

**Transportation and Poverty in
Monroe County**
How Land Use, Job Locations and
Commuting Options Affect Access to
Jobs

March, 2018



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Transportation and Poverty in Monroe County

How Land Use, Job Locations and Commuting Options Affect Access to Jobs

March, 2018

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Reconnect Rochester

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Acknowledgements

CGR would like to thank Pete Nabozny, Mike Governale and Mary Staropoli with Reconnect Rochester for creating the brainchild that sparked this report.

This report was made possible with funding from:

ESL Charitable Foundation

United Way of Greater Rochester

Center for Governmental Research Fund for the Public Interest

This report is part of a broader community initiative to examine the intersection between transportation and poverty. Committed organizational partners include:

City of Rochester

Connected Communities

ESL Charitable Foundation

Genesee Transportation Council

Reconnect Rochester

Regional Transit Service

Rochester Monroe Anti-Poverty Initiative

The Community Foundation

United Way of Greater Rochester

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Summary

This report explores the relationships between residence patterns, employment, transportation, and poverty in Rochester and Monroe County. It aims to explore how changing patterns of residential settlement, locations of jobs and transportation options have collectively affected the ability of people, especially low-income people to access employment.

In particular, this report explores Monroe County and the City of Rochester in terms of:

- Where people live and how that has changed over time.
- Where people work in Monroe County, and how the distribution of these jobs has changed over time.
- How people commute to work, and how long that commute takes.
- The rates of car ownership and the financial burdens of car ownership.
- The accessibility of jobs depending on city neighborhood of residence, mode of transit, and length of commute.

In addition to analyzing these elements for Monroe County and Rochester City as a whole, this report also compares Rochester against four upstate New York comparison cities selected by Reconnect Rochester. These are Albany, Binghamton, Buffalo, and Syracuse.

The analyses in this report are based on data from three main sources: the U.S. Census Bureau's American Community Survey, data from the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program, and General Transit Feed Specification (GTFS) data.

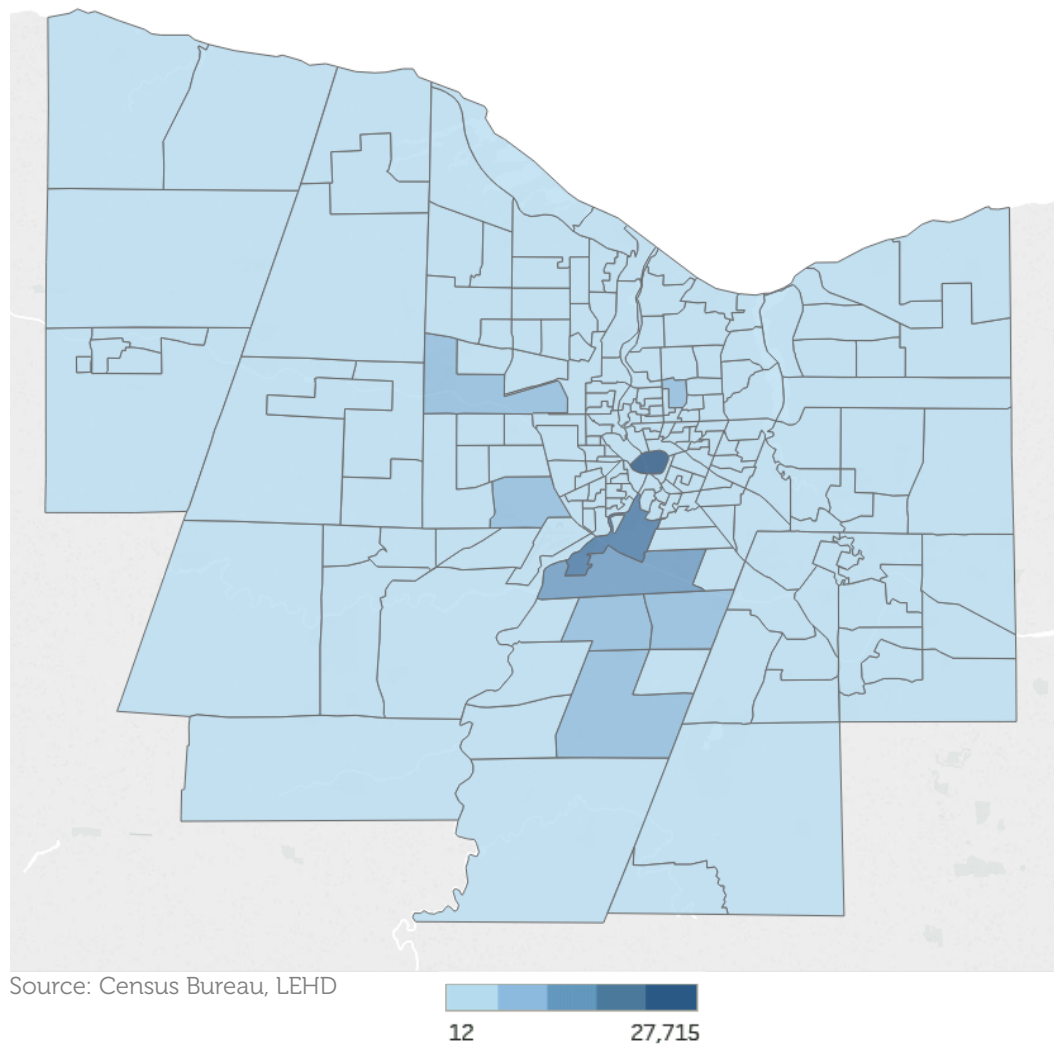
Shifting Population, Shifting Jobs

Monroe County has seen the majority of its population shift from the city to the suburbs over the past century. Rochester has always been the most populated municipality in Monroe County, however, while in 1910 over three-quarters of the county's population lived within city limits, in 2010 only about a quarter of the population of Monroe County lived in the City of Rochester.

Monroe County had about 288,000 workers in jobs in 2015. Of these, 40% were located within the City of Rochester. Indeed, Rochester is the major hub of employment in Monroe County, with Henrietta, Greece, and Brighton the other notable employment municipalities.

40% of Monroe County jobs in 2015 were located within the City of Rochester.

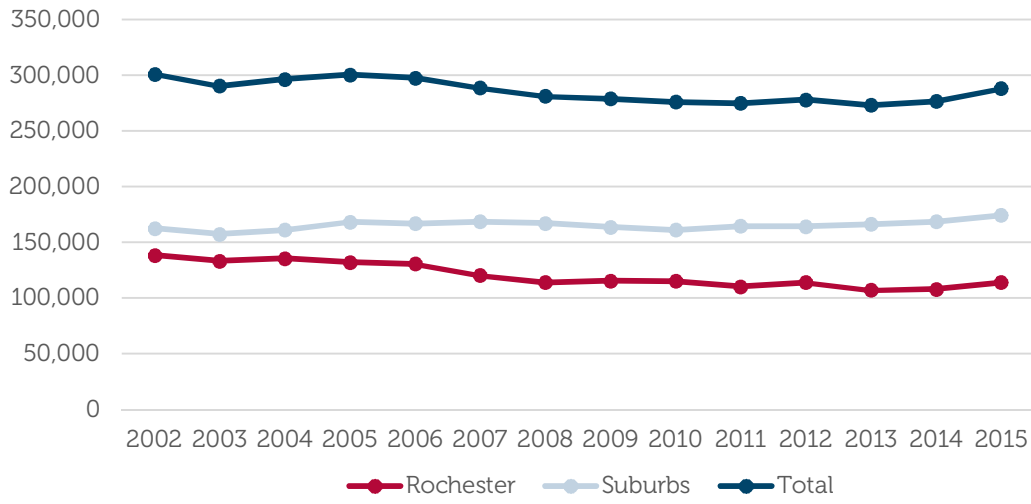
Figure 1 – Number of Jobs by Census Tract, Monroe County, 2015



Overall, jobs¹ in Monroe County declined 4% since 2002, and 18% in the City of Rochester. This highlights that while the county's overall job loss has not been severe, where those jobs are located has shifted. As the figure below illustrates, from 2002 to 2015, the share of county jobs located in the suburbs grew, while the share in the city declined.

¹ In this section, all references to jobs mean filled jobs, not including any unfilled positions.

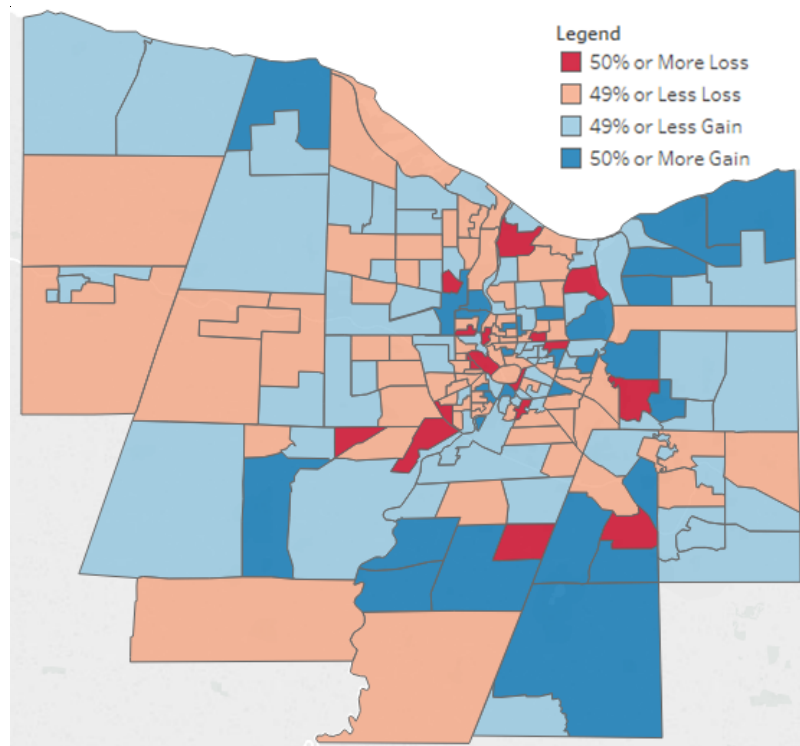
Figure 2 – Monroe County Jobs by Location



Source: Census Bureau, LEHD

The figure below illustrates these changes at the census tract level, with many of the tracts on the county periphery seeing gains in jobs from 2002 to 2015, while more central county tracts saw declines. This city to suburb shift in jobs highlights that Monroe County’s job locations have become less geographically concentrated.

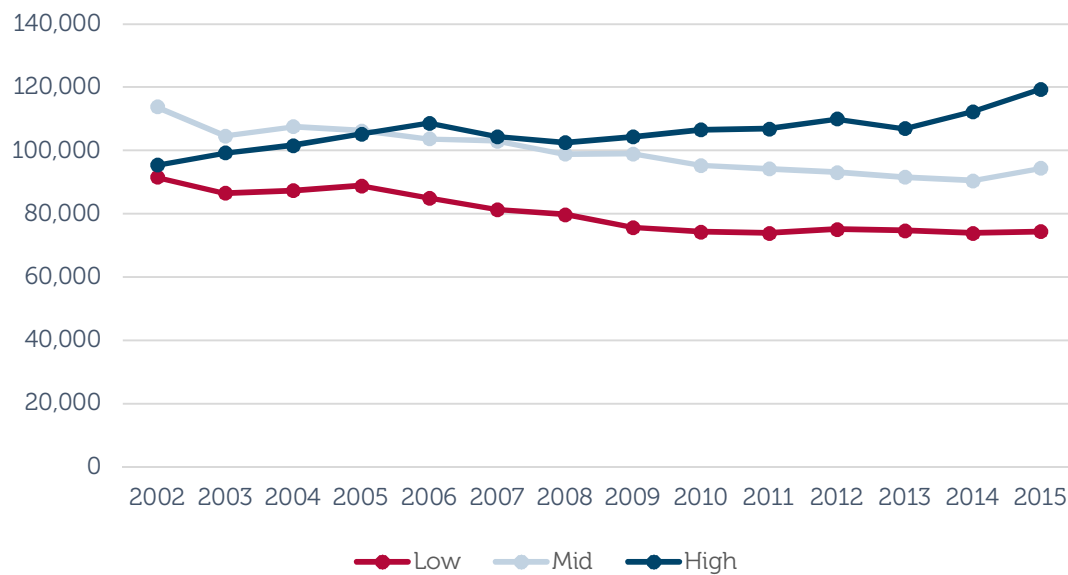
Figure 3 – Change in Jobs



Source: Census Bureau, LEHD

However, while the overall number of jobs declined slightly, the changes in the income levels of the jobs available have been more dramatic. From 2002 to 2015, Rochester saw a 29% decline in low-income jobs and a 32% decline in its mid-income jobs, even as its number of high-income jobs increased by 4%. Similarly, Monroe County as a whole saw a 19% decrease in low-income jobs, a 17% decrease in mid-income jobs, and a 25% increase in high-income jobs in the same time period.²

Figure 4 – Jobs in Monroe County by Level of Income



Source: U.S. Census Bureau, LEHD

In 2015, the County's low-income jobs were primarily concentrated in the City and Henrietta, while the workers in those jobs were spread across the County, highlighting the need of low-income workers to be able to commute across the County to access employment.

² LEHD breaks the overall jobs (both full- and part-time) into three categories based on income level. It defines low-income jobs as those that earn \$15,000 or less a year, mid-income jobs as those that earn between \$15,001 a year and \$39,999 a year, and high-income jobs as those that earn more than \$39,999 a year.

Figure 5 – Number of Low-Income Jobs by Census Tract of Job

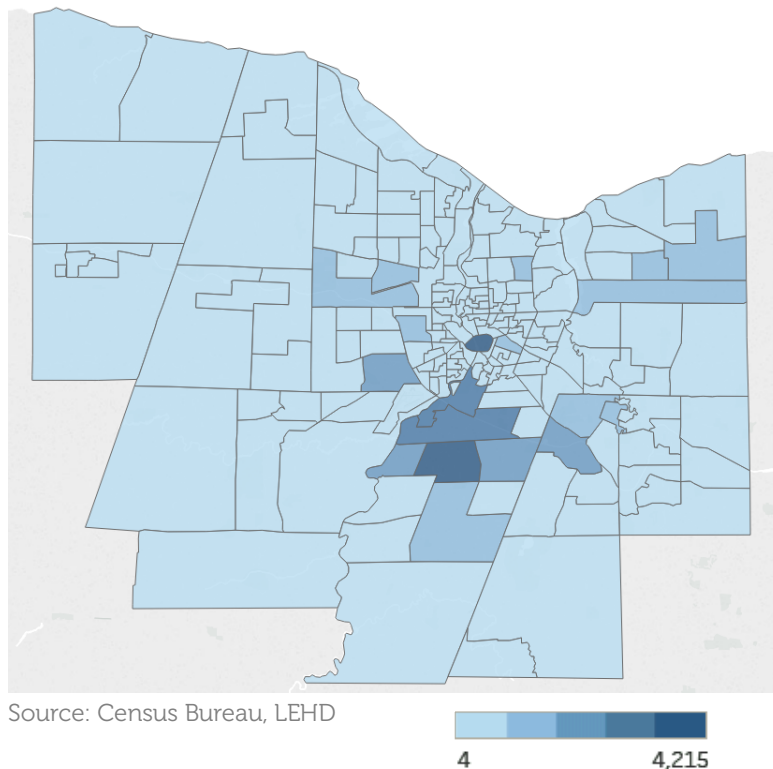
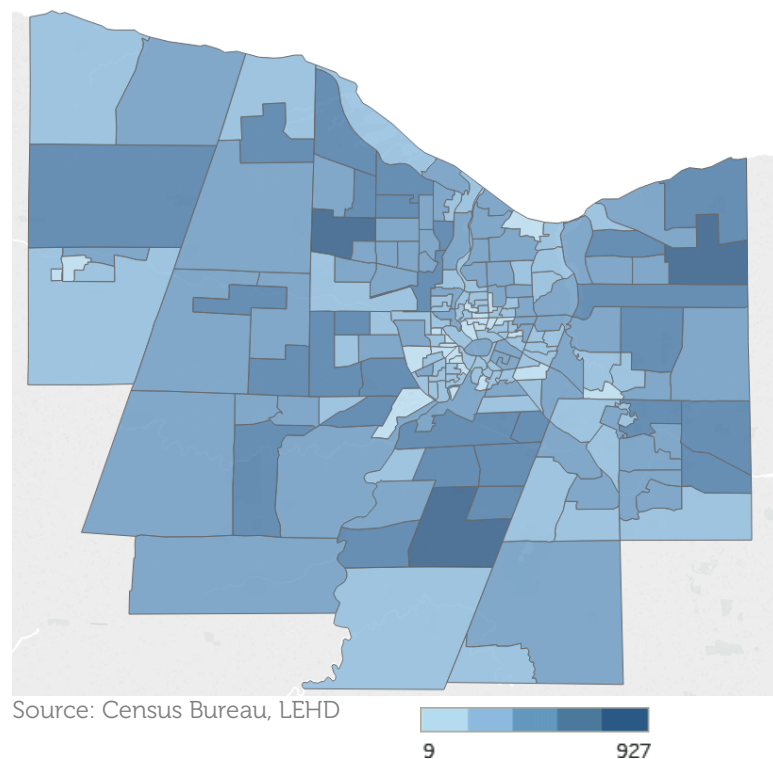


Figure 6 – Number of Low-Income Workers by Census Tract of Residence



Most People Travel outside Their Local Area to Work

One in four jobs in Monroe County are filled by those who live and work in the same municipality. Otherwise stated, 76% of workers rely on travel to other municipalities in order to find employment. City residents make up a larger share of their own workforce (32%). This is likely due to the preponderance of jobs located within the Rochester city limits. Only 49% of Rochester's employed residents work outside the city.

76% of Monroe County workers rely on travel to other municipalities in order to find employment.

For Rochester, the share of resident-filled jobs differs by the income level of the job. For low-income jobs, almost half (45%) are filled by residents. Similarly, 43% of mid-income jobs are filled by residents. In contrast, only 20% of high-income jobs in the city are filled by city residents.

The interconnectedness of municipalities' workforces and residents across the county requires workers to travel. In order to support this process (and the resulting employment it generates), there is a need for a robust transportation network that assists workers to get from home to work as easily as possible. While there are multiple modes that workers can choose to take to work, currently, Monroe County only provides a truly robust transportation network for those who drive, when considering factors such as commute times and access to a wide variety of jobs.

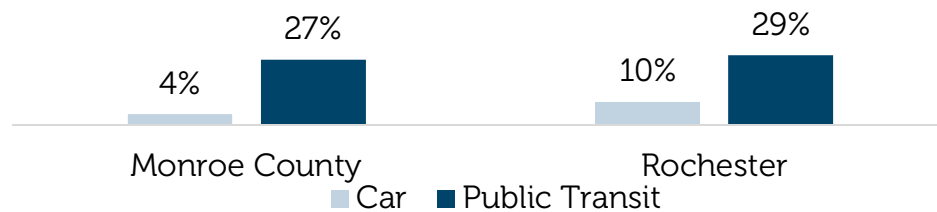
Most People Commute by Car

Most people (84%) in Monroe County get to work by driving alone. Only 3% reported commuting to work via public transit. While this overall pattern holds true for Rochester City, a slightly larger proportion of residents uses public transit to get to work with 71% of commuters reporting driving alone and 9% reporting using public transit to get to work (a lower rate than any of the comparison cities except Binghamton).

Bus Riders are More Likely to Be in Poverty than Drivers

In terms of income, almost half of those who commute via public transit earn below 150% of the poverty level and thus have limited financial means (27% are living in poverty). They are likely reliant on this less expensive mode of transportation in order to be able to access employment. Overall, transit commuters are far more likely to be in poverty than drivers.

Figure 7 – Share in Poverty, by Mode of Transit to Work

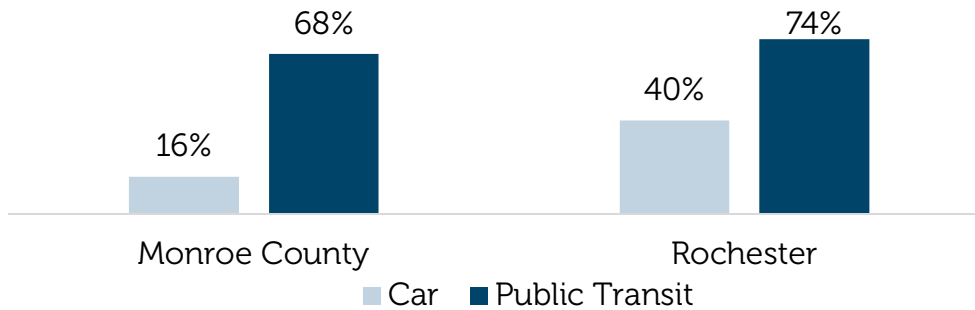


Source: American Community Survey, Census Bureau

Bus Riders are More Likely to Be People of Color than Drivers

In terms of race and ethnicity, while the majority of people of all races and ethnicities in Monroe County commute by car, about half of those commuting via public transit are African American or Black, while about 32% are white. That means that 68% of transit riders in Monroe County are people of color, in comparison to 16% of drivers. For Rochester, 74% of transit riders are people of color, compared to 40% of drivers. The majority of drivers are white, while the majority of transit commuters are not.

Figure 8 – Share Non-white, by Mode of Transit to Work



Source: American Community Survey, Census Bureau

The High Cost of Owning a Car

While owning a car in Monroe County can greatly reduce the amount of time spent commuting, it is a significant financial expense. In addition to the cost of the car itself, analyses from 2016 estimate that New York State car owners pay over \$3,000 a year in ownership costs including registration fees, car insurance, gas, and car maintenance.³

Many of these costs are actually higher for people from low-income communities. Insurance rates in those communities tend to be higher.⁴ Similarly, those with weaker credit histories face less favorable loan terms when looking to buy a vehicle. CGR estimated costs to try to account for some of the circumstances of lower-income car buyers in the Rochester area and found that for an individual making minimum wage (\$10.40/hour), or approximately \$1,664/month, purchasing a used car requires 34% of pre-tax earnings, and even once purchased, the car still takes 19% of monthly pre-tax earnings, a significant share given other essential living costs such as food, clothing, and housing.

The cost of car ownership requires an estimated 19-34% of pre-tax earnings for a full-time minimum wage worker

While working individuals may make other choices in order to try to lower these costs, these estimates are based on car owners with clean records and good credit. These costs may be significantly higher for those with less stellar qualifications.

In comparison to car ownership, taking the bus is cheap. A monthly adult pass from RTS costs \$56 per month (for a total of \$672 a year). For those who use public transit as their method of commuting to work, it offers a much lower cost option than owning a car (only 3.4% of pre-tax minimum-wage monthly earnings).

³ <https://www.insurance.com/auto-insurance/most-least-expensive-states-car-ownership.html>; https://www.huffingtonpost.com/gobankingrates/most-and-least-expensive_b_9516846.html

⁴ Angwin, Larson, Kirchner, and Mattu, 2017, "Minority Neighborhoods Pay Higher Car Insurance Premiums Than White Areas With the Same Risk", *ProPublica* and *Consumer Reports*. April 5, 2017. <https://www.propublica.org/article/minority-neighborhoods-higher-car-insurance-premiums-white-areas-same-risk>; Ong, P. M. and Stoll, M. A., 2007, "Redlining or risk? A spatial analysis of auto insurance rates in Los Angeles." *Journal of Policy Analysis and Management*, 26: 811–830. doi:10.1002/pam.20287; Waldron, T, 2005. "Actuarial Discrimination: City Residents Pay Up To 198% More For Car Insurance Than County Residents." Baltimore, MD: *Abell Foundation*.

A Bus Commute is Often Not a Choice

Of those who rely on public transit to get to work, many do not have a vehicle available. In Monroe County, 47% of those who use public transit to get to work live in a household without a vehicle. In the City of Rochester, 53% of public transit commuters live in households without a vehicle. For the City of Rochester, 44% of workers without a vehicle rely on public transit to commute to work. Of workers with even one vehicle available to them, almost none choose to use public transit to get to work (4% in Monroe County).

Of Monroe County workers with even one vehicle available to them, only 4% use public transit to get to work.

Car ownership, however, is expensive, with the CGR model estimating vehicle ownership costs of 20%-35% of the pre-tax earnings of a minimum-wage full-time worker.

Most households (88%) in Monroe County have access to a vehicle (74% in Rochester). This leaves 12% of households in the county (35,000 households), and 26% of households in the city (22,000 households) without access to a vehicle.

Beyond households in general, it is important to look at car access for households with at least one worker. If a household has more workers than vehicles available, then it can be thought of as a vehicle constrained. If, however, there are as many, or more, vehicles available than workers, then the household can be considered to be vehicle sufficient. Most working households in Monroe County are vehicle sufficient, with 5% lacking a vehicle, and another 6% facing vehicle constraints (13% and 9% for Rochester). Thus, there are almost as many vehicle-constrained working households as there are no vehicle households.

It is worth noting that a much greater share of overall households lack a vehicle than the share of working households, highlighting the relationship between access to a vehicle and employment. While Rochester has similar rates of no-vehicle overall households to the comparison cities, only Binghamton has as low a rate of working households without a vehicle. In fact, only 34% of Rochester's no-vehicle households contain workers (lower than every comparison city except Binghamton). This may be a sign of the barriers no-vehicle households face in accessing employment.

Table 1 – Share of Households with a Worker, by Vehicle Access Level

Geography	No Vehicle	Vehicle
Monroe County	32%	75%
Rochester	34%	75%
New York State	61%	78%
Albany	47%	78%
Buffalo	37%	74%
Binghamton	34%	68%
Syracuse	39%	75%

Source: American Community Survey, Census Bureau

A Bus Commute is a Long Commute

While average commute time is fairly low for Monroe County, there is a large difference in how long it takes to get to work depending on what mode of transportation is being used. In 2012-16 in Monroe County, it took roughly 21 minutes to get to work for those who took a car or truck, and roughly 42 minutes for those relying on public transit. The difference in time between the two modes was even larger for those living in Rochester. The difference between the two modes was also slightly larger than for the other comparison cities.

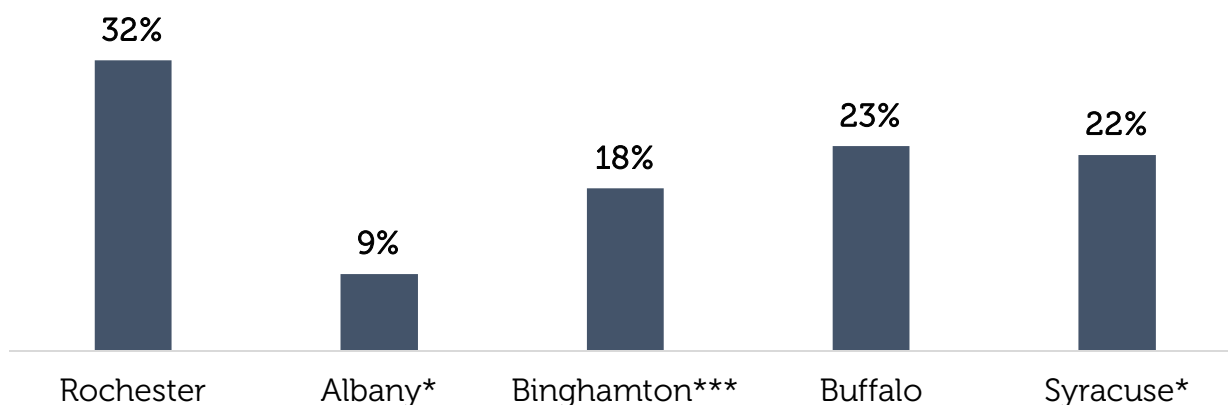
Table 2 – Average Commute Time by Mode and Geography

Geography	Average Commute Time		Difference
	Drive	Public Transit	
Monroe County	21	42	21
Rochester	19	44	25
New York State	28	52	24
Albany	18	33	14
Buffalo	20	41	21
Binghamton	17	37	20
Syracuse	18	37	20

Source: Author's Calculations, American Community Survey, Census Bureau

Of those Rochester residents who take public transit to work, almost a third face commutes of over an hour. This is a much higher share than in comparison cities.

Figure 9 – Share of Public Transit Commuters with a Commute of an Hour or More⁵



Source: American Community Survey, Census Bureau

Being Dependent on the Bus Limits Job Accessibility

While the average commute in Monroe County is slightly over 20 minutes, from Rochester, roughly 85% of the jobs in the county are accessible within a 20-minute commute by car.⁶ In contrast, by bus, from a low-income neighborhood,⁷ only 11% of the jobs in the county are accessible within a 20-minute commute.⁸ In 40 minutes, 41% of the county's jobs are accessible, and in an hour, 70% of the county's jobs are accessible. That means that a bus-dependent commuter living in a low-income neighborhood Rochester can reach fewer of the county's jobs in an hour than a car commuter can reach in 20 minutes.

A bus-dependent commuter living in Rochester can reach fewer of the jobs in Monroe County in an hour than a car commuter can reach in 20 minutes.

⁵ The stars in the figure represent the margins of error for the estimates presented: * margin of error between 20% and 35% of estimate; ** margin of error between 35% and 50% of estimate; *** margin of error greater than 50% of estimate. The lack of a star means that the margin of error is 20% or below.

⁶ See Appendix 2 for a more detailed methodology of the transit analyses.

⁷ For the purposes of this analysis, the transit accessibility of jobs from five low-income neighborhoods in Rochester was analyzed. These neighborhoods were Brown Square, Upper Falls, North Marketview Heights, South Marketview Heights, and J.O.S.A.N.A. A neighborhood's income level was based on the neighborhood's median-income level (taking into account its share of people in poverty).

⁸ This analysis assumes a 1-hour commute window at 8-9am. A brief sensitivity analysis did not show large differences based on time of day.

In terms of job accessibility, it seems that the transit system in Monroe County is set up to serve low-income neighborhoods slightly better than higher income neighborhoods.⁹ Whereas a resident from a low-income neighborhood can reach 11%, 41%, and 70% of jobs in the county in 20, 40, and 60 minutes respectively, a resident of a high-income neighborhood can reach 5%, 34%, and 59% of the jobs in the county in those same time frames. This makes sense as those that are reliant on the bus are more likely to be low-income, however it also highlights that moving to a higher-income neighborhood may further limit the accessibility of jobs for a transit-dependent individual.

Table 3 – Average Share of Monroe County Jobs Accessible by Bus, by Commute Time and Neighborhood Income Level

Neighborhood	20 min	40 min	60 min
Low-Income	11%	41%	70%
Mixed-Income	8%	32%	59%
High-Income	5%	34%	59%

Source: LEHD, GTFS

Beyond the transit system’s limitations on how far a commuter can get in a given period of time is the question of what types of jobs they can reach. For a commuter from a low-income neighborhood in the city, 52% of the jobs accessible within 20 minutes are high-income jobs.¹⁰ The fact that the majority of jobs that low-income residents have easy access to are high-income (and therefore potentially more difficult to get for low-income residents) highlights a potential spatial mismatch between low-income city residents and the types of jobs that are easily accessible.

Transportation is an Equity Issue

The state of the transportation options in Monroe County and Rochester pose an equity issue for the community, both in terms of race and income. Drivers (who are whiter and wealthier than transit riders) face easy commutes and a wide access to jobs. Those who ride the bus face very long commutes and limited access to jobs. Given these differences, the transportation system writ large reinforces the disparities that already exist in the community rather than helping to reduce them.

Additionally, given how much longer it takes to get to work by bus, and how many fewer jobs one can reach, it is unlikely that those who can afford a vehicle would

⁹ For the purposes of this analysis, the transit accessibility of jobs from five high-income neighborhoods in Rochester was analyzed. These neighborhoods were North Winton Village, Culver University East, Browncroft, ABC Streets, and Cobbs Hill. A neighborhood’s income level was based on the neighborhood’s median income.

¹⁰ Low-, mid- and high- wage definitions are based on LEHD data definitions (low=\$15,000 a year or less, mid=\$15,001-\$39,999 a year, high=over \$39,999 a year).

choose to take transit. Thus, transportation also becomes a segregating rather than integrating element in the community.

As various collective impact initiatives in the community work to address poverty and structural racism, it is critical that they consider the ways in which the transportation system contributes to or hinders their intended outcomes.

Introduction

Rochester and Monroe County are in the midst of a cross-sector, multi-year effort to dramatically reduce poverty, which is highest among children of color in the City of Rochester but affects communities across the County. This collaborative initiative, the Rochester-Monroe Anti-Poverty Initiative, has support from state and local leaders and the philanthropic community, is harnessing the efforts and ideas of our rich nonprofit sector and is exploring ways to help low-income individuals and families cross the bridge to financial self-sufficiency.

A good transportation system can be part of that equation, so it is fortunate that at the same time, the Regional Transit Service is exploring options for its future and increased effectiveness through a Reimagine RTS project.

This report aims to contribute to that body of work by exploring the relationships between residence patterns, employment, transportation, and poverty in Rochester and Monroe County. It aims to explore how changing patterns of residential settlement, locations of jobs and transportation options have collectively affected the ability of people, especially low-income people to access employment.

In particular, this report explores Monroe County and the City of Rochester in terms of:

- Where people live and how that has changed over time.
- Where people work in Monroe County, and how the distribution of these jobs has changed over time.
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CGR analyzed data from the LEHD program to understand the relationships between where people live and work. The LEHD program combines administrative data and

data from censuses and surveys. From these data, the program creates statistics on employment, earnings, and job flows at detailed levels of geography and industry and for different demographic groups. In addition, the LEHD program uses these data to create partially synthetic data on workers' residential patterns.¹¹ The LEHD data includes all employed workers in a region (both part- and full-time).

CGR analyzed LEHD data from 2002 to 2015 for all census blocks within Monroe County. The latest data from the American Community Survey (ACS) was explored to provide context, additional demographic information, and information on worker's mode of commute. CGR also used GTFS data for the Rochester-Genesee Regional Transit Authority (RGRTA) to perform the transit network accessibility analysis.

Poverty is Concentrated and Impacts Some Groups more than others

We begin with an overview of poverty. Poverty in Monroe County is primarily concentrated within the city of Rochester, with 61% of poor Monroe County residents living in Rochester. Poverty is unevenly distributed among groups, with higher rates of poverty for children and people of color. Additionally, despite their poverty status, 20% of the county's poor are employed at some level.

In 2012-2016, Rochester had 33% of its residents living in poverty (up slightly from 31% in 2007-11). This is higher than Monroe County as a whole, which had 15% of its residents living in poverty. Of Rochester residents in poverty, 17% (or roughly 11,500 people) were the working poor, meaning that they were in poverty despite being employed (though that employment may be part- or full-time). Monroe County as a whole had almost 22,000 working poor residents in 2012-16 (4% of its residents overall).

Outside of working-age adults, 4% of those over 65 in Rochester were living in poverty (7% of those in Monroe County). In contrast, 50% of children in Rochester were living in poverty (22% in Monroe County as a whole).

Poverty in Monroe County is not evenly distributed across racial and ethnic groups, with 35% of Black or African Americans and 34% of Hispanics living in poverty, while only 10% of whites live in poverty (for Rochester the numbers are higher: 39% of Blacks or African Americans, 34% of Hispanics, and 25% of whites). Most Blacks or African Americans and Hispanics living in poverty in Monroe County live in Rochester (86% of Blacks or African Americans living in poverty and 78% of Hispanics living in poverty). In contrast, only 43% of whites living in poverty live in Rochester. Similar patterns hold true for the distribution of children living in poverty in Monroe County.

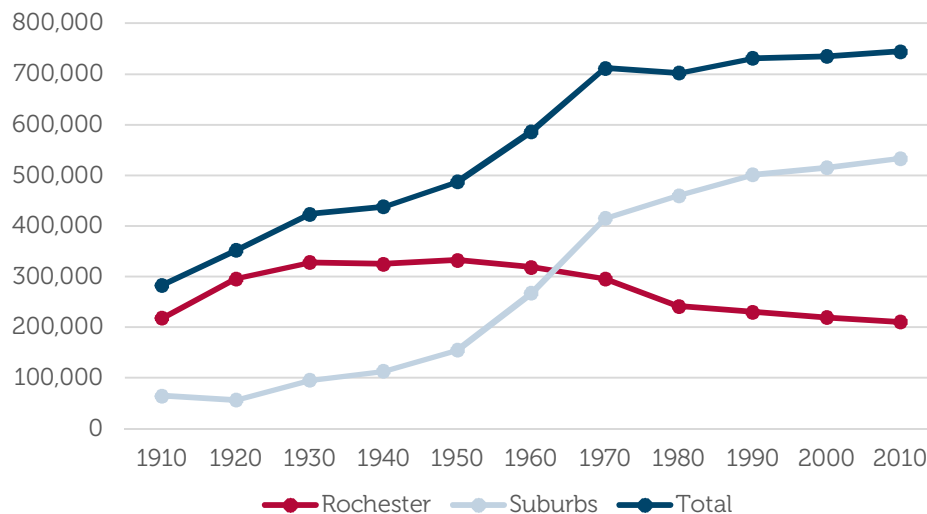
¹¹ For more information on the LEHD visit <https://lehd.ces.census.gov/>

Living & Working in Monroe County

The City to Suburb Shift

Rochester has always been the most populated municipality in Monroe County. In 1910, over three-quarters of the county's population lived within city limits.

Figure 10 – Monroe County Population by Location



Source: U.S. Census Bureau, Decennial Census

Rochester's population peaked in the 1950s at around 330,000. Since then the population has continually declined, however the countywide population has continued to increase.

This is due to the rise of the suburbs in Monroe County. Similar to other parts of the nation, the Rochester suburbs began their climb in the 1940s. The suburbs overtook the city in the 1960s, and have continued to grow. Growth in the suburbs has slowed in recent years. In 2010, about a quarter of the population of Monroe County lived in the City of Rochester, a complete swap of the city/suburb share of the county's population from 100 years prior.

This growth of the suburbs is also evident in looking at population density, or residents per square mile in the table below.

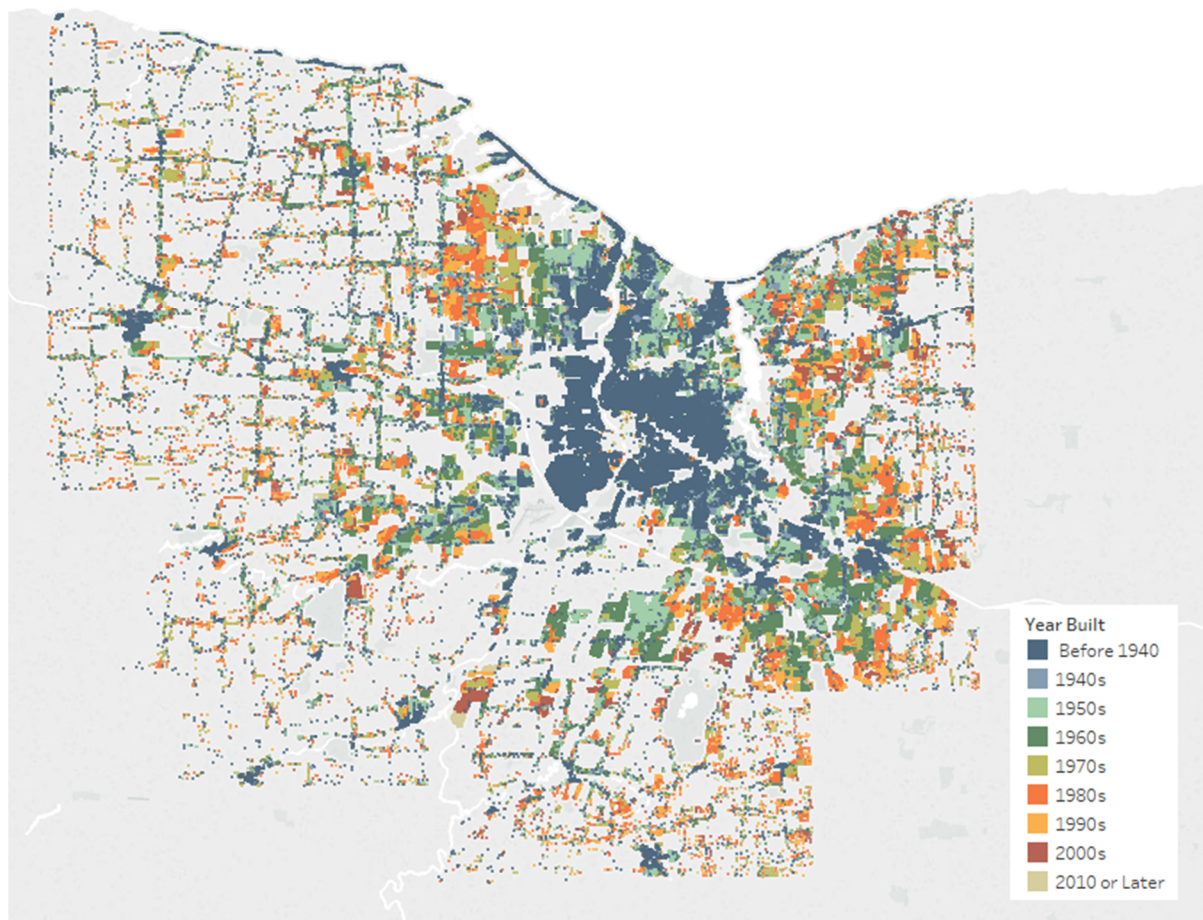
Table 4 – Population Density

	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
Rochester	6,097	8,266	9,171	9,083	9,293	8,905	8,279	6,756	6,438	6,142	5,885
Suburbs	105	91	154	182	250	431	669	741	807	830	859

Source: Author's calculations using U.S. Census Bureau data

We see that as the population grew the suburbs became denser. We also see that the density of the city (even as it has declined) is still much higher than that of the suburbs.

Figure 11 – Residential Properties in Monroe County by Year Built

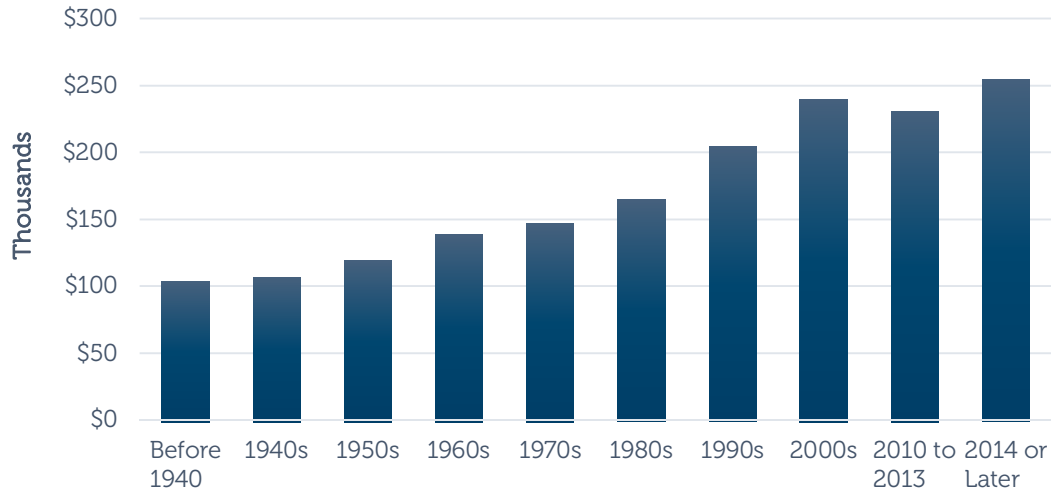


Source: 2015 Monroe County Tax Parcel Centroids

This has had an impact on the housing. By looking at the property tax data for residential properties in Monroe County, one observes that most of Rochester's housing was built before the 1940s. As the post-war population in the county increased, housing was built. The location of the new housing was successively farther

from the city center. This leaves the pattern of older housing in the center of the county and newer housing radiating outward in somewhat successive rings.

Figure 12 – Median Home Value in Monroe County by Age of Housing



Source: Census Bureau, American Community Survey

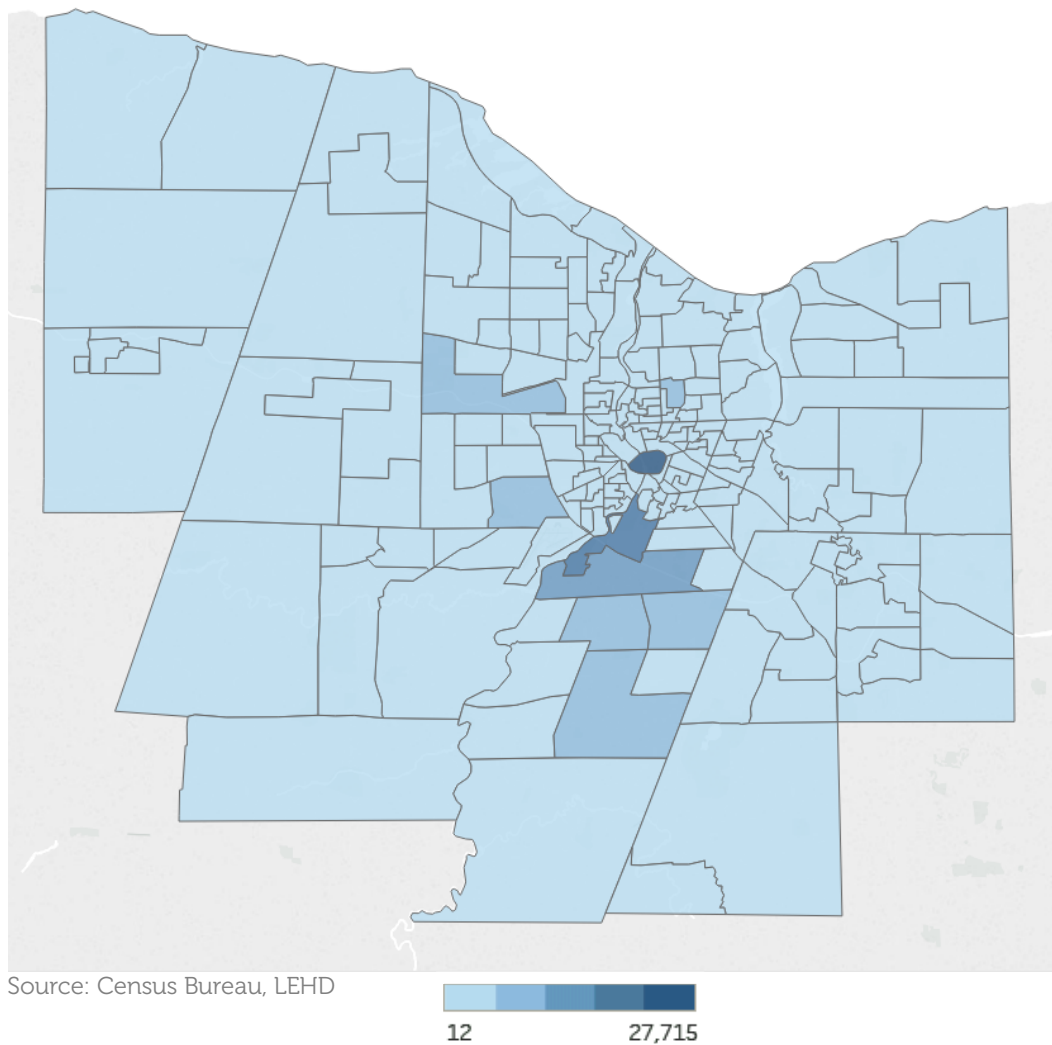
The value and cost of a home in Monroe County decreases as the age of the home increases. Homes built in or before the 1940s are roughly half the value of a contemporary build. The city has thus become a place that has much more affordable housing stock for those looking for housing than the suburbs.

However, many low-income residents may rent instead of owning their own property. Half of the rental housing in Monroe County is located within the City of Rochester and 64% of all housing in the City of Rochester is rental housing as compared to 25% in the suburbs. There is considerable variation within the suburbs. Rental housing makes up around 40% for Brighton, East Rochester and Sweden. Riga and Rush have the smallest shares (9%). This highlights the extent to which the availability of rental housing may impact where low-income residents may choose to live.

Most People Work in Rochester, Henrietta, and Greece

Monroe County had about 288,000 workers in jobs in 2015. Of these, 40% were located within the City of Rochester. Indeed, Rochester is the major hub of employment in Monroe County. Henrietta had 11% and Greece and Brighton another 8% and 7%, respectively.

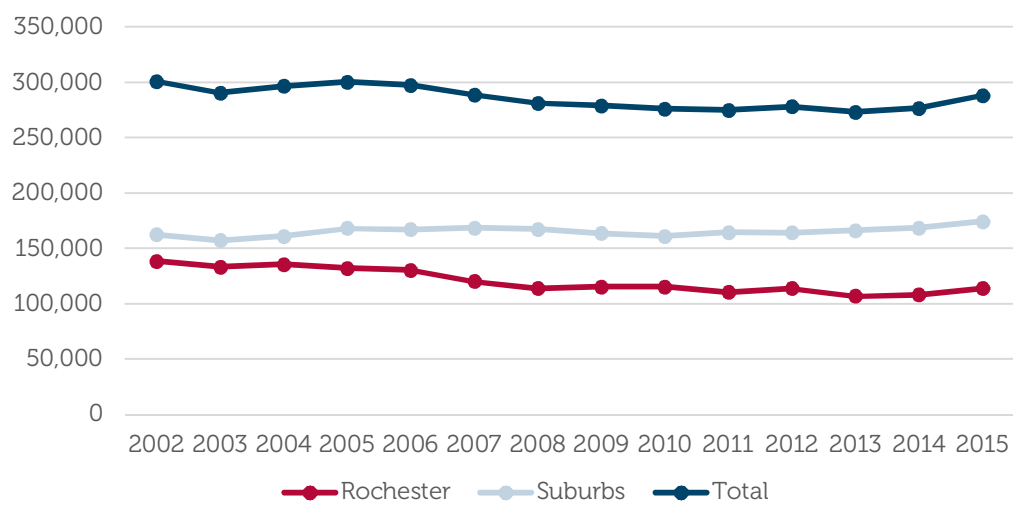
Figure 13 – Number of Jobs by Census Tract, Monroe County, 2015



Overall, jobs¹² in Monroe County declined 4% since 2002, and 18% in the City of Rochester. In contrast, jobs in Henrietta increased 25%, and the town of Webster saw an even larger increase (38%) of its jobs from roughly 9,000 in 2002 to 12,600 in 2015. This highlights that while the county's overall job loss has not been severe, where those jobs are located has shifted. As the figure below illustrates, from 2002 to 2015, the share of county jobs located in the suburbs grew, while the share in the city declined.

¹² In this section, all references to jobs mean filled jobs, not including any unfilled positions.

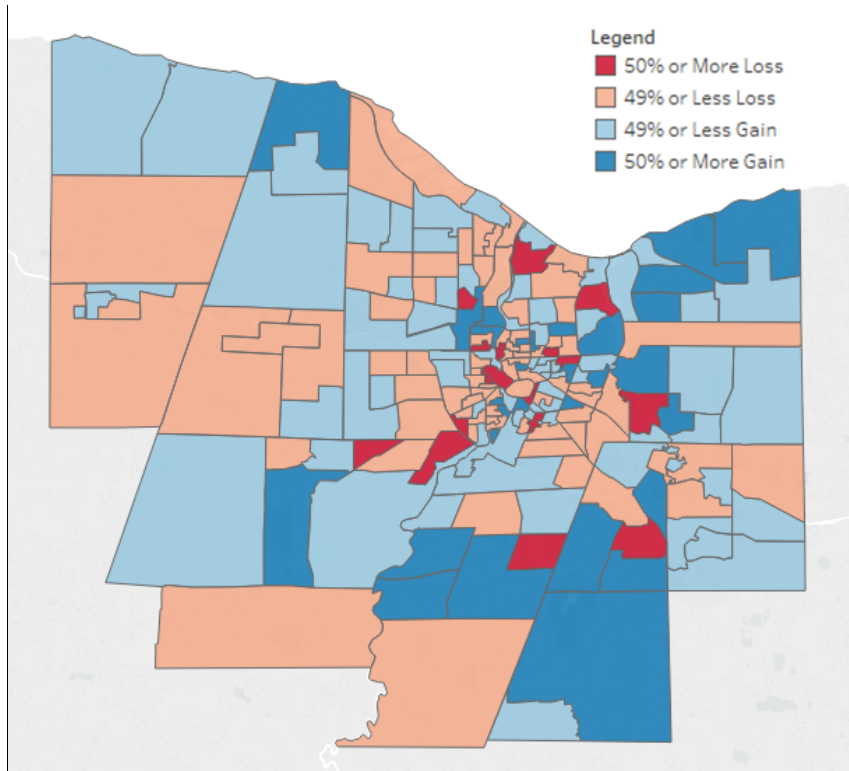
Figure 14 – Monroe County Jobs by Location



Source: Census Bureau, LEHD

The figure below illustrates these changes at the census tract level, with many of the tracts on the County periphery seeing gains in jobs from 2002 to 2015, while more central County tracts saw declines. This city to suburb shift in jobs highlights that Monroe County’s job locations have become less geographically concentrated.

Figure 15 – Change in Jobs

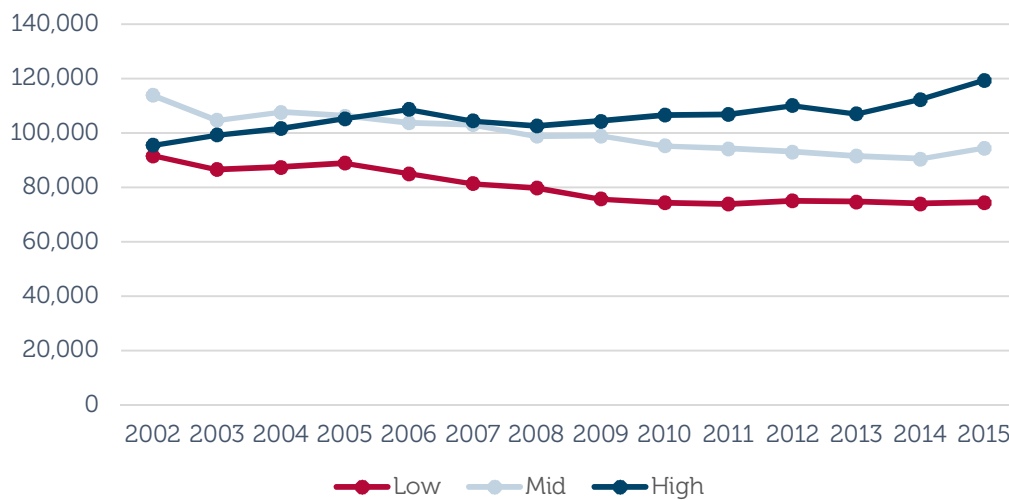


Source: Census Bureau, LEHD

Low- and Mid-Income Jobs Declined, Higher Earning Jobs Increased

While the *location* of jobs matters, it is also important to note the changes in the earning levels of jobs people are working in. While Monroe County had a 4% decrease in jobs overall since 2002, it had a 19% decrease in low-income jobs and a 17% decrease in mid-income jobs, while the number of high-income jobs increased by 25% in the same time period. This resulted in high-income jobs making up 41% of the total in 2015 (up from 32%), with mid- and low-income jobs making up 33% and 26% of all positions respectively (down from 38% and 30%). It is important to note that LEHD defines low-income jobs as those that earn \$15,000 or less a year, mid-income jobs as those that earn between \$15,001 a year and \$39,999 a year, and high-income jobs as those that earn more than \$39,999 a year.

Figure 16 – Jobs in Monroe County by Level of Income



Source: Census Bureau, LEHD

Table 5 – Jobs in Monroe County by Level of Income

	2002	2015	Change
Low	91,613	74,437	-19%
Mid	113,854	94,461	-17%
High	95,482	119,380	25%
Total	300,949	288,278	-4%

Source: Census Bureau, LEHD

This same pattern, but with larger impact sizes, holds true for Rochester City, which with an overall decline of 18% in its jobs from 2002 to 2015, had a 29% decrease in the number of low-income jobs (a loss of roughly 9,000), a 32% decrease in the number of

mid-income jobs (a loss of roughly 17,000) and a 4% increase in the number of high-income jobs (a gain of slightly less than 2,000).

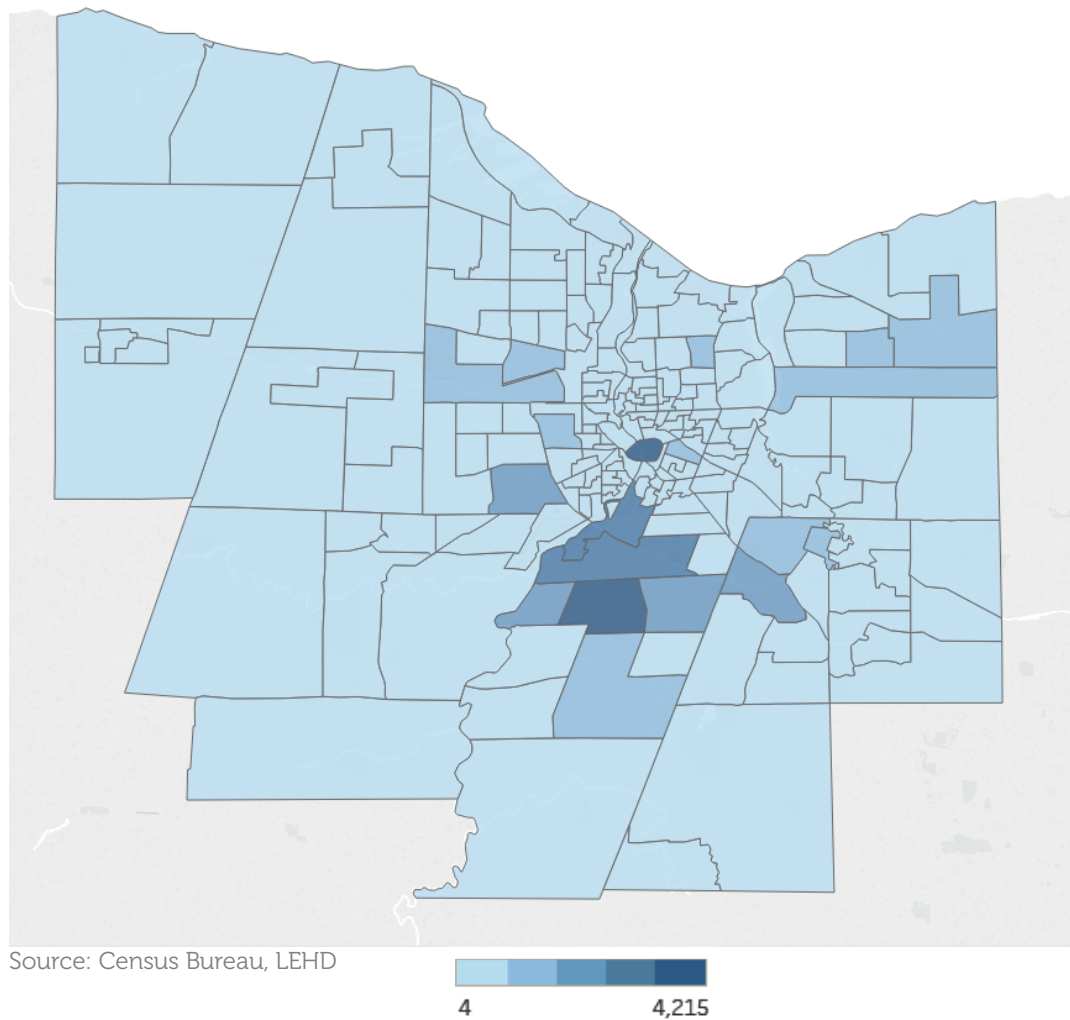
The rest of Monroe County experienced an overall 7% growth in its number of jobs (a growth of slightly under 12,000). This growth was driven entirely by the 51% increase in high-income jobs (an increase of almost 22,000). The number of low- and mid-income jobs available in the rest of the county decreased in this time period (a decrease of 13% for low-income and 4% for mid-income jobs, for a collective loss of about 10,000).

In Rochester, high-income jobs made up 48% of the total in 2015 (in contrast to 38% in 2002). In 2015, only 20% of those employed in Rochester worked in low-income jobs, whereas 30% of those employed in the balance of the county held low-income jobs.

Of employed Rochester residents in 2015, 31% were in low-income jobs, 43% were in mid-income jobs, and 26% were in high-income jobs. The balance of the county had 24% of its employed residents in low-income jobs, 29% in mid-income jobs, and 46% in high-income jobs.

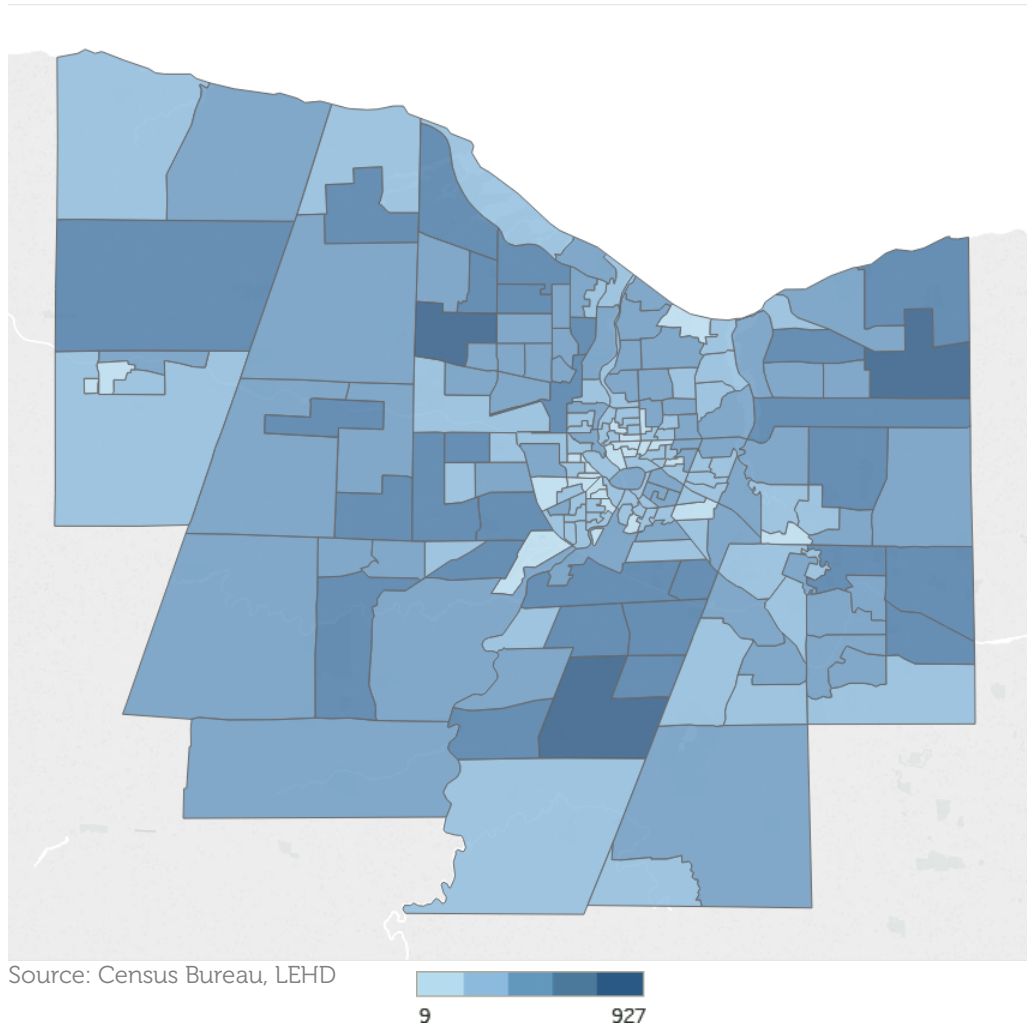
In terms of the distribution of the workforce across the county, 39% of mid-income workers in Monroe County work in Rochester, 12% in Henrietta, 8% in Greece and 7% in Brighton. For high-income workers in the county, 46% work in Rochester, 11% in Henrietta, and 7% in Brighton. For low-income workers, 30% work in Rochester, with another 12% working in Henrietta, and another 10% working in Greece. This highlights that 70% of low-income workers in 2015 worked outside of Rochester (a slight increase from 66% in 2002). See the figure below for the distribution of low-income jobs across the county.

Figure 17 – Number of Low-Income Jobs by Census Tract of Job
Monroe County, 2015



While low-income jobs are concentrated in a few tracts in the City and Henrietta, the workers who work those jobs often commute from elsewhere in the county. The figure below shows the distribution of low-income workers by their tract of residence. As is evident from the figures, low-income workers' residences are much more widely scattered across the county than the locations of their jobs.

Figure 18 – Number of Low-Income Workers by Census Tract of Residence
Monroe County, 2015



Disappearing Jobs in Low-Wage Sectors

The loss of low- and mid-wage work that occurred across the county from 2002 to 2015 is reflected in the changes in the employment levels of low-wage sectors across the county. These include the retail and hospitality sectors.

Retail

Retail sector jobs in Monroe County decreased from about 45,000 in 2002 to about 40,000 in 2015, a 12% decrease. The highest number of jobs in the retail sector were in Henrietta, Greece and the City of Rochester. They all experienced the decline and then some rebound, but overall, while Greece experienced the larger percent change, Henrietta lost the most jobs.

Table 6 – Retail Jobs

	2002	2015	Change
Henrietta	9,170	8,177	-11%
Greece	7,807	6,618	-15%
Rochester	6,183	5,876	-5%
Monroe County	45,293	39,757	-12%

Source: Census Bureau, LEHD

Hospitality

Hospitality sector (Accommodation & Food Services) jobs increased 15% in the county but declined 21% in Rochester. As a result of this shift, city residents who had worked in these types of jobs would have had to shift their commute out to the suburbs in order to work at similar jobs.

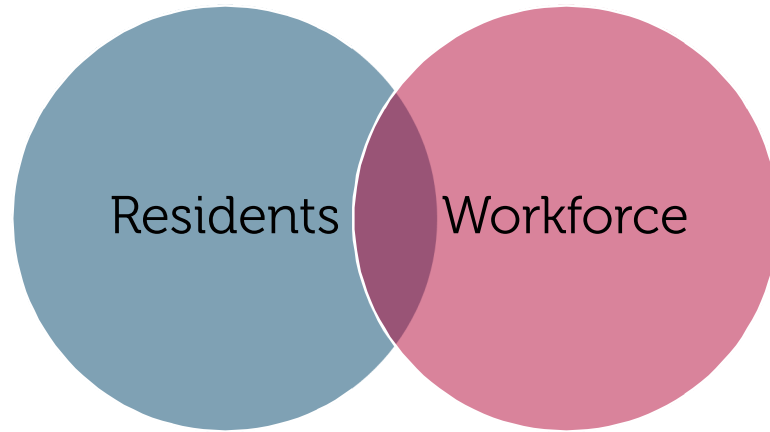
Table 7 – Hospitality Jobs

	2002	2015	Change
Henrietta	3,318	4,203	27%
Greece	2,924	3,536	21%
Rochester	8,850	7,002	-21%
Monroe County	24,751	28,369	15%

Source: Census Bureau, LEHD

Commuting Across Municipalities

To understand the relationship between where people live and where people work, it is helpful to think of individuals within their roles. They are both residents of a municipality and part of the workforce of a municipality (though it may not be the same municipality). Some of a municipality's residents are also part of its workforce, meaning they work and live in the same municipality. The remainder of that workforce is made up of commuters from outside the municipality.



No Municipality is an Island

Suppose we have a case where all the workforce needs are filled by a municipality's residents. This municipality would be self-sufficient and would have no need to be connected with any other municipality. On the other extreme, imagine the case where the workforce is supplied entirely by non-residents, while all the municipality's residents find work elsewhere. This type of municipality is totally reliant on its connections.

Municipalities in Monroe County lie somewhere between these two extremes. One in four jobs in Monroe County are filled by those who live and work in the same municipality. Otherwise stated, 76% of workers rely on traveling to other municipalities in order to find employment. City residents make up a larger share of their own workforce (32%). This is probably due to the preponderance of jobs located within the Rochester city limits. Only 49% of Rochester's employed residents work outside the city. This is far lower than the rest of the county (Henrietta is the next lowest with 71% of its residents commuting elsewhere for work). Overall, 80% of non-city residents commute to a different municipality in order to work.

Table 8 – Share of Residents who Commute Outside Their Municipality, 2015

	Total Residents Who Work	Jobs Filled by Residents	Residents Who Work Outside	Share of Residents Who Work Outside
Brighton	13,953	1,749	12,204	87%
Chili	13,033	929	12,104	93%
Clarkson	2,398	136	2,262	94%
East Rochester	2,576	234	2,342	91%
Gates	12,362	1,631	10,731	87%
Greece	41,911	8,029	33,882	81%
Hamlin	3,578	238	3,340	93%
Henrietta	15,477	4,431	11,046	71%

Irondequoit	22,854	2,581	20,273	89%
Mendon	3,490	669	2,821	81%
Ogden	8,770	892	7,878	90%
Parma	6,634	801	5,833	88%
Penfield	15,283	1,811	13,472	88%
Perinton	17,472	3,488	13,984	80%
Pittsford	10,188	1,483	8,705	85%
Riga	2,234	246	1,988	89%
Rochester	71,160	36,555	34,605	49%
Rush	1,392	98	1,294	93%
Sweden	3,929	846	3,083	78%
Webster	17,684	3,551	14,133	80%
Wheatland	1,863	221	1,642	88%
Monroe County	288,241	70,619	217,622	76%

Source: Census Bureau, LEHD

Note: Excludes the 37 workers whose municipality of residence was unknown.

For Rochester, while overall, 32% of employees who work in the city also live in the city, the share of resident-filled jobs differs by the income level of the job. For low-income jobs, almost half (45%) are filled by residents. Similarly, 43% of mid-income jobs are filled by residents. In contrast, only 20% of high-income jobs in the city are filled by city residents.

Getting To Work

The interconnectedness of municipalities' workforces and residents across the county requires workers to travel. In order to support this process (and the resulting employment it generates), there is a need for a robust transportation network that assists workers to get from home to work as easily as possible. While there are multiple modes that workers can choose to take to work, currently, Monroe County only provides a truly robust transportation network for those that drive, when considering factors such as commute times and access to a wide variety of jobs. In 2016, Rochester City and RMAPI (Rochester-Monroe Anti-Poverty Initiative) designed and fielded a door-to-door survey of a Pilot District catchment area in order to build on previous public outreach efforts and better understand residents' needs and concerns regarding neighborhood services and employment barriers.¹³ The survey asked respondents to list the biggest issues that people faced in their neighborhood in finding and keeping a job. In response, 54% of respondents listed transportation as an

¹³ The catchment area includes the neighborhoods of Beechwood, Bensonhurst, EMMA, Marketview Heights, and a portion of CONEA.

issue (with 31% listing it as a major issue).¹⁴ Low-income respondents were more likely to view transportation as a barrier to employment, with 63% listing it as a barrier.¹⁵

Most People Drive

Most people (84%) in Monroe County get to work by driving alone. Only 3% reported commuting to work via public transit. While this overall pattern holds true for Rochester City, a slightly larger proportion of residents uses public transit to get to work with 71% of commuters reporting driving alone and 9% reporting using public transit to get to work. Rochester has a smaller share of workers getting to work via public transit than any of the comparison cities other than Binghamton.

Table 9 – Share of Commuters by Mode and Geography¹⁶

Geography	Mode					
	Drive Alone	Carpool	Public Transit	Walk	Other	
Monroe County	84%	8%	3%	3%	1%	
Rochester	71%	11% *	9%	7%	2%	
New York State	55%	7%	29%	7%	2%	
Albany	65%	* 8%	** 14%	11%	2%	*
Buffalo	69%	11%	12%	6%	2%	
Binghamton	72%	* 10%	*** 9%	7%	3%	*
Syracuse	66%	10% *	10%	11%	2%	

Source: American Community Survey, Census Bureau

Of those who rely on public transit to get to work, many do not have a vehicle available. In Monroe County, 47% of those who use public transit to get to work live in a household without a vehicle. In the City of Rochester, 53% of public transit commuters live in households without a vehicle.

Of workers ages 16 and up without a vehicle available in Monroe County, 33% rely on public transit to get them to work. For the City of Rochester, 44% of workers without a vehicle rely on public transit to commute to work. Of workers with even one vehicle available to them, almost none used public transit to get to work (4% in Monroe County).

¹⁴ Survey data is available interactively at:

<https://public.tableau.com/profile/office.of.innovation#!/vizhome/shared/ZG2BXQ37M>

¹⁵ Mayor's Office of Innovation & Strategic Initiatives, Pathways to Prosperity Survey Report, May 2016.

¹⁶ The stars in the figure represent the margins of error for the estimates presented: * margin of error between 20% and 35% of estimate; ** margin of error between 35% and 50% of estimate; *** margin of error greater than 50% of estimate. The lack of a star means that the margin of error is 20% or below.

Table 10 – Share of Workers who Use Public Transit to Commute, by Number of Vehicles Available

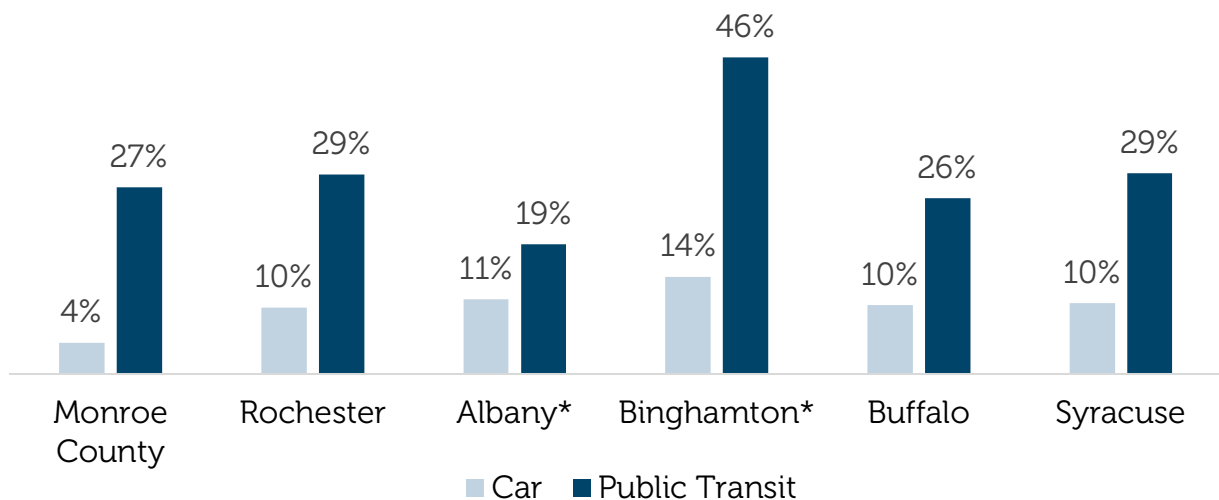
Geography	No Vehicle	1 Vehicle	2 Vehicles	
Monroe County	33%	4%	1%	
Rochester	44%	7%	3%	*
New York State	68%	31%	12%	
Albany	51%	12%	5%	*
Buffalo	47%	9%	3%	*
Binghamton	36%	7%	3%	***
Syracuse	39%	6%	3%	**

Source: American Community Survey, Census Bureau

Transit Riders are More Likely to be in Poverty

In terms of income, 91% of Monroe County residents who drive alone to work are at or above 150% of the federal poverty level. Only 57% of those who commute via public transit are at that income level. This highlights that slightly less than half of those who commute via public transit earn below 150% of the poverty threshold and thus have limited financial means (27% are living in poverty) and are likely reliant on this less expensive mode of transportation in order to be able to access employment. Like other comparison cities, a far larger share of transit commuters are in poverty when compared with those that drive alone to work.¹⁷

Figure 19 – Share in Poverty, by Mode of Transit to Work



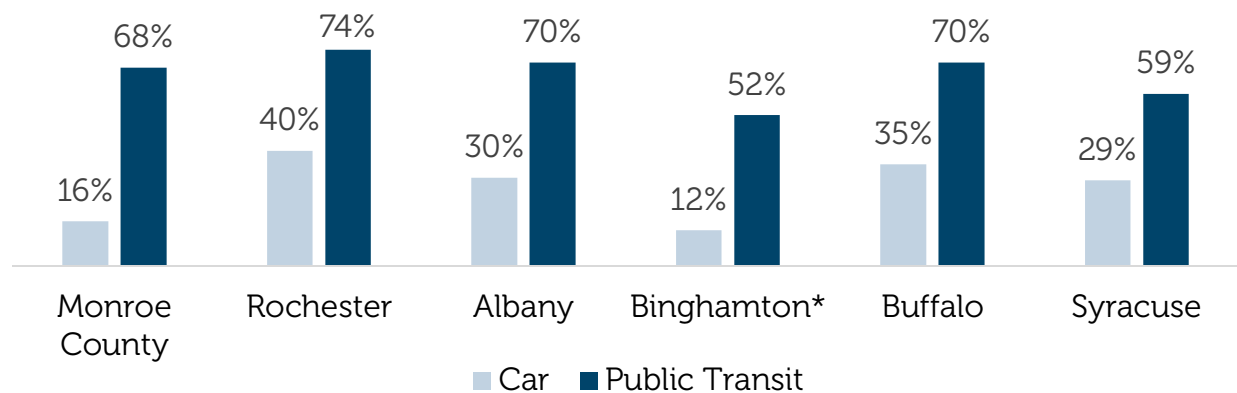
Source: American Community Survey, Census Bureau

¹⁷ See Appendix 2 for additional data

Transit Riders are More Likely to be People of Color

In terms of race and ethnicity, while the majority of people of all races and ethnicities in Monroe County commute by car, 13% of African American or Black residents and 7% of Hispanic residents commute by public transit, while only 1% of white residents do the same. From another perspective, about half of those commuting via public transit are African American or Black, while about 32% are white. That means that 68% of transit riders in Monroe County are people of color, in comparison to 16% of drivers. For Rochester, 74% of transit riders are people of color, compared to 40% of drivers. The majority of drivers are white, while the majority of transit commuters are not.¹⁸

Figure 20 – Share Non-white, by Mode of Transit to Work



Source: American Community Survey

Driving a Car

The High Cost of Owning a Car

While owning a car in Monroe County can greatly reduce the amount of time spent commuting, it is a significant financial expense. A 2016 analysis¹⁹ estimated that in addition to the cost of the car, New York car owners spent an average of \$17,697 over 5-years, or an average of \$3,539 per year, based on an average car price of \$23,407. Another 2016 analysis²⁰ estimated that after the cost of the vehicle itself, car owners in New York State paid \$1,392 in one-time purchase costs (car sales tax and title fees) and another \$3,079 per year in ownership and usage costs (registration fees, car insurance, gas, and car maintenance costs).

¹⁸ See Appendix 2 for additional data

¹⁹ <https://www.insurance.com/auto-insurance/most-least-expensive-states-car-ownership.html>

²⁰ https://www.huffingtonpost.com/gobankingrates/most-and-least-expensive_b_9516846.html

Many of these costs are actually higher for people from low-income communities. Insurance rates in those communities tend to be higher.²¹ Similarly, those with weaker credit histories face less favorable loan terms when looking to buy a vehicle. CGR estimated costs to try to account for some of the circumstances of lower-income car buyers in the Rochester area.

The purchase of a reliable older vehicle at \$7,500, comes with the following costs:

- \$3,001 annual loan payment²²
- \$1,648 annual insurance premium²³
- \$980 in fuel costs²⁴
- \$683 in car maintenance, repairs, and tires²⁵
- \$454 in license, registration, taxes, and other costs²⁶

Together this totals \$6,766/year or \$564/month for the first three years of car ownership. Once the car is paid for, ownership costs are still estimated at \$3,765/year or \$314/month. For an individual making minimum wage (\$10.40/hour), or \$1664/month, purchasing a car requires 34% of pre-tax earnings, and even once purchased, the car still takes 19% of monthly pre-tax earnings, a significant share given other essential living costs such as food, clothing, and housing.

While working individuals may make other choices in order to try to lower these costs, these estimates are based on car owners with clean records and good credit. These costs may be significantly higher for those with less stellar qualifications.

Most Households, Especially Working Households, Own a Car

Most households (88%) in Monroe County have access to a vehicle. This rate is lower for the City of Rochester, where only 74% of households have access to a vehicle. This leaves 12% of households in the county (35,000 households), and 26% of households in the city (22,000 households) without access to a vehicle. Rochester's rate of

²¹ Angwin, Larson, Kirchner, and Mattu, 2017, "Minority Neighborhoods Pay Higher Car Insurance Premiums Than White Areas With the Same Risk", *ProPublica* and *Consumer Reports*. April 5, 2017. <https://www.propublica.org/article/minority-neighborhoods-higher-car-insurance-premiums-white-areas-same-risk>; Ong, P. M. and Stoll, M. A., 2007, "Redlining or risk? A spatial analysis of auto insurance rates in Los Angeles." *Journal of Policy Analysis and Management*, 26: 811–830. doi:10.1002/pam.20287; Waldron, T, 2005. "Actuarial Discrimination: City Residents Pay Up To 198% More For Car Insurance Than County Residents." Baltimore, MD: *Abell Foundation*.

²² Assume a 3-year used-car loan for someone with a FICO score of 700+. This estimate includes 8% NY sales tax on the purchase and 7% interest rate on the loan.

²³ Average of estimated rate for a full-coverage policy for a woman in her 30s in the five poorest zip codes in Monroe County. This rate assumes a clean record and good credit.

²⁴ 10,000 miles at \$2.45/gallon and a car that gets 25 miles per gallon in fuel usage.

²⁵ AAA recommended small sedan rate.

²⁶ AAA small sedan estimate.

households without access to a vehicle is similar to that of the comparison cities, which ranged from having 23% to 29%.

Table 11 – Share of Households by Number of Vehicles and Geography

Geography	No Vehicle	1 Vehicle	2 Vehicles	3+ Vehicles
Monroe County	12%	37%	37%	14%
Rochester	26%	45%	23%	6%
New York State	29%	33%	26%	12%
Albany	26%	45%	23%	6%
Binghamton	23%	44%	24%	9%
Buffalo	29%	44%	21%	6%
Syracuse	28%	44%	22%	6%

Source: American Community Survey, Census Bureau

Beyond households in general, it is important to look at car access for households with at least one worker. If a household has more workers than vehicles available, then it can be thought of as a vehicle-constrained household. If, however, there are as many, or more, vehicles available than workers, then the household can be considered to be vehicle-sufficient. Most working households in Monroe County are vehicle sufficient, with 5% lacking a vehicle, and another 6% facing vehicle constraints. Thus, there are almost as many vehicle-constrained households as there are no vehicle households. This number is higher for city residents where 13% of working households lack access to a vehicle, and another 9% are vehicle constrained. In general, Rochester has a lower number of working households that lack a vehicle or are vehicle constrained.

Table 12 – Share of Working Households by Vehicle Constraint Level

Geography	No Vehicle	Vehicle-Constrained	Vehicle-Sufficient
Monroe County	5%	6%	89%
Rochester	13%	9%	77%
New York State	24%	12%	64%
Albany	18%	12%	70%
Buffalo	17%	11%	72%
Binghamton	13%	11%	76%
Syracuse	17%	11%	72%

Source: American Community Survey, Census Bureau

It is worth noting that a much greater share of overall households lack a vehicle than the share of working households, highlighting the relationship between access to a vehicle and employment. While Rochester has similar rates of no-vehicle overall households to the comparison cities, only Binghamton has as low a rate of working

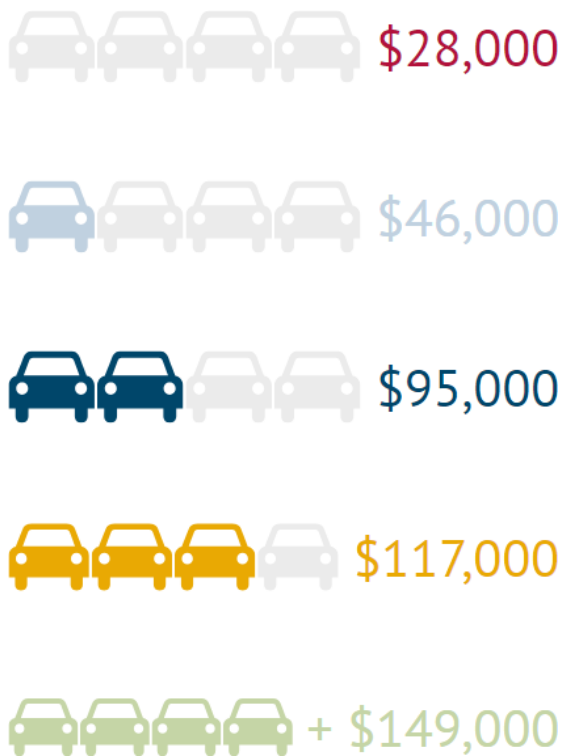
households without a vehicle. In fact, only 34% of Rochester's no-vehicle households contain workers (lower than every comparison city except Binghamton). This may be a sign of the barriers no-vehicle households face in accessing employment.

Table 13 – Share of Households that Contain a Worker by Vehicle Access Level

Geography	No Vehicle	Vehicle
Monroe County	32%	75%
Rochester	34%	75%
New York State	61%	78%
Albany	47%	78%
Buffalo	37%	74%
Binghamton	34%	68%
Syracuse	39%	75%

Source: American Community Survey, Census Bureau

Figure 21 – Average Household Income by Number of Vehicles Available



Source: CGR Calculations using 2012-16 ACS PUMS

More Money, More Cars

There is a relationship in Monroe County between household income and the number of vehicles available to the household.

In Monroe County, those households without a vehicle available make \$28,000 a year on average. As the number of vehicles available to the household increases, so does the level of household income. Those with one vehicle have an average household income of \$46,000. Households with two have an income of \$95,000.

This highlights how both the need for and the ability to earn income increases with the number of vehicles. A higher level of income is needed to support the cost of vehicle ownership. However, the ability of the household to generate income also increases when more workers are able to get to work

Taking the Bus

Public Transit System Costs and Estimated Usage

In comparison to car ownership, taking the bus is cheap. A monthly adult pass from RTS costs \$56 per month (for a total of \$672 a year). For those who use public transit as their method of commuting to work, it offers a much lower cost option than owning a car (only 3.4% of pre-tax minimum-wage monthly earnings).

Beyond its cost, there is the question of a transit system's ridership. The number of trips people take on the bus (given an area's population) can give a sense of its usage and popularity.

Table 14 – Public Transit System Information by Geography

City	Agency Name	2016 Annual Unlinked Passenger Bus Trips	Annual Trips Per Capita	2016 Total Fare Revenues per Unlinked Trip (\$)	2016 Avg. Bus Trip Length (miles)
Rochester, NY	Regional Transit Service, Inc. and Lift Line, Inc.	16,561,701	24	\$1.43	3.21
Albany, NY	Capital District Transportation Authority	16,642,528	33	\$1.04	3.54
Buffalo, NY	Niagara Frontier Transportation Authority	22,680,510	23	\$1.39	3.44
Binghamton, NY	Broome County Department of Public Transportation	2,054,806	10	\$1.16	3.55
Syracuse, NY	CNY Centro, Inc.	10,742,944	17	\$1.37	3.73

Source: Federal Transit Administration, December 2017 Adjusted National Transit Database

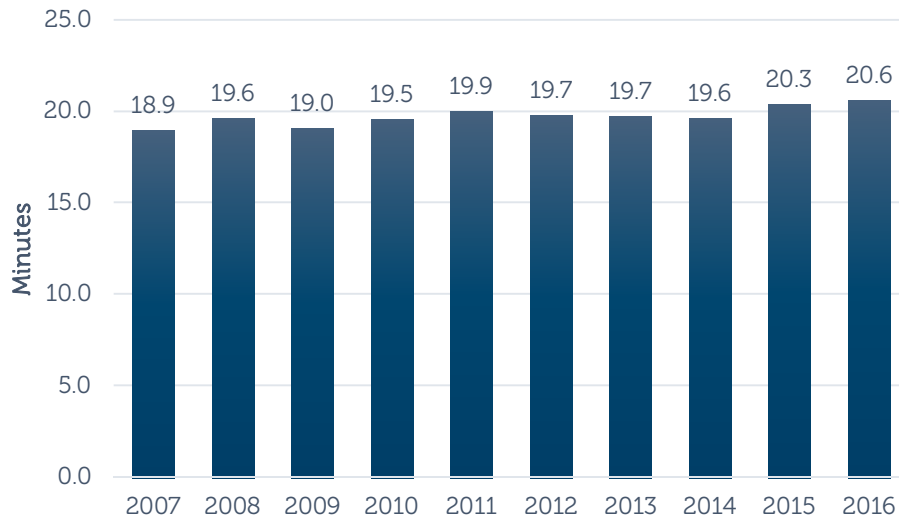
Note: Only bus transit is included in the table above. This excludes other modes of public transit used in the cities above including commuter buses, demand response, demand response taxi, light rail, and vanpool. An unlinked passenger trip is defined as the number of passengers who board public transit vehicles. Passengers are counted each time they board a vehicle, no matter how many vehicles they use to travel from origin to destination. The per capita number is based on the property service area population reported by the transit authority to the Federal Transit Authority. Total Fare Revenues include fare revenues generated from all sources including supplementary contracts, thus the total fare revenue per unlinked trip differs from an agency's bus fare for passengers (which for the Regional Transit Service in Rochester is \$1 per unlinked ride).

On a per-resident basis, Rochester has an average of 24 unlinked bus trips taken per resident per year. Thought about in another way, for every person in the city, RGRTA sees 24 bus trips per year (though some of those may be part of the same ride if it required a transfer). In contrast, Buffalo and Albany have an average of 33 and 23 bus trips respectively taken per resident. Additionally, of the five comparison cities, Rochester generated the most total fare revenue in proportion to the number of unlinked trips it provided (\$1.43).

How Long it Takes to Get to Work Depends on Whether It's by Car or Bus

Residents of Monroe County enjoy a very low commute time. In 2016, the average resident's commute time was slightly under 21 minutes. Commute times have crept upwards over the last ten years (the 2012-16 average was 20 minutes).

Figure 22 – Average Commute Time in Monroe County - All Modes



Source: American Community Survey, Census Bureau

Monroe County and Rochester both averaged a 20-minute commute time from 2012 to 2016. This was similar to Buffalo, but slightly longer than the average commute times for comparison cities over that time period.

Table 15 – Average Commute Time by Geography - All Modes

Geography	2012-16 Average Commute Time (min)
Monroe County	20.0
Rochester	20.0
New York State	32.6
Albany	18.7
Buffalo	20.9
Binghamton	17.8
Syracuse	18.4

Source: American Community Survey, Census Bureau

While average commute time across residents is fairly low for Monroe County (20 minutes), there is a large difference in how long it takes to get to work depending on what mode of transportation is being used. In 2012-16 in Monroe County, it took roughly 21 minutes to get to work for those who took a car or truck, and roughly 42 minutes for those relying on public transit. The difference in time between the two modes was even larger for those living in Rochester. The difference between the two modes was also slightly larger than for the other comparison cities.

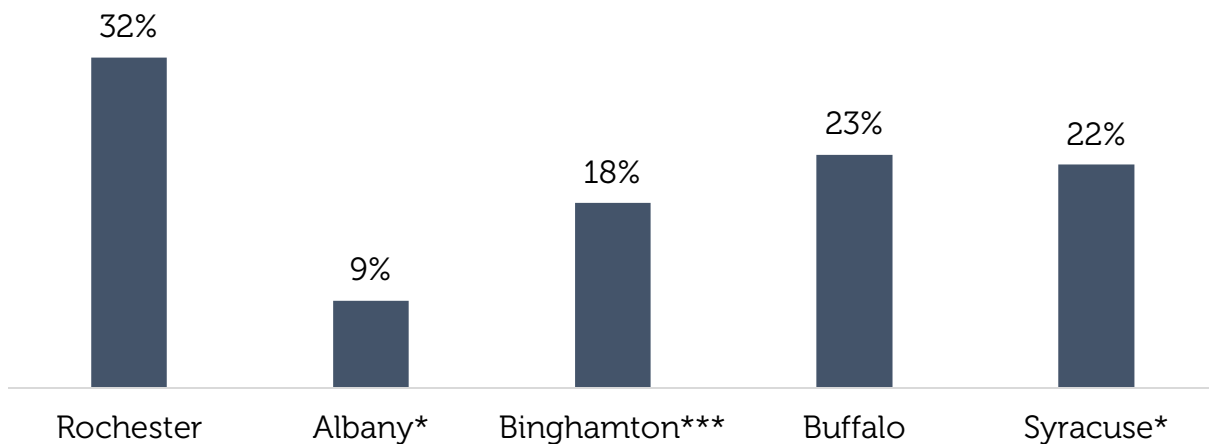
Table 16 – Average Commute Time by Mode and Geography

Geography	Average Commute Time		Difference
	Drive	Public Transit	
Monroe County	21	42	21
Rochester	19	44	25
New York State	28	52	24
Albany	18	33	14
Buffalo	20	41	21
Binghamton	17	37	20
Syracuse	18	37	20

Source: Author's Calculations, American Community Survey, Census Bureau

Of those Rochester residents who take public transit to work, almost a third face commutes of over an hour. This is a much higher share than in comparison cities.

Figure 23 – Share of Public Transit Commuters with a Commute of an Hour or More



Source: American Community Survey, Census Bureau

The Bus System's Reach Limits the Accessibility of Jobs

Being reliant on the transit system limits the accessibility of jobs. For those who rely on the bus to get to work, there is a tradeoff between the time of their commute and the number of jobs that are accessible from their neighborhood by public transit.

CGR used ESRI Network Analyst tool in combination with the GTFS dataset on transit networks, the LEHD datasets on job locations, and Census data on median-income and poverty rates to analyze the accessibility of jobs from city neighborhoods. For the purposes of the analysis, CGR selected 15 sample neighborhoods (five low-income, five mixed-income, and five high-income). Neighborhood income level was determined using neighborhood median-income level, though neighborhood poverty rates were also considered. The neighborhoods that CGR selected for this analysis are the following:

- Low-Income: Brown Square, Upper Falls, North Marketview Heights, South Marketview Heights, and J.O.S.A.N.A.
- Mixed-Income: 14621, South Wedge, 19th Ward, Maplewood, and Upper Monroe
- High-Income: North Winton Village, Culver University East, Browncroft, ABC Streets, and Cobbs Hill.

For each of these neighborhoods a central physical starting street address was chosen from which the reach of the public transit network was analyzed. For each neighborhood the number of destinations (jobs) that were accessible by public transit in 20, 40, and 60 minutes of commuting was calculated weighting each destination by the number of jobs at that location.

Even 60 Minutes by Bus Can't Beat 20 Minutes by Car

As previously mentioned, the average commute in Monroe County is slightly over 20 minutes. On average, from Rochester, 85% of the jobs in the county are accessible within a 20-minute commute by car.²⁷ With a 40-minute car commute, 100% of the County's jobs are accessible. In contrast, by bus, on average only 8% of the jobs in the County are accessible within a 20-minute commute.²⁸ In 40 minutes, 36% of the County's jobs are accessible, and in an hour, 63% of the County's jobs are accessible. That means that a

²⁷ This is an average of the accessibility of jobs from the 15 neighborhoods included in the transit analysis. For a more detailed methodology of the transit analyses see Appendix 2.

²⁸ This analysis assumes a 1-hour commute window at 8-9 am. A brief sensitivity analysis of a 40-minute commute in the 10pm-11pm time window did not show large differences based on time of day. It is worth noting that we have no information related to time-of-day of the jobs, all were included regardless of time of day. Additionally, this analysis defines access as the process of being able to reach a given destination, and does not address the additional potential difficulty of returning from the destination.

bus-dependent commuter living in Rochester can reach fewer of the County's jobs in an hour than a car commuter can reach in 20 minutes.

Table 17 – City Neighborhood Average Share of Monroe County Jobs Accessible, by Commute Time and Mode of Transportation

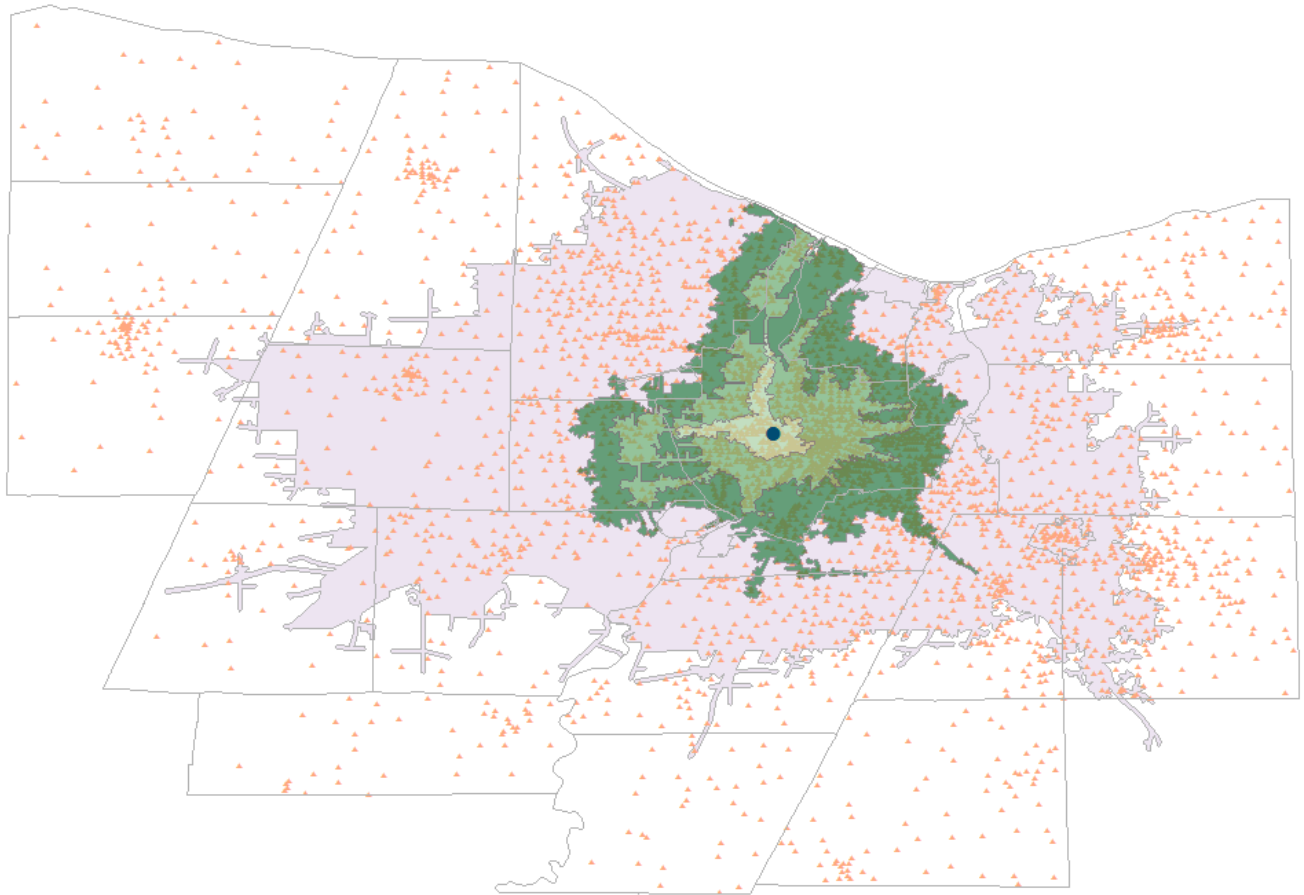
	Bus	Car
20 Minutes	8%	85%
40 Minutes	36%	100%
60 Minutes	63%	100%

Source: LEHD, GTFS

A bus-dependent commuter living in Rochester can reach fewer of the jobs in Monroe County in an hour than a car commuter can reach in 20 minutes.

This is illustrated by the figure below, which shows the boundaries of 20, 40, and 60 minutes of bus travel, and the reach of a 20-minute car ride using the Brown Square Neighborhood as an example.

Figure 24 – Brown Square Boundaries of Possible Bus and Car Commutes, by Commute Length (Weekday, 8am)



Legend

- Brown Square Neighborhood
- Public Transit - 20 Mins
- Public Transit - 40 Mins
- Public Transit - 60 Mins
- Travel by Car - 20 Mins
- ▲ Job Location
- Monroe County

Brown Square Neighborhood Transit Profile²⁹

Percent Living in Poverty:	55%
Median Household Income:	\$18,000
Income Level:	Low

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	47,954	341,814
Within 40 Minutes	177,246	392,178
Within 60 Minutes	278,860	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	12%	87%
Within 40 Minutes	45%	100%
Within 60 Minutes	71%	100%

	Day	Night
By Bus Within 40 Minutes	45%	43%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	20%	28%	52%
Within 40 Minutes	23%	31%	46%
Within 60 Minutes	25%	32%	43%

Low-Income Neighborhoods Have Slightly Better Transit Accessibility

In terms of job accessibility, it seems that the transit system in Monroe County is set up to serve low-income neighborhoods slightly better than higher income neighborhoods. Whereas a resident from a low-income neighborhood can reach 11%, 41%, and 70% of jobs in the county in 20, 40, and 60 minutes respectively, a resident of a high-income neighborhood can reach 5%, 34%, and 59% of the jobs in the county in those same time frames. This makes sense as those who are reliant on the bus are more likely to be low-income, however it also highlights that moving to a higher-income neighborhood may further limit the accessibility of jobs for a transit-dependent individual.

²⁹ See Appendix 3 for additional neighborhood transit profiles.

Table 18 – City Neighborhood Average Share of Monroe County Jobs Accessible by Bus, by Commute Time and Neighborhood Income Level

Neighborhood	20 min	40 min	60 min
Low-Income	11%	41%	70%
Mixed-Income	8%	32%	59%
High-Income	5%	34%	59%

Source: LEHD, GTFS

Roughly 50% of the Easily Accessible Jobs are High-Wage

Beyond the transit system's limitations on how far a commuter can get to in a given period of time is the question of what types of jobs they can reach. For a commuter from a low-income neighborhood in the city, 52% of the jobs accessible within 20 minutes are high-income jobs.³⁰ Assuming that the commuter is low-income (since he or she is bus dependent) and is in that financial situation precisely because he or she is unable to get a high-wage job due to limitations in experience or education level, this cuts the number of jobs accessible within 20 minutes in half.

Table 19 – Average Share of Bus-Accessible Jobs by Wage-Level, Commute Time, and Neighborhood Income Level

Neighborhood	Low-Wage			Mid-Wage			High-Wage		
	20 min	40 min	60 min	20 min	40 min	60 min	20 min	40 min	60 min
Low-Income	20%	24%	25%	29%	32%	31%	52%	45%	43%
Mixed-Income	24%	23%	25%	31%	31%	32%	45%	46%	43%
High-Income	22%	23%	25%	30%	31%	32%	47%	46%	43%

Source: LEHD, GTFS

³⁰ Low-, mid- and high- wage definitions are based on LEHD data definitions (low=\$15,000 a year or less, mid=\$15,001-\$39,999 a year, high=over \$39,999 a year).

Transportation is an Equity Issue

The state of the transportation options in Monroe County and Rochester pose an equity issue for the community, both in terms of race and income. Drivers (who are whiter and wealthier than transit riders) face easy commutes and a wide access to jobs. Those who ride the bus face very long commutes and limited access to jobs. Given these differences, the transportation system writ large reinforces the disparities that already exist in the community rather than helping to reduce them.

Additionally, given how much longer it takes to get to work by bus, and how many fewer jobs one can reach, it is unlikely that those who can afford a vehicle would choose to take transit. Thus, transportation also becomes a segregating rather than integrating element in the community.

As various collective impact initiatives in the community work to address poverty and structural racism, it is critical that they consider the ways in which the transportation system contributes to or hinders their intended outcomes.

Appendices

Appendix 1: Jobs 2002-2015 by Municipality & Job Type

Table 20 – Number of Jobs by Municipality and Year – All Types

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Brighton	20,682	19,943	20,552	20,400	19,740	19,967	18,767	18,240	18,458	18,720	18,362	18,679	19,144	19,475
Chili	6,007	6,054	6,193	6,484	6,451	5,808	5,956	5,718	5,179	4,921	5,163	5,106	5,367	5,657
Clarkson	824	791	807	760	836	937	954	940	946	962	1,130	923	775	744
East Rochester	4,107	3,379	3,409	3,648	3,736	3,879	4,059	4,077	4,084	4,091	3,760	3,918	3,889	3,949
Gates	14,989	14,533	13,932	14,683	16,016	15,234	15,249	14,427	12,914	13,683	14,355	14,448	14,800	14,913
Greece	22,055	21,465	22,226	22,664	18,367	20,880	21,117	20,400	20,316	20,311	18,060	20,686	22,064	22,376
Hamlin	405	445	398	444	449	446	438	392	417	450	522	476	483	515
Henrietta	26,408	26,487	26,841	29,313	29,502	30,701	30,453	30,477	29,603	31,162	30,822	30,787	31,196	32,975
Irondequoit	10,627	9,778	10,038	10,271	10,098	9,807	9,602	10,179	9,299	9,097	9,591	9,365	9,051	9,926
Mendon	1,200	1,213	1,172	1,407	1,345	1,497	1,394	1,414	1,550	1,514	1,683	1,714	1,733	1,784
Ogden	4,736	4,513	4,488	4,403	4,792	4,393	4,382	4,210	4,111	4,329	4,874	4,569	4,687	4,614
Parma	2,560	2,373	2,125	2,244	2,228	2,284	1,483	2,336	2,406	2,380	2,458	2,522	2,654	2,806
Penfield	9,533	8,055	8,777	8,750	9,540	9,799	9,560	8,888	9,375	9,297	10,057	9,889	9,968	10,603
Perinton	13,255	11,038	12,727	13,588	13,999	13,957	14,495	13,840	14,068	13,905	13,774	13,784	13,261	13,962
Pittsford	9,930	9,973	10,012	10,899	10,905	10,497	11,295	10,601	10,682	11,210	11,601	11,316	11,466	11,450
Riga	1,118	1,131	1,084	1,131	1,190	1,478	1,383	1,394	1,485	1,446	1,349	1,381	1,391	1,287
Rochester	138,440	133,194	135,510	132,059	130,525	120,176	113,941	115,422	115,211	110,347	113,977	106,977	108,058	113,888
Rush	353	380	383	456	436	563	592	567	587	588	477	480	459	436
Sweden	3,371	3,174	3,191	3,322	3,420	3,156	3,071	3,091	3,099	3,345	2,879	2,918	3,060	3,198
Webster	9,182	11,528	11,623	12,264	12,579	12,084	11,754	11,229	11,283	12,016	12,179	12,340	12,320	12,681
Wheatland	1,167	1,142	1,133	1,210	1,352	1,275	1,259	1,222	1,120	1,167	1,157	1,028	920	1,039
Monroe County	300,949	290,589	296,621	300,400	297,506	288,818	281,204	279,064	276,193	274,941	278,230	273,306	276,746	288,278

Table 21 – Share of Monroe County Jobs by Municipality and Year – “High Income” Jobs (\$3,333 per month)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Brighton	6%	6%	6%	5%	5%	6%	6%	6%	6%	6%	6%	7%	7%	7%
Chili	1%	1%	1%	2%	2%	2%	2%	1%	1%	1%	1%	1%	2%	2%
Clarkson	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
East Rochester	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Gates	4%	4%	3%	4%	5%	5%	5%	5%	3%	4%	4%	4%	4%	4%
Greece	5%	5%	5%	5%	4%	5%	5%	5%	5%	5%	4%	6%	6%	6%
Hamlin	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Henrietta	8%	8%	8%	9%	9%	10%	10%	11%	10%	11%	11%	11%	11%	11%
Irondequoit	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Mendon	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%
Ogden	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	1%	1%
Parma	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%
Penfield	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%
Perinton	5%	4%	4%	5%	5%	5%	6%	6%	6%	6%	5%	6%	5%	5%
Pittsford	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	3%	3%
Riga	0%	0%	0%	0%	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%
Rochester	55%	55%	55%	53%	52%	49%	48%	48%	50%	47%	48%	45%	45%	46%
Rush	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sweden	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Webster	4%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	6%	5%	5%
Wheatland	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Monroe County	95,482	99,312	101,663	105,241	108,728	104,461	102,547	104,379	106,552	106,842	110,061	107,004	112,340	119,380

Table 22 – Share of Monroe County Jobs by Municipality and Year – “Mid Income” Jobs (\$1,251 to \$3333 per month)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Brighton	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Chili	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Clarkson	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
East Rochester	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Gates	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	5%	5%
Greece	7%	7%	7%	8%	6%	7%	7%	7%	8%	7%	6%	8%	8%	8%
Hamlin	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Henrietta	8%	10%	9%	10%	11%	11%	11%	11%	11%	12%	11%	11%	12%	12%
Irondequoit	4%	4%	3%	4%	4%	3%	3%	4%	4%	4%	4%	4%	4%	4%
Mendon	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Ogden	2%	2%	2%	2%	2%	2%	2%	2%	1%	2%	2%	2%	2%	2%
Parma	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%
Penfield	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	3%	3%	4%
Perinton	4%	4%	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%	4%	4%
Pittsford	3%	3%	3%	4%	3%	3%	4%	3%	4%	4%	4%	4%	4%	4%
Riga	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rochester	48%	47%	46%	44%	44%	43%	41%	42%	41%	40%	41%	39%	39%	39%
Rush	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sweden	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Webster	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%
Wheatland	0%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Monroe County	113,854	104,698	107,579	106,272	103,767	102,992	98,872	98,950	95,318	94,243	93,093	91,563	90,462	94,461

Table 23 – Share of Monroe County Jobs by Municipality and Year – “Low Income” Jobs (under \$1,251 per month)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Brighton	8%	8%	8%	8%	7%	8%	6%	7%	7%	7%	7%	7%	7%	7%
Chili	3%	3%	3%	3%	3%	2%	3%	3%	2%	2%	2%	2%	2%	2%
Clarkson	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
East Rochester	1%	1%	1%	1%	1%	1%	2%	1%	2%	1%	1%	1%	1%	1%
Gates	6%	7%	6%	6%	6%	6%	6%	6%	6%	6%	7%	7%	7%	6%
Greece	10%	10%	10%	10%	9%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Hamlin	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Henrietta	10%	10%	10%	10%	11%	11%	12%	12%	11%	11%	12%	12%	12%	12%
Irondequoit	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Mendon	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Ogden	2%	2%	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Parma	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Penfield	4%	4%	4%	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Perinton	4%	4%	4%	4%	5%	4%	5%	4%	5%	5%	5%	5%	5%	5%
Pittsford	4%	5%	4%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	5%
Riga	0%	1%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Rochester	34%	34%	34%	33%	33%	31%	30%	30%	31%	30%	30%	30%	29%	30%
Rush	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sweden	2%	2%	2%	2%	2%	2%	1%	2%	2%	2%	2%	1%	2%	2%
Webster	3%	3%	3%	3%	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%
Wheatland	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Monroe County	91,613	86,579	87,379	88,887	85,011	81,365	79,785	75,735	74,323	73,856	75,076	74,739	73,944	74,437

Table 24 – Historic Census Population - Monroe County

	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	Area (sq. Miles)
Brighton	3,998	3,027	9,065	13,132	18,036	27,849	35,065	35,776	34,455	35,588	36,609	15.42
Chili	2,071	1,780	2,493	3,392	5,283	11,237	19,609	23,676	25,178	27,638	28,625	39.5
Clarkson	1,549	1,403	1,456	1,449	1,912	2,339	3,642	4,016	4,517	6,072	6,736	33.18
East Rochester	2,398	3,901	6,627	6,691	7,022	8,152	8,347	7,596	6,932	6,650	6,587	1.32
Gates	4,862	1,419	3,634	4,965	7,925	13,755	26,442	29,756	28,583	29,275	28,400	15.2
Greece	7,777	3,350	12,113	14,925	25,508	48,670	75,136	81,367	90,106	94,141	96,095	47.52
Hamlin	2,184	1,999	2,079	2,080	2,321	2,755	4,167	7,675	9,203	9,355	9,045	43.47
Henrietta	1,972	1,794	2,142	2,728	3,385	11,598	33,017	36,134	36,376	39,028	42,581	35.35
Irondequoit	3,526	5,123	18,024	23,376	34,417	55,337	63,675	57,648	52,322	52,354	51,692	15
Mendon	2,754	2,509	2,636	2,700	2,903	3,902	4,541	5,434	6,845	8,370	9,152	39.47
Ogden	3,143	2,681	3,159	3,435	3,970	7,262	11,736	14,693	16,912	18,492	19,856	36.48
Parma	2,954	2,923	3,222	3,387	4,049	6,277	10,748	12,585	13,873	14,822	15,633	42.02
Penfield	2,977	2,087	3,306	3,774	4,847	12,601	23,782	27,201	30,219	34,645	36,242	37.21
Perinton	6,566	7,799	9,854	10,170	11,559	16,314	31,568	41,802	43,015	46,090	46,462	34.19
Pittsford	3,634	4,614	7,192	7,741	9,413	15,156	25,058	26,743	24,497	27,219	29,405	23.18
Riga	1,853	1,649	1,718	1,669	1,906	2,800	3,746	4,309	5,114	5,437	5,590	34.96
Rochester	218,149	295,750	328,132	324,975	332,488	318,611	296,233	241,741	230,356	219,773	210,565	35.78
Rush	2,150	2,091	1,901	1,791	2,052	2,555	3,287	3,001	3,217	3,603	3,478	30.33
Sweden	4,885	3,984	4,613	4,698	5,982	7,224	11,461	14,859	14,181	13,716	14,175	33.68
Webster	3,755	3,976	4,778	5,520	7,174	16,434	24,739	28,925	31,639	37,925	42,641	33.53
Wheatland	2,453	2,076	2,364	2,323	2,502	3,711	4,265	4,897	5,093	5,149	4,775	30.41
Monroe County	283,212	352,034	423,881	438,230	487,632	586,387	711,917	702,238	731,698	735,343	744,344	657.2

Source: U.S. Census Bureau, Decennial Census

Table 25 – Population Density by Municipality and Decade

	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
Brighton	259	196	588	852	1,170	1,806	2,274	2,320	2,234	2,308	2,374
Chili	52	45	63	86	134	284	496	599	637	700	725
Clarkson	47	42	44	44	58	70	110	121	136	183	203
East Rochester	1,817	2,955	5,020	5,069	5,320	6,176	6,323	5,755	5,252	5,038	4,990
Gates	320	93	239	327	521	905	1,740	1,958	1,880	1,926	1,868
Greece	164	70	255	314	537	1,024	1,581	1,712	1,896	1,981	2,022
Hamlin	50	46	48	48	53	63	96	177	212	215	208
Henrietta	56	51	61	77	96	328	934	1,022	1,029	1,104	1,205
Irondequoit	235	342	1,202	1,558	2,294	3,689	4,245	3,843	3,488	3,490	3,446
Mendon	70	64	67	68	74	99	115	138	173	212	232
Ogden	86	73	87	94	109	199	322	403	464	507	544
Parma	70	70	77	81	96	149	256	300	330	353	372
Penfield	80	56	89	101	130	339	639	731	812	931	974
Perinton	192	228	288	297	338	477	923	1,223	1,258	1,348	1,359
Pittsford	157	199	310	334	406	654	1,081	1,154	1,057	1,174	1,269
Riga	53	47	49	48	55	80	107	123	146	156	160
Rochester	6,097	8,266	9,171	9,083	9,293	8,905	8,279	6,756	6,438	6,142	5,885
Rush	71	69	63	59	68	84	108	99	106	119	115
Sweden	145	118	137	139	178	214	340	441	421	407	421
Webster	112	119	142	165	214	490	738	863	944	1,131	1,272
Wheatland	81	68	78	76	82	122	140	161	167	169	157
Monroe County	431	536	645	667	742	892	1,083	1,069	1,113	1,119	1,133

Source: Author's Calculations on U.S. Census Bureau Data

Appendix 2: Demographic Tables by Mode of Transit

Table 26 – Share of Public Transit Commuters by Poverty Status

Geography	Below 100% of the poverty level		100%-149% of the poverty level		At or above 150% of the poverty level	
Monroe County	27%		15%	*	57%	
Rochester	29%		15%		56%	
New York State	9%		8%		83%	
Albany	19%	*	11%	*	70%	
Binghamton	46%	*	16%	***	38%	*
Buffalo	26%		16%		59%	
Syracuse	29%		15%	*	55%	

Source: American Community Survey, Census Bureau

Table 27 – Share of Public Transit Commuters by Race/Ethnicity

Geography	Asian		African American or Black		Hispanic		White	
	%		%		%		%	
Monroe County	7%	*	51%		15%	*	32%	
Rochester	5%	**	63%		14%		26%	
New York State	13%		24%		27%		46%	
Albany	7%	*	56%		12%	*	30%	
Binghamton	13%	***	28%	**	12%	***	48%	*
Buffalo	7%	*	55%		10%		30%	
Syracuse	8%	*	50%		11%	*	41%	

Source: American Community Survey, Census Bureau

Table 28 – Share of Drive-Along Commuters by Race/Ethnicity

Geography	African American or			
	Asian	Black	Hispanic	White
Monroe County	3%	10%	8%	84%
Rochester	3%	30%	20%	60%
New York State	5%	10%	32%	79%
Albany	5%	23%	14%	70%
Binghamton	3% *	6% *	8% **	88%
Buffalo	3%	27%	12%	65%
Syracuse	4%	22%	11%	71%

Source: American Community Survey, Census Bureau

Appendix 3: Transit Accessibility Methodology

CGR used ESRI Network Analyst tool in combination with the GTFS dataset on transit networks, the LEHD datasets on job locations, and Census data on median-income and poverty rates to analyze the accessibility of jobs from city neighborhoods.

For the purposes of the analysis, CGR selected 15 sample neighborhoods (five low-income, five mixed-income, and five high-income). Neighborhood income level was determined using neighborhood median-income level, though neighborhood poverty rates were also considered. The neighborhoods that CGR selected for this analysis are the following:

- Low-Income: Brown Square, Upper Falls, North Marketview Heights, South Marketview Heights, and J.O.S.A.N.A.
- Mixed-Income: 14621, South Wedge, 19th Ward, Maplewood, and Upper Monroe
- High-Income: North Winton Village, Culver University East, Browncroft, ABC Streets, and Cobbs Hill.

For each of these neighborhoods a central physical starting street address was chosen from which the reach of the public transit network was analyzed. For each neighborhood the number of destinations (jobs) that were accessible by public transit in 20, 40, and 60 minutes of commuting was calculated weighting each destination by the number of jobs at that location. The share this represented of total jobs in the county was also calculated.

The analysis assumed that the travel was taking place in the one hour window between 8 and 9 am. A sensitivity analysis of a 10 pm-11 pm travel window did not show large differences in access to jobs.

Appendix 3: Neighborhood Job and Transit Accessibility Profiles

Low-Income Neighborhoods

Brown Square

Percent Living in Poverty:	55%
Median Household Income:	\$18,000
Income Level:	Low

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	47,954	341,814
Within 40 Minutes	177,246	392,178
Within 60 Minutes	278,860	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	12%	87%
Within 40 Minutes	45%	100%
Within 60 Minutes	71%	100%

	Day	Night
By Bus Within 40 Minutes	45%	43%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	20%	28%	52%
Within 40 Minutes	23%	31%	46%
Within 60 Minutes	25%	32%	43%

Upper Falls

Percent Living in Poverty:	51%
Median Household Income:	\$17,000
Income Level:	Low

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	53,140	330,700
Within 40 Minutes	170,599	392,178
Within 60 Minutes	286,023	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	14%	84%
Within 40 Minutes	44%	100%
Within 60 Minutes	73%	100%

	Day	Night
By Bus Within 40 Minutes	44%	40%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	18%	28%	53%
Within 40 Minutes	25%	32%	43%
Within 60 Minutes	25%	31%	43%

North Marketview Heights

Percent Living in Poverty:	50%
Median Household Income:	\$23,000
Income Level:	Low

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	20,640	313,836
Within 40 Minutes	115,466	392,116
Within 60 Minutes	252,067	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	5%	80%
Within 40 Minutes	29%	100%
Within 60 Minutes	64%	100%

	Day	Night
By Bus Within 40 Minutes	29%	33%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	23%	31%	46%
Within 40 Minutes	24%	32%	44%
Within 60 Minutes	25%	31%	44%

South Marketview Heights

Percent Living in Poverty:	49%
Median Household Income:	\$21,000
Income Level:	Low

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	40,220	349,197
Within 40 Minutes	166,436	392,178
Within 60 Minutes	284,953	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	10%	89%
Within 40 Minutes	42%	100%
Within 60 Minutes	73%	100%

	Day	Night
By Bus Within 40 Minutes	42%	39%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	19%	29%	53%
Within 40 Minutes	25%	32%	43%
Within 60 Minutes	25%	31%	44%

J.O.S.A.N.A

Percent Living in Poverty:	46%
Median Household Income:	\$22,000
Income Level:	Low

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	47,457	343,439
Within 40 Minutes	166,938	392,178
Within 60 Minutes	262,304	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	12%	88%
Within 40 Minutes	43%	100%
Within 60 Minutes	67%	100%

	Day	Night
By Bus Within 40 Minutes	43%	39%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	18%	28%	54%
Within 40 Minutes	23%	31%	46%
Within 60 Minutes	25%	32%	43%

Mixed-Income Neighborhoods

14621

Percent Living in Poverty:	38%
Median Household Income:	\$26,000
Income Level:	Mixed

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	5,585	274,415
Within 40 Minutes	89,786	392,049
Within 60 Minutes	211,071	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	1%	70%
Within 40 Minutes	23%	100%
Within 60 Minutes	54%	100%

	Day	Night
By Bus Within 40 Minutes	23%	20%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	29%	38%	33%
Within 40 Minutes	23%	31%	47%
Within 60 Minutes	25%	32%	43%

South Wedge

Percent Living in Poverty:	31%
Median Household Income:	\$31,000
Income Level:	Mixed

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	86,905	355,449
Within 40 Minutes	189,388	392,116
Within 60 Minutes	294,873	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	22%	91%
Within 40 Minutes	48%	100%
Within 60 Minutes	75%	100%

	Day	Night
By Bus Within 40 Minutes	48%	48%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	20%	30%	50%
Within 40 Minutes	24%	32%	44%
Within 60 Minutes	26%	31%	43%

19th Ward

Percent Living in Poverty:	28%
Median Household Income:	\$52,000
Income Level:	Mixed

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	32,973	324,716
Within 40 Minutes	132,180	392,178
Within 60 Minutes	223,720	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	8%	83%
Within 40 Minutes	34%	100%
Within 60 Minutes	57%	100%

	Day	Night
By Bus Within 40 Minutes	34%	32%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	24%	32%	44%
Within 40 Minutes	22%	31%	47%
Within 60 Minutes	25%	32%	43%

Maplewood

Percent Living in Poverty:	27%
Median Household Income:	\$33,000
Income Level:	Mixed

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	5,204	273,482
Within 40 Minutes	79,927	392,178
Within 60 Minutes	202,236	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	1%	70%
Within 40 Minutes	20%	100%
Within 60 Minutes	52%	100%

	Day	Night
By Bus Within 40 Minutes	20%	18%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	23%	28%	49%
Within 40 Minutes	21%	30%	49%
Within 60 Minutes	24%	32%	44%

Upper Monroe

Percent Living in Poverty:	21%
Median Household Income:	\$57,000
Income Level:	Mixed

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	17,699	363,774
Within 40 Minutes	132,487	392,178
Within 60 Minutes	234,174	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	5%	93%
Within 40 Minutes	34%	100%
Within 60 Minutes	60%	100%

	Day	Night
By Bus Within 40 Minutes	34%	32%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	25%	28%	47%
Within 40 Minutes	23%	31%	46%
Within 60 Minutes	25%	32%	44%

High-Income Neighborhoods

North Winton Village

Percent Living in Poverty:	18%
Median Household Income:	\$50,000
Income Level:	High

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	15,627	327,967
Within 40 Minutes	122,840	391,826
Within 60 Minutes	223,430	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	4%	84%
Within 40 Minutes	31%	100%
Within 60 Minutes	57%	100%

	Day	Night
By Bus Within 40 Minutes	31%	30%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	23%	34%	43%
Within 40 Minutes	22%	30%	47%
Within 60 Minutes	25%	32%	43%

Culver University East

Percent Living in Poverty:	15%
Median Household Income:	\$57,000
Income Level:	High

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	36,520	351,664
Within 40 Minutes	142,828	392,008
Within 60 Minutes	250,787	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	9%	90%
Within 40 Minutes	36%	100%
Within 60 Minutes	64%	100%

	Day	Night
By Bus Within 40 Minutes	36%	35%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	20%	27%	52%
Within 40 Minutes	24%	31%	45%
Within 60 Minutes	25%	32%	43%

Browncroft

Percent Living in Poverty:	15%
Median Household Income:	\$55,000
Income Level:	High

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	8,472	348,255
Within 40 Minutes	124,925	391,727
Within 60 Minutes	212,553	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	2%	89%
Within 40 Minutes	32%	100%
Within 60 Minutes	54%	100%

	Day	Night
By Bus Within 40 Minutes	32%	25%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	19%	31%	50%
Within 40 Minutes	22%	31%	47%
Within 60 Minutes	25%	32%	43%

ABC Streets

Percent Living in Poverty:	13%
Median Household Income:	\$61,000
Income Level:	High

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	17,665	355,518
Within 40 Minutes	141,787	392,116
Within 60 Minutes	231,125	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	5%	91%
Within 40 Minutes	36%	100%
Within 60 Minutes	59%	100%

	Day	Night
By Bus Within 40 Minutes	36%	31%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	25%	30%	45%
Within 40 Minutes	23%	31%	46%
Within 60 Minutes	24%	32%	44%

Cobbs Hill

Percent Living in Poverty:	9%
Median Household Income:	\$71,000
Income Level:	High

Job Accessibility by Mode of Transportation

	Bus	Car
Within 20 Minutes	14,310	354,509
Within 40 Minutes	142,807	392,116
Within 60 Minutes	229,241	392,178

Share of Jobs in Monroe County Accessible by Mode

	Bus	Car
Within 20 Minutes	4%	90%
Within 40 Minutes	36%	100%
Within 60 Minutes	58%	100%

	Day	Night
By Bus Within 40 Minutes	36%	32%

Share of Bus-Accessible Jobs in Monroe County by Job Wage Level

	Low	Mid	High
Within 20 Minutes	25%	29%	46%
Within 40 Minutes	23%	31%	46%
Within 60 Minutes	25%	32%	44%