

# 2011 HOUSEHOLD TRAVEL SURVEY



**Travel Patterns of Residents of the Rochester Transportation Management Area**

**GRAPHIC SUMMARY**

July 2012

GENESEE TRANSPORTATION COUNCIL

# Introduction

## Survey Overview

**Survey period:**

September and October 2011

**Sample size:**

3,671 households

**Study area:**

Rochester Transportation Management Area, which consists of Monroe County and adjacent portions of Livingston, Ontario, and Wayne Counties (334,217 households).

**Sample selection:**

A stratified sampling approach was used in which a listing of all residential addresses in the study area was divided into smaller groups of households and a random sample was chosen within each group.

**Survey Method:**

The survey was administered by Internet or telephone. One member of each surveyed household was asked to fill in a diary of all the trips made by that household on a specific day.

**Survey Content:**

All personal travel outside the home was reported, from a walk to a neighbor's house to a trip on the Thruway. Basic household and socioeconomic information was also collected.

**More Information:**

Please contact the Genesee Transportation Council at [contactgtc@gtcmpo.org](mailto:contactgtc@gtcmpo.org) or 585-232-6240.

The Genesee Transportation Council's 2011 Household Travel Survey is a comprehensive look at how, where, and why we travel.

The information from the survey updates detailed travel data last collected in 1993. Since that time there have been changes in transportation infrastructure, population movements, and land use development.

Findings from the household travel survey will help us understand the impacts of these changes on personal mobility and regional travel patterns.

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# What's Changed Since 1993?

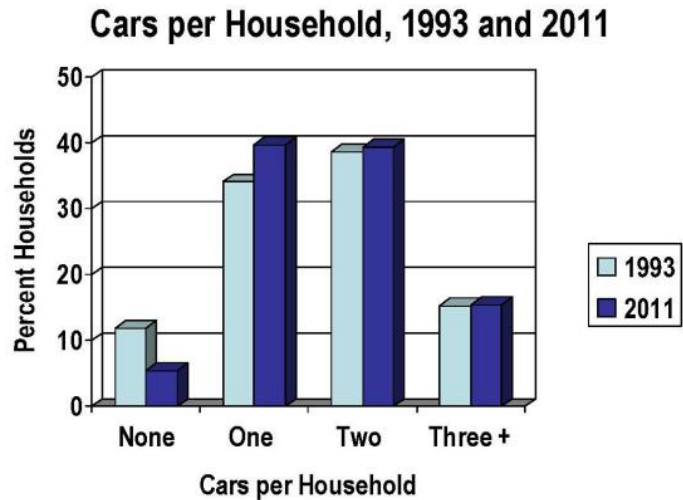
## Car Ownership

Seventy-nine percent of households in the study area currently own either one car (39.7 percent) or two cars (39.3 percent).

Between 1993 and 2011, there appears to have been an overall increase in the number of cars owned by households. More specifically:

- The proportion of households owning no cars declined by more than half from about 12 percent to 5 percent.
- The proportion of households owning one car increased five percent.
- There were slight increases in the proportions of households owning two or three cars.

Although the proportion of households with no cars declined significantly, nearly 24 percent of African-American households are still without vehicles, according to the American Community Survey.



## Trip Rates and Trip Length

Not only are there more cars on the road, but people are making more and longer trips.

- The average number of daily person trips per household rose from 6.9 in 1993 to 7.7 in 2011.
- The average length of a trip increased from 5.4 miles in 1993 to 6.1 miles in 2011.

*Members of a typical household in the study area traveled a total of 38 miles each day in 1993 and 47 miles per day in 2011.*

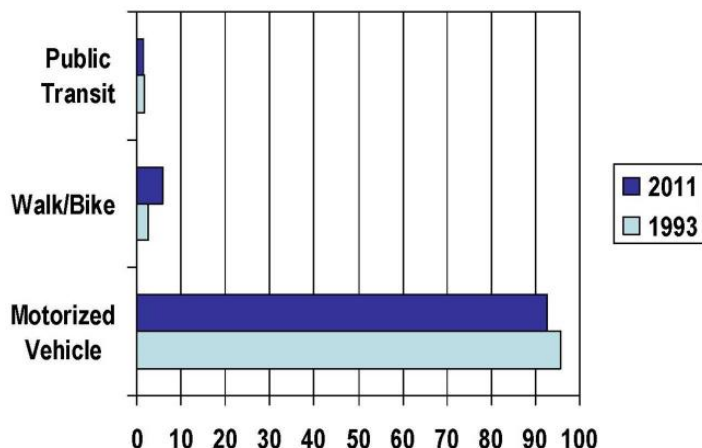
# What's Changed Since 1993?

## Mode Share

Travel in the study area in both 1993 and 2011 was dominated by motorized vehicles, particularly the private car. Over 92 percent of all trips in 1993 and 2011 were automobile trips.

The numbers show a slight decline in the proportion of trips made by motor vehicles and public transit and a slight uptick in trips made by walking and biking.

Percent Mode Share, 1993 and 2011

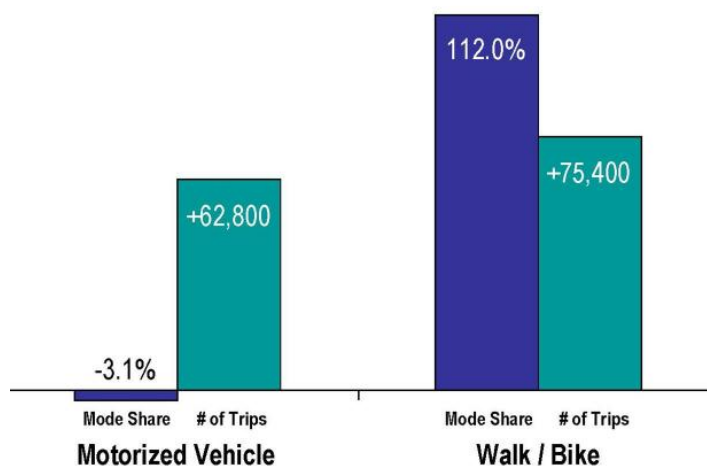


## Change in Mode Share

Mode shares are not the same as total modal use. For example, it is possible for use of cars or other modes to increase even as mode share goes down if the overall population increases or personal behaviors change, as they have in the region since 1993.

Between 1993 and 2011, the number of households in the study area rose 11 percent, from 300,321 to 334,217. The total number of weekday trips by adults rose from 1,988,000 to 2,122,860, a jump of 132,960 or 7 percent. Economic and behavioral changes such as an increase in people working at home may also affect the number of trips and mode shares.

Change in Mode Share and Number of Trips 1993 to 2011



# What's Changed Since 1993?

## Trip Purpose

The percentage of trips from home to work decreased by more than a quarter since 1993.

The biggest share of trips undertaken for each trip purpose in both 1993 and 2011 was for "home-based-other" trips. These are trips where one end is home and the other end is a store, school, doctor's office, etc. These trips, as well as those in which neither end is the traveler's home (non-home-based trips), increased since 1993.

Trip Purpose, 1993 and 2011		
Purpose	Purpose Share (%)	
	1993	2011
Home-Based Work	24.3	18.2
Home-Based Other	46.1	50.7
Non-Home-Based	29.6	31.1

Travel that is not related to work is becoming increasingly important to people's lives. It is also important to transportation planning because it influences how travel is distributed in the study area. Travel patterns, in turn, affect how and where new homes and services are built, as well as the types of investments and policies that can be used to address personal transportation needs.



Trips made in a car as driver or passenger are the dominant mode of travel, accounting for more than nine out of ten trips.

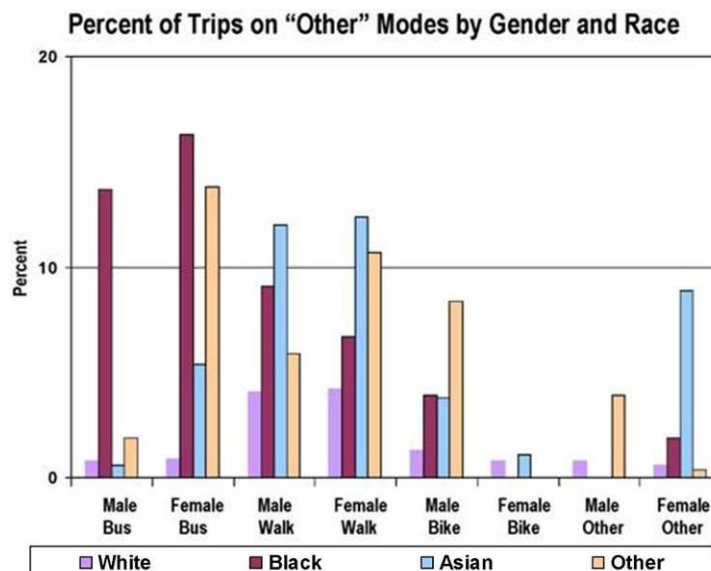
Walking is the second most commonly used mode (nearly 5 percent of total trips).

Around 1.6 percent of trips are made by public transit, and just over 1 percent of all trips are made by bicycle. Other modes, such as vanpools and taxis, have relatively minimal roles in travel.

Mode Share Statistics Persons Ages 18+		
Mode	Daily Person Trips	Mode Share (%)
Car/Truck/Motorcycle	1,946,217	91.7
Walk/Wheelchair	100,516	4.7
Public Bus	33,286	1.6
Bicycle	24,004	1.1
Paratransit	1,215	0.1
Shuttle	4,816	0.2
Taxi-Limo	1,219	0.1
Organized Vanpool	1,105	0.1
Other	10,482	0.5
All Modes	2,122,860	100.1

Total is greater than 100 percent due to rounding

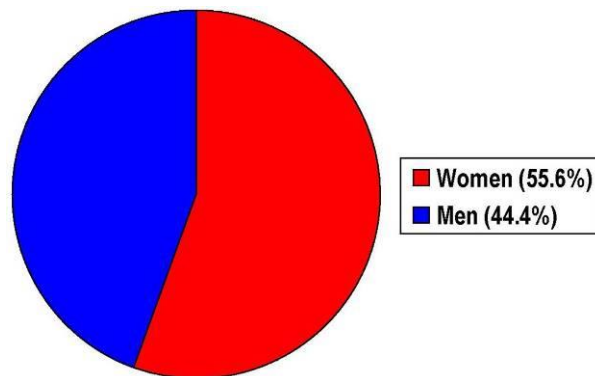
The small overall proportion of trips made by modes other than the private vehicle obscures the value of alternative modes to many segments of the population, especially women and minorities.



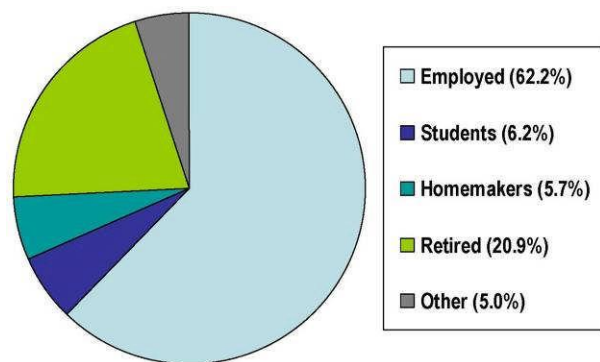


## Who Makes the Most Trips?

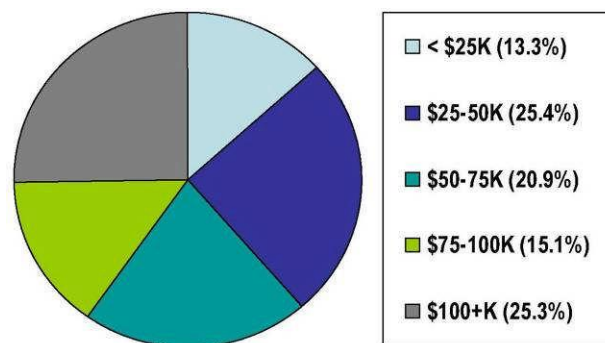
*... by gender*



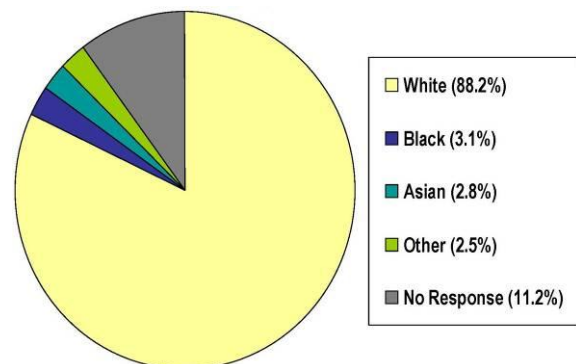
*... by employment status*



*... by income*

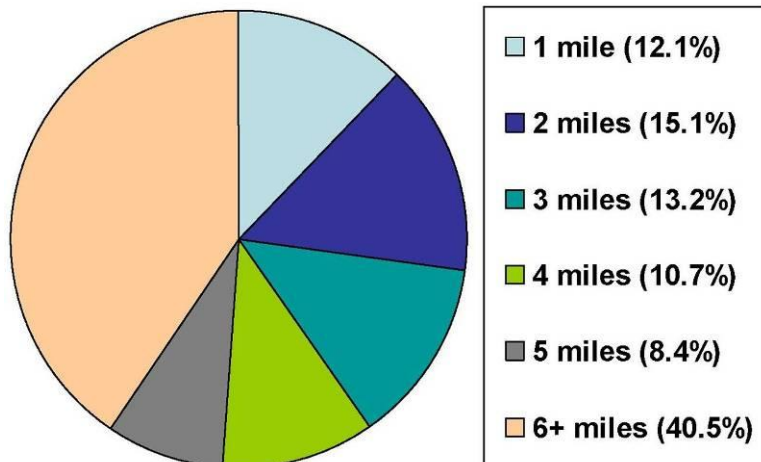


*... by race*



## Proportion of Daily Trips by Length

Over 40 percent of the trips we make each day are three miles or less in length, and 40 percent are six miles or more.

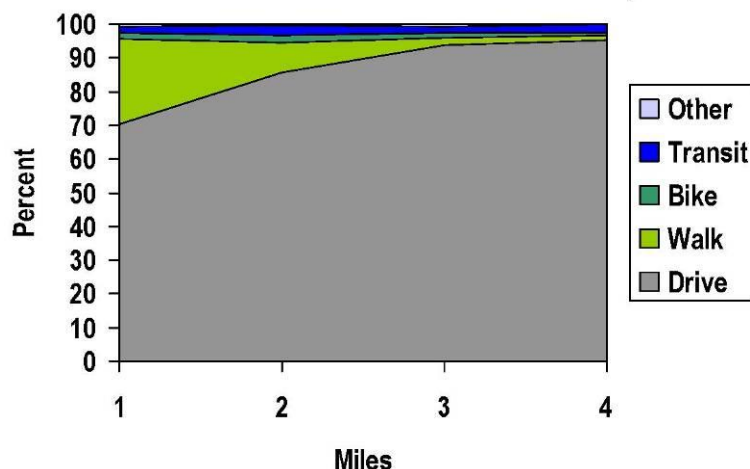


Median trip lengths vary by municipality, though about 80 percent of the study area's population travels 4 miles or less on half their trips.

Median Trip Length by Municipality									
1 mile	2 miles	3 miles	4 miles	5 miles	6 miles	7 miles	8 miles	9 miles	10 miles
		Brighton Caledonia Irondequoit Rochester Sweden	Avon Canandaigua (T) Chili East Rochester Gates Greece Mendon Parma Penfield Perinton Webster	Canandaigua (C) Henrietta Lima Pittsford Victor	Ogden	East Bloomfield Farmington Macedon Rush	Clarkson Hamlin Walworth West Bloomfield	Ontario Riga	Wheatland

## Travel Mode for 1-4 Mile Trips

Regardless of trip length, cars are the preferred means of travel. Even for trips of one mile or less, 70 percent of people take a car. For trips of three or more miles, other modes besides the car become relatively insignificant.



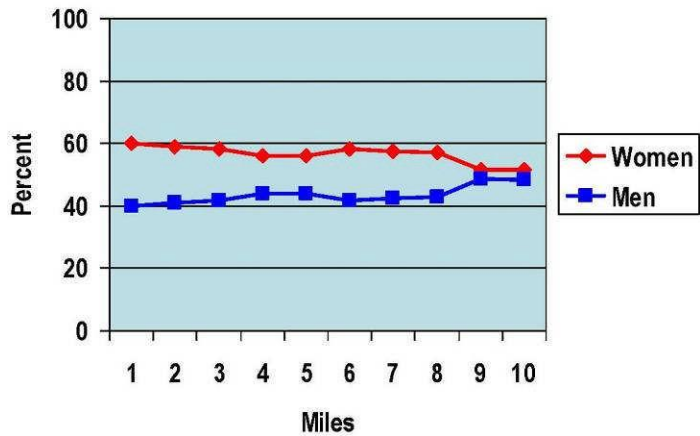
Women account for most trips, and the disparity with men is greatest at shorter distances. The necessity of juggling trips, here and nationally, falls mainly to women.

Women are far more likely than men to make multiple stops — called trip chaining — on their way to or from home. This is significant because we have been witnessing a feminization of poverty” in America over the past two decades, as more elderly women and single women with children of all races and ethnicities fall into poverty and the time and costs required by transportation become a significant burden.

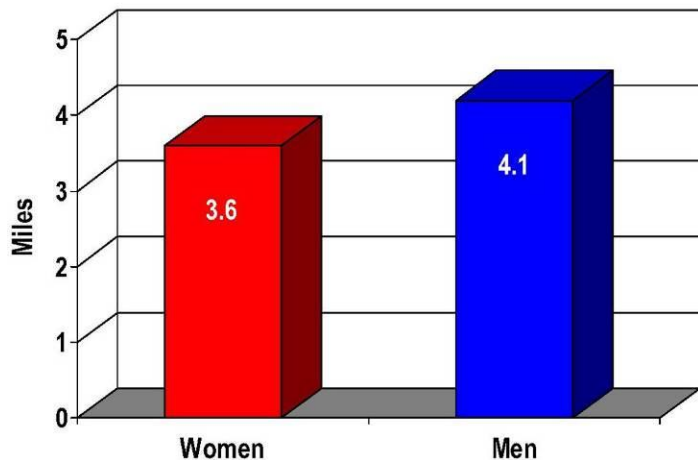
Women make not only more but also slightly shorter trips than men, reflecting perhaps their need to manage time by completing errands closer to home.

Median trip lengths vary not only by municipality and gender but also by race, with white travelers going the farthest distances.

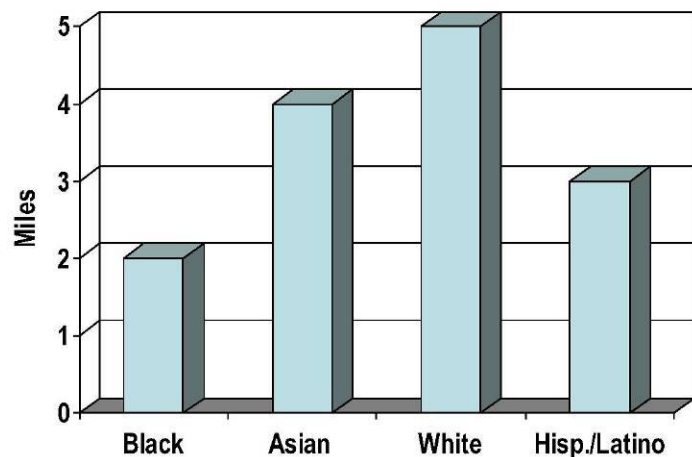
**Proportion of Trips by Length and Gender**



**Median Trip Length by Gender**



**Median Trip Length by Race and Ethnicity**



### Trip Purpose Glossary

Trips to **Earn a Living** include those to and from main and secondary places of work.

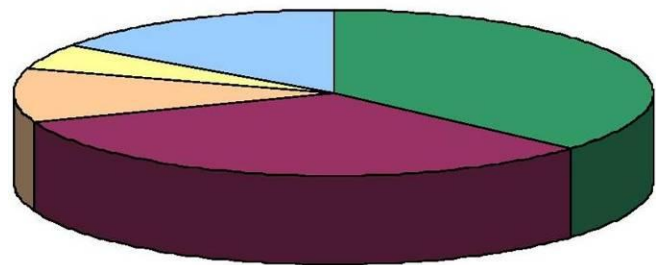
#### **Family and Personal Business**

trips include such trips as those to the hairdresser, post office, shoe repair, daycare center, and doctor's office, as well as shopping trips.

**Social and Recreational** trips include, for example, visiting people, whether at home or in the hospital, active and passive participation in sporting activities and hobbies, and all entertainment.

**Civic, Educational and Religious** trips include those to schools, colleges, and universities, places of worship, and civic activities such as voting or attending a public meeting.

Primary Purpose of Trip



- Earn a Living (36.8%)
- Family & Personal Business (32.3%)
- Social & Recreational (10.7%)
- Civic, Educational & Religious (4.9%)
- Return Home (not work-related) (15.3%)

Women account for 51.7 percent of the study area's population, yet make almost a quarter more trips each day than men.

Daily Person Trips by Gender		
	Number	Percent
Female	1,335,941	55.3
Male	1,078,707	44.7
Total	2,414,649	100.0
<i>Difference: Female-Male</i>	257,234	23.7

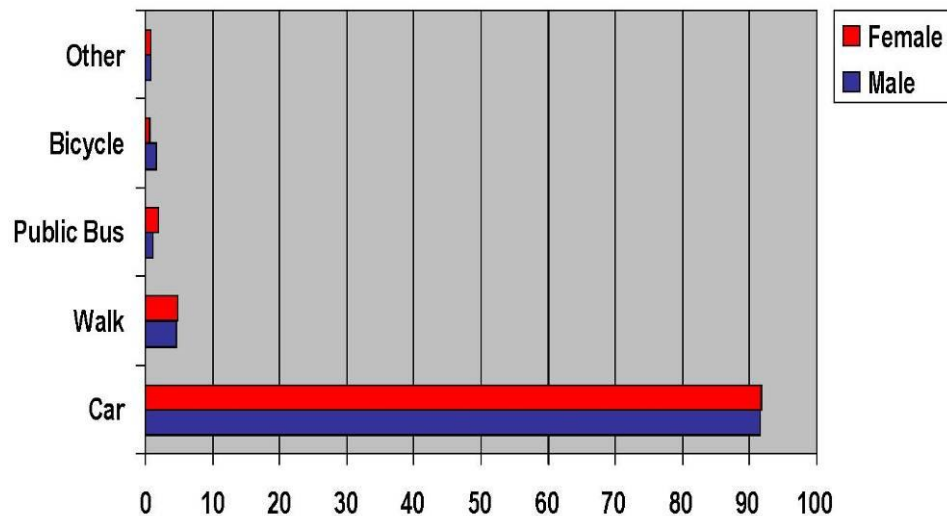
Differences in the proportion of daily trips by gender vary little throughout the study area.

Percent Daily Trips by Gender by Municipality		
Municipality	Male	Female
Avon	49.9	50.1
Brighton	44.1	55.9
Caledonia	59.5	40.5
Canandaigua (town)	44.4	45.6
Canandaigua (city)	38.5	61.5
Chili	43.9	56.1
Clarkson	45.3	54.7
East Bloomfield	44.8	55.2
East Rochester	44.7	55.3
Farmington	47.5	52.3
Gates	45.4	54.6
Greece	42.6	57.3
Hamlin	45.5	54.5
Henrietta	48.9	51.1
Irondequoit	36.8	63.2
Lima	43.3	56.7
Macedon	50.4	49.6
Mendon	45.0	55.0
Ogden	45.6	54.4
Ontario	43.5	56.5
Pama	36.3	63.7
Penfield	45.8	54.2
Perinton	41.3	58.7
Pittsford	40.2	59.8
Riga	38.8	61.2
Rochester	45.2	54.8
Rush	45.8	54.2
Sweden	41.2	58.8
Victor	47.2	52.8
Walworth	44.5	55.5
Webster	47.0	53.0
West Bloomfield	53.6	46.4
Wheatland	53.7	46.3

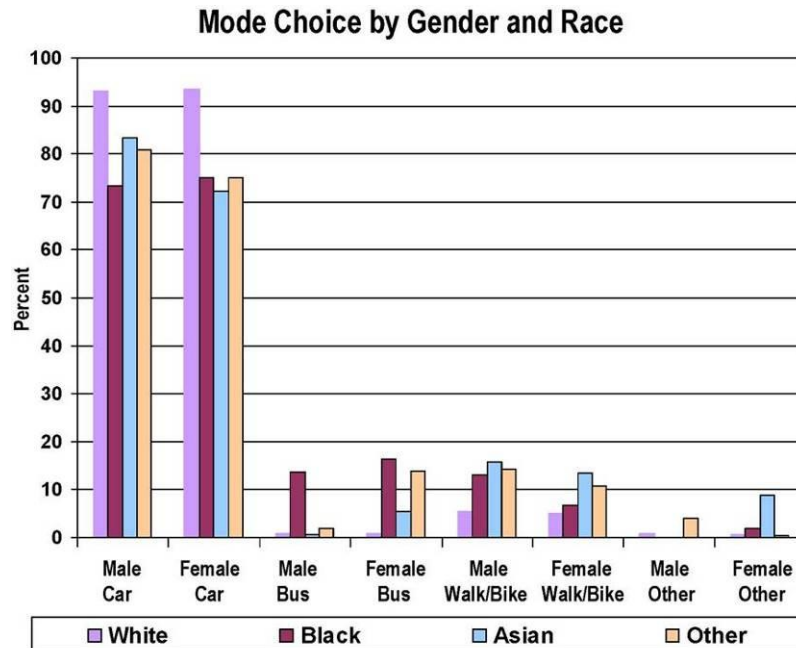
Females account for more trips in all modes except bicycling.

- Females make a slightly greater proportion of their total trips by driving and walking than males.
- Females are nearly twice as likely to ride the bus as males.
- Males ride bicycles at double the rate of females.
- Vanpools (part of "other" mode) are utilized by females five times more frequently than males.

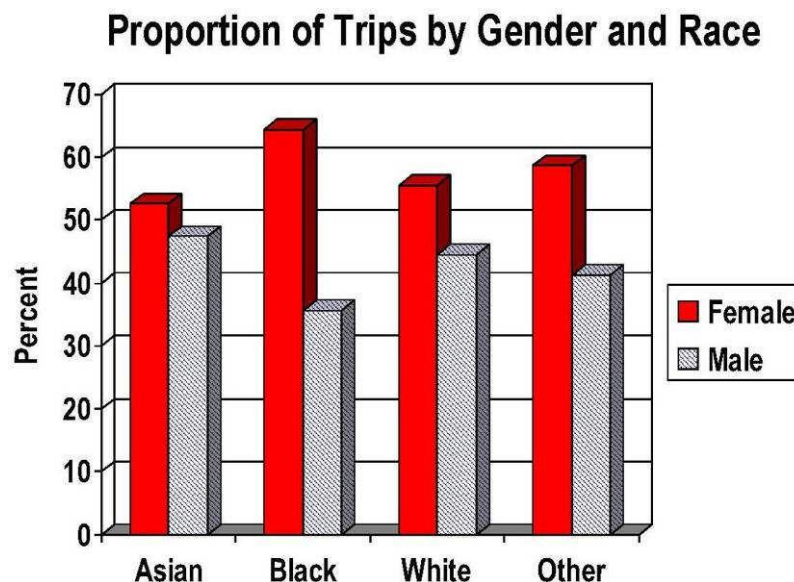
### Mode Share by Gender (%)



Gender differences are more striking when race is considered. People of color generally walk and bike at 2-3 times the rates of whites. Blacks, especially Black women, rely heavily on public transit. They are 20 times more likely to ride the bus than white women or men.



Women of all races make the most trips, and the percentage of additional trips made by women than men is remarkable. Black women, for example, make over 80 percent more daily trips than Black men. Asian women, by contrast, make 11 percent more trips than Asian men.





At all ages, men make slightly more trips for work, and women make considerably more for errands. The disparity between the total number of trips made by women and the number made by men increases with age.

Distribution of Daily Trips by Age, Purpose, and Gender (%)						
	Work Trips		Non-Work Trips		All Trips	
	Female	Male	Female	Male	Female	Male
All Ages	47.2	52.8	57.8	42.2	55.3	44.7
18-34	46.7	53.3	57.5	42.5	53.7	46.3
35-64	47.4	52.6	59.6	40.4	58.6	41.4
65+	48.5	51.5	53.4	46.6	63.3	36.7

Most trips are made by people between the ages of 45 and 64. Senior citizens (ages 65+) make more daily trips than teenagers.

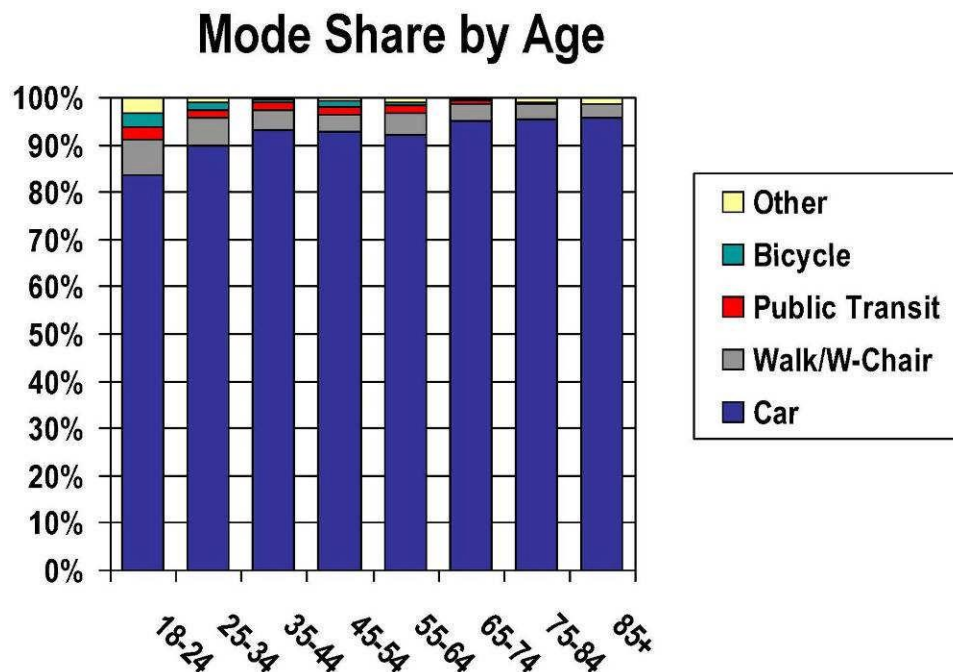
Trips by Age Group		
Age	Daily Person Trips	Proportion (%)
0-4	60,812	2.5
5-15	115,577	4.8
16-17	19,050	0.8
18-24	152,402	6.3
25-34	373,327	15.5
35-44	408,344	16.9
45-54	438,274	18.2
55-64	436,599	18.1
65-74	265,149	11.0
75-84	114,600	4.7
85+	30,516	1.3
All Ages	2,414,649	100.0

The table below plots the mode share within each age group.

Generally, slow modes of travel give way to faster modes as people age.

Car travel, especially, becomes increasingly important with age.

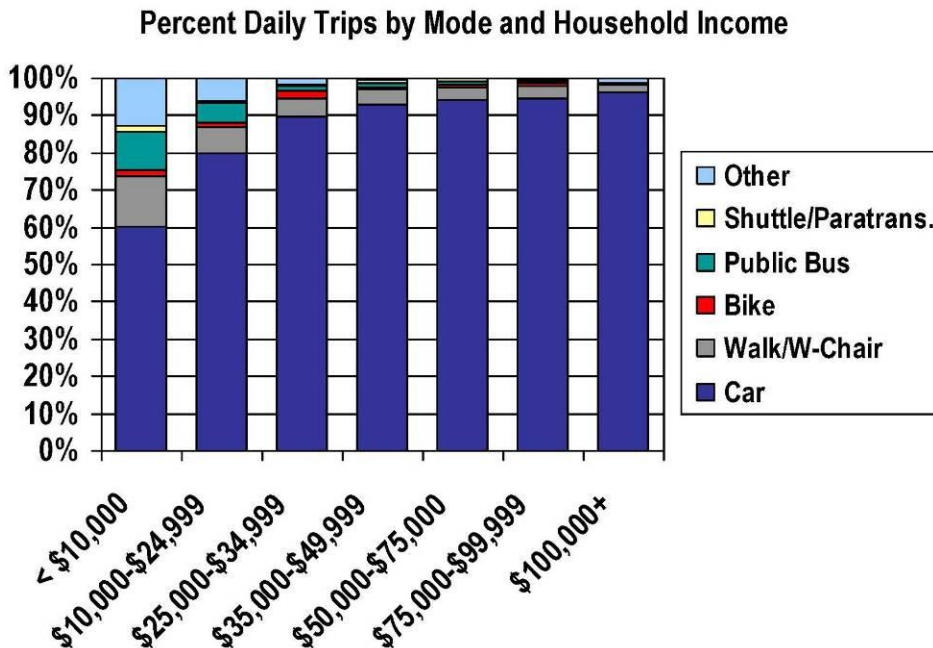
Walking, bicycling, and bus travel generally reach a plateau at a modest level between the ages of 25 and 35, and then decline slightly in subsequent decades. Very few seniors ride the bus.



Household income appears to be a significant factor influencing mode choice.

People with lower incomes drive less and walk twice as frequently as other groups. However, cars become the first choice of travel well before a household's income reaches the study area median of about \$52,000. People move away from the public bus more quickly than any other alternative mode:

HH Income	Bus Mode Share
<10K	11.2%
10-25K	5.6%
25-35K	1.2%
35-50K	0.9%
100+K	0.0%



Income also appears to influence the number of trips. Generally, lower income households are less mobile, and a household's trip frequency will increase with income.

Proportion of Total Daily Trips by Income		
Household Income	% of Daily Trips in Study Area	% Study Area Population
< \$10,000	2.8	8.9
\$10,000-\$24,999	10.5	16.1
\$25,000-\$34,999	12.5	10.9
\$35,000-\$49,999	12.9	14.5
\$50,000-\$74,999	20.9	18.5
\$75,000-\$99,999	15.1	11.9
\$100,000-\$149,999	15.9	12.3
\$150,000-\$199,999	5.3	3.7
\$200,000+	4.2	3.2

While upper incomes account for a greater percentage of overall trips, households with lower incomes account proportionally for more trips of shorter lengths.

Percent of Daily 1 to 3 Mile Trips by Income									
Trip Length	Household Income								
	<\$10K	\$10-24.9K	\$25-34.9K	\$35-49.9K	\$50-74.9K	\$75-99.9K	\$100-149.9K	\$150-199.9K	\$200+K
1 Mile	22.9	17.9	13.2	13.3	11.3	9.0	9.2	10.3	10.8
2 Miles	17.9	18.4	19.3	14.5	15.1	13.2	12.1	13.4	13.8
3 Miles	15.8	14.0	12.6	13.9	13.2	12.6	13.3	11.9	13.7

Walking decreases rapidly at distances over one mile for all income groups.

As mentioned previously, lower income households are more frequent walkers, and bus ridership enjoys a significant mode share at only the lowest income levels.

Spending more time to cover the same distance, whether by foot or bus, is a burden (cost) that falls disproportionately on those with lower incomes.

Percent of Daily 1 to 3 Mile Trips by Length, Income, and Mode				
Household Income	Trip Length	Mode		
		Car	Walk	Bus/Shuttle/Para
<\$10K				
	1 mile	38.6	46.0	8.2
	2 miles	59.7	20.7	17.6
\$10-24.9K	3 miles	55.7	13.9	20.1
	1 mile	59.3	32.7	4.9
\$25-34.9K	2 miles	76.5	9.4	11.3
	3 miles	88.9	2.8	7.4
\$35-49.9K	1 mile	70.5	22.0	3.1
	2 miles	87.6	11.7	2.1
	3 miles	93.3	2.2	1.2
\$50-74.9K				
	1 mile	74.9	21.7	1.1
	2 miles	85.3	12.0	1.7
\$75-99.9K	3 miles	94.9	1.7	0.7
	1 mile	74.4	24.5	0
\$100-149.9K	2 miles	90.9	6.5	0.2
	3 miles	94.7	2.4	0.6
\$150-199.9K	1 mile	73.1	24.0	0
	2 miles	88.7	7.3	0.8
	3 miles	96.7	1.6	0.3
\$200+K				
	1 mile	81.8	16.3	0.3
	2 miles	90.5	8.5	0.2
\$250+K	3 miles	96.9	1.5	0
	1 mile	83.1	16.6	0
\$300+K	2 miles	94.4	0.9	1.6
	3 miles	100.0	0	0
\$350+K	1 mile	64.2	35.8	0
	2 miles	96.0	2.2	0
	3 miles	98.2	0	0

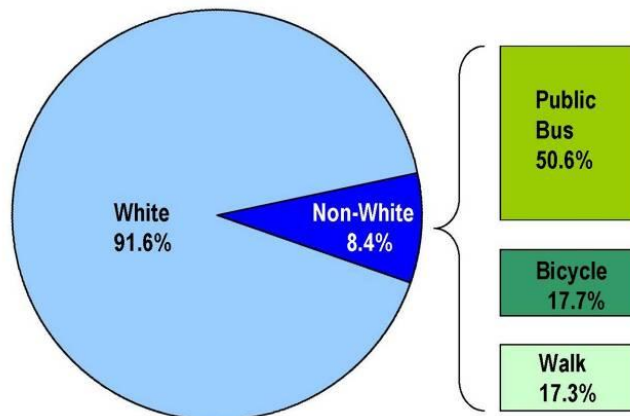
Although all segments of the study area's population are dependent primarily on the car for travel, people of color are more likely than whites to utilize alternative modes of transportation.

People of color are several times as likely as whites to ride the bus and about twice as likely as whites to walk. Blacks stand out among people of color in their use of public transit; they are 19 times as likely as whites to ride the bus.

Percent Mode Share by Race					
Mode	Race				
	African-American or Black	American Indian or Alaskan Native	Asian	White	Other
Car	74.4	74.4	77.6	93.3	77.8
Bicycle	1.4	15.9	2.4	1.0	2.1
Paratransit	0.0	0.0	0.0	0.0	1.2
Public Bus	15.4	5.3	3.2	0.8	9.2
Shuttle	0.0	0.0	3.3	0.1	0.0
Taxi-Limo	0.0	0.0	0.4	0.1	0.0
Vanpool	0.4	0.0	0.0	0.0	0.0
Walk or W-Chair	7.5	4.4	12.2	4.2	9.2
Other	0.9	0.0	0.9	0.5	0.5
TOTAL	100.0	100.0	100.0	100.0	100.0

Proportion of Total Daily Trips by Race and Alternative Modes

People of color make only 8.4 percent of the total daily trips in the study area, but 50.6 percent of all daily public bus trips, 17.7 percent of all bicycle trips, and 17.3 percent of all walking trips.





Blacks with lower incomes are more likely to walk, bike, or ride the bus than whites with lower incomes. This suggests, perhaps, that household income alone might not determine use of transportation means; it may be important to consider household income in the context of broader family wealth.

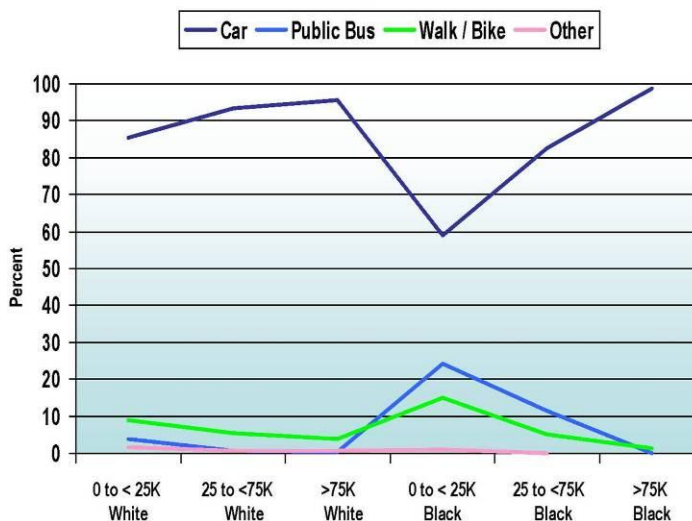
As household incomes increase, differences in relative mode shares between Blacks and whites tend to decrease.

By the time the income of a white household reaches the median for the study area, that household makes 0.7 percent of its daily person trips by bus. Black households at this income level make nearly 12 percent of their trips by bus, highlighting the importance of Blacks (especially Black women) as both choice and captive bus riders.

People who drive to work each day are probably most dependent on their car, using it for all trips during the day, regardless of race. After you have driven your car to work, it's unlikely you will abandon it for the rest of your trips.

People of color are much more likely to use alternative modes, especially public transit, for other trips — over a quarter of their daily non-work trips are by bike, bus, or foot.

Mode Choice by Income and Race



Percent Trips to Work by Mode and Race

Mode to Work	Black	White	Asian	Other
Car	84.4	94.2	67.1	93.3
Public Bus	12.8	0.8	0.8	3.1
Walk	1.6	3.3	16.2	0.9
Bike	1.2	1.3	1.6	2.7
Other	0.0	0.4	14.3	0.0

Percent Non-Work Trips Mode and Race

Mode	Black	White	Asian	Other
Car	72.1	93.2	79.0	74.7
Public Bus	16.1	0.7	3.7	10.0
Walk	9.0	4.4	11.5	9.9
Bike	1.5	0.9	2.6	3.7
Other	1.4	0.7	3.2	1.8



While many trips for basic household maintenance and employment are essentially mandatory for most travelers, notable variations by race and age exist in our study area in the frequency of trips for the same purpose.

This is not surprising since travel is determined by the socio-economic resources, constraints, and opportunities of individuals and groups.

More travel should indicate more consumption of goods and services by various demographic groups.

Travel also indicates access to labor markets.

Finally, the proportion of trips may indicate cultural differences in what activities different groups find beneficial.

Percent of Daily Trips by Age, Purpose, and Race							
Age	Purpose		Race				
			Asian	Black	White	Other	All
18-34	Work		40.3	25.9	39.7	36.8	39.0
	Non-Work		59.7	74.1	60.3	63.2	61.0
	Selected Non-Work Trip Purposes	Go to school/childcare	11.0	13.2	12.1	13.2	12.1
		Drop off or pick up someone	1.2	6.4	7.5	26.1	7.3
		Eat out/get take out	5.8	1.6	5.1	3.6	4.9
		Conduct personal business	5.6	6.9	6.0	8.4	6.1
		Quick stop	1.1	6.2	3.9	2.4	3.9
		Go to religious/community activity	2.6	2.1	1.1	1.7	1.3
		Go shopping	25.8	8.0	12.5	5.9	12.8
		Attend social/recreational event	7.7	11.2	6.1	6.2	6.5
35-64	Work		39.4	27.6	36.0	30.7	35.7
	Non-Work		60.6	72.4	64.0	69.3	64.3
	Selected Non-Work Trip Purposes	Go to school/childcare	8.1	2.6	3.4	1.2	3.4
		Drop off or pick up someone	18.3	8.1	12.3	12.5	12.3
		Eat out/get take out	3.2	2.2	6.4	0.5	6.1
		Conduct personal business	6.4	13.8	11.4	13.7	11.4
		Quick stop	2.8	7.9	3.5	1.4	3.6
		Go to religious/community activity	1.4	6.0	2.2	4.1	2.4
		Go shopping	19.0	18.6	18.8	21.1	18.9
		Attend social/recreational event	4.1	3.8	5.7	6.5	5.5
65+	Work		0.0	5.4	7.3	10.7	7.3
	Non-Work		100.0	94.6	92.7	89.3	89.3
	Selected Non-Work Trip Purposes	Go to school/childcare	0.0	0.0	0.6	0.0	0.6
		Drop off or pick up someone	1.7	0.0	1.3	7.7	1.4
		Eat out/get take out	0.0	8.3	5.8	5.3	5.7
		Conduct personal business	15.5	12.1	13.0	11.9	13.0
		Quick stop	4.3	5.9	1.6	2.3	1.6
		Go to religious/community activity	0.0	5.6	4.4	1.4	4.3
		Go shopping	29.0	16.7	20.3	24.4	20.3
		Attend social/recreational event	0.0	0.9	5.7	3.8	5.6

While there is no “typical” public bus rider, the majority in the study area are lower-income females of working age who live in the City of Rochester.

Bus Rider Profile		
	% of Public Bus Riders	% of Study Area Population
<b>Gender</b>		
Female	68.6	51.7
Male	31.4	48.3
<b>Age</b>		
18-24	12.5	14.6
25-34	19.2	15.9
35-44	18.1	16.5
45-54	22.3	20.8
55-64	23.4	13.4
65+	4.5	18.8
<b>Race</b>		
White	47.6	78.1
Black	29.8	14.2
Other	22.8	7.7
<b>Ethnicity</b>		
Hisp./Latino of Any Race	11.5	9.1
<b>HH Income</b>		
< \$10K	22.8	8.4
\$10-25K	42.8	15.6
\$25-35K	10.5	10.9
\$35-50K	8.5	13.8
\$50-75K	9.2	19.3
\$75+K	6.2	32.0
<b>Residence</b>		
Rochester	66.0	25.0
Other	34.0	75.0

The three tables on this page and the next note the frequency that respondents to the household travel survey ride the bus to work, school, or other places within each age, racial, ethnic, and residential group.

... Respondents who are employed (N= 375,650)

Of respondents who use the bus primarily to go to and from work, 58.1 percent of whites and 20.7 percent of Blacks report household incomes of greater than \$50,000.

Percent Daily Bus Rides to Work								
	5+ Days/ Week	5 Days/ Week	4 Days/ Week	3 Days/ Week	2 Days/ Week	1 Days/ Week	<1 Days/ Week	Never
<b>TOTAL</b>	0.5	1.9	0.4	0.2	0.3	0.2	2.2	94.2
<b>Age</b>								
18-24	2.1	5.5	2.0	0.0	0.0	0.0	2.2	88.2
25-34	0.8	1.7	0.4	0.1	0.1	0.2	2.3	94.3
35-44	0.0	1.7	0.3	0.5	0.7	0.1	2.2	94.5
45-54	0.2	1.4	0.2	0.1	0.4	0.1	2.1	95.5
55-64	0.4	1.8	0.4	0.2	0.4	0.6	2.5	93.7
65-74	0.5	1.9	1.0	0.0	0.0	0.0	0.4	96.3
75-84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
85+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
<b>Race</b>								
White	0.3	1.5	0.4	0.2	0.4	0.2	1.6	95.3
Black	4.4	10.9	0.6	0.0	0.0	0.0	8.8	75.3
Other	1.8	6.6	1.8	0.0	0.0	0.0	5.4	84.4
<b>Ethnicity</b>								
Hisp./Latino of Any Race	0.0	7.3	0.0	0.0	0.0	0.0	3.5	89.2
<b>Residence</b>								
Rochester	1.4	4.3	0.8	0.7	1.1	0.4	5.7	85.5
Other	0.5	1.9	0.4	0.2	0.3	0.2	2.2	94.2

... Respondents who are students (N= 36,006)

Students account for a significant portion of daily bus ridership.

Percent Daily Bus Rides to School								
	5+ Days/ Week	5 Days/ Week	4 Days/ Week	3 Days/ Week	2 Days/ Week	1 Days/ Week	<1 Days/ Week	Never
<b>TOTAL</b>	4.0	4.4	3.2	1.2	3.5	1.2	11.0	71.5
<b>Age</b>								
18-24	4.2	5.9	4.7	1.7	1.7	1.5	2.9	77.3
25-34	5.0	3.1	2.4	0.9	6.8	1.2	16.6	64.0
35-44	0.0	0.0	0.0	0.0	0.0	0.0	9.5	90.5
45-54	0.0	0.0	0.0	0.0	0.0	0.0	52.6	47.4
55-64	0.0	56.8	0.0	0.0	0.0	0.0	0.0	43.2
<b>Race</b>								
White	1.9	3.3	4.2	0.5	3.5	1.3	11.0	74.3
Black	20.4	0.0	0.0	0.0	0.0	0.0	5.5	74.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
<b>Ethnicity</b>								
Hisp./Latino of Any Race	0.0	0.0	0.0	0.0	0.0	0.0	12.1	87.9
<b>Residence</b>								
Rochester	6.1	5.4	2.3	1.0	5.9	1.4	17.4	60.5
Other	4.0	4.4	3.2	1.2	3.5	1.2	11.0	71.5

... All respondents (N= 567,120)

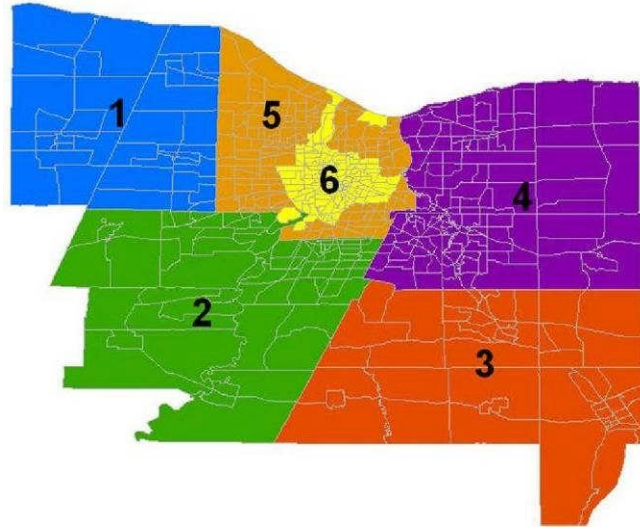
While all people of color and Latinos are more likely to take the bus for non-work and non-school trips than whites, the extent of the difference is largest for Blacks.

Percent Daily Bus Rides to Other Places								
	5+ Days/ Week	5 Days/ Week	4 Days/ Week	3 Days/ Week	2 Days/ Week	1 Days/ Week	<1 Days/ Week	Never
<b>TOTAL</b>	0.5	0.5	0.2	0.6	0.6	0.8	5.2	91.5
<b>Age</b>								
18-24	1.1	2.1	1.1	0.7	1.2	4.6	7.6	81.6
25-34	0.6	0.3	0.1	0.9	0.4	0.5	5.2	92.0
35-44	0.4	0.7	0.2	0.5	0.9	0.4	4.3	92.7
45-54	0.5	0.3	0.2	0.9	0.8	0.6	7.3	89.5
55-64	0.9	0.4	0.3	0.5	0.4	0.8	5.3	91.4
65-74	0.0	0.5	0.4	0.0	0.0	0.1	2.9	96.2
75-84	0.0	0.0	0.0	0.0	0.2	0.5	2.9	96.4
85+	0.0	0.0	0.0	0.0	0.0	0.0	1.7	98.3
<b>Race</b>								
White	0.3	0.3	0.1	0.2	0.4	0.6	4.3	93.7
Black	4.3	3.5	1.9	6.2	5.8	4.8	10.0	63.5
Other	0.9	3.3	1.5	5.2	0.9	0.0	10.0	78.2
<b>Ethnicity</b>								
Hisp./Latino of Any Race	0.0	2.3	1.2	4.3	0.8	0.0	4.4	87.0
<b>Residence</b>								
Rochester	2.5	1.2	1.0	2.0	1.4	1.8	10.6	79.6
Other	0.5	0.5	0.2	0.6	0.6	0.8	5.3	91.5



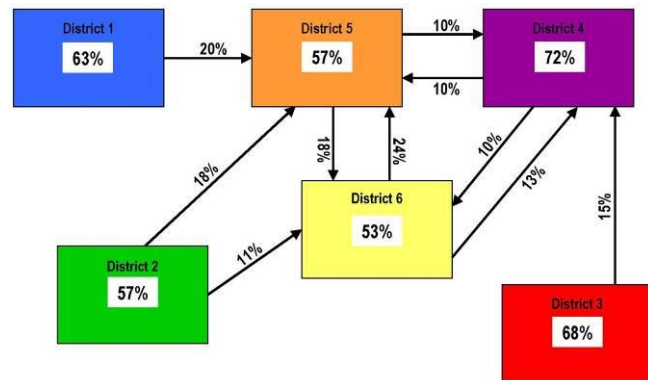
## Districts

In order to better understand the underlying trends in regional travel, municipalities in the study area were grouped into six districts. The survey data was then used to identify where travelers in the study area are traveling to and from.



## District-to-District Trip Flows

People make most of their daily trips within the district in which they live. Each rectangle in the flow chart at right correspond to the district of the same color in the diagram above. The number in the center of each rectangle indicates the percentage of all trips that both begin and end in the district. The arrows indicate all daily trip flows greater than 10 percent that begin in one district and end in another. In each district, at least 83 percent of all trips are made within that district or to an immediately adjacent district.



## District Mode Share

Car travel accounts for more than 95 percent of all daily trips in every district with the exception of District 6, where almost 16 percent of all trips are made with alternative modes of transportation.

Mode Share by District (%)			
District	Mode		
	Car	Bus	Walk/Bike
1	97.4	0.2	2.3
2	96.7	0.7	2.7
3	97.5	0.3	2.3
4	97.2	0.4	2.3
5	95.9	1.0	3.1
6	84.4	4.4	11.2
Total	94.1	1.4	4.4

The Travel Survey included questions about personal attitudes, opinions, and preferences. Answers to these questions can provide a “snapshot” of respondents’ views, tastes, and concerns about important transportation-related issues at a particular point in time.

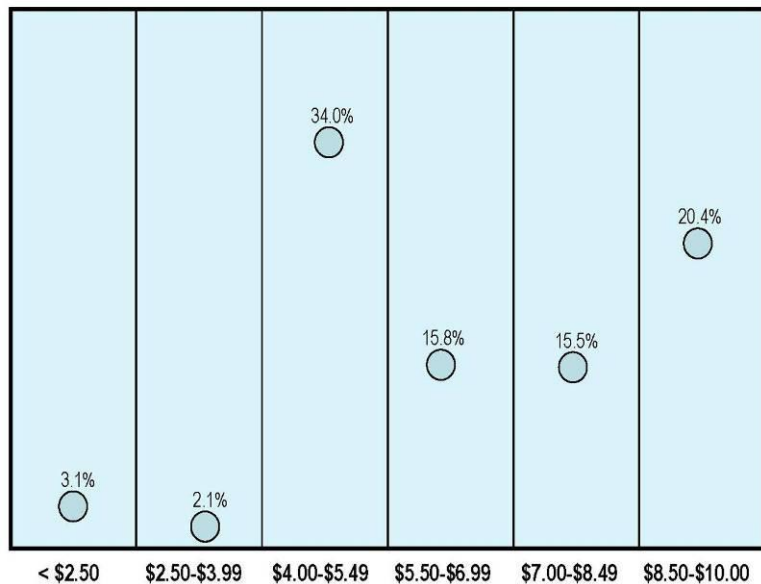
## Gas Prices

People were asked to state the minimum gas price that would encourage them to use alternative means of transportation at least two days a week.

The average retail gas price in the Rochester area at the time of the survey was \$3.75 per gallon, according to GasBuddy.com.

Almost 40 percent of respondents — 114,000 commuters — said they would seek alternatives to car travel by the time gasoline hits \$4.00 per gallon. (The 9.1 percent of respondents who reported already walking, biking, or riding the bus regularly are not tallied in the adjacent table.)

**Gas Price Threshold for Seeking Alternative Transportation  
(Percent of Respondents)**



Generally, the gas price threshold for seeking transportation alternatives gets higher as incomes get higher.

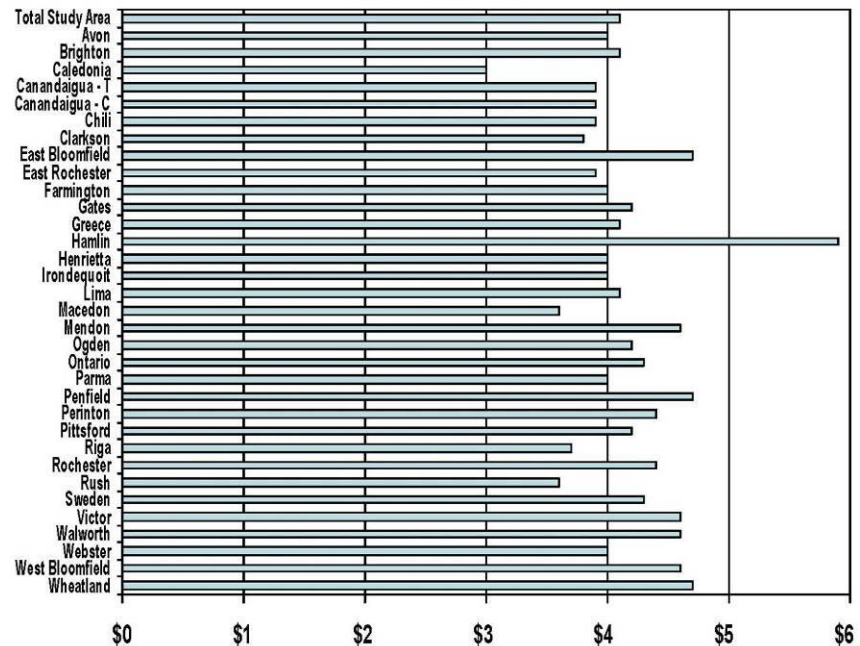
Gas Price Threshold for Seeking Alternative Transportation (Percent of Respondents by Household Income)						
Household Income	Price Per Gallon					
	< \$2.50	\$2.50-\$3.99	\$4.00-\$5.49	\$5.50-\$6.99	\$7.00-\$8.49	\$8.50-\$10.00
< \$10,000	0.0	8.9	43.8	7.5	2.8	15.0
\$10,000 - \$24,999	6.7	4.2	30.2	14.1	15.9	15.6
\$25,000 - \$34,999	1.7	2.5	42.5	17.5	7.9	11.2
\$35,000 - \$49,999	1.6	2.7	40.0	14.8	13.7	17.9
\$50,000 - \$74,999	4.2	1.6	37.9	15.5	15.1	17.2
\$75,000 - \$99,999	2.7	2.6	30.7	18.9	16.6	21.9
\$100,000 - \$149,999	3.2	1.3	31.5	15.9	17.7	24.1
\$150,000 - \$199,999	2.1	1.3	30.5	11.7	23.4	23.8
\$200,000+	3.4	0.0	11.8	15.9	18.6	43.0

## Gas Prices

The average gas price at which survey respondents say they would switch modes for at least two days per week is \$4.10 per gallon, with generally modest variations by municipality.

Only one municipality has an average above \$4.70 per gallon.

Average Gas Price Threshold for Seeking Alternative Transportation by Municipality



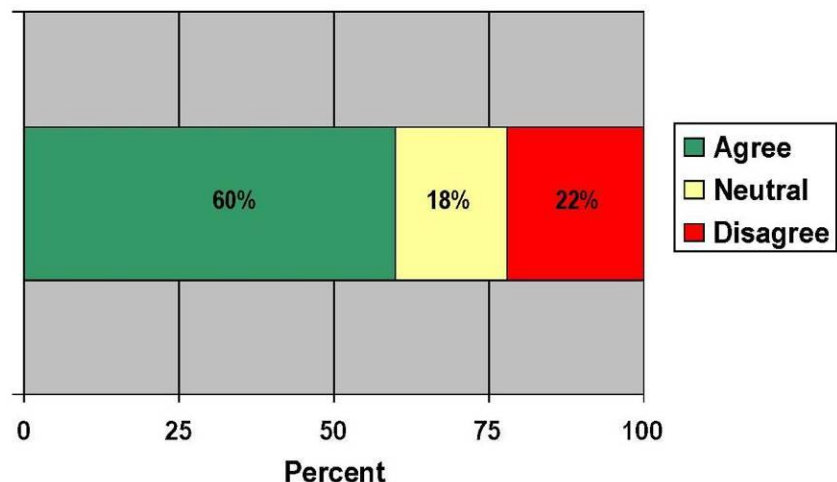
My Car is King! Nothing Will Replace My Car as My Main Mode of Transportation.

## All Commuters

### My Car is King

The survey asked commuters ages 18 and older whether or not they agreed with the statement, *Nothing will replace my car as my main mode of transportation.*

Sixty percent of respondents agreed.





## My Car is King

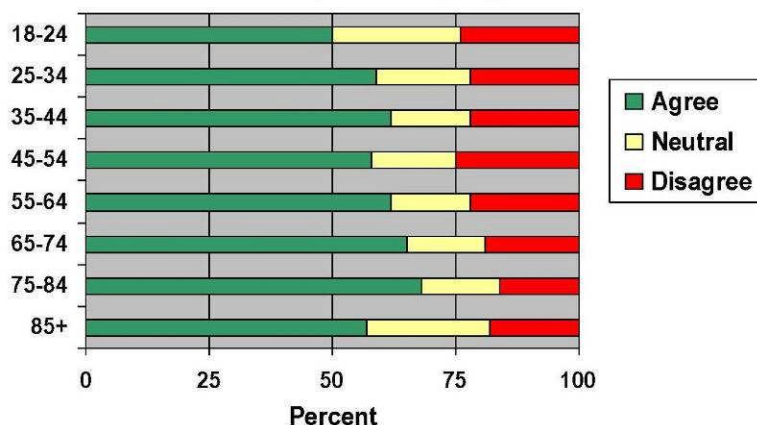
Support for the personal automobile as the main way of getting around on a daily basis is strong for all age, income, and racial groups.

Still, 40 percent of respondents in the study area, or about 230,000 individuals, disagree or are neutral that their car is irreplaceable.

The population groups least likely to agree that their car is king include youth between the ages 18 and 24; commuters in households earning less than \$10,000 per year; African-Americans; Asians; and persons designating themselves as belonging to Other races.

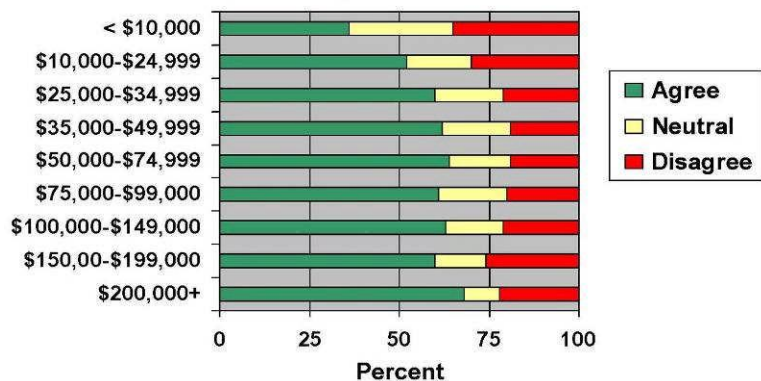
*My Car is King! Nothing Will Replace My Car as My Main Mode of Transportation.*

### Responses by Age



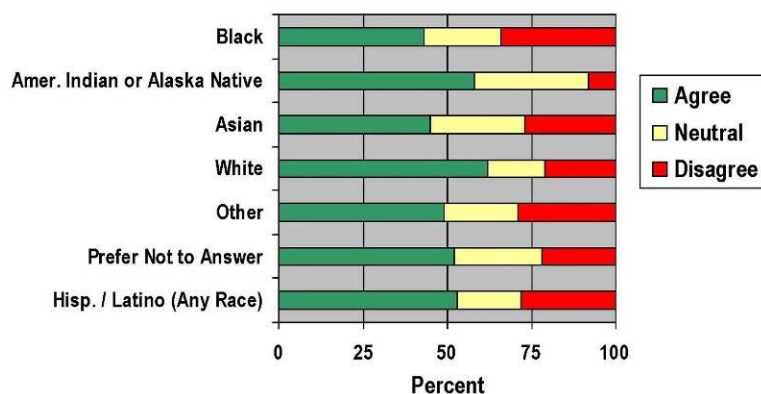
*My Car is King! Nothing Will Replace My Car as My Main Mode of Transportation.*

### Responses by Household Income



*My Car is King! Nothing Will Replace My Car as My Main Mode of Transportation.*

### Responses by Race and Ethnicity



## Gas Tax Increase

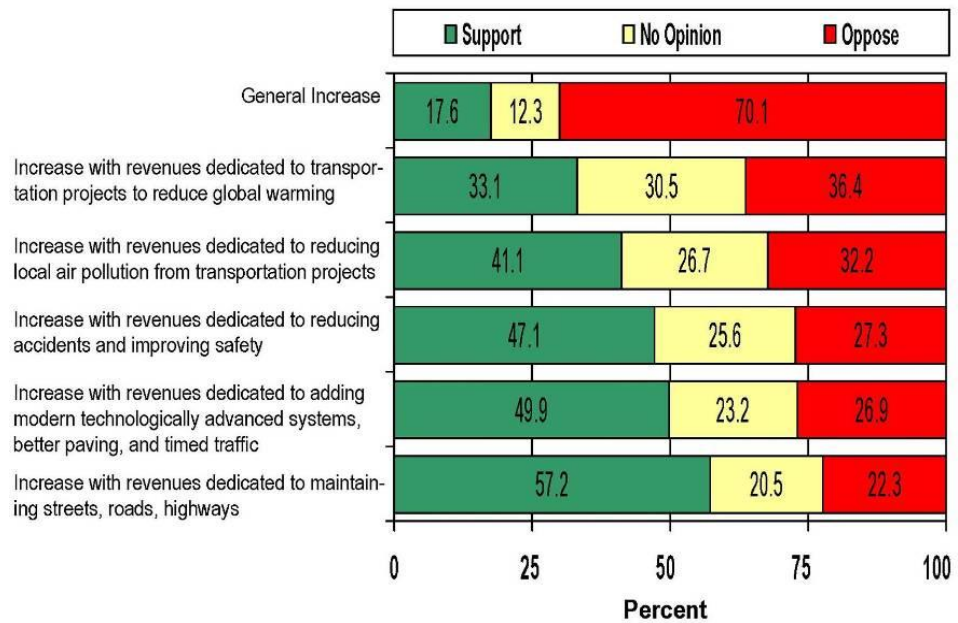
The survey asked commuters 18 years of age and over their opinions of a ten cent per gallon increase in the gas tax.

Over 70 percent of respondents were opposed to a general increase, and opposition remained at that high level across all age and income groups, with a single exception: only 57 percent of commuters in households earning \$150,000 or more opposed a general gas tax increase.

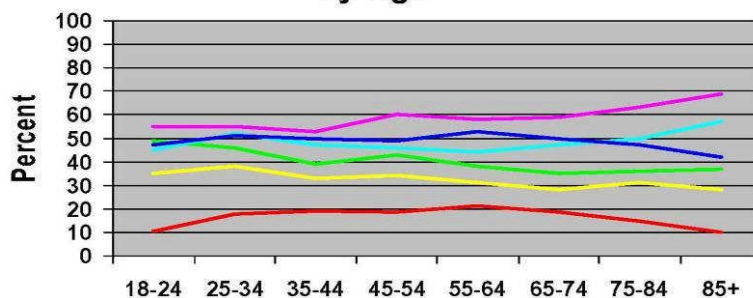
However, when survey participants were asked their opinions of a gas tax increase with revenues dedicated to specific transportation projects and services, support grew and opposition fell.

In general, gas tax increases targeted to street maintenance, technological improvements, and safety found relatively strong support regardless of ages or incomes.

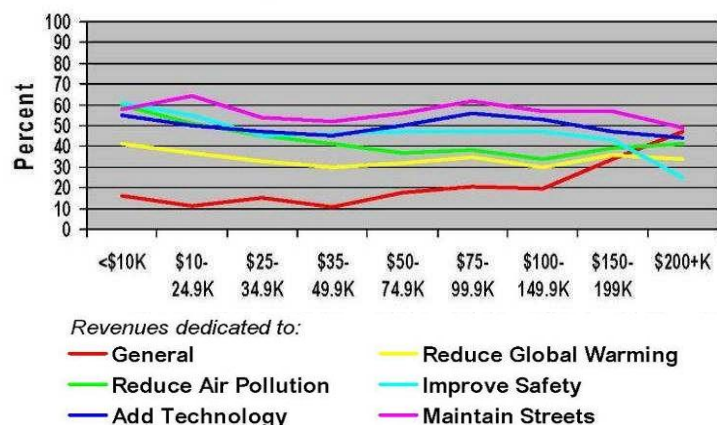
### Relative Support for Variants of 10¢ Gas Tax Increase



### Support for Variants of 10¢ Gas Tax Increase by Age



### by Household Income



## Residential Location

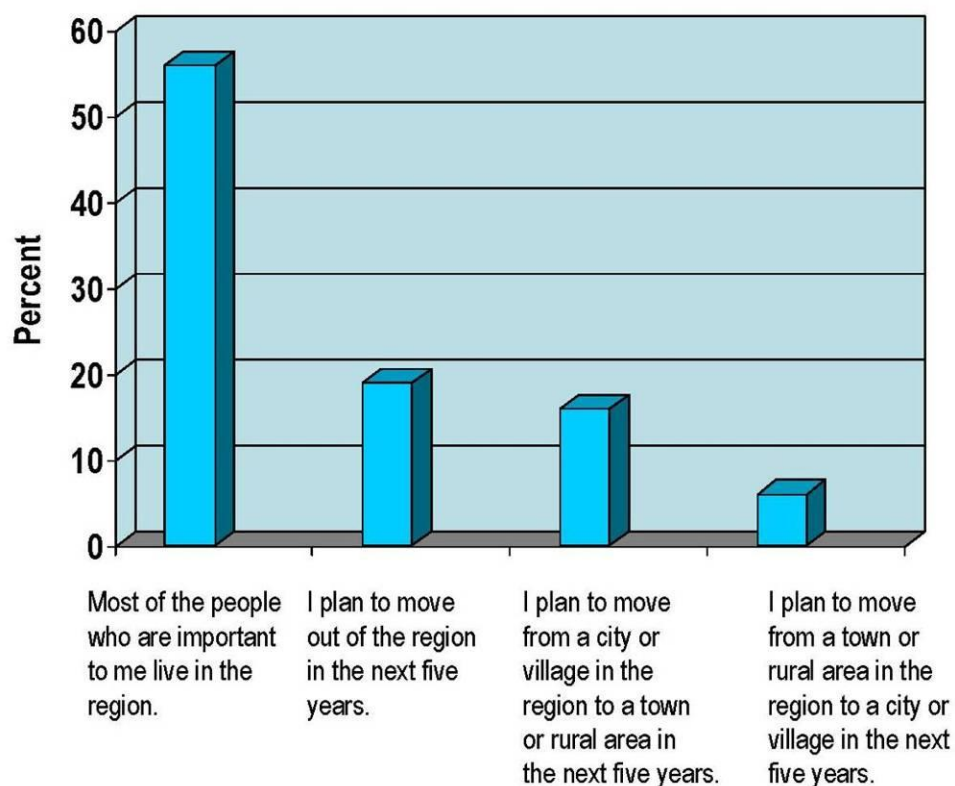
The survey asked participants whether they agree, have no opinion, or disagree with the following statements:

- Most of the people who are important to me live in the Rochester region.
- I plan to move out of the region in the next five years.
- I plan to move from a city or village to a town or rural area in the region within the next five years.
- I plan to move from a town or rural area to a city or village in the region within the next five years.

Nineteen percent of respondents, or 113,000 individuals, say they plan to move out of the region within five years. This would suggest a potential outmigration rate 60 percent higher than what the study area has experienced in recent history. Since 1990, five-year outmigration totals for the Rochester Metropolitan Statistical Area consistently averaged about 69,000 people, according to data from the Internal Revenue Service.

About 34,000 people (16 percent of respondents) say they plan to move to a suburban town or rural area and 22,000 people (6 percent of respondents) report contemplating a move in the opposite direction. This suggests a potential 70 percent increase in the rate of relocation to suburban and rural areas over what the region experienced between 2000 and 2010, according to Census data.

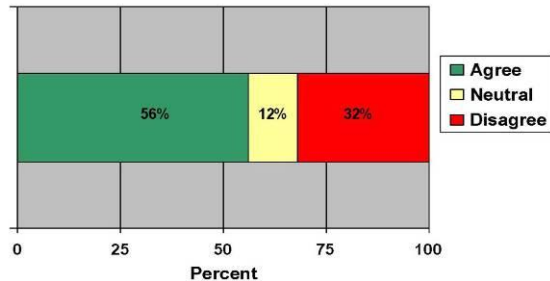
**Adults 18+ Years of Age Who Agree with Statement**



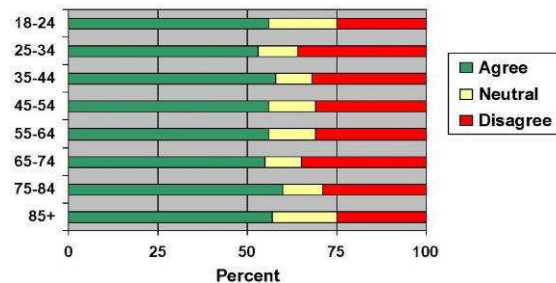
The following pages detail responses to the survey's residential location statements by age, income, and race and ethnicity.

**Most of the people who are important to me live in the Rochester region.**

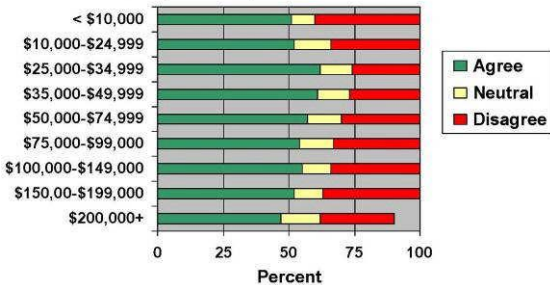
All Adults 18 years of Age and Older



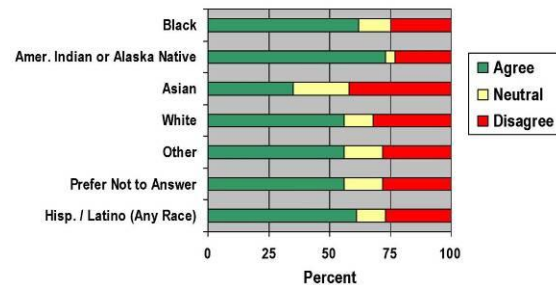
Responses by Age



Responses by Household Income

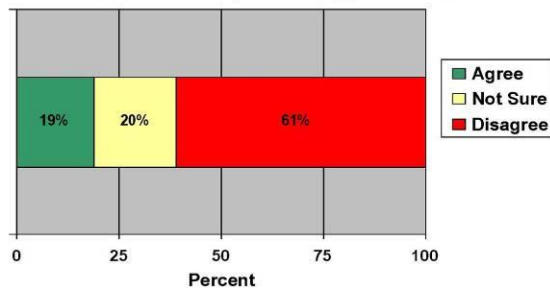


Responses by Race and Ethnicity

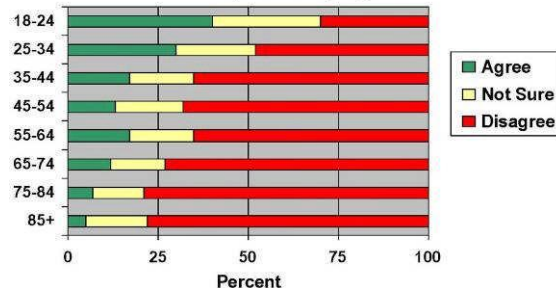


**I plan to move out of the Rochester region in the next five years.**

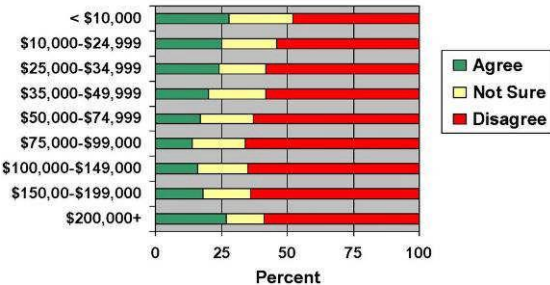
All Adults 18 years of Age and Older



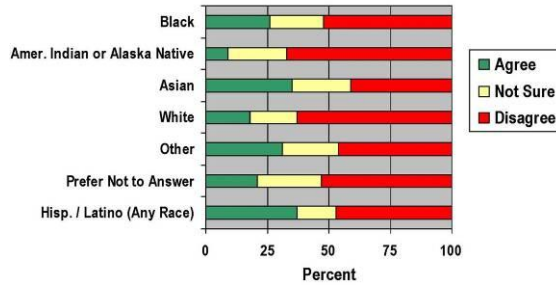
Responses by Age



Responses by Household Income



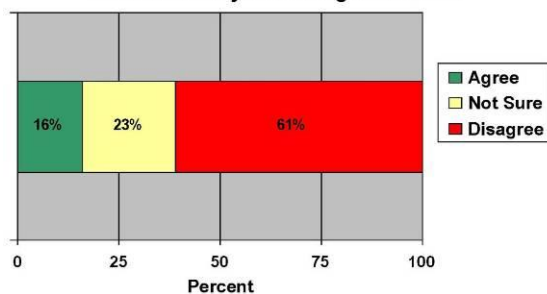
Responses by Race and Ethnicity



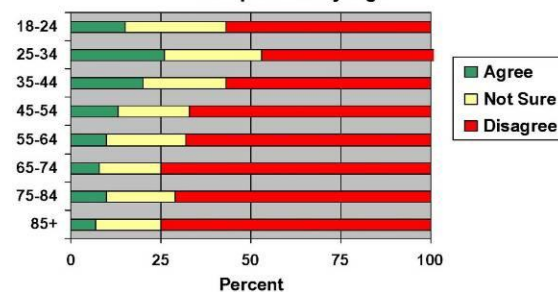


### I live in a city or village and plan to move to a town or rural area in the Rochester region in the next five years.

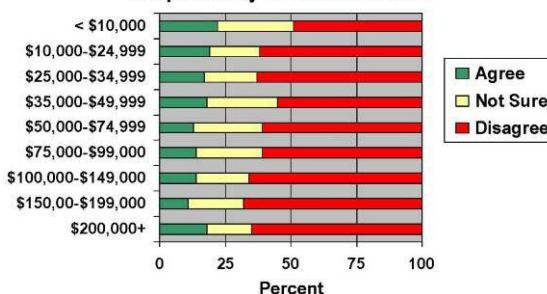
All Adults 18 years of Age and Older



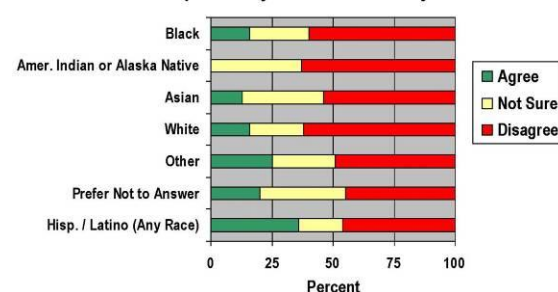
Responses by Age



Responses by Household Income

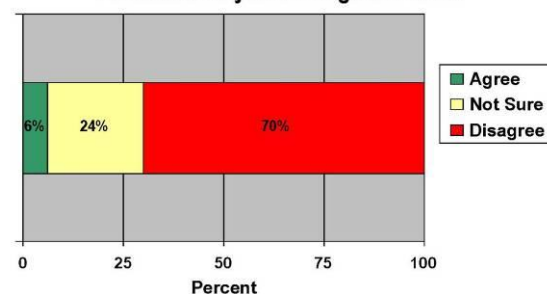


Responses by Race and Ethnicity

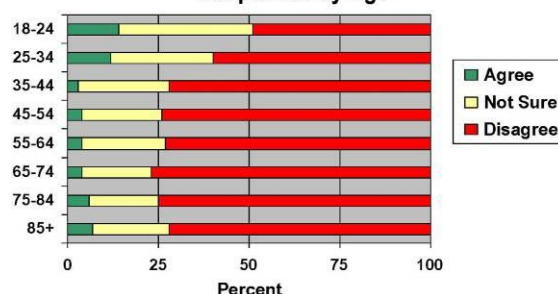


### I live in a town or rural area and plan to move to a city or village in the Rochester region in the next five years.

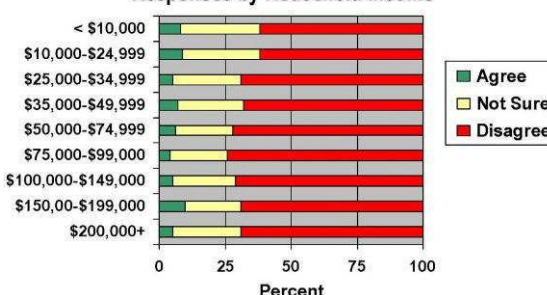
All Adults 18 years of Age and Older



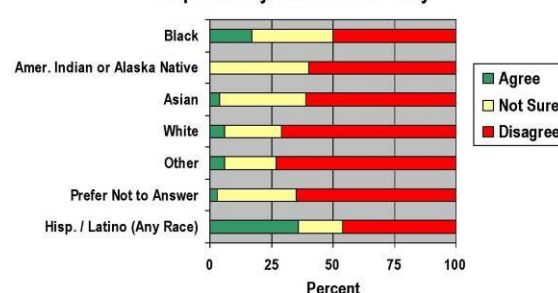
Responses by Age



Responses by Household Income



Responses by Race and Ethnicity



## Public Transit

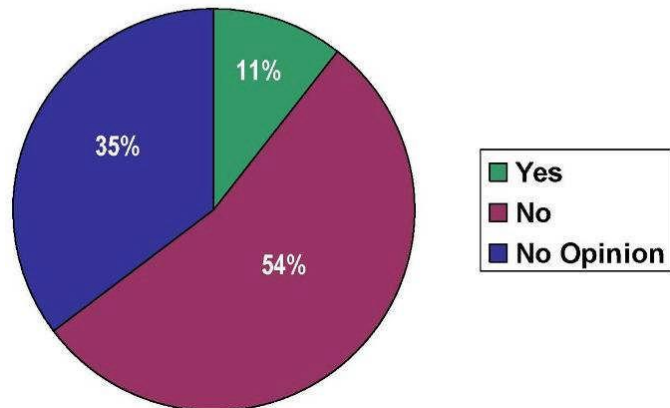
The survey asked participants two questions regarding travel by public transit:

- Is it easy to plan a transit trip?
- Is getting to and from transit stops pedestrian friendly?

Among respondents who expressed an opinion, solid majorities responded negatively to both questions.

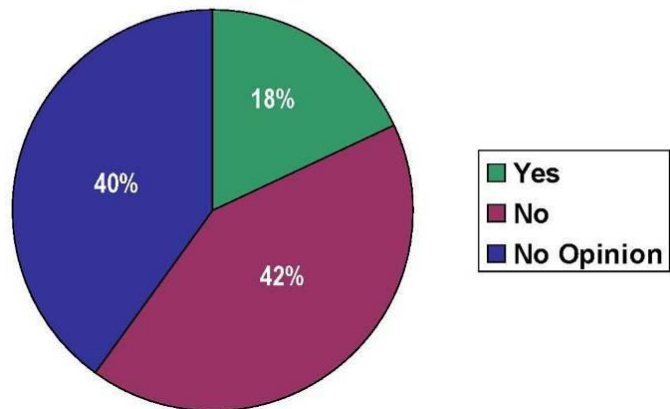
*Is It Easy to Plan a Transit Trip?*

**All Adults 18 years of Age and Older**



*Is Getting To and From Transit Stops Pedestrian Friendly?*

**All Adults 18 years of Age and Older**



City of Rochester residents had more favorable opinions than non-city respondents.

Ease of Public Transit Travel by Place of Residence (Percent of Respondents)						
	Is It Easy to Plan a Transit Trip?			Is Getting To and From Transit Stops Pedestrian Friendly?		
	Yes	No	No Opinion	Yes	No	No Opinion
City of Rochester	19	50	31	28	38	34
Monroe County Suburbs	8	58	34	15	44	41
Rest of Study Area	7	50	43	12	39	49

## **About GTC**

The Genesee Transportation Council (GTC) guides transportation planning in the Genesee-Finger Lakes Region, which includes Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates Counties.

By federal law, every urbanized area of the country with over 50,000 people must have a formal planning organization for transportation. The Genesee Transportation Council fills that role in our region. GTC is authorized to conduct transportation planning and oversee transportation investment.

The Genesee Transportation Council assures that no person shall, on the grounds of race, color, national origin, disability, age, gender, or income status, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity. GTC further assures every effort will be made to ensure nondiscrimination in all of its programs activities, whether those programs and activities are federally funded or not.

## **About the Travel Survey**

Financial assistance for the preparation of this report was provided by the Federal Highway Administration and the Federal Transit Administration. The Genesee Transportation Council is solely responsible for its content, and the views and opinions expressed herein do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

All data in this report are from the 2011 Household Travel Survey unless otherwise noted.

## **Contact GTC**

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