RGRTA Regional Village Local Service Study

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Provided by

Table of Contents

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- Genesee Office for the Aging
- Livingston County Office for the Aging
- Ontario Office for the Aging
- Wayne County DSS
- Wayne Dept. of Aging & Youth
- Orleans Office for the Aging
- City of Canandaigua
- Community Action (Wyoming County)
- Livingston County Planning
- Livingston County Mobility Management

Executive summary

The Regional Transit Service (RTS) Regional Villages Study was commissioned by the Rochester-Genesee Regional Transportation Authority (RGRTA) to determine how to best serve 27 communities across six counties in Western New York. These towns were selected for inclusion in the study as they currently have limited or no local public transit service. For example, the majority of these communities have some bus service, but it typically only offers limited connections to a nearby community, and in many cases only operates a few trips per day.

Project Goals:

1. Determine the best way to deliver public transit in selected towns and villages

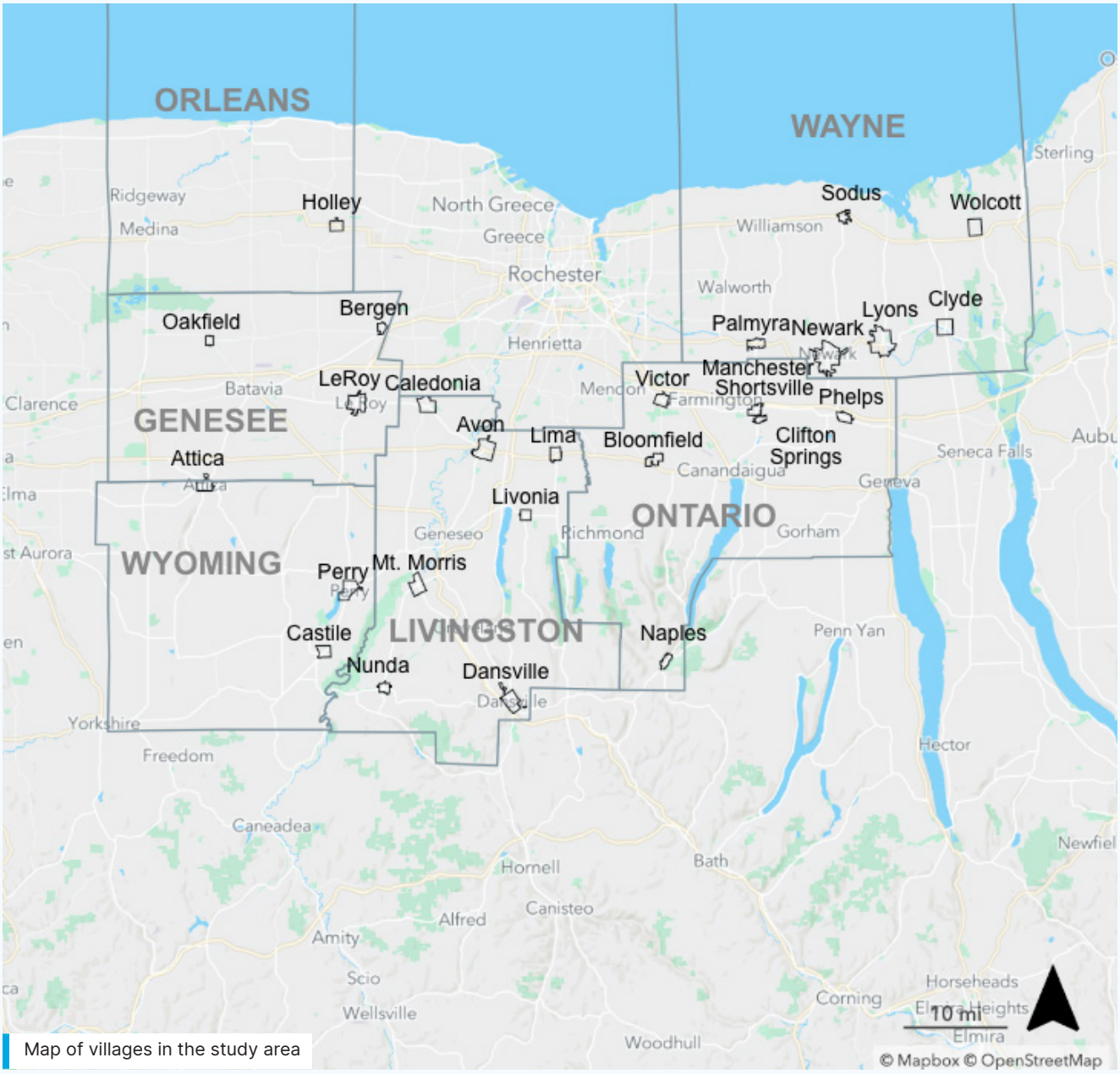
2. Propose a range of different service models including local and intercity bus service, on-demand microtransit, and pre-booked microtransit depending on which is best suited for the specific community

3. Identify best practices for implementing new transit services in small towns and villages in Western New York

RTS Vehicle

Study Area

The study area covers 27 towns and villages in Ontario, Livingston, Wayne, Wyoming, Genesee, and Orleans counties. The municipalities are LeRoy, Oakfield, Bergen, Dansville, Avon, Mt. Morris, Caledonia, Lima, Livonia, Nunda, Victor, Clifton Springs, Phelps, Manchester, Shortsville, Bloomfield, Naples, Holley, Newark, Lyons, Palmyra, Clyde, Sodus, Wolcott, Perry, Attica, and Castile.



Map of villages in the study area

Stakeholder and Public Engagement Summary

To gather feedback from the Finger Lakes community, the study included a survey and interviews with key stakeholders. The survey gathered responses from over 120 current or potential transit users. Responses were gathered both online and in-person (while riding RGRTA bus routes). The key takeaways from the survey include:

1. Most respondents who use public transit in the region do so infrequently. Only one in five respondents use public transit 'very often' and half of respondents who use public transit do so a few times a month or less. It is likely that they rely on other modes of transportation when possible, and public transit is considered a backup option. This suggests that improvements to public transit could encourage existing users to travel more often using public transit.

2. Respondents showed enthusiasm for improved public transit service, with 40% of respondents indicating they would use a local public transit service daily if it was available and convenient.

3. When considering different ways to expand public transit, most respondents would prefer access to more geographic areas, followed by weekend service and extended hours on weekdays.

4. The most common reasons to use public transit would be grocery shopping and access to work and medical services. Therefore, improvements to public transit should prioritize grocery stores, employers, and medical services.

5. The survey respondents did not indicate a clear preference between microtransit and deviated fixed-route bus and many respondents were not sure which would be better suited to their needs.

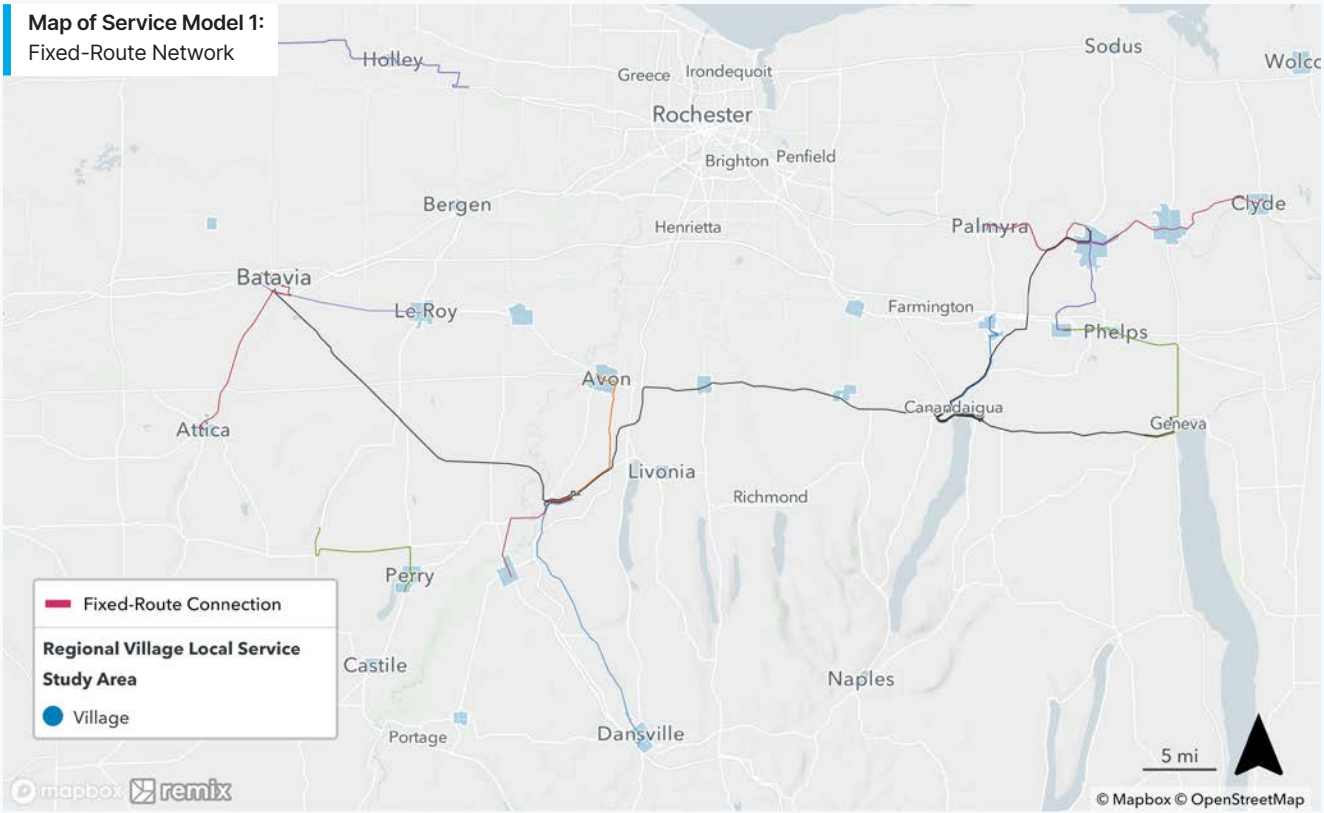
Promotional poster for the study's community engagement efforts

Service Delivery Recommendations

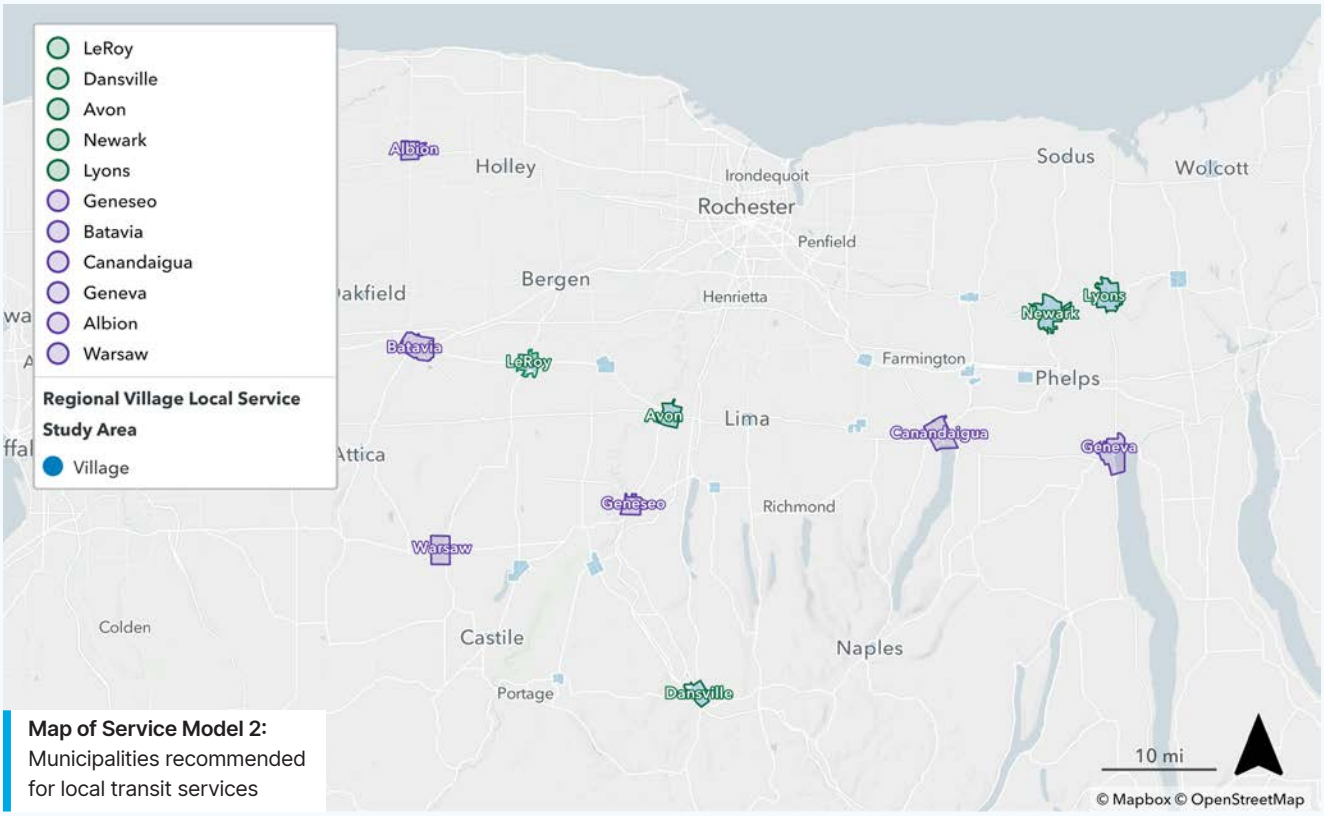
Based on a demographic analysis of the villages, a review of the current transit services, and the survey results, the following three transit delivery models were developed. Together, these three models will enable RGRTA to serve the community in a cost-efficient manner, by ensuring the level of service matches the expected ridership and density of the different communities. The three models are described below:

- **Service Model 1 - Frequent, Intercity Fixed-Route Network**
  The first service model would be used to connect the largest towns and villages across the region. The fixed-route connections should be direct and run often enough to be useful for the local population, likely around every 2o to 40 minutes, depending on the route's popularity. Service model 1 could also provide intercounty connections and serve smaller villages that are on the route between larger municipalities.

Map of Service Model 1:
Fixed-Route Network

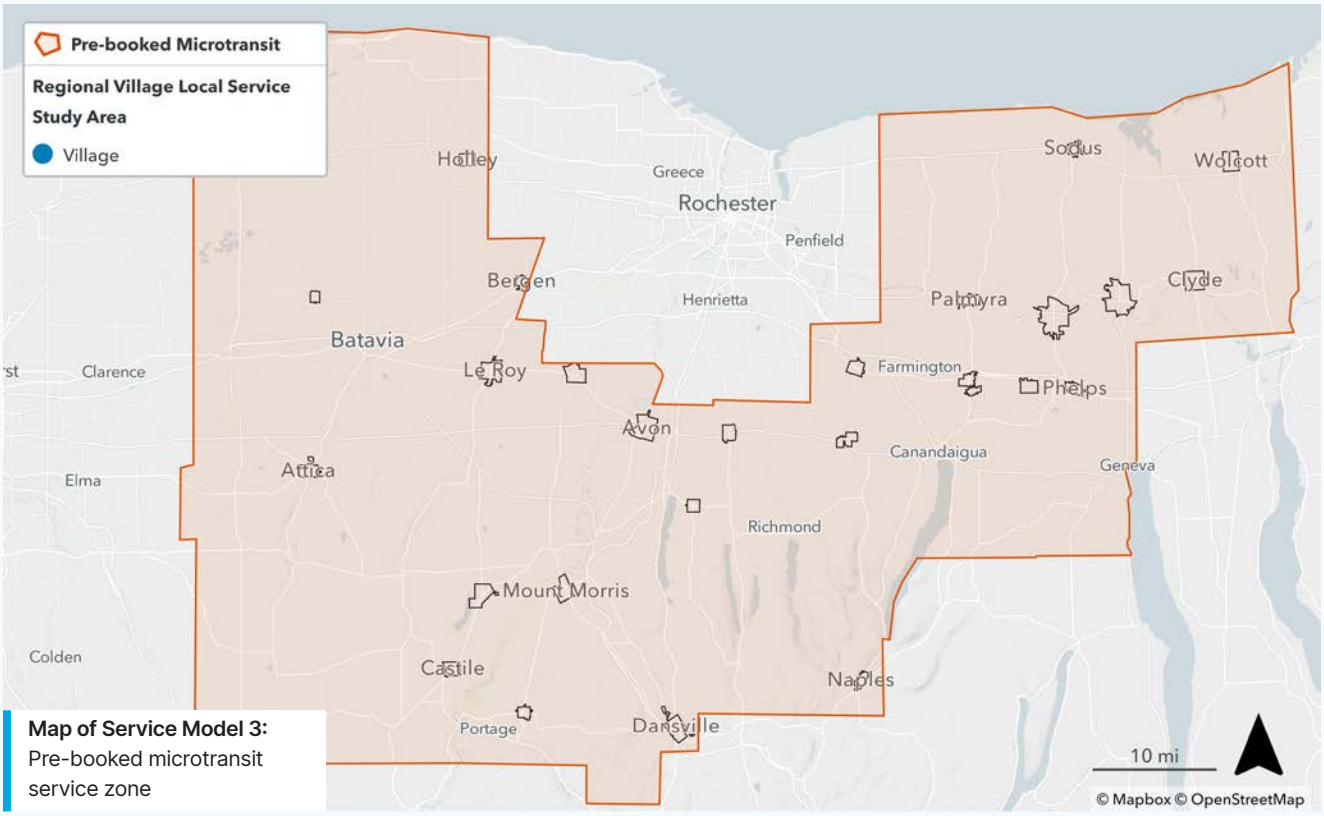


- **Service Model 2 - Local On-Demand Microtransit or Fixed-Route Service**
  The second model would provide local transit services for the largest towns and villages in the study. Local service can be provided through fixed-route buses or microtransit service. This study mostly evaluated microtransit for the application of Service Model 2. Microtransit is a technology-enabled demand-response service that provides shared rides based on where and when people want to travel within a pre-defined service area. Customers usually book trips on a smartphone application and wait between 5 and 20 minutes for their ride. There are no schedules or pre-defined routes and stops. Microtransit can be more efficient if demand is dispersed throughout the village and travel patterns are more varied. Microtransit also requires less capital infrastructure and can work well in areas with poor pedestrian infrastructure. Service Model 2 would provide a convenient service for local trips, including commuting, grocery stores, and medical appointments.



Map of Service Model 2: Municipalities recommended for local transit services

- **Service Model 3 - Regional Pre-booked Microtransit**
  For villages that are too small to support a local transit service and not located along any Service Model 1 fixed-routes, a pre-booked microtransit service could fulfill transportation needs. Service Model 3 could also provide service for those who do not live near a fixed-route bus and therefore avoid deviations that would make the fixed-routes less efficient. Pre-booked microtransit works best in large rural areas and would operate similarly to the current Dial-a-Ride services offered by RGRTA.



Map of Service Model 3: Pre-booked microtransit service zone

This table outlines how each service model would be applied to the 27 villages of the study. The most significant change recommended by this study is the launch of microtransit (Service Model 2) in several of the larger communities; Newark, Lyons, Dansville, LeRoy, and Avon. Most of the smaller communities do not have enough residents and destinations to support a local microtransit service, and would be better served by fixed-route bus connections to larger towns (Service Model 1), or inclusion in a regional pre-booked microtransit service (Service Model 3).

Table summarizing recommendations by village and service model

<table>
<tr><th>Village</th><th>Service Model 1
Frequent, Intercity
Fixed-Route Network</th><th>Service Model 2
Local On-Demand
Microtransit or Fixed-Route</th><th>Service Model 3
Regional Pre-booked
Microtransit</th></tr>
<tr><td>Newark</td><td>To Canandaigua;
To Clifton Springs;
To Palmyra;
To Clyde via Lyons</td><td rowspan="2">Lyons + Newark
On-Demand Zone</td><td rowspan="5">Not required as the local on-demand microtransit service will complete all trips within the village.</td></tr>
<tr><td>Lyons</td><td>To Clyde and Newark via Palmyra</td></tr>
<tr><td>Dansville</td><td>No fixed-route recommended</td><td>Dansville On-Demand Zone</td></tr>
<tr><td>LeRoy</td><td>To Batavia</td><td>Le Roy On-Demand Zone</td></tr>
<tr><td>Avon</td><td>To Geneseo</td><td>Avon On-Demand Zone</td></tr>
<tr><td>Perry</td><td>To Warsaw</td><td rowspan="10">None of these villages have sufficient population and/or local destinations to support a local on-demand microtransit or fixed-route.</td><td rowspan="10">The regional pre-booked microtransit service can be used to provide accessible trips for disabled passengers within ¾ mile of fixed-routes in these villages.[1] This means the fixed-routes do not need to deviate and can offer improved on-time performance.</td></tr>
<tr><td>Palmyra</td><td>To Clyde via Newark and Lyons
To Eastview Mall</td></tr>
<tr><td>Manchester</td><td>To Canandaigua via Shortsville</td></tr>
<tr><td>Shortsville</td><td>To Canandaigua and Manchester</td></tr>
<tr><td>Mt. Morris</td><td>To Geneseo</td></tr>
<tr><td>Victor</td><td>To Eastview Mall</td></tr>
<tr><td>Attica</td><td>To Batavia</td></tr>
<tr><td>Clifton Springs</td><td>To Newark;
To Geneva via Phelps</td></tr>
<tr><td>Clyde</td><td>To Palmyra via Lyons and Newark</td></tr>
</table>

[1]The ¾ mile limit is based on ADA requirements for paratransit.

Table summarizing recommendations by village and service model (*Continued*)

Village	Service Model 1 Frequent, Intercity Fixed-Route Network	Service Model 2 Local On-Demand Microtransit or Fixed-Route	Service Model 3 Regional Pre-booked Microtransit
Lima	On Canandaigua to Geneseo route	None of these villages have sufficient population and/or local destinations to support a local on-demand microtransit or fixed-route.	The regional pre-booked microtransit service can be used to provide accessible trips for disabled passengers within ¾ mile of fixed-routes in these villages.[1] This means the fixed-routes do not need to deviate and can offer improved on-time performance.
Phelps	To Clifton Springs and Geneva		
Holley	To Albion and Brockport		
Bloomfield	On Canandaigua to Geneseo route		
Caledonia	None of these villages are located along a frequent intercity bus route and/or have the population to support a dedicated fixed-route to a nearby community.		Trips to nearby towns (based on regional pre-booked microtransit rules)
Oakfield			Trips to nearby towns (based on regional pre-booked microtransit rules)
Sodus			Trips to nearby towns (based on regional pre-booked microtransit rules)
Wolcott			Trips to nearby towns (based on regional pre-booked microtransit rules)
Livonia			Trips to nearby towns (based on regional pre-booked microtransit rules)
Nunda			Trips to nearby towns (based on regional pre-booked microtransit rules)
Bergen			Trips to nearby towns (based on regional pre-booked microtransit rules)
Castile			Trips to nearby towns (based on regional pre-booked microtransit rules)
Naples			Trips to nearby towns (based on regional pre-booked microtransit rules)

[1]The ¾ mile limit is based on ADA requirements for paratransit.

Implementation Recommendations

The implementation chapter of this report focuses primarily on recommendations for microtransit, as RGRTA already has extensive experience operating deviated fixed-route buses. If RGRTA chooses to launch new microtransit services, this report includes a set of recommendations on how to successfully implement new services, including:

Selecting vehicles

Microtransit works well with small buses or vans that hold 6 to 12 passengers. Vehicles should be RGRTA branded.

Marketing

Marketing efforts such as press releases, websites, social media campaigns, and flyers can be important ways to grow ridership on new services. For many residents, microtransit will be a new form of public transit. An education campaign including How-To videos and informational meetings can be useful to teach people how to use the new service.

Community Engagement

In addition to the marketing efforts, the community should be engaged with throughout the planning and launch process to ensure that the service meets the needs of the community.

Accessibility

The service should be curb-to-curb and use wheel-chair accessible vehicles. For customers without smartphones, booking by calling a dispatcher should be available.

Commingling demand-responsive services

By commingling microtransit with the dial-a-ride services, RGRTA can improve the overall efficiency of all demand-responsive services.

Fares

Fares should be comparable to existing transit services, and multiple payment options should be available, especially for those without access to a debit/credit card.

RTS Wyoming bus route 228 and RTS staff

SECTION 1

Introduction

1.

Introduction

1.1. Project Overview and Goals

In early 2022, RGRTA commissioned Regional Village Local Study Service to evaluate transit services for 27 towns and villages in Western New York. These municipalities are within Ontario, Livingston, Genesee, Wyoming, Wayne, and Orleans counties. With this project, RGRTA sought to identify the best ways to deliver transit services for small villages in a rural context. Specifically, the agency was interested in the feasibility of new transit modes, such as microtransit.

In order to answer these questions, the project included an analysis of the demographics and socioeconomic characteristics of each of the counties and villages in the study area, and a review of the transit offerings currently available in the study area to identify gaps and opportunities for service improvements. To supplement this analysis, the project team conducted interviews with stakeholders and surveyed current and potential transit users. From this analysis, the project team identified three models for service delivery and specific recommendations for transit in each of the 27 towns and villages. The study also includes a set of recommendations on how to best implement new transit services in the local context. These recommendations include launch planning, marketing, and community engagement best practices, advice on how to comingle different transit services, and how to ensure new transit services are accessible.

1.2. Study Area Overview

The study area for this project consists of 27 towns and villages spanning six counties in Western New York. These counties surround Monroe County, which is not included in the study and is home to Rochester (New York's third largest city).

The county's small towns and villages are scattered throughout and surrounded by low-density rural areas. Collectively, the counties have over 400,000 residents and nearly 150,000 jobs. Nearly 70,000 residents and 20,000 jobs are located within the study area towns and villages, with 75% of these in Wayne, Ontario, and Livingston Counties. About half of the towns and villages in study have a population less than 2,000; Newark is the largest town in the study area with just under 9,000 residents.

The towns and villages being evaluated as part of this study have limited or no local public transit service and include LeRoy, Oakfield, Bergen, Dansville, Avon, Mt. Morris, Caledonia, Lima, Livonia, Nunda, Victor, Clifton Springs, Phelps, Manchester, Shortsville, Bloomfield, Naples, Holley, Newark, Lyons, Palmyra, Clyde, Sodus, Wolcott, Perry, Attica, and Castile. They are shown on the map in Figure 1.1.

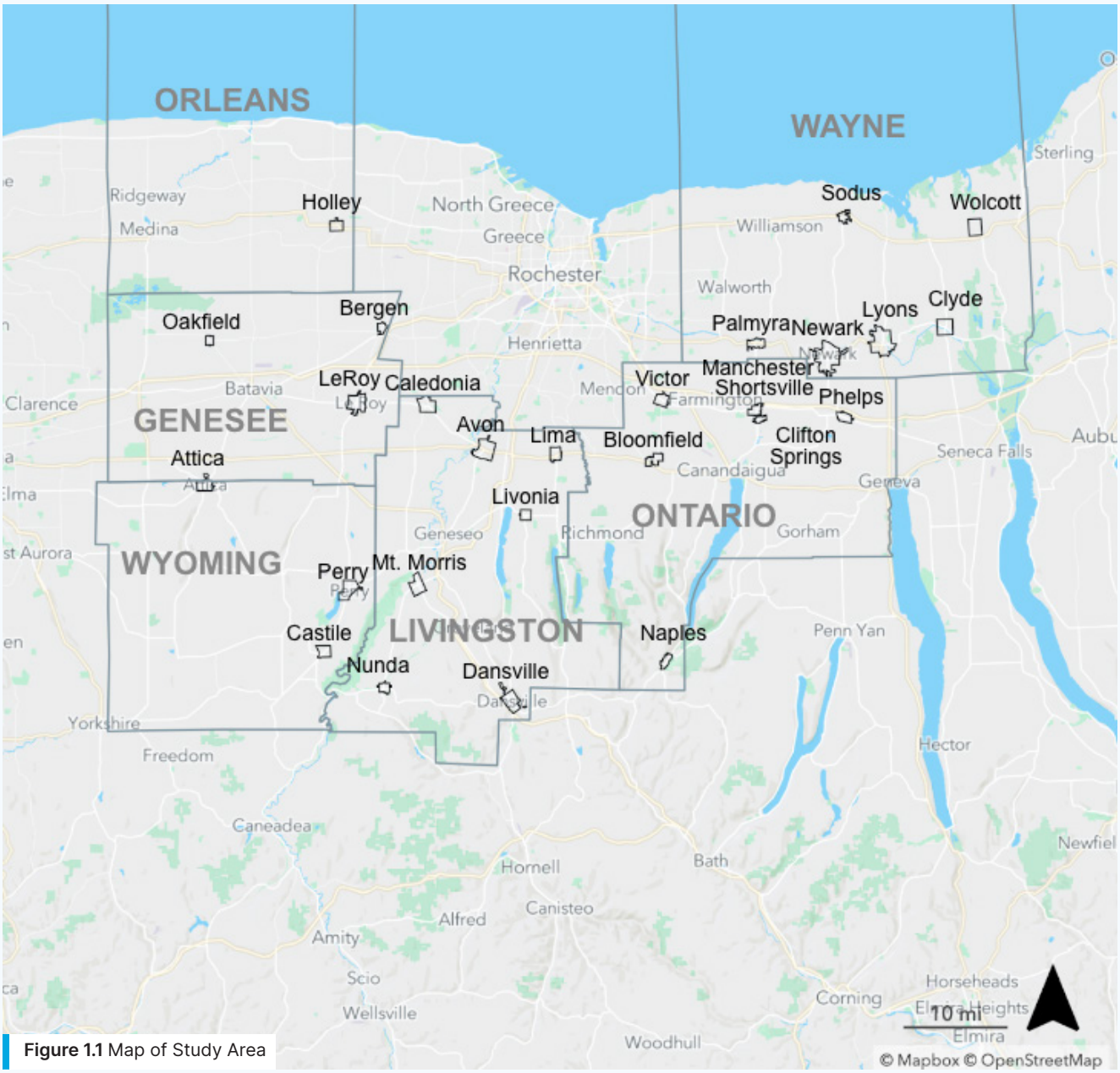


Figure 1.1 Map of Study Area

SECTION 2

Existing Conditions Analysis

2.

Existing Conditions Analysis

In order to inform transit recommendations for the region, a review of the existing conditions was conducted. Due to the large area, the maps are displayed by county, with Orleans and Genesee being evaluated together due to their proximity and shape. Various metrics were evaluated, including population, employment, poverty, minority status, disability status, and access to a private vehicle. In addition, the project team reviewed the RGRTA bus network by county to understand the ridership trends and efficiency of the current transit offerings. Together, this analysis helped to identify gaps in the existing service network and areas where the community may benefit from additional transit services.

2.1. Demographic Analysis

2.1.1. Orleans County and Genesee County: Demographic Analysis

Orleans and Genesee: Population

Holley is the only village included in this study in Orleans, representing roughly 5% the county's population. Oakfield, Bergen, and LeRoy are the three study villages located in Genesee, representing 12% of its population. Of these four villages, LeRoy has the largest population with about as many residents as Holley, Oakfield, and Bergen combined. Holley and Bergen are both proximate to Monroe County and the extended suburbs of Rochester.

Table 2.1 Orleans and Genesee counties: **Population summary**

Area	Population
Holley	1,871
Oakfield	1,060
Bergen	1,679
LeRoy	4,220
Orleans County	40,600
Genesee County	57,600

Source: American Community Survey 5-year 2016-2020 by Census place.

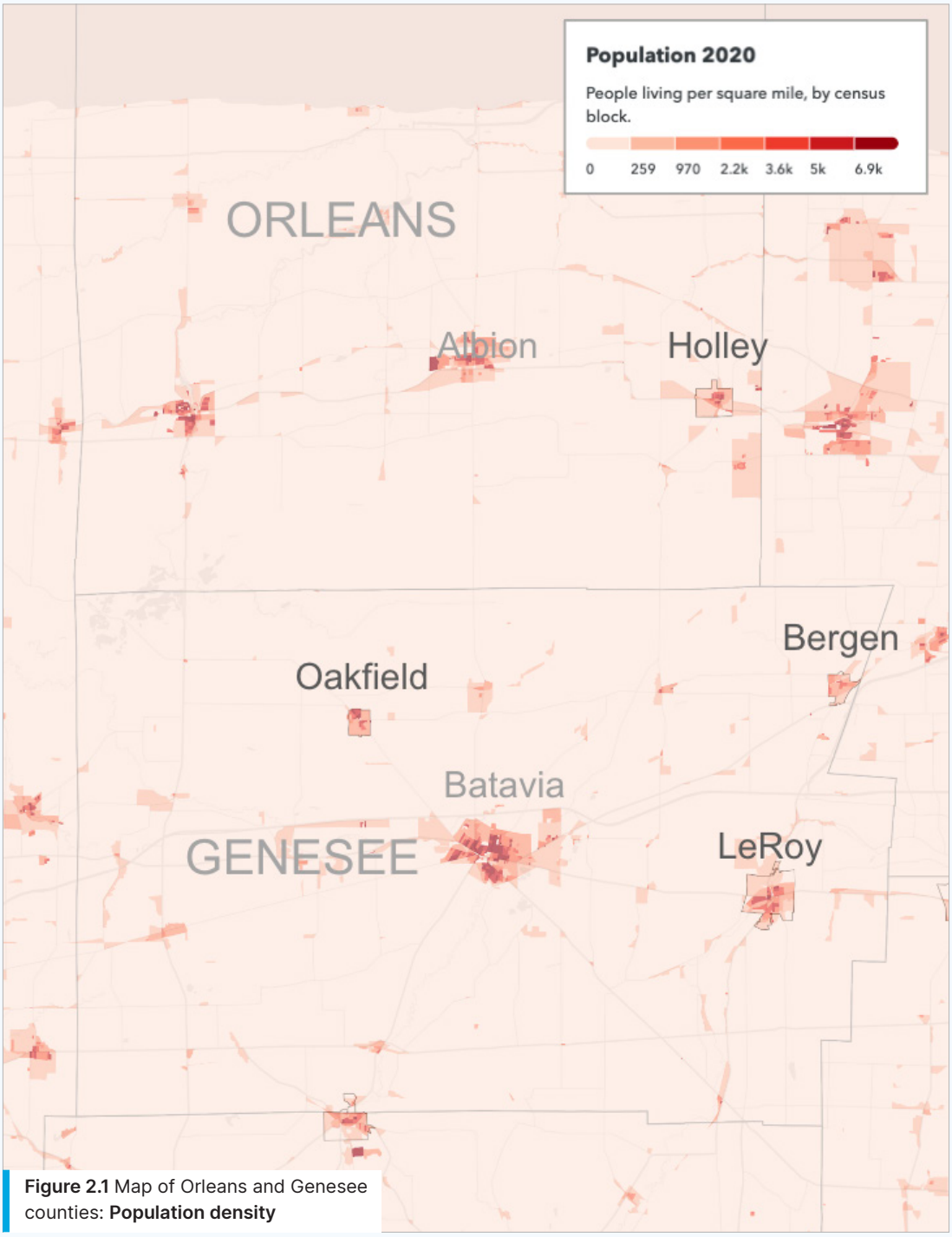


Figure 2.1 Map of Orleans and Genesee counties: **Population density**

Source: American Community Survey 5-year; 2015-2019 by census block.

Orleans and Genesee: Jobs

Of the four villages included in this study, LeRoy is the largest job center with over twice as many jobs as the other villages combined. The majority of major employers in Orleans are located in Albion, and the majority of major employers in Genesee are in Batavia, outside of the study villages.

Table 2.2 Orleans and Genesee counties: **Employment summary**

Area	Jobs	Major Employers
Holley	50	-
Oakfield	100	US Gypsum Bonduelle
Bergen	200	Liberty Pumps Bonduelle
LeRoy	800	CH Wright Lapp Insulator
Orleans County	12,300	
Genesee County	21,900	

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019.

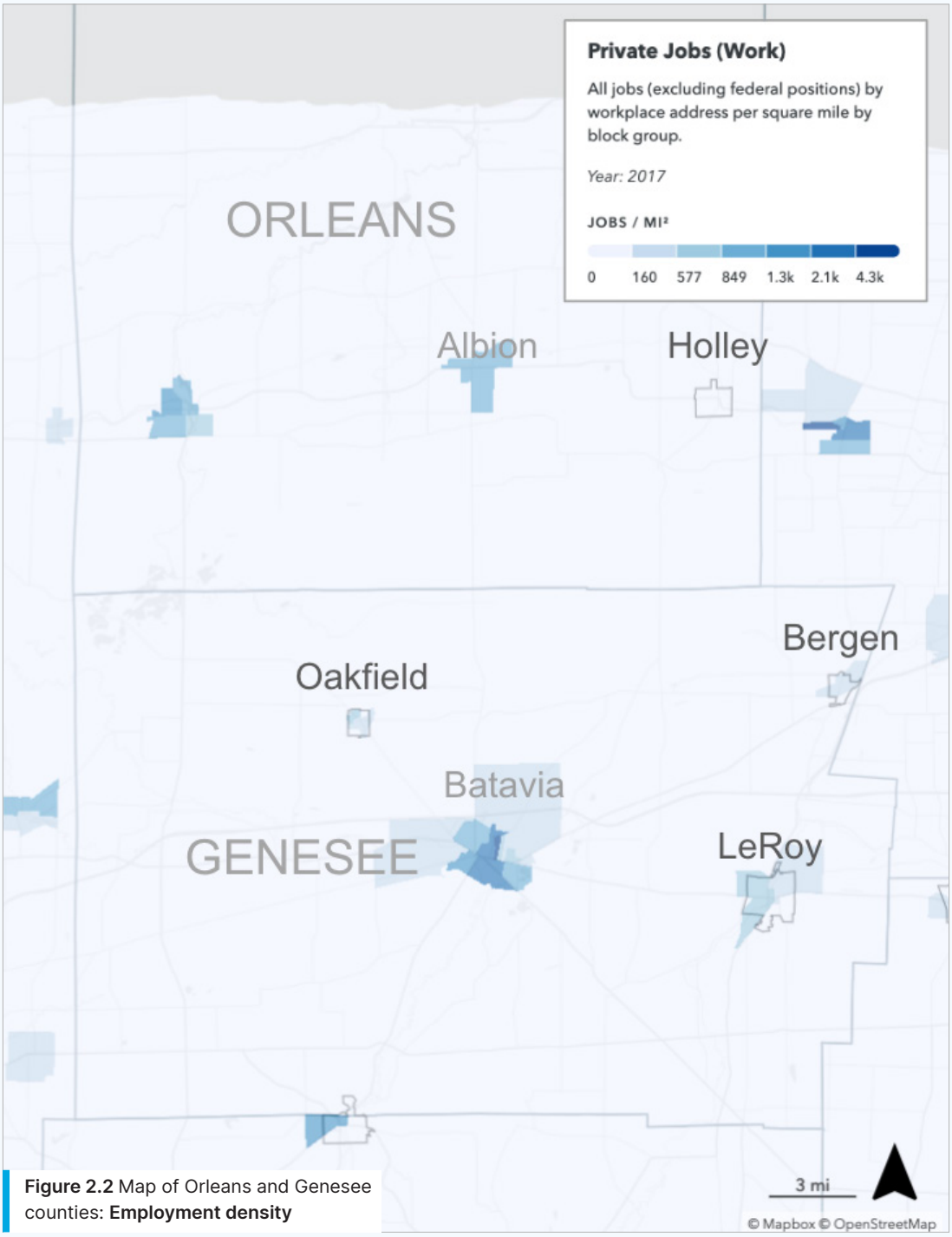


Figure 2.2 Map of Orleans and Genesee counties: **Employment density**

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019 by block group.

Orleans and Genesee: Car-Free Households

Over 90% of residents in Holley, Oakfield, and Bergen have access to a household vehicle, while only 80% of residents in LeRoy have such access. LeRoy has the greatest existing public transit connectivity of these four communities, with over 400 households reliant on public transit or other transportation modes for their mobility needs.

Table 2.3 Orleans and Genesee counties: **Car-free households summary**

Area	Car-Free Households	Percent of Households
Holley	46	6%
Oakfield	12	3%
Bergen	40	6%
LeRoy	425	21%
Orleans County	1,272	8%
Genesee County	2,369	10%

Source: American Community Survey 5-year 2016-2020 by Census place.

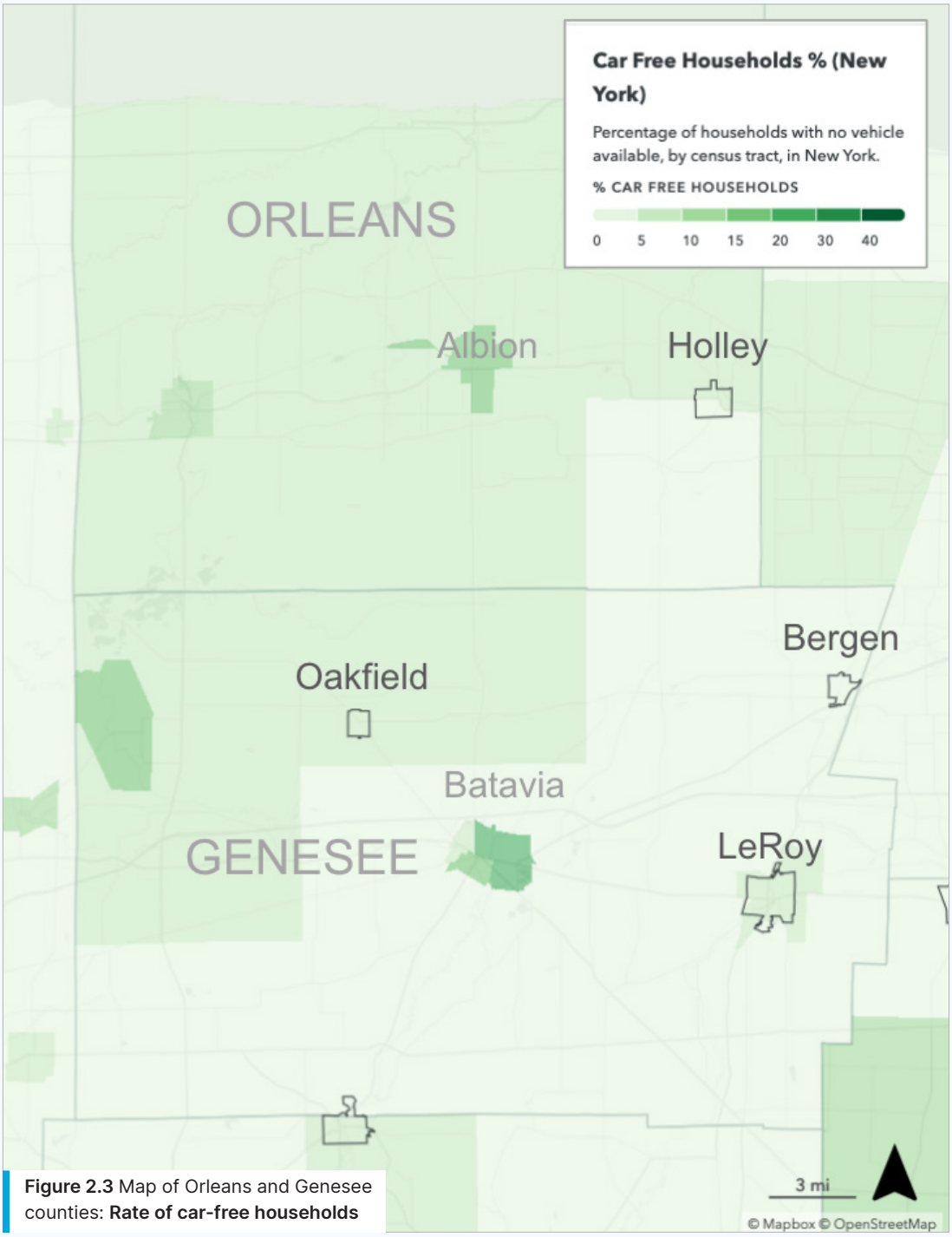


Figure 2.3 Map of Orleans and Genesee counties: **Rate of car-free households**

Source: American Community Survey 5-year; 2015-2019 by census tract.

Orleans and Genesee: Poverty

Of the four villages included in this study, LeRoy has both the greatest number of individuals in poverty and the highest poverty rate. The other communities have poverty rates that are equal to or less than the poverty rates in their counties.

Table 2.4 Orleans and Genesee counties: **Poverty summary**

Area	People in Poverty	Percent of Population
Holley	178	10%
Oakfield	119	11%
Bergen	172	10%
LeRoy	617	15%
Orleans County	5,606	14%
Genesee County	6,216	11%

Source: American Community Survey 5-year 2016-2020 by Census place.

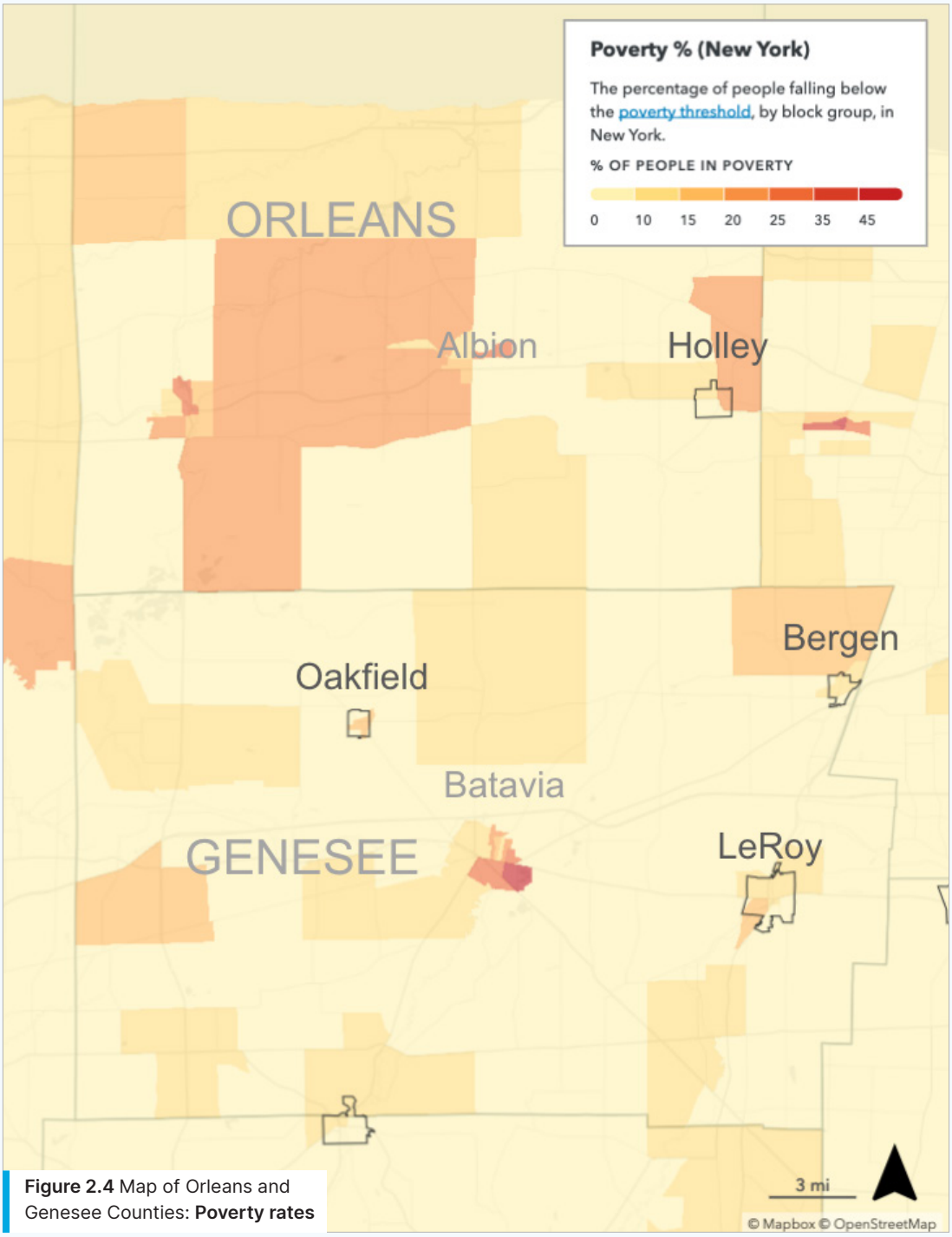


Figure 2.4 Map of Orleans and Genesee Counties: **Poverty rates**

Source: American Community Survey 5-year; 2015-2019 by block group.

Orleans and Genesee: Minority

Of the four villages included in this study, Holley has the greatest number and percentage of minority residents, with nearly one in four residents identifying as non-white or Hispanic.

Table 2.5 Orleans and Genesee counties: **Minority summary**

Area	Minority Residents	Percent of Population
Holley	448	24%
Oakfield	90	8%
Bergen	160	10%
LeRoy	431	10%
Orleans County	5,728	14%
Genesee County	5,640	10%

Source: American Community Survey 5-year 2016-2020 by Census place.

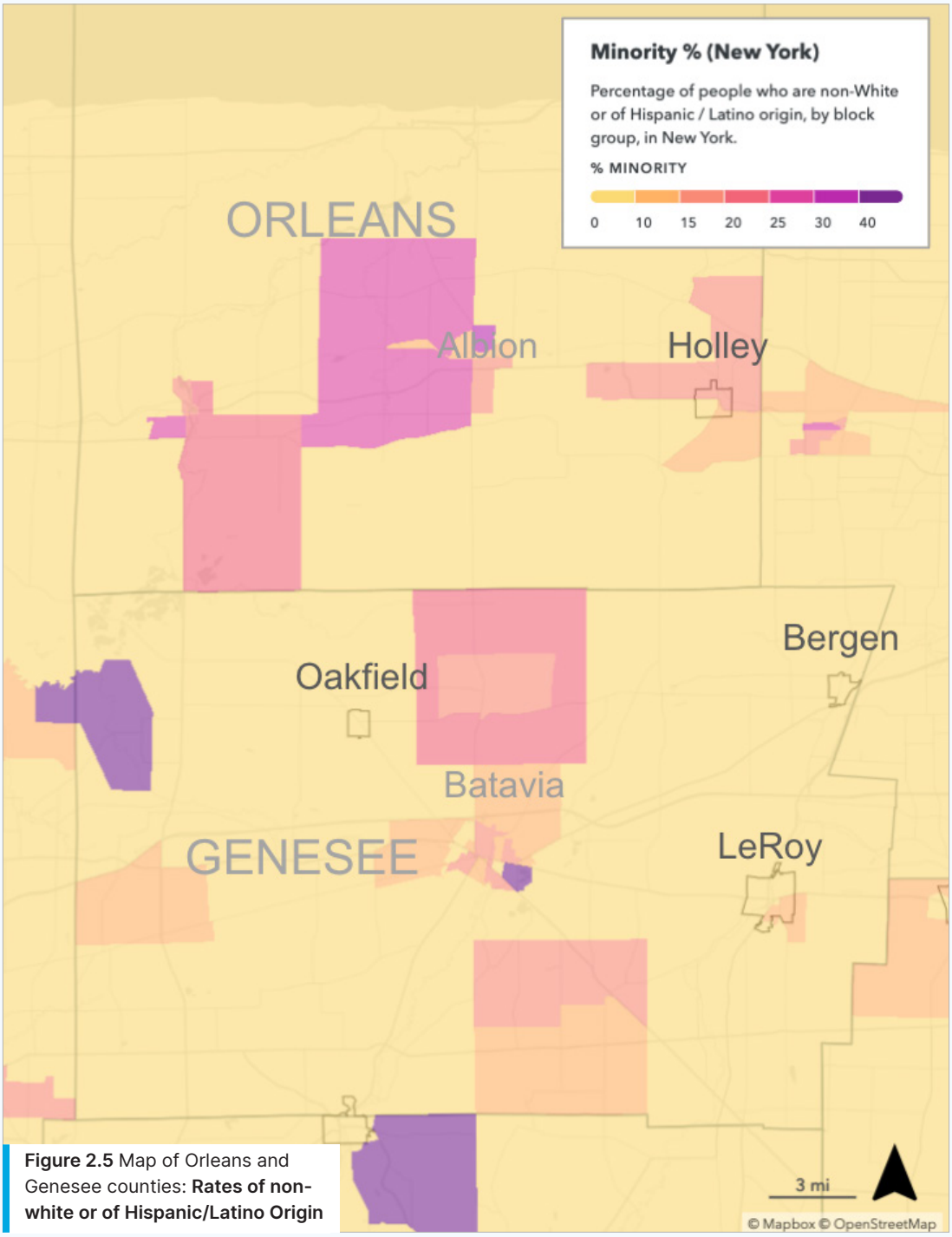


Figure 2.5 Map of Orleans and Genesee counties: **Rates of non-white or of Hispanic/Latino Origin**

Source: American Community Survey 5-year; 2015-2019 by block group.

Orleans and Genesee: Disability

Of the villages included in this study, LeRoy has the greatest number and percentage of residents with disabilities with over one in five residents living with a disability. The other communities have a lower percentage of residents with disabilities compared to their counties.

Table 2.6 Orleans and Genesee counties: **Disability population summary**

Area	People with Disabilities	Percent of Population
Holley	218	12%
Oakfield	107	10%
Bergen	209	12%
LeRoy	883	21%
Orleans County	6,079	15%
Genesee County	8,376	15%

Source: American Community Survey 5-year 2016-2020 by Census place.

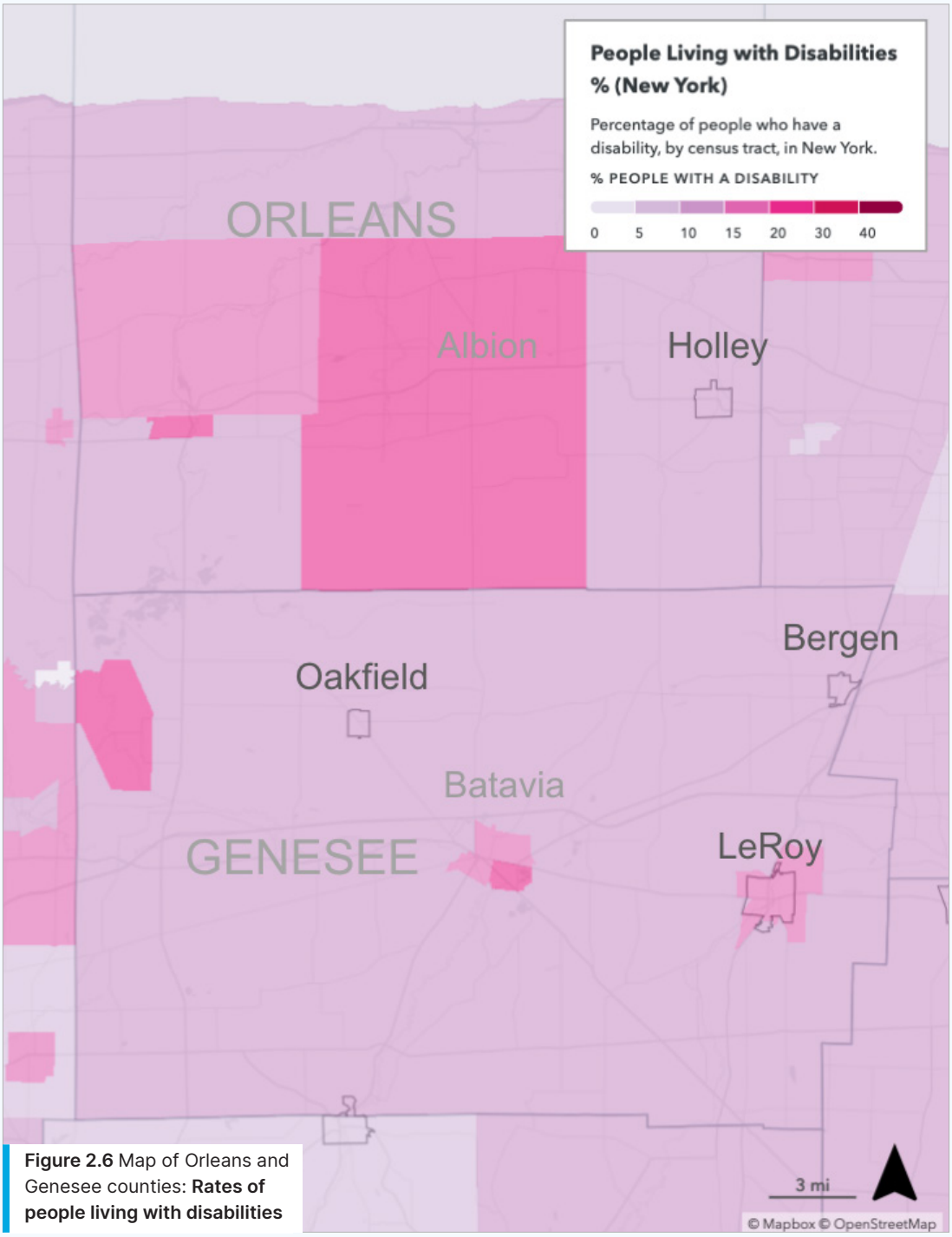


Figure 2.6 Map of Orleans and Genesee counties: **Rates of people living with disabilities**

Source: American Community Survey 5-year; 2015-2019 by census tract.

Orleans and Genesee: Seniors

Holley, Oakfield, and Bergen have relatively lower percentages of senior population compared to their counties, while LeRoy has a higher rate with nearly one in four residents over 65 years old.

Table 2.7 Orleans and Genesee counties: **Seniors summary**

Area	Seniors	Percent of Population
Holley	167	9%
Oakfield	159	15%
Bergen	195	12%
LeRoy	984	23%
Orleans County	7,231	18%
Genesee County	10,763	19%

Source: American Community Survey 5-year 2016-2020 by Census place.

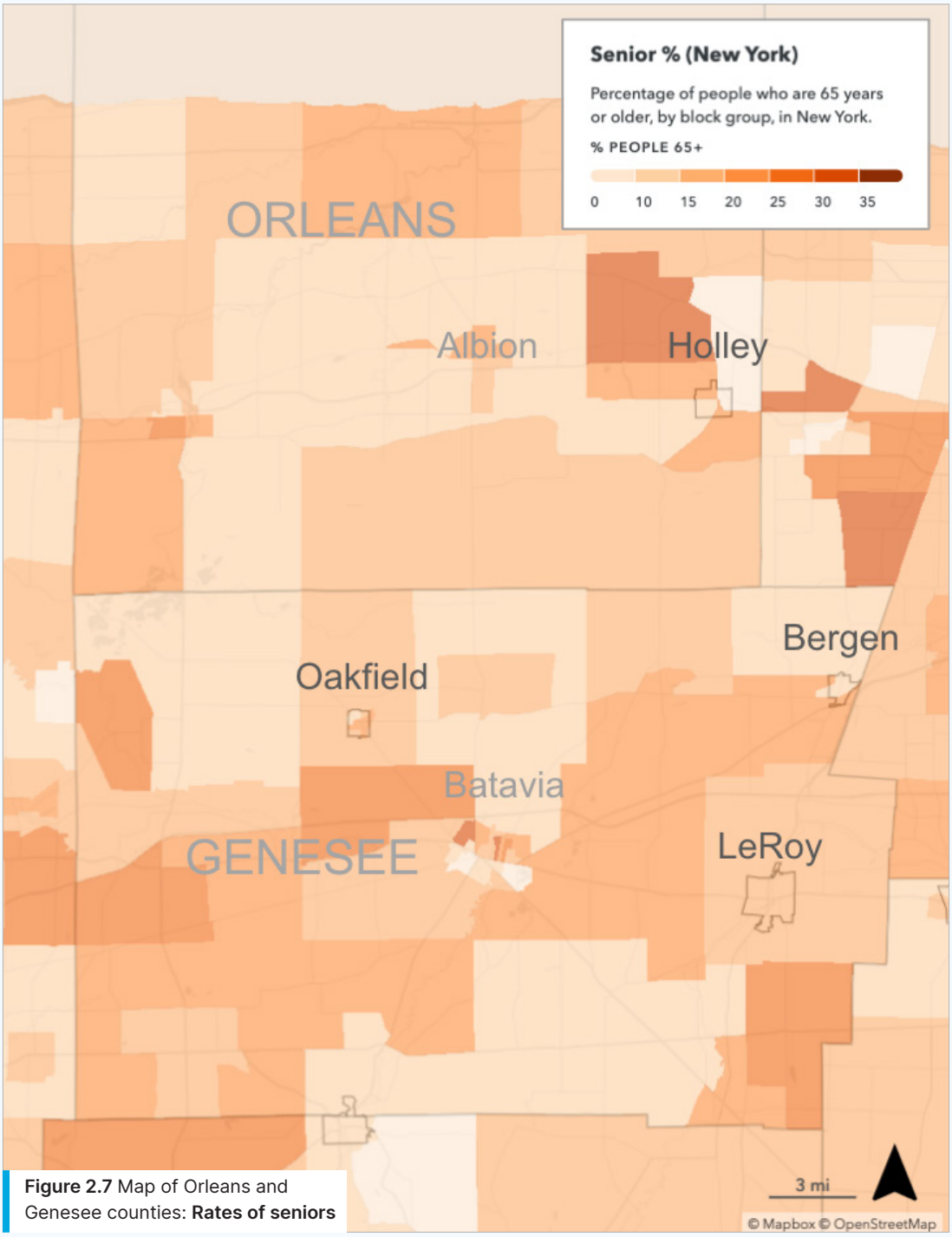


Figure 2.7 Map of Orleans and Genesee counties: **Rates of seniors**

Source: American Community Survey 5-year; 2015-2019 by block group.

Orleans and Genesee: Youth

All communities have 20% or more of their population aged 17 or younger, with Bergen at nearly 30% of its population aged 17 or younger. This suggests that these are younger communities with many residents who would benefit from transportation locally for afterschool and summer activities.

Table 2.8 Orleans and Genesee counties: **Youth summary**

Area	Youth	Percent of Population
Holley	494	26%
Oakfield	211	20%
Bergen	486	29%
LeRoy	866	21%
Orleans County	7,882	19%
Genesee County	11,684	20%

Source: American Community Survey 5-year 2016-2020 by Census place.

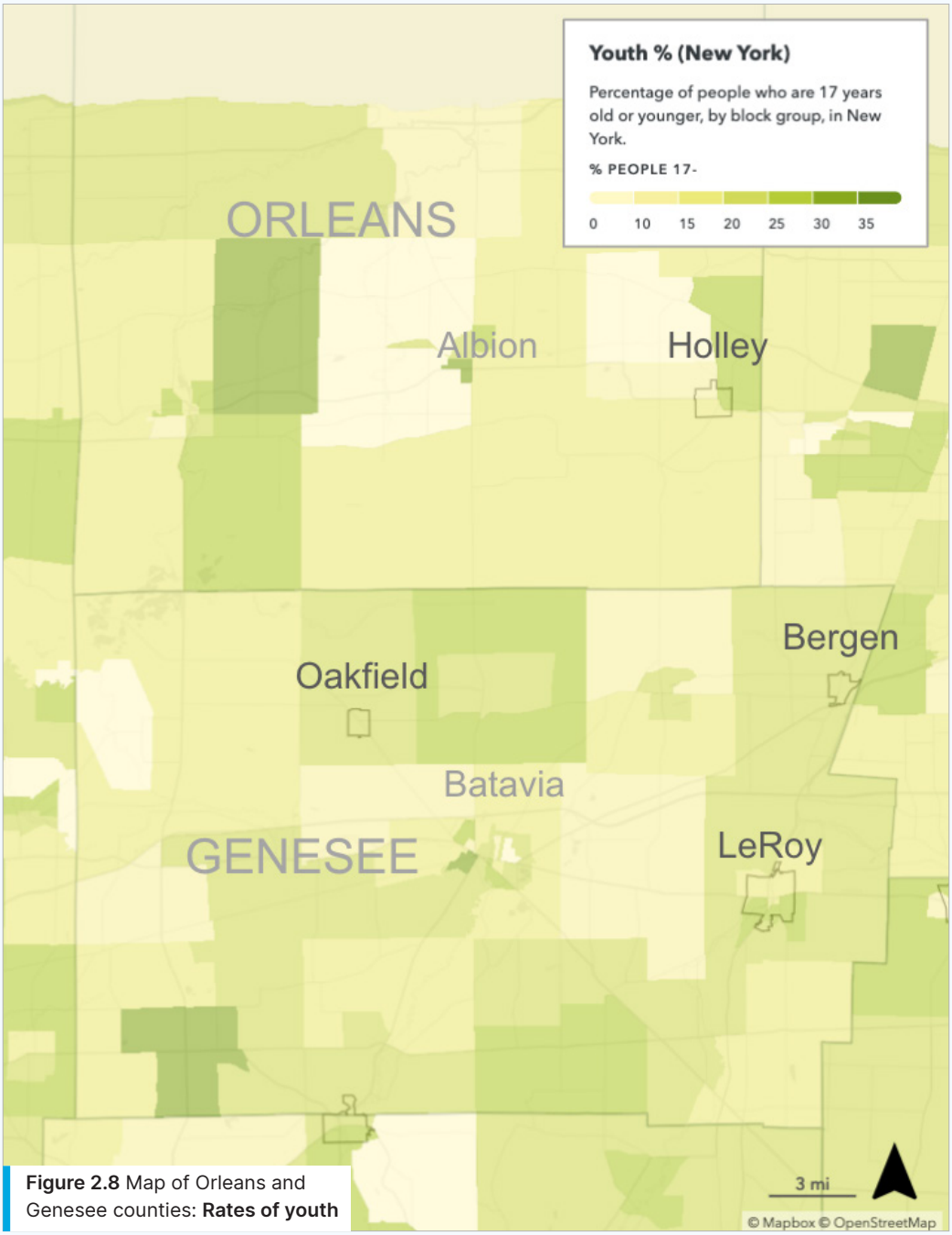


Figure 2.8 Map of Orleans and Genesee counties: **Rates of youth**

Source: American Community Survey 5-year; 2015-2019 by block group.

Orleans and Genesee: Summary

Compared to other communities in Orleans and Genesee County, LeRoy in particular stands out as high potential for additional public transit investment due to its size, number of jobs, and demographics.

2.1.2. Wyoming County: Demographic Analysis

Wyoming County: Population

In Wyoming County there are three villages included in this study, of which Perry is the largest. Collectively, they represent 18% of Wyoming's population. Both Attica and Perry have some residents living beyond the village boundaries, suggesting that there may be additional residents who would benefit from public transit options.

Table 2.9 Wyoming County: **Population summary**

Area	Population
Attica	2,912
Perry	3,347
Castile	952
Wyoming County	40,027

Source: American Community Survey 5-year 2016-2020 by Census place.

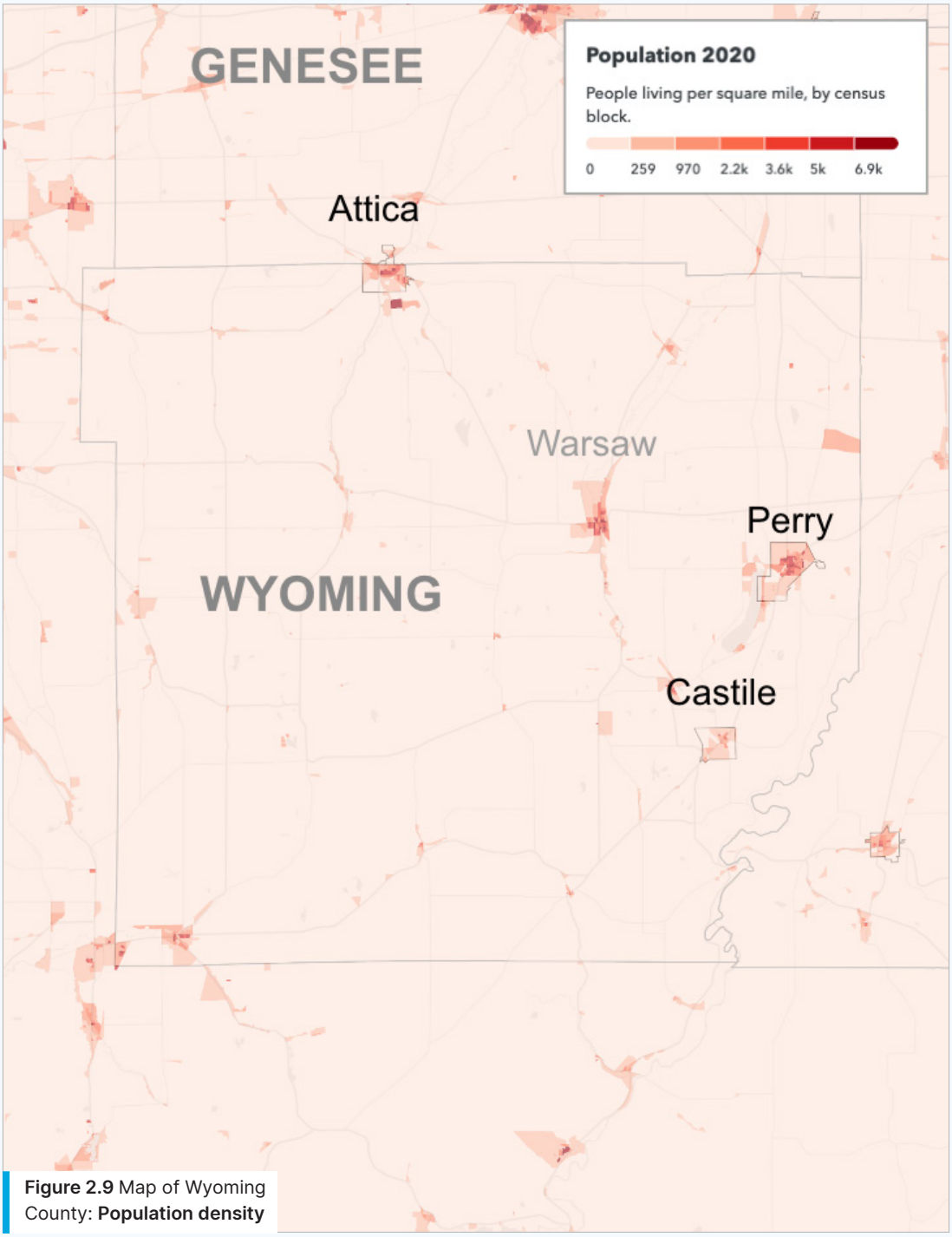


Figure 2.9 Map of Wyoming County: **Population density**

Source: American Community Survey 5-year; 2015-2019 by census block.

Wyoming County: Jobs

Both Perry and Attica have over 500 jobs and several major employers with over 100 employees. Castile has fewer than 50 jobs, with many jobs coming from Letchworth State Park (which extends to Perry and Mt. Morris in Livingston County).

Table 2.10 Wyoming County: **Employment summary**

Area	Jobs	Major Employers
Attica	600	Attica Correctional Fac. Attica CSD Five Star Bank Wyoming County Corr. Fac.
Perry	800	Creative Food Ingredients Perry CSD Pioneer Credit Recovery
Castile	30	-
Wyoming County	13,900	-

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019.

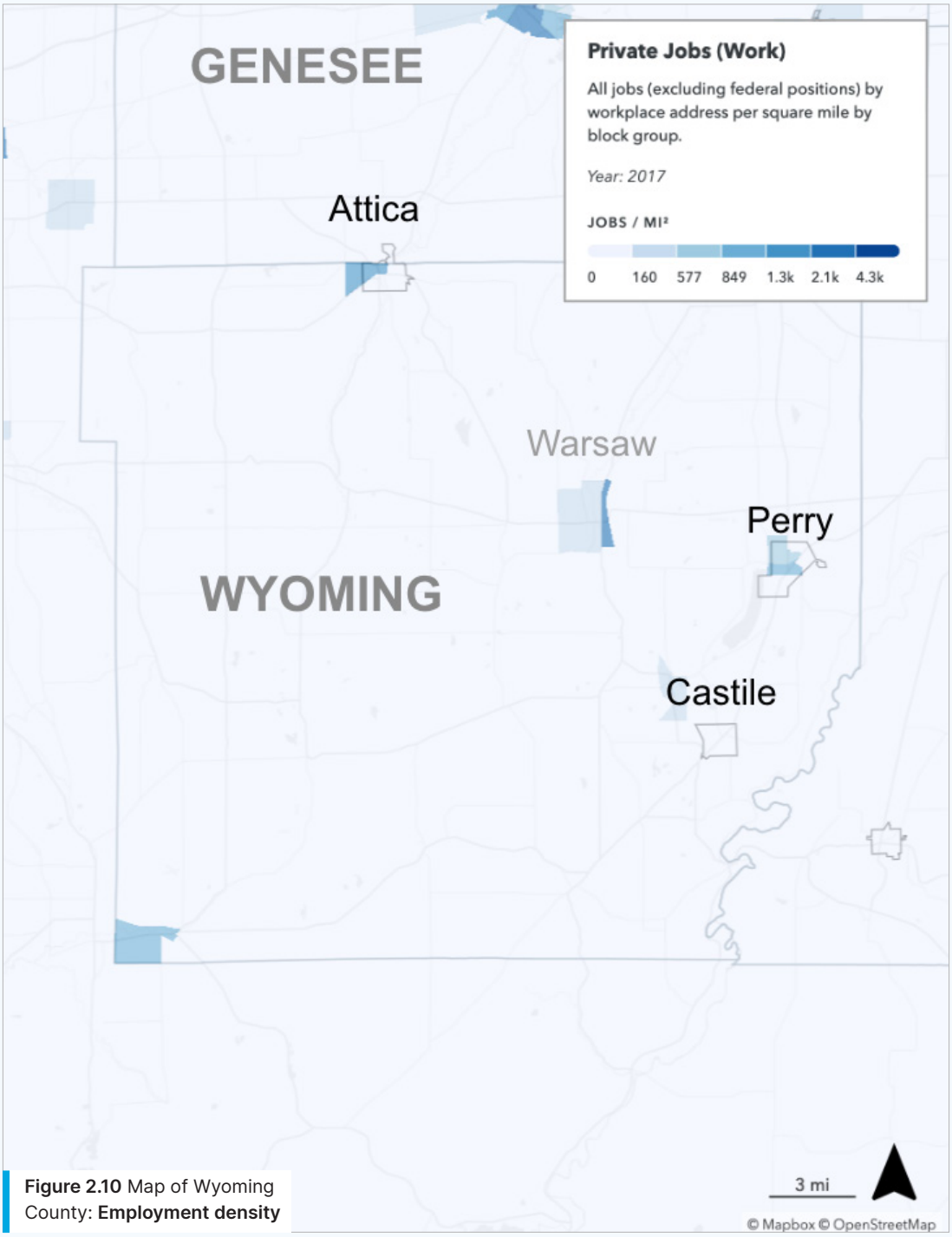


Figure 2.10 Map of Wyoming County: **Employment density**

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019 by block group.

Wyoming County: Car-Free Households

Nearly 95% of residents of Wyoming County have access to a household vehicle. The same is true for Attica, while in both Perry and Castile just 85% of households have access. Perry alone has nearly 200 households who are reliant on public transit or other transportation modes for their mobility needs.

Table 2.11 Wyoming County: **Car-free households summary**

Area	Car-Free Households	Percent of Households
Attica	60	5%
Perry	190	14%
Castile	62	15%
Wyoming County	1,019	6%

Source: American Community Survey 5-year 2016-2020 by Census place.

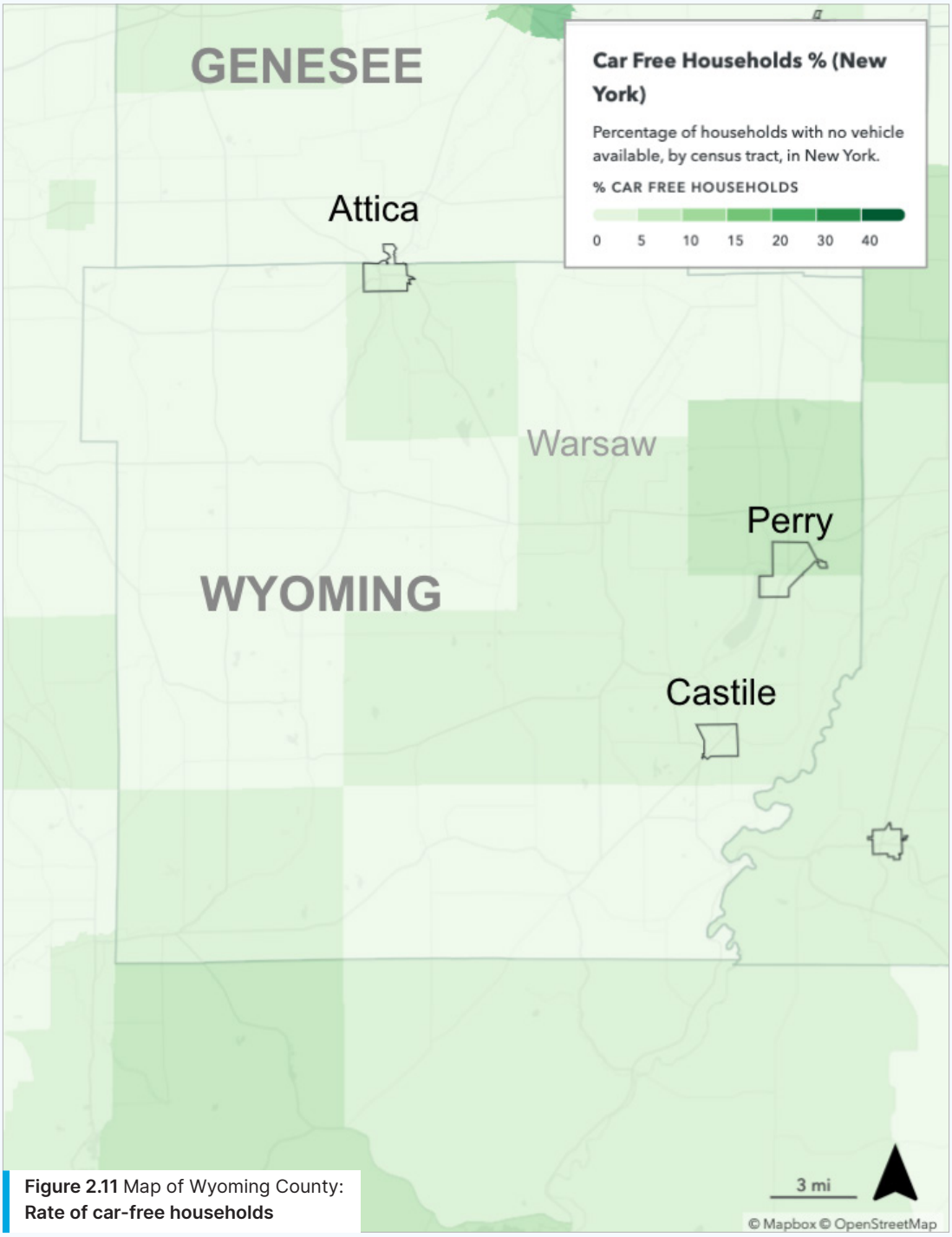


Figure 2.11 Map of Wyoming County: **Rate of car-free households**

Source: American Community Survey 5-year; 2015-2019 by census tract.

Wyoming County: Poverty

Of the three villages included in this study, Castile has the greatest highest poverty rate at 14% of the population. Perry's poverty rate is similar to that of the county overall, while Attica's is relatively lower. Due to the larger sizes of Perry and Attica, despite having a lower poverty rate than Castile they both have more residents living in poverty.

Table 2.12 Wyoming County: **Poverty summary**

Area	People in Poverty	Percent of Population
Attica	178	6%
Perry	329	10%
Castile	131	14%
Wyoming County	3,482	9%

Source: American Community Survey 5-year 2016-2020 by Census place.

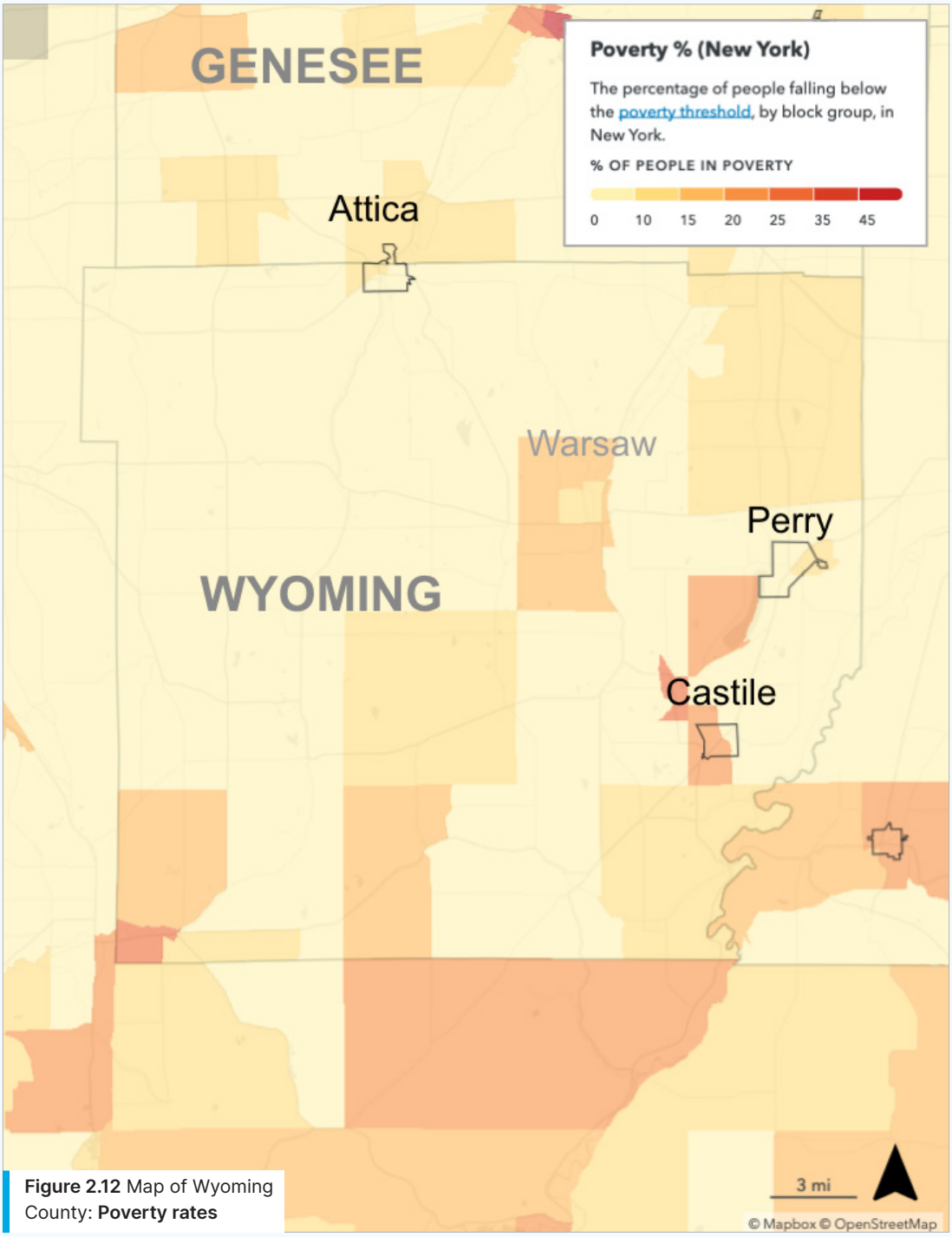


Figure 2.12 Map of Wyoming County: **Poverty rates**

Source: American Community Survey 5-year; 2015-2019 by block group.

Wyoming County: Minority

Of the three villages included in this study, Perry has the greatest number and percentage of minority residents, with 600 residents (18%) identifying as non-white or Hispanic. Both Attica and Castile have a smaller percentage of minority residents than the county as a whole, although there are many minority residents living in rural areas near Attica.

Table 2.13 Wyoming County: **Minority summary**

Area	Minority Residents	Percent of Population
Attica	134	5%
Perry	586	18%
Castile	76	8%
Wyoming County	4,123	10%

Source: American Community Survey 5-year 2016-2020 by Census place.

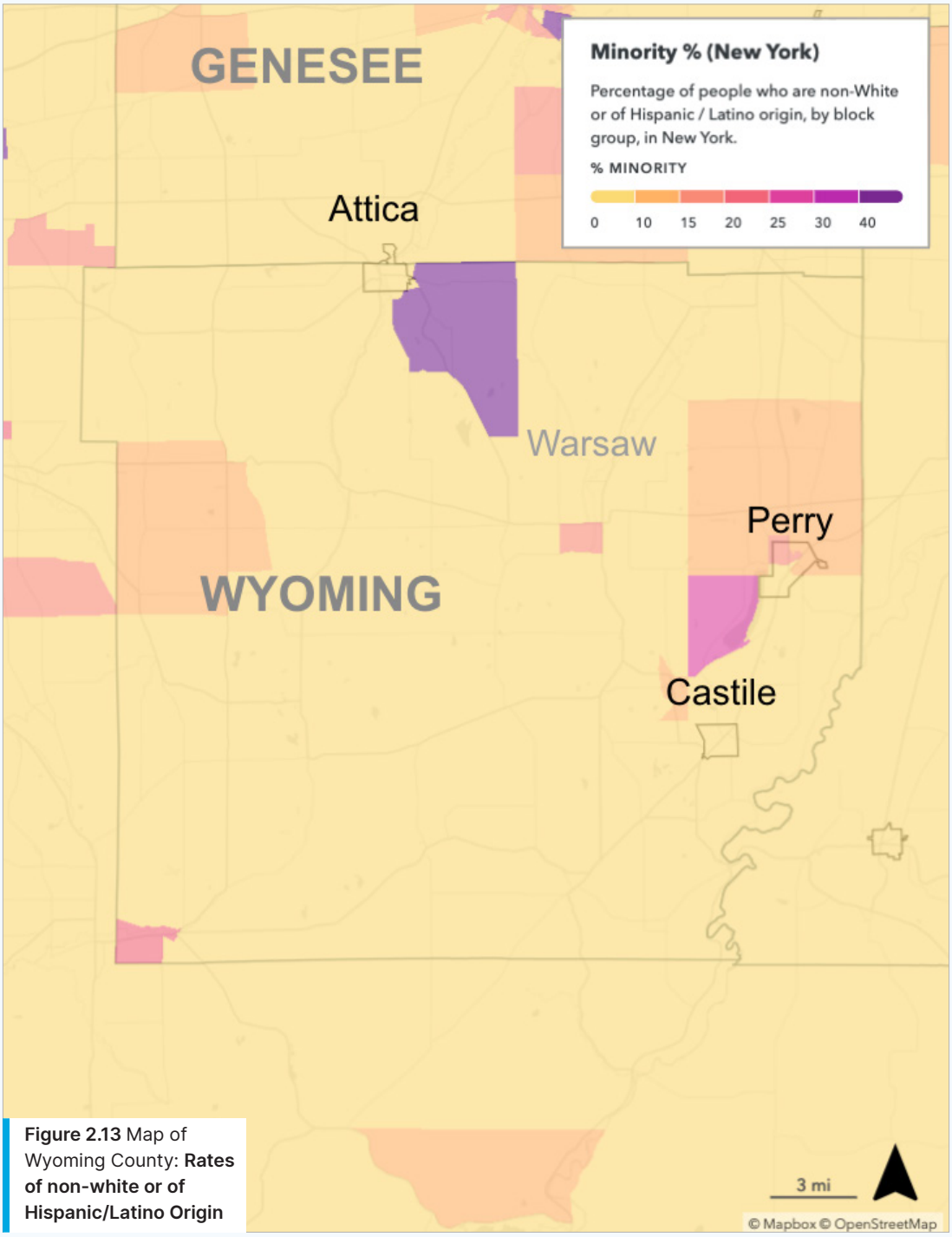


Figure 2.13 Map of Wyoming County: **Rates of non-white or of Hispanic/Latino Origin**

Source: American Community Survey 5-year; 2015-2019 by block group.

Wyoming County: Disability

Both Perry and Castile have a greater percentage of people with disabilities than the county as a whole, with about one in six residents living with a disability. Due to its larger size, this means Perry has nearly 550 residents living with a disability, followed by Attica with nearly 250.

Table 2.14 Wyoming County: **Disability population summary**

Area	People with Disabilities	Percent of Population
Attica	236	8%
Perry	535	16%
Castile	166	17%
Wyoming County	4,959	12%

Source: American Community Survey 5-year 2016-2020 by Census place.

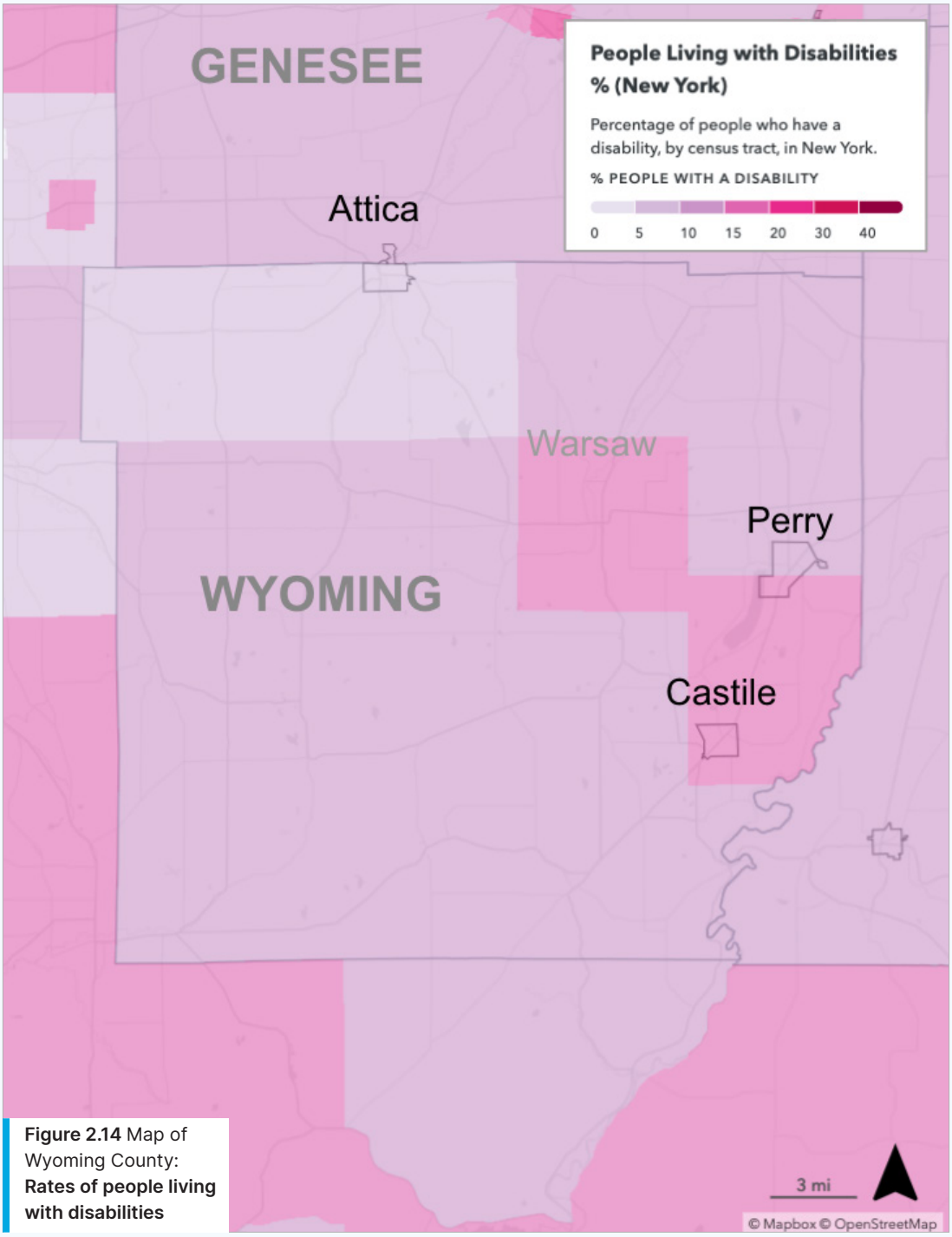


Figure 2.14 Map of Wyoming County: **Rates of people living with disabilities**

Source: American Community Survey 5-year; 2015-2019 by census tract.

Wyoming County: Seniors

All three villages included in this study have a similar percentage of senior population as the county as a whole, with about one in five residents aged 65 or older.

Table 2.15 Wyoming County: **Seniors summary**

Area	Seniors	Percent of Population
Attica	525	18%
Perry	546	16%
Castile	166	17%
Wyoming County	7,245	18%

Source: American Community Survey 5-year 2016-2020 by Census place.

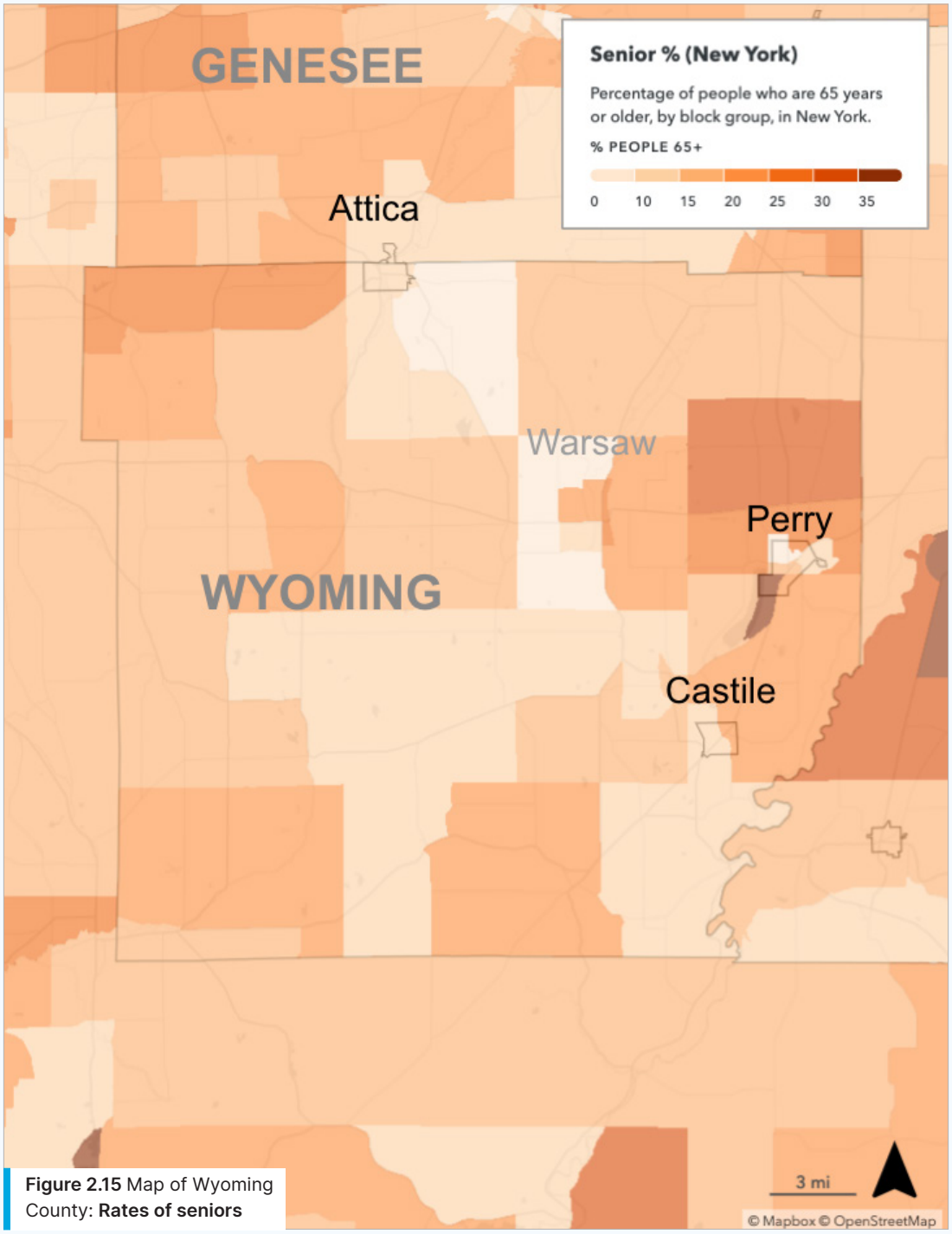


Figure 2.15 Map of Wyoming County: **Rates of seniors**

Source: American Community Survey 5-year; 2015-2019 by block group.

Wyoming County: Youth

Perry and Castile have a greater portion of their residents aged 17 or younger than the county as a whole.

Table 2.16 Wyoming: **Youth summary**

Area	Youth	Percent of Population
Attica	533	18%
Perry	730	22%
Castile	238	25%
Wyoming County	7,606	19%

Source: American Community Survey 5-year 2016-2020 by Census place.

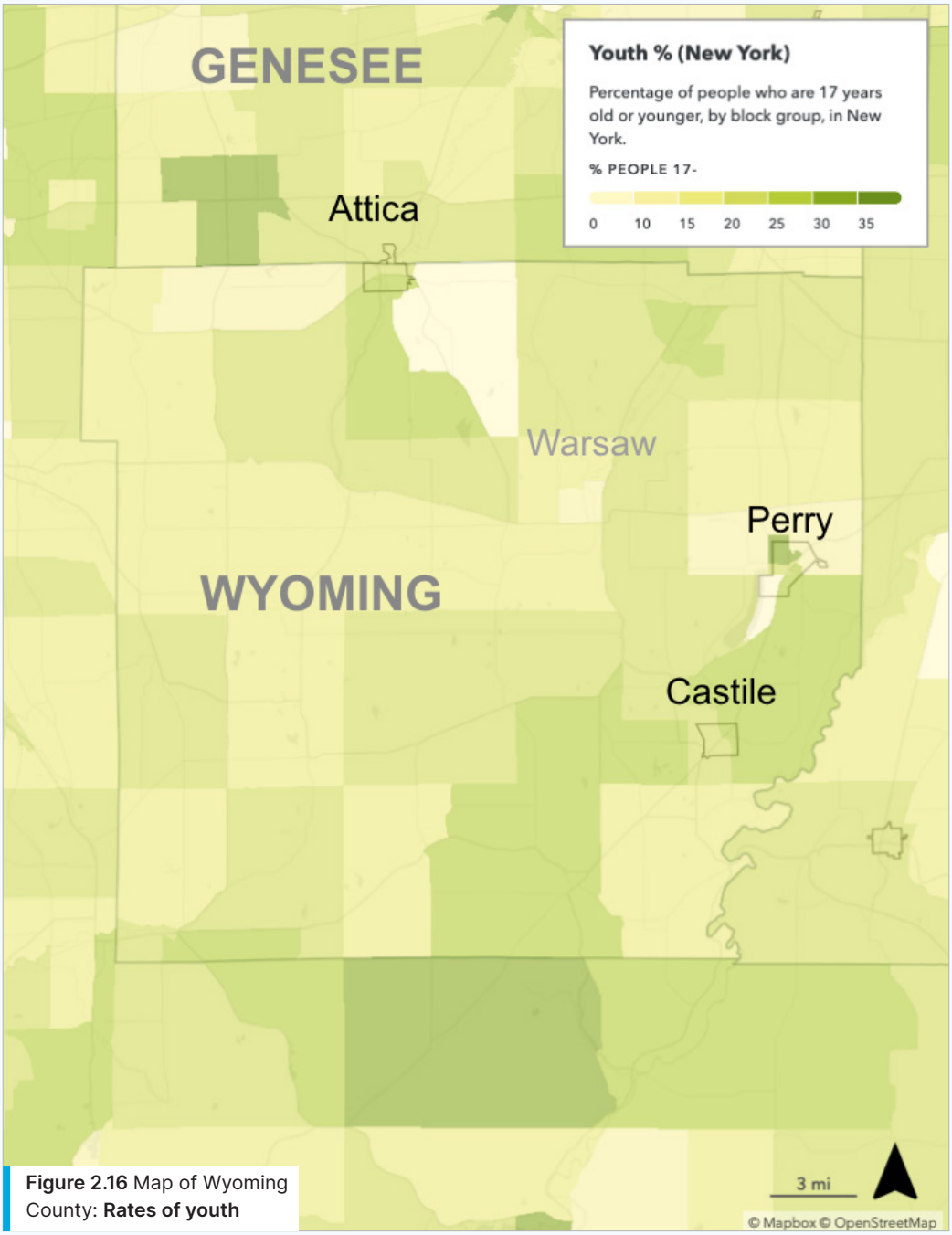


Figure 2.16 Map of Wyoming County: **Rates of youth**

Source: American Community Survey 5-year; 2015-2019 by block group.

Wyoming County: Summary

Overall, compared to other communities in Wyoming County included in this study, Perry stands out as higher potential for additional transit investment due to its larger population and demographics.

2.1.3. Livingston County: Demographic Analysis

Livingston County: Population

In Livingston County there are seven villages included in this study, representing 29% of the county's population. Of the villages included in this study, Dansville is the largest village in this county and the second-largest in the study as a whole. Avon and Mt. Morris are also fairly populous with over 3,000 residents. Of these villages, Livonia has the greatest population spillover outside of its village border.

Table 2.17 Livingston County: **Population summary**

Area	Population
Caledonia	2,133
Avon	3,271
Lima	2,164
Livonia	1,472
Mt. Morris	3,064
Nunda	1,196
Dansville	4,653
Livingston County	63,218

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.17 Map of Livingston County: **Population density**

Source: American Community Survey 5-year; 2015-2019 by census block.

Livingston County: Jobs

Three of three of the Livingston County villages included in this study have over 1,000 jobs - Avon, Mt. Morris, and Dansville. Major employers span a variety of industries, from healthcare to social services to manufacturing.

Table 2.18 Livingston County: **Employment summary**

Area	Jobs	Major Employer
Caledonia	400	Livingston Associates
Avon	1,800	Gray Metal Products Kraft Foods NYS DEC Region 8 Office
Lima	300	-
Livonia	100	-
Mt. Morris	1,300	Hilltop Industries Livingston County Govt Dept of Social Services
Nunda	100	-
Dansville	2,000	Noyes Memorial Hospital
Livingston County	20,300	-

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019.

Figure 2.18 Map of Livingston County: **Employment density**

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019 by block group.

Livingston County: Car-Free Households

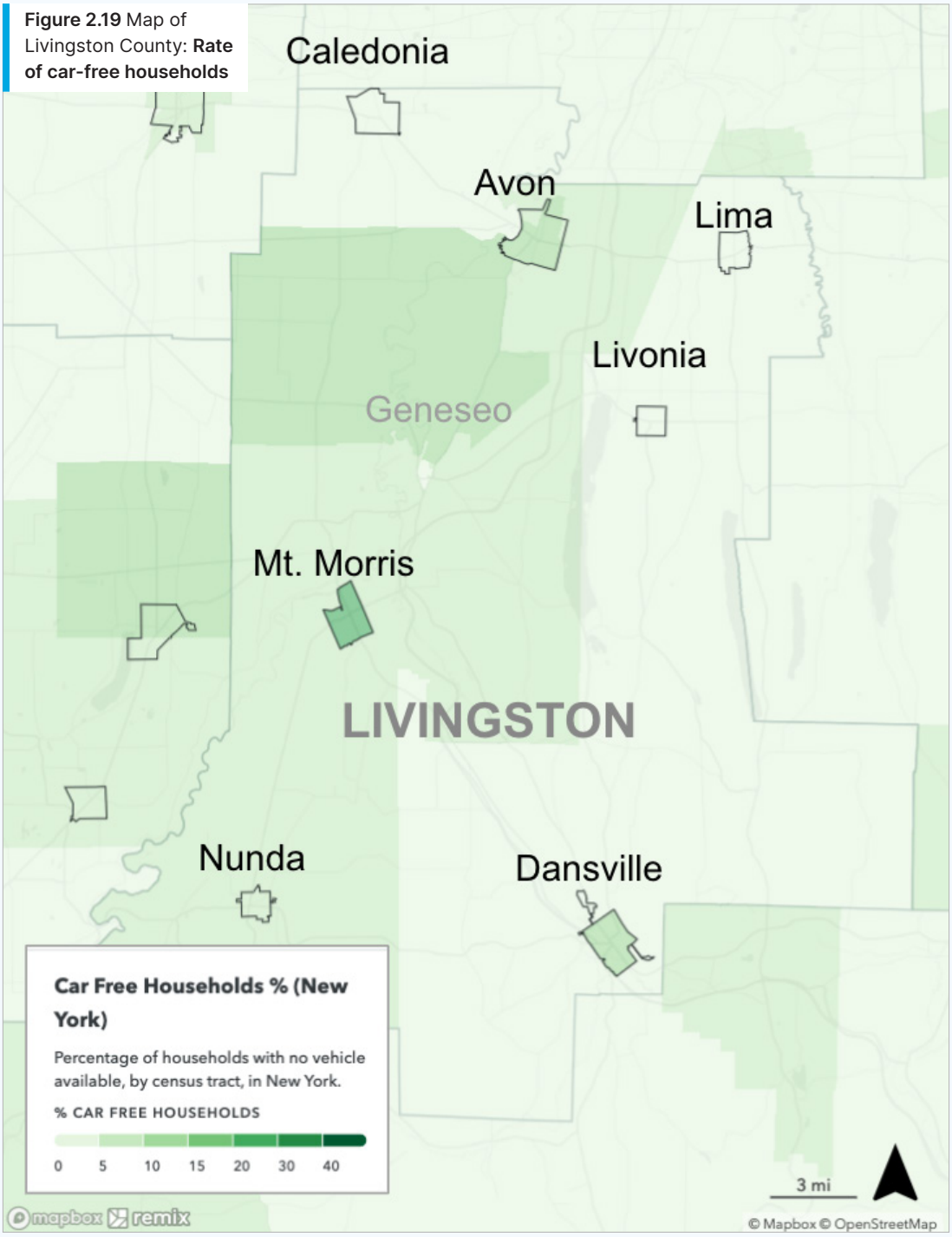
Nearly 95% of households in Livingston have access to a household vehicle. Mt. Morris has the lowest rate of vehicle ownership and the greatest number of households without a vehicle. Avon, Nunda, and Dansville also have elevated rates of households without a vehicle, around 10%.

Table 2.19 Livingston County: **Car-free households summary**

Area	Car-Free Households	Percent of Households
Caledonia	27	3%
Avon	134	10%
Lima	55	7%
Livonia	23	4%
Mt. Morris	247	17%
Nunda	55	10%
Dansville	198	9%
Livingston County	1,520	6%

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.19 Map of Livingston County: **Rate of car-free households**



Source: American Community Survey 5-year; 2015-2019 by census tract.

Livingston County: Poverty

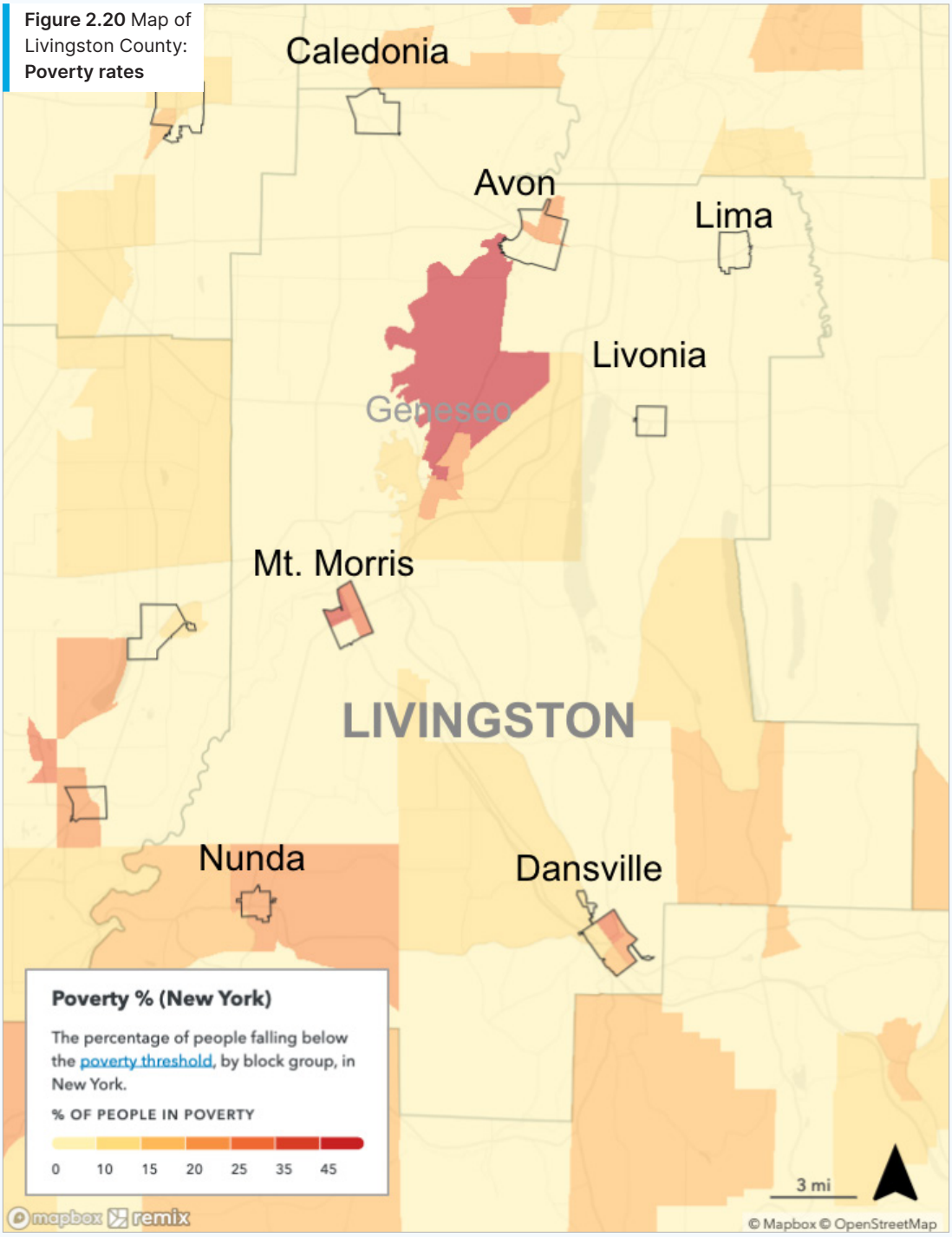
The largest area of poverty in Livingston County is located outside of the villages in this study, surrounding Geneseo. However, this is likely due to the high student population living in this area. Of the villages in the study, Nunda has the highest rate of poverty with one in three residents below the poverty line. Both Mt. Morris and Dansville also have elevated poverty rates and over 500 residents in poverty.

Table 2.20 Livingston County: **Poverty summary**

Area	People in Poverty	Percent of Population
Caledonia	114	5%
Avon	354	11%
Lima	152	7%
Livonia	83	6%
Mt. Morris	589	19%
Nunda	357	30%
Dansville	624	13%
Livingston County	7,965	13%

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.20 Map of Livingston County: **Poverty rates**



Source: American Community Survey 5-year; 2015-2019 by block group.

Livingston County: Minority

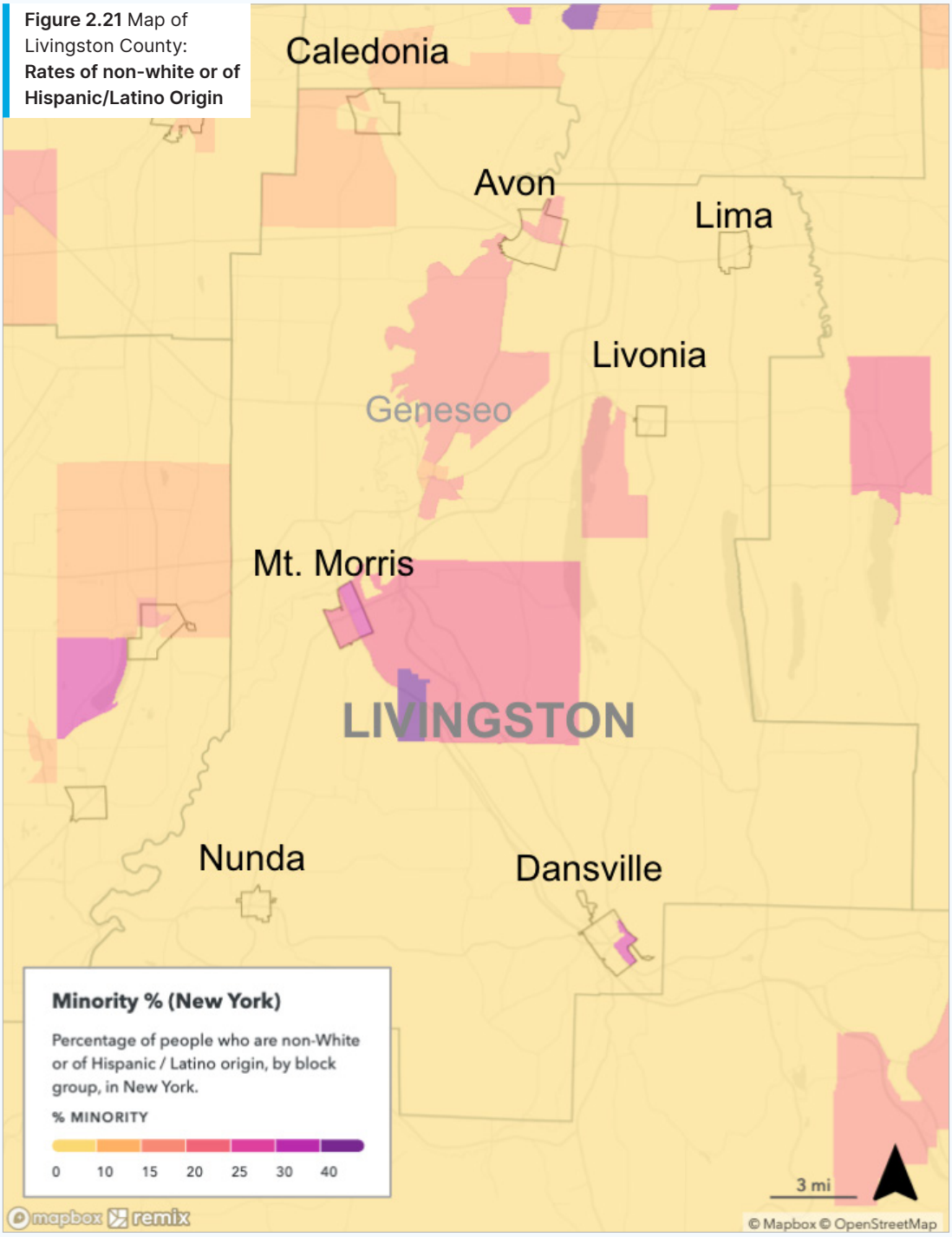
Of the villages included in this study, Mt. Morris has the greatest number and percentage of minority residents, with one in five residents identifying as non-white or Hispanic. Lima and Dansville also have high rates and numbers of minority residents.

Table 2.21 Livingston County: **Minority summary**

Area	Minority Residents	Percent of Population
Caledonia	195	9%
Avon	167	5%
Lima	260	12%
Livonia	99	7%
Mt. Morris	629	21%
Nunda	48	4%
Dansville	424	9%
Livingston County	6,259	10%

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.21 Map of Livingston County: **Rates of non-white or of Hispanic/Latino Origin**



Source: American Community Survey 5-year; 2015-2019 by block group.

Livingston County: Disability

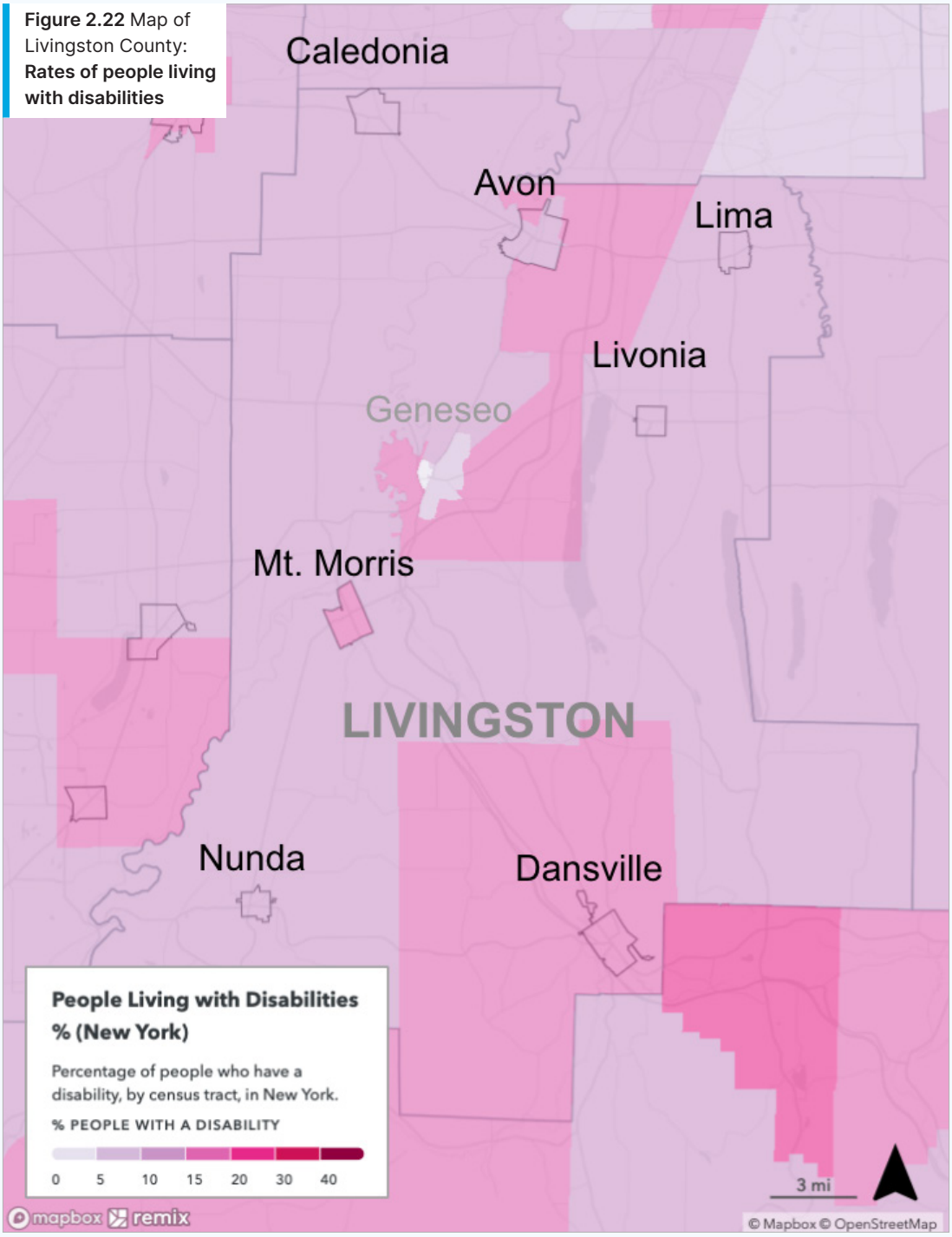
Nunda has the greatest percentage of residents with disabilities, with over one in four residents living with a disability. Both Mt. Morris and Dansville have high rates of disability and over 500 residents living with a disability.

Table 2.22 Livingston County: **Disability population summary**

Area	People with Disabilities	Percent of Population
Caledonia	241	11%
Avon	367	11%
Lima	296	14%
Livonia	151	10%
Mt. Morris	557	18%
Nunda	340	28%
Dansville	757	16%
Livingston County	7,359	12%

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.22 Map of Livingston County: **Rates of people living with disabilities**



Source: American Community Survey 5-year; 2015-2019 by census tract.

Livingston County: Seniors

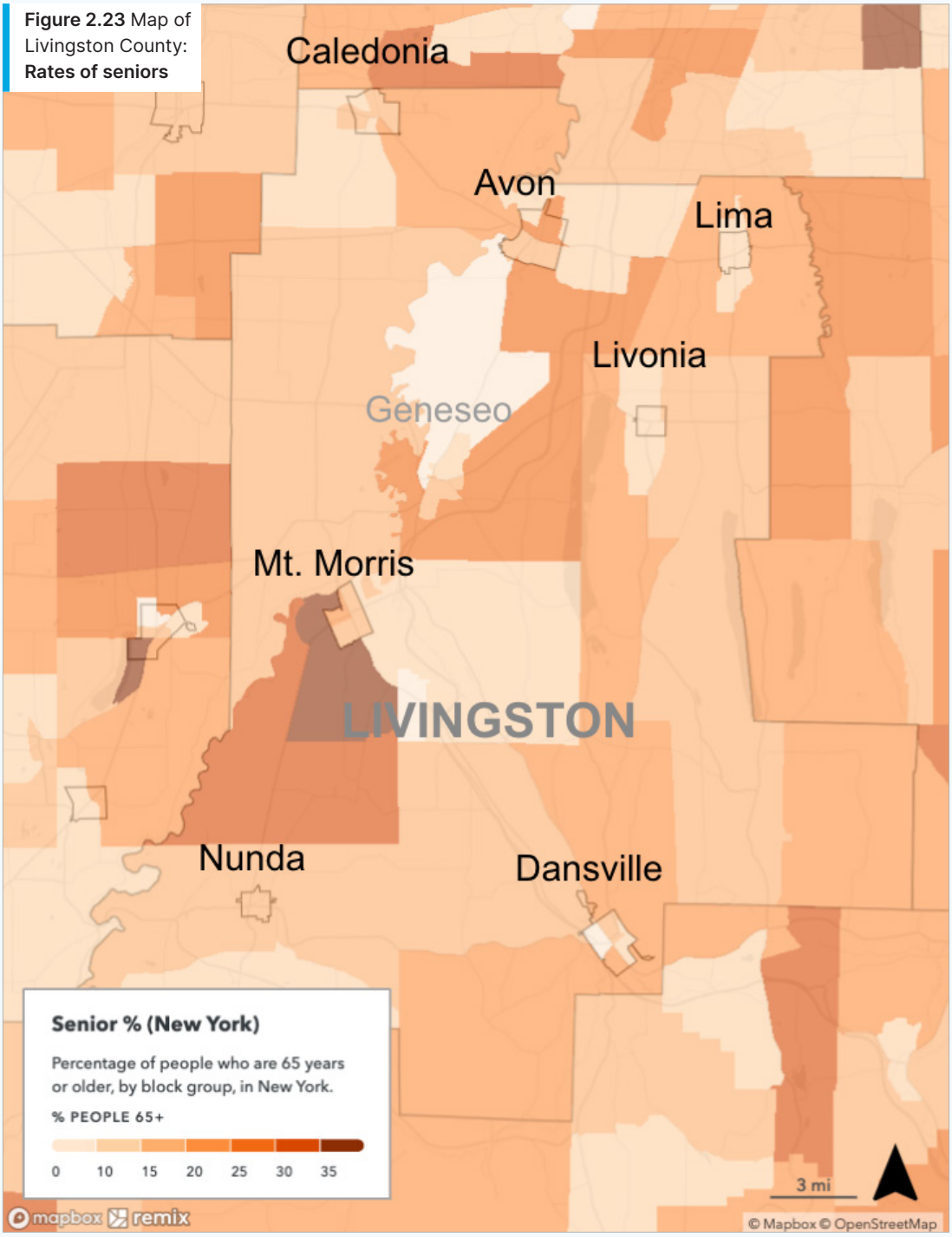
Nunda has the greatest percentage of senior residents, with over one in five residents being older adults. Both Avon and Dansville have high rates of seniors and over 500 seniors living in each village.

Table 2.23 Livingston County: **Seniors summary**

Area	Seniors	Percent of Population
Caledonia	314	15%
Avon	658	20%
Lima	275	13%
Livonia	277	19%
Mt. Morris	531	17%
Nunda	272	23%
Dansville	926	20%
Livingston County	11,316	18%

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.23 Map of Livingston County: **Rates of seniors**



Source: American Community Survey 5-year; 2015-2019 by block group.

Livingston County: Youth

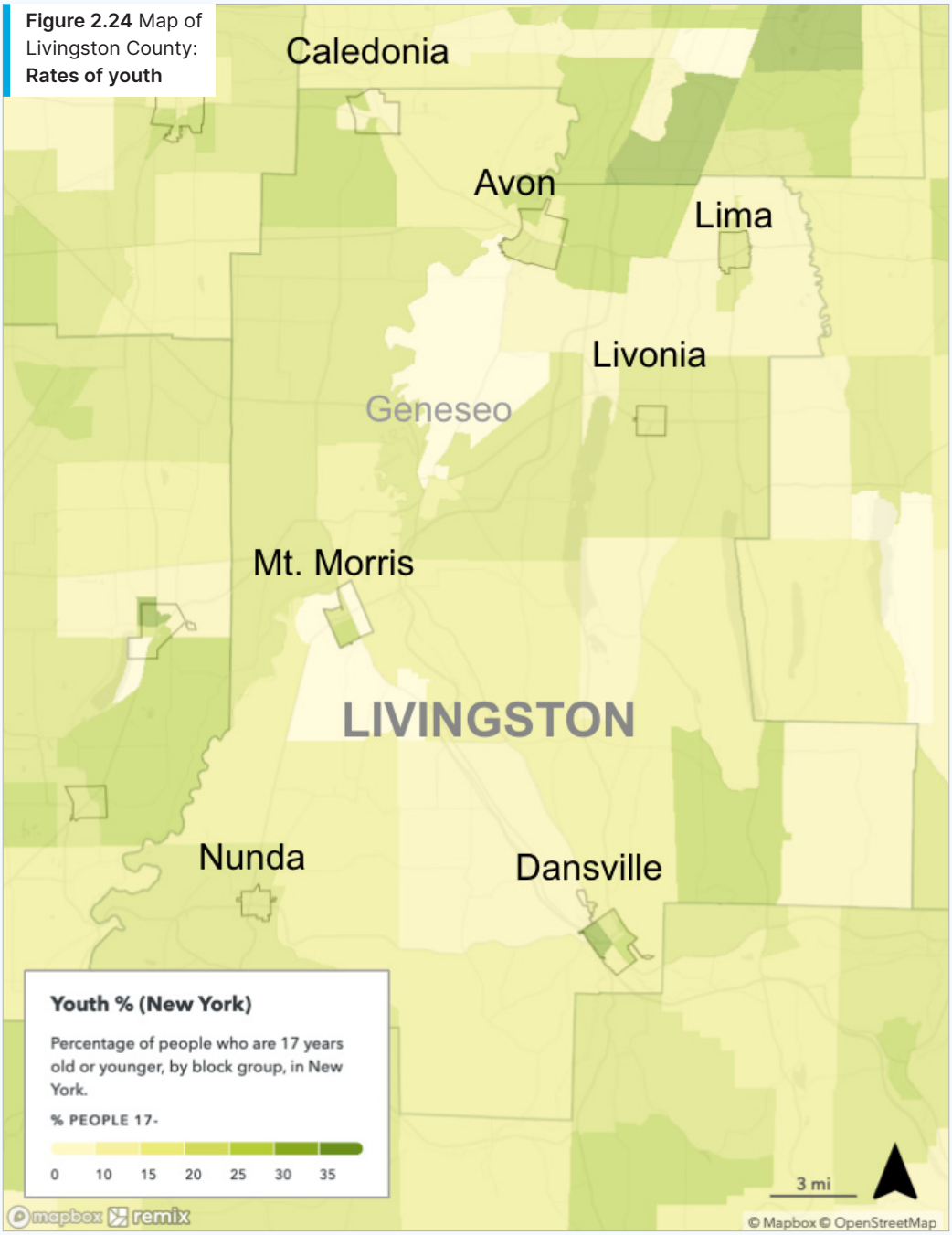
All of the villages included in this study have the same or greater percentage of youth population than the county as a whole, with over 500 residents of Avon, Lima, Mt. Morris, and Dansville aged 17 or younger.

Table 2.24 Livingston County: **Youth summary**

Area	Youth	Percent of Population
Caledonia	382	18%
Avon	681	21%
Lima	509	24%
Livonia	385	26%
Mt. Morris	619	20%
Nunda	239	20%
Dansville	852	18%
Livingston County	11,190	18%

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.24 Map of Livingston County: **Rates of youth**



Source: American Community Survey 5-year; 2015-2019 by block group.

Livingston County: Summary

Overall, when compared to other communities in Livingston County, Dansville, Mt. Morris, and Avon are all high-potential areas for public transit investment due to population, jobs, and demographics.

2.1.4. Ontario County: Demographic Analysis

Ontario County: Population

In Ontario County there are seven villages included in this study, representing 11% of the county's population. Of the villages included in this study, Victor is the largest and is located within a denser area due to its proximity to Monroe County and the extended Rochester suburbs. Phelps and Clifton Springs are also quite populous, as is the Manchester-Shortsville area when considered together.

Table 2.25 Ontario County: **Population summary**

Area	Population
Victor	2,709
Manchester	1,551
Phelps	2,175
Clifton Springs	1,931
Shortsville	1,709
Bloomfield	1,471
Naples	906
Ontario County	109,774

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.25 Map of Ontario County: **Population density**

Source: American Community Survey 5-year; 2015-2019 by census block.

Ontario County: Jobs

Victor and Clifton Springs each have over 500 jobs located within their borders. When combined, these two villages are home to over twice as many jobs as all other studied Ontario County villages combined.

Table 2.26 Ontario County: **Employment summary**

Area	Jobs	Percent of Population
Victor	600	Constellation Brands Info Directions O'Connell Electric
Manchester	300	-
Phelps	200	-
Clifton Springs	900	Clifton Springs Hospital G.W. Lisk Co. Inc
Shortsville	100	-
Bloomfield	50	-
Naples	80	-
Ontario County	51,000	-

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019.

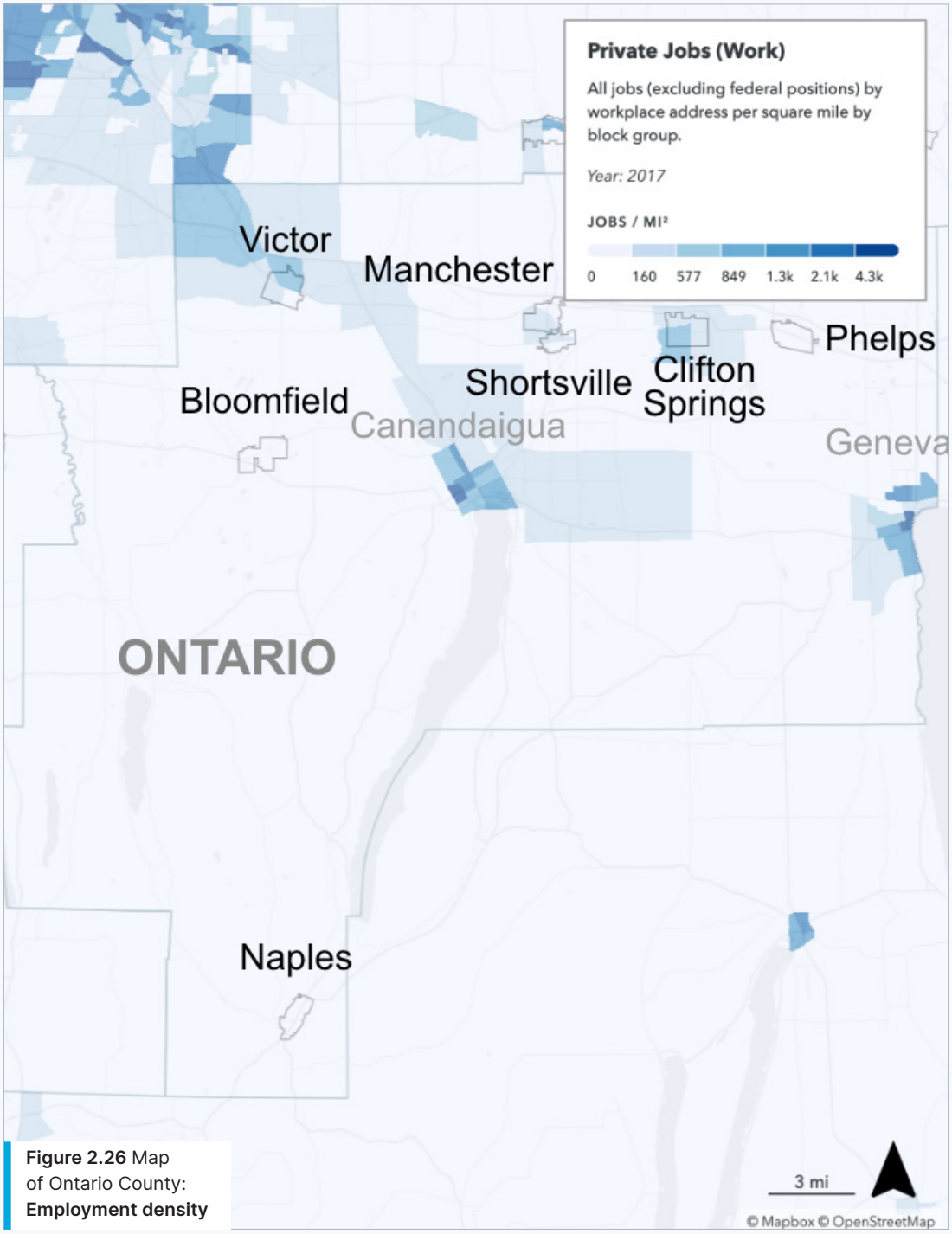


Figure 2.26 Map of Ontario County: **Employment density**

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019 by block group.

Ontario County: Car-Free Households

Over 90% of households in Ontario county have access to a vehicle. Of the villages included in this study, only Clifton Springs and Naples have particularly low rates of vehicle ownership; one in five households in Clifton Sprints and one in seven households in Napes do not have access to a vehicle.

Table 2.27 Ontario County: **Car-free households summary**

Area	Car-Free Households	Percent of Households
Victor	78	7%
Manchester	6	1%
Phelps	71	8%
Clifton Springs	145	19%
Shortsville	18	3%
Bloomfield	40	6%
Naples	60	14%
Ontario County	3,105	7%

Source: American Community Survey 5-year 2016-2020 by Census place.

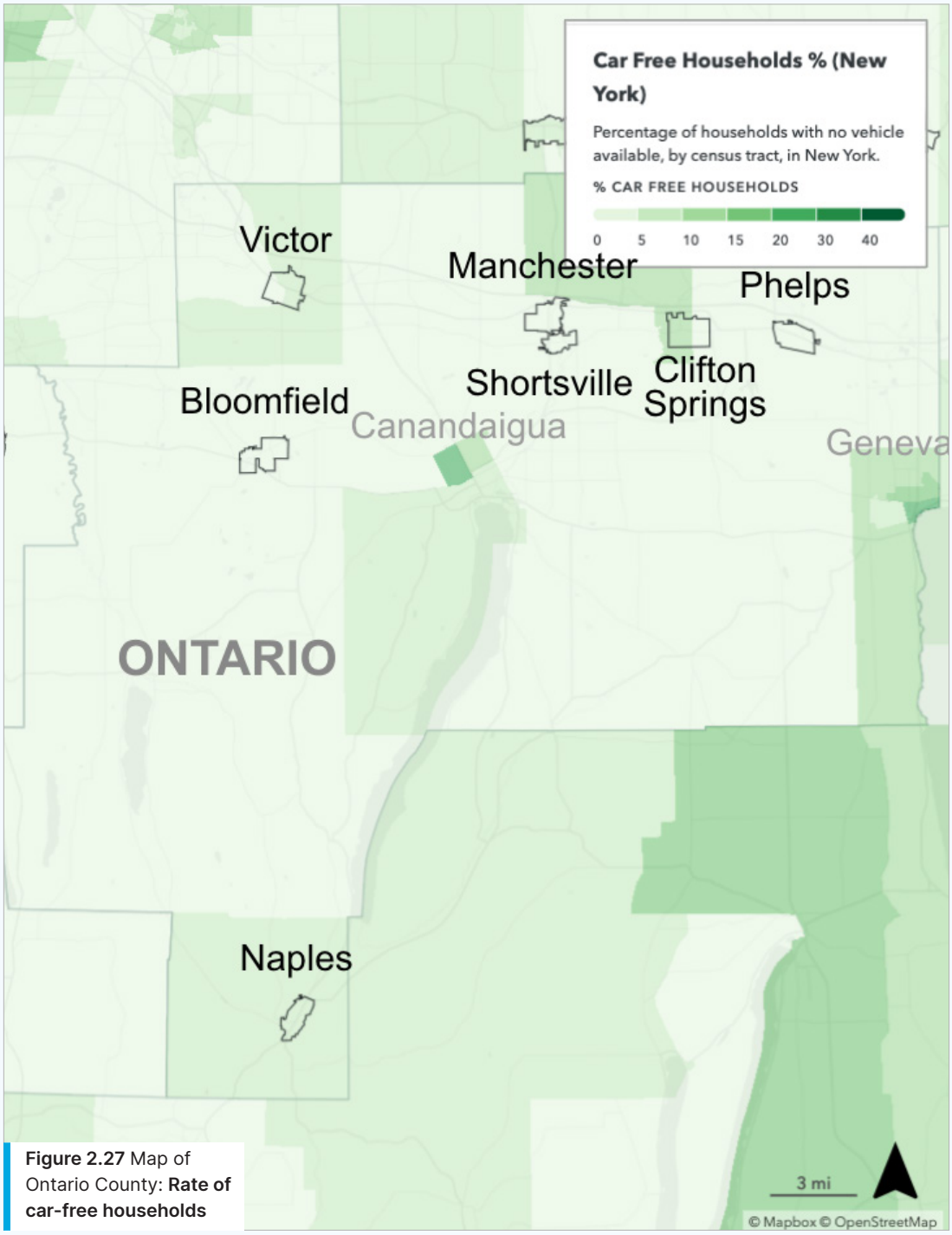


Figure 2.27 Map of Ontario County: **Rate of car-free households**

Source: American Community Survey 5-year; 2015-2019 by census tract.

Ontario County: Poverty

Of the villages included in this study, Phelps has the greatest number of individuals in poverty and the highest poverty rate. Naples also has an elevated poverty rate, while the other communities have poverty rates that are about equal to or less than the poverty rate in the county as a whole.

Table 2.28 Ontario County: **Poverty summary**

Area	People in Poverty	Percent of Population
Victor	101	4%
Manchester	143	9%
Phelps	362	17%
Clifton Springs	186	10%
Shortsville	79	5%
Bloomfield	134	9%
Naples	131	14%
Ontario County	9,880	9%

Source: American Community Survey 5-year 2016-2020 by Census place.

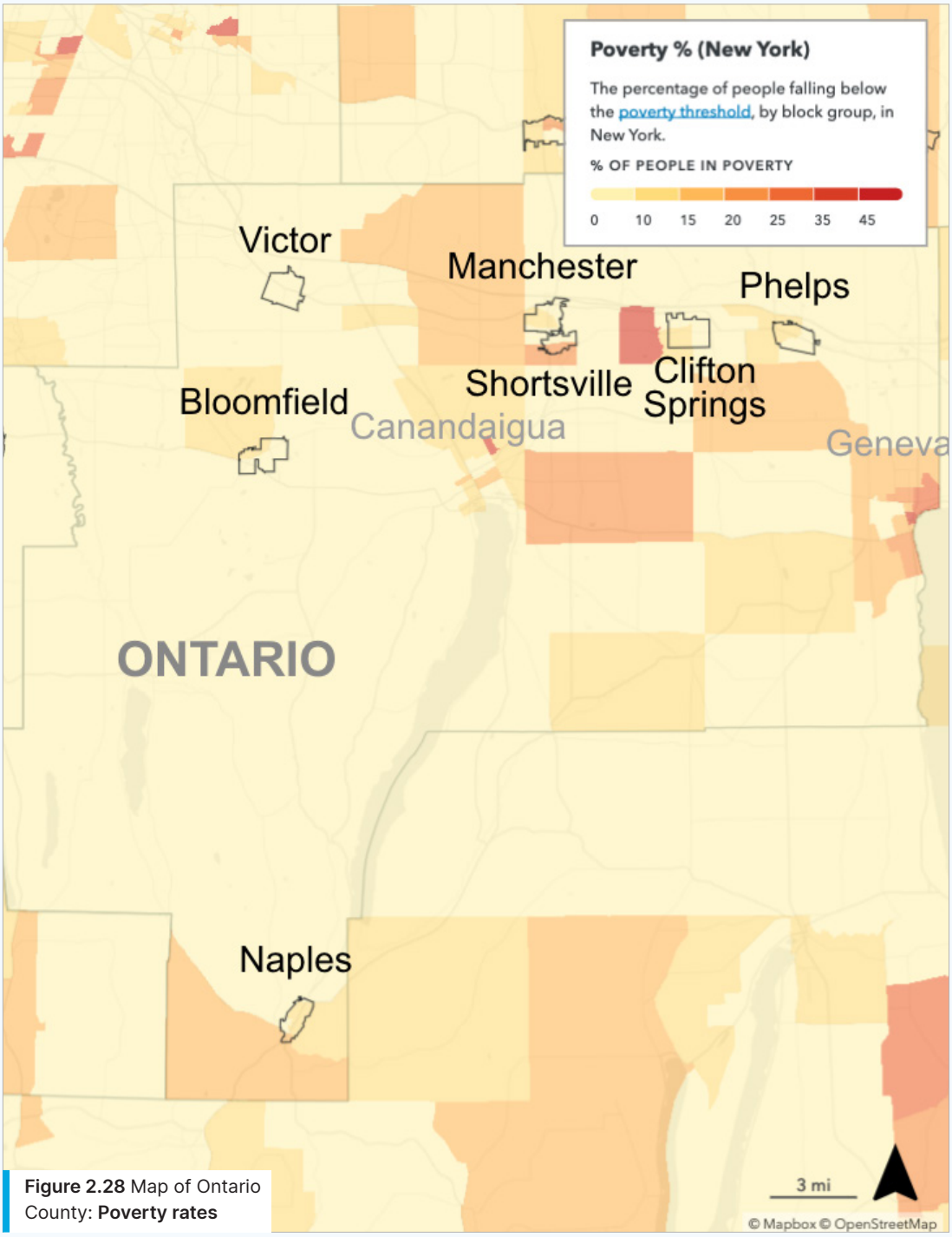


Figure 2.28 Map of Ontario County: **Poverty rates**

Source: American Community Survey 5-year; 2015-2019 by block group.

Ontario County: Minority

Of the villages included in this study area, Clifton Springs has the highest rate of minority residents at 11% - the same as the county as a whole. All other villages have lower rates of minority populations than the county, likely driven by the concentration of minority residents in Geneva, which is not included in this study.

Table 2.29 Ontario County: **Minority summary**

Area	Minority Residents	Percent of Population
Victor	90	3%
Manchester	73	5%
Phelps	161	7%
Clifton Springs	207	11%
Shortsville	31	2%
Bloomfield	92	6%
Naples	77	8%
Ontario County	11,526	11%

Source: American Community Survey 5-year 2016-2020 by Census place.

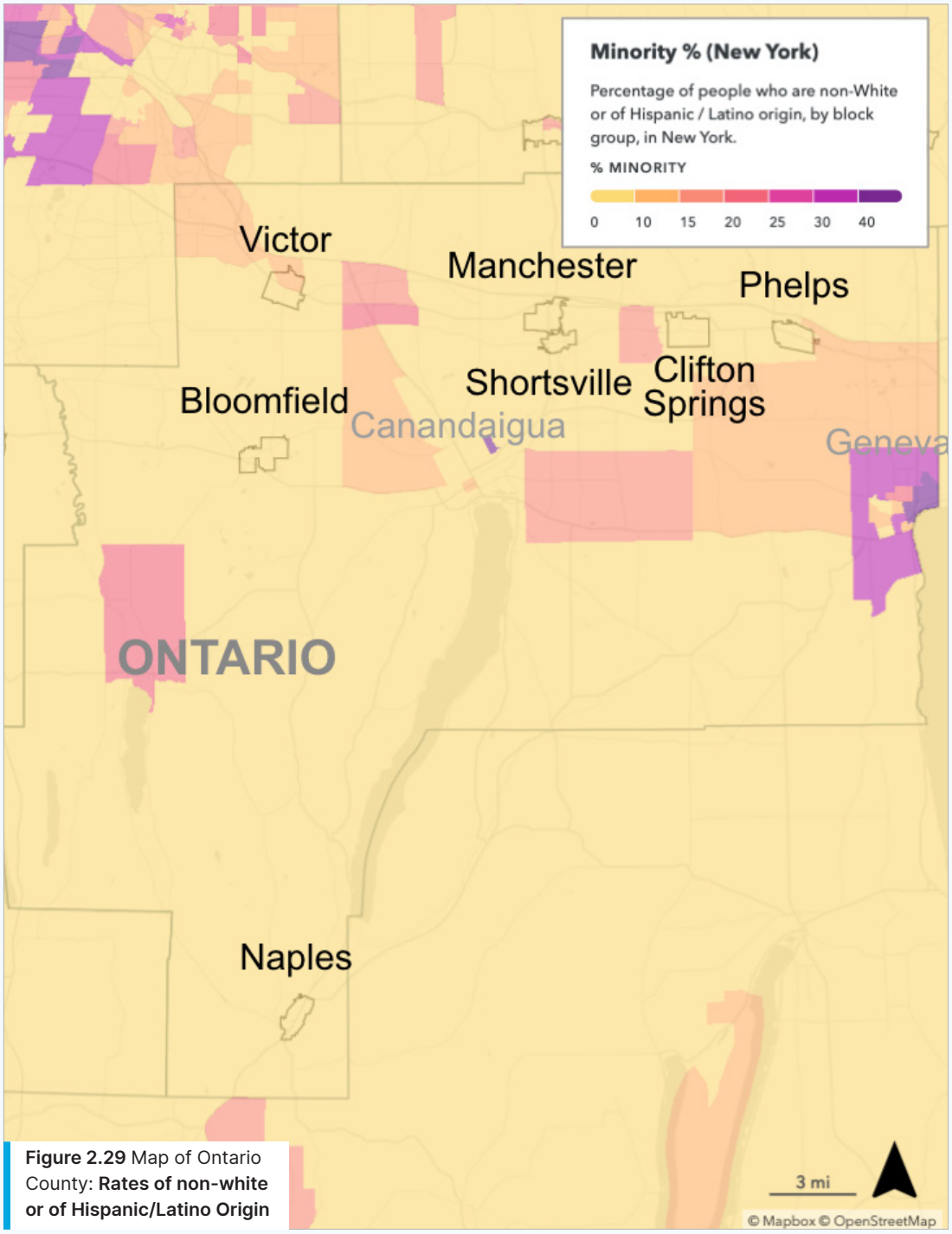


Figure 2.29 Map of Ontario County: **Rates of non-white or of Hispanic/Latino Origin**

Source: American Community Survey 5-year; 2015-2019 by block group.

Ontario County: Disability

None of the villages included in this study have significantly higher disability rates than the county as a whole. Victor, Manchester, Phelps, Clifton Springs, and Shortsville all have 200-350 residents living with a disability.

Table 2.30 Ontario County: **Disability population summary**

Area	People with Disabilities	Percent of Population
Victor	326	12%
Manchester	241	16%
Phelps	250	11%
Clifton Springs	276	14%
Shortsville	205	12%
Bloomfield	145	10%
Naples	121	13%
Ontario County	14,306	13%

Source: American Community Survey 5-year 2016-2020 by Census place.

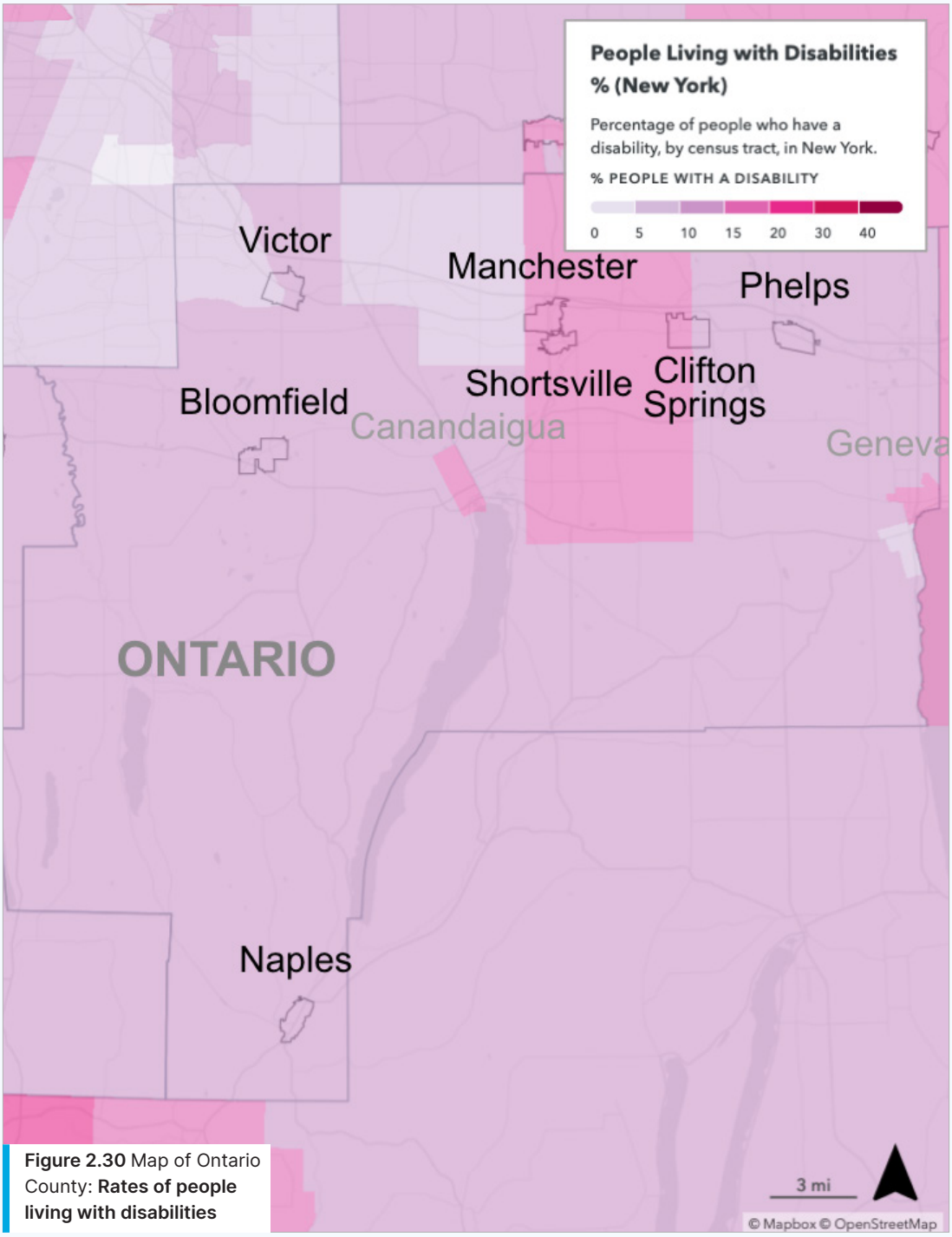


Figure 2.30 Map of Ontario County: **Rates of people living with disabilities**

Source: American Community Survey 5-year; 2015-2019 by census tract.

Ontario County: Seniors

In most of the Ontario County villages included in this study, and Ontario County as a whole, about one in five residents is aged 65 or older. Clifton Springs does have a greater proportion of seniors in its population, with one in four residents aged 65 or older.

Table 2.31 Ontario County: **Seniors summary**

Area	Seniors	Percent of Population
Victor	556	21%
Manchester	312	20%
Phelps	390	18%
Clifton Springs	497	26%
Shortsville	317	19%
Bloomfield	281	19%
Naples	184	20%
Ontario County	21,955	20%

Source: American Community Survey 5-year 2016-2020 by Census place.

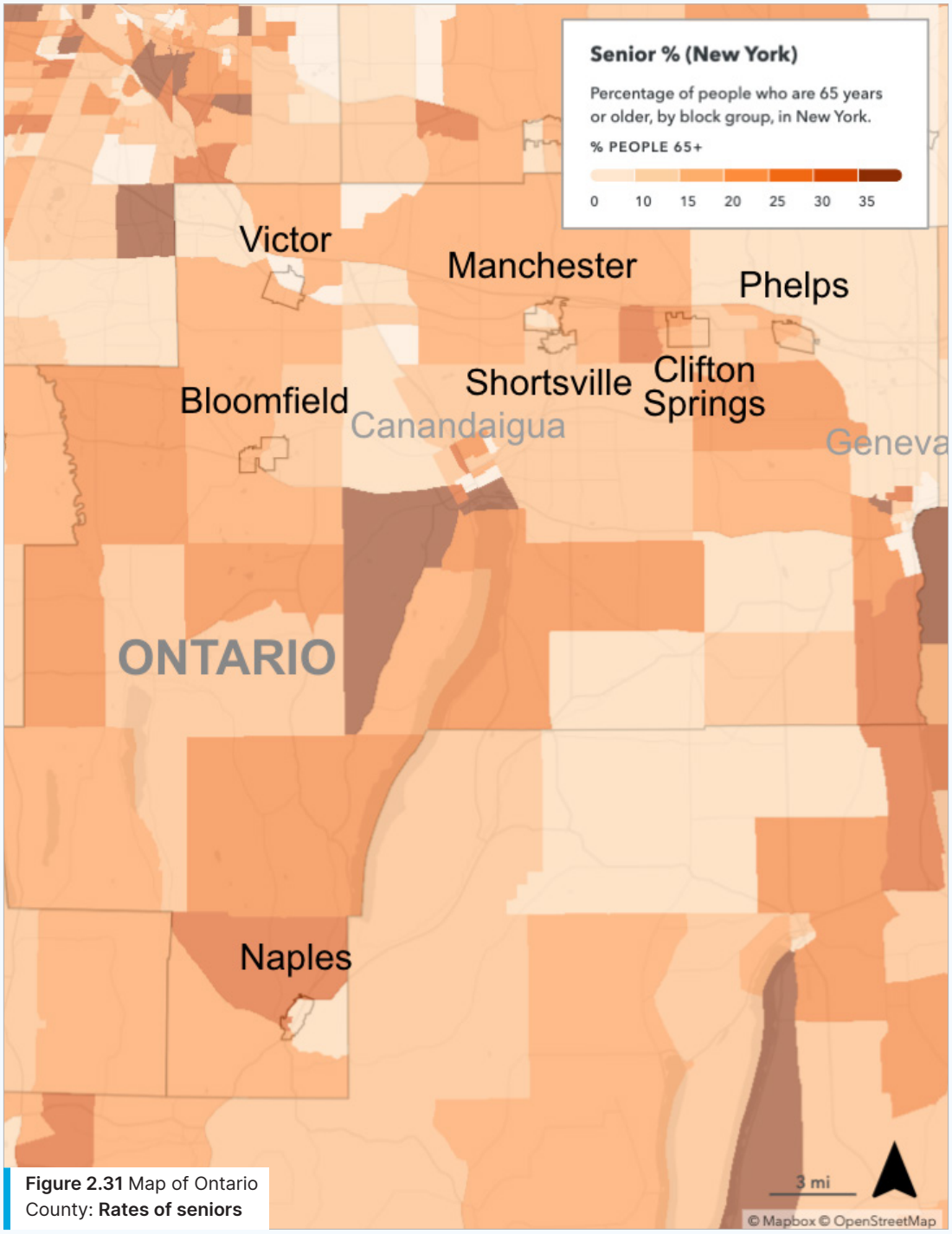


Figure 2.31 Map of Ontario County: **Rates of seniors**

Source: American Community Survey 5-year; 2015-2019 by block group.

Ontario County: Youth

Five of the seven villages included in this study have over 20% of their population aged 17 or younger, a higher rate than the county as a whole. Phelps is a particularly young community.

Table 2.33 Ontario County: **Youth summary**

Area	Youth	Percent of Population
Victor	629	23%
Manchester	320	21%
Phelps	592	27%
Clifton Springs	435	23%
Shortsville	356	21%
Bloomfield	205	14%
Naples	165	18%
Ontario County	22,065	20%

Source: American Community Survey 5-year 2016-2020 by Census place.

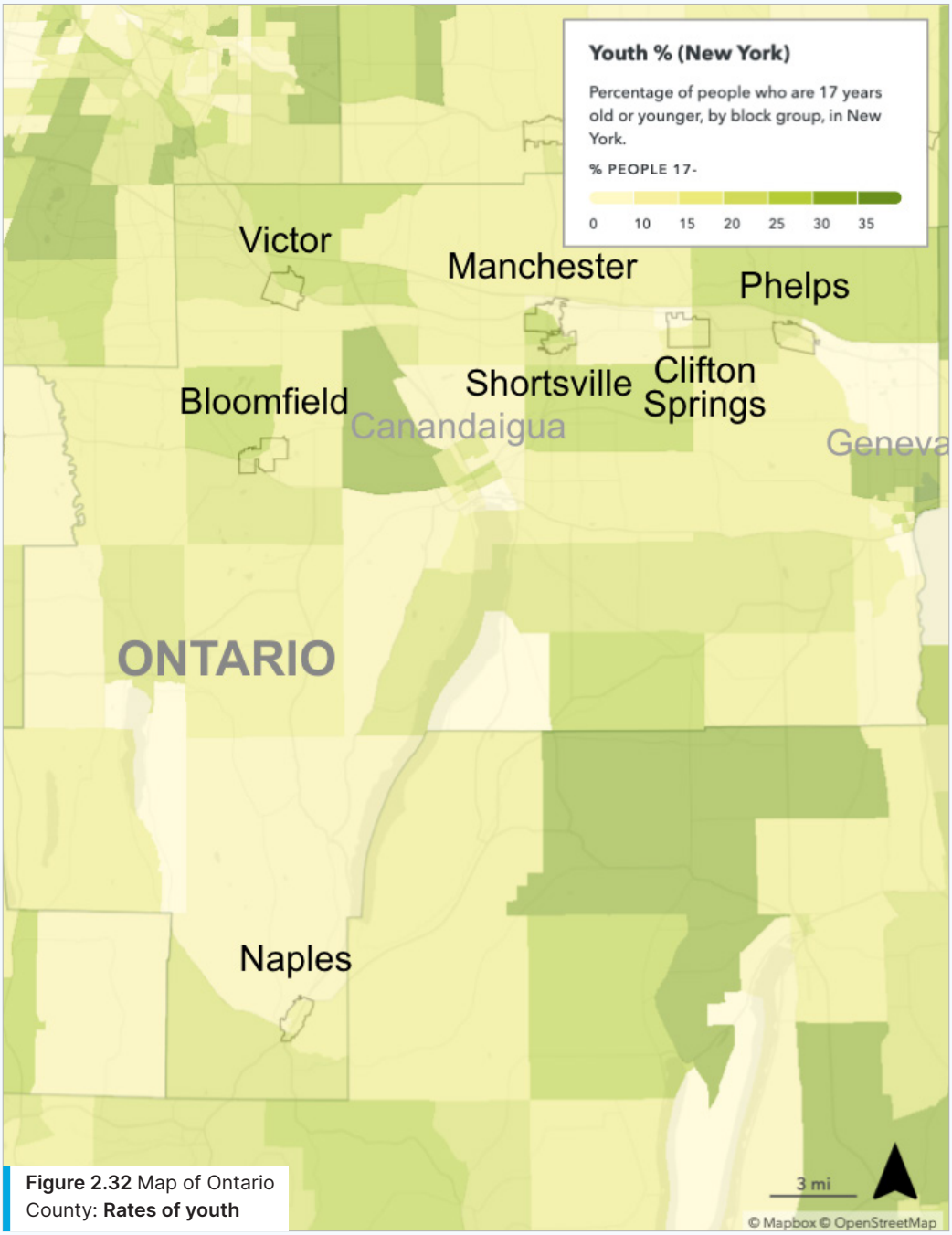


Figure 2.32 Map of Ontario County: **Rates of youth**

Source: American Community Survey 5-year; 2015-2019 by block group.

Ontario County: Summary

Overall, when compared to other communities in Ontario County, Victor, Clifton Springs, and Phelps look particularly promising for public transit investment due to their size, jobs, and demographics.

2.1.5. Wayne County: Demographic Analysis

Wayne County: Population

In Wayne County there are six villages included in this study, representing 23% of the county's population. Of the villages included in this study, Newark is the largest in both Wayne County and the study overall. Lyons and Palmyra are both quite populous, with Palmyra located in a denser area overall due to its proximity to Monroe County and Rochester's extended suburbs.

Table 2.33 Wayne County: **Population summary**

Area	Population
Sodus	1,742
Wolcott	1,534
Clyde	1,832
Lyons	3,313
Newark	8,868
Palmyra	3,361
Wayne County	90,103

Source: American Community Survey 5-year 2016-2020 by Census place.

Figure 2.33 Map of Wayne County: **Population density**

Source: American Community Survey 5-year; 2015-2019 by census block.

Wayne County: Jobs

The majority of the villages in this study are fairly large employment centers with over 500 jobs. Sodus, Clyde, Lyons, Newark, and Palmyra make up half of the top ten employment centers of all the villages in the six-county study area, with Newark being the largest employment center overall.

Table 2.34 Wayne County: **Employment summary**

Area	Jobs	Major Employer
Sodus	900	Dynalec Corp Sodus CSD
Wolcott	300	North Rose-Wolcott CSD Red Creek CSD
Clyde	600	-
Lyons	1,900	Empire Merchants North Lyons CSD Silgan Containers
Newark	4,500	Ultralife Corporation Wayne Finger Lakes BOCES
Palmyra	800	Garlock Sealing Technologies
Wayne County	27,400	-

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019.

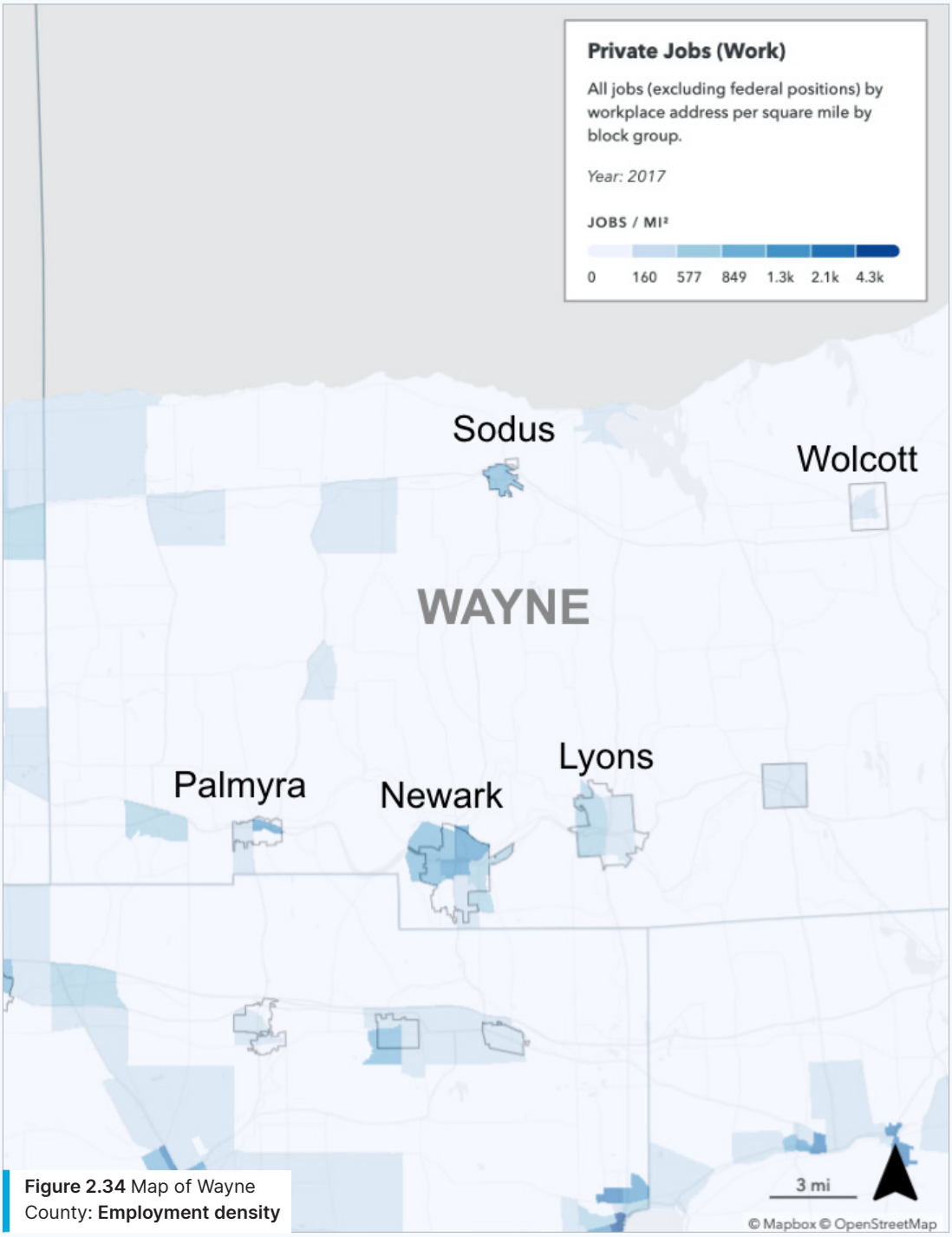


Figure 2.34 Map of Wayne County: **Employment density**

Source: U.S. Census Bureau, Center for Economic Studies, LEHD, 2019 by block group.

Wayne County: Car-Free Households

Nearly all of the villages included in this study have lower rates of vehicle ownership than the county as a whole. Wolcott, Lyons, and Newark all have 15% or more of households without access to a vehicle. Newark alone has nearly 600 households reliant on public transit or other transportation modes for their mobility needs.

Table 2.35 Wayne County: **Car-free households summary**

Area	Car-Free Households	Percent of Households
Sodus	76	9%
Wolcott	127	18%
Clyde	87	11%
Lyons	221	17%
Newark	590	16%
Palmyra	102	7%
Wayne County	2,872	8%

Source: American Community Survey 5-year 2016-2020 by Census place.

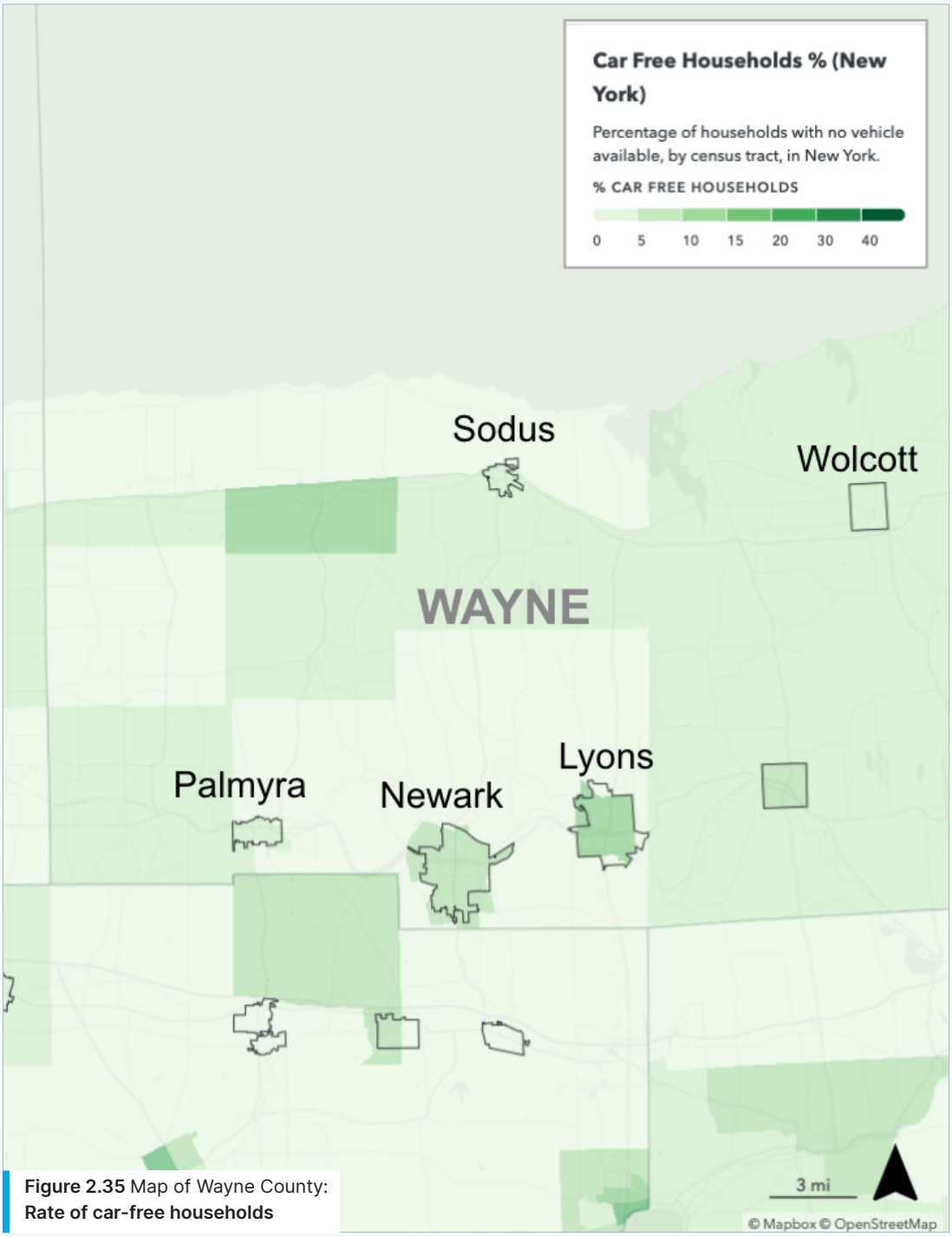


Figure 2.35 Map of Wayne County: **Rate of car-free households**

Source: American Community Survey 5-year; 2015-2019 by census tract.

Wayne County: Poverty

Nearly all of the villages included in this study have elevated rates of poverty compared to the county as a whole. Wolcott and Lyons have nearly one in four residents living in poverty. Due to its size, Newark has the greatest number of residents in poverty despite its relatively low poverty rate.

Table 2.36 Wayne County: **Poverty summary**

Area	People in Poverty	Percent of Population
Sodus	297	17%
Wolcott	346	23%
Clyde	286	16%
Lyons	776	23%
Newark	967	11%
Palmyra	528	16%
Wayne County	10,092	11%

Source: American Community Survey 5-year 2016-2020 by Census place.

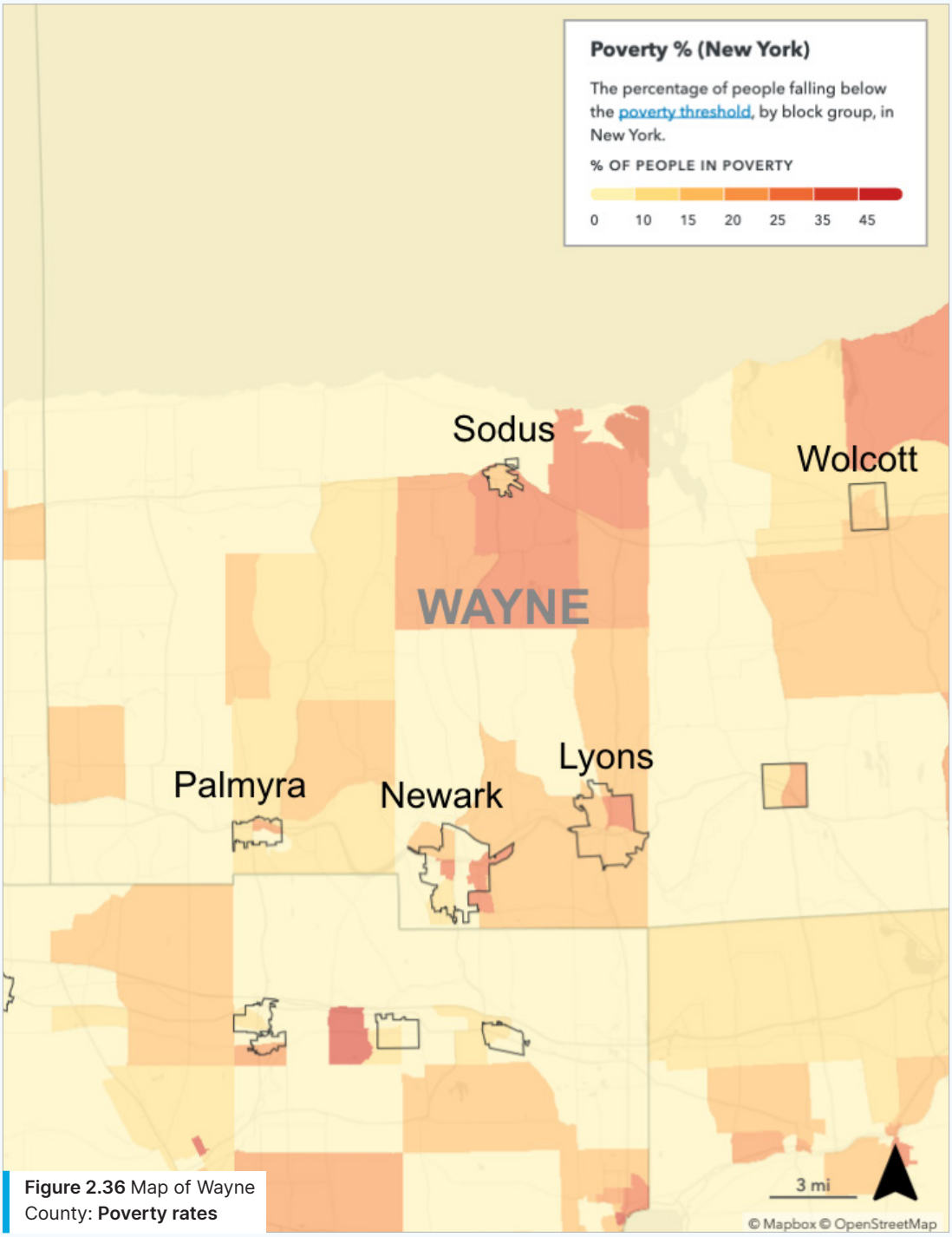


Figure 2.36 Map of Wayne County: **Poverty rates**

Source: American Community Survey 5-year; 2015-2019 by block group.

Wayne County: Minority

Sodus, Lyons, and Newark have over twice the percentage of minority residents than the county as a whole, with about one in four residents identifying as non-white or Hispanic.

Table 2.37 Wayne County: **Minority summary**

Area	Minority Residents	Percent of Population
Sodus	436	25%
Wolcott	114	7%
Clyde	189	10%
Lyons	902	27%
Newark	1,996	23%
Palmyra	306	9%
Wayne County	9,641	11%

Source: American Community Survey 5-year 2016-2020 by Census place.

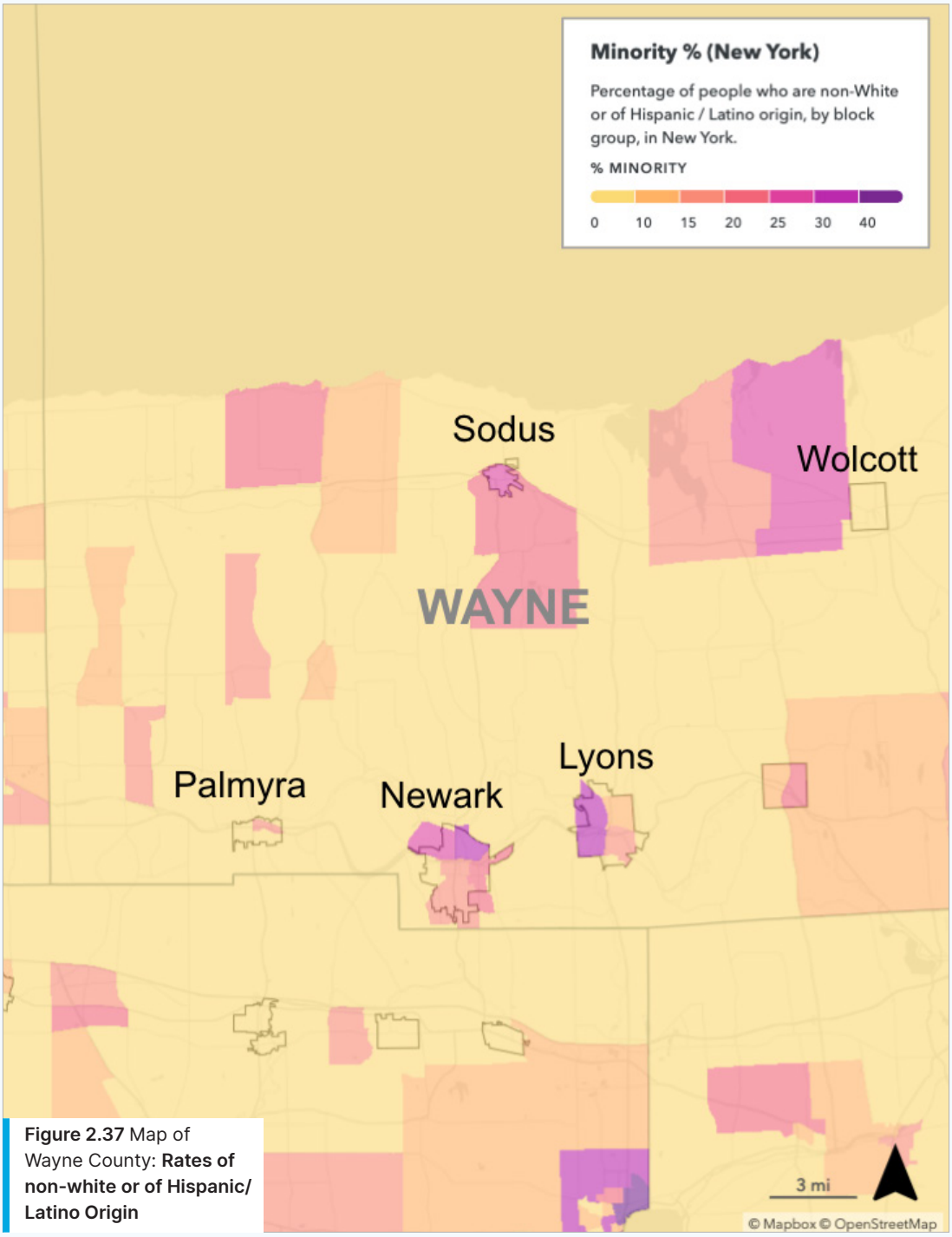


Figure 2.37 Map of Wayne County: **Rates of non-white or of Hispanic/ Latino Origin**

Source: American Community Survey 5-year; 2015-2019 by block group.

Wayne County: Disability

All of the villages included in this study have a higher percentage or residents with disabilities than the county as a whole. In Newark alone there are over 1,500 residents living with disabilities.

Table 2.38 Wayne County: **Disability population summary**

Area	People with Disabilities	Percent of Population
Sodus	300	17%
Wolcott	305	20%
Clyde	327	18%
Lyons	704	21%
Newark	1,510	17%
Palmyra	521	16%
Wayne County	13,546	15%

Source: American Community Survey 5-year 2016-2020 by Census place.

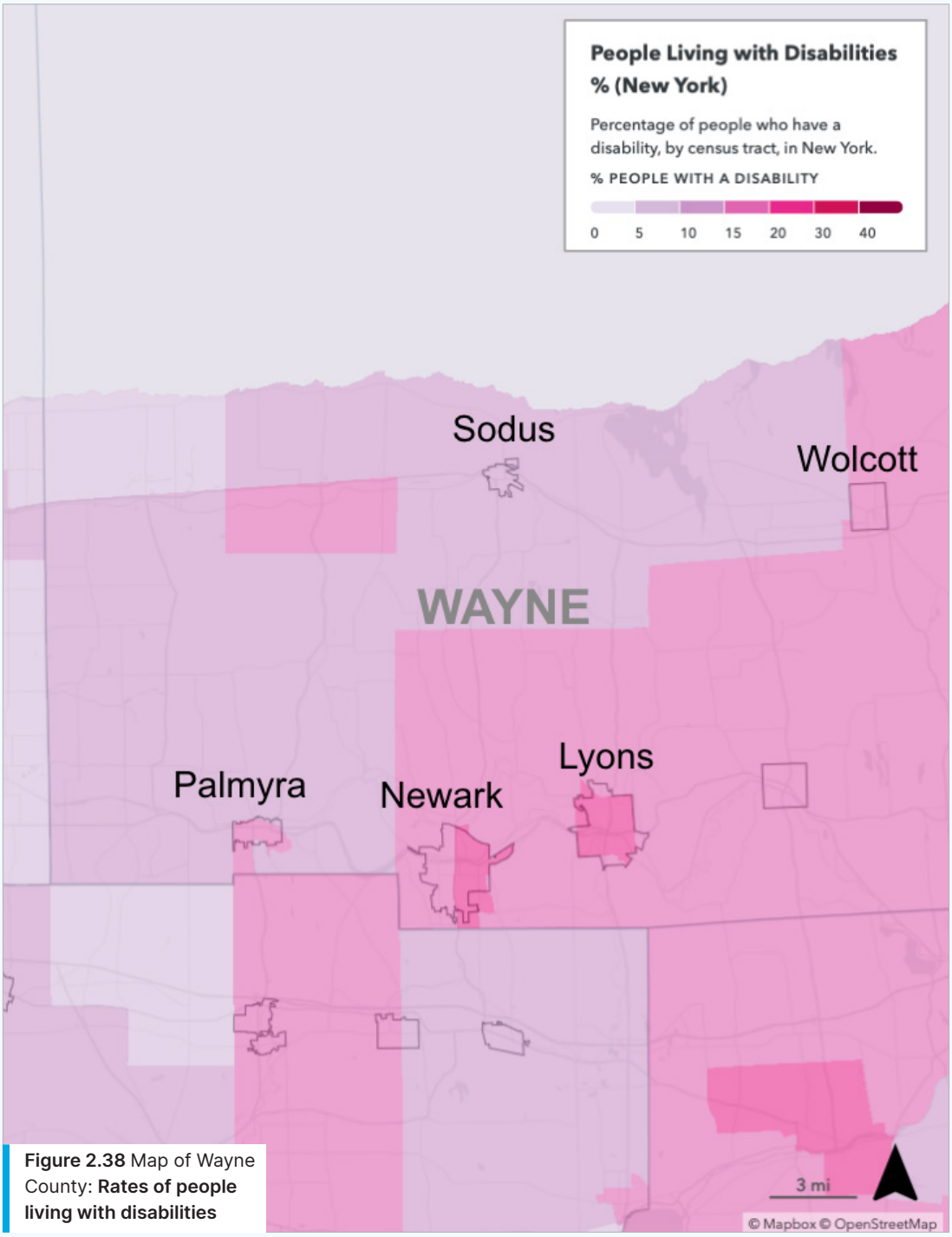


Figure 2.38 Map of Wayne County: **Rates of people living with disabilities**

Source: American Community Survey 5-year; 2015-2019 by census tract.

Wayne County: Seniors

All of the villages included in this study have 15-20% of their population aged 65 or older, similar to the percentage of the county as a whole. Due to their larger populations, Newark, Lyons, and Palmyra have the greatest number of senior residents.

Table 2.39 Wayne County: **Seniors summary**

Area	Seniors	Percent of Population
Sodus	272	16%
Wolcott	258	17%
Clyde	251	14%
Lyons	647	20%
Newark	1,517	17%
Palmyra	501	15%
Wayne County	16,939	19%

Source: American Community Survey 5-year 2016-2020 by Census place.

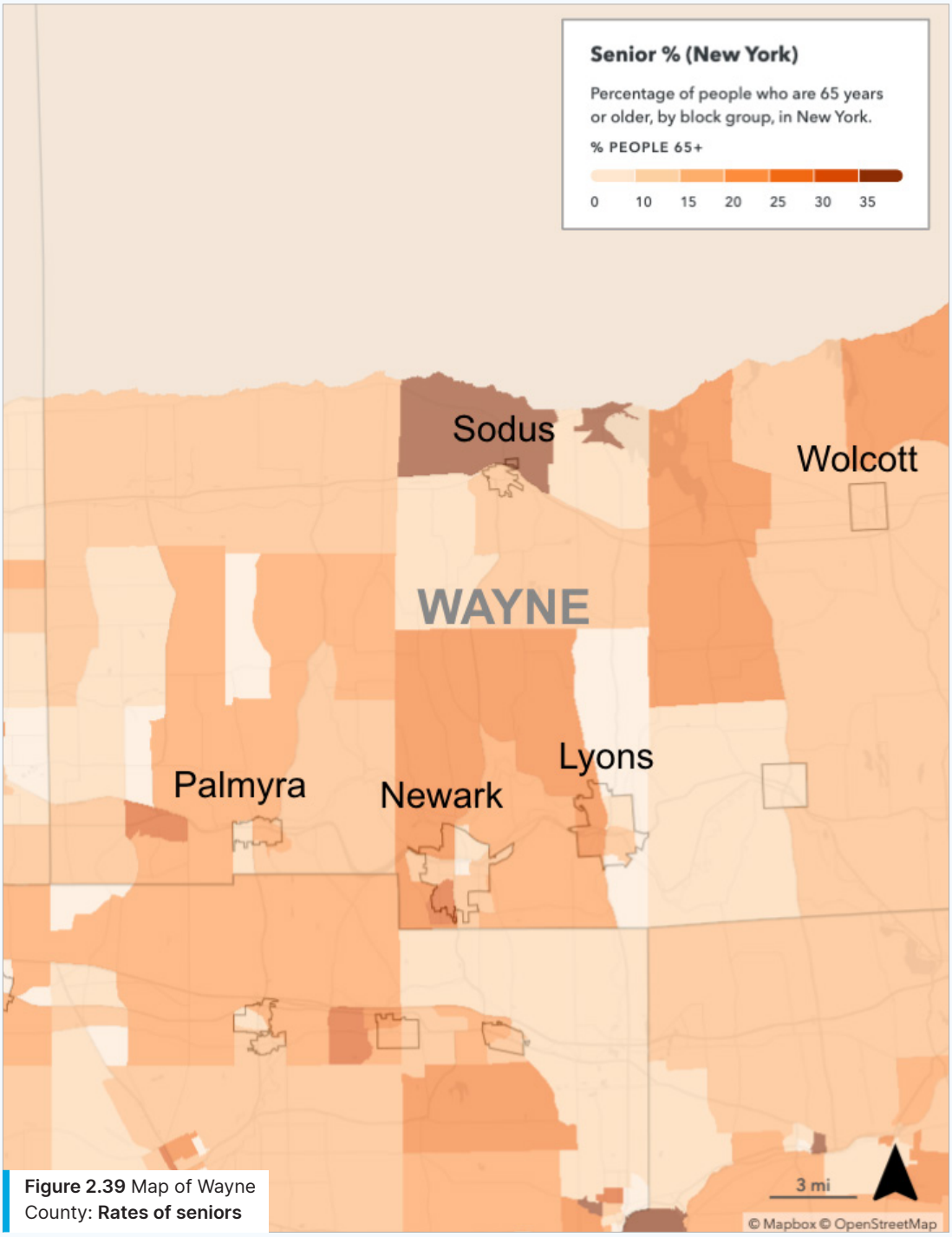


Figure 2.39 Map of Wayne County: **Rates of seniors**

Source: American Community Survey 5-year; 2015-2019 by block group.

Wayne County: Youth

All of the villages included in this study have about one in five residents aged 17 or younger, similar to the county as a whole.

Table 2.40 Wayne County: **Youth summary**

Area	Youth	Percent of Population
Sodus	365	21%
Wolcott	272	18%
Clyde	424	23%
Lyons	743	22%
Newark	1,960	22%
Palmyra	656	20%
Wayne County	19,283	21%

Source: American Community Survey 5-year 2016-2020 by Census place.

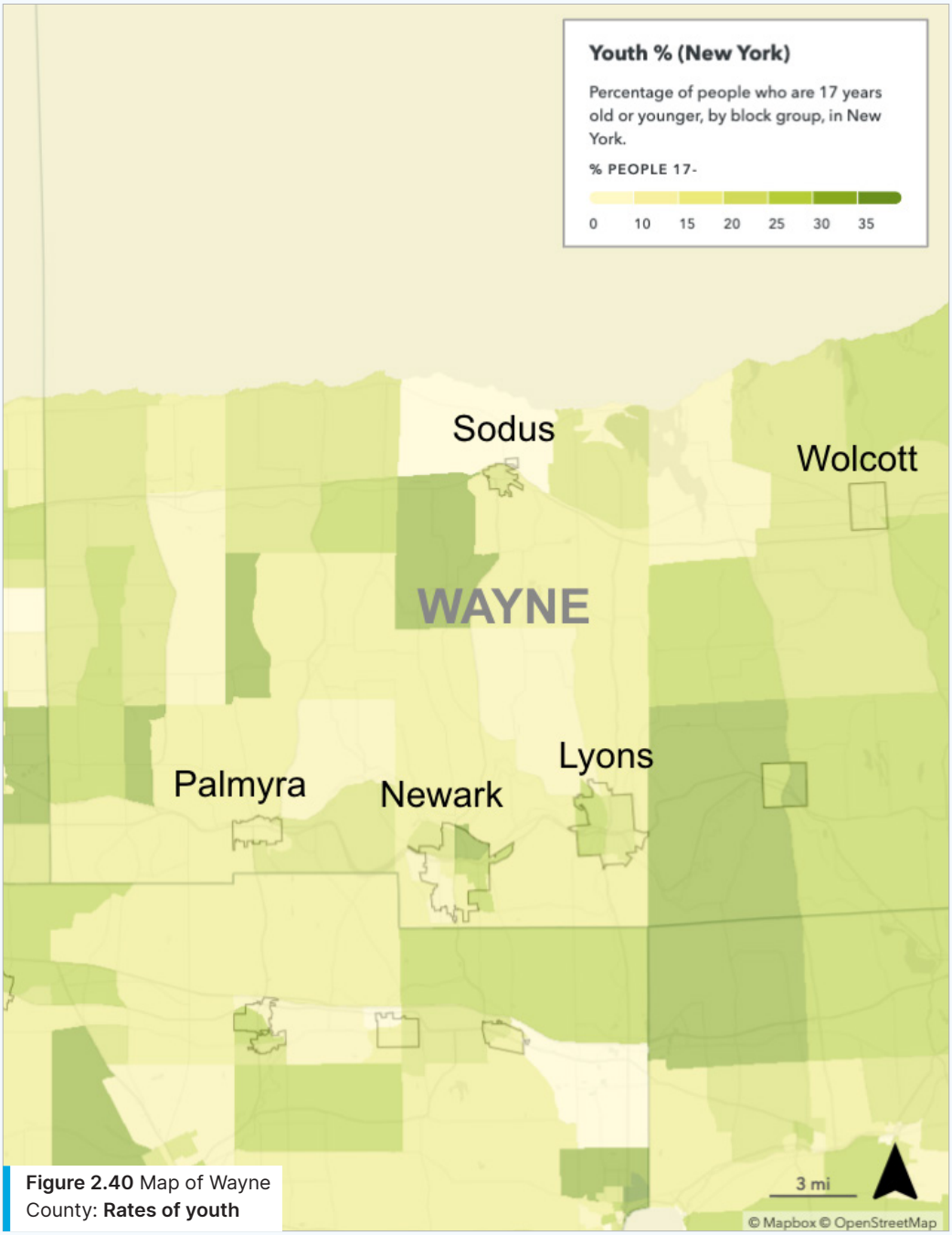


Figure 2.40 Map of Wayne County: **Rates of youth**

Source: American Community Survey 5-year; 2015-2019 by block group.

Wayne County: Summary

Overall, many communities in Wayne County could be viable for expanded transit access, with the greatest initial potential in Newark, Lyons, and Palmyra.

2.1.6.Regional Villages Key Statistics

Table 2.41 (on the following page) shows population, jobs, and key socioeconomic factors (both by absolute numbers and percentage of population) for the study area villages, counties, and state. The table is sorted from fewest to most residents, and the socioeconomic factors are colored from green (least need) to red (greatest need). Overall, villages and counties with the greatest number of residents have the greatest number of individuals with transit needs, simply due to the larger overall population. The villages of Nunda, Wolcott, Sodus, Holley, Clifton Springs, and Phelps all have disproportionate percentages of residents with transit needs due to an elevated percentage of at least one of the key socioeconomic factors. These should also be considered for improved transit to ensure equitable transit access in the region, even if they have fewer individuals with transit needs overall.

Table 2.41 Regional Villages Key Statistics

	Daytime/Nightime Pop.		Socioeconomic conditions (# of people)						Socioeconomic conditions (percentages)					
	Population	Jobs #	Poverty #	Minority #	0 Vehicle HH #	Disability #	Seniors #	Youth #	Poverty %	Minority %	0 Vehicle HH %	Disability %	Senior %	Youth %
Study Villages														
Naples	906	80	131	77	60	121	184	165	14%	8%	14%	13%	20%	18%
Castile	952	30	131	76	62	166	166	238	14%	8%	15%	17%	17%	25%
Bergen	1,060	100	119	90	12	107	159	211	11%	8%	3%	10%	15%	20%
Nunda	1,196	100	357	48	55	340	272	239	30%	4%	10%	28%	23%	20%
Bloomfield	1,471	50	134	92	40	145	281	205	9%	6%	6%	10%	19%	14%
Livonia	1,472	100	83	99	23	151	277	385	6%	7%	4%	10%	19%	26%
Wolcott	1,534	300	346	114	127	305	258	272	23%	7%	18%	20%	17%	18%
Manchester	1,551	300	143	73	6	241	312	320	9%	5%	1%	16%	20%	21%
Oakfield	1,679	200	172	160	40	209	195	486	10%	10%	6%	12%	12%	29%
Shortsville	1,709	100	79	31	18	205	317	356	5%	2%	3%	12%	19%	21%
Sodus	1,742	900	297	436	76	300	272	365	17%	25%	9%	17%	16%	21%
Clyde	1,832	600	286	189	87	327	251	424	16%	10%	11%	18%	14%	23%
Holley	1,871	50	178	448	46	218	167	494	10%	24%	6%	12%	9%	26%
Clifton Springs	1,931	900	186	207	145	276	497	435	10%	11%	19%	14%	26%	23%
Caledonia	2,133	400	114	195	27	241	314	382	5%	9%	3%	11%	15%	18%
Lima	2,164	300	152	260	55	296	275	509	7%	12%	7%	14%	13%	24%
Phelps	2,175	200	362	161	71	250	390	592	17%	7%	8%	11%	18%	27%
Victor	2,709	600	101	90	78	326	556	629	4%	3%	7%	12%	21%	23%
Attica	2,912	600	178	134	60	236	525	533	6%	5%	5%	8%	18%	18%
Mt. Morris	3,064	1,300	589	629	247	557	531	619	19%	21%	17%	18%	17%	20%
Avon	3,271	1,800	354	167	134	367	658	681	11%	5%	10%	11%	20%	21%
Lyons	3,313	1,900	776	902	221	704	647	743	23%	27%	17%	21%	20%	22%
Perry	3,347	800	329	586	190	535	546	730	10%	18%	14%	16%	16%	22%
Palmyra	3,361	800	528	306	102	521	501	656	16%	9%	7%	16%	15%	20%
LeRoy	4,220	800	617	431	425	883	984	866	15%	10%	21%	21%	23%	21%
Dansville	4,653	2,000	624	424	198	757	926	852	13%	9%	9%	16%	20%	18%
Newark	8,868	4,500	967	1,996	590	1,510	1,517	1,960	11%	23%	16%	17%	17%	22%
Villages Total	**67,096**	**19,810**	**8,333**	**8,421**	**3,195**	**10,294**	**11,978**	**14,347**	**12%**	**13%**	**11%**	**15%**	**18%**	**21%**
Study Counties														
Wyoming County	40,027	13,900	3,482	4,123	1,019	4,959	7,245	7,606	9%	10%	6%	12%	18%	19%
Orleans County	40,624	12,300	5,606	5,728	1,272	6,079	7,231	7,882	14%	14%	8%	15%	18%	19%
Genesee County	57,554	21,900	6,216	5,640	2,369	8,376	10,763	11,684	11%	10%	10%	15%	19%	20%
Livingston County	63,218	20,300	7,965	6,259	1,520	7,359	11,316	11,190	13%	10%	6%	12%	18%	18%
Wayne County	90,103	27,400	10,092	9,641	2,872	13,546	16,939	19,283	11%	11%	8%	15%	19%	21%
Ontario County	109,774	51,000	9,880	11,526	3,105	14,306	21,955	22,065	9%	11%	7%	13%	20%	20%
County Total	**401,300**	**146,800**	**43,241**	**42,917**	**12,157**	**54,625**	**75,449**	**79,710**	**11%**	**11%**	**7%**	**14%**	**19%**	**20%**
Study State														
New York State Tot	**19,514,849**	**7,900,000**	**2,654,019**	**8,742,652**	**2,149,235**	**2,226,768**	**2,751,594**	**4,059,089**	**14%**	**45%**	**29%**	**11%**	**14%**	**21%**

Source: American Community Survey 5-year 2016-2020 by Census place.

Socioeconomic factors legend:

Least need — Greatest need

2.2. Transit Data Analysis

The RGRTA is split into Transit Agencies for each county. Across the entire study area, there are 39 bus routes (shown in Table 2.42) — most routes run Monday through Friday. The exceptions are routes 203 and 204, which run only on Thursdays, and route 205, which runs only on Saturdays. The table shows the number of trips completed per route per weekday and the length of each trip.

Table 2.42 RTS current weekday trips and journey lengths by route

Line	Weekday Trips	Miles per Trip
201 Albion	22	8
202 Medina	21	13
203 Albion-Batavia (Thursday only)	4	20
204 Albion-Brockport (Thursday only)	4	18
205 Albion / Medina (Saturday only)	0	41
211 City of Batavia	22	8
220 Arcade Shopping Shuttle	12	5
221 Village of Warsaw	20	5
222 Arcade / Batavia	4	21
223 Arcade Commuter	2	37
224 Warsaw-Arcade	6	29
225 Sasi	3	22
226 Warsaw / Silver Springs / Castile	10	16
227 Warsaw / Perry	10	13
228 Warsaw / Wyoming	6	7
229 Warsaw / Attica	10	18
231 Mt. Morris / Caledonia / Avon	4	50
232 Mt M / Dansv / Nunda / Perry	9	30
242 Mt M / Dansville / Springwater	8	28

Table 2.42 Table 2.42 RTS current weekday trips and journey lengths by route (Continued)

Line	Weekday Trips	Miles per Trip
243 Dans / Mt M / Geneseo / Avon	8	34
250 Canandaigua North	26	11
252 Canandaigua South	26	8
253 Canandaigua-Victor	24	10
255 Canandaigua-Geneva	12	27
261 Geneva City	24	6
281 Seneca Falls	20	7
282 Waterloo	20	9
290 Lyons-Canandaigua	4	29
296 Newark-Geneva	10	26
302 Countywide Loop	2	59
303 Countywide Loop	2	51
304 Countywide Loop	2	49
305 Countywide Loop	2	51
306 Countywide Loop	2	34
307 Countywide Loop / Webster	2	60
308 Newark-Webster	2	42
331 Route 31 Shuttle	4	35
332 Clyde-Macedon	2	35
333 Lyons-Palmyra	4	19

Source: RGRTA, 2022.

In addition to the bus route network, each regional agency operates a public Dial-A-Ride service that provides curb-to-curb service. Trips must be booked 24 to 48 hours in advance, and fares vary by county. Trips are generally restricted to destinations within the county of origin.

2.2.1. Orleans County: transit profile

RTS Orleans has four routes. Three routes are intercity routes between Albion and Medina, Holley/Brockport, and Batavia (in Genesee county). The fourth route is local service for Albion.

Table 2.43 RTS Orleans transit Profile by fiscal year (fiscal year ends March 31)

	FY 19 - 20	FY 21 - 22
Annual ridership	43,532	25,860
Annual revenue hours	8,100	7,700
Annual revenue miles	171,700	168,125
Productivity (ridership by revenue hour)	5.4	3.4
On-time performance	96%	96.3%
Peak fleet size	6	7
Operational cost per hour	$62	$67
Revenue	$35.7k	$25.4k

Source: RTS Orleans, 2022.

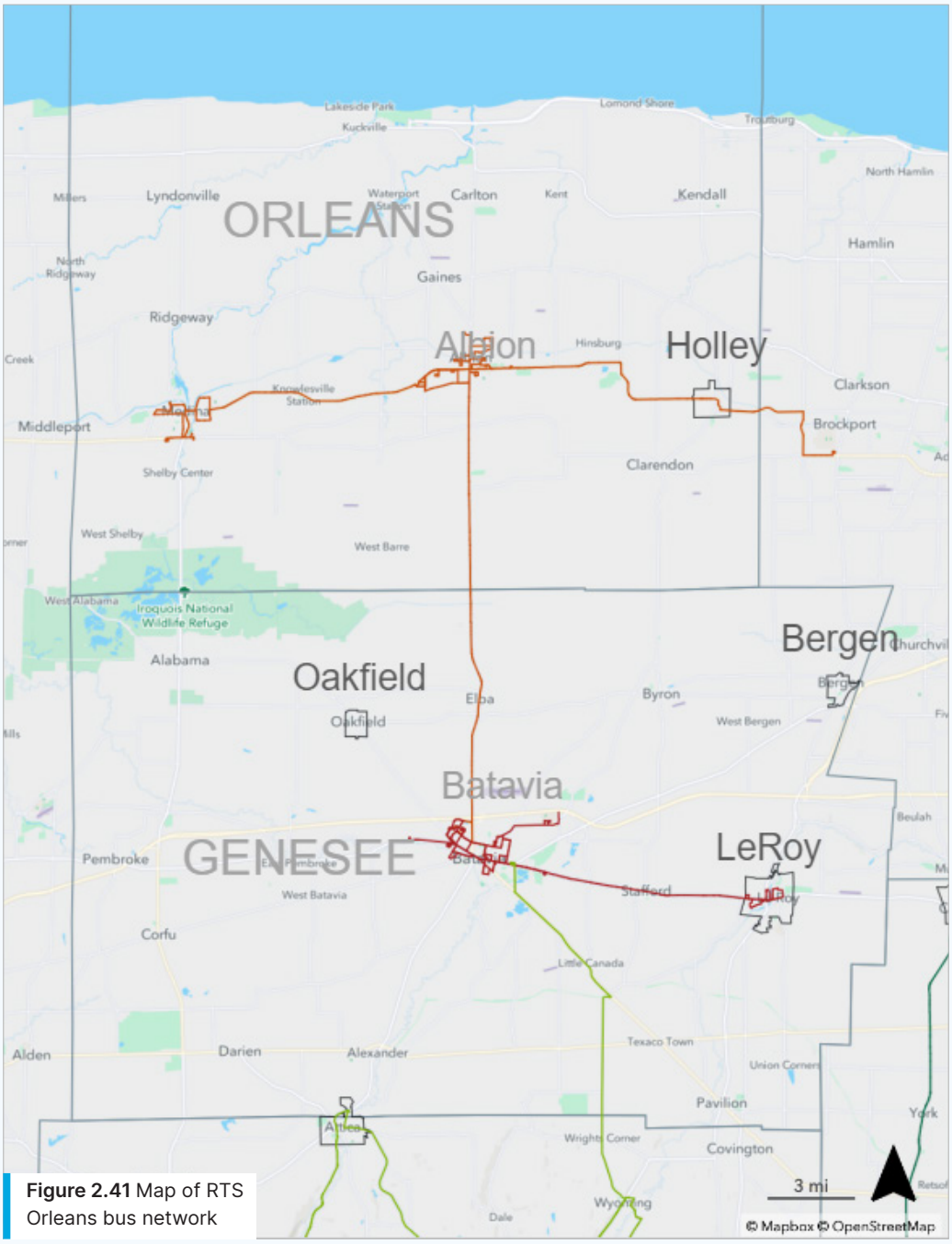


Figure 2.41 Map of RTS Orleans bus network

Source: RTS Orleans, 2022.

2.2.2. Genesee County: transit profile

RTS Genesee has three bus routes. Two are local routes in Batavia, and the third covers both Batavia and LeRoy.

Table 2.44 RTS Genesee transit Profile by fiscal year (fiscal year ends March 31)

	FY 19 - 20	FY 21 - 22
Annual ridership	41,200	24,350
Annual revenue hours	9,590	11,480
Annual revenue miles	117,970	126,815
Productivity (ridership by revenue hour)	4.3	2.1
On-time performance	95.5%	95%
Peak fleet size	12	12
Operational cost per hour	$60	$75
Revenue	$170k	$140k

Source: RTS Genesee, 2022.

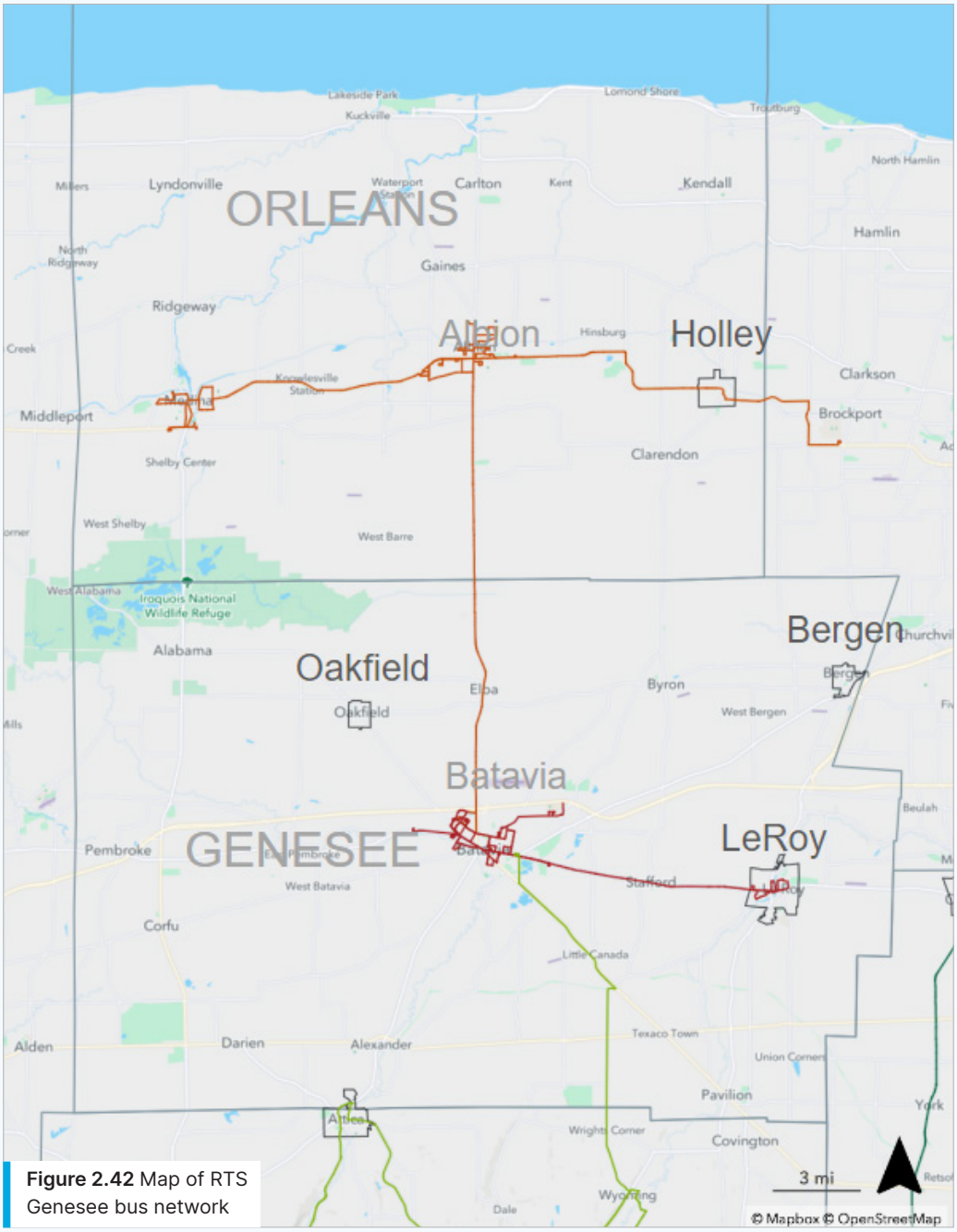


Figure 2.42 Map of RTS Genesee bus network

Source: RTS Genesee , 2022.

2.2.3. Wyoming County: transit profile

RTS Wyoming has nine bus routes. Eight of the routes are intercity services. The local route is focused on Warsaw. All but two of the routes run through Warsaw. One route crosses into Genesee County connecting Wyoming County to Batavia. Wyoming County bus routes exceeded pre-pandemic ridership levels in FY 21-22, unlike most other RTS services.

Table 2.45 RTS Wyoming transit Profile by fiscal year (fiscal year ends March 31)

	FY 19 - 20	FY 21 - 22
Annual ridership	47,080	51,150
Annual revenue hours	14,700	*
Annual revenue miles	299,720	*
Productivity (ridership by revenue hour)	3.2	*
On-time performance	98.1%	*
Peak fleet size	17	17
Operational cost per hour	$70	*
Revenue	$75.5k	*

Source: RTS Wyoming, 2022.

** Data for these periods was not available.*

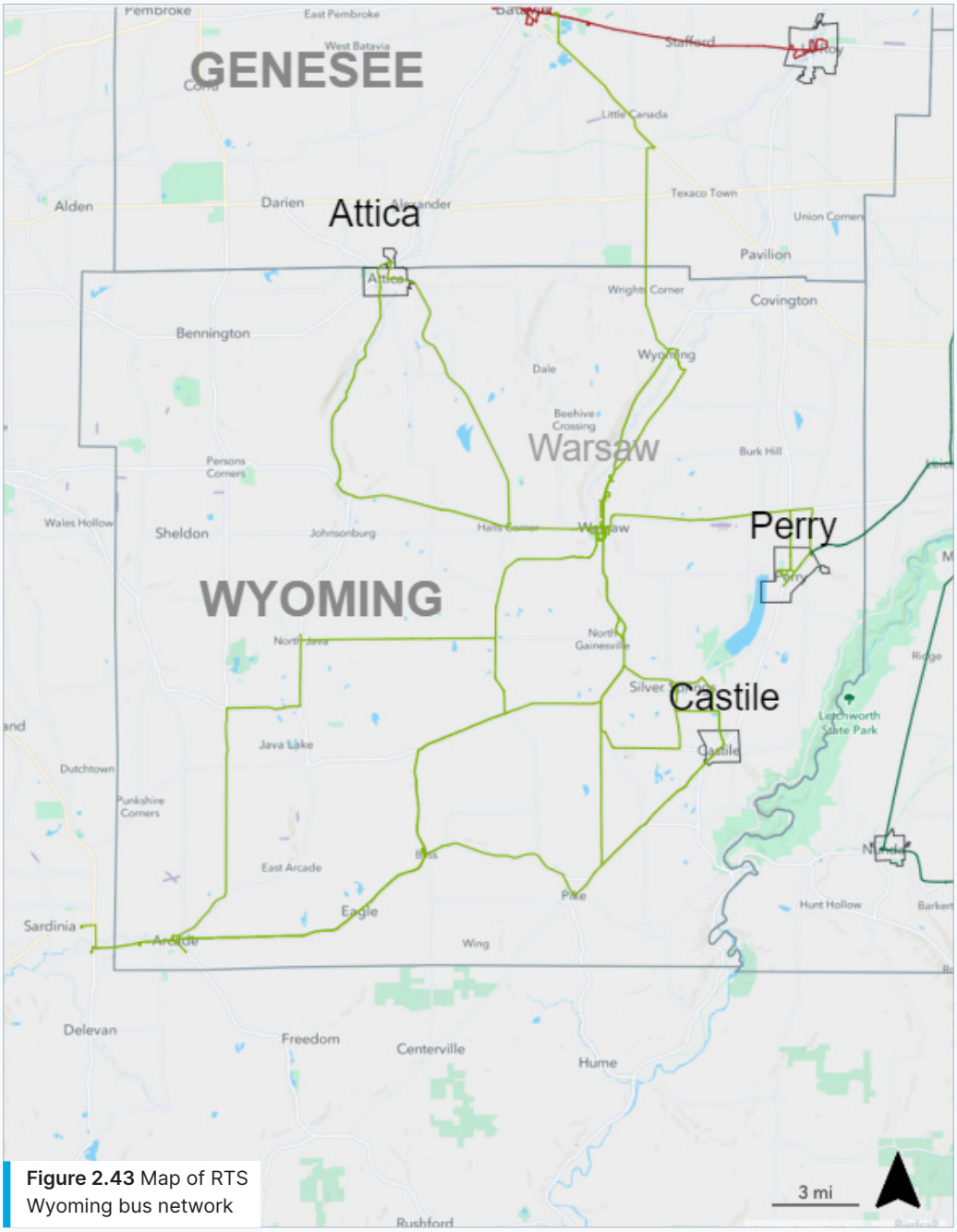


Figure 2.43 Map of RTS Wyoming bus network

Source: RTS Wyoming, 2022.

2.2.4. Livingston County: Transit Profile

RTS Livingston has four deviated fixed-routes, although the majority of transit ridership since March 2020 (FY 21 -22 onwards) has been via the Livingston Dial-a-Ride service. They are all focused on intercity travel and pass through the seven towns of interest in the county.

Table 2.46 RTS Livingston transit Profile by fiscal year (fiscal year ends March 31)

	FY 19 - 20	FY 21 - 22
Annual ridership	144,250	63,700
Annual revenue hours	19,630	16,590
Annual revenue miles	361,590	284,840
Productivity (ridership by revenue hour)	7.3	3.8
On-time performance	91.1%	100%
Peak fleet size	19	19
Operational cost per hour	$54	$62
Revenue	$575k	$550k

Source: RTS Livingston, 2022.

Figure 2.44 Map of RTS Livingston bus network

Source: RTS Livingston, 2022.

2.2.5. Ontario County: Transit profile

RTS Ontario has six bus routes. Three routes are between Canandaigua and nearby towns, including two connecting Canandaigua and Geneva. Two other routes are local in Canandaigua (a north and south route). The sixth route is a local route based in Geneva.

Table 2.47 RTS Ontario transit Profile by fiscal year (fiscal year ends March 31)

	FY 19 - 20	FY 21 - 22
Annual ridership	227,165	120,660
Annual revenue hours	*	20,500
Annual revenue miles	*	529,140
Productivity (ridership by revenue hour)	*	5.9
On-time performance	*	95%
Peak fleet size	25	29
Operational cost per hour	*	$59
Revenue	*	$180k

Source: RTS Ontario, 2022.

** Data for these periods was not available.*

Figure 2.45 Map of RTS Ontario bus network

Source: RTS Ontario, 2022.

2.2.6. Wayne County: transit profile

RTS Wayne has 13 bus routes, all of which are intercity routes or loops between various towns and villages, including Sodus, Palmyra, Newark, Lyons, and Wolcott in Wayne county and Canandaigua and Geneva in Ontario County.

Table 2.48 RTS Wayne transit Profile by fiscal year (fiscal year ends March 31)

	FY 19 - 20	FY 21 - 22
Annual ridership	214,800	77,850
Annual revenue hours	36,960	*
Annual revenue miles	790,430	*
Productivity (ridership by revenue hour)	5.8	*
On-time performance	98%	*
Peak fleet size	42	44
Operational cost per hour	$56	*
Revenue	$2,134k	*

Source: RTS Wayne, 2022.

** Data for these periods was not available.*

Figure 2.46 Map of RTS Wayne bus network

Source: RTS Wayne, 2022.

2.2.7 Ridership and productivity

The Ontario and Wayne agencies have the highest ridership in FY 19-20. Ridership since the pandemic has dropped more drastically for Wayne county (64% decrease). Ontario county in FY 21-22 has the highest ridership with over 120,000 passenger trips. Across all counties, the ridership has decreased by about 50% between the two years. In FY 19-20, productivity averaged 5.5 passengers per revenue hour across the entire system. In FY 21-22, productivity decreased to 4.2 passengers per revenue hour across the entire system.

Table 2.49 RTS Deviated Route Ridership and productivity by county and fiscal year (fiscal year ends March 31)

Agency	FY 19 - 20 Ridership	FY 21 - 22 Ridership	FY 19 - 20 Productivity (Ridership per revenue hour)	FY 21 - 22 Productivity (Ridership per revenue hour)
Genesee	41,200	24,350	4.3	2.1
Livingston	144,250	63,700	7.3	3.8
Ontario	227,150	120,650	*	5.9
Orleans	43,500	25,850	5.4	3.4
Wayne	214,800	77,850	5.8	*
Wyoming	47,100	51,150	3.2	*
Total	**718,050**	**363,565**	**5.5**	**4.2**

Source: RGRTA, 2022.

** Data for these periods was not available.*

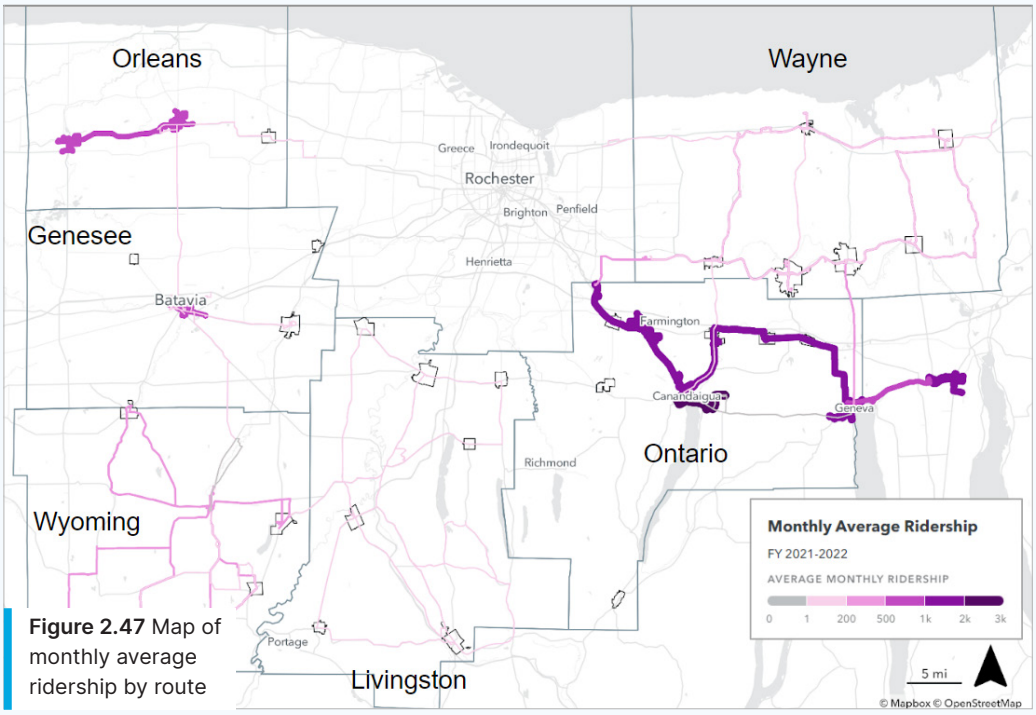


Figure 2.47 Map of monthly average ridership by route

Source: RGRTA, 2022.

RTS Ontario has the highest ridership routes and most productive routes. All three routes are local routes within an urbanized area. The three routes with the most ridership are

1. **252** Canandaigua South (2,750 monthly riders)
2. **250** Canandaigua North (1,630 monthly riders)
3. **261** Geneva City (1,500 monthly riders)

13 routes have 100 or fewer monthly riders. These routes are in Wyoming County (4), Livingston County (3), Wayne County (3), and Orleans County (2). Table 2.50 displays the annual ridership, revenue hours, and average productivity for all routes where data were available.

Table 2.50 RTS annual ridership, hours, and productivity by route (fiscal year ends March 31)

County	Route	Annual total ridership (FY 21-22)	Annual Revenue Hours (FY 21 -22)	Average Productivity (Boardings per revenue hour, FY 21 - 22)
Orleans	**201** Albion	11,501	2,576	4.5
Orleans	**202** Medina	10,256	2,491	4.1
Orleans	**203** Albion-Batavia	245	604	0.4
Orleans	**204** Albion-Brockport	536	510	1.1
Genesee	**211** City of Batavia	8,595	3,392	2.5
Wyoming	**220** Arcade Shopping Shuttle	3,731	1,148	3.3
Wyoming	**221** Village of Warsaw	5,557	2,338	2.4
Wyoming	**222** Arcade / Batavia	40	574	0.1
Wyoming	**223** Arcade Commuter	1,150	574	2.0
Wyoming	**224** Warsaw-Arcade	3,142	1,573	2.0
Wyoming	**225** Sasi	1,072	574	1.9
Wyoming	**226** Warsaw / Silver Springs / Castile	2,566	1,594	1.6
Wyoming	**227** Warsaw / Perry	4,948	1,530	3.2

Table 2.50 RTS annual ridership, hours, and productivity by route (fiscal year ends March 31) (Continued)

County	Route	Annual total ridership (FY 21-22)	Annual Revenue Hours (FY 21 -22)	Average Productivity (Boardings per revenue hour, FY 21 - 22)
Wyoming	**229** Warsaw / Attica	2,826	1,913	1.5
Livingston	**231** Mt. Morris / Caledonia / Avon	231	1,870	0.1
Livingston	**232** Mt M / Dansv / Nunda / Perry	318	2,304	0.1
Livingston	**242** Mt M / Dansville / Springwater	1,093	1,828	0.6
Livingston	**243** Dans / Mt M / Geneseo / Avon	1,172	2,474	0.5
Ontario	**250** Canandaigua North	19,600	3,315	5.9
Ontario	**252** Canandaigua South	32,941	3,315	9.9
Ontario	**253** Canandaigua-Victor	13,156	3,060	4.3
Ontario	**255** Canandaigua-Geneva	16,004	3,060	5.2
Ontario	**261** Geneva City	17,923	3,060	5.9
Seneca	**281** Seneca Falls	12,205	2,580	4.7
Seneca	**282** Waterloo	11,224	2,580	4.4
Wayne	**290** Lyons-Canandaigua	852	1,063	0.8
Wayne	**296** Newark-Geneva	3,752	2,066	1.8

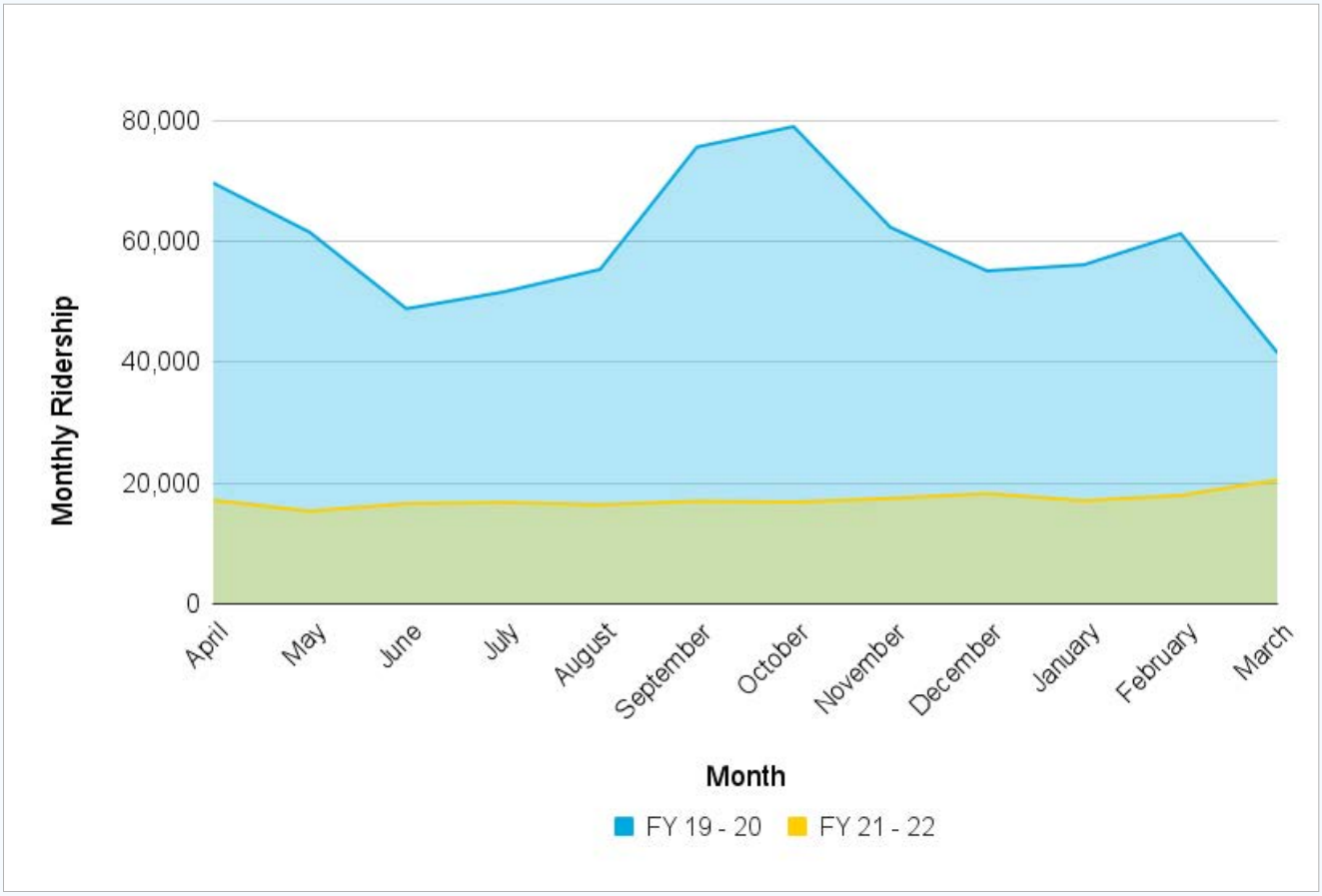
Table 2.50 RTS annual ridership, hours, and productivity by route (fiscal year ends March 31) (Continued)

County	Route	Annual total ridership (FY 21-22)	Annual Revenue Hours (FY 21 -22)	Average Productivity (Boardings per revenue hour, FY 21 - 22)
Wayne	**302** Countywide Loop	2,076	1,237	1.7
Wayne	**303** Countywide Loop	3,144	1,050	3.0
Wayne	**304** Countywide Loop	2,378	944	2.5
Wayne	**305** Countywide Loop	2,609	986	2.6
Wayne	**306** Countywide Loop	1,308	667	2.0
Wayne	**307** Countywide Loop / Webster	2,213	1,088	2.0
Wayne	**308** Newark-Webster	1,460	727	2.0
Wayne	**331** Route 31 Shuttle	3,917	1,581	2.5
Wayne	**332** Clyde-Macedon	1,019	757	1.3
Wayne	**333** Lyons-Palmyra	1,070	854	1.3

Source: RGRTA, 2022.

Seasonality in ridership is evident in pre-COVID-19 data. Ridership is highest in the fall months of October and November. Monthly Ridership is lowest in the Summer, between June and July, and dips in the Winter months of December and January. Seasonality in ridership is not evident in data from FY 21 - 22.

Figure 2.48 Chart of RGRTA monthly ridership for fiscal years 2020 and 2022 (fiscal year ends March 31)



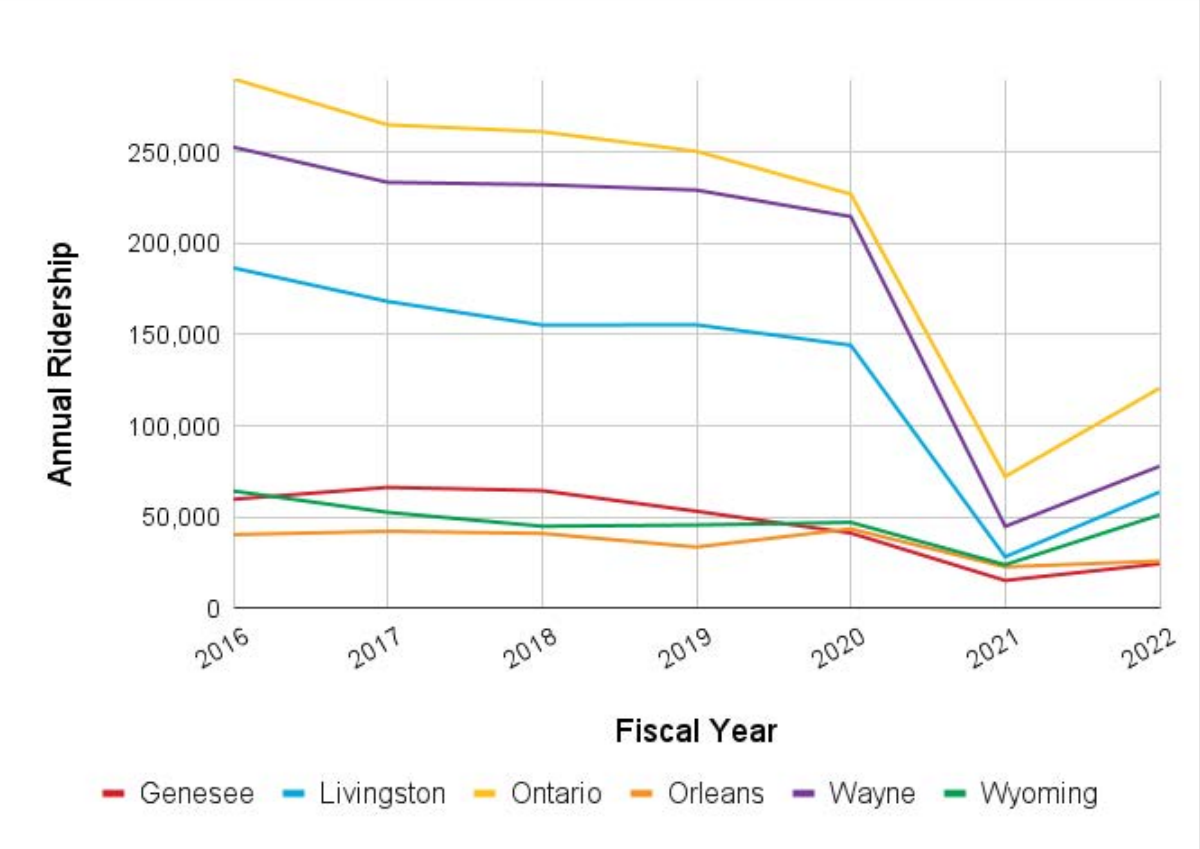
Source: RGRTA, 2022.

Ridership over the last six years is consistently highest for RTS Ontario, followed by Wayne and Livingston. Ridership is lowest in Orleans, Genesee, and Wyoming.

Ridership was fairly consistent, though slightly declining, between 2018 and 2020 across all agencies. Between 2016 and 2020, ridership declined by 20% across all six counties.

All six agencies lost significant ridership during 2021 due to the COVID-19 Pandemic. None of the agencies have returned to pre-pandemic ridership yet. However, ridership is growing and was higher in FY 2022 than in FY 2021 across the entire region.

Figure 2.49 Chart of RGRTA annual ridership by county



Source: RGRTA, 2022.

2.2.8. RTS Fleets

Across the six agencies, there are 112 vehicles, most of which (80%) are Type 3 that hold 24 passengers. The remainder of the vehicles are Type 6, which have the capacity for 32 passengers. RTS Wayne has the most vehicles (38), compared to Orleans, with the fewest vehicles (6). A total of 5 vans are projected to be added to the fleet next year.

Table 2.51 RTS fleet characteristics by county (fiscal year ends March 31)

Agency	Type 3 (24', 24 passengers)	Type 6 (30', 32 passengers)	Total	Projected van delivery (Q3 2022 - 23)
Genesee	8	2	10	1
Livingston	11	8	19	1
Ontario	21	0	21	1
Orleans	6	0	6	0
Wayne	24	14	38	1
Wyoming	18	0	18	1
Total	**88**	**24**	**112**	**5**

Source: RGRTA, 2022.

SECTION 3

Community Engagement

3.

Community Engagement

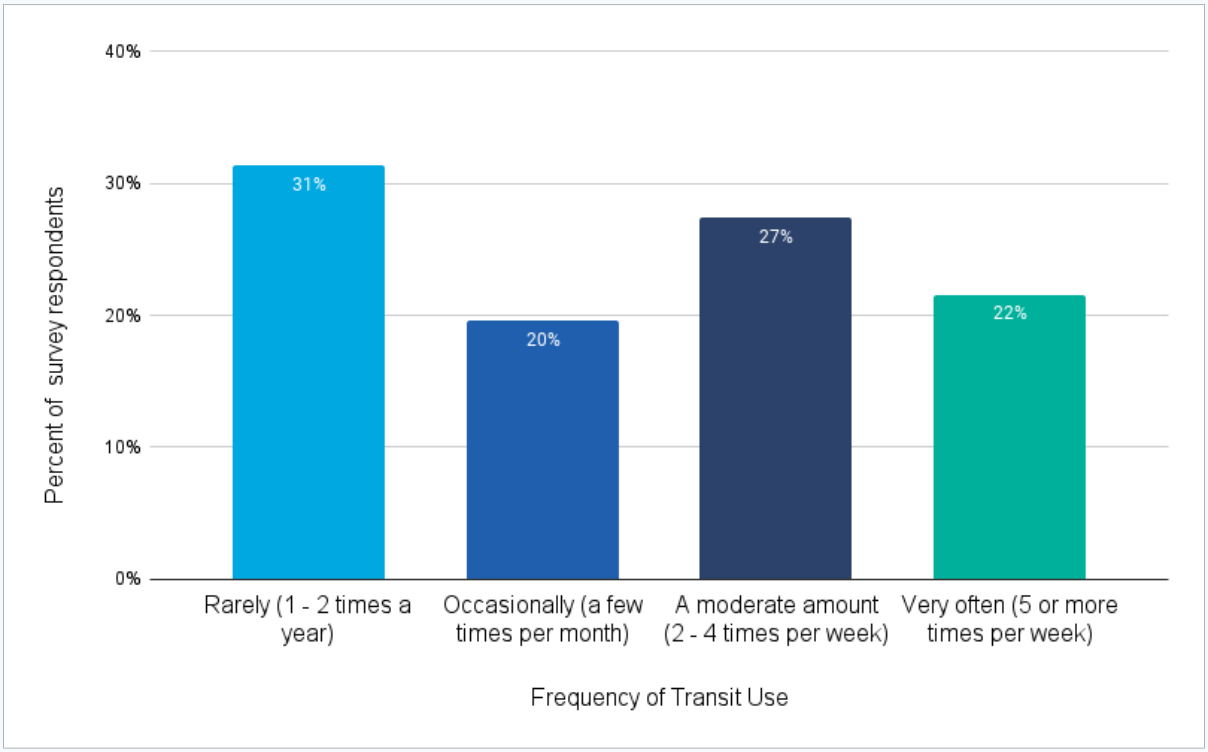
3.1 Public Survey

To gather feedback from the Finger Lakes community, over 100 survey responses were collected from July 2022 through September 2022. The survey was available online and in print. The survey was distributed by the RGRTA, stakeholder email lists, social media, and in-person on various bus routes. The survey was an opportunity for the RGRTA to learn about people's transportation needs and get feedback on how to improve transit in the region.

Respondents were first asked how they typically get around their community. The majority of survey respondents (72%) usually drive a personal or shared vehicle to get around their community. About a quarter of respondents receive rides from friends and family, walk, and take the RGRTA bus services. Respondents were also asked whether or not bus or paratransit services were available in their community, 63% said there are, However, 20% indicated that they do not know. Nearly 80% of respondents have access to a private vehicle.

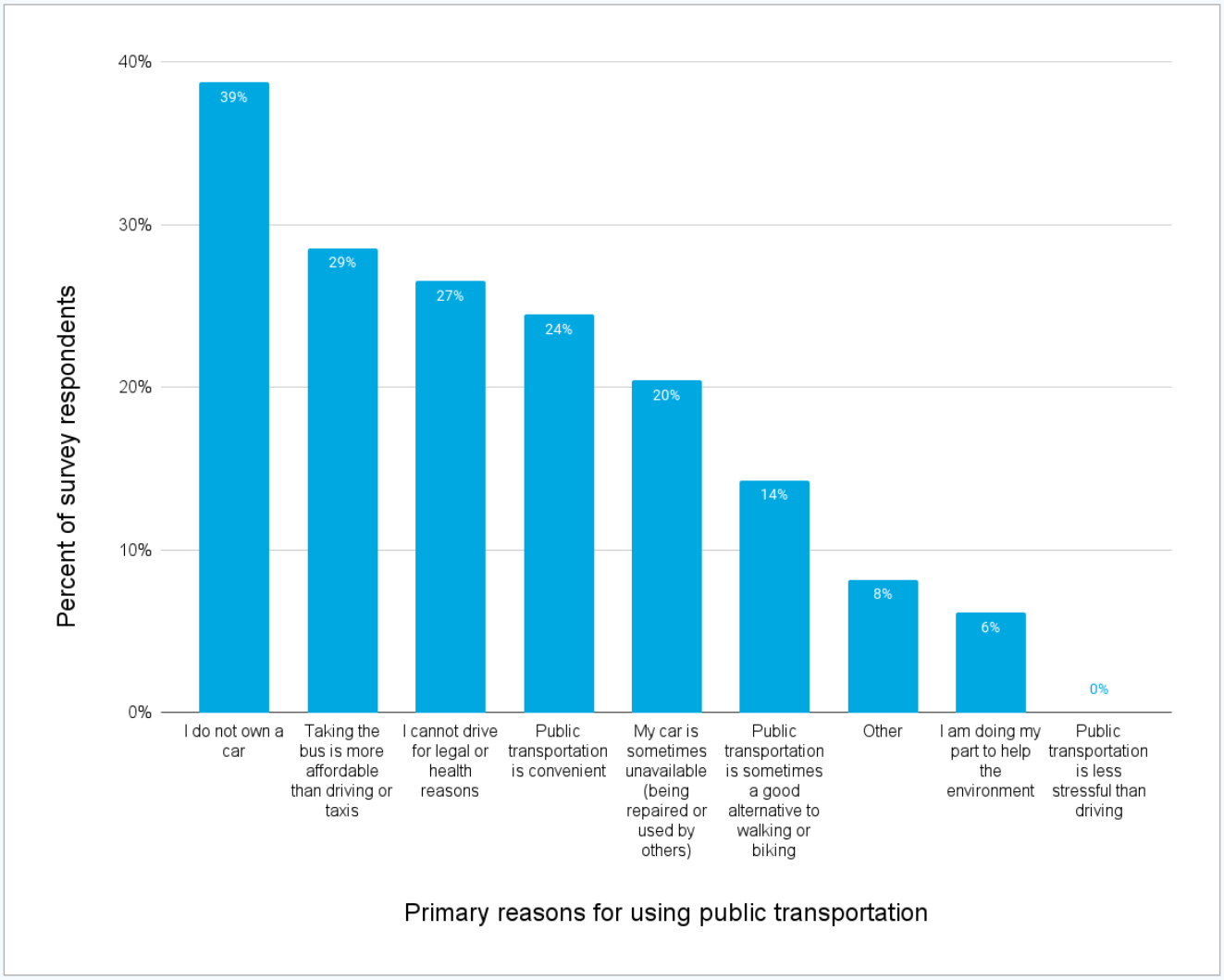
Of those who use public transportation, only about 20% use the service very often, and about a third rarely use public transportation (1 to 2 times per year).

Figure 3.1 Chart of survey results: **How often do you use public transportation?**



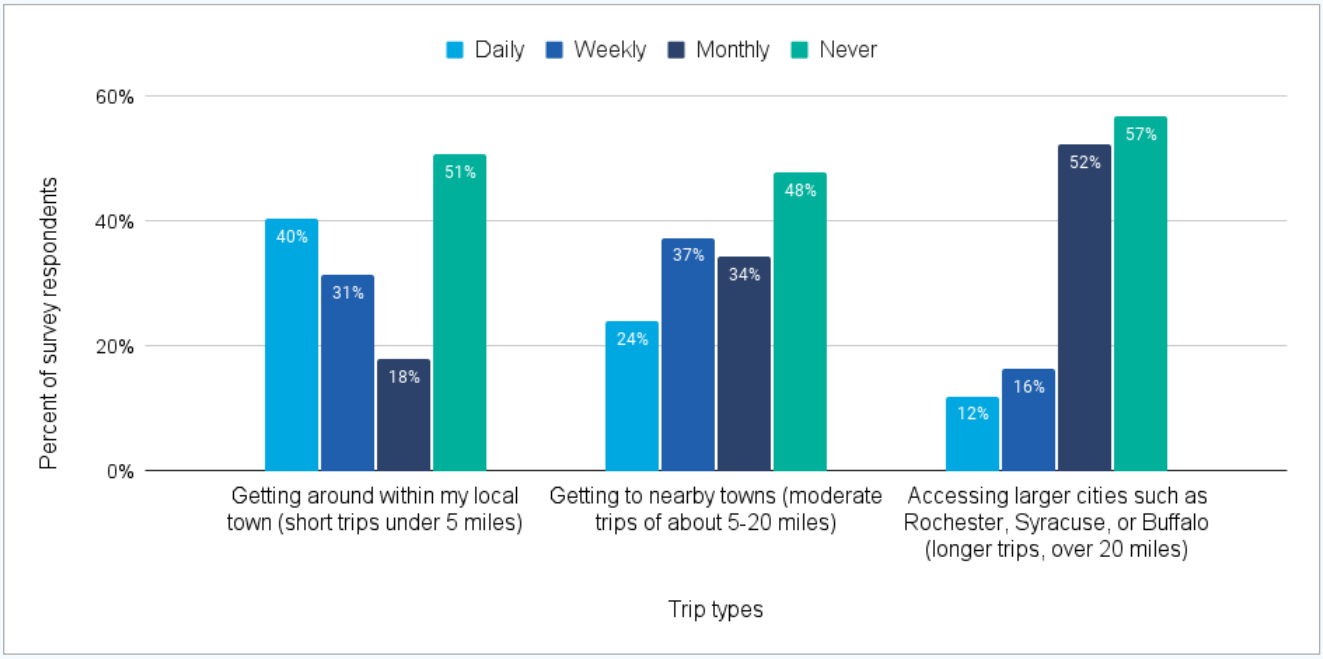
Those who take public transportation were then asked what are the primary three reasons they use the RGRTA services. The most common reasons are not owning a car (39%), affordability of taking the bus compared to driving and using taxis (29%), and not being able to drive for legal or health reasons (27%).

Figure 3.2 Chart of survey results: **What are the primary reasons you use public transportation?** [select up to three]



In the next set of questions, survey respondents were asked about their public transportation needs and travel patterns. Over 90% of respondents indicated that they would like to see public transportation services improved in their community. Respondents were asked, if public transportation were available and service was convenient, what types of trips would they make using public transportation and how often? Generally, people are more willing to use public transit regularly for local trips, rather than long-distance trips. 40% of the respondents answered they would make daily trips within their local towns/villages. 37% said they would take weekly trips to nearby towns, and 52% said they would take monthly trips to larger cities such as Rochester, Syracuse, or Buffalo. However, about 28% of respondents would never make any of these types of trips using public transportation.

Figure 3.3 Chart of survey results: **If public transit was available and service was convenient, what types of trips would you take using public transit?**



Among regular transit users (respondents who take at least 2 to 4 public transit trips per week), two-thirds said they would take daily trips within their local towns, compared to only 21% of non-regular transit users that would take daily transit rides in their local towns. Similarly, 56% of regular transit users said they would take weekly trips to nearby towns, compared to only 20% of non-frequent transit users. Non-regular transit users said they would never take public transit for local trips, and only one respondent said they would never take trips to nearby towns.

Respondents were also asked what kind of trips they would use public transportation for if transit were improved in their communities. The most popular answer was to go to a grocery store or food pantry (55%), followed by going to work (42%), and accessing medical services (42%). Respondents were told to select all types of trips that apply, the complete responses are in Table 3.1.

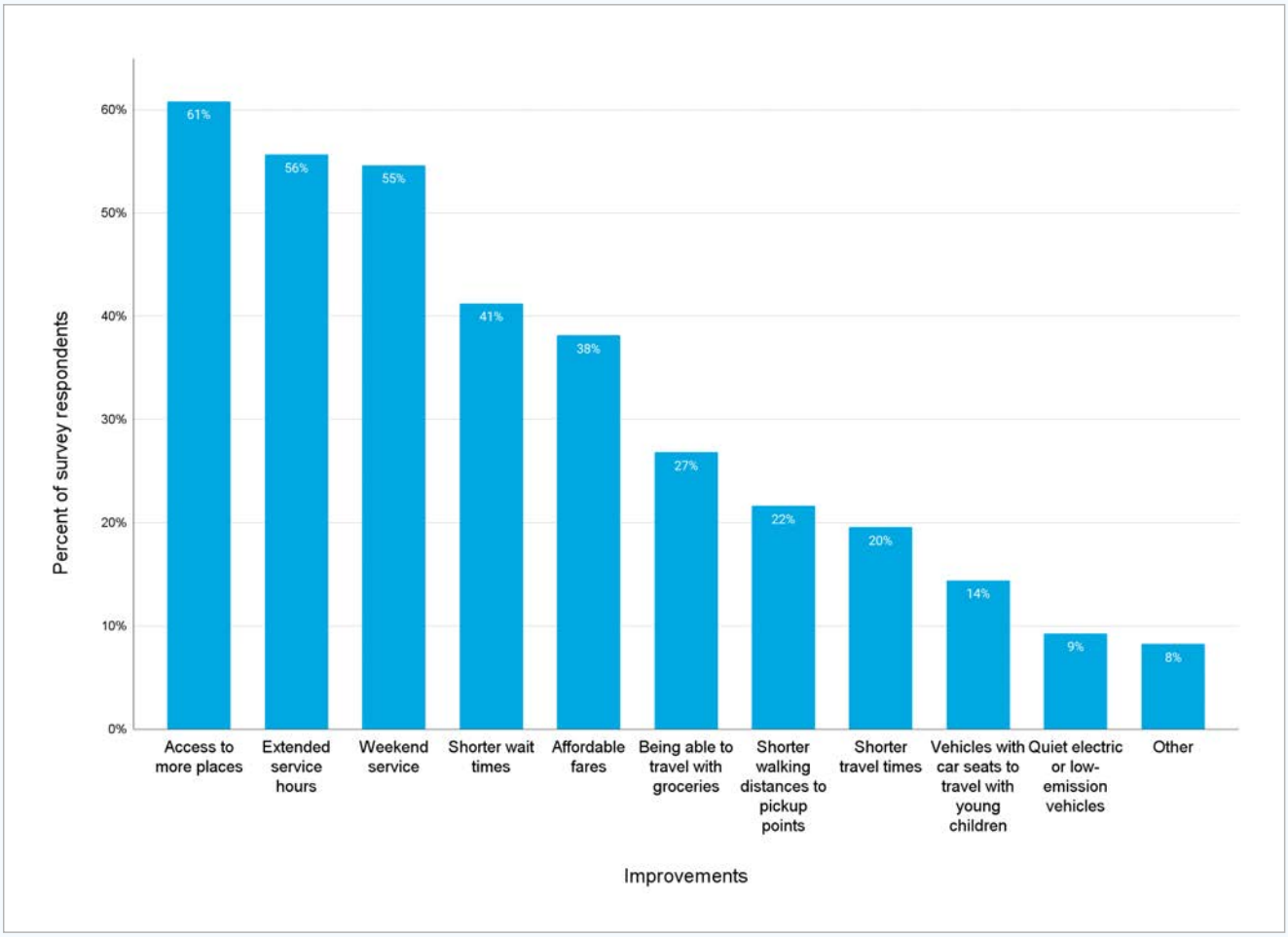
Table 3.1 Survey results: **If public transit was improved in your community, what kind of trips would you want to use it for?** [Select all that apply]

Trip type	Percent of Respondents
Go to a grocery store/food pantry	55%
Go to work	42%
Access medical services	42%
Recreational trips	39%
Connect to other bus routes to travel to a different neighborhood	26%
Access other social services	21%
I would not use it	17%
Go to school	15%
Other	4%

All respondents who indicated that they would not use public transportation services also responded that they have access to a personal vehicle. 75% of the respondents who said they would use public transportation to go to work have access to a private car. In comparison, 70% of the respondents who would use public transportation to access medical services do not have access to private vehicles. This indicates that choice riders who have access to a private car and other transportation options are more likely to use public transit for commuting purposes than to access essential services like medical appointments.

The last set of questions pertained to specific improvements that could be made to the RGRTA public transportation system. The three biggest priorities indicated by respondents were access to more places (61%), extended service hours (56%), and weekend service (55%). When broken down further, frequent transit users identified weekend service, extended service hours, and shorter wait times as their top priorities. Older adults (over the age of 65) named access to more places, weekend service, and affordable fares as their primary concerns.

Figure 3.4 Chart of survey results: **If there were public transportation improvements in your town, what would be most important to you?** [Select up to three options]



Respondents were provided a brief explanation of microtransit service and asked whether they would prefer a bus route or microtransit/demand-responsive transit service in their community. Respondents slightly preferred microtransit over bus routes, 39%, and 30%, respectively. The remaining 31% of respondents said they were not sure or it would depend. Respondents were also asked to explain their choice. Many indicated that they would like to see a hybrid approach with both types of service. Others noted that it depended on where they could travel with each option and how reliable the transit offerings would be. The survey did not identify whether passengers were familiar with any existing demand-response services in their areas, such as RTS On-Demand (Monroe County) or regional Dial-A-Ride services.

3.2 Stakeholder Interviews

Engaging stakeholders as voices for the communities they represent is critical to ensure our recommendations considers the needs of those who may use the service. The project team conducted about 10 interviews of 30 to 45 minutes each. The interviews discussed the transportation needs of the communities that the stakeholder represented, as well as an overview of the study. The following organizations were included in the study:

- Genesee Office for the Aging
- Livingston County Office for the Aging
- Ontario Office for the Aging
- Wayne County DSS
- Wayne Dept. of Aging & Youth
- Orleans Office for the Aging
- City of Canandaigua
- Community Action (Wyoming County)
- Livingston County Planning
- Livingston County Mobility Management

Survey respondents live and work all over the Finger Lakes region, including Albion, Batavia, and Canandaigua. About a third of respondents identified as non-white or of Hispanic/Latino origin. Two-thirds of respondents are full or part-time workers. About half of the respondents have household incomes of less than $50,000. 23% of the respondents indicated that they have a disability. The complete breakdown of survey respondent characteristics can be found in Appendix A.

Several conclusions have been developed based on the survey outcomes:

- Most respondents who use public transit in the region do so infrequently. Only one in five respondents use public transit ‘very often’ and half of respondents who use public transit do so a few times a month or less. It is likely that they rely on other modes of transportation when possible, and public transit is considered a backup option. This suggests that improvements to public transit could encourage existing users to travel more often using public transit.
- Respondents showed enthusiasm for improved public transit service, with 40% of respondents indicating they would use a local public transit service daily if it was available and convenient.
- When considering different ways to expand public transit, most respondents would prefer access to more geographic areas, followed by weekend service and extended hours on weekdays.
- The most common reasons to use public transit would be grocery shopping and access to work and medical services. Therefore, improvements to public transit should prioritize grocery stores, employers, and medical services.
- The survey respondents did not indicate a clear preference between microtransit and fixed-route and many respondents were not sure which would be better suited to their needs. This highlights two key points:
    - RGRTA should consider both fixed-route buses and microtransit services as both appear to have public support.
    - Microtransit education is important if a microtransit service is launched, as many people do not fully understand it, even after reading a description of the service.

SECTION 4

Service Delivery Recommendations

4.

Service Delivery Recommendations

4.1 Framework

This framework was developed based on the existing conditions analysis and public outreach findings, as well as best practices observed in other similar regions. The framework includes three service models, or types of public transit solutions, that complement each other to provide a holistic service plan for the entire Rochester-Genesee region, including the 27 villages this study focuses on. Each service model addresses different transit needs, and more than one service model can be applied to each village, providing complementary transit solutions. The sections below describe each service model in detail.

4.1.1 Service Model 1: Frequent, Intercity Fixed-Route Network

Description of Service Model:

The first service model is a frequent, intercity fixed-route bus network that connects the largest towns and villages. These routes prioritize high ridership corridors, offer reliable and consistent departure and arrival times, and avoid unnecessarily long and circuitous routing. They are the most cost-effective way to serve long trips as they efficiently group passengers traveling in the same direction.

The frequent, intercity fixed-route network should offer direct and regular connections and make stops at key destinations that are likely to attract the most riders. The fixed-route network should not be limited by county boundaries but instead should focus on the most common intercity travel patterns. The service hours should include evenings to allow for return trips for those commuting by bus and weekend hours for those who are unable to complete trips during weekdays.

This study recommends 'frequent' headways when describing this service model. However, frequency should be defined in the context of the study area. While in urban areas, 'frequent' fixed-route service is often considered headways of 10 to 15 minutes or less.

Given the population density of the study area, the fixed-route services recommended in this study would more likely operate with 30 to 45-minute frequencies, with the most popular routes operating as often as every 15 to 20 minutes during peak hours.

While the network should focus on providing direct connections between larger and more densely populated towns and villages, if a smaller village is on the route and would not result in significant additional travel time, the route should include stops in the smaller village. However, a key goal should be to minimize deviations that would make the route longer and less useful for those traveling between the larger towns and villages.

Recommended Areas for Implementation:

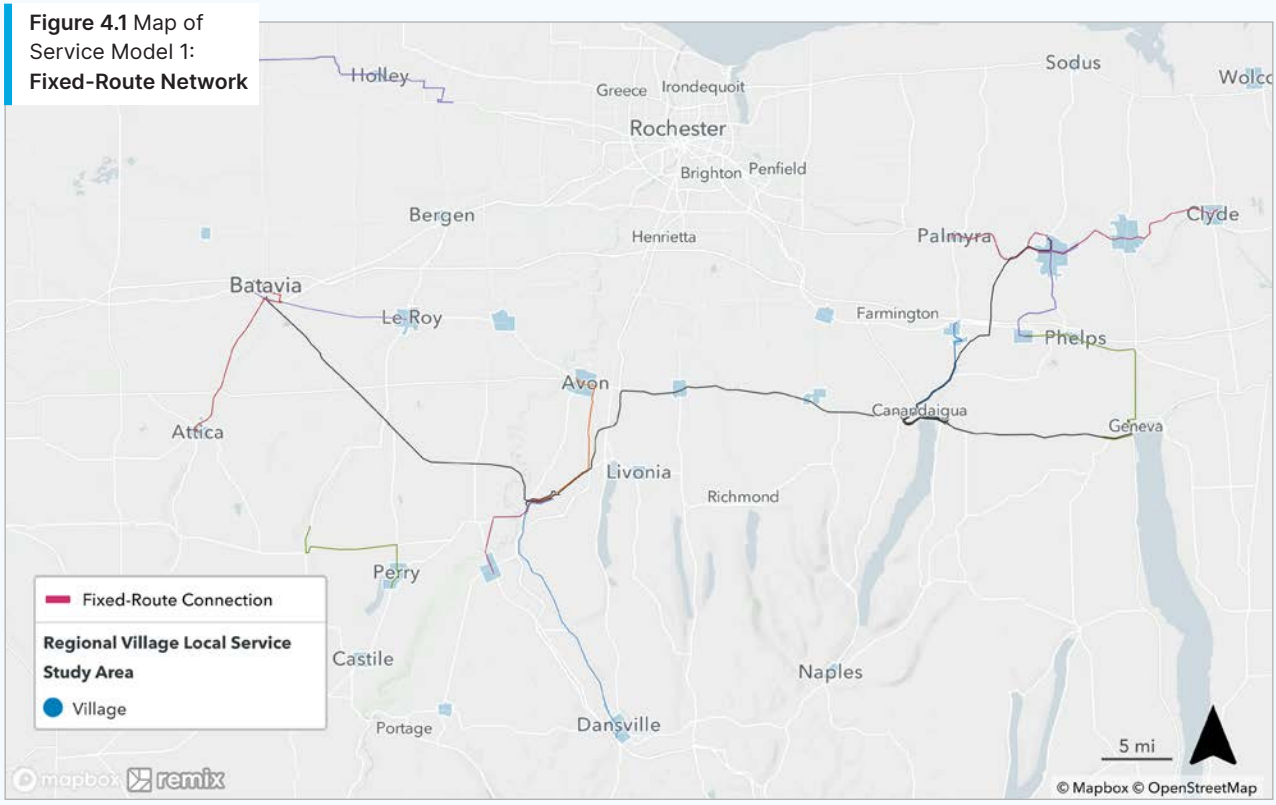
While this study does not include a full redesign of a fixed-route network for the six-county region, it identifies which of the 27 villages in the study justify having fixed-route connections and where those connections should be to. The rationale for each village is based on the size and population of the village, the demographics and expected needs of the community, the employment patterns of the village's workers, the location and proximity to other larger towns and villages, and the availability of key destinations and essential services within the village. Several examples are outlined below:

- Villages with fewer than 1,500 residents were not considered for fixed-route connections unless they were directly on the route between two larger towns or villages. For example, Bloomfield has a population of 1,300 but is on a direct route between Canandaigua and Geneseo; a stop in Bloomfield would not require a significant detour.
- The geography between towns and villages was a major consideration for service. For example, even though Wolcott has a population of 1,600 (more than the 1,500 minimum population criteria), it is over 30 minutes driving time to Newark, the nearest larger village, and thus fixed-route is not recommended. However, Manchester, which is a similar size as Wolcott, is a 10-minute drive to Canandaigua, and thus fixed-route service can be provided more frequently at a lower cost between these two municipalities.
- Key destinations and employment patterns were also considered. For Perry, fixed-routes were explored to both Warsaw and Geneseo. However, a connection between Perry and Warsaw was ultimately recommended as there are more commuters traveling to Warsaw than to Geneseo and Warsaw also has a large hospital which Geneseo does not have.

The map in Figure 4.1 displays a possible fixed-route network that prioritizes connections between towns and villages based on the criteria outlined above. The exact route alignments and schedules were not determined as part of this study. The map also focuses on connections to/from the villages in the study area; additional connections may be considered between larger towns that were excluded from this study.

The recommendations and analysis for each village are described in the subsequent section (4.3. Village Specific Recommendations).

Figure 4.1 Map of Service Model 1: **Fixed-Route Network**



4.1.2 Service Model 2: Local On-Demand Microtransit or Fixed-Route Service

Description of Service Model:

This model focuses on providing local transit service within the larger towns and villages in the study area. These short, local trips are best served by either an on-demand microtransit service or with a local fixed-route bus, which provide fast and frequent trips within the small service area. This service model is well suited for one-off or recurring short trips such as grocery shopping or errand running. The service should be fast and convenient as passengers with other options, such as a private vehicle or walking, are typically not willing to wait long when their destination is within a few miles. Local transit services can also be used as first-and-last-mile connections to intercity fixed routes (such as those outlined in the Service Model 1).

Local trips can either be served with a fixed-route bus or on-demand microtransit.

- **Local fixed-routes** perform best when the majority of trips start and end along a linear corridor. Fixed-routes can provide reliable wait times and travel times through their predetermined schedules. Some riders prefer the predictability of fixed-route over the flexibility of microtransit.
- **Microtransit** can be more efficient if demand is dispersed throughout the village and travel patterns are more varied. Microtransit also requires less capital infrastructure and can work well in areas with poor pedestrian infrastructure. Finally, microtransit often requires less walking and faster overall travel times.

What is Microtransit?

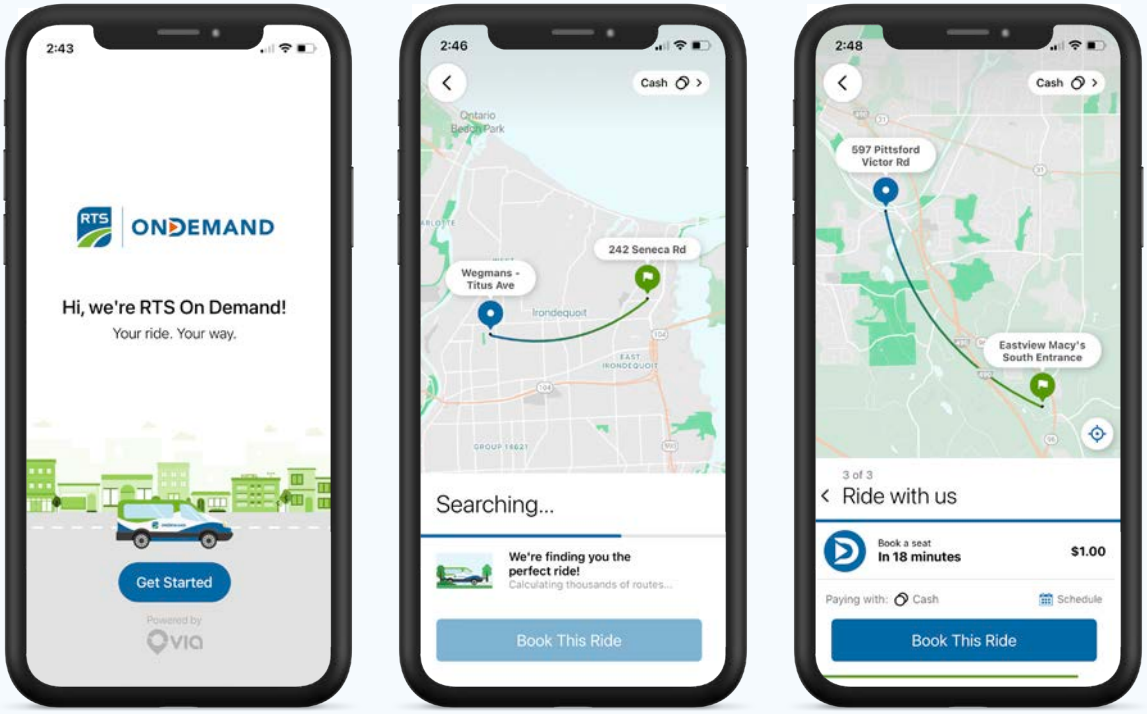
Microtransit, also known as on-demand transit or demand-response transit, uses technology to route a fleet of vehicles based on real-time passenger demand. While other forms of demand-response transit have existed for decades, often in the form of Dial-a-Ride and other paratransit services, microtransit has grown in popularity just in the last few years. The key difference is that microtransit is technology driven and encourages riders to book trips through a mobile phone app, allowing on-demand booking in addition to pre-booking. There are no fixed routes or pre-determined schedules. Instead, routing is based on where riders want to travel and when. Microtransit is often implemented using small buses or vans, and rides are shared as they are with traditional bus service.

Microtransit services operate in pre-defined zones, and passengers are restricted to starting and ending their trips within that area. Passengers sometimes transfer to fixed-route buses to travel beyond the zone's boundaries.

Most passengers will book rides through a phone app, though services often provide a call center to book rides by phone as well. Customers first indicate the number of passengers they are traveling with and select their desired pickup and dropoff locations within the pre-defined zone. Once the passenger submits a trip request, they are given a proposal that tells them when the vehicle will arrive. Typically, passengers must wait between 5 -20 minutes for a trip, although this may vary depending on the level of demand and the number of vehicles available. Customers who book with the app can track the vehicle in real-time. Customers who book by phone can receive text message updates about their trip.

To ensure customers know which vehicle is theirs, they will be provided with vehicle information such as a license plate, driver name, driver photo, and vehicle ID number. Customers can usually cancel a ride at any time before pickup, but cancellations negatively affect the routing and experience of other passengers. Thus many agencies charge a small fee to discourage last-minute cancellations.

Figure 4.2 Images of the RTS On-Demand microtransit app



Once the vehicle arrives, the driver uses a driver app to confirm the passenger's details. Passengers typically pay for their rides using credit and debit cards, transit passes, or vouchers. To ensure the service is accessible to everyone, there are typically payment alternatives for customers without credit/debit cards. Fares for microtransit rides are typically comparable to other local transit options, usually between $1 to $3.

Once the passengers are in the vehicle, they are routed to their final destination. Most microtransit services are shared, and other customers traveling in similar directions may be picked up or dropped off on the way. Passengers using the app can track the progress of their trip on their phones. After each trip, passengers may be automatically emailed a receipt. Passengers may also be able to provide real-time and post-trip feedback through the app.

Figure 4.3 Diagram of On-Demand Microtransit Passenger Experience

Some microtransit services, especially those in urban areas, ask passengers to walk to meet a vehicle at a nearby intersection to reduce detours and maximize the efficiency of the service. In rural areas, where demand is less concentrated, curb-to-curb service can be just as efficient. In low-density areas, microtransit services can also be pre-booked. For pre-booked services, passengers select a window in which they would like to be picked up or dropped off, typically at least the day before their trip.

Recommended Areas for Implementation:

Local transit service was explored for any village within the study that had a population of over 3,000 residents, as villages with a smaller population than this do not have sufficient local travel generators (such as grocery stores) to support a local service. These villages were Newark, Dansville, Lyons, LeRoy, Avon, Perry, and Palmyra. A proposed on-demand microtransit zone was drawn for each village. For villages with population centers or key destinations adjacent to the village boundary, the microtransit zones were drawn to include these areas.

For each zone, a low, medium, and high demand estimate was calculated based on the proposed zone population, the number of jobs, and the area's capture rate[2]. The capture rate represents the percentage of the population that is expected to use the on-demand microtransit service. Simulations were conducted for each village at each level of demand in order to estimate the average wait times, journey times, productivity, and costs for the services. The simulations assumed weekday service hours between 7 AM and 7 PM and weekend hours between 8 AM and 4 PM. Maximum wait times were set to 30 minutes. The results of these simulations are shown in Section 4.3 Village Specific Recommendations.

The productivity of the simulated services was measured as passenger boardings per vehicle revenue hour. Based primarily on this metric for the medium demand scenario, villages were categorized into three groups:

1. **Productivity below 1.5 passengers per vehicle revenue hour:** On-demand microtransit is not recommended. Below this threshold, we believe that a regional, pre-booked microtransit (Service Model 3) would be a more effective solution. This was the case for Perry and Palmyra (the smallest villages where on-demand microtransit was evaluated) as well as all smaller villages.
2. **Productivity between 1.5 and 2.5 passengers per vehicle revenue hour:** On-demand microtransit is recommended. These villages are Dansville, Lyons, LeRoy, and Avon. Note that a productivity of 1.5 - 2.5 passengers per vehicle revenue hour is considered relatively low for an on-demand microtransit service. Nonetheless, the alternatives are a local fixed-route bus (which would also require a single vehicle and most likely have lower ridership) or a regional pre-booked microtransit,

[2] Medium demand represents the expected ridership based on comparable services in the United States. Low demand represents a service that underperforms comparable services, and a high demand conveys a service that is outperforming comparable services.

which would require trips to be booked several hours in advance. Therefore, while relatively low-performing, on-demand microtransit appears to be the best solution for this group of villages. As ridership grows over time, RGRTA may be able to further improve productivity using a single vehicle.

3. **Productivity above 2.5 passengers per vehicle revenue hour:** On-demand microtransit is strongly recommended. This only includes Newark (either with or without Lyons as part of the same zone). This category may also include larger villages not included as part of this study such as Albion, Batavia, Warsaw, Geneva, and Canandaigua. However, these communities already have local deviated routes, so they were not included in the scope of this study. We recommend conducting additional analysis to compare the current deviated route service with an on-demand microtransit service.

The towns and villages highlighted on the map in Figure 4.4 show those that require local service based on the criteria above. The green villages are those within the scope of the study that are further described in the subsequent sections of the report. The purple towns were excluded from the analysis, as they already have local deviated routes service.

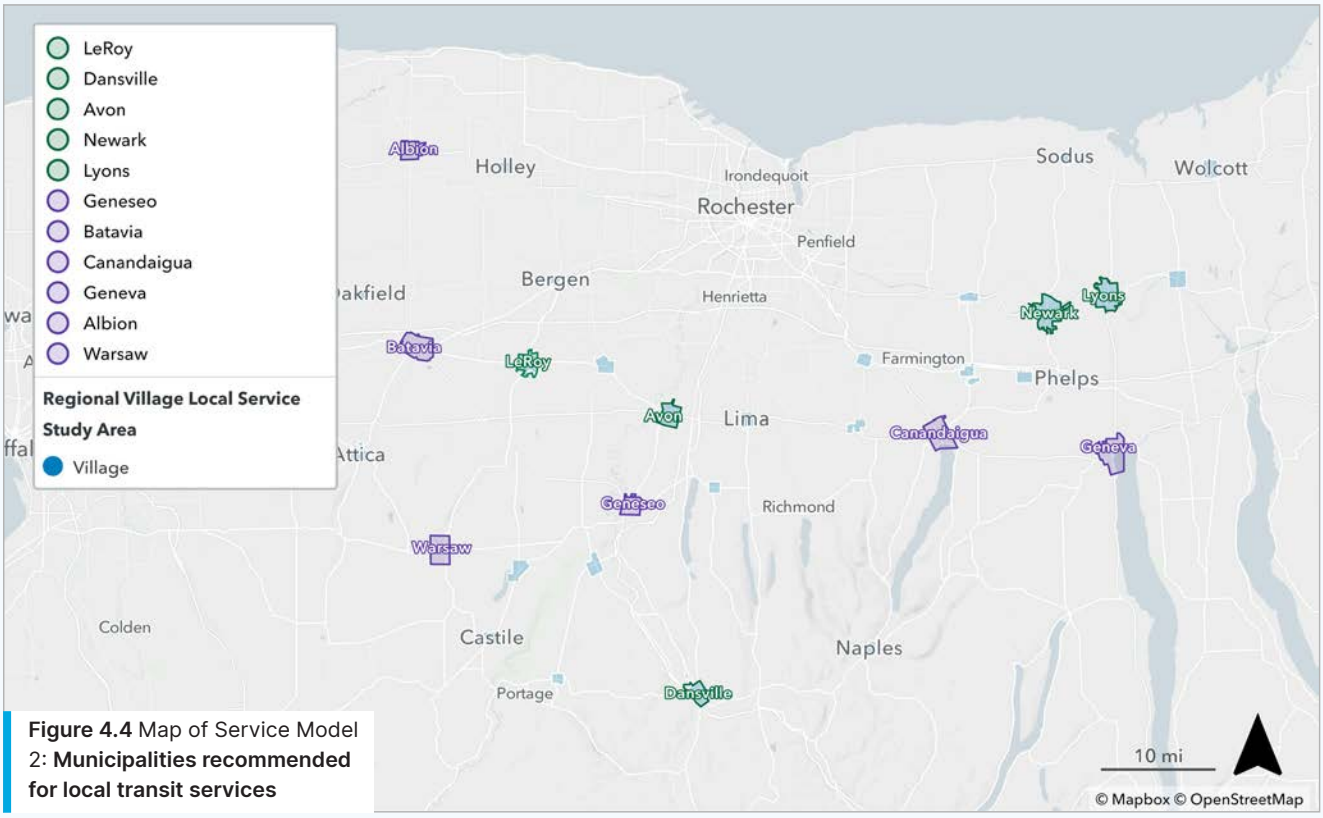


Figure 4.4 Map of Service Model 2: **Municipalities recommended for local transit services**

4.1.3 Service Model 3: Regional Pre-booked Microtransit

Description of Service Model:

A regional pre-booked microtransit solution is intended to close any remaining service gaps after Service Models 1 and 2 have been implemented. A pre-booked microtransit service is often the most efficient mode for large rural areas with few trips. The areas that are recommended to be served solely by pre-booked microtransit are the smallest villages without any fixed-route service passing through and all rural areas—essentially the hardest-to-serve areas. The types of trips that are expected include trips to medical appointments, access to social services, and shopping trips to large grocery stores and pharmacies (like Walmart). Typical users of the service are older adults, individuals with disabilities, and car-free households. This model can also be used to meet the requirements of the Americans with Disabilities Act (ADA) by ensuring those traveling near fixed-routes are provided with an accessible trip that offers an equivalent level of service.

A regional pre-booked microtransit service is very similar to the existing Dial-a-Ride service but offers some additional features more commonly seen with a microtransit service, such as app-based bookings, an automated scheduling and routing platform, and electronic fare payment. This service model would ensure that RGRTA provides some form of public transit service across the entire region. However, as this mode is typically the most expensive to provide, trip requests will only be fulfilled if there is no other transit option available. Like the existing Dial-a-Ride, passengers will be asked to book trips in advance (typically at least two hours before their requested pick-up time). To allow trips to be efficiently shared, passengers must provide a 1-2 hour pickup or dropoff window. For example, passengers traveling for an 11 AM appointment may be dropped off as early as 9 AM or 10 AM, depending on the window RGRTA implements. Passengers will be provided with an exact pickup time within a few hours of pickup so they know when to be ready, and they can track their vehicle live on an app (the exact service parameters and pickup windows can be adjusted by the agency). Given that many of these trips are likely to be intercity and longer distances, the flexibility in scheduling pre-booked rides enables the greatest aggregation of trips across the service area.

Recommended Areas for Implementation:

This model would replace and expand the RGRTA Dial-a-Ride service. Currently, RGRTA Dial-a-Ride services are limited to travel within a county. However, in some instances, people may be closer to a grocery store or hospital that is in a nearby county. Instead of limiting trip requests to county boundaries, limits can be placed on the length of the trip or the type of destination. For example, the service could be regulated to only allow for out-of-county trips to medical facilities or limit rides to a 20-mile radius from the resident's home address. If funding is available, service should extend to the evenings and weekends to maximize the usefulness of residents.

The regional pre-booked microtransit service can also be used to connect to other transit services being provided in Service Models 1 and 2—for example, connections to intercity fixed-routes to facilitate longer-distance trips. In addition, the regional pre-booked microtransit can supplement local microtransit services. For example, when a passenger needs to travel to a medical facility in a different town, and there is no intercity fixed route available for that trip, they could be offered a trip using the pre-booked microtransit service.

The map in Figure 4.5 shows a regional pre-booked microtransit service across the six counties.

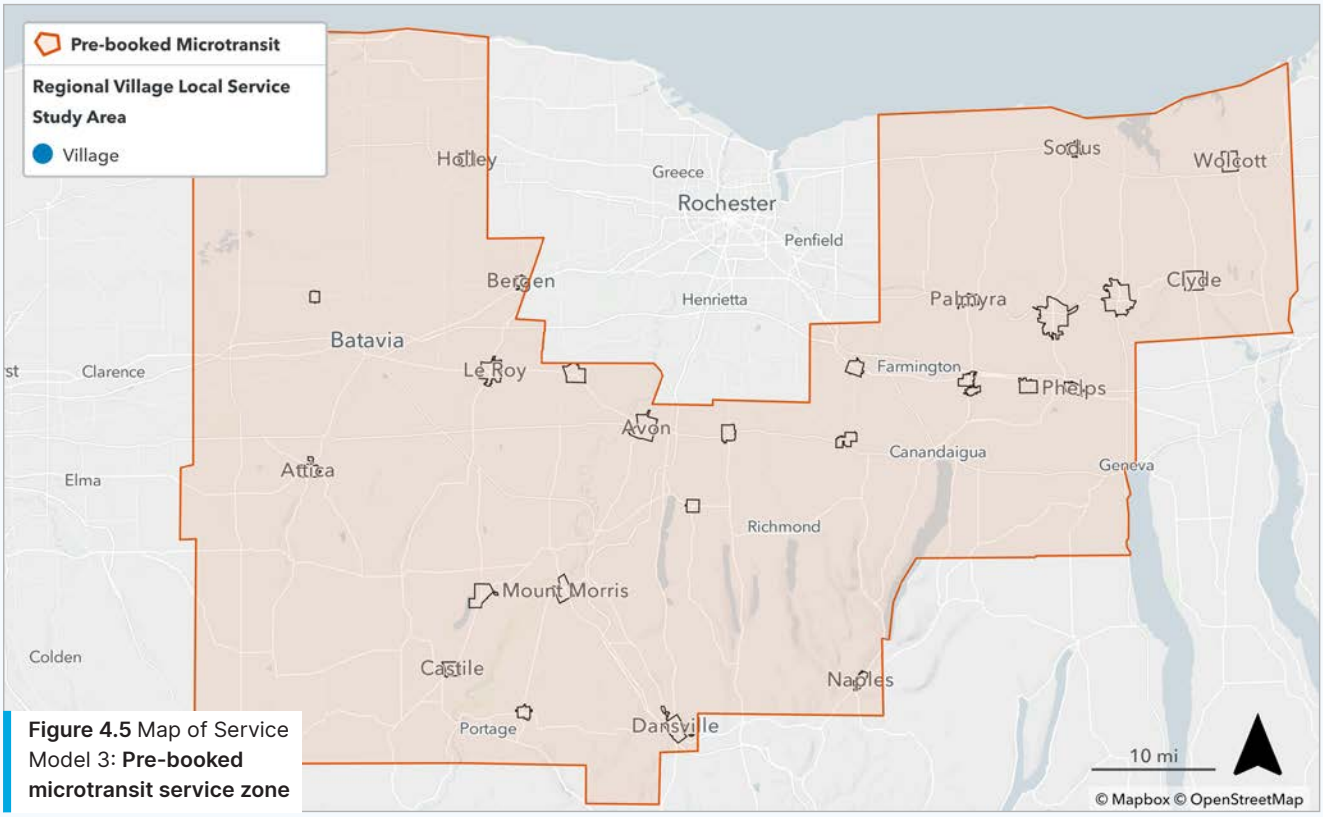


Figure 4.5 Map of Service Model 3: **Pre-booked microtransit service zone**

4.2 Application of the Framework

Tables 4.1, 4.2, and 4.3 summarize how each service model should be applied to the 27 villages. The most significant change recommended by this study is the launch of microtransit (Service Model 2) in several of the larger communities; Newark, Lyons, Dansville, LeRoy, and Avon. Most of the smaller communities do not have enough residents and destinations to support a local microtransit service, and would be better served by fixed-route bus connections to larger towns (Service Model 1), or inclusion in a regional pre-booked microtransit service (Service Model 3).

The first table (4.1) displays the set of villages where only Service Model 1 is recommended. Recommendations highlighted in green are those where a new or modified service is suggested. In gray are recommendations that are already part of RGRTA's service offerings.

Table 4.1 Summary of transit recommendations for village where only Service Model 1 is suggested

Village	**Service Model 1** Frequent, Intercity Fixed-Route Network	**Service Model 2** Local On-Demand Microtransit or Fixed-Route Service	**Service Model 3** Regional Pre-booked Microtransit
Perry	To Warsaw	None of these villages have sufficient population and/or local destinations to support a local on-demand microtransit or fixed-route.	The regional pre-booked microtransit service can be used to provide accessible trips for disabled passengers within ¾ mile of fixed-routes in these villages[3]. This means the fixed-routes do not need to deviate and can offer improved on-time performance.
Palmyra	To Clyde via Newark and Lyons To Eastview Mall		
Manchester	To Canandaigua via Shortsville		
Shortsville	To Canandaigua and Manchester		
Mt. Morris	To Geneseo		
Victor	To Eastview Mall		
Attica	To Batavia		
Clifton Springs	To Newark; To Geneva via Phelps		
Clyde	To Palmyra via Lyons and Newark		
Lima	On Canandaigua to Geneseo route		
Phelps	To Clifton Springs and Geneva		
Holley	To Albion and Brockport		
Bloomfield	On Canandaigua to Geneseo route		

Recommendations that are already part of RGRTA's service offerings

Recommendations for new or modified service

[3] The ¾ mile limit is based on ADA requirements for paratransit.

The second set of villages, shown in Table 4.2, are those where Service Model 2 is recommended. Given that these a re the largest towns in the study, most also can support intercity, frequent fixed-route buses (Service Model 1). However, a regional pre-booked microtransit service is unnecessary as all trips can be fulfilled by Service Models 1 and 2.

Table 4.2 Summary of transit recommendations for village where Service Model 2 is suggested

Village	**Service Model 1** Frequent, Intercity Fixed-Route Network	**Service Model 2** Local On-Demand Microtransit or Fixed-Route Service	**Service Model 3** Regional Pre-booked Microtransit
Newark	To Canandaigua; To Clifton Springs; To Palmyra; To Clyde via Lyons	Lyons + Newark On-Demand Zone	Not required as the local on-demand microtransit service will complete all trips within the village.
Lyons	To Clyde and Newark via Palmyra		
Dansville	No fixed-route recommended	Dansville On-Demand Zone	
LeRoy	To Batavia	Le Roy On-Demand Zone	
Avon	To Geneseo	Avon On-Demand Zone	

Recommendations that are already part of RGRTA's service offerings

Recommendations for new or modified service

The final set of villages are those that are recommended to be served only by Service Model 3. These are the smallest subset of villages and are unlikely to have a population large enough to support additional service.

Table 4.3 Summary of transit recommendations for village where Service Model 3 is suggested

Village	**Service Model 1** Frequent, Intercity Fixed-Route Network	**Service Model 2** Local On-Demand Microtransit or Fixed-Route Service	**Service Model 3** Regional Pre-booked Microtransit
Caledonia	None of these villages are located along a frequent intercity bus route and/or have the population to support a dedicated fixed-route to a nearby community.	None of these villages have sufficient population and/or local destinations to support a local on-demand microtransit or fixed-route.	Trips to nearby towns (based on regional pre-booked microtransit rules)
Oakfield			
Sodus			
Wolcott			
Livonia			
Nunda			
Bergen			
Castile			
Naples			

Recommendations that are already part of RGRTA's service offerings

Recommendations for new or modified service

4.3 Village Specific Recommendations

This section includes a detailed application of the service models for each of the villages in the study. It outlines the recommendations for new or modified services and the justifications for those recommendations. It also includes the key travel destinations and simulation results for villages where Service Model 2 was analyzed.

4.3.1. Newark (Wayne County)

Population: 9,000
Size: 5.4 sq mi
Density: 1,700 people per sq mi
Jobs: 4,400

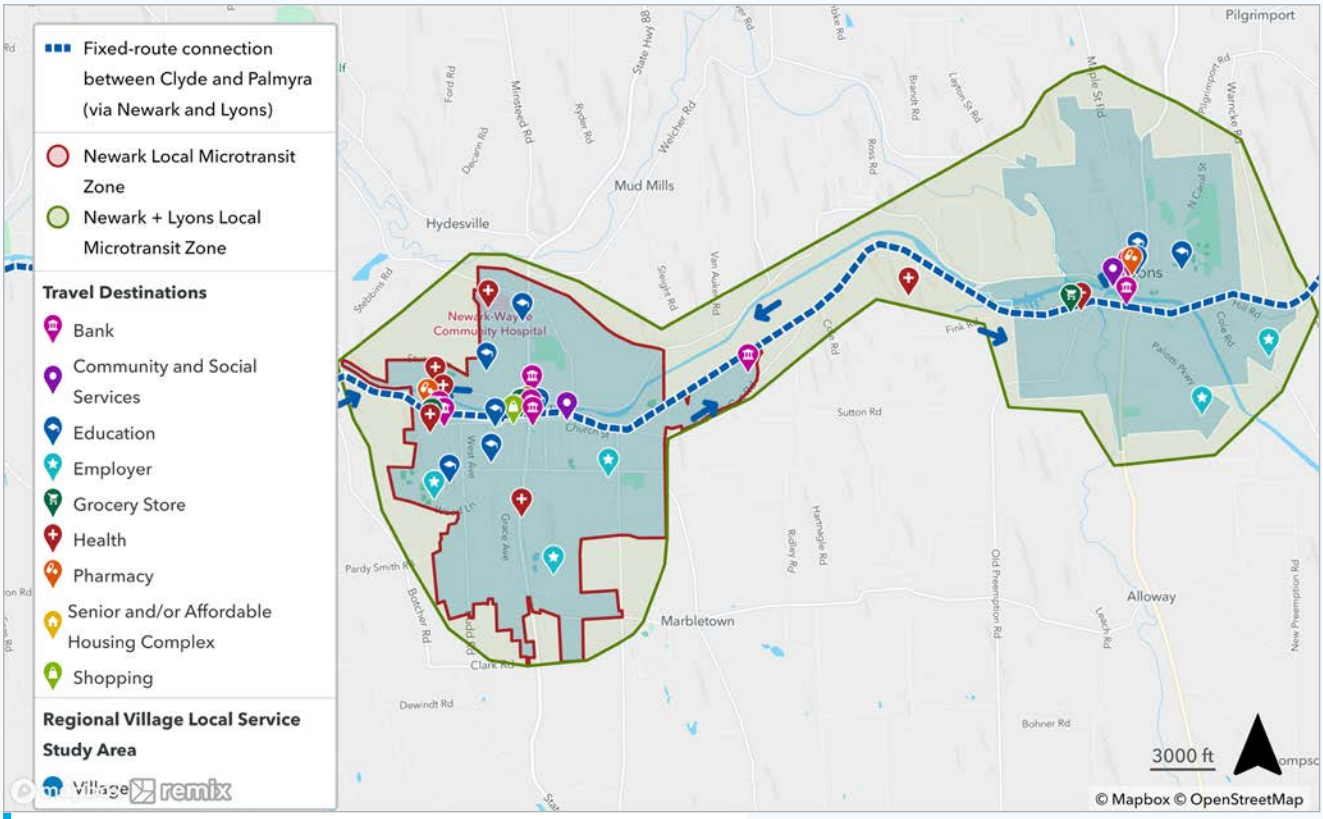


Figure 4.6 Map of public transportation recommendations for Newark

Village Overview

Newark is the largest village in the study both by population and Area. The village is located in south-central Wayne County between Lyons and Palmyra. Newark is served by 12 RTS Wayne bus routes.

- Route 290 goes from Lyons to Canandaigua via Newark and Palmyra twice per weekday.
- Route 293 goes from Canandaigua to Lyons via Newark twice per weekday.
- Route 296 connects from Newark to Geneva and back and makes five round trips per weekday.
- Routes 302 through 307 are county loops that connect Newark to Sodus, Wolcott, Clyde, Lyons, and Palmyra. In total, there are three clockwise departures from Newark and three counterclockwise departures from Newark.
- Route 308 goes from Newark to Webster and back from Webster to Newark each once per weekday morning.
- Routes 332 makes one round trip from Clyde to Palmyra and back via Lyons and Newark each weekday.
- Route 333 goes from Lyons to Palmyra and back via Newark and makes two round trips per day.

The study recommends a local microtransit service that covers both Newark and Lyons.

Service Model 1 (Intercity Fixed-Routes) Rationale

A local microtransit service (Service Model 2) will provide connections between Newark and Lyons. Therefore, Service Model 1 is not a priority for the transit needs of Newark residents. However, this study recommends frequent fixed-route service between Newark and Clyde (via Lyons), Palmyra, and Clifton Springs. RGRTA should also consider a direct and frequent intercity fixed-route between Newark and Canandaigua. While less than 2% of Newark's commuters travel to Canandaigua for work, the fixed-route may be useful for other smaller villages that are connected to Newark and may wish to travel to Ontario County. Newark residents may also benefit from the additional shopping options and medical facilities available in Canandaigua, Clyde, Palmyra, and Clifton Springs.

Service Model 2 (Local Transit Service) Rationale

Newark has 9,000 residents and 4,000 jobs. Local on-demand microtransit service is recommended for Newark. Popular travel destinations in the village include the Newark-Wayne Community Hospital, a Walmart Supercenter, grocery stores, and pharmacies. Furthermore, 27% of Newark's working population is employed within the village.

A one-vehicle, microtransit service was simulated for Newark. The operating hours modeled were Monday through Friday from 7 AM to 7 PM and weekends from 8 AM to 4 PM. The curb-to-curb service could be operated with vehicles as small as minivans with a capacity for six passengers, including one wheelchair space. For Newark, a service with maximum wait times of 30 minutes would have average wait times between 10 and 15 minutes.

Table 4.4 outlines the ridership, revenue hours, average wait time, average trip duration, average productivity, and expected annual cost and cost per ride for a one-vehicle microtransit service in Newark at a low, medium, and high demand level.

Table 4.4 Summary of the microtransit analysis for Newark

Demand	Low	Medium	High
Weekday ridership (passengers)	28	45	65
Annual ridership (passengers)	8,800	14,000	20,300
Fleet size (vehicles required at peak)	1	1	1
Average weekday revenue hours (hours)	12	12	12
Annual revenue hours (hours)	4,000	4,000	4,000
Average wait time at peak (minutes)	8 - 13	9 - 14	10 - 15
Average trip duration at peak (minutes)	5 - 10	6 - 11	7 - 12
Average productivity (passengers per revenue hour)	2.8 - 3.8	3.2 - 4.2	4.9 - 5.9
Annual cost[4] (millions of USD)	$0.3M	$0.3M	$0.3M
Average cost per ride[4] (USD)	$34	$22	$15

[4] Based on RTS Wayne's May 2022 costs per vehicle revenue hour of $75.58.

Modeling indicates that a local microtransit service covering Newark would likely have a weekday demand between 28 and 65 riders per day. Provided that the service is implemented with one vehicle, simulations indicate the average productivity of the service will be 3.7 passengers per revenue hour. The service is expected to cost about $0.3 million per year.

Given the proximity to Lyons and the fact that ~6% of Newark's workforce commutes to Lyons, a second microtransit alternative was evaluated that would cover both Newark and Lyons with one service. Travel destinations in Lyons include additional grocery stores and pharmacies, county services, and medical services. The same service hours, wait times, and vehicle capacity was assumed for the modeling of a Newark plus Lyons curb-to-curb microtransit service. The results are shown in Table 4.5.[5]

Table 4.5 Summary of the microtransit analysis for Newark and Lyons

Demand	Low	Medium	High
Weekday ridership (passengers)	53	85	123
Annual ridership (passengers)	16,600	27,000	39,000
Fleet size (vehicles required at peak)	2	2	3
Average weekday revenue hours (hours)	20	24	31
Annual revenue hours (hours)	6,000	7,900	9,700
Average wait time at peak (minutes)	5 - 10	11 - 16	8 - 13
Average trip duration at peak (minutes)	5 - 10	6 - 11	5 - 10
Average productivity (passengers per revenue hour)	2.2 - 3.2	3.0 - 4.0	3.5 - 4.5
Annual cost[5] (millions of USD)	$0.45M	$0.6M	$0.73M
Average cost per ride[5] (USD)	$27	$22	$19

[5] Based on RTS Wayne's May 2022 costs per vehicle revenue hour of $75.58.

The modeling suggests that an on-demand microtransit zone for both municipalities would have between 53 and 123 riders per weekday. Two to three vehicles would be needed for the service, and the average productivity is expected to be 3.5 passengers per revenue hour. This is slightly less productive and more expensive on a cost-per-ride basis than the Newark service alone. However, it is more cost-effective than providing Lyons' services separately. Moreover, the combined service will be more useful to passengers by offering more travel destinations, including those located between the two villages. Further aggregations and efficiencies could be achieved if RGRTA implements a corner-to-corner bus stop model, which would require riders to walk a few minutes to meet their vehicle and from their dropoff point to their final destination. Corner-to-corner models offer more direct trips for passengers and reduce the average journey length for the service.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit would only be used to provide accessible trips for disabled passengers traveling to select destinations outside of Newark and Lyons, if they are unable to use the fixed-route bus. Accessible trips within Lyons and Newark can also be served by the on-demand microtransit service that should be implemented with accessible vehicles that can accommodate wheelchairs and other mobility devices. If a corner-to-corner microtransit service is implemented for Service Model 2, curb-to-curb rides could still be provided for passengers with limited mobility traveling within Newark and Lyons.

4.3.2. Lyons (Wayne County)

Population: 4,000
Size: 4.7 sq mi
Density: 850 people per sq mi
Jobs: 2,500

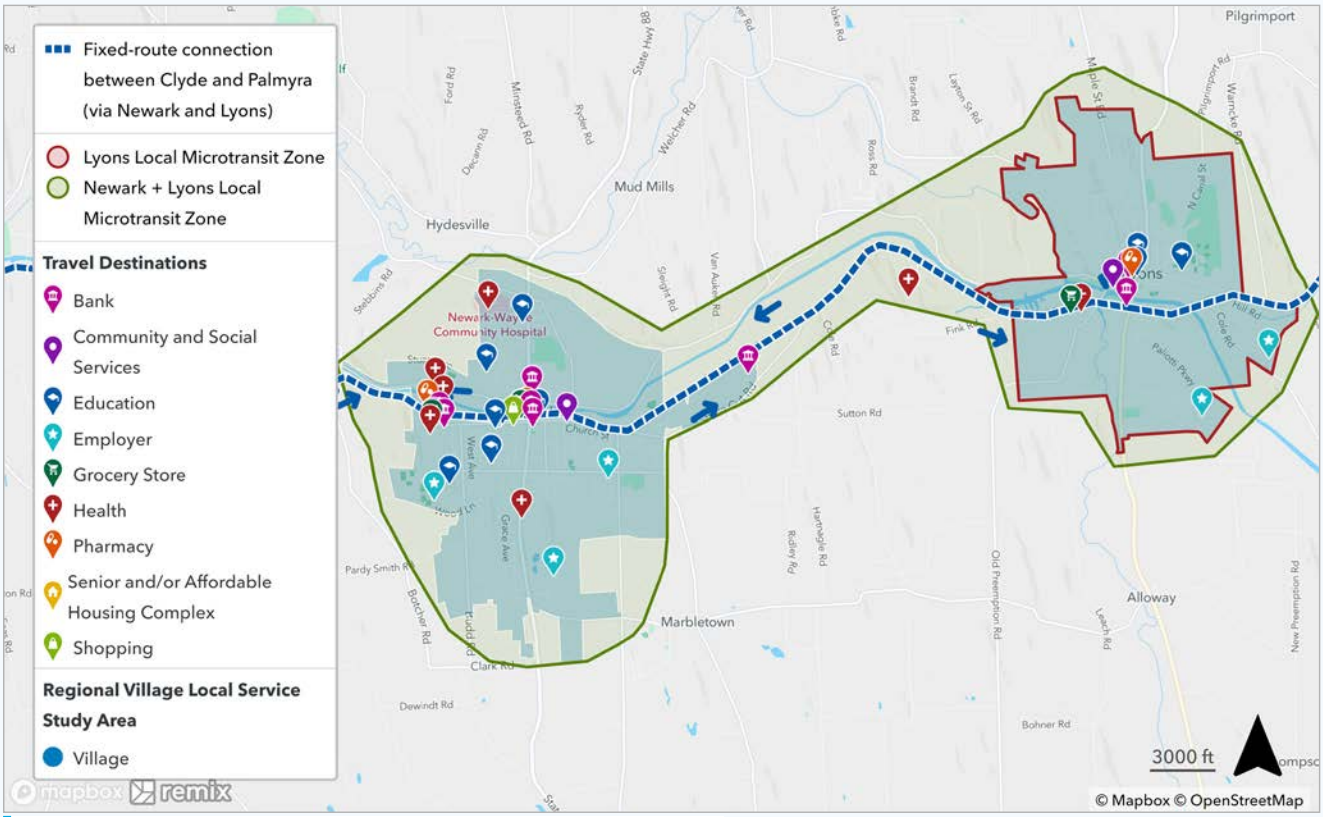


Figure 4.7 Map of public transportation recommendations for Lyons

Village Overview

Lyons is the second largest village in the study scope by area and third largest by population. There are ten bus routes that operate in the village, all operated by RTS Wayne.

- Route 290 goes from Lyons to Canandaigua via Newark and Palmyra twice per weekday.
- Routes 302 through 307 are loops around Wayne County covering various villages, including Lyons, Newark, Palmyra, Williamson, Wolcott, and Clyde. In total, they provide six trips to Newark in a clockwise loop around the county and five that run in the opposite direction from Newark to Lyons.
- Route 308 goes from Lyons to Webster via Newark on weekday mornings starting at 5:15 AM.

- Route 332 connects from Clyde to Macedon and back via Lyons, Newark, and Palmyra and makes one final stop in Lyons at the end of the run. It operates between 9:30 AM to 12:30 PM on weekdays.
- Route 333 goes from Lyons to Palmyra via Newark and makes two round trips per day. Route 333 runs in the afternoons between 12:15 PM and 3:30 PM.

The study recommends a local microtransit service that covers both Lyons and Newark.

Service Model 1 (Intercity Fixed-Routes) Rationale

A local microtransit service (Service Model 2) will provide connections to Newark. As this will meet the majority of travel needs for Lyon's residents, Service Model 1 is not a priority for this community. However, this study recommends Service Model 1 connects Clyde and Newark, and this route will likely pass through Lyons, meaning Service Model 1 will be offered in Lyons regardless. Travel demand between Lyon's and other communities aside from Newark will be low, given that only ~2% of the Lyons working population commutes to Clyde, and less than 1% commutes to Palmyra. If a local microtransit service, discussed in Service Model 2, is not implemented to cover both Lyons and Newark, then the RGRTA should consider a direct and frequent fixed-route connection from Lyons to Newark.

Service Model 2 (Local Transit Service) Rationale

With a population of 4,000 residents, it is recommended that local trips within Lyons be served by an on-demand microtransit service. Likely trips within Lyons include travel to ALDI, the pharmacy (Dobbins Drugs), Wayne County Department of Social Services, or the Lyons Health Center. Microtransit could also be used for commuting. There are 2,500 jobs in the village, and ~20% of workers that live in Lyons also work in Lyons.

A one-vehicle, curb-to-curb, microtransit service was simulated for Lyons. The operating hours modeled were Monday through Friday from 7 AM to 7 PM and weekends from 8 AM to 4 PM. The service could be operated with vehicles as small as minivans with a capacity for six passengers, including one wheelchair space. For Lyons, a service with maximum wait times of 30 minutes would have average wait times between 10 and 15 minutes.

Table 4.6 outlines the ridership, revenue hours, average wait time, average trip duration, average productivity, and expected annual cost and cost per ride for a one-vehicle microtransit service in Lyons at a low, medium, and high demand level.

Table 4.6 Summary of the microtransit analysis for Lyons

Demand	Low	Medium	High
Weekday ridership (passengers)	14	22	31
Annual ridership (passengers)	4,200	6,800	9,900
Fleet size (vehicles required at peak)	1	1	1
Average weekday revenue hours (hours)	12	12	12
Annual revenue hours (hours)	4,000	4,000	4,000
Average wait time at peak (minutes)	8 - 13	8 - 13	9 - 14
Average trip duration at peak (minutes)	5 - 10	5 - 10	6 - 11
Average productivity (passengers per revenue hour)	0.6 - 1.6	1.4 - 2.4	2.1 - 3.1
Annual cost[6] (millions of USD)	$0.3M	$0.3M	$0.3M
Average cost per ride[6] (USD)	$73	$45	$31

[6]Based on RTS Wayne's May 2022 costs per vehicle revenue hour of $75.58.

The simulation analysis indicates that a local microtransit service covering Lyons would likely have a weekday demand between 14 and 31 riders per day. Provided that the service is implemented with one vehicle, the average productivity of the service will be 1.9 passengers per revenue hour. The service is expected to cost about $0.3 million per year.

Given Lyons' proximity to Newark, the fact that ~14% of Lyons' workforce commutes to Newark, and the high number of travel destinations in Newark, a second microtransit alternative was evaluated that would cover both Newark and Lyons with one service. Newark travel destinations include additional grocery stores, pharmacies, and the Newark-Wayne Community Hospital. This service would also capture travel destinations between the two communities, such as Walmart Supercenter, and various county services such as the Wayne County Department of Aging and Youth and the Wayne County Jail. A combined microtransit zone would make it more efficient to serve these locations for both Lyons and Newark residents. The same service hours, wait times, and vehicle capacity was assumed for the modeling of a Newark plus Lyons curb-to-curb microtransit service. The results can be found in the profile for Newark (Table 4.5).

The modeling suggests that an on-demand microtransit zone for both municipalities would have between 53 and 123 riders per weekday. Two to three vehicles would be needed for the service, and the average productivity is expected to be 3.5 passengers per revenue hour. This is more productive and cost-effective on a per-ride basis compared to the service covering Lyons solely. Further aggregations and efficiencies could be achieved if RGRTA implements a corner-to-corner bus stop model, which would require riders to walk a few minutes to meet their vehicle and from their dropoff point to their final destination. Corner-to-corner models offer more direct trips for passengers and reduce the average journey length for the service.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit would only be used to provide accessible trips for disabled passengers traveling to select destinations outside of Newark and Lyons, if they are unable to use the fixed-route bus. Accessible trips within Lyons and Newark can also be served by the on-demand microtransit service that should be implemented with accessible vehicles that can accommodate wheelchairs and other mobility devices. If a corner-to-corner microtransit service is implemented for Service Model 2, curb-to-curb rides could still be provided for passengers with limited mobility traveling within Newark and Lyons.

4.3.3. Dansville (Livingston County)

Population: 4,400
Size: 2.6 sq mi
Density: 1,700 people per sq mi
Jobs: 2,000

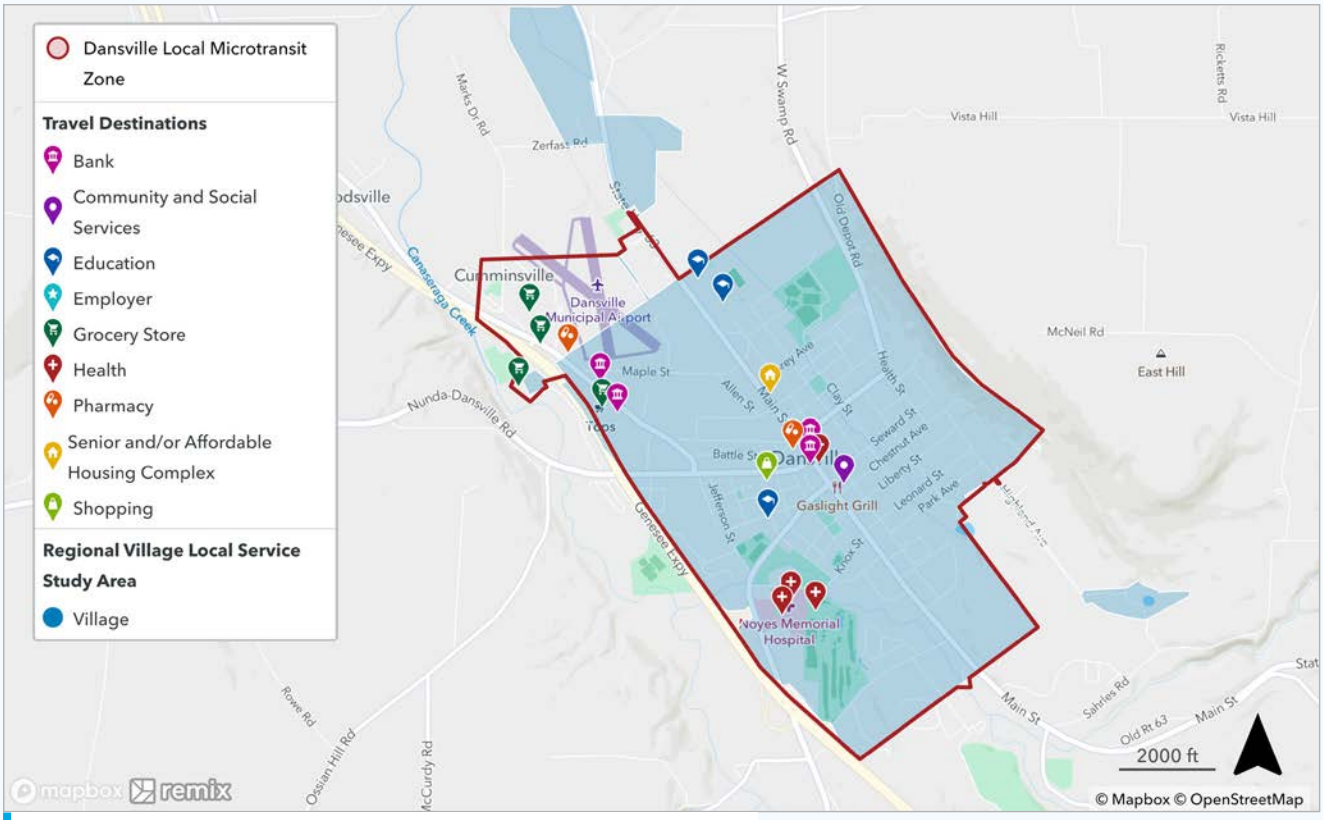


Figure 4.8 Map of public transportation recommendations for Dansville

Village Overview

Dansville is the second most populous village in the study. It is located in southeastern Livingston County. Dansville is currently on RTS Livingston Routes 232, which provides connections to Mt. Morris, Leicester, and Perry once per weekday at 7 AM. Return trips are available via the RTS Livingston Dial-a-Ride on weekdays between 8 AM and 4 PM. This study recommends that transit for Dansville be primarily provided through Service Model 2. Service Model 3, regional pre-booked microtransit services, can supplement trips outside the village for select locations.

Service Model 1 (Intercity Fixed-Routes) Rationale

Intercity fixed-route service is not recommended for Dansville if a local microtransit service is provided by Service Model 2, as this service would provide access to a significant variety of local destinations. The closest larger municipality to Dansville is Geneseo, about a 30 minute bus ride. However, the only major travel destination that is not available in Dansville is a Walmart Supercenter. Moreover, Dansville is not located between any other municipalities where intercity fixed-routes are recommended, meaning it is not possible to stop in the village without adding a significant detour to this route. Given the 20 mile distance between Geneseo and Dansville and the considerable number of travel destinations in Dansville, it is not recommended to provide frequent direct intercity fixed-routes between the two municipalities.

Service Model 2 (Local Transit Service) Rationale

With a population of 4,400 people, a local on-demand microtransit service is recommended to serve local trips within Dansville. Travel destinations in and near Dansville include a Dollar General, a Tops Friendly Market, a Save A Lot, two pharmacies, and various medical facilities, such as the Noyes Memorial Hospital. There are 2,000 jobs in the village, and ~20% of workers that live in Dansville also work in Dansville.

A one-vehicle, curb-to-curb, on-demand microtransit service was evaluated for Dansville. The service zone was expanded slightly beyond the village boundaries to include important travel destinations. The recommended service hours are Monday through Friday from 7:00 AM to 7:00 PM and weekends from 8 AM to 4 PM. The service could be operated with vehicles as small as minivans with a capacity for six passengers, including one wheelchair space. The modeled service assumed a maximum wait time of 30 minutes (with an expected average wait time of fewer than 10 minutes).

Table 4.7 outlines the ridership, revenue hours, average wait time, average trip duration, average productivity, and expected annual cost and cost per ride for a one-vehicle microtransit service in Dansville at a low, medium, and high demand level.

Table 4.7 Summary of the microtransit analysis for Dansville

Demand	Low	Medium	High
Weekday ridership (passengers)	14	23	33
Annual ridership (passengers)	4,700	7,300	10,400
Fleet size (vehicles required at peak)	1	1	1
Average weekday revenue hours (hours)	12	12	12
Annual revenue hours (hours)	4,000	4,000	4,000
Average wait time at peak (minutes)	4 - 9	5 - 10	5 - 10
Average trip duration at peak (minutes)	4 - 9	4 - 9	4 - 9
Average productivity (passengers per revenue hour)	0.7 - 1.7	1.4 - 2.4	2.2 - 3.2
Annual cost[7] (millions of USD)	$0.31M	$0.31M	$0.31M
Average cost per ride[7] (USD)	$66	$42	$30

The microtransit service is estimated to have between 14 and 33 boardings per weekday. The simulations indicate that on average, the microtransit service will have a productivity of 1.9 passengers per revenue hour. While this is a relatively low productivity for an on-demand microtransit service, it is still recommended as the most cost-effective way to serve trips within the village.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

Accessible trips within Dansville can also be served by the on-demand microtransit service that should be implemented with accessible vehicles that can accommodate wheelchairs and other mobility devices. Therefore, Service Model 3 is not recommended.

[7] Based on RTS Livingston's May 2022 costs per vehicle revenue hour of $77.18.

4.3.4. LeRoy (Genesee County)

Population: 4,300
Size: 2.7 sq mi
Density: 1,600 people per sq mi
Jobs: 1,800

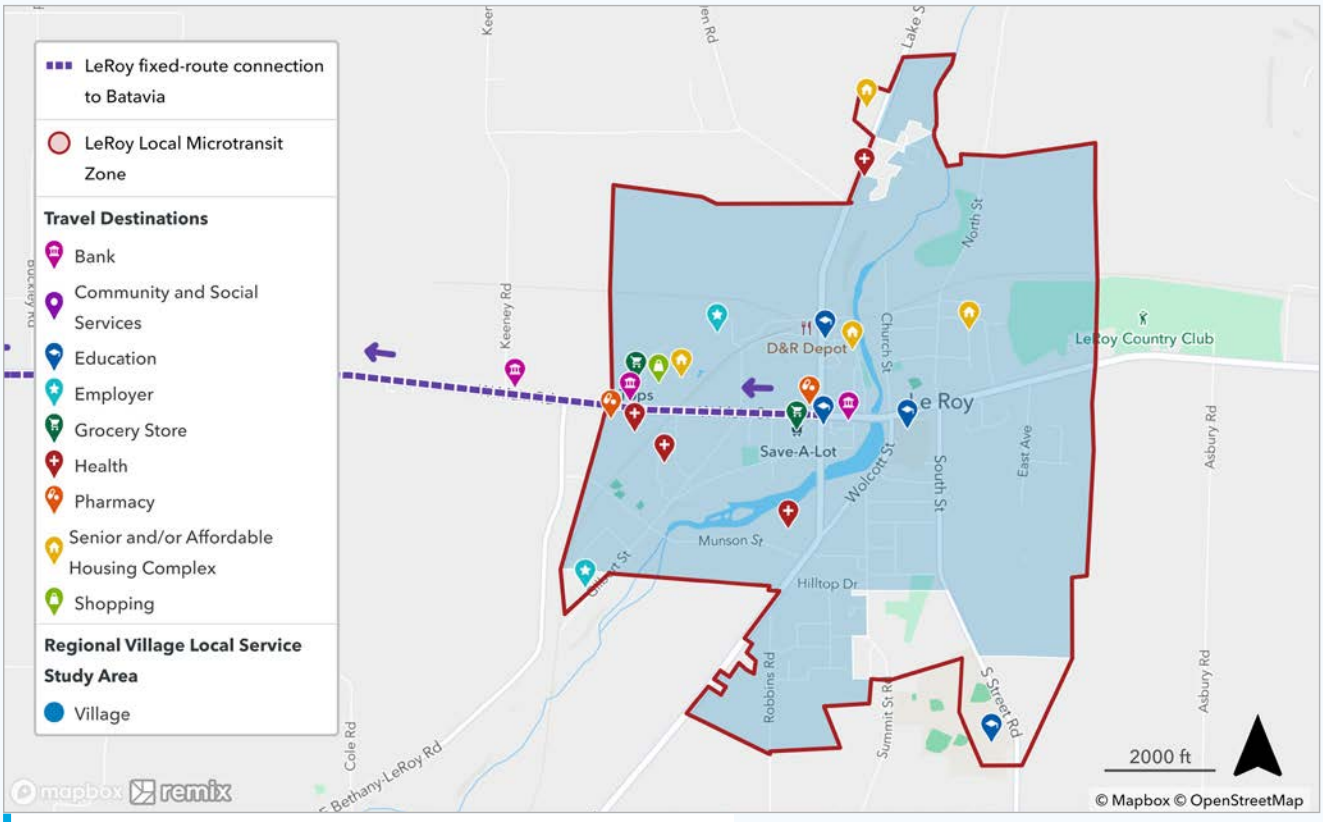


Figure 4.9 Map of public transportation recommendations for LeRoy

Village Overview

LeRoy is the third most populous village in the study. It is currently served by the RTS Genesee 214 bus, which connects Batavia and LeRoy 3 times per day, and the Genesee county Dial-a-Ride. LeRoy has a population of 4,400 and a significant number of jobs and travel destinations. A local microtransit service complemented by a regional fixed-route connection to Batavia is recommended for transit service in the village.

Service Model 1 (Intercity Fixed-Routes) Rationale

It is recommended that LeRoy continue to be connected to Batavia by frequent fixed-route service with evening and weekend hours. Most needs that are not available in LeRoy are likely to be available in Batavia, including access to a Walmart, county services, additional grocery stores, and medical facilities. While Warsaw and Geneseo also have Walmart stores, large grocery stores, and medical facilities, Batavia is closest, 10 miles from LeRoy. In comparison, Geneseo and Warsaw are about 20 miles from LeRoy. Geneseo also does not have a large hospital. When looking at employment patterns, more workers living in LeRoy travel to Batavia (7%) compared to less than 1% going to Warsaw and Geneseo. In addition, Batavia is within the same county as LeRoy thus any fixed-route connections could be provided by RTS Genesee without additional inter-county coordination.

Service Model 2 (Local Transit Service) Rationale

Local trips within LeRoy can be served by an on-demand microtransit service. Many essential needs can be served within LeRoy. Likely trips within LeRoy include travel to the Tops Friendly Market, Save A Lot, Walgreens Pharmacy, and medical facilities. Microtransit could also be used for commuting. There are 1,800 jobs in LeRoy and 15% of workers that live in LeRoy also work in the village.

For trips within LeRoy, it is recommended to have a one-vehicle microtransit service that operates curb-to-curb service Monday through Friday from 7 AM to 7 PM and weekends from 8 AM to 4 PM. The microtransit service could be operated with vehicles as small as minivans with a capacity for six passengers, including one wheelchair space. A service with maximum wait times of 30 minutes would have average wait times of under 10 minutes. A microtransit service in LeRoy is expected to have between 13 and 31 passengers per weekday.

Table 4.8 outlines the ridership, revenue hours, average wait time, average trip duration, average productivity, and expected annual cost and cost per ride, for a one-vehicle microtransit service in LeRoy at a low, medium, and high demand level.

Table 4.8 Summary of the microtransit analysis for LeRoy

Demand	Low	Medium	High
Weekday ridership (passengers)	13	21	31
Annual ridership (passengers)	4,200	6,800	9,900
Fleet size (vehicles required at peak)	1	1	1
Average weekday revenue hours (hours)	12	12	12
Annual revenue hours (hours)	4,000	4,000	4,000
Average wait time at peak (minutes)	4 - 9	5 - 10	5 - 10
Average trip duration at peak (minutes)	3 - 8	3 - 8	4 - 9
Average productivity (passengers per revenue hour)	0.6 - 1.6	1.3 - 2.3	2.1 - 3.1
Annual cost[8] (millions of USD)	$0.29M	$0.29M	$0.29M
Average cost per ride[8] (USD)	$69	$42	$29

The simulation analysis indicates that there will likely be a weekday demand between 13 and 31 riders for the microtransit service. Provided that the service is implemented with one vehicle, the average productivity of the service will be 1.8 passengers per revenue hour. The service is expected to cost about $0.3 million.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit would only be used to provide accessible trips for disabled passengers traveling to select destinations outside of LeRoy, if they are unable to use the fixed-route bus. Accessible trips within LeRoy can also be served by the on-demand microtransit service that should be implemented with accessible vehicles that can accommodate wheelchairs and other mobility devices.

[8] Based on RTS Genesee's May 2022 costs per vehicle revenue hour of $71.48.

4.3.5. Avon (Livingston County)

Population: 3,400
Size: 3.1 sq mi
Density: 1,100 people per sq mi
Jobs: 1,900

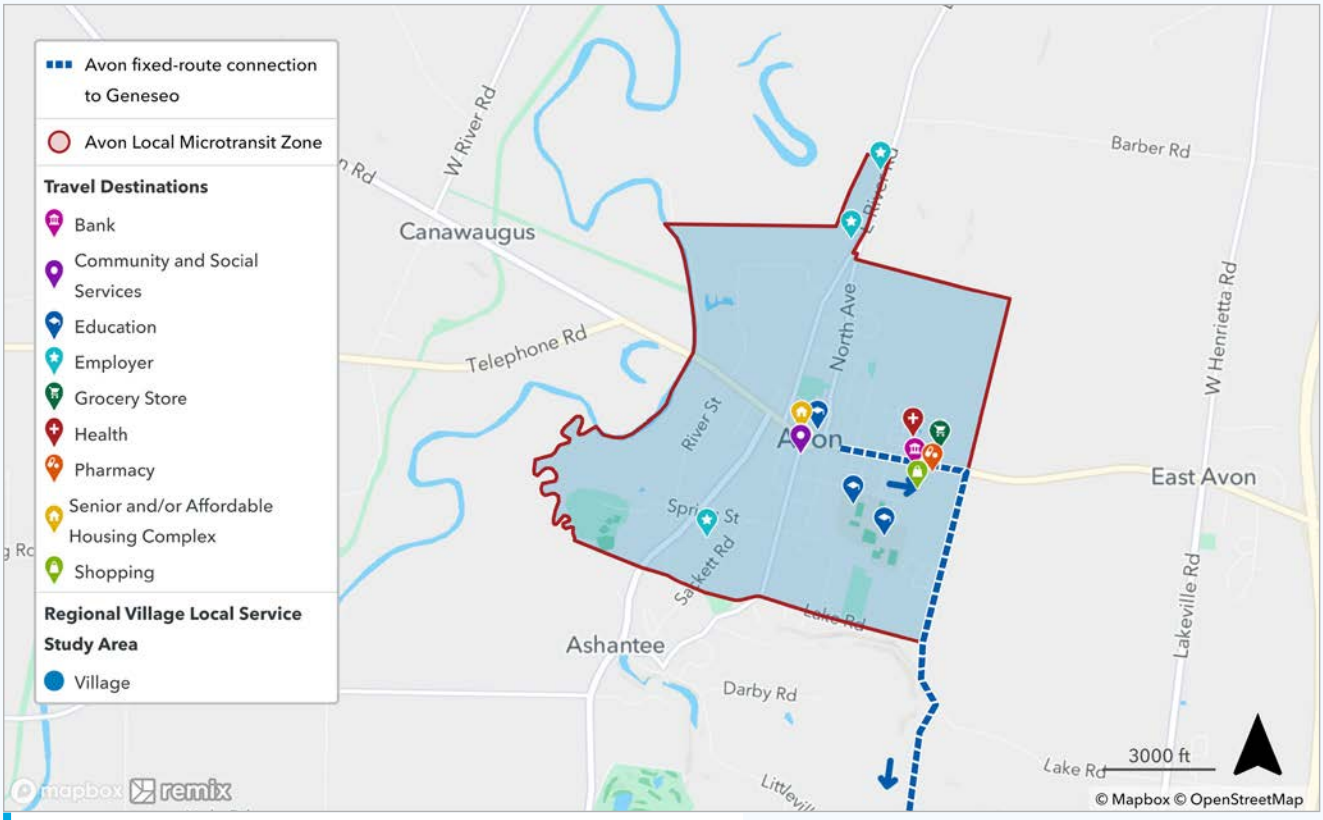


Figure 4.10 Map of public transportation recommendations for Avon

Village Overview

Avon is located in Livingston County and has a population of 3,200. The village is currently served by RTS Livingston Routes 231 and 243.

- Route 231 is a loop that runs once per weekday (starting at 7:30 AM). From Avon, riders can get to Caledonia, York, Leicester, and Mt. Morris.
- Route 243 provides connections to Geneseo, Leicester, and Mt. Morris, also through a loop route that runs through Avon at 9:00 AM and 12:15 PM.

Return trips for both services are provided through the Livingston Dial-a-Ride service which is available in Avon from Tuesday through Fridays from 10:00 AM to 2:00 PM. This study recommends that Avon be connected by an intercity fixed-route to Geneseo alongside a new local microtransit service.

Service Model 1 (Intercity Fixed-Routes) Rationale

Avon's population size and limited key destinations support the need for fixed-route service to Geneseo. This intercity connection should be direct and frequent and run into the evenings to ensure it can be used by commuters. 5% of Avon's workforce commutes to Geneseo. Moreover, residents of Avon may use the route to access additional services, grocery stores, the Walmart Supercenter, Noyes Health Services, or the SUNY Geneseo Campus.

Service Model 2 (Local Transit Service) Rationale

An on-demand microtransit service is recommended for local trips within Avon. This includes trips to the Tops Friendly Market, CVS Pharmacy, and Dollar General. The service could also be used for commuting by the 14% of Avon's working population employed within the village.

A one-vehicle microtransit service that operates Monday through Friday from 7:00 AM to 7:00 PM and weekends from 8 AM to 4 PM is recommended. The microtransit service could be operated with vehicles as small as minivans with a capacity for six passengers, including one wheelchair space. The modeled service assumed curb-to-curb pickups and dropoffs and a maximum wait time of 30 minutes (with an expected average wait time of fewer than 10 minutes). A microtransit service in Avon is estimated to have between 11 and 26 passenger boardings per weekday.

Table 4.9 outlines the ridership, revenue hours, average wait time, average trip duration, average productivity, and expected annual cost and cost per ride for a one-vehicle microtransit service in Avon at a low, medium, and high demand level.

Table 4.9 Summary of the microtransit analysis for Avon

Demand	Low	Medium	High
Weekday ridership (passengers)	11	18	26
Annual ridership (passengers)	3,600	5,700	8,300
Fleet size (vehicles required at peak)	1	1	1
Average weekday revenue hours (hours)	12	12	12
Annual revenue hours (hours)	4,000	4,000	4,000
Average wait time at peak (minutes)	5 - 10	6 - 11	6 - 11
Average trip duration at peak (minutes)	3 - 8	4 - 9	4 - 9
Average productivity (passengers per revenue hour)	0.4 - 1.4	1.0 - 2.0	1.6 - 2.6
Annual cost[9] (millions of USD)	$0.31M	$0.31M	$0.31M
Average cost per ride[9] (USD)	$85	$54	$37

The simulations indicate that on average, a microtransit service in Avon will have a productivity of 1.5 passengers per revenue hour. While this is a relatively low productivity for an on-demand microtransit service, it is still recommended as the most cost-effective way to serve trips within the village.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit would only be used to provide accessible trips for disabled passengers traveling to select destinations outside of Avon, if they are unable to use the fixed-route bus. Accessible trips within Avon can also be served by the on-demand microtransit service that should be implemented with accessible vehicles that can accommodate wheelchairs and other mobility devices.

[9] Based on RTS Wyoming's May 2022 costs per vehicle revenue hour of $64.60.

4.3.6. Perry (Wyoming County)

Population: 3,500
Size: 2.4 sq mi
Density: 1,500 people per sq mi
Jobs: 1,100

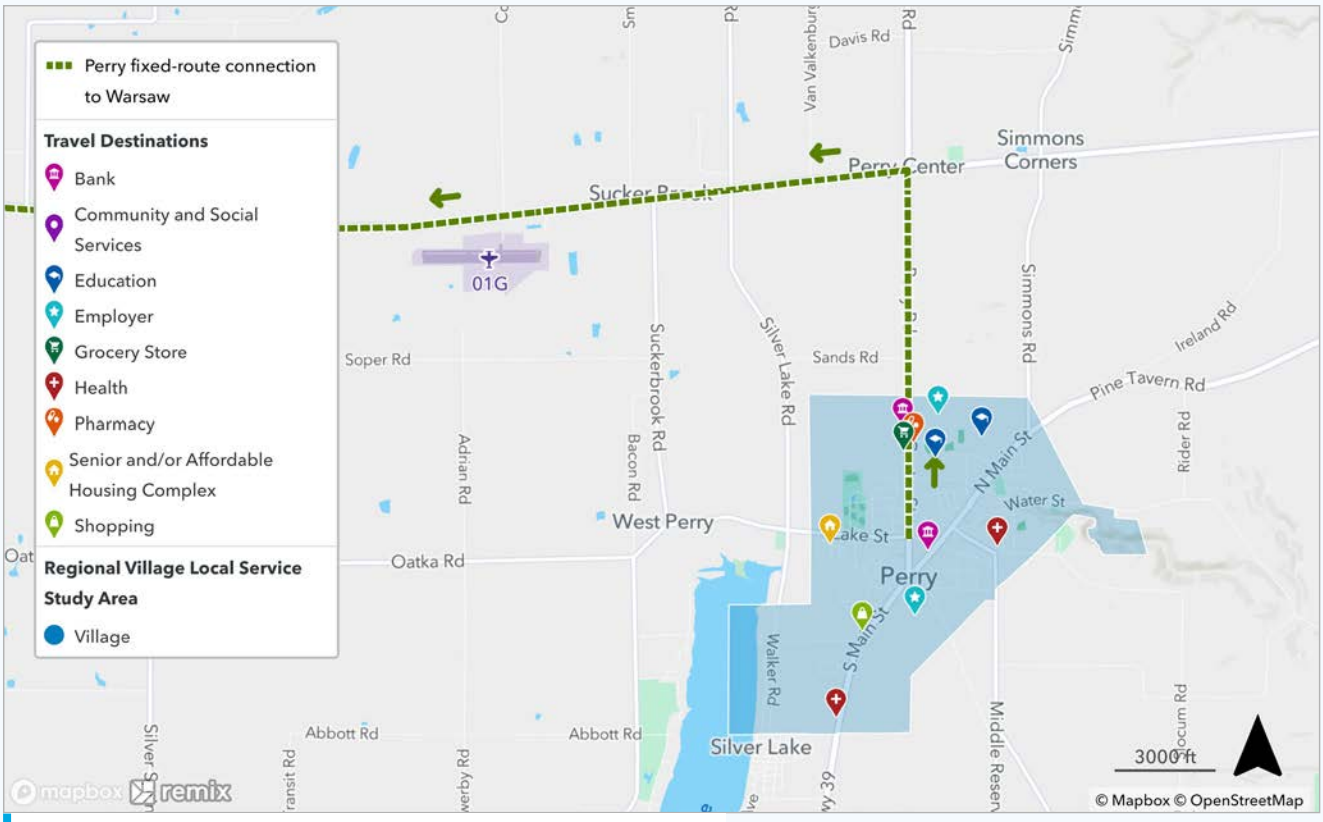


Figure 4.11 Map of public transportation recommendations for Perry

Village Overview

Perry is a village in Wyoming County with a population of 3,500. It is among the larger villages in the study. It is currently served by two bus routes, 227 and 232.

- RTS Wyoming Bus 227 runs from Warsaw to Perry and Back on weekdays between 7:40 AM and 5:00 PM. This route makes 5 round trips per day.
- RTS Livingston Route 232 operates once per week on weekdays in the morning and connects Perry to Mt. Morris. Return trips need to be scheduled on Dial-a-Ride services.

While Service Model 2 was modeled for Perry, the analysis showed that ridership is not sufficient to support a single-vehicle local microtransit or fixed-route service. Ultimately, Perry would be best served by intercity fixed-route connections to Warsaw and a regional, pre-booked microtransit service for qualifying accessible trips.

Service Model 1 (Intercity Fixed-Routes) Rationale

Public transit service in Perry should prioritize a direct and frequent connection to Warsaw. ~7% of the workers living in Perry travel to Warsaw for employment, meaning a fixed-route service with suitable operating hours could be used for commuting. Moreover, Warsaw has various destinations that may generate travel demand from Perry, including Walmart, two grocery stores, and Wyoming County Community Hospital. While Mt. Morris is a similar distance from Perry, it has fewer workers traveling between the two municipalities, and there is no large grocery store or hospital in Mt. Morris.

Service Model 2 (Local Transit Service) Rationale

With a population of over 3,500 people, a local microtransit service was modeled for Perry. Travel destinations within Perry include the Dollar General Store, Perry Marketplace, and Walgreens Pharmacy. Furthermore, over 16% of employed people living in Perry also work in Perry.

For shared trips within the village, a one-vehicle microtransit service operating curb-to-curb shared Monday through Friday from 7:00 AM to 7:00 PM and weekends from 8 AM to 4 PM was explored. It was assumed that the microtransit service would be operated with vehicles as small as minivans with a capacity for six passengers, including one wheelchair space. With maximum wait times of 30 minutes, the service would be expected to have average wait times of under 10 minutes.

Table 4.10 outlines the ridership, revenue hours, average wait time, average trip duration, average productivity, and expected annual cost and cost per ride, for a one-vehicle microtransit service in Perry at a low, medium, and high demand level.

Table 4.10 Summary of the microtransit analysis for Perry

Demand	Low	Medium	High
Weekday ridership (passengers)	10	15	22
Annual ridership (passengers)	3,100	4,700	7,300
Fleet size (vehicles required at peak)	1	1	1
Average weekday revenue hours (hours)	12	12	12
Annual revenue hours (hours)	4,000	4,000	4,000
Average wait time at peak (minutes)	3 - 8	3 - 8	4 - 9
Average trip duration at peak (minutes)	3 - 8	3 - 8	4 - 9
Average productivity (passengers per revenue hour)	0.3 - 1.3	0.8 - 1.8	1.3 - 2.3
Annual cost[10] (millions of USD)	$0.26M	$0.26M	$0.26M
Average cost per ride[10] (USD)	$83	$55	$36

The simulation analysis indicates that there will likely be a weekday demand between 10 and 22 passengers per weekday. This level of ridership would require a single vehicle, resulting in an average productivity of ~1.3 passengers per revenue hour. This is less than the 1.5 passengers per vehicle hour productivity cut-off used for this study, meaning that Service Model 2 is not recommended for Perry. Service Models 1 and 3 would be more cost-effective solutions for the village and are recommended instead.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

[10] Based on RTS Wyoming's May 2022 costs per vehicle revenue hour of $64.60.

4.3.7. Palmyra (Wayne County)

Population: 3,300
Size: 1 sq mi
Density: 3,300 people per sq mi
Jobs: 900

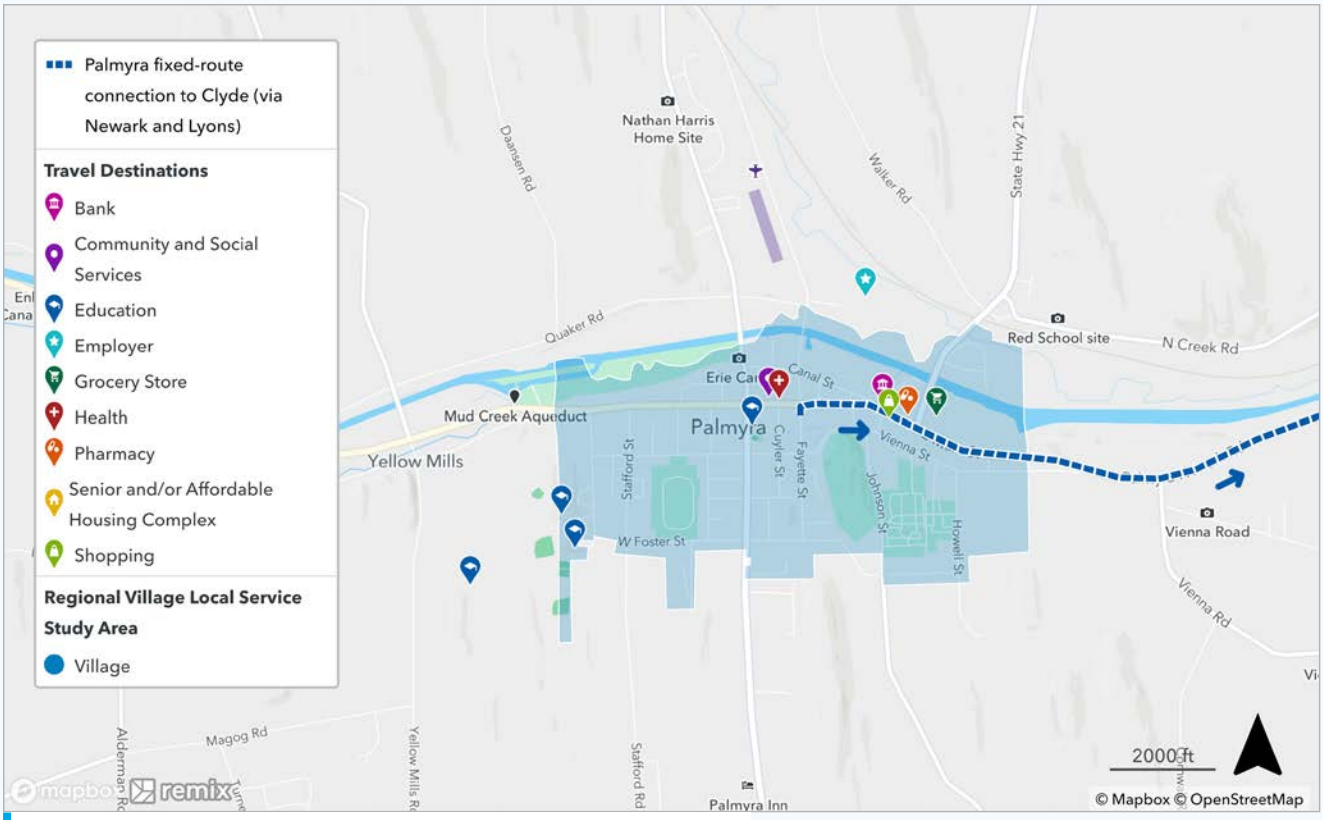


Figure 4.12 Map of public transportation recommendations for Palmyra

Village Overview

Palmyra is located in Wayne County near the border with Ontario County and Monroe County. There are stops in Palmyra on nine different RTS Wayne Bus Routes, 290, 293, 302, 303, 304, 305, 306, 332, and 333.

- Route 290 goes from Lyons to Canandaigua via Newark and Palmyra twice per weekday.
- Route 293 is the reverse, running from Canandaigua to Lyons, stopping in Palmyra and Newark, also running twice per weekday.
- Routes 302 through 306 are all Wayne County Loops that run once per weekday. Together they provide two trips to Newark per day and three trips from Newark per day.
- Routes 332 makes one round trip from Clyde to Palmyra and back via Lyons and Newark each weekday.
- Route 333 goes from Lyons to Palmyra via Newark and makes two round trips per day.

A local microtransit service in Palmyra was explored, but modeling concluded that the productivity would be too low to be cost-effective. Instead, Palmyra's transit services should prioritize fixed-route connections to nearby larger towns, including Newark, through Service Model 1.

Service Model 1 (Intercity Fixed-Routes) Rationale

The study recommends that Palmyra is served by frequent, intercity fixed-routes to Newark and Eastview Mall. While Palmyra has few travel destinations for local residents (a small grocery store, Dollar General, and Walgreens Pharmacy), Eastview Mall is in Monroe County and could provide further connections to RTS Monroe services. Newark has a hospital, Walmart Supercenter, and additional grocery stores. In addition, 4.4% of Palmyra's working population commutes to Newark for work.

Service Model 2 (Local Transit Service) Rationale

Palmyra's population of over 3,000 justified an exploration into the cost and productivity of a local microtransit service. While there are few local travel destinations for residents, a Walgreens Pharmacy and a Dollar General Store, over 9% of Palmyra's workforce are employed within the village.

The microtransit service that was simulated would be for these local trips within the village and would operate with one-vehicle providing curb-to-curb shared rides. The modeling assumed the service would operate Monday through Friday from 7:00 AM to 7:00 PM and weekends from 8 AM to 4 PM. It was also assumed that the service would use vehicles as small as minivans with a capacity for six passengers, including one wheelchair space. The maximum wait times were set to be 30 minutes for an average wait time of under 10 minutes. A local Palmyra service is estimated to have between 9 and 20 passengers per weekday. Palmyra was the smallest village in which microtransit was evaluated.

Table 4.11 outlines the ridership, revenue hours, average wait time, average trip duration, average productivity, and expected annual cost and cost per ride, for a one-vehicle microtransit service in Palmyra at a low, medium, and high demand level.

Table 4.11 Summary of the microtransit analysis for Palmyra

Demand	Low	Medium	High
Weekday ridership (passengers)	9	14	20
Annual ridership (passengers)	2,600	4,700	6,200
Fleet size (vehicles required at peak)	1	1	1
Average weekday revenue hours (hours)	12	12	12
Annual revenue hours (hours)	4,000	4,000	4,000
Average wait time at peak (minutes)	2 - 7	3 - 8	3 - 8
Average trip duration at peak (minutes)	3 - 8	3 - 8	3 - 8
Average productivity (passengers per revenue hour)	0.2 - 1.2	0.7 - 1.7	1.2 - 2.2
Annual cost[11] (millions of USD)	$0.3M	$0.3M	$0.3M
Average cost per ride[11] (USD)	$116	$65	$49

The simulation analysis indicates that there will likely be a weekday demand around 14 riders for the microtransit service. Provided that the service is implemented with one vehicle, the average productivity of the service would be about 1.2 passengers per revenue hour. This is less than the 1.5 passengers per vehicle hour productivity threshold that is needed to sustain the service, and thus Service Model 2 is not recommended for Palmyra. Service Models 1 and 3 would be more cost-effective solutions for the village and are recommended for implementation.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

[11] Based on RTS Wayne's May 2022 costs per vehicle revenue hour of $75.58.

4.3.8. Manchester/Shortsville (Ontario County)

Population: 3,000 (Manchester: 1,600; Shortsville: 1,400)
Size: 2.6 sq mi (Manchester: 1 sq mi; Shortsville: 0.6 sq mi)
Density: 1,900 people per sq mi
Jobs: 500 (Manchester: 400; Shortsville: 100)

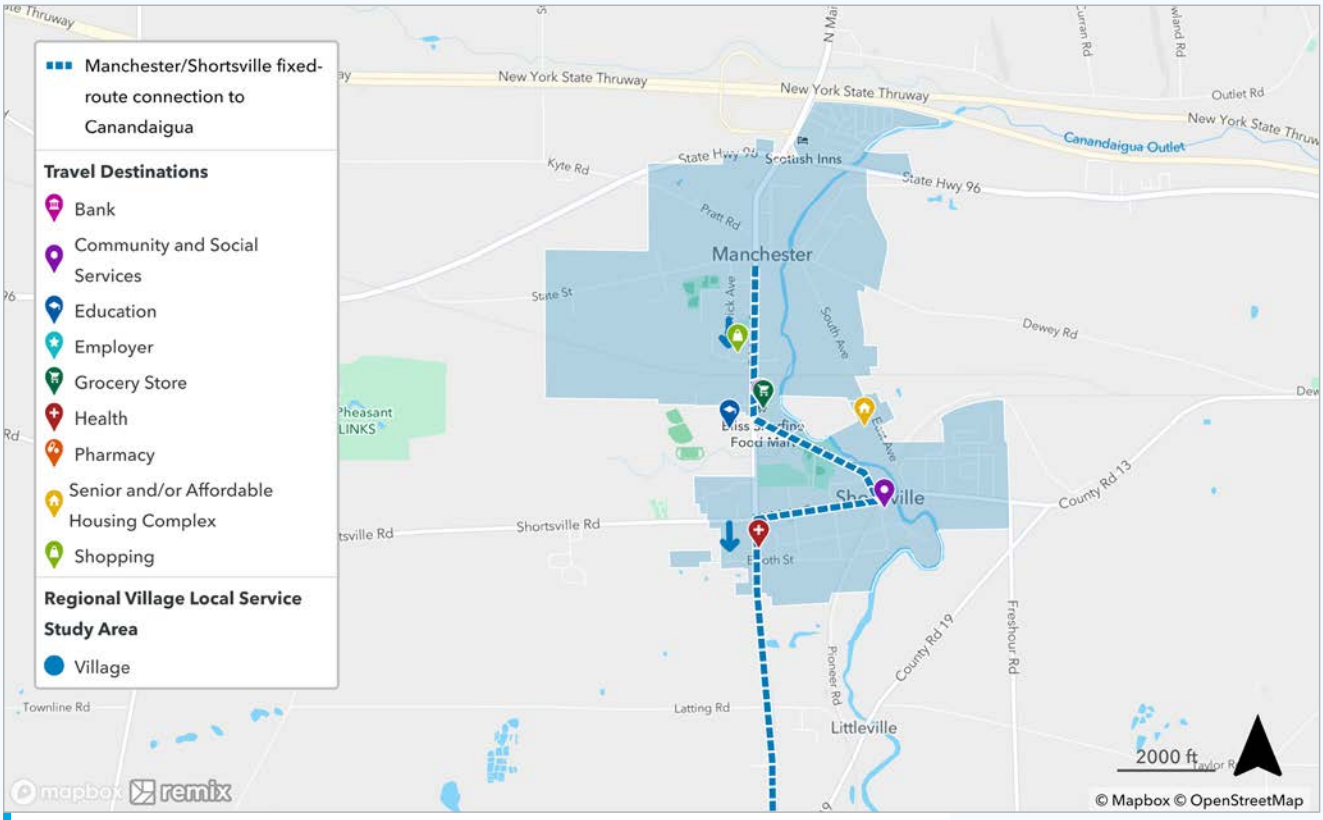


Figure 4.13 Map of public transportation recommendations for Manchester and Shortsville

Village Overview

Due to their close proximity, Manchester and Shortsville were evaluated together. Together they have a population of 3,000 people. Both villages are served by RTS Ontario Route 255, which runs between Canandaigua and Geneva, stopping in Shortsville, Manchester, Clifton Springs, and Phelps. The route operates between 5:30 AM and 9:30 AM and then again in the afternoons between 2:30 PM and 6:30 PM making a total of four round trips each weekday. The study recommends that Manchester a nd Shortsville are served by direct and frequent service to Canandaigua.

Service Model 1 (Intercity Fixed-Routes) Rationale

Intercity fixed-route connections between Manchester, Shortsville, and Canandaigua are recommended. Canandaigua has many key destinations for Manchester and Shortsville residents, including the F.F. Thompson Hospital, a Walmart Supercenter, and various large grocery stores and pharmacies. Moreover, given that~6% of Manchester's working population is employed in Canandaigua, this service would provide an important connection for commuters. Similarly, ~5% of employed residents living in Shortsville work in Canandaigua.

Service Model 2 (Local Transit Service) Rationale

There are few local travel destinations to generate transit trips within the two villages. There is a Dollar General store and a small grocery store, Bliss Shurfine Food Mart, but no pharmacy, hospital or large grocery store. Furthermore, the combined population of the two villages is not large enough to support a local fixed-route or microtransit service.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.9. Mt. Morris (Livingston County)

Population: 2,900
Size: 2 sq mi
Density: 1,450 people per sq mi
Jobs: 1,200

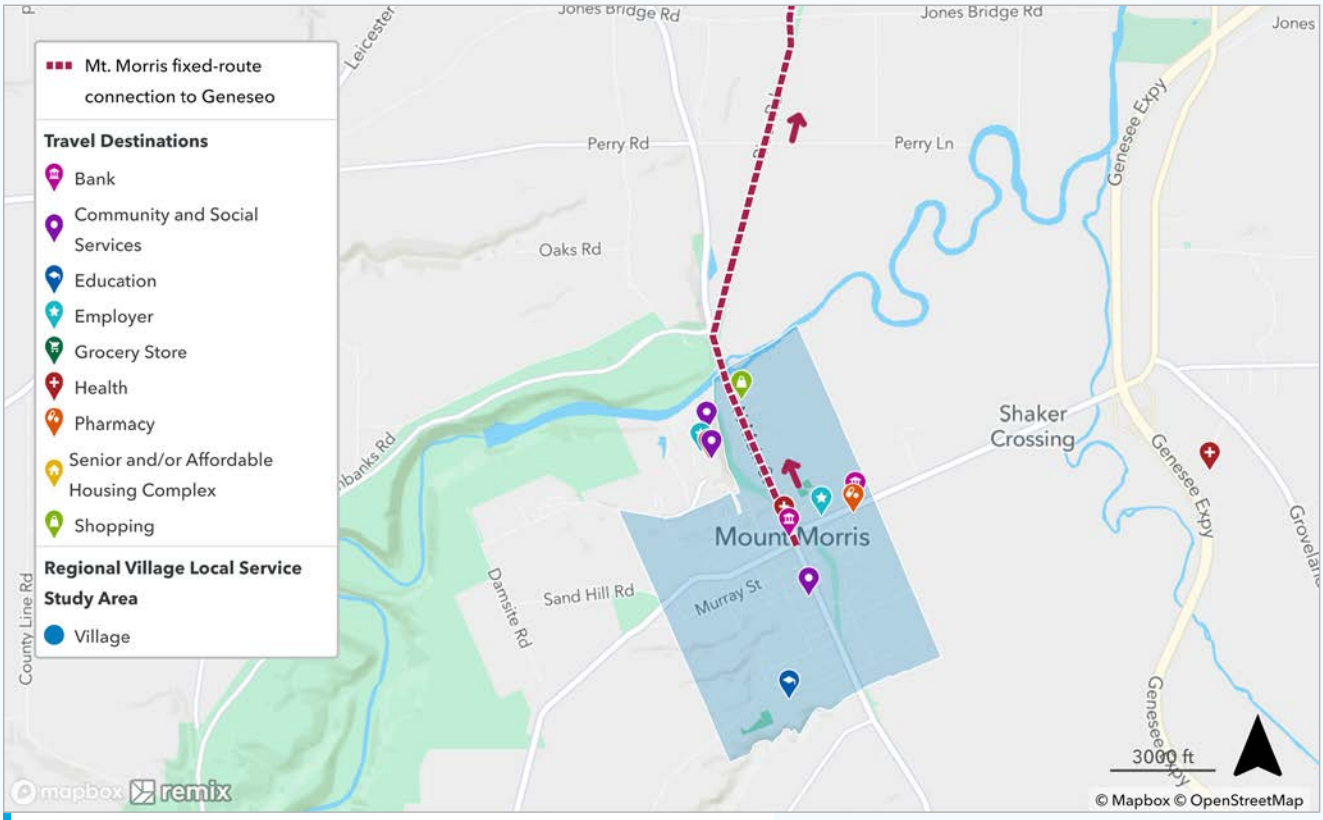


Figure 4.14 Map of public transportation recommendations for Mt. Morris

Village Overview

Mt. Morris has a population of 2,900 people. This study recommends that the transit priority for Mt. Morris residents be a direct and frequent fixed-route connection to Geneseo. The village is currently served by 3 RTS Livingston Bus routes, 231, 232, and 243. Routes 231 and 232 are both loops. Route 231 runs once per day in the mornings and connects Mt. Morris to Geneseo, Avon, and Caledonia. Route 232 also runs once per day in the morning and connects Mt. Morris to Dansville, Nunda, and Perry. Route 243 runs from Dansville to Mt. Morris, then Geneseo, then completes a loop to Livonia, Lima, and Avon before returning to Geneseo and Mt. Morris. The route runs twice per day between 7 AM and 1 PM. Return trips are provided through the pre-scheduled Dial-A-Ride service. Mt. Morris Dial-A-Ride is available Monday through Thursday from 10 AM to 3 PM. This study recommends that Mt. Morris be mainly served through Service Model 1, providing direct and frequent fixed-route connections to Geneseo.

Service Model 1 (Intercity Fixed-Routes) Rationale

The transit priority for Mt. Morris should be direct and frequent fixed-route connections to Geneseo. Nearly 11% of employed people in Mt. Morris work in Geneseo. Key destinations in Geneseo that may generate travel demand for residents of Mt Morris include the Walmart Supercenter, multiple grocery stores, medical facilities (such as Noyes Health Services), and the SUNY Geneseo campus. In addition to daytime service, expanding service into the weekends and evenings would be important to maximize the benefit to Mt. Morris residents.

Service Model 2 (Local Transit Service) Rationale

The main travel destinations in the village are a Dollar General and Walgreens Pharmacy, however there is no large grocery store in Mt. Morris. And while 13% of employed people in Mt. Morris also work in the village, with a population of just 2,900 people, it is unlikely that Mt. Morris could support a local microtransit or fixed-route bus service. Moreover, much of Mt. Morris is walkable and bikeable, so many residents are able to travel locally using active modes of transport. For those who are unable to walk due to a disability, transit can be provided through a regional pre-booked microtransit service outlined in Service Model 3.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.10. Victor (Ontario County)

Population: 2,700
Size: 1 sq mi
Density: 2,700 people per sq mi
Jobs: 1,100

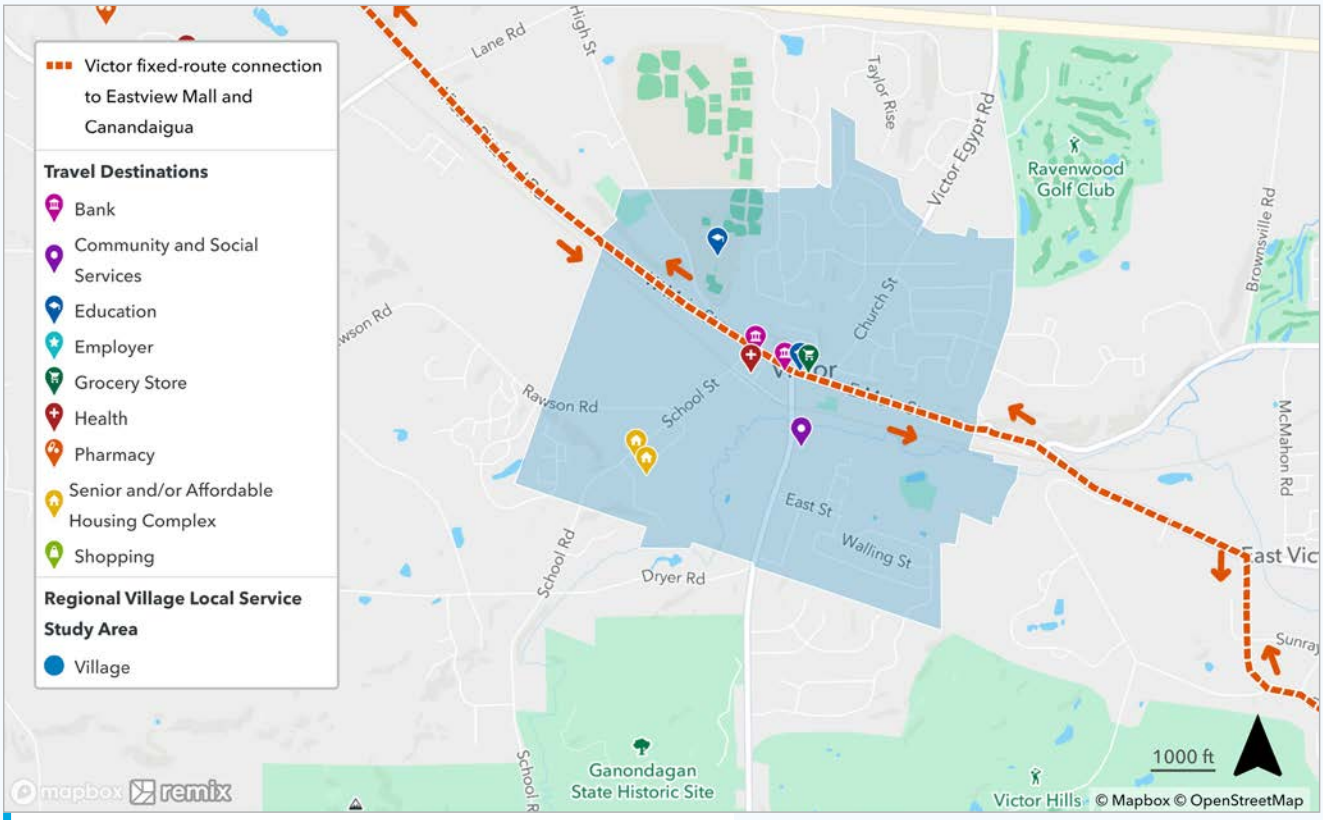


Figure 4.15 Map of public transportation recommendations for Victor

Village Overview

Victor is a village in Ontario County with a population of 2,700 people. Victor is currently served by RTS Ontario Bus 253, which goes from Eastview Mall to Canandaigua through Victor. The route currently operates from 6 AM to 10 AM and from 2 PM to 6 PM. This study recommends that a frequent intercity fixed-route service continue to operate from Victor to Eastview Mall and Canandaigua.

Service Model 1 (Intercity Fixed-Routes) Rationale

Victor's location near the existing bus route connecting Eastview Mall and Canandaigua makes it easy to serve without making significant detours. Moreover, the distance to Eastview Mall is less than 5 miles from Victor, and the distance to Canandaigua is about 10 miles. Travel destinations in Canandaigua include F.F. Thompson Hospital, a Walmart Supercenter, and various large grocery stores and pharmacies. Near Eastview Mall is a second Walmart Supercenter and Target store. ~3% of Victor's workforce is employed in Canandaigua.

Service Model 2 (Local Transit Service) Rationale

Victor's population is too small to support a local microtransit or fixed-route bus. Furthermore, there are few travel destinations that would generate local travel demand in the village. There is no large grocery store, pharmacy, or hospital. Less than 2% of the employed residents of Victor also work in the village.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.11. Attica (Wyoming County)

Population: 2,400
Size: 1.7 sq mi
Density: 1,400 people per sq mi
Jobs: 500

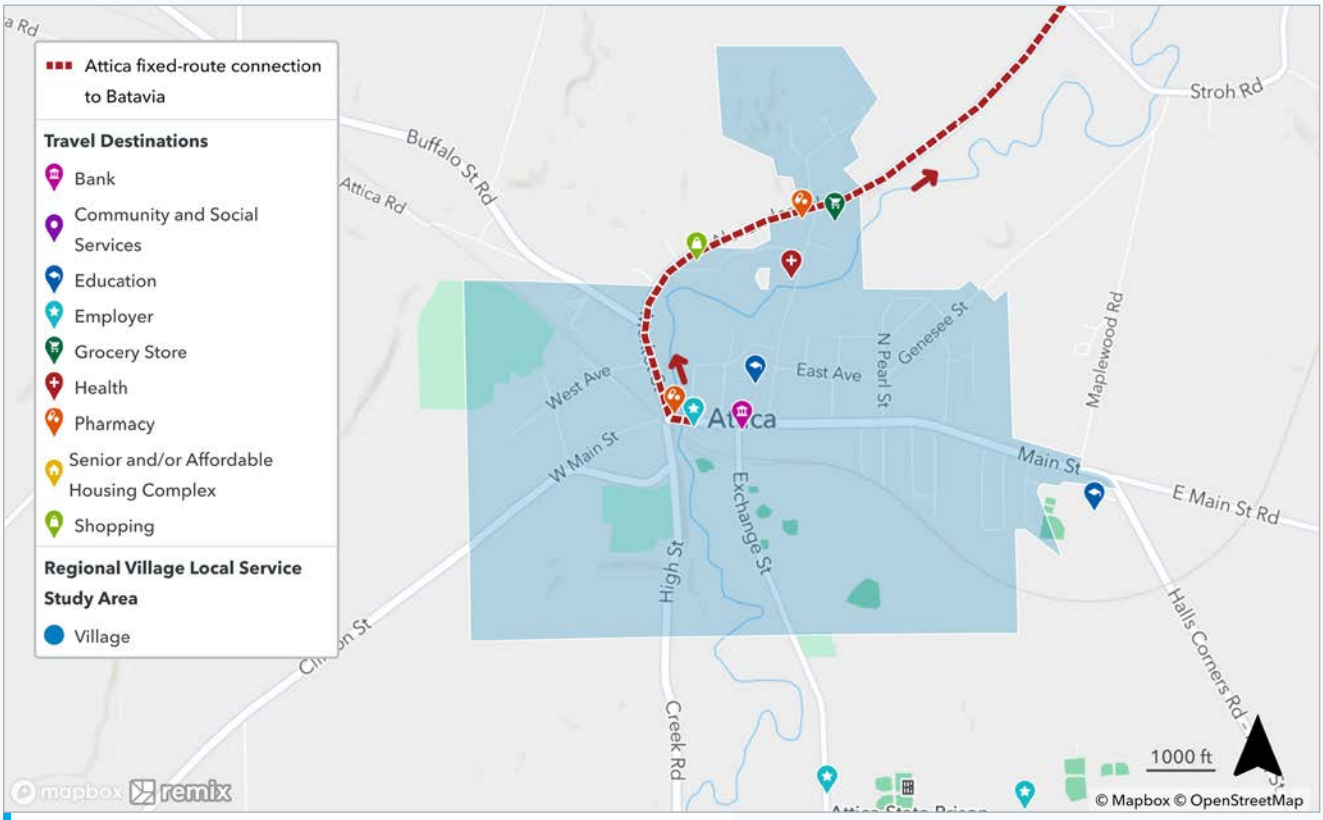


Figure 4.16 Map of public transportation recommendations for Attica

Village Overview

Attica is located on the border of Wyoming and Genesee counties and has a population of 2,400. RTS Wyoming Route 229 connects Attica to Warsaw from 6:30 AM to 3:30 PM on weekdays. The bus makes a total of five round-trip journeys per day from the Walmart in Warsaw to Attica and back. Each round trip takes approximately an hour and a half. This study recommends that Attica is served by Service Model 1, a frequent and direct intercity route to Batavia.

Service Model 1 (Intercity Fixed-Routes) Rationale

It is recommended that an intercity fixed-route connection from Attica to Batavia be prioritized for implementation. ~10% of Attica's workforce travel to Batavia for employment and could use a fixed-route service for commuting if it offered broad service hours and direct trips. Batavia has several key destinations for Attica residents, such as a Walmart Supercenter, additional grocery stores, pharmacies, and the United Memorial Medical Center. While Batavia is in a different county, it is closer than Warsaw, has more commuter travel (only 4% of workers travel to Warsaw from Attica), and more key destinations.

Service Model 2 (Local Transit Service) Rationale

While Attica has a small number of useful local destinations for residents, such as Tops Friendly Market, Rite Aid Pharmacy, and Dollar General, the population of only 2,400 people is unlikely to support a local microtransit or fixed-route service.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.12. Clifton Springs (Ontario County)

Population: 2,200
Size: 1 sq mi
Density: 2,200 people per sq mi
Jobs: 2,000

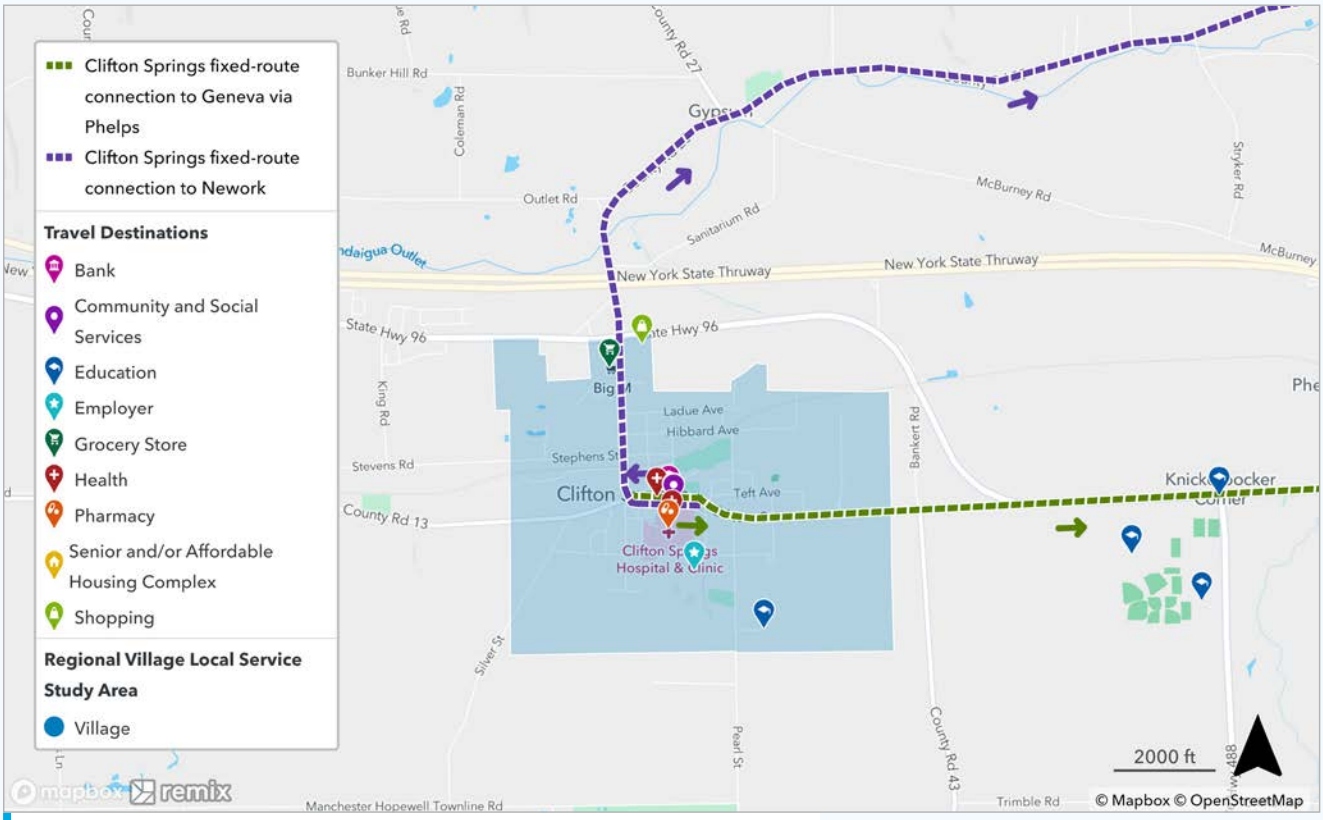


Figure 4.17 Map of public transportation recommendations for Clifton Springs

Village Overview

Clifton Springs has a population of approximately 2,200. It is currently served by RTS Ontario Route 255 which connects the village to the cities of Canandaigua and Geneva. Route 255 operates between 5:30 AM and 9:30 AM and then again in the afternoons between 2:30 PM and 6:30 PM making a total of four round trips each weekday. It is recommended that Clifton Springs be primarily served with Service Model 1, fixed-route connections to Geneva and Newark, which are two municipalities nearby.

Service Model 1 (Intercity Fixed-Routes) Rationale

Fixed-route bus services between Clifton Springs and Newark, and Clifton Springs and/or Geneva/ Canandaigua are recommended.

- **Newark** is the largest nearby town or village and is located 8 miles from Clifton Springs. 6.5% of workers that live in Clifton Springs travel to Newark for employment. Newark also has additional grocery stores, medical facilities, and a Walmart.
- **Geneva** has a Walmart and some County services. 4% of the working population from Clifton Springs travels to Geneva for employment. While Canandaigua also has a Walmart and other travel destinations, by providing connections to Geneva, it will be easier to also provide fixed-route service to Phelps, which is located between Clifton Springs and Geneva. However, about 4% of workers from Clifton Springs travel to Canandaigua for employment purposes, so while the priority should be connections to Newark, then Geneva, if budget allows, the RGRTA should consider connections to Canandaigua as a third priority for Clifton Springs.

Service Model 2 (Local Transit Service) Rationale

The main destinations within the town include Clifton Springs Hospital & Clinic, a Tops Friendly Market, a Dollar General Store, G. W. Lisk Company Inc. (a manufacturer). However, the population is too small to support a local microtransit or fixed-route bus service. Moreover, Clifton Springs is fairly small and walkable within its core area.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.13. Clyde (Wayne County)

Population: 2,200
Size: 2.3 sq mi
Density: 950
Jobs: 600

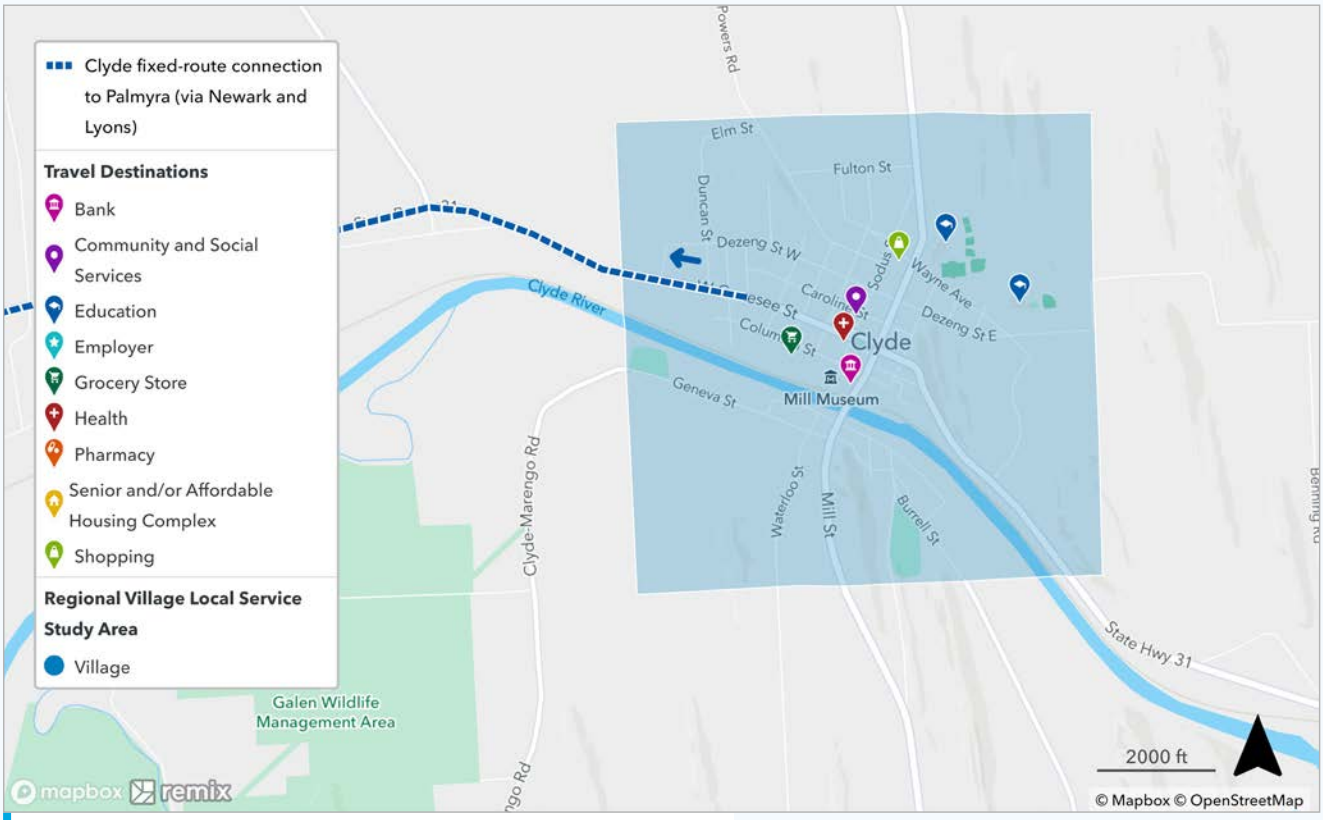


Figure 4.18 Map of public transportation recommendations for Clyde

Village Overview

Clyde is located in Wayne County and has a population of 2,200 people. Based on its size and likely travel destinations for the residents, it's recommended that Clyde be served with direct and frequent fixed-route connections to Newark via Lyons. Currently, Clyde is serviced by six RTS Wayne bus routes, the 302, 303, 304, 305, 307, and 332. Routes 302 through 307 are loops that each run once per day. Across all the routes, trips from Clyde to Newark and Lyons are provided three times per weekday at 10:30 AM, 1:30 PM, and 6:00 PM. Return trips are available twice daily, arriving in Clyde at 9:15 AM and 3:40 PM. The 332 Bus is a pilot route that runs weekdays from 9:30 AM to 12:30 AM and connects Clyde to Macedon via Lyons, Newark, and Palmyra, then returns to Clyde, ending with one final trip from Clyde to Lyons. The transit priority for Clyde should be provided through Service Model 1, frequent intercity fixed-route connection to Newark.

Service Model 1 (Intercity Fixed-Routes) Rationale

This study recommends a direct and frequent connection between Clyde and Newark with stops in Lyons. This service should also be available in the evenings and on weekends as the current schedule makes it difficult to return to Clyde from Newark after 3:45 PM in the evenings on weekdays, offering limited benefit to commuters. With nearly 14% of Clyde's working population traveling to Newark for employment and over 7% traveling to Lyons for work, a direct bus with evening service could benefit commuters. Moreover, connections to Newark and Lyons would improve access to medical services, including the Newark-Wayne Community Hospital and stores like the Walmart Supercenter. There is no large grocery store or pharmacy in Clyde, only a small market and a Dollar General store.

Service Model 2 (Local Transit Service) Rationale

Clyde has too few residents and travel destinations to sustain a local microtransit or fixed-route service. Instead, Clyde would be better served by intercity fixed-route buses described in Service Model 1.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.14. Lima (Livingston County)

Population: 2,100
Size: 1 sq mi
Density: 2,100 people per sq mile
Jobs: 500

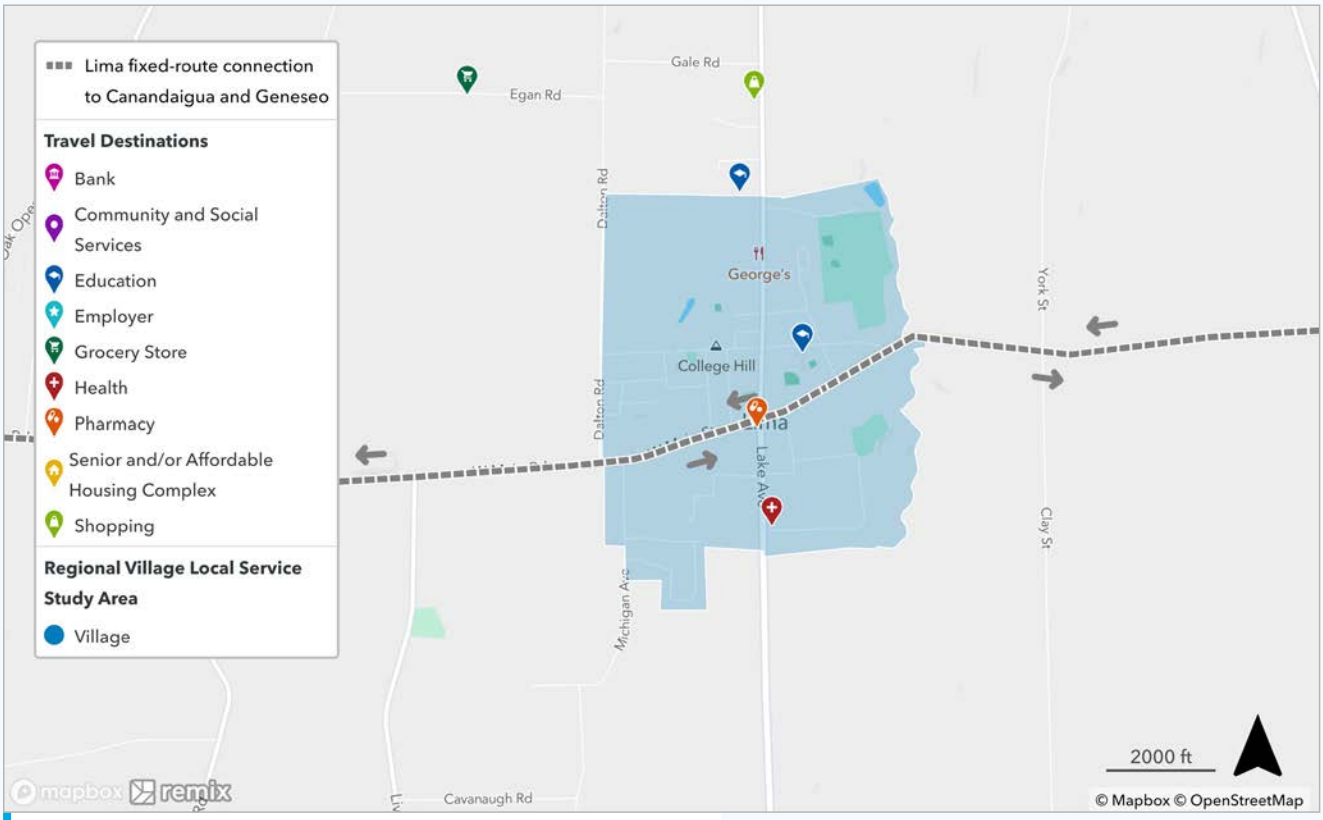


Figure 4.19 Map of public transportation recommendations for Lima

Village Overview

Lima is one of the smaller villages in the study area. It is currently served by RTS Livingston Route 243, which stops in Lima twice per day, at 8:35 AM and 12:00 PM, and provides connections to Avon, Geneseo, and Mt. Morris. This study recommends that Lima be primarily served by a linear intercity fixed-route bus between Canandaigua and Geneseo that could stop in Lima in both directions.

Service Model 1 (Intercity Fixed-Routes) Rationale

With a population of over 1,500, Lima is large enough to support fixed-route connections to nearby communities. We recommend that Geneseo and Canandaigua be connected by a bus route due to the size of both towns. The only points of interest within Lima are a small pharmacy, a Dollar General (just beyond the village boundary), and Thompson Health Family Practice. The suggested route could stop in Lima and Bloomfield, thus providing both of these smaller villages with access to grocery stores and other medical facilities. Less than 2% of workers living in Lima travel to Canandaigua and Geneseo for work, suggesting that this route would more likely be used for non-commute trips.

Service Model 2 (Local Transit Service) Rationale

Because of the size of the village and small population, it is not recommended that Lima be served with a dedicated fixed-route bus or microtransit service. Moreover, the limited points of interest within the village suggest that it would be more beneficial to residents to travel to Geneseo and Canandaigua for shopping and other activities.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.15. Caledonia (Livingston County)

Population: 2,100
Size: 2.1 sq mi
Density: 1,050 people per sq mi
Jobs: 800

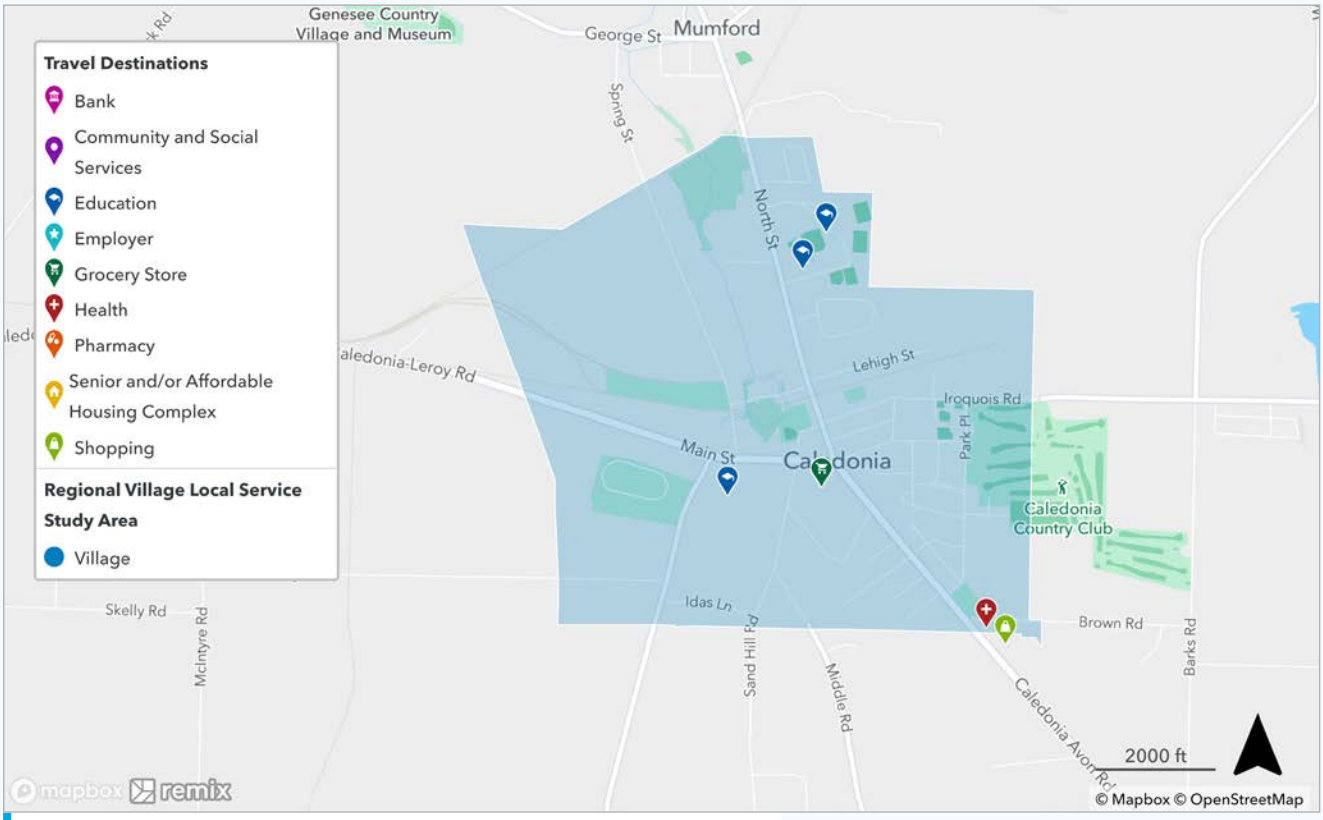


Figure 4.20 Map of public transportation recommendations for Caledonia

Village Overview

Caledonia is located in northeastern Livingston County. Approximately 2,100 people live in the village. Caledonia is served by one RTS Livingston route, Route 231. This route connects Caledonia to Mt. Morris once per day at 8:30 AM. RTS Livingston's Dial-a-Ride service provides return trips. Dial-a-ride requests need to be made at least 24 hours in advance. Due to the size and location of Caledonia, this study recommends that Caledonia be served only with a regional pre-booked microtransit service as described by Service Model 3.

Service Model 1 (Intercity Fixed-Routes) Rationale

Direct and frequent intercity buses are not recommended for Caledonia. Geneseo is the closest municipality with a significant number of travel destinations, and it is about 15 miles from Caledonia. Batavia is similarly distanced from Caledonia and also has many travel destinations. However, neither Batavia nor Geneseo generate a significant number of commute trips from Caledonia. Furthermore, the population of Caledonia is too small to support a dedicated connection to either of these municipalities and Caledonia is not located between any municipalities where intercity fixed-routes are recommended, meaning it is not possible to stop in the village without adding a significant detour to this route.

Service Model 2 (Local Transit Service) Rationale

Caledonia's population is too small to support a local microtransit or fixed-route bus. Furthermore, there are few travel destinations that would generate local travel demand in the village. There is no large grocery store, pharmacy, or hospital.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in the village, Service Model 3 is recommended as the only public transit option available to residents. As we expect very limited trips to and from this village, a regional pre-booked microtransit service is likely to be the most cost-effective way to provide transportation to nearby towns and cities. Service Model 3 can also provide commute trips for the 8% of Caledonia's workforce that also works in the village.

4.3.16. Phelps (Ontario County)

Population: 1,900
Size: 1 sq mi
Density: 1,900 people per sq mi
Jobs: 400

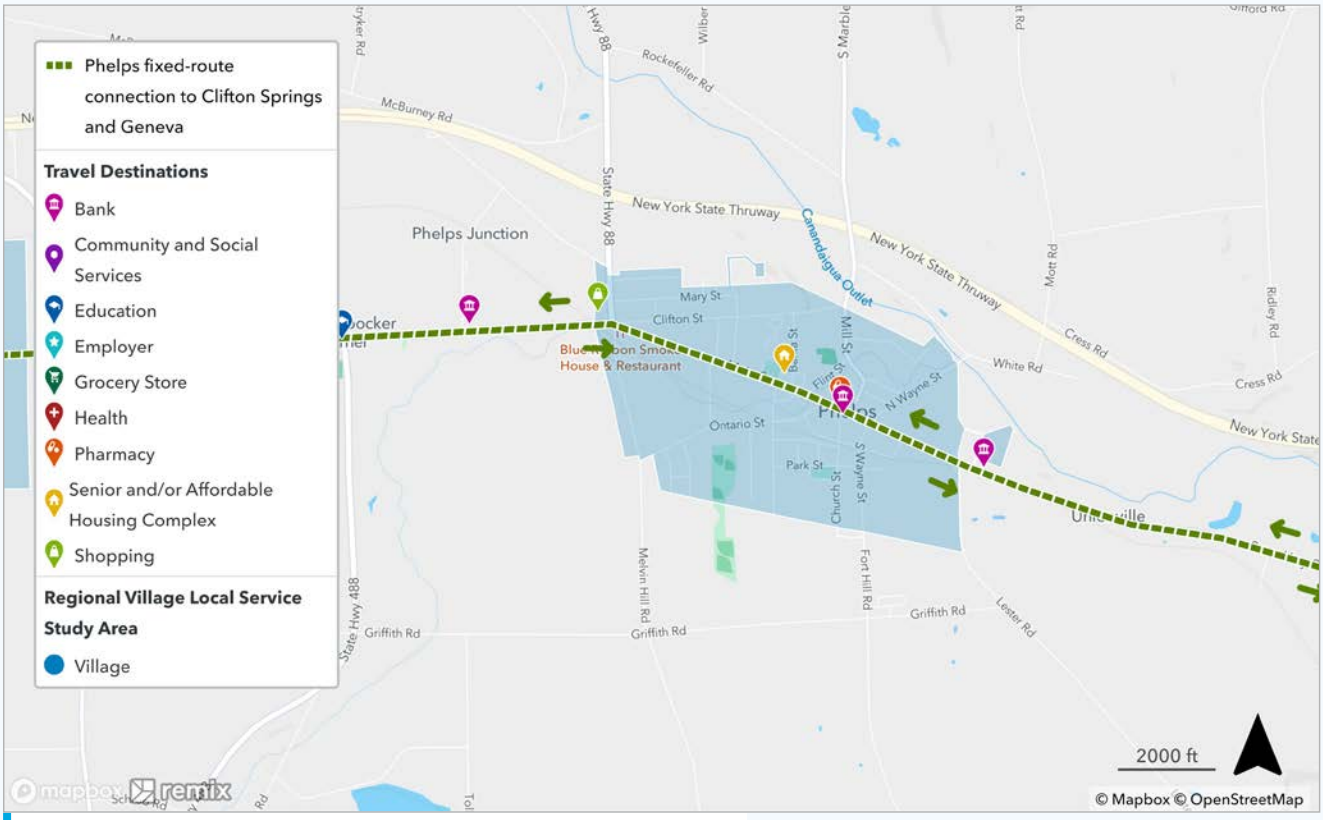


Figure 4.21 Map of public transportation recommendations for Phelps

Village Overview

This study recommends that Phelps be primarily served by an intercity fixed-route bus service operating between Clifton Springs and Geneva, stopping in Phelps. Currently, Phelps is served by RTS Ontario Route 255 which provides services between Canandaigua and Geneva. Route 255 makes a total of four round trips per day, 2 in the mornings and 2 in the afternoons. No service is available between 9:30 AM and 2:30 PM. Service Model 3 would supplement the Service Model 1 recommendation for the village.

Service Model 1 (Intercity Fixed-Routes) Rationale

Service Model 1 is recommended for Phelps for multiple reasons. The location of Phelps makes it a logical stopping point on a bus route between Clifton Springs and Geneva. Furthermore, there are very few travel destinations within the village. There is a Dollar General and Phelps Hometown Pharmacy within Phelps but no large grocery store. This new route could connect Phelps to the Walmart in Geneva, the Tops Friendly Market in Clifton Springs, and the hospitals in both places. Moreover, 8.4% of workers living in Phelps travel to Geneva for employment, and 6.4% travel to Clifton Springs for work. While RTS Ontario already provides the 255 route that makes these connections, it is important that the route runs frequently and directly between these communities. And that service is available through evenings and weekends, and the priority for Phelps should be connections to Geneva since it is closer than Canandaigua.

Service Model 2 (Local Transit Service) Rationale

Local microtransit or fixed-route services (meaning those that only operate within Phelps) are not recommended due to the small population and limited travel destinations within the village. These resources should instead be invested in providing connections to larger municipalities nearby.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.17. Holley (Orleans County)

Population: 1,800
Size: 1 sq mi
Density: 1,800 people per sq mi
Jobs: 600

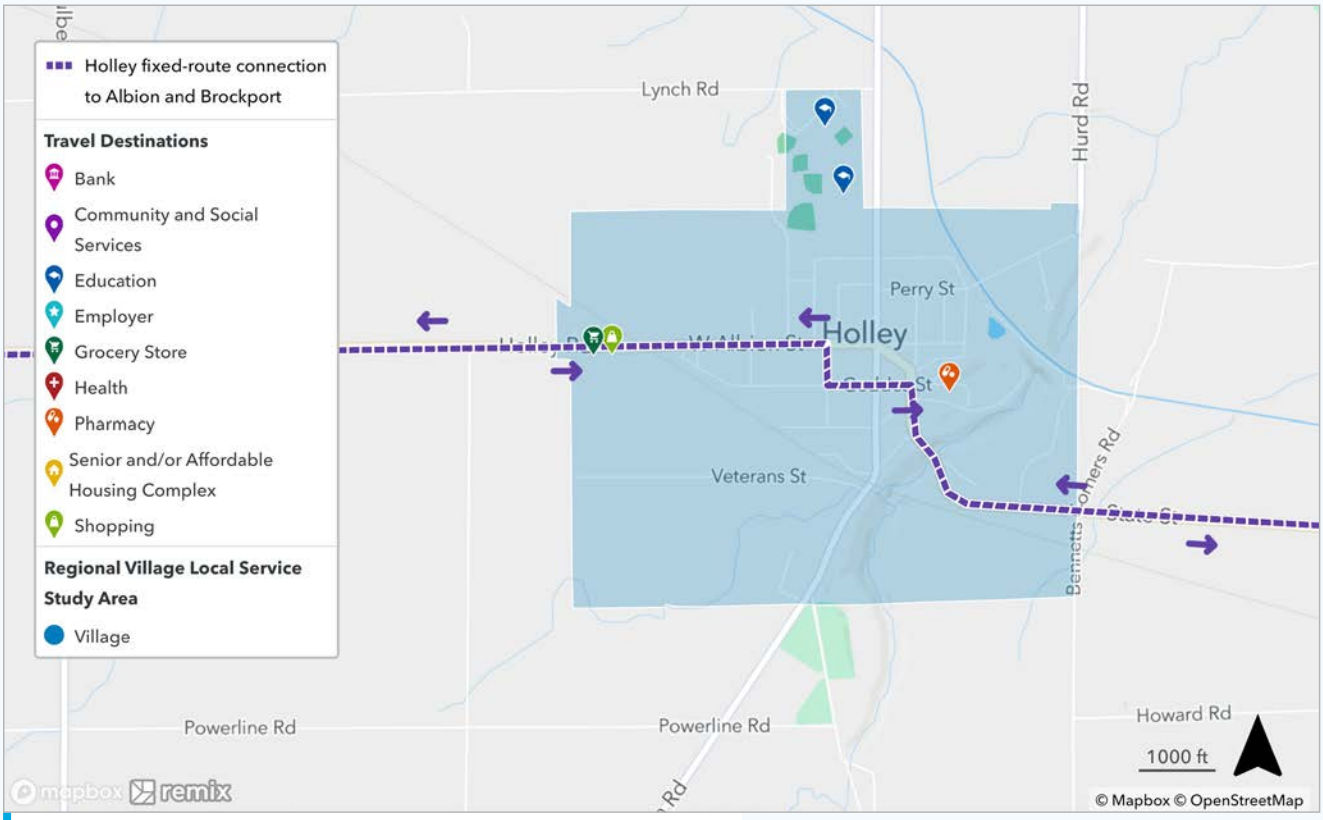


Figure 4.22 Map of public transportation recommendations for Holley

Village Overview

Holley is located in Orleans County. Holley is currently served by RTS Orleans Bus 204, which operates Mondays and Thursdays only. It connects Albion to Brockport via Holley, making limited stops in each village (at the Walmart in Albion and Wegmans in Brockport). The route makes two round trips per weekday, once at 10:00 AM and once at 1:00 PM. Each round trip takes about an hour and ten minutes. Additional service to Holley residents is provided through a Dial-a-Ride service on weekdays between 6:30 AM and 11:00 AM and between 2:00 PM and 5:00 PM. The study recommends that Holley be served by direct and frequent intercity bus to Albion and Brockport during daytime hours, evenings on weekdays, and weekends.

Service Model 1 (Intercity Fixed-Routes) Rationale

Fixed-route connections to Albion and Brockport could be popular with commuters if service hours on weekdays were long enough. ~6% of workers living in Holley work in Brockport, and 5% work in Albion. Once in Brockport, residents of Holley could connect to other RTS Monroe services, such as the RTS On Demand service. Given the limited services and stores in the village, Holley residents may want to travel to Brockport for the Walmart Supercenter, grocery stores, medical facilities such as the Rochester Regional Health Brockport Medical Campus, and the SUNY Brockport campus. Additional grocery stores and a Walmart Supercenter are located in Albion, as well as various Orleans County services.

Service Model 2 (Local Transit Service) Rationale

The only travel destinations that may generate transit demand in Holley are a small grocery store, pharmacy, and Dollar General store. Given the few travel destinations and small population, it is not likely that the village could support a local fixed-route or microtransit service.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

4.3.18. Oakfield (Genesee County)

Population: 1,800
Size: 0.7 sq mi
Density: 2,600 people per sq mi
Jobs: 200

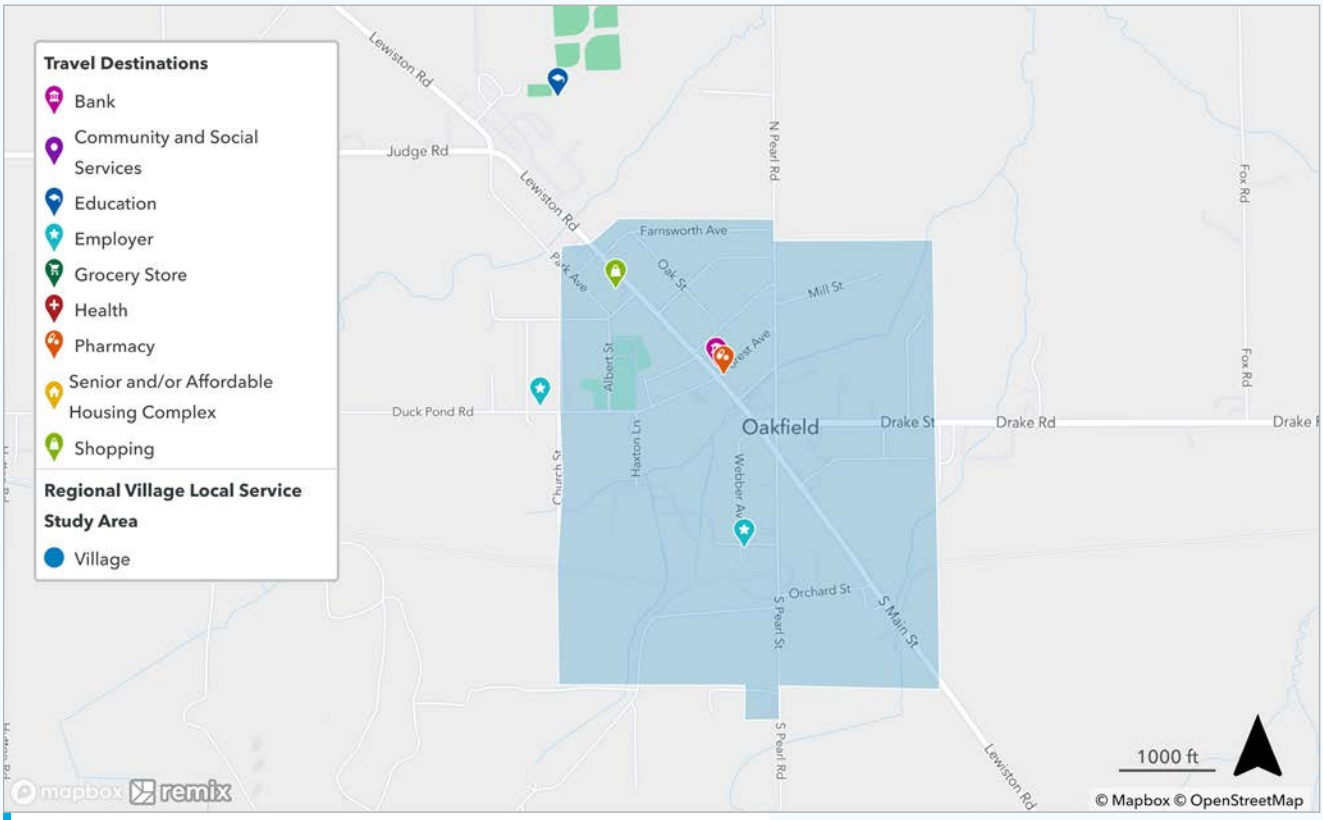


Figure 4.23 Map of public transportation recommendations for Oakfield

Village Overview

Oakfield is located in Genesee County and has a population of 1,800 people. No RTS Genesee bus routes service the village. This study recommends that Wolcott be served only with a regional pre-booked microtransit service as described by Service Model 3.

Service Model 1 (Intercity Fixed-Routes) Rationale

Service Model 1 is not recommended in Oakfield. The closest municipality with a significant number of travel destinations is Batavia. While Batavia is less than 10 miles from Oakfield, the population size of the village is too small to support a direct and frequent intercity fixed-route bus. Also, Oakfield is not located between any municipalities where intercity fixed-routes are recommended, meaning it is not possible to stop in the village without adding a significant detour to this route. Instead, trips should be provided on an as-needed basis through Service Model 3.

Service Model 2 (Local Transit Service) Rationale

Because Oakfield has a population of only 1,800, a local fixed-route or microtransit service would not be supported. Furthermore, there are very few travel destinations within the village that would generate local travel demand. Instead, Service Model 3 can provide trips to nearby towns and cities with more travel destinations, such as Batavia.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in the village, Service Model 3 is recommended as the only public transit option available to residents. As we expect very limited trips to and from this village, a regional pre-booked microtransit service is likely to be the most cost-effective way to provide transportation to nearby towns and cities.

4.3.19. Sodus (Wayne County)

Population: 1,700
Size: 0.9 Sq mi
Density: 1,900 people per sq mi
Jobs: 1,000

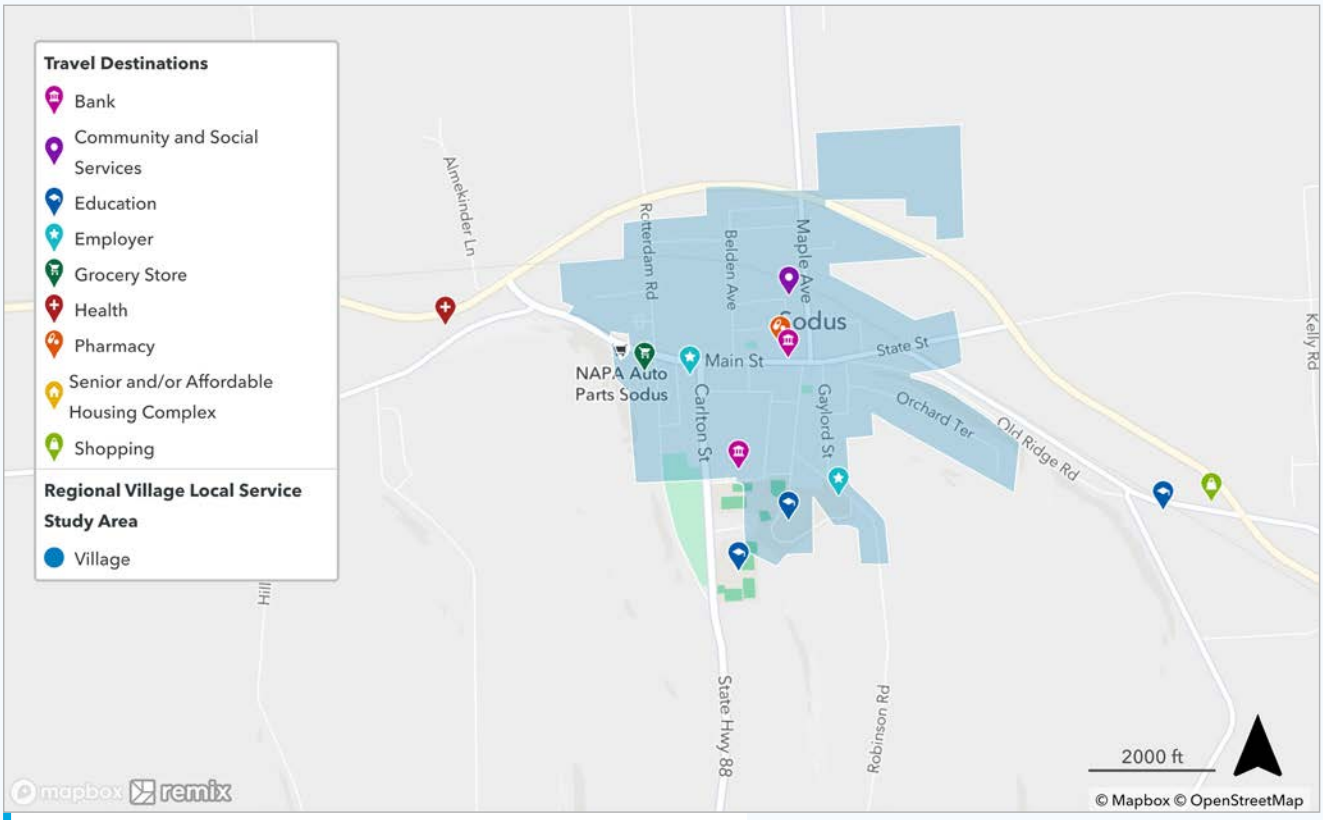


Figure 4.24 Map of public transportation recommendations for Sodus

Village Overview

Sodus is a village in north-central Wayne County. It has a population of 1,700 residents. Currently, Sodus is served by six RTS Wayne bus routes, Routes 302 through 307. All six of these routes are loops that connect to various villages in the county, including Newark, Lyons, Palmyra, and Clyde. There are three clockwise trips from Sodus to Newark, which take about 2 hours, and three counterclockwise loops from Sodus to Newark that take about one hour. There are three trips from Newark back to Sodus that also take between one and two hours. Service Model 3, regional pre-booked microtransit, is recommended for Sodus.

Service Model 1 (Intercity Fixed-Routes) Rationale

Service Model 1 is not recommended in Sodus. The closest municipality with a significant number of travel destinations is Newark, which has multiple grocery stores, a Walmart Supercenter and a Hospital. 7% of Sodus' workforce commutes to Newark for employment. However, while the direct distance to Newark is only 15 miles, the population of Sodus is too low to support its own direct and frequent intercity connection. Moreover, Sodus is not located between any municipalities where intercity fixed-routes are recommended, meaning it is not possible to stop in the village without adding a significant detour to this route.

Service Model 2 (Local Transit Service) Rationale

Service Model 2 is not recommended for Sodus as the village has too few local travel destinations and too small of a population to support a local microtransit or fixed-route bus.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in the village, Service Model 3 is recommended as the only public transit option available to residents. As we expect very limited trips to and from this village, a regional pre-booked microtransit service is likely to be the most cost-effective way to provide transportation to nearby towns and cities. Pre-booked microtransit can also provide trips to jobs in Sodus and elsewhere in Wayne County. 8% of employed people in Sodus work in the village and ~40% work elsewhere in the County.

4.3.20. Wolcott (Wayne County)

Population: 1,600
Size: 2 sq mi
Density: 800 people per sq mi
Jobs: 400

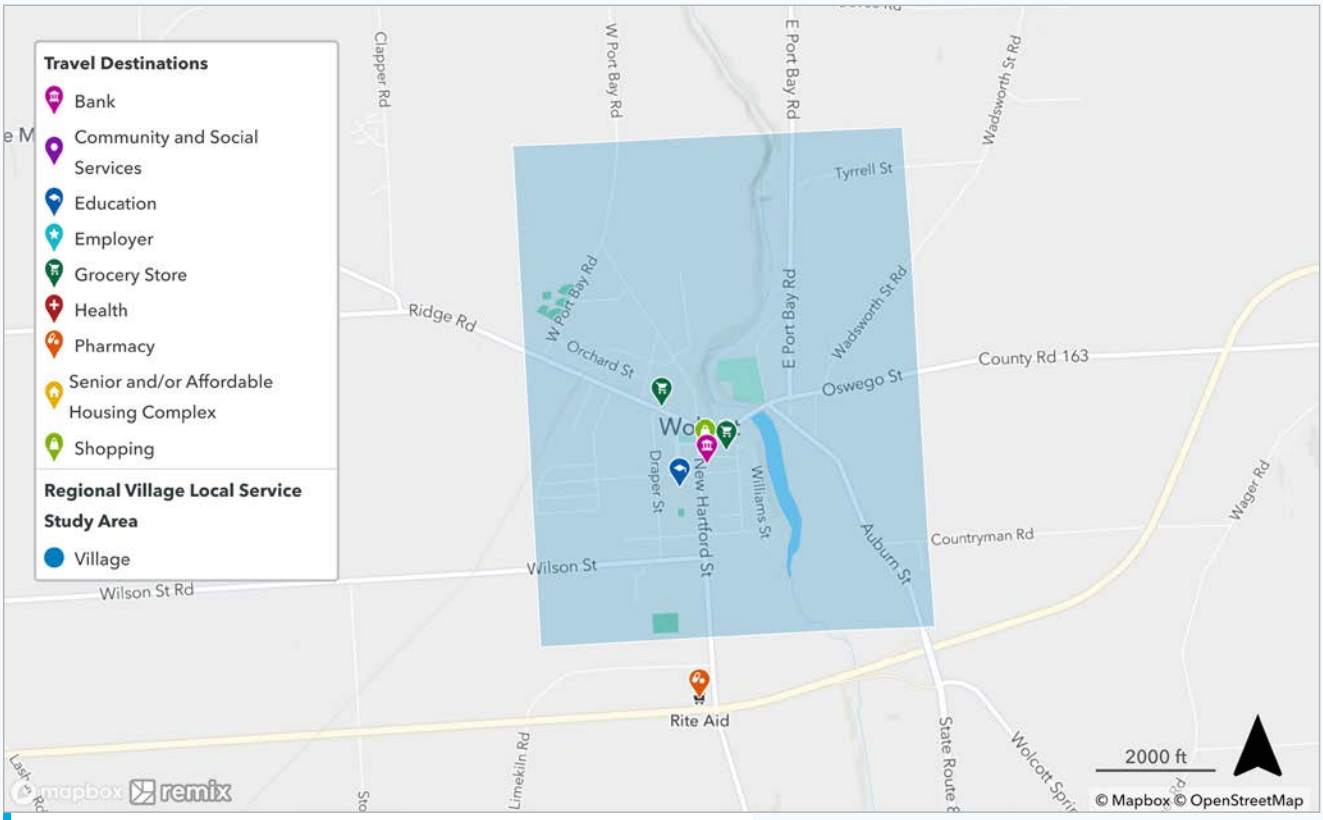


Figure 4.25 Map of public transportation recommendations for Wolcott

Village Overview

Wolcott is located in Northeastern Wayne County and has a population of 1,600 people. It is currently served by five RTS Wayne routes, 302, 303, 304, 305, and 307. These routes are all loops around Wayne County that cover various villages, including Wolcott, Clyde, Lyons, Newark, Palmyra, Williamson, and Sodus. Together the routes offer three trips from Wolcott to Newark and Lyons via Clyde, and two trips per weekday from Newark and Lyons to Wolcott. In addition, twice per weekday, connections are available from Wolcott on a counterclockwise loop via Sodus and Palmyra to Newark and Lyons. However, these trips can take over an hour and a half. This study recommends that Wolcott be served only with a regional pre-booked microtransit service as described by Service Model 3.

Service Model 1 (Intercity Fixed-Routes) Rationale

Service Model 1 is not recommended for Wolcott. Newark is the closest municipality to Wolcott with a significant number of travel destinations. Travel destinations in Newark include a Walmart Superstore, large grocery stores, and the Newark-Wayne Hospital. ~5% of Wolcott's working population commutes to Newark. However, Newark is over 25 miles away from Wolcott. And Wolcott is not located between two larger municipalities where frequent intercity fixed-routes could be supported, meaning it is not possible to stop in the village without adding a significant detour to this route. Therefore, due to the small number of residents in Wolcott, trips should be provided on an as-needed basis through Service Model 3.

Service Model 2 (Local Transit Service) Rationale

Wolcott's main travel destinations are a Dollar General store, two small grocery markets, and a pharmacy (just beyond the village boundary). However, with a population of just 1,600 people, Wolcott is too small to justify a local fixed-route or microtransit service.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in the village, Service Model 3 is recommended as the only public transit option available to residents. As we expect very limited trips to and from this village, a regional pre-booked microtransit service is likely to be the most cost-effective way to provide transportation to nearby towns and cities. Service Model 3 can also be used to provide trips for employment purposes. About half of the working residents in Wolcott work in Wayne County.

4.3.21. Livonia (Livingston County)

Population: 1,500
Size: 1 sq mi
Density: 1,500 people per sq mi
Jobs: 400

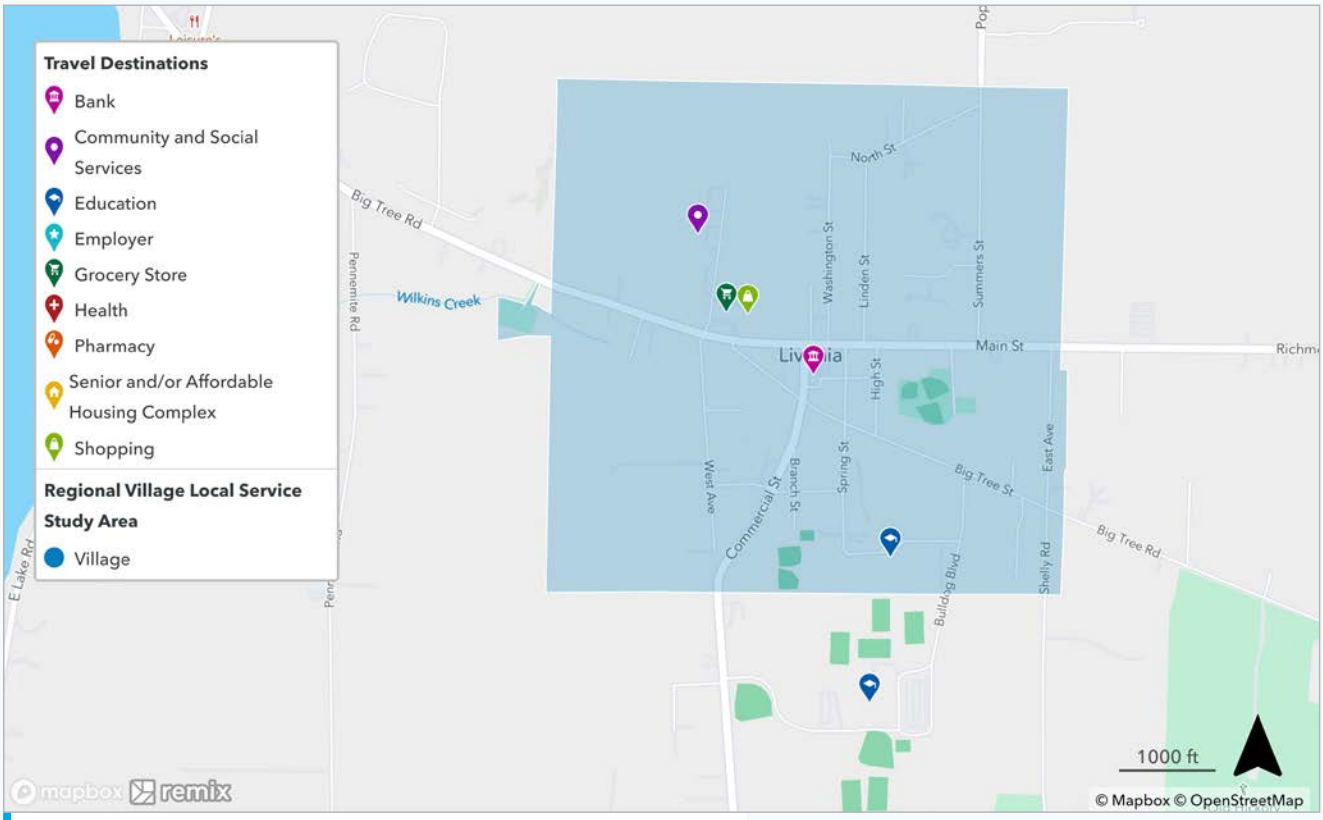


Figure 4.26 Map of public transportation recommendations for Livonia

Village Overview

Livonia is located in Livingston County and has a population of 1,500 people. RTS Livingston Bus Route 243 connects Livonia to Geneseo and Mt. Morris on a loop route that operates twice per day. It stops in Livonia at 8:35 AM and 11:45 AM. Return trips to Livonia are provided through the pre-scheduled Dial-A-Ride service. Due to the size of the village, it is recommended that transit be provided only through Service Model 3, a regional pre-booked microtransit service.

Service Model 1 (Intercity Fixed-Routes) Rationale

Service Model 1 is not recommended for Livonia. While Geneseo is only 10 miles from Livonia, and it has a significant number of travel destinations, Livonia is not large enough to support a fixed-route bus connection. Less than 20 residents of Livonia commute to Geneseo for work. Furthermore, Livonia is not located between two larger municipalities where a fixed-route is justified, meaning it is not possible to stop in the village without adding a significant detour to this route. Instead, trips should be provided on an as-needed basis through Service Model 3.

Service Model 2 (Local Transit Service) Rationale

Service Model 2, local fixed-route or microtransit service, is not recommended in Livonia because of the small population size and limited number of local destinations.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in the village, Service Model 3 is recommended as the only public transit option available to residents. As we expect very limited trips to and from this village, a regional pre-booked microtransit service is likely to be the most cost-effective way to provide transportation to nearby towns and cities. The pre-booked microtransit service can also be used to provide commuting trips. ~6% of Livonia's workforce is employed in the village and ~25% are employed elsewhere in Livingston County.

4.3.22. Bloomfield (Ontario County)

Population: 1,300
Size: 1 sq mi
Density: 1,300 people per sq mi
Jobs: 600

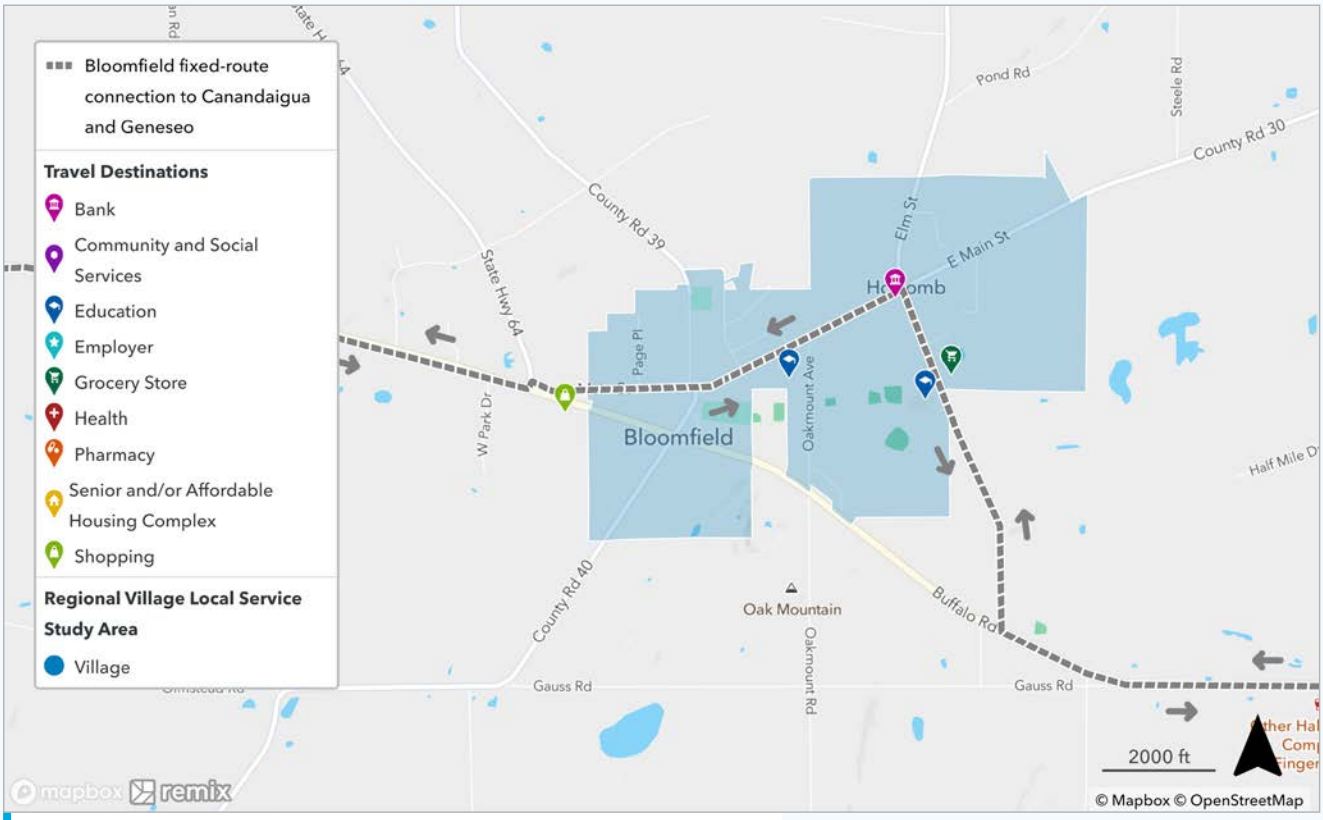


Figure 4.27 Map of public transportation recommendations for Bloomfield

Village Overview

Bloomfield has a population of 1,300 people and is only served by the RTS Ontario Dial-a-Ride service. No bus routes stop in Bloomfield. Bloomfield is located between Canandaigua and Geneseo and this study recommends that an intercity bus route between these two towns should also stop in Bloomfield to provide service for the village residents. Otherwise, Bloomfield should be served with a regional pre-booked microtransit service only.

Service Model 1 (Intercity Fixed-Routes) Rationale

With a population of less than 1,500, Bloomfield is unlikely to support its own bus route. However, as Bloomfield is located directly between Canandaigua and Geneseo, any route between these two cities should provide service to Bloomfield as it passes through[12]. ~7% of workers living in Bloomfield travel to Canandaigua for work and may use this route for commuting. Residents would also use the route to access additional services and stores in both Geneseo and Canandaigua.

Service Model 2 (Local Transit Service) Rationale

As Bloomfield has few destinations and a small population, it is not recommended to implement a local microtransit or fixed-route service in Bloomfield. There is a Dollar General store in the village but no large grocery store or pharmacy.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

The regional pre-booked microtransit service can be used to provide accessible trips for qualifying passengers such as seniors and individuals living with a disability. By providing door-to-door service to qualifying passengers, RGRTA can ensure all residents have access to public transit services while avoiding the need for fixed-route buses to deviate.

[12] While outside the scope of this study, the towns of Geneseo and Canandaigua are large enough to warrant further investigation into an intercounty fixed-route connection.

4.3.23. Nunda (Livingston County)

Population: 1,200 people
Size: 1 sq mi
Density: 1,200 people per sq mi
Jobs: 400

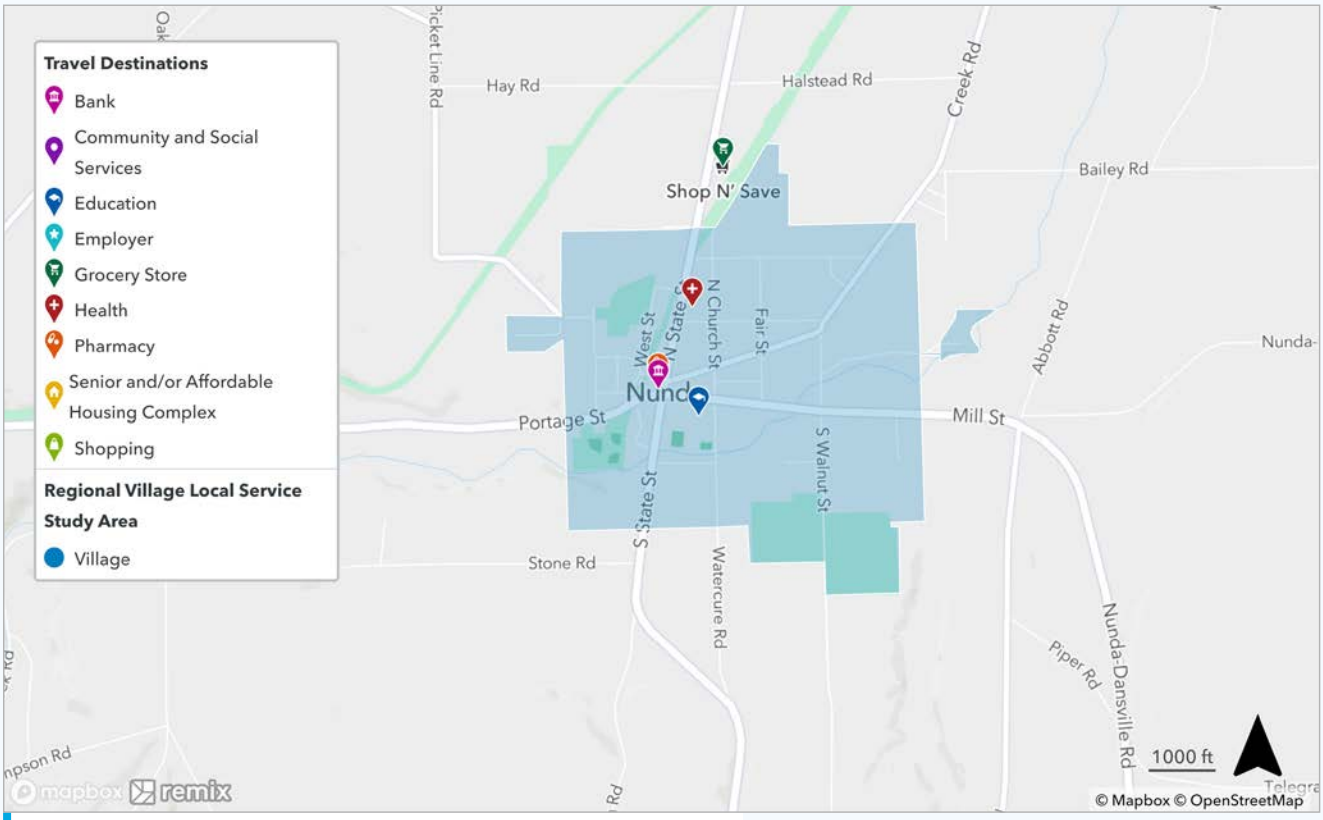


Figure 4.28 Map of public transportation recommendations for Nunda

Village Overview

Nunda is located in the southwestern portion of Livingston County. The village has a population of 1,200 people and is only served by RTS Livingston Bus Route 232. Route 232 operates once per day in the mornings and offers connections from Nunda to Mt. Morris, Leicester, and Perry. Return trips are provided through the RTS Livingston Dial-a-Ride service and must be booked at least 24 hours in advance. Due to the size and geographic location of Nunda, it is recommended that transit be provided only through Service Model 3, a regional pre-booked microtransit service.

Service Model 1 (Intercity Fixed-Routes) Rationale

Nunda does not have enough residents to support Service Model 1. The nearest municipality with a significant number of travel destinations is Geneseo and while ~5% of Nunda's commuters travel to Geneseo for work, this is only about 30 people. Geneseo is about 18 miles away. Warsaw, another candidate for fixed-route connections, is a similar distance and also has a Walmart, a hospital, and grocery stores. However, it has even fewer commuters traveling there from Nunda, less than 1%.

Nunda is also not located between any other municipalities where intercity fixed-routes are proposed by this study, meaning it would require a significant deviation of the routes to capture this village. Therefore, the study recommends that Nunda is not served by Service Model 1. Instead, trips should be provided on an as-needed basis through Service Model 3.

Service Model 2 (Local Transit Service) Rationale

Within Nunda, there are few travel destinations that would generate transit demand. The destinations include the Shop n' Save grocery store and the Nunda Family Pharmacy. Moreover, due to the small population size of the village, a local microtransit or fixed-route service cannot be supported.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in the village, Service Model 3 is recommended as the only public transit option available to residents. As we expect very limited trips to and from this village, a regional pre-booked microtransit service is likely to be the most cost-effective way to provide transportation to nearby towns and cities. Service Model 3 can also be used to serve employment trips within Nunda, ~9% of Nunda's working population also works in the village and a total of ~35% work in Livingston County.

4.3.24. Bergen (Genesee County)

Population: 1,200
Size: 0.7 sq mi
Density: 1,700 people per sq mi
Jobs: 200

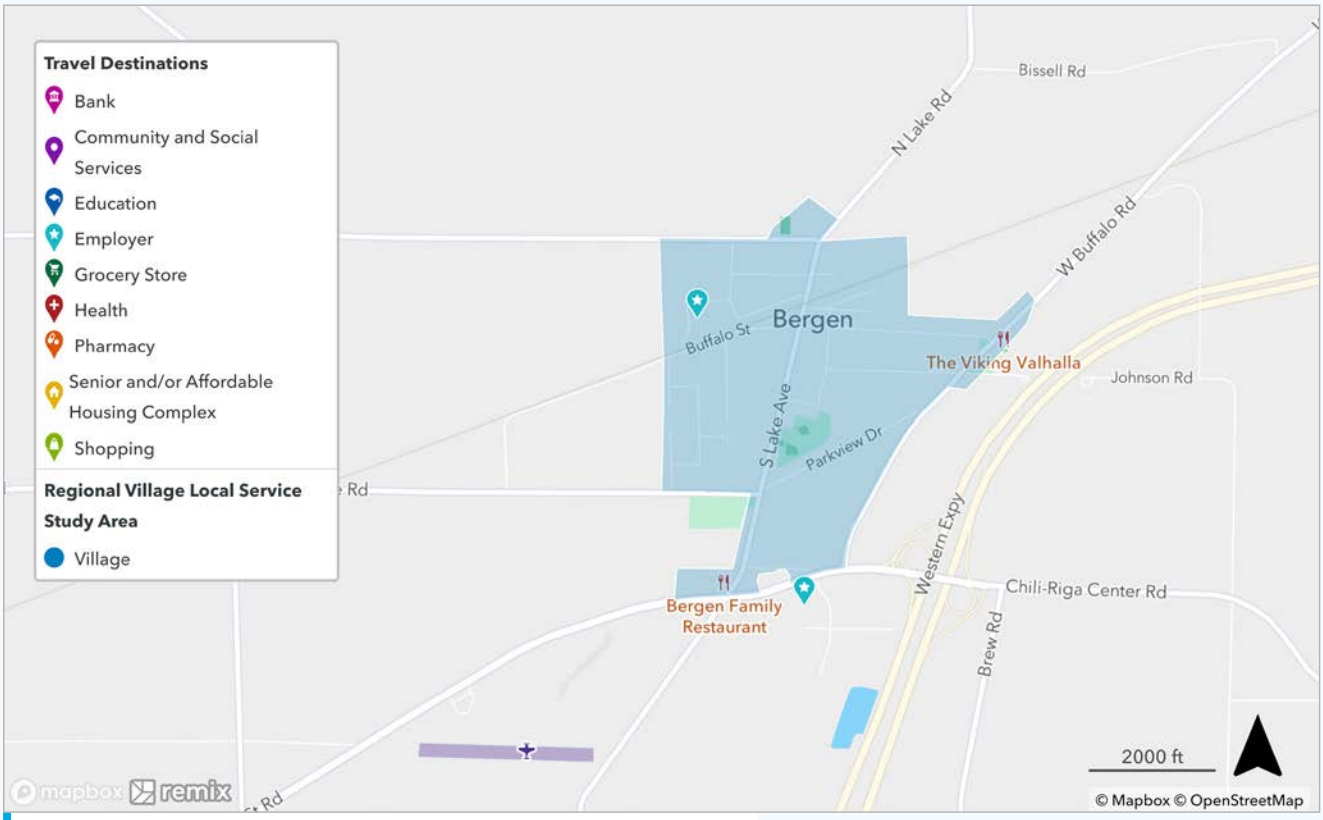


Figure 4.29 Map of public transportation recommendations for Bergen

Village Overview

Bergen is located in Genesee County and has a population of 1,200 residents. There are no RGRTA bus routes that currently provide service for the village. This study recommends that Bergen's transit needs be served by a regional pre-booked microtransit service through Service Model 3.

Service Model 1 (Intercity Fixed-Routes) Rationale

Service Model 1 is not recommended for Bergen. Batavia is the closest large municipality with significant transit destinations, and it is 15 miles from Bergen. Fewer than 50 residents commute to Batavia. However, given Bergen's overall small population, it is unlikely that the village can support its own dedicated fixed-route connections to Batavia. Instead of providing direct and frequent intercity fixed-route connections to one town or city, it would be most cost-effective if trips from Bergen were served on an as-needed basis through Service Model 3.

Service Model 2 (Local Transit Service) Rationale

Local travel destinations in Bergen include two major employers (Bonduelle and Liberty Pumps Inc.) There is no large grocery store, pharmacy, or medical facility in the village, and only ~3% of the workers living in Bergen also work in Bergen. The combination of few travel destinations and a small population means that Bergen would not be able to support a local microtransit of fixed-route bus (Service Model 2).

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in the village, Service Model 3 is recommended as the only public transit option available to residents. As we expect very limited trips to and from this village, a regional pre-booked microtransit service is likely to be the most cost-effective way to provide transportation to nearby towns and cities.

4.3.25. Castile (Wyoming County)

Population: 1,000
Size: 1 sq mi
Density: 1,000 people per sq mi
Jobs: 90

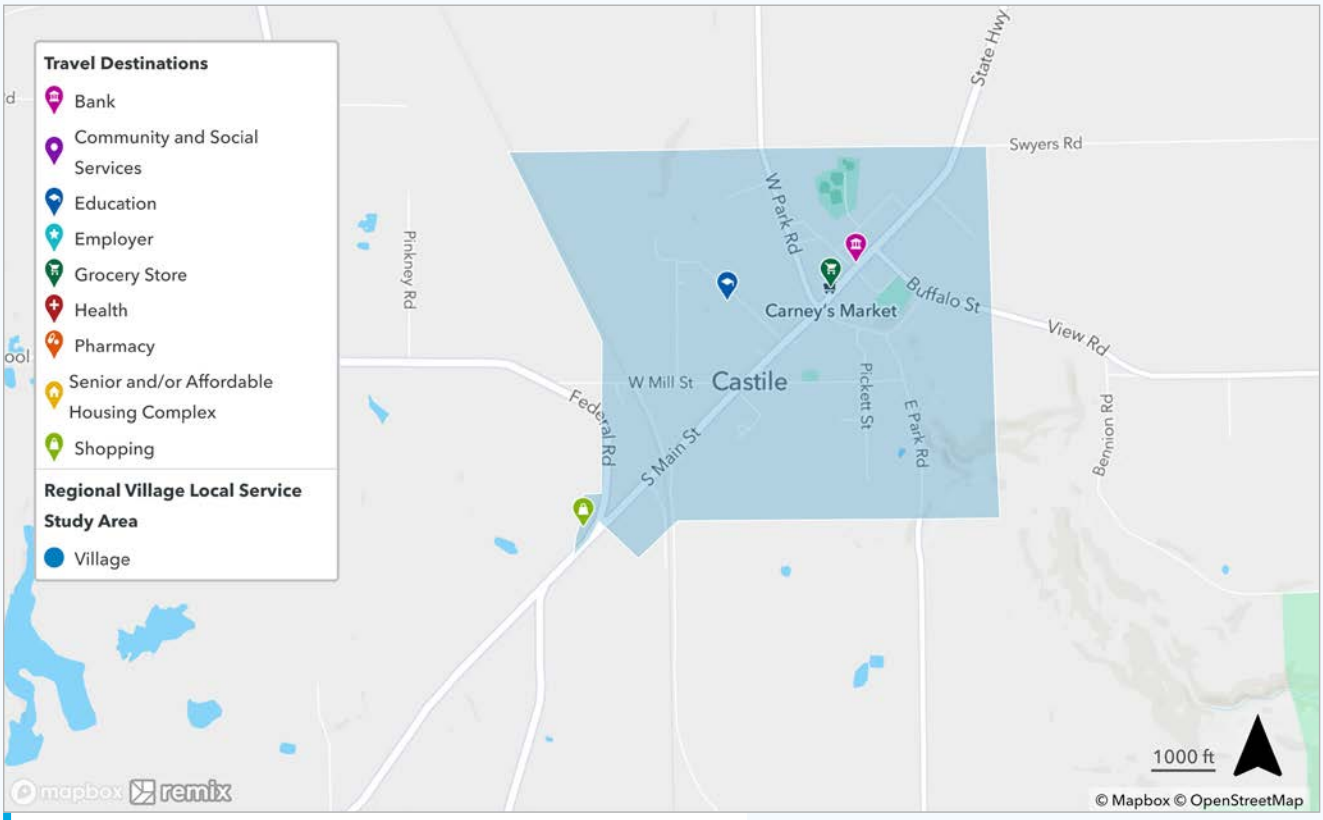


Figure 4.30 Map of public transportation recommendations for Castile

Village Overview

Castile is one of the smallest villages in the study. It is currently served by RTS Wyoming Route 226. Route 226 connects Warsaw to Gainesville, Pike, Portageville, Castile, and Silver Springs in a loop. Stops in Castile are by request only, and the bus passes through the village 5 times per day between 7:15 AM and 4:30 PM. Because of the size and location of Castile, it is recommended that transit be provided only through Service Model 3, a regional pre-booked microtransit service.

Service Model 1 (Intercity Fixed-Routes) Rationale

Service Model 1 is not recommended for Castile because there are only 1,000 residents in the village, which is not enough to sustain a direct, frequent, intercity fixed-route bus service primarily for Castile residents. Moreover, the village is also not located between two larger municipalities where connections are recommended. The closest large village is Warsaw, located approximately 12 miles away. Geneseo, which is larger and offers more travel destinations than Warsaw, is approximately 19 miles from Warsaw. There are also few commuters traveling to either of these locations.

Service Model 2 (Local Transit Service) Rationale

Furthermore, within Castile, there are few travel destinations. There is no pharmacy, large grocery store, or medical facility. Only 4% of Castile's workers are employed within the village. For these reasons and the small number of residents, it is not recommended to implement a local fixed-route bus or microtransit service in Castile.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in the village, Service Model 3 is recommended to provide all public transit trips. For those without access to a private vehicle, a regional pre-booked microtransit service can provide transportation to larger grocery stores, hospitals, and county services located in nearby towns and cities.

4.3.26. Naples (Ontario County)

Population: 900
Size: 1 sq mi
Density: 900 people per sq mi
Jobs: 600

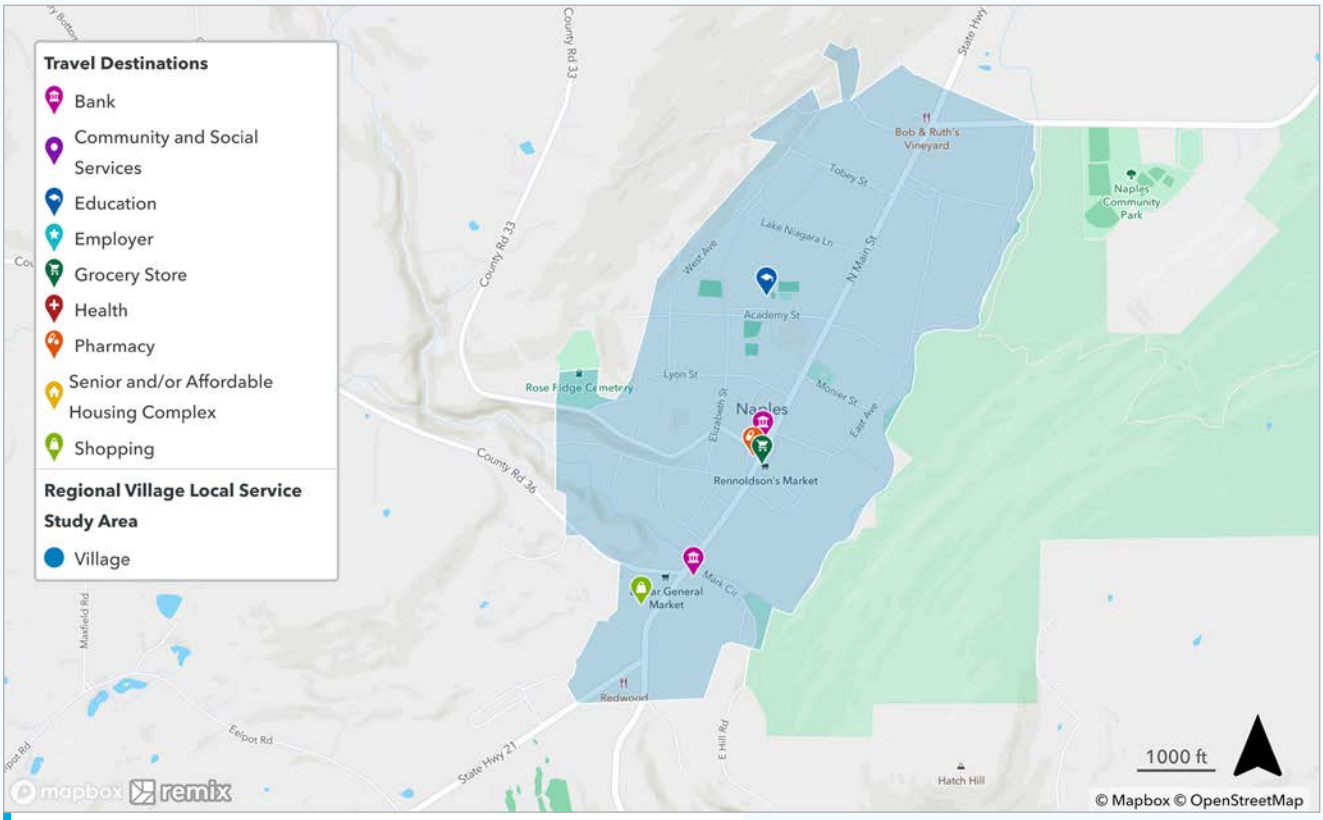


Figure 4.31 Map of public transportation recommendations for Naples

Village Overview

Due to the size and location of Naples, it is recommended that the village be solely served by a regional pre-booked microtransit service. Naples is the smallest of the villages in the study, with under 1,000 residents, and is not currently served by any RTS Ontario bus routes. It is recommended that the transit needs of Naples be solely provided through Service Model 3, a regional pre-booked microtransit service.

Service Model 1 (Intercity Fixed-Routes) Rationale

Because Naples is small and not located near other small villages, it would not support a fixed-route bus. The closest large town to Naples is Canandaigua, which is over 20 miles away, making it costly to offer a frequent direct fixed-route bus between these two municipalities.

Service Model 2 (Local Transit Service) Rationale

While Naples has a Dollar General and a small grocery store, residents will likely need to travel to nearby towns and villages to meet some essential needs. Therefore, demand for a local microtransit or fixed-route service is not sufficient to support a dedicated service. For trips within Naples, the village is small and walkable.

Service Model 3 (Regional Pre-booked Microtransit Service) Rationale

As Service Models 1 and 2 are not recommended in Naples, Service Model 3 is recommended to provide all public transit trips. For employment, about 2% of the workers living in Naples also work in Naples, and an additional 30% of workers commute to other parts of Ontario county. For those without access to a private vehicle, a regional pre-booked microtransit service can provide transportation to larger grocery stores, hospitals, and county services.

SECTION 5

Implementation

5.

Implementation

5.1. Microtransit Launch Planning

While this report makes high-level recommendations related to changes in fixed-route bus service, it does not elaborate on the specific route adjustments to be implemented as this was not within the scope of the study. Therefore, this section focuses on the launch planning for microtransit services within the subset of villages where local microtransit services are recommended. RGRTA must take several steps prior to launching service. This process can be divided into three phases; preliminary service design, procurement, and launch preparation.

Phase 1: Preliminary Service Design. RGRTA should make the following determinations prior to issuing a procurement for microtransit service:

- **Select an operating/contracting model.** RGRTA can select between several operating models which best suit its budget, capabilities, and access to vehicles. Potential models generally include:
  - **Agency-operated service.** RTS Monroe's existing on-demand microtransit services are operated using this model, making it appear to be the best fit for future services. In this model, RGRTA uses a purchased software platform for the operation of microtransit service, and delivers service using its own drivers, vehicles, and operations team. Selecting this model has several advantages including allowing RGRTA to utilize its existing resources and assume a high level of control over service delivery. RGRTA has already developed the administrative and operational capacity required to oversee this service.

- **Turnkey purchased transportation (vendor-operated).** In this model, the vendor provides a solution which includes a microtransit software platform, along with the vehicles, drivers, and management services needed to operate service. This partnership model may be described as Transportation-as-a-Service, or "TaaS", and/or as a "turnkey" model. Turnkey services sometimes have lower operating costs and are typically easier to scale quickly when compared to agency-operated alternatives, as third-party vendors can typically flex vehicle supply or extend operating hours more easily than transit agencies. Turnkey models also ensure the operator and technology platform are designed to work interoperably and efficiently. Disadvantages of using a turnkey model include reliance on a vendor for all aspects of service delivery, and less direct agency control over operational decisions (potentially including vehicle make/model, driver recruitment and pay, and maintenance). However, a well-designed contract can address many of these concerns.
- **Non-dedicated transportation providers.** Rather than introducing microtransit as a dedicated service, some agencies contract with one or more local taxi/Transportation Network Companies (TNCs) on a non-dedicated, or trip-by-trip basis. Under this model, TNCs would deliver agency-subsidized trips alongside trips for private consumers. However, this model is unlikely to be suitable as most of the villages do not have reliable taxi and/or TNC services available. Other disadvantages include limited oversight of operations and ineligibility for FTA funding (depending on whether the TNC is able to meet drug and alcohol testing and other requirements). Further, trips are typically harder to aggregate in a non-dedicated model, meaning costs increase linearly as demand grows (as compared to a shared-ride model, where cost per trip decreases as more customers are aggregated).
- **Designate vehicles for service (if applicable).** If directly operating service, prior to commencing operations, RGRTA will need to designate a fleet of vehicles for the service. RGRTA may be able to use existing small cutaway buses as these would be well suited for a service of this nature (although it would also be possible to use smaller vehicles with 6-12 seats). RGRTA could also continue to provide on-demand service with the same vehicle type as it uses for existing on-demand services in Monroe County. This allows RGRTA to share vehicles between the services and helps to build a clear brand for customers to understand. An example of an RTS On-Demand Vehicle is shown in Figure 5.1.
- **Secure Funding.** Once top-level service design and an operating model have been chosen, RGRTA can use this report to estimate the costs of launching a new microtransit service. Funding can be secured through a number of channels including federal grants, existing operating budgets, local ballot initiatives, or partnerships with local companies.

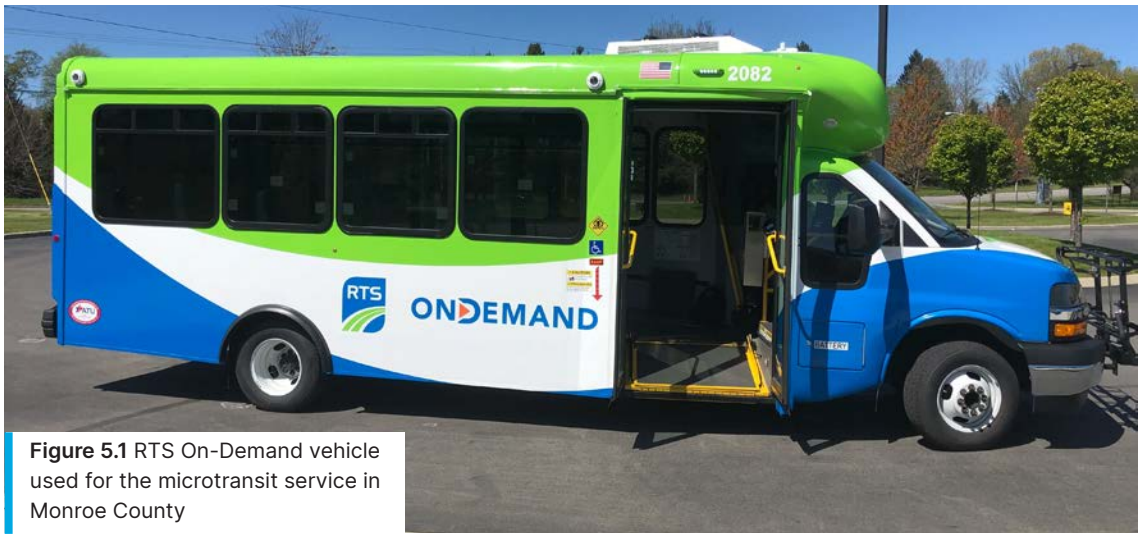


Figure 5.1 RTS On-Demand vehicle used for the microtransit service in Monroe County

Phase 2: Launch Preparation. After a vendor or vendors have been selected, RGRTA can take the following steps to prepare for launch:

- **Finalize Service Design.** RGRTA will need to finalize high-level service parameters before implementing service. Primary service parameters consist of zone location and boundaries, service hours, fare structure, and target quality of service metrics. This report provides recommendations for all parameters, but the final selection should be done in partnership with the selected vendor to ensure the software is able to deliver all requirements. Once RGRTA has finalized service parameters, the agency must create a detailed shift plan for service, that considers requirements such as minimum and maximum shift lengths, driver breaks, pre-trip checks, and other requirements. This is particularly critical when operating a microtransit zone that only requires a single vehicle in operation. This means a vehicle must be available to provide trips during the entire span of operating hours. When a driver is taking a meal break, RGRTA must determine the best way to operate the service without interruption, which may involve a second 'relief' vehicle or driver stepping in during this time. In addition, RGRTA must ensure it develops a strategy for planned and unplanned maintenance and driver absence.
- **Driver Training.** Drivers will need to be trained in delivering microtransit service, including how to use the software platform, best practices for service delivery, and best practices for customer service. RGRTA already has experience operating on-demand microtransit services and should work to share the knowledge developed by the existing drivers by involving them in these trainings.
- **Administrator Training.** RGRTA's administrative staff (including dispatchers, schedulers, and customer service representatives) will need to be trained in the use of its selected microtransit platform. Administrative requirements may include supervision of live service and responding to issues when needed, booking trips for customers making reservations over the phone, and familiarity with microtransit performance indicators (in order to assess system performance over time). However, it is possible that RGRTA can oversee this service with the same administrative team and tools that it currently uses for existing RTS Monroe's On-Demand services.
- **Marketing and Rider Education.** Marketing and community engagement are important steps to inform the public about the new service. Some members of the community may already be familiar with microtransit through the RTS On-Demand services in Monroe County, but other potential customers could be unfamiliar with this type of public transit and will need to learn how to book rides and use the service. RGRTA can do this in various ways, including creating a dedicated website for the service, developing informational videos, sharing information on social media channels, and meeting with local community organizations. Furthermore, given Rochester's longtime use of the Transit App, expanding the app's implementation into the surrounding areas can help build a cohesive transit network that is efficiently communicated to riders. Please find additional information in the following Section, 5.2 Marketing and Rider Education.

5.2. Marketing and Rider Education

We recommend that RGRTA conduct parallel community engagement and marketing activities to ensure the microtransit service's success.

5.2.1. Community Engagement & Changes to Existing Service

The ability to move conveniently and affordably between homes, work, school, childcare, and healthcare is central to a community's ability to thrive. The transit systems that enable this movement play such a crucial role in people's everyday lives, and any changes to these systems — even positive ones — can naturally be a source of apprehension. Service changes have the potential to catch customers unaware, and some customers may even assume they are excluded from the new service offering. Service changes can be particularly anxiety-inducing for vulnerable populations, for whom public transit serves as a vital lifeline with no easy replacement. Generally, the microtransit services outlined in this study are additive to existing transit services, so it is more likely that the community will be supportive.

Fears can be exacerbated by a lack of information regarding what changes to transit means for the community. Concerns about cost, access for those with accessibility needs and/or lack of technology, service coverage, and more, routinely create opposition to projects before they even get off the ground.

A high-touch and proactive approach to community engagement not only helps mitigate concerns, but can turn those in the community who could potentially be opponents of change into advocates. When launching a microtransit service, support from the community is essential, both to ensure a smooth launch and to set the service up for continued success and growth.

Pre-Launch

Community engagement should begin several months before launch, giving RGRTA time to incorporate feedback from stakeholders, and potentially to adjust service design. Starting community engagement early in the launch process also helps preempt passenger and stakeholder concerns through thorough education about service offerings. To start this process:

1. Identify subcommunities that may be sensitive to service changes, or might require personalized outreach in order to adapt service. Once key stakeholders have been identified, steps can be taken to preemptively address their concerns. For example, if accessibility is an expected concern, educate customers about the wheelchair-accessible vehicles in the fleet and the ability to book door-to-door trips for mobility-impaired passengers. Table 5.1 describes examples of communities who should play a central role in community engagement efforts.

Table 5.1 Examples of communities that should be engaged with pre-launch

Customers with High Barriers to Entry	Stakeholder Groups Sensitive to Service Changes
Seniors	Agency employees (drivers, call center staff, administrators)
Non-native English Speakers	Employee unions
Unbanked individuals, or those who prefer cash	Rider advocacy groups
Those without cellphones	Elected officials
Homeless customers	Civic and business leaders
Customers with disabilities	Major local employers

2. Develop materials that engage with likely responses to the new service to proactively answer questions. These materials can include pamphlets, mailers, videos, or physical or digital advertisements. The materials should explain the mechanics of the service, how passengers will book trips, the service zone, and fare. Be sure to address how passengers in high-barrier groups will be able to access the service such as including information around phone booking, voucher payment, and accessibility features.
3. Speak with advocacy groups, elected officials, civic and business leaders, and major local employers as part of the broader community outreach. RGTRA should continue to engage with the stakeholders who were interviewed as part of this study.

Successful Engagement with Older Adults

Across the six-county region, 19% of the population is over 65. Older adults are less likely to drive or own personal vehicles and more likely to rely on public transit as their main mode of transportation. Moreover, older adults can sometimes be reluctant to adopt new forms of transportation, especially technology-enabled solutions. However, specific and targeted engagement with older adults can help encourage the adoption of the new microtransit service.

- Focus materials on service features that would appeal to older adults such as the availability of booking by phone, wheelchair-accessible vehicles, and curb-to-curb service for those that need it.
- Provide relevant examples of trips such as to grocery stores or medical appointments and de-emphasize the use of commuter trips as many older adults will be retired.
- Clearly communicate any discounts or promotions that are specific to older adults.
- Provide a phone number for questions on any print or digital marketing materials.
- Use accessible colors and fonts.
- Focus on offline channels such as direct mail, pamphlets, and fridge magnets.
- Post printed marketing materials in relevant locations such as healthcare facilities, senior centers, retirement homes, food banks, and other relevant social service agencies.
- Offer in-person educational sessions at convenient locations, such as retirement communities or senior centers. During these sessions help customers create accounts and walk them through how to book rides and select if they need a wheelchair-accessible vehicle.

Launch

Leading up to the launch of microtransit service, RGRTA can continue its community engagement strategy through three channels:

- **Stakeholder Organizations**. As RGRTA approaches launch and finalizes key service parameters, it should re-engage previously-contacted organizations and relevant county services (such as offices of the aging), to enlist their help in publicizing key information about the service. Helpful organizations may include libraries, health centers, care facilities, civic groups, and social services organizations. These organizations can help create informational materials that are relevant to the audiences they serve, and can help distribute these materials.
- **Customers with high barriers to entry.** RGRTA can build a list of users who are likely to have trouble accessing service and conduct phone calls to help them create accounts, and alleviate any concerns they may have. This will be their first interaction with the service and can impact how much they promote the service to their peers, so it's important to keep the communication open and keep a detailed record of their feedback, both positive and negative.
- **The public.** RGRTA should make information available to the general public by posting information about service changes as early as possible and in as many places as possible. Particularly in instances where microtransit is introduced alongside changes to RGRTA's existing system, we recommend posting physical signage (e.g., at bus stops and aboard vehicles) to explain upcoming service changes, along with posting information digitally on local websites and social media.

Post-Launch

After microtransit service has been launched, community engagement activities can inform continuing improvements to the system. RGRTA can re-engage stakeholder communities to see how service is going, and identify opportunities for improvement. Stakeholder organizations can alsoplay a central role in continuing to promote service to their constituent communities.

5.2.2. Marketing Microtransit Service

Marketing is an important step to ensure the public is aware of the new microtransit service, both to ensure existing transit customers are prepared for changes to service, and to attract new customers to the system. Many potential customers will be unfamiliar with microtransit as a type of public transit and will need to learn how to book rides and use the service. Creating sustained awareness of the microtransit service prior to launch is essential, and some of the following strategies may be useful:

- **Webpage.** The existing RTS On-Demand webpage (https://myrts.com/on-demand) should be updated and promoted within the specific communities where service will be launched. It should include a service map, and other key information such as service hours.
- **Press release.** Develop a pre-launch press release for distribution in local media that directs readers to download the microtransit app.
- How-to video. If RGRTA chooses to operate using the same platform as the existing service, update the existing short informative video on how to use the service and share on the service website and social media. The current video does not focus on rural areas and includes dates and other content that is no longer relevant.
- **Targeted outreach.** Targeted emails or print and social media advertisements. Targeted outreach including "how-to" instructions may be particularly useful for seniors and at retirement communities.
- **Community announcements.** Announce on-demand transit service in municipal communications, newsletters, and social groups.

Figure 5.2 Example marketing material produced for RTS Monroe's on-demand service

Encouraging awareness of microtransit through word of mouth is especially important. Generating awareness via word of mouth can be achieved through some of the following approaches:

- **Focus groups.** Engage directly with the public through virtual outreach, focus groups, or public meetings held via Zoom or other communication tools. Focus groups can serve as a good opportunity to instruct customers who may be in need of assistance using new technology, like seniors, unbanked customers, non-native English speakers.
- **Street marketing.** Placing a wrapped microtransit vehicle at high foot traffic areas can increase awareness and encourage conversation about the service.
- **Promotional fare discounts or free rides.** Offer reduced or promotional fares for new users.

Table 5.2 Phased marketing approach

	Pre-launch	Months 1-3	Months 4+
Focus	Establish marketing channels and develop materials	Promote service visibility and attract first-time riders	Continue attracting customers and retain customers with engagement promotions
Activities	• Design marketing materials • Begin pre-launch awareness: social media, local press, and local government outlets	• Digital (social media) and physical ads (flyers, direct mail, bus station signage). • Press releases • Events and direct public engagement	• Rider surveys and focus groups • Referral campaigns • Promotion of discounted tickets and referral campaigns • Outreach to specific communities

5.3. Accessibility

RGRTA's microtransit system should prioritize accessibility to ensure all potential customers have access to service, including passengers with disabilities, and those without smartphones and credit cards. We recommend the following accessibility measures, most of which are already supported by RTS Monroe's existing microtransit service:

- **For customers with limited mobility:** The service should include at least 20% wheelchair-accessible vehicles (WAV). However, as most services proposed are 1-2 vehicles, the entire fleet should be accessible to ensure an accessible vehicle is available at all times, ensuring an equivalent quality of service can be offered for customers using wheelchairs. To make the booking process simple for passengers with disabilities, the software platform should remember a passenger's need for a WAV, and ensure that a WAV request is the default for future bookings. To avoid operational problems, the system should automatically assign passengers to vehicles with an available wheelchair position.
- **For customers with hearing, vision, or cognitive impairments:** Passengers should be able to indicate their disability status, either directly through the app or through notifying the customer service agent at the time of booking. This information can be used to modify the service to better adapt for their needs, whether it's through enabling point-to-point pick-up and drop-offs, concessionary pricing, or notification to the driver to provide additional assistance.
- **For customers without smartphones:** In addition to the smartphone app for booking trips, offering web-based and phone booking options can ensure passengers without smartphones (or those who prefer not to use an app) can access service. RGRTA administrators should be able to easily book microtransit rides for customers calling in. RGRTA can also partner with community organizations to train workers on how to book trips on behalf of passengers.
- **For customers without credit cards:** Unbanked or underbanked passengers should be able to pay for services with several different options, which may include physical or digital vouchers (purchased in cash at community centers, transit hubs, or other key locations), prepaid debit cards, and cash on board the vehicle.

5.4. Commingling Demand-Responsive Services

RGRTA operates both deviated routes and dial-a-ride services in many of the villages where local microtransit (Service Model 2) or pre-booked microtransit (Service Model 3) is recommended. We recommend that RGRTA consider the following:

- **Commingle existing demand-responsive services with microtransit.** Commingling microtransit and dial-a-ride trips can improve the overall efficiency of demand-response service. Primarily, using the same vehicles to transport dial-a-ride and microtransit customers can lead to higher levels of passenger aggregation, and improve the overall productivity of service. While many dial-a-ride trips extend outside the proposed microtransit zones, those that begin and end within a zone can be transitioned to microtransit. Further, RGRTA has the opportunity to streamline the administration of demand-response services, potentially using a single administrative structure and software platform to manage both services. Doing so could reduce the administrative burden of managing separate services.
- **Deliver NEMT trips using the microtransit fleet.** RGRTA also has an opportunity to deliver non-emergency medical transportation (NEMT) trips using its microtransit fleet. Using the same fleet of vehicles, RGRTA can likely deliver NEMT trips with minimal additional vehicle revenue hours (VRH), especially when compared to the VRH requirements of operating service separately. NEMT trips are reimbursable through Medicaid for eligible customers. Accordingly, delivering NEMT trips can provide a new source of revenue for RGRTA, and has the potential to significantly improve farebox recovery in demand-response service categories. Revenue from NEMT trips has the potential to offset the cost of additional microtransit VRH needed to deliver demand. To begin the process of delivering NEMT trips, RGRTA should first obtain certification to deliver Medicaid-reimbursable trips from the New York state, then develop an operating plan to deliver these trips using the microtransit fleet.

5.5. Fares

In general, microtransit fares can be set as flat rates per trip or charged by distance or journey length. Fares should be affordable for residents and offering reduced fares for specific groups can ensure the accessibility of the service. While it is not recommended to charge fares that mirror the actual cost of a service, fares can still contribute to the economic viability of a service. Farebox recovery ratios measure how much of the total operating expenses are covered by fares. Farebox recovery ratios can vary significantly, however, as a point of reference, a similar service in West Sacramento has a farebox recovery ratio of ~20%.

Fares can be used to influence passenger behaviors and encourage certain trip patterns. For example, free transfers between on-demand microtransit and fixed-routes can encourage usage of the on-demand microtransit services as a first/last-mile service. Charging by distance can encourage shorter trips.

RGRTA has already developed a fare structure for existing on-demand services that generally reflects best practices (see Figure 5.3).

5.6. Language

To ensure the service is accessible to non-English speakers, the app can be made available in multiple languages. However, the study area is primarily English speaking, with ~2% of the population who speak English less than "very well". Therefore, this does not appear to be a critical priority, but could still potentially be implemented for minimal cost depending on the provider.

Figure 5.3 RGRTA Fare Information

Fares

RTS Go, valid RTS passes or exact change accepted

RTS Connect Fares

Frequent, Local, Crosstown/Suburban and Commuter Routes

Adults	$1.00
Reduced Fares	$ .50

RTS On Demand Fares

One ride within one On Demand Zone	Adults	Reduced Fares
To/from RTS bus stop or Connection Hub	$1.00	$ .50
Curb-to-Curb ride	$3.00	$1.50

Unlimited Fares with RTS Go

RTS Connect routes and/or On Demand service. Must use RTS Go card or app (regular fare is applied until this maximum amount is reached).

All-Day	Adults	$3.00
	Reduced Fares	$1.50
31-Day	Adults	$56
	Reduced Fares	$28

Reduced Fares:
- Children age 6 -11
- Seniors age 65 and above
- People with disabilities

Customers receiving reduced fares may be asked to show a government-issued ID or Medicare card when boarding.

Children

Children age 5 and under ride free (limit 3 per adult).

Children age 10 and under must be accompanied by an adult.

Veterans

Veterans ride free on RTS Connect and RTS On Demand. To receive free service, veterans are required to use the Veterans Outreach Center-issued bus pass. Visit vocroc.org/rts for details.

RTS Access Customers

RTS Access customers ride free on RTS Connect and RTS On Demand. RTS Access customers must show their RTS Access ID; visit myRTS.com/Access for details.

Appendices

The tables in this appendix display the breakdown of demographics of the 120 respondents that answered the survey.

Table A.1 Survey respondents by age

Age	Percent of Respondents
13-18	1.1%
19-24	4.4%
25-34	23.1%
35-44	19.8%
45-54	16.5%
55-65	23.1%
65-74	7.7%
75+	4.4%

Table A.2 Survey respondents by race/ethnicity

Race/Ethnicity	Percent of Respondents
Asian	2.5%
Black/African American	3.7%
Hispanic/ Latino	9.9%
Native Hawaiian or other Pacific Islander	1.2%
White	91.4%
Multiracial	3.7%

Table A.3 Survey respondents by employment

Employment Status	Percent of Respondents
Working full-time or part-time	71%
Full-time or part-time student	4.4%
Retired	14.4%
Looking after family/home	5.5%
Other	3.3%

Table A.4 Survey respondents by household

Household Income	Percent of Respondents
Under $25,000	16.7%
$25,000 - $50,000	36.1%
$50,000 - $100,000	34.7%
Over $100,000	12.5%

Table A.5 Survey respondents by disability status

Disability status	Percent of Respondents
Person with a disability	23%
Does not have a disability	77%


VIA