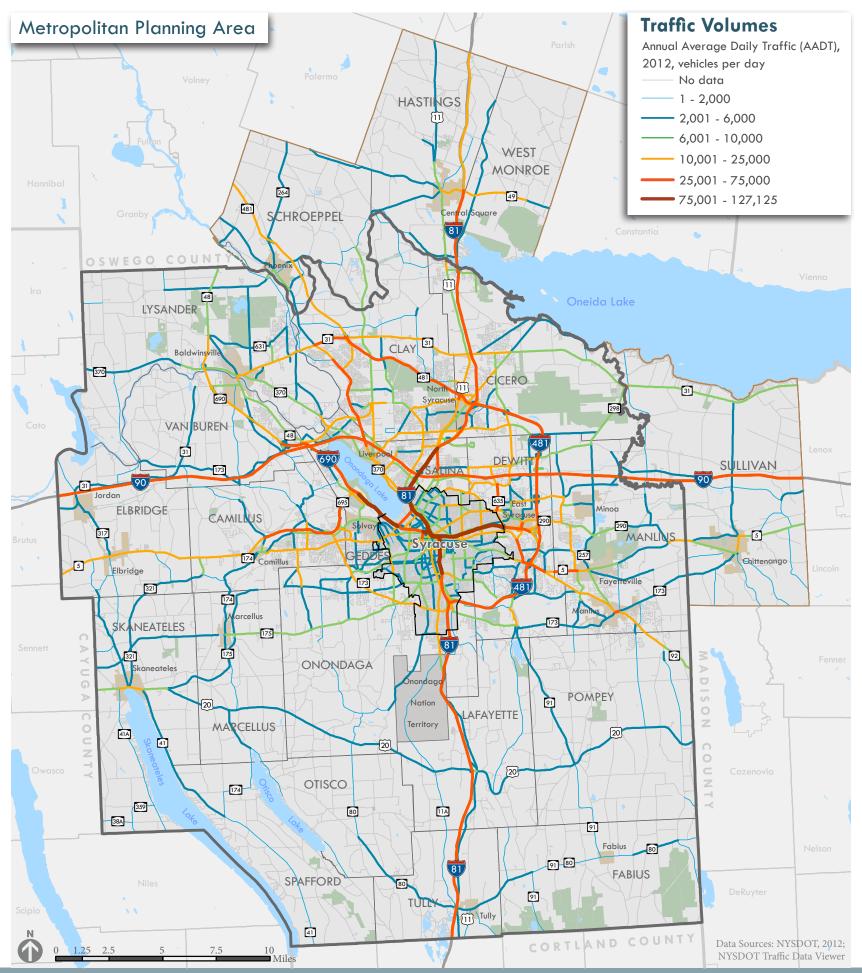
### Traffic

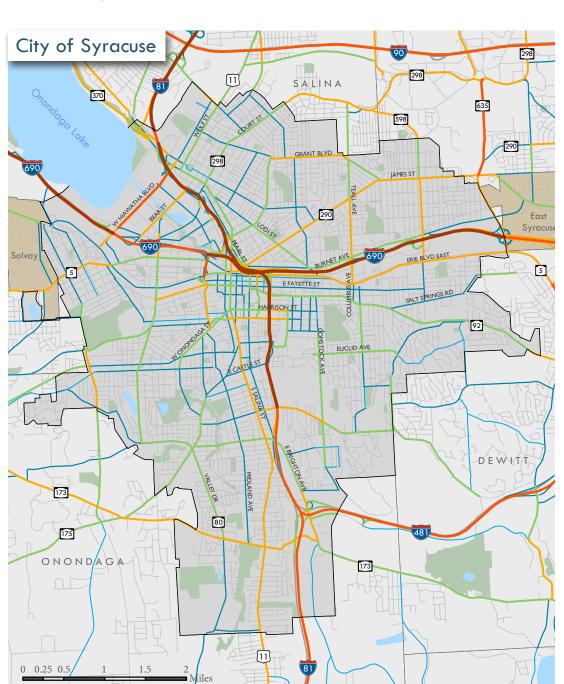
- Annual average daily traffic, or AADT, represents the typical daily volume of traffic on a road segment.
- The highest volume roads in our region, I-690 and I-81 in and around downtown Syracuse, have AADT between 100,000 and 128,000 vehicles.
- Most of the roads in the region for which traffic volumes are available carry fewer than 6,000 vehicles a day.



## Total Centerline Mileage of Roads in the MPA by Annual Average Daily Traffic Volumes



Mileage shown is centerline mileage, which is the length of a road measured along its center, regardless of the number of lanes. For example, one mile of a 2-lane road and one mile of a 4-lane road each have a centerline distance of one mile.



Annual average daily traffic, or AADT, is a value frequently referenced by traffic engineers and planners. AADT is the total daily traffic averaged over a full year and is expressed in vehicles per day. AADT is typically estimated for a road segment based on a sample count taken over a few days (during the work week). This short count data is seasonally factored based on trends observed at continuous count stations in order to calculate an annual average day. The roads with the highest traffic volumes in our area are 1-690 and I-81, which reach peak volumes (127,000 and 102,000 vehicles per day, respectively) near their junction in downtown Syracuse. I-481 in DeWitt sees its peak volume (65,000 vehicles per day) in the segment between East Genesee Street and I-690. The busiest segment of surface street in the region, East Genesee Street (Route 5) between Erie Boulevard East and Lyndon Road (45,000 to 54,000 vehicles per day), is busy, in part, because it provides access to the I-481 interchange in DeWitt.

There are many miles of roads - primarily local roads and residential streets - for which no traffic volume data is available. Traffic volume data is available for only about a quarter of the total road mileage (by centerline) in the region, and most of these roads are relatively low-volume roads that carry fewer than 6,000 vehicles per day. These are the local streets that provide access to individual driveways, and funnel traffic to the higher-volume collector and arterial roads. The highest volume roads - those carrying over 25,000 vehicles per day - make up a very small fraction of our total regional road mileage. However, these high-volume roads are the conduits for thousands of trips every day in and through the region. In between these two extremes are a few hundred miles of roads that carry moderate volumes of between 6,000 and 25,000 vehicles per day and provide connections between the local streets and major highways.

# Commuting Patterns

• In most suburban towns, relatively few workers commute into, or stay within, that town to work. The Town of De-Witt is an exception outside of the City, drawing in a large number of workers from outside the town.

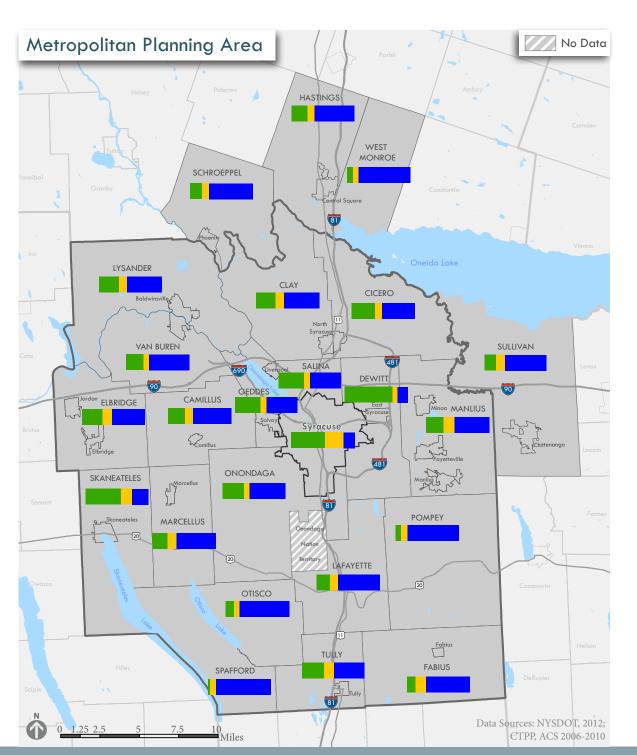
he map at right shows the relative proportions of different types of commuting patterns by town. Each town has workers that commute into that town (green), commute to a job within that same town (yellow), or commute to a job in another town (blue). The bars on the map at right are all the same length, and so are not representative of the actual number of employees or residents, but the segments within each bar show the relative proportion of the types of commuters in each town.

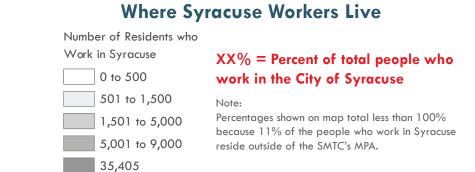
Most towns in our region tend towards being "bedroom communities," where most town residents commute elsewhere for work. These towns have relatively long blue segments on the map at right. The rural towns in southern Onondaga County and in Oswego and Madison counties have the greatest proportion of residents that work elsewhere.

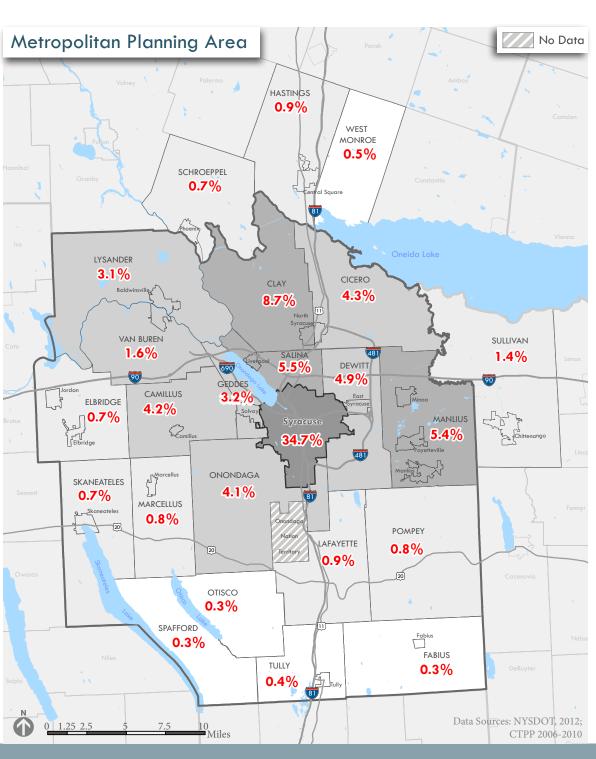
The Town of DeWitt attracts more workers from outside of the town, relative to the town's own population, than any other community in our region, as shown by the relative length of the green segment for this town. Syracuse and Skaneateles also attract relatively high proportions of workers from outside their communities.

Syracuse has the highest proportion of workers that both live and work within that community, as shown by the relative length of the yellow segment. • Thirty-five percent of the people who work in the City also live in the City. The remaining workers commute in from suburban towns, with the towns north and east of the City contributing the greatest number of workers.

# Commuting Patterns by Town Work in town/city but live elsewhere Live and work in same town/city Live in town/city but work elsewhere Total Residents





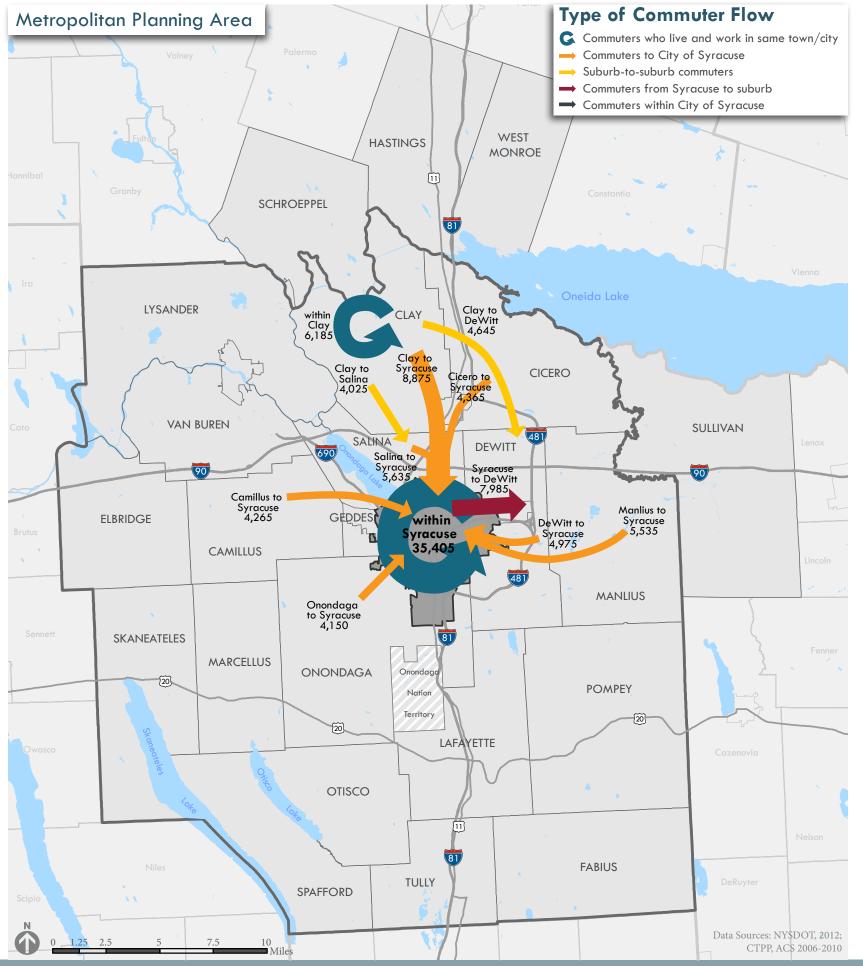


With more than 35 percent of the total jobs in the MPA, the City of Syracuse accounts for more jobs than any other individual municipality in the region. Therefore, the commuting patterns of workers that work in the City of Syracuse heavily influence the overall travel patterns in the region, and it is useful to understand where these workers reside.

The shading in the map at left represents the number of people from each town that work within the City of Syracuse. In total, nearly 100,000 people work in the City of Syracuse. The percentages on the map at left indicate the portion of these 100,000 workers that live in each individual town throughout the MPA, as well as those that live in the City of Syracuse. Of the total people who work in the City, 35 percent also live in the City, 54 percent live in other towns throughout the MPA, and 11 percent live outside of the MPA. This amounts to approximately 35,000 people commuting within the City of Syracuse and approximately 65,000 people commuting into the City of Syracuse from outside the City on a typical workday. The more-populous towns just north and east of the City, such as Clay, Cicero, Salina, DeWitt, and Manlius, are home to the largest percentages of City workers outside of the City, with 4.3 percent (Cicero) to 8.7 percent (Clay) of the total City of Syracuse workers residing in each of these towns.

### Commuter Flows

- The most substantial commuter flow within the region is within the City of Syracuse, with over 35,000 commuters who both live and work in the city.
- A total of nearly 19,000 people live in the towns of Clay, Cicero, and Salina and work in the city, making this the second largest concentration of commuters in the region.



### Significant Commuter Flows by Workplace and Residence

Top workplace locations for Syracuse residents:

	140. 01	worker
Syracuse ····	3	5,405
DeWitt		7,985
Salina		2,930
Clay·····		1,970
Onondaga-		1,570

Towns with the greatest number of residents that also work in that town:

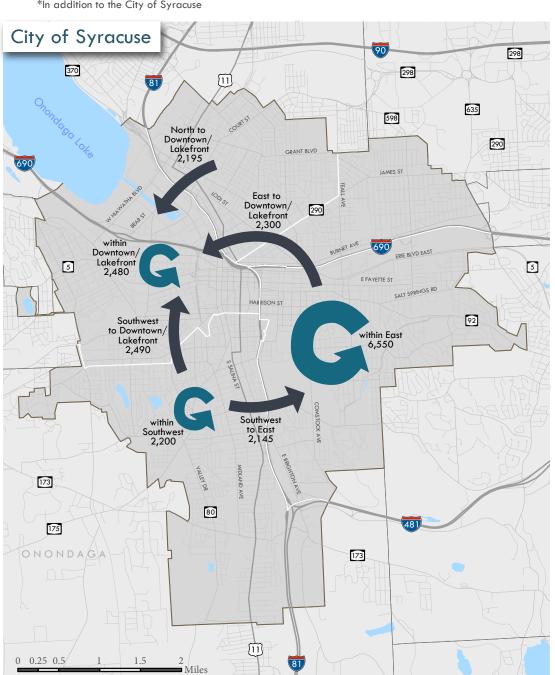
Clay 6,	185
DeWitt 3,	770
Manlius 3,	720
Salina ····· 3,	475
Cicero 2,	.635

Top residences for people who work in Syracuse\*:

No. of workers				
Clay 8,875				
Salina 5,635				
Manlius 5,535				
DeWitt4,975				
Cicero 4,365				
*In addition to the City of Syracuse				

Top suburb-to-suburb commuter flows:

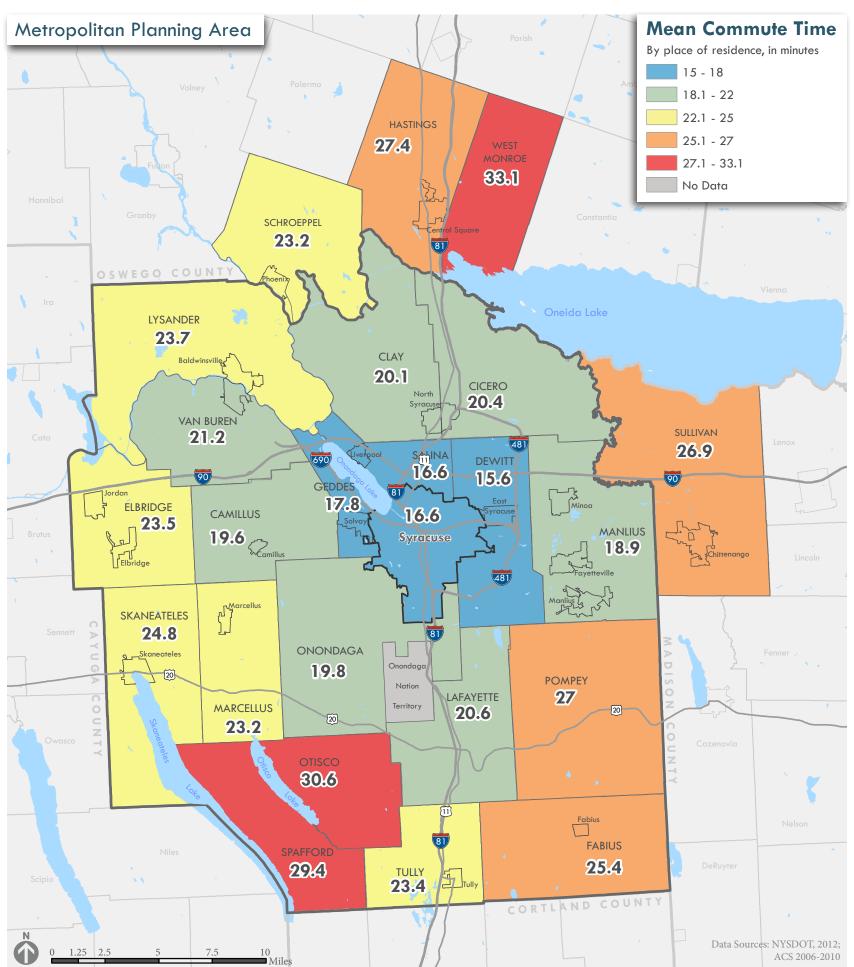
Residence - Workplace	No. of workers
Clay - DeWitt	4,645
Clay - Salina ·····	4,025
Manlius - DeWitt	3,300
Cicero - DeWitt	2,985
Salina - DeWitt ·····	2,655



he maps shown here are based on a dataset that summarizes, for each individual town/city in our region, how many residents of that town/city work in every other town/city in our region. From this information, town-to-town commuter flows (i.e. the volume of people traveling from one town to another to get to work) can be inferred. Since there are over 20 towns plus the City of Syracuse within our MPA, there are over 400 different town/city-level residence and workplace pairs in the region (plus additional commuters who live outside the MPA but who work in the MPA). The MPA map at the far left shows only those residence/workplace pairs that include more than 4,000 people. If all of these people went to work on any given day, the numbers shown on the map would be the total number of people traveling from home to work in a single day; this is the commuter flow. By far, the largest single flow of commuters is within the City of Syracuse itself, with over 35,000 people who both live and work inside the city. The total volume of commuters from the northern suburban towns of Clay, Cicero, and Salina into the City of Syracuse is nearly 19,000 people, making this the second most substantial concentration of commuters in the region. Although the city dominates as the single most significant commuting destination, some notable suburb-to-suburb flows (such as Clay to DeWitt), "reverse commuter" flows (Syracuse to DeWitt), and flows within a single town (such as people who both live and work in Clay) also occur in our region. Within the City of Syracuse, a large number of people commute within the eastern portion of the city, likely reflecting the number of people who work at Syracuse University and the hospitals and live within the immediately surrounding neighborhoods. There are also substantial flows from throughout the city to the Downtown/ Lakefront area, likely due to the number of jobs concentrated Downtown as well as at Destiny USA.

# Commuting Times

- The average commute time for Onondaga County residents is 19 minutes, below the national average of 25 minutes and well below the statewide average of 31 minutes.
- The Town of DeWitt has the shortest average commute time (by residence) in the region: 15.6 minutes.
- The Town of West Monroe has the longest average commute time (by residence) in the region: 33.1 minutes.



### **Commute Time**

By number of working residents



- 1. There are 234,108 total working residents in the MPA.
- 2. The travel time to work data displayed on these pages is by residence, not by workplace.
- 3. Workers who work at home are not included in the graphic; 3% of all MPA workers work from home.

Commute times can say a lot about a community. When trips to work are well above the national average (25 minutes), it may suggest a lack of suitable housing options, a transportation problem, a lack of suitable job opportunities, or some combination of these factors. The longest commutes in New York State are in the New York City area, where workers face both congested transportation facilities and housing costs that rise steeply with proximity to the central business district. The average commute time for workers in Queens, for example, is 42 minutes, in spite of being only 12 miles from job-rich Manhattan. In the Syracuse area, on the other

hand, commute times reflect both housing affordability and ease of access to job centers. The average worker

living in the Syracuse area spends about 19 minutes getting to work – six minutes below the national average. As the Commute Time graphic (above) shows, 32 percent of the region's workers have commutes under 15 minutes, and only 18 percent have commutes of 30 minutes or more. Half of the region's workers have commutes in the 15-to-29 minute range.

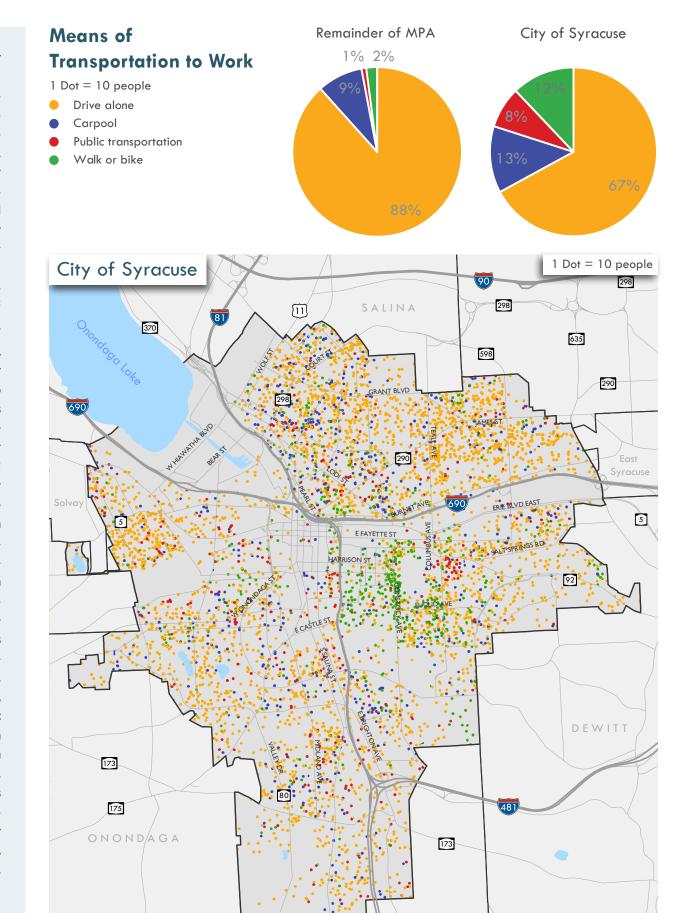
In our region, commute time varies primarily with proximity to the City of Syracuse. While there are office parks and commercial centers scattered across the region, the city's importance as an employment center is reflected in the map of Mean Commute Time (left), which shows average travel time to work generally increasing with distance from the city. The three suburban towns with the shortest average commutes (15 to 18 minutes) are adjacent to the city: Salina,

DeWitt, and Geddes. Towns with average commutes of 18 to 22 minutes are just beyond this inner ring and make up a secondary ring of towns, including Clay, Cicero, Manlius, and Camillus. Towns with average commutes over 23 minutes long, such as Sullivan, Pompey, Spafford, Skaneateles, and Schroeppel, make up the outermost ring. Many other factors contribute to variations in average commute times, including access to freeways and how people get to work. For example, in the City of Syracuse, more than 4,000 workers commute by public transportation. Sixty percent of these trips are more than 30 minutes long, according to Census data.

### How We Get to Work

- Nearly nine out of ten commuters who live in suburban and rural towns drive alone to work; in the City of Syracuse slightly less than 70 percent of commuters drive alone.
- Carpooling, walking, and biking to work are all more common in the City than in the remainder of the MPA.

Driving alone is the most common method of traveling to work in our MPA. Nearly nine out of every ten suburban and rural town residents drive alone to work. Public transit, walking, or biking to work are uncomsuburban and rural Only three percent of residents commute by these means. The remaining nine percent of MPA residents outside of the City of Syracuse carpool to work. In the City of Syracuse, slightly less than 70 percent of residents drive alone to work, and the percentages of City residents who take public transit (8 percent) or who walk or bike to work (12 percent) are notably higher than in the remainder of the MPA. However, as shown in the map at right, the residents who choose alternative modes of transportation are clustered in specific areas throughout the City. The University Hill neighborhoods are home to colleges, hospitals, students, and families. Given the mixture of uses, walking, biking, and public transportation use are much more common here than in other areas of the City. Concentrations of residents who carpool or use public transit are also evident in the Northside, Southside, and Near Westside areas.



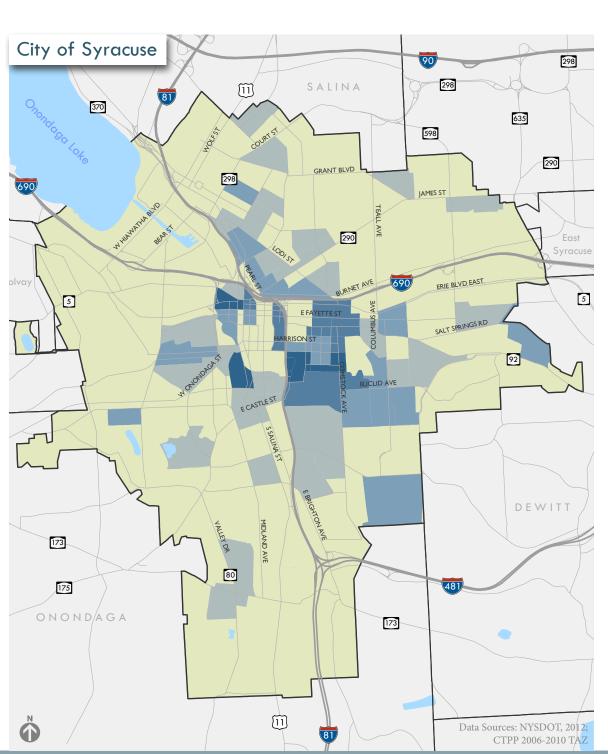
• Within the City, residents who bike or walk to work are highly concentrated in the neighborhoods close to downtown and University Hill, or near a neighborhood business district.

### Workers Who Bike or Walk to Work

% of working residents
0% to 10%
11% to 20%
21% to 50%
51% to 75%
75% to 100%

### Notes

- 1. The data in these maps is based on residence, not workplace.
  2. Carpooling is defined as an instance when an ACS survey respondent indicated that including him or herself, at least one other person rode to work in the same car, truck, or van the previous week; it is unknown whether all of the people in the car, truck, or van were going to work or another destination.
- 3. The maps/data omit workers who worked from home, as well as those who commuted by motorcycle, taxis, or the Census's 'other' category; combined, these make up 3.9% of the MPA's workers.



Biking or walking to work is becoming much more common within the City of Syracuse. The "Means of Transportation to Work" map on the previous page highlights concentrations of City residents who bike or walk to work. The "Workers who Bike or Walk to Work" map on this page further emphasizes this point by showing the percentage of all working residents who bike or walk to work for specific greats of the City.

work for specific areas of the City. As shown here, in some areas of the City, more than 75 percent of all working residents bike or walk to work. The areas producing the highest percentages of walkers and bikers are in the greater University Hill area near the main campus of Syracuse University, SUNY ESF, and the adjacent hospitals. These destinations support jobs and are located close to housing, which makes biking and walking a convenient commuting option. Neighborhoods within and near downtown such as Armory Square, Hawley Green, and Prospect Hill also offer convenient access to jobs located within walking and biking distance.

Other neighborhoods, such as the Near Westside, portions of the Valley and the Southside, and areas south of University Hill, also generate relatively high percentages of residents who bike or walk to work.

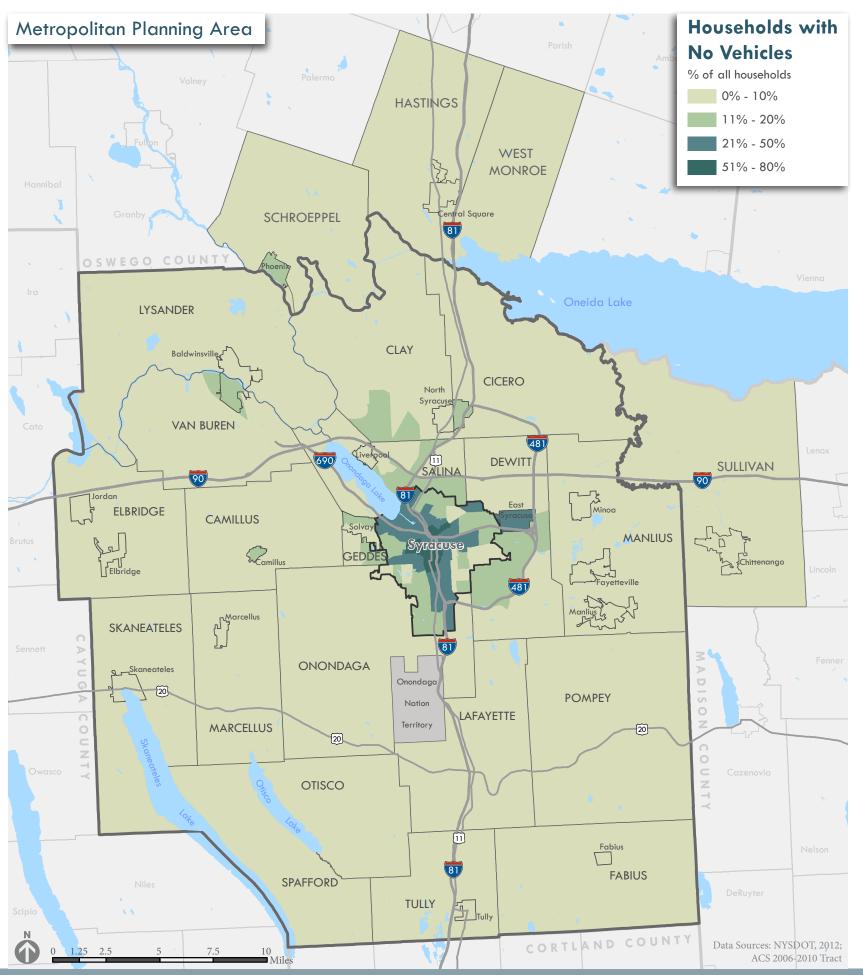
68 Mobility 69

Data Sources: NYSDOT, 2012;

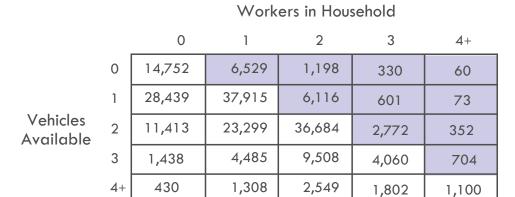
CTPP 2006-2010 TAZ

## Households and Vehicle Availability

- In the City of Syracuse, more than a quarter (26.4%) of households have no vehicles.
- In the remainder of the MPA, 5.6% of households have no vehicles.
- The majority of "car-light" households (where the number of vehicles available is less than the number of workers) are concentrated in the City of Syracuse.



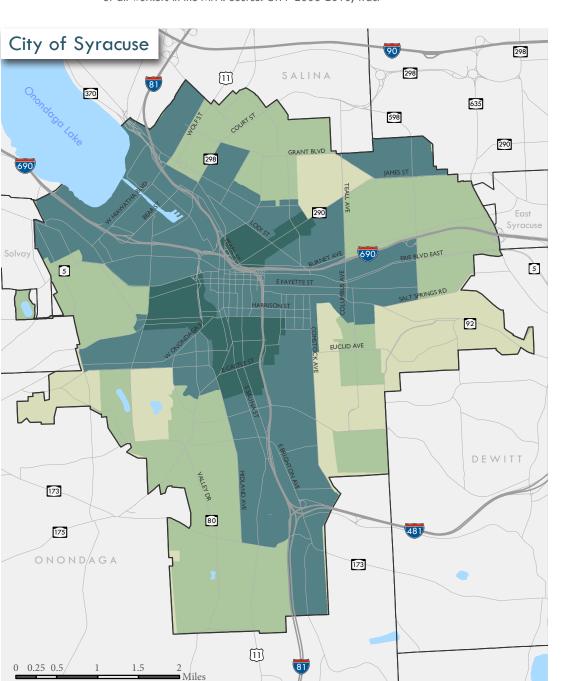
### Households in the MPA by Number of Workers and Number of Vehicles Available



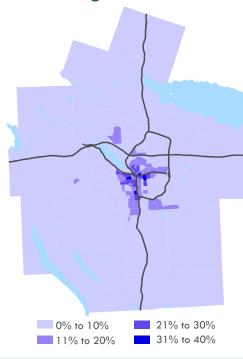
Number of "car-light" households, which are defined as households in which the number of workers exceeds the number of cars

### Note

Percentages in the small map at right are based on workers in households. Workers in group quarters or student housing are excluded. Workers in households consitute 87% of all workers in the MPA. Source: CTPP 2006-2010, Tract



### Percentage of Workers in "Car-Light" Households



In the City of Syracuse, 26 percent of households have no vehicle. As shown on the map at left, the majority of these households are located in three pockets: (1) west of I-81, with a small section extending just east of I-81; (2) west of West Street and south of Erie Boulevard West; and (3) just north of the I-690 and I-81 junction. In the remainder of the MPA, 5.6 percent of households have no vehicle, with concentrations located in some of the villages, including East Syracuse, Camillus, Baldwinsville, and North Syracuse.

The most commonly occurring type of household in the MPA has one worker with one vehicle available, followed by households with two workers and two vehicles available. The majority of "carlight" households (where the number of vehicles available is less than the number of workers) are located in the City of Syracuse, with concentrations shown along I-690 and I-81. Most "car-light" households have either one worker and no vehicle, or two workers and only one vehicle. Workers in these households likely use some means other than a single-occupancy vehicle to get to work, such as transit, carpooling, walking or biking, or may work from home.