

### 2009 National Household Travel Survey, New York Add-On

**Ithaca MPO** 

December 2013

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## NTRODUCTION

Policymakers rely on transportation statistics, including data on personal travel behavior, to formulate strategic transportation policies, and to improve the safety and efficiency of the U.S. transportation system. Data on personal travel trends are needed to examine the reliability, efficiency, capacity, and flexibility of the nation's transportation system to meet current demands and accommodate future demands; to assess the feasibility and efficiency of alternative congestion-alleviating technologies (e.g., high-speed rail, intelligent vehicle and highway systems); to evaluate the merits of alternative transportation investment programs; and to assess the energy-use and air-quality impacts of various policies.

To address these data needs, the U.S. Department of Transportation (USDOT) initiated an effort in 1969 to collect detailed data on personal travel. The 1969 survey was the first Nationwide Personal Transportation Survey (NPTS). The survey was conducted again in 1977, 1983, 1990, 1995, 2001, and, most recently, in 2009. Data on daily travel were collected in 1969, 1977, 1983, 1990, and 1995. Longer-distance travel was collected in 1977 and 1995. In 2001 the survey was renamed the National Household Travel Survey (NHTS) and it collected both daily and longer-distance trips in one survey. Long distance travel was recorded for a four-week sample period. For 2009, the NHTS returned to the single day data collection scheme where data on trips taken by all members of a household during a designated travel day were collected. As a result, only very limited data was collected on long distance tripmaking. The primary objective of these surveys is to collect trip-based data on the nature and characteristics of personal travel so that the relationships between the characteristics of personal travel and the socio-economic and demographic characteristics of the traveler can be established.

Sponsorship of the various surveys has changed somewhat over the years. The 2009 NHTS was conducted as usual under the primary sponsorship of the Federal Highway Administration (FHWA). The Federal Transit Administration (FTA), the American Automobile Association (AAA) and the Public Policy Institute of the American Association of Retired Persons (AARP) also contributed funding to support a 2009

national sample of some 25,510 U.S. households. New York State purchased additional sampling of households in the 2009 NHTS, increasing the sample sizes within its planning areas. The increased sample sizes provided additional data for more reliable transportation planning. The final sample size for New York State was 16,165 usable households.

## WHO IS INCLUDED

Similar to the previous surveys, the 2009 NHTS collected travel data from the civilian, non-institutionalized population of the United States. People living in hotels, college dormitories, nursing homes, other medical institutions, prisons, military bases, convents or monasteries or any living quarters where 10 or more unrelated roommates were excluded from the sample. Prior to 2001, all household members age 5 or older were eligible to be interviewed in NPTS surveys. To improve the completeness of travel data, since 2001 NHTS survey enumerated travel taken by all household members regardless of the age. For children ages 5 through 13, an adult member of the household reported for them.

## OW THE DATA WERE COLLECTED

The 2009 NHTS was conducted as a telephone survey, using Computer-Assisted Telephone Interviewing (CATI) technology. The sample was selected based on a list-assisted random digit dialing telephone number sample frame. Each household in the sample was assigned a specific 24-hour "Travel Day" and kept diaries to record all travel taken by all household members for the assigned day. The variation in travel by day of the week was balanced by assigning the travel days for one-seventh of the sample telephone numbers to each day of the week. The diary package was mailed within a day or two following the completion of the household recruitment interview. It was sent via United States Postal Service Priority Mail and contained the following:

- A letter from the USDOT thanking the household for completing the household interview and agreeing to participate in the survey;
- A brochure describing the survey;
- A travel day diary and a two-dollar cash incentive in individual envelopes
  personalized for each household member at least five years old. The reverse side
  of each diary provided guidance on completing the diary and included an example
  of a completed diary;
- A reminder card identifying the household's travel date; and
- An odometer mileage form identifying the make, model, and year of each household vehicle, with spaces to enter the odometer readings and the dates they were taken.

## HEN THE DATA WERE COLLECTED

The 2009 NHTS was conducted over a period from March 2008 through May 2009, with the New York add-on covering March 2008 through April 2009. Travel data were collected for all seven days of the week, including all holidays. A travel day is taken to begin at 4 AM on the sampled travel day, and to end at 3:59 AM on the following day. The survey was conducted over at least a 12-month period so that data would account for seasonal variations in travel. To correct for this seasonal variation, sample weighting was developed to specifically address this issue. Each household and person weight was adjusted so that each month in the year contained equal numbers of household and person interviews.

### AMPLE SIZES AND WEIGHTED SUMS

For the state of New York, information was gathered for a total of 16,165 households, 33,435 persons, 29,778 vehicles, and 125,402 trips. NHTS uses weights to expand the sample data to estimates for the entire New York state population. The weights reflect the sample design and selection probabilities, over-sampling of certain strata, and

adjustments to compensate for survey non-response and non-coverage. It is absolutely necessary to use the survey weights to properly account for the sample design used for the survey.

The weights are multiplicative factors that must be applied to the file variables in order to obtain valid estimates of population values. If the weights are not used, incorrect estimates will result. For example, the overall number of *unweighted* daily sample trips per household for the state of New York is 7.8, whereas the overall number of *weighted* daily trips per household is 9.3. Sample errors can be magnified and lead to serious inaccuracies when weights are not used in tabulating these data. Table 1 presents the location-specific weighted sums of demographic characteristics and total travel.

## OMPARING 2009 NHTS DATA TO DATA FROM OTHER SOURCES

It is inevitable that the 2009 NHTS data will be compared to data from other sources. For example, the 2009 NHTS data will be compared to data from previous surveys to address questions of whether travel behavior has changed over time, and whether the changes are real or an artifact. Also, the 2009 NHTS data collected from New York residents will be compared to those collected from the rest of the country to determine whether New York residents have similar travel behavior than the rest of the country.

There are two points to remember when comparing 2009 NHTS data to data from other sources. First, one should always use the **weighted** statistics. Second, one should always draw conclusions by taking into account the variability in the data. In general, caution needs to be exercised when comparing estimates based on travel surveys or other sampling approaches. Since the 2009 New York NHTS did not interview every New York resident regarding his/her travel patterns, travel statistics/rates reported in this report are estimated based on data collected from a representative sample of New York residents. Whenever estimates are derived based on data from a sample, they are subject to statistical errors.

A statistical test(s) should be conducted to ascertain whether differences between the 2009 NHTS data and those of previous years (or those of other sources) are real, or within the statistical noise. The following example is used to illustrate such a test. It is estimated that New York residents drove a total of 92,171 million miles in their vehicles (vehicle miles traveled (VMT)) in 2009. This figure was estimated to be 95,207 million miles in 2001. The question then becomes whether this decrease in driving is real or within the sampling errors. To answer this question with a statistical certainty, one needs first to estimate the variances for these VMT estimates. They are 1,844<sup>2</sup> million miles in 2001 (denoted by  $\tilde{\alpha}_{5001}$ ) and 2,367<sup>2</sup> million in 2009 (denoted by  $\tilde{\alpha}_{5995}$ ). If the *z* test statistic is less than -1.96 (or greater than 1.96), then we are 95% confident to conclude that the 2009 VMT was actually less than (or greater than) that in 2001. The test statistics is computed as:

$$\frac{VMT_{2009} - VMT_{2001}}{\stackrel{\wedge}{\sigma}_{VMT_{2009} - VMT_{2001}}} = \frac{VMT_{2009} - VMT_{2001}}{\sqrt{\stackrel{\wedge}{\sigma}_{2009} + \stackrel{\wedge}{\sigma}_{2001}}}$$
$$= \frac{92,171 - 95,207}{\sqrt{2,367^2 + 1,844^2}} = -1.011$$

Since -1.011 is greater than -1.96, we are about 95% confident that the decrease in driving from 2001 to 2009 is within the statistical noise.

Alternatively, one could compare the confidence intervals<sup>1</sup> of these VMT estimates. If the intervals do not overlap, then one can conclude that the VMT difference between the two years is real. However, if the intervals do overlap, then it is not necessarily true that the difference is real. This is because the confidence-interval approach overestimates the standard error of the difference (e.g.,  $VMT_{2009}$ - $VMT_{2001}$ ). Therefore, we recommend that the z test be used when comparing 2009 data with data from earlier surveys or from other sources.

<sup>1.</sup> Confidence intervals represent a range of values within which the true population parameter is likely to lie with a pre-determined confidence.

Standard errors were calculated for 2009 NHTS estimates on: 1) vehicle occupancy, 2) the total vehicle miles traveled, 3) the total number of vehicle trips, 4) the total person miles traveled, 5) the total number of person trips, and 6) the average length of person trips. All of these estimates are categorized by mode (e.g., car, air, transit) and trip purpose (e.g., to work, religion related activities, shopping). This information is available on the web site:

https://www.dot.ny.gov/portal/page/portal/divisions/policy-and-strategy/darb/dai-unit/ttss/nhts?nd=nysdot

Similar tables for 2001 NHTS data are also available on this site. If these published tables do not include standard errors for particular 2009 NHTS data, then one can use the web tools on <a href="https://www.nhts.ornl.gov">www.nhts.ornl.gov</a> to calculate the errors.

Table 1. Summary Statistics on Demographic Characteristics and Total Travel 2009 New York NHTS

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Households	37,443
Persons	96,674
5-15	9,585
16-19	15,669
20-29	20,958
30-39	11,728
40-49	12,809
50-59	12,229
60-64	3,785
65+	9,911
Persons	96,674
Male	51,043
Female	45,631
Drivers	80,502
Male	42,292
Female	38,210
Workers	66,992
Male	36,487
Female	30,506
Total Vehicle Trips (000,000)	69
Total Vehicle Miles of Travel (000,000)	518
Total Person Trips (000,000)	132
Total Person Miles of Travel (000,000)	945

## RAVEL CONCEPTS

Appendix A contains a full glossary of terms used in this report. However, a few basic terms and concepts need to be introduced before data are presented.

**Person Trip** - A trip by one person in any mode of transportation. This is the most basic and universal measure of personal travel. Each record in the Travel Day and Travel Period files in the NHTS dataset represents one-person trip. An example of this is if two people are traveling together in one car, two person trips are counted. Based on 2009 NHTS data, residents of New York State made an estimated 24,281 million person-trips that year.

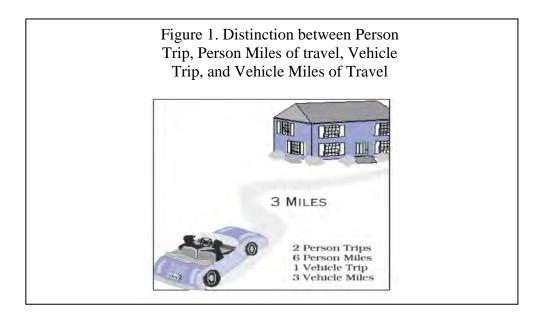
**Person Miles of Travel (PMT)** - The number of miles traveled by each person on a trip. An example of this is two people taking a six-mile subway trip to the airport result in 12 person miles of travel. A four-mile van trip with a driver and three passengers counts as 16 person miles of travel.

Person-miles are often called passenger miles, particularly in the transit and airline industries. The state of New York had an estimated 171,875 million person-miles of travel during the 2009 NHTS period.

**Vehicle Trip** - A trip made using a single privately operated vehicle (POV) regardless of the number of persons in the vehicle. For example, two people traveling together in a car would be counted as one vehicle trip. Four people going to a restaurant in a van are considered one vehicle trip. To be counted as a vehicle trip in the NHTS, a trip must be made in a POV and the driver must be a member of a household in the NHTS sample. A POV can be a household-based car, van, sport utility vehicle, pickup truck, other truck, recreational vehicle, motorcycle, or other POV. The vehicle does not need to belong to the household.

Trips made in other highway vehicles, such as buses, streetcars, taxis, and school buses are collected in the NHTS. However, these trips are not counted as vehicle trips because these vehicles are not privately operated vehicles. The state of New York had an estimated 10,877 million vehicle-trips during the 2009 NHTS period.

**Vehicle Miles of Travel (VMT)** - One vehicle mile of travel is the movement of one privately operated vehicle (POV) for one mile, regardless of the number of people in the vehicle. When one person drives her car 12 miles to work, 12 vehicle miles of travel have been made. If two people travel three miles in a pickup truck, three vehicle miles of travel have been made. The distinction among person trip, person miles of travel, vehicle trip and vehicle miles of travel is better illustrated in Figure 1. The state of New York had an estimated 92,171 million vehicle-miles of travel during the 2009 NHTS period.



**Vehicle Occupancy** - For NHTS data, vehicle occupancy is generally computed as person miles of travel per vehicle mile (i.e., PMT/VMT which is referred to as the *travel* method). Note that the other commonly used definition of vehicle occupancy is persons per vehicle trip (referred to as the *trip* method).

Because longer trips often have higher occupancies, the *travel* method generally yields a higher vehicle occupancy rate than the *trip* method. For example, according to the 2009

NHTS, the average person-miles of travel per vehicle mile for the state of New York was 1.86 in 2009, compared to a vehicle occupancy of 1.67 persons per vehicle trip. Note that calculation of the *travel* method requires that trip miles be reported, but trip miles are not always reported, thus it is calculated based on a slightly smaller number of trips than the *trip* method.

**Daily Trip Rates** - Rather than presenting total travel, much of the data presented in this report are in units of daily trip rate, such as the number of trips taken by an individual on a typical day. Daily trip rates are derived by dividing the total daily travel (e.g., total person trips) by the total number of entities (e.g., households, workers, drivers, persons). This method implies that even if someone did not travel on the designated travel day, he/she is included in the calculation. Appendix B contains information that enables the user to convert daily trip rates to total travel. For example, the daily person trip rates reported in Table 4-6 can be used in conjunction with Table B-1 (of Appendix B) to calculate the total person trip distribution by age and gender.

<u>Average Daily Person Travel per Person</u> - The average daily number of person trips or person miles of travel taken by a person. This includes persons who did not travel during the designated travel day. The estimated "average daily person trips per person" in the state of New York was 3.64. Similarly, the estimated "average daily person miles per person" was 25.80 during the 2009 NHTS period.

<u>Average Daily Travel per Household</u> - The average daily number of person trips, vehicle trips, person miles of travel, vehicle miles of travel, or journey-to-work trips taken by a typical NYS household. This includes households that did not travel during the designated travel day. For NYS, the 2009 NHTS estimates are as follows: the average daily person trips per household was 9.32, the average daily person miles per household was 66.00, the average daily vehicle trips per household was 4.18, the average daily vehicle miles per household was 35.4, and the average daily journey-

to-work trips taken by a household was 1.5 during the 2009 NHTS period.

Average Daily Vehicle Travel per Driver - The average number of daily vehicle trips or vehicle miles of travel driven by an individual driver in NYS. This includes drivers who did not drive during the designated travel day (i.e., all NYS drivers are considered in the calculation). On average, a New York driver engaged in 2.32 vehicle trips and drove 19.7 miles per day in 2009.

Average Daily Journey-to-Work Travel per Worker - The average number of daily journeys to or from work for any day, or journey-to-work miles of travel, taken by a worker. The denominator includes workers who work at home and workers who did not go to work during the designated travel day. On average, a typical New York worker took 1.06 trips to work per day in 2009.

## REPORT ORGANIZATION

This Introduction is followed by a set of tables that pertain to this metropolitan planning organization. These tables are numbered according to the numbering scheme of the 1990 NPTS Databook<sup>2</sup>. When referring to statistics in these tables, users should note a number of annotation conventions:

- Empty cells indicate that no data available.
- A bolded number within a cell indicates a sample size of 5 or less (Note: Subtotals have not been checked for sample size.)
- Daily rates per person include all persons, regardless whether s/he traveled on the designated travel day.
- Weekday is defined as the time between 12:01 a.m. Monday and 6:00 p.m.
   Friday. Weekend is defined as the time between 6:01 p.m. Friday and midnight Sunday.
- Number of workers includes those who work at home.
- Journey-to-Work trips do not include those who work at home.
- Small urban areas are those outside MSAs only.

Appendix A contains key travel concepts and a glossary of terms used in this report. Information that enables daily travel rates be converted to total travel, or vise versa, is included in Appendix B. To facilitate additional analysis, all tables in this report are included in Excel files in the enclosed CD-ROM, as well as the SAS programs that were used to generate the statistics in this report.

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<sup>2. 1990</sup> Nationwide Personal Transportation Survey Databook, Volumes 1 and 2. FHWA-PL-94-010A. Federal Highway Administration, U.S. Department of Transportation. Washington, D.C. November 1993.

#### New York State - 2009 NHTS Number of Households by Household Vehicle Ownership Ithaca

	Households	%
ALL	37,443	100.00
No vehicles	4,587	12.25
One vehicle	16,639	44.44
Two vehicles	11,939	31.89
Three or more	4,278	11.43
Total HH Vehicles	55,153	100.00

Note: Household vehicle ownership includes all vehicles owned by or available on a regular basis to the household

# New York State - 2009 NHTS Number of Households by Number of Household Members and Number of Household Based Vehicles Ithaca

	One	Two	Three	Four	Five	Six-Seven	Eight or more	TOTAL
No vehicles	3,385	746	259	40		157		4,587
One vehicle	9,747	4,256	1,594	883	159			16,639
Two vehicles	439	5,829	1,969	2,359	1,006	176	161	11,939
Three or more	86	1,524	1,060	1,060	349	175	23	4,278
ALL HHs	13,657	12,355	4,882	4,342	1,514	509	184	37,443
HH VEHS	10,939	21,079	9,086	9,064	3,385	1,108	430	55,091
Vehicles per HH	1.25	0.59	0.54	0.48	0.45	0.46	0.43	0.68

Note: Household vehicle ownership includes all vehicles owned by or available on a regular basis to the household

#### New York State - 2009 NHTS Number of Households by Household Composition Ithaca

Household Composition	Households
1 Adult, No Child	8,732
2+ Adults, No Child	8,338
1 Adult, Child <6	354
2+ Adults, Child <6	4,186
1 Adult, Child 6-15	602
2+ Adults, Child 6-15	3,728
1 Adult, Child 16-21	545
2+ Adults, Child 16-21	1,684
1 Adult, Retired, No Child	4,925
2+ Adults, Retired, No Child	4,350
TOTAL	37,443

#### New York State - 2009 NHTS Average Daily Person Trips per Person by Age and Gender Ithaca

	AGE	TOTAL	Male	Female
	All Days			
5-15	•	2.86	2.93	2.79
16-19		3.44	3.13	4.00
20-29		3.66	3.66	3.67
30-39		4.31	4.22	4.40
40-49		4.16	3.56	4.84
50-59		4.04	3.83	4.23
60-64		4.10	3.80	4.41
65+		3.37	4.00	2.91
TOTAL		3.73	3.58	3.89
	Weekday			
5-15		2.75	2.84	2.63
16-19		4.26	4.15	4.47
20-29		4.47	4.52	4.42
30-39		4.91	4.99	4.83
40-49		4.35	3.90	4.86
50-59		4.25	3.84	4.62
60-64		3.57	2.64	4.57
65+		4.09	5.00	3.42
TOTAL		4.20	4.13	4.28
	Weekend			
5-15		3.11	3.12	3.11
16-19		1.70	0.95	3.03
20-29		1.95	1.84	2.06
30-39		3.04	2.59	3.49
40-49		3.75	2.84	4.81
50-59		3.60	3.82	3.41
60-64		5.22	6.28	4.07
65+		1.84	1.87	1.81
TOTAL		2.72	2.41	3.06

#### New York State - 2009 NHTS Average Daily PMT per Person by Age and Gender Ithaca

	AGE	TOTAL	Male	Female
	All Days			
5-15		18.77	17.74	20.06
16-19		34.67	18.51	63.73
20-29		22.91	20.49	25.59
30-39		27.42	37.92	17.02
40-49		33.57	42.49	23.25
50-59		27.66	38.75	17.88
60-64		30.51	38.74	21.65
65+		18.25	21.29	16.00
TOTAL		26.79	27.58	25.89
	Weekday			
5-15		13.92	16.24	11.04
16-19		35.66	25.04	54.74
20-29		21.97	19.21	25.06
30-39		32.47	48.22	16.88
40-49		29.01	38.90	17.58
50-59		20.05	20.20	19.91
60-64		28.11	38.85	16.54
65+		19.13	20.58	18.04
TOTAL		25.30	26.99	23.41
	Weekend			
5-15		29.07	20.93	39.19
16-19		32.60	4.67	82.80
20-29		24.88	23.22	26.72
30-39		16.70	16.08	17.31
40-49		43.22	50.11	35.25
50-59		43.79	78.08	13.56
60-64		35.61	38.51	32.49
65+		16.40	22.78	11.66
TOTAL		29.93	28.84	31.15

# New York State - 2009 NHTS Average Daily Person Travel per Person by Gender, Driver Status and Trip Purpose - Weekday Travel Only Ithaca

		TOTAL			Male			Female	
	Driver Status		1	Driver Status		Driver Status			
	TOTAL	Driver	Non-Driver	TOTAL	Driver	Non-Driver	TOTAL	Driver	Non-Driver
				Averag	e Daily Person T	Trips			
TOTAL	4.20	4.58	1.70	4.13	4.50	1.62	4.28	4.68	1.80
Earn a Living	1.12	1.33	0.18	1.15	1.36	0.26	1.09	1.29	0.06
Family & Personal Business	1.54	1.68	0.86	1.39	1.51	0.74	1.70	1.86	1.03
Civic, Educational & Religious	0.34	0.25	0.31	0.44	0.35	0.45	0.22	0.14	0.13
Social & Recreational	1.07	1.18	0.32	1.06	1.17	0.11	1.08	1.18	0.58
Other	0.08	0.09	0.02	0.02	0.01	0.04	0.15	0.18	
				Ave	erage Daily PMT	•			
TOTAL	25.30	28.21	6.90	26.99	29.74	9.10	23.41	26.53	4.01
Earn a Living	7.26	8.65	0.73	8.20	9.83	0.59	6.21	7.33	0.92
Family & Personal Business	6.66	7.36	3.13	6.84	7.41	4.39	6.46	7.31	1.47
Civic, Educational & Religious	2.16	1.87	2.50	3.19	2.94	3.68	1.00	0.69	0.96
Social & Recreational	7.81	8.66	0.36	6.51	6.89	0.14	9.26	10.63	0.66
Other	0.94	1.10	0.14	1.50	1.75	0.25	0.32	0.38	
				Ave	rage Trip Lengtl	h			
TOTAL	6.12	6.26	4.16	6.58	6.66	5.67	5.61	5.81	2.32
Earn a Living	6.56	6.59	4.15	7.28	7.39	2.26	5.71	5.68	14.31
Family & Personal Business	4.39	4.45	3.76	4.94	4.92	5.92	3.88	4.01	1.55
Civic, Educational & Religious	6.42	7.53	8.19	7.27	8.39	8.35	4.54	5.06	7.46
Social & Recreational	7.29	7.39	1.14	6.13	5.88	1.20	8.55	9.04	1.12
Other	18.34	19.97	6.00	75.88	134.42	6.00	3.69	3.74	

# New York State - 2009 NHTS Average Daily Person Travel per Person by Gender, Driver Status and Trip Purpose - Weekend Travel Only Ithaca

		TOTAL			Male			Female	
		Driver Status			Driver Status			Driver Status	
	TOTAL	Driver	Non-Driver	TOTAL	Driver	Non-Driver	TOTAL	Driver	Non-Driver
				Averag	e Daily Person T	rips			
TOTAL	2.72	2.77	1.49	2.41	2.44	0.92	3.06	3.13	2.22
Earn a Living	0.23	0.26	0.16	0.29	0.33	0.26	0.16	0.19	0.02
Family & Personal Business	1.18	1.25	0.63	0.87	0.97	0.09	1.52	1.57	1.33
Civic, Educational & Religious	0.09	0.08	0.03	0.04	0.03	0.03	0.13	0.13	0.03
Social & Recreational	1.16	1.12	0.41	1.19	1.10	0.54	1.12	1.14	0.23
Other	0.03	0.04	0.01	0.00	0.00		0.06	0.07	0.01
				Ave	erage Daily PMT				
TOTAL	29.93	29.57	30.85	28.84	26.84	51.83	31.15	32.60	3.36
Earn a Living	3.99	4.42	3.87	6.50	7.16	6.63	1.18	1.39	0.27
Family & Personal Business	11.52	12.73	0.42	5.83	6.13	0.14	17.90	20.03	0.80
Civic, Educational & Religious	0.72	0.68	0.14	0.72	0.79	0.19	0.72	0.54	0.08
Social & Recreational	11.65	9.73	26.23	14.53	11.61	44.88	8.43	7.65	1.81
Other	0.30	0.36	0.01	0.01	0.01		0.62	0.73	0.01
				Ave	rage Trip Length	1			
TOTAL	11.01	10.68	20.85	11.95	11.00	56.13	10.18	10.42	1.52
Earn a Living	17.20	16.77	24.55	22.14	21.88	25.24	7.24	7.19	13.00
Family & Personal Business	9.80	10.15	0.68	6.67	6.34	1.45	11.82	12.76	0.60
Civic, Educational & Religious	8.43	8.26	5.06	16.38	22.92	6.50	5.48	4.06	3.00
Social & Recreational	10.05	8.68	64.72	12.18	10.54	83.37	7.51	6.70	7.82
Other	9.86	10.00	1.00	10.00	10.00		9.86	10.00	1.00

Note: Average trip length is calculated using only those records with trip mile information present.

# New York State - 2009 NHTS Average Daily Person Trips per Person Taken by Individuals 65+ vs Younger by Day of the Week Ithaca

	TOTAL	65+	
DAY OF WEEK			
TOTAL	3.73	3.77	3.37
Sunday	3.01	3.14	1.82
Monday	4.12	4.13	4.04
Tuesday	4.99	5.17	3.36
Wednesday	4.49	4.06	8.25
Thursday	2.89	2.93	2.53
Friday	4.63	4.98	1.58
Saturday	2.03	2.03	2.08
Weekday	4.20	4.21	4.09
Weekend	2.72	2.82	1.84

## New York State - 2009 NHTS Average Daily Person Trips per Person Taken by Individuals 65+ by Mode of Transportation and Trip Purpose Ithaca

Family & Civic. Personal Educational Social & TOTAL Earn a Living Business & Religious Recreational Other Unreported All Days TOTAL 3.37 0.42 0.07 0.89 0.01 1.96 0.02 Auto, Van-driver 0.07 0.05 0.34 0.00 1.34 0.88 0.44 0.19 0.13 0.02 0.08 0.01 0.00 Auto.Van-passenger Sports Utility 0.49 0.06 0.10 0.32 0.00 0.00 Pickup 0.18 0.03 0.10 0.06 Other POV 0.00 0.01 0.01 Subtotal - Private 2.46 0.35 1.43 0.07 0.58 0.02 0.01 Bus/Streetcar 0.20 0.19 0.02 Subtotal - Public 0.20 0.19 0.02 Taxi/Shuttle 0.00 0.00 0.00 0.00 Bike 0.01 0.01 0.00 Walk 0.66 0.30 0.29 0.01 0.00 Special Transit - People w/Disabilities 0.00 0.00 Other 0.04 0.04 0.00 Subtotal - Other 0.71 0.07 0.34 0.00 0.29 0.01 0.00 Unreported 0.00 0.00 Weekday 4.09 0.57 0.03 0.01 TOTAL 2.46 0.05 0.98 Auto, Van-driver 1.57 0.07 1.07 0.03 0.40 0.00 Auto, Van-passenger Sports Utility 0.53 0.27 0.15 0.01 0.07 0.02 0.00 0.59 0.09 0.41 0.09 Pickup 0.23 0.03 0.12 0.07 0.00 Other POV 0.01 0.01 0.00 Subtotal - Private 1.75 0.05 0.64 0.02 0.01 2.94 0.48 0.29 Bus/Streetcar 0.27 0.02 Subtotal - Public 0.29 0.27 0.02 0.01 Bike 0.01 0.00 Walk 0.80 0.38 0.32 0.01 0.09 Special Transit - People w/Disabilities 0.00 0.00 0.05 Other 0.05 Subtotal - Other 0.10 0.33 0.01 Weekend TOTAL 1.84 0.09 0.91 0.12 0.70 0.01 0.00 Auto, Van-driver 0.83 0.06 0.47 0.09 0.21 Auto, Van-passenger 0.25 0.10 0.03 0.11 0.00 Sports Utility 0.27 0.14 0.12 0.01 Pickup 0.08 0.02 0.04 0.02 Other POV 0.00 0.00 Subtotal - Private 1.43 0.08 0.75 0.11 0.47 0.01 Bus/Streetcar 0.01 0.01 0.01 Subtotal - Public 0.01 0.01 0.01 Taxi/Shuttle 0.01 0.00 0.00 0.01 Walk 0.36 0.01 0.14 0.21 0.00 Other 0.01 0.01 0.00

0.01

0.38

0.01

0.15

0.01

0.00

0.22

0.00

Note: Rail/Subway includes trips by subway, elevated rail and commuter train.

Subtotal - Other

Unreported

#### New York State - 2009 NHTS Average Daily Person Trips per Household by Trip Purpose and Household Composition Ithaca

	TOTAL	Earn a Living	Family & Personal Business	Civic, Educational & Religious	Social & Recreational	Other	Unreported
			All Days				
HH COMPOSITION			•				
TOTAL	9.62	2.15	3.67	0.66	2.84	0.17	0.13
1 Adult, No Child	4.18	0.77	2.09	0.05	1.18	0.01	0.08
2+ Adults, No Child	10.40	2.98	4.00	0.32	2.67	0.41	0.02
1 Adult, Child <6	4.86	0.21	1.91		2.74		
2+ Adults, Child <6	12.16	2.58	4.49	1.21	3.53	0.07	0.28
1 Adult, Child 6-15	8.96	1.54	3.13	1.02	3.10		0.16
2+ Adults, Child 6-15	17.15	3.81	7.07	1.72	4.34	0.14	0.06
1 Adult, Child 16-21	11.28	6.63	0.50	0.30	3.85		
2+ Adults, Child 16-21	44.18	10.10	10.62	5.14	15.93	1.05	1.34
1 Adult, Retired, No Child	2.52	0.02	1.82	0.10	0.56	0.01	0.01
2+ Adults, Retired, No Child	5.10	0.54	2.53	0.05	1.93	0.03	0.01
			Weekday				
HH COMPOSITION							
TOTAL	10.85	2.89	3.97	0.87	2.77	0.21	0.14
1 Adult, No Child	4.11		1.98	0.08	1.02	0.01	
2+ Adults, No Child	11.84		4.41	0.29	2.37	0.60	0.01
1 Adult, Child <6	3.12		2.81				
2+ Adults, Child <6	14.60		5.75	1.76	3.09	0.10	0.37
1 Adult, Child 6-15	5.52	2.08	1.37	1.51	0.56		
2+ Adults, Child 6-15	17.77		6.27	2.13	3.91	0.21	0.07
1 Adult, Child 16-21	13.60		0.54	0.44	3.67		
2+ Adults, Child 16-21	55.11		11.91	7.45	20.09	0.77	1.97
1 Adult, Retired, No Child	3.18		2.43	0.08	0.62	0.01	0.01
2+ Adults, Retired, No Child	5.52	0.57	2.95	0.03	1.92	0.04	0.01
			Weekend				
HH COMPOSITION							
TOTAL	7.02		3.04	0.22	3.00	0.08	0.09
1 Adult, No Child	4.31		2.30		1.50		0.24
2+ Adults, No Child	7.36		3.13	0.39	3.31	0.01	0.03
1 Adult, Child <6	8.53				8.53		
2+ Adults, Child <6	7.00		1.80	0.06	4.47		0.10
1 Adult, Child 6-15	16.26		6.87		8.49		0.51
2+ Adults, Child 6-15	15.83		8.77	0.84	5.26		0.04
1 Adult, Child 16-21	6.36		0.42		4.24		
2+ Adults, Child 16-21	21.01		7.89	0.24	7.13	1.64	
1 Adult, Retired, No Child	1.14		0.52	0.16	0.43		0.01
2+ Adults, Retired, No Child	4.20	0.47	1.65	0.10	1.96	0.01	0.02

# New York State - 2009 NHTS Average Daily Person Trips per Person by Public Transit vs Other Modes, Trip Purpose and MSA Status Ithaca

	All Days Not in MSA	Weekday Not in MSA	Weekend Not in MSA
Public Tr	ansit Used		
TOTAL	0.19	0.27	0.03
Earn a Living	0.05	0.08	
Family & Personal Business	0.04	0.05	0.00
Civic, Educational & Religious	0.04	0.06	
Social & Recreational	0.07	0.08	0.03
Other	0.00	0.00	
Public Transit N	Not Used/Leg S	Skip	
TOTAL	3.53	3.93	2.69
Earn a Living	0.78	1.04	0.23
Family & Personal Business	1.38	1.48	1.18
Civic, Educational & Religious	0.22	0.28	0.09
Social & Recreational	1.03	0.99	1.13
Other	0.06	0.08	0.03
Unreported	0.05	0.06	0.03

#### New York State - 2009 NHTS Average Daily PMT per Person by Trip Purpose and MSA Size Ithaca

#### TOTAL Not in MSA

All Days		
TOTAL	26.79	26.79
Earn a Living	6.21	6.21
Family & Personal Business	8.22	8.22
Civic, Educational & Religious	1.70	1.70
Social & Recreational	9.04	9.04
Other	0.73	0.73
Unreported	0.88	0.88
Weekday		
TOTAL	25.30	25.30
Earn a Living	7.26	7.26
Family & Personal Business	6.66	6.66
Civic, Educational & Religious	2.16	2.16
Social & Recreational	7.81	7.81
Other	0.94	0.94
Unreported	0.48	0.48
Weekend		
TOTAL	29.93	29.93
Earn a Living	3.99	3.99
Family & Personal Business	11.52	11.52
Civic, Educational & Religious	0.72	0.72
Social & Recreational	11.65	11.65
Other	0.30	0.30
Unreported	1.74	1.74

#### New York State - 2009 NHTS Average Daily Person Trips per Person by Mode of Transportation and Trip Purpose Ithaca

			Family & Personal	Civic, Educational	Social &		
	TOTAL	Earn a Living	Business	& Religious	Recreational	Other	Unreported
TOTAL	2.72	All D		0.26	1.10	0.06	0.05
Auto, Van-driver	3.73 1.39	0.83 0.36	1.42 0.61	0.26 0.06	1.10 0.31	0.06	0.05 0.02
Auto, Van-passenger	0.61	0.10	0.61	0.06	0.31	0.02	0.02
Sports Utility	0.54	0.16	0.17	0.07	0.12	0.01	0.00
Pickup	0.15	0.04	0.06	0.02	0.03	0.00	0.00
Other POV	0.03	0.01	0.00	0.00	0.01		0.00
Subtotal - Private	2.72	0.68	1.08	0.16	0.73	0.03	0.04
Rail/Subway	0.00					0.00	
Bus/Streetcar	0.19	0.05	0.04	0.04	0.07	0.00	
Subtotal - Public	0.19	0.05	0.04	0.04	0.07	0.00	
Amtrak/InterCity Train	0.00					0.00	
Airplane	0.02	0.00				0.02	
Taxi/Shuttle	0.03	0.00	0.01	0.00	0.00	0.01	0.01
Bike	0.04	0.02	0.01	0.00	0.01		
Walk	0.68	0.08	0.28	0.02	0.29	0.00	0.00
School Bus	0.03	0.00	0.00	0.03			
Special Transit - People w/Disabilities	0.00		0.00				
Other	0.01	0.00	0.00	0.00	0.01		
Subtotal - Other	0.81	0.10	0.31	0.06	0.31	0.03	0.01
Unreported	0.00	0.00	0.00				0.00
TOTAL	4.20	Weel 1.12	1.54	0.34	1.07	0.08	0.06
Auto,Van-driver	1.56	0.47	0.66	0.34	0.31	0.08	0.08
Auto, Van-passenger	0.60	0.14	0.15	0.07	0.18	0.02	0.03
Sports Utility	0.61	0.23	0.13	0.03	0.10	0.02	0.00
Pickup	0.16	0.05	0.26	0.01	0.03	0.00	0.01
Other POV	0.04	0.02	0.00	0.00	0.02		0.00
Subtotal - Private	2.97	0.91	1.13	0.20	0.64	0.04	0.05
Rail/Subway	0.00					0.00	
Bus/Streetcar	0.27	0.08	0.05	0.06	0.08	0.00	
Subtotal - Public	0.27	0.08	0.05	0.06	0.08	0.00	
Amtrak/InterCity Train	0.00					0.00	
Airplane	0.03	0.00				0.03	
Taxi/Shuttle	0.03	0.00	0.01			0.01	
Bike	0.05	0.02	0.02	0.00	0.01		
Walk	0.79	0.10	0.32	0.03	0.34	0.00	0.00
School Bus	0.05	0.00	0.00	0.05			
Special Transit - People w/Disabilities	0.00		0.00				
Other	0.01	0.00	0.01	0.00	0.00		
Subtotal - Other	0.96	0.13	0.35	0.09	0.35	0.04	0.00
Unreported	0.00	0.00					0.00
TOTAL	2.72	Week 0.23	tena 1.18	0.09	1.16	0.03	0.03
Auto, Van-driver	1.04	0.23	0.52	0.09	0.32	0.03	0.03
Auto, Van-passenger	0.65	0.12	0.52	0.04	0.32	0.03	0.00
Sports Utility	0.39	0.03	0.19	0.03	0.16	0.00	0.00
Pickup	0.12	0.02	0.06	0.00	0.03	0.00	0.00
Other POV	0.00	0.02	0.00	0.00	0.00		0.00
Subtotal - Private	2.20	0.19	0.97	0.08	0.91	0.03	0.01
Bus/Streetcar	0.03		0.00		0.03		
Subtotal - Public	0.03		0.00		0.03		
Taxi/Shuttle	0.02		0.00	0.00	0.00		0.02
Bike	0.01	0.00	0.00		0.01		
Walk	0.44	0.04	0.20	0.00	0.20		0.00
Other	0.01		0.00		0.01		
Subtotal - Other	0.49	0.05	0.20	0.00	0.21		0.02
Unreported	0.00		0.00				

Note: Rail/Subway includes trips by subway, elevated rail and commuter train.

#### New York State - 2009 NHTS Statistics of Person Travel per Person by Trip Purpose Ithaca

	Person Trips	PMT	Average Trip Length
	All Davis		
TOTAL	All Days 3.73	26.79	7.27
At work	0.73	4.74	6.56
Work Related Business	0.73	1.47	14.15
	0.83	6.21	7.51
Earning a Living Subtotal Shopping	0.70	5.45	7.90
Doctor/Dentist	0.05	0.26	4.90
Other Family & Personal Business	0.67	2.52	3.78
Family & Personal Business Subtotal	1.42	8.22	5.84
School/Church	0.26	1.70	6.64
School/Church Subtotal	0.26	1.70	6.64
Vacation	0.02	1.27	53.89
Visit Friends/Relatives	0.24	3.80	16.03
Other Soc/Rec	0.84	3.97	4.73
Social and Recreational Subtotal	1.10	9.04	8.22
Other	0.06	0.73	16.51
Other Subtotal	0.06	0.73	16.51
Unreported	0.05	0.88	18.34
	Weekday		
TOTAL	4.20	25.30	6.12
At work	1.00	6.53	6.60
Work Related Business	0.12	0.73	6.15
Earning a Living Subtotal	1.12	7.26	6.56
Shopping	0.62	3.41	5.60
Doctor/Dentist	0.08	0.35	4.72
Other Family & Personal Business	0.84	2.89	3.48
Family & Personal Business Subtotal	1.54	6.66	4.39
School/Church	0.34	2.16	6.42
School/Church Subtotal	0.34	2.16	6.42
Vacation	0.01	0.55	92.61
Visit Friends/Relatives	0.24	4.02	16.81
Other Soc/Rec	0.83	3.24	3.92
Social and Recreational Subtotal	1.07	7.81	7.29
Other	0.08	0.94	18.34
Other Subtotal	0.08	0.94	18.34
Unreported	0.06	0.48	8.74
	Weekend		
TOTAL	2.72	29.93	11.01
At work	0.16	0.96	5.97
Work Related Business	0.07	3.03	42.28
Earning a Living Subtotal	0.23	3.99	17.20
Shopping	0.86	9.76	11.34
Doctor/Dentist	0.00	0.05	12.32
Other Family & Personal Business	0.31	1.72	5.52
Family & Personal Business Subtotal	1.18	11.52	9.80
School/Church	0.09	0.72	8.43
School/Church Subtotal	0.09	0.72	8.43
Vacation	0.06	2.80	45.94
Visit Friends/Relatives	0.23	3.34	14.32
Other Soc/Rec	0.87	5.51	6.37
Social and Recreational Subtotal	1.16	11.65	10.05
Other	0.03	0.30	9.86
Other Subtotal Unreported	<b>0.03</b> 0.03	<b>0.30</b> 1.74	<b>9.86</b> 50.69
omeported	0.03	1.74	30.09

## New York State - 2009 NHTS Average Daily Segmented Person Travel per Person by Trip Purpose Ithaca

	Person Trips	PMT	Average Trip Length
	All Days		
TOTAL	0.19	1.07	5.51
At work	0.05	0.13	2.45
Earning a Living Subtotal	0.05	0.13	2.45
Shopping	0.02	0.20	8.39
Doctor/Dentist	0.00		
Other Family & Personal Business	0.01	0.06	5.30
Family & Personal Business Subtotal	0.04	0.27	7.37
School/Church	0.04	0.40	10.78
School/Church Subtotal	0.04	0.40	10.78
Visit Friends/Relatives	0.02	0.11	5.47
Other Soc/Rec	0.05	0.14	3.10
Social and Recreational Subtotal	0.07	0.25	3.84
Other	0.00	0.01	8.31
Other Subtotal	0.00	0.01	8.31
	Weekday		
TOTAL	0.27	1.48	5.49
At work	0.08	0.19	2.45
Earning a Living Subtotal	0.08	0.19	2.45
Shopping	0.04	0.30	8.43
Doctor/Dentist	0.00		
Other Family & Personal Business	0.02	0.09	5.30
Family & Personal Business Subtotal	0.05	0.39	7.39
School/Church	0.06	0.60	10.78
School/Church Subtotal	0.06	0.60	10.78
Visit Friends/Relatives	0.02	0.08	5.00
Other Soc/Rec	0.07	0.21	3.10
Social and Recreational Subtotal	0.08	0.28	3.45
Other	0.00	0.02	8.31
Other Subtotal	0.00	0.02	8.31
	Weekend		
TOTAL	0.03	0.20	5.90
Shopping	0.00	0.00	4.00
Family & Personal Business Subtotal	0.00	0.00	4.00
Visit Friends/Relatives	0.03	0.19	5.94
Social and Recreational Subtotal	0.03	0.19	5.94

## New York State - 2009 NHTS Average Daily Non-Segmented Person Travel per Person by Trip Purpose Ithaca

	Person Trips	PMT	Average Trip Length
	·		- 0-
	All Days	25.72	
TOTAL	3.53	25.72	7.37
At work	0.68	4.61	6.88
Work Related Business	0.11 0.78	1.47	14.15 7.85
Earning a Living Subtotal Shopping	0.78	6.08 5.24	7.88
Doctor/Dentist	0.05	0.26	4.90
Other Family & Personal Business	0.66	2.45	3.76
Family & Personal Business Subtotal	1.38	7.95	5.80
School/Church	0.22	1.29	5.92
School/Church Subtotal	0.22	1.29	5.92
Vacation	0.02	1.27	53.89
Visit Friends/Relatives	0.22	3.69	17.04
Other Soc/Rec	0.79	3.83	4.82
Social and Recreational Subtotal	1.03	8.78	8.50
Other	0.06	0.72	16.78
Other Subtotal	0.06	0.72	16.78
Unreported	0.05	0.88	18.34
	Weekday		
TOTAL	3.93	23.82	6.16
At work	0.92	6.34	6.95
Work Related Business	0.12	0.73	6.15
Earning a Living Subtotal	1.04	7.07	6.86
Shopping	0.58	3.11	5.43
Doctor/Dentist	0.08	0.35	4.72
Other Family & Personal Business	0.82	2.80	3.44
Family & Personal Business Subtotal	1.48	6.27	4.28
School/Church	0.28	1.56	5.56
School/Church Subtotal	0.28	1.56	5.56
Vacation	0.01	0.55	92.61
Visit Friends/Relatives	0.22	3.95	17.61
Other Soc/Rec	0.76	3.03	3.99
Social and Recreational Subtotal	0.99	7.52	7.60
Other	0.08	0.92	18.77
Other Subtotal	0.08 0.06	0.92 0.48	18.77 8.74
Unreported	Weekend	0.48	6.74
TOTAL	2.69	29.73	11.08
At work	0.16	0.96	5.97
Work Related Business	0.07	3.03	42.28
Earning a Living Subtotal	0.23	3.99	17.20
Shopping	0.86	9.76	11.34
Doctor/Dentist	0.00	0.05	12.32
Other Family & Personal Business	0.31	1.72	5.52
Family & Personal Business Subtotal	1.18	11.52	9.81
School/Church	0.09	0.72	8.43
School/Church Subtotal	0.09	0.72	8.43
Vacation	0.06	2.80	45.94
Visit Friends/Relatives	0.20	3.14	15.68
Other Soc/Rec	0.87	5.51	6.37
Social and Recreational Subtotal	1.13	11.46	10.16
Other	0.03	0.30	9.86
Other Subtotal	0.03	0.30	9.86
Unreported	0.03	1.74	50.69

# New York State - 2009 NHTS Average Daily Person Trips per Person by Mode of Transportation, and Trip Purpose Ithaca

	TOTAL	Earn a Living	Family & Personal Business	Civic, Educational & Religious	Social & Recreational	Other	Unreported
			All Days				
TOTAL	3.73	0.83	1.42	0.26	1.10	0.06	0.05
Private	2.72	0.68	1.08	0.16	0.73	0.03	0.04
Public	0.19	0.05	0.04	0.04	0.07	0.00	
Other	0.13	0.02	0.03	0.04	0.01	0.03	0.01
Walk	0.68	0.08	0.28	0.02	0.29	0.00	0.00
Unreported	0.00	0.00	0.00				0.00
			Weekday				
TOTAL	4.20	1.12	1.54	0.34	1.07	0.08	0.06
Private	2.97	0.91	1.13	0.20	0.64	0.04	0.05
Public	0.27	0.08	0.05	0.06	0.08	0.00	
Other	0.17	0.03	0.04	0.05	0.01	0.04	
Walk	0.79	0.10	0.32	0.03	0.34	0.00	0.00
Unreported	0.00	0.00					0.00
			Weekend				
TOTAL	2.72	0.23	1.18	0.09	1.16	0.03	0.03
Private	2.20	0.19	0.97	0.08	0.91	0.03	0.01
Public	0.03		0.00		0.03		
Other	0.05	0.00	0.01	0.00	0.02		0.02
Walk	0.44	0.04	0.20	0.00	0.20		0.00
Unreported	0.00		0.00				

#### New York State - 2009 NHTS Average Trip Length (Miles) by Trip Purpose Ithaca

			Family & Personal	Civic, Educational			
	TOTAL	Earn a Living	Business	& Religious	Social & Recreational	Other	Unreported
All	7.27	7.51	5.84	6.64	8.22	16.51	18.34
Weekday	6.12	6.56	4.39	6.42	7.29	18.34	8.74
Weekend	11.01	17.20	9.80	8.43	10.05	9.86	50.69

Note: Average trip length is calculated using only those records with trip mile information present.

#### New York State - 2009 NHTS Average Daily Person Trips per Person by Travel Time Category and Trip Purpose Ithaca

	TOTAL	1-9 min	10-19 min	20-29 min	30-39 min	40-49 min	50+ min	Unreported
			All Days					
TOTAL	3.73	1.28	1.37	0.50	0.28	0.08	0.21	0.00
At work	0.73	0.20	0.29	0.13	0.08	0.02	0.02	0.00
Work Related Business	0.11	0.05	0.02	0.01	0.01	0.00	0.01	
Earning a Living Subtotal	0.83	0.25	0.31	0.14	0.08	0.02	0.03	0.00
Shopping	0.70	0.29	0.28	0.04	0.04	0.00	0.04	0.00
Doctor/Dentist	0.05	0.01	0.03	0.01	0.00	0.00	0.00	
Other Family & Personal Business	0.67	0.35	0.21	0.07	0.02	0.01	0.00	
Family & Personal Business Subtotal	1.42	0.66	0.52	0.12	0.06	0.01	0.05	0.00
School/Church	0.26	0.04	0.10	0.04	0.03	0.02	0.01	
School/Church Subtotal	0.26	0.04	0.10	0.04	0.03	0.02	0.01	
Vacation	0.02	0.00	0.00	0.01	0.00	0.00	0.01	
Visit Friends/Relatives	0.24	0.04	0.06	0.06	0.03	0.01	0.04	
Other Soc/Rec	0.84	0.25	0.35	0.13	0.07	0.01	0.04	
Social and Recreational Subtotal	1.10	0.29	0.41	0.19	0.10	0.02	0.09	
Other	0.06	0.02	0.01	0.01	0.00		0.02	
Other Subtotal	0.06	0.02	0.01	0.01	0.00		0.02	
Unreported	0.05	0.02	0.01	0.00	0.00	0.01	0.00	0.00
			Weekday					
TOTAL	4.20	1.45	1.53	0.57	0.35	0.10	0.20	0.00
At work	1.00	0.27	0.40	0.16	0.11	0.02	0.03	0.00
Work Related Business	0.12	0.07	0.03	0.01	0.00	0.00	0.01	
Earning a Living Subtotal	1.12	0.34	0.43	0.18	0.11	0.03	0.03	0.00
Shopping	0.62	0.26	0.25	0.03	0.05	0.00	0.04	0.00
Doctor/Dentist	0.08	0.01	0.05	0.01	0.00	0.00	0.00	
Other Family & Personal Business	0.84	0.44	0.27	0.10	0.03	0.01	0.00	0.00
Family & Personal Business Subtotal	1.54	0.71	0.57	0.13	0.07	0.02	0.04	0.00
School/Church	0.34	0.05	0.13	0.06	0.05	0.03	0.02	
School/Church Subtotal	0.34	0.05	0.13	0.06	0.05	0.03	0.02	
Vacation	0.01	0.00	0.00	0.00	0.00	0.02	0.00	
Visit Friends/Relatives	0.24	0.03	0.05	0.07	0.03	0.02	0.03	
Other Soc/Rec Social and Recreational Subtotal	0.83 1.07	0.25 0.29	0.32 0.37	0.13 0.20	0.08 0.12	0.01 0.02	0.04 0.07	
Other	0.08	0.29	0.37	0.20	0.12	0.02	0.07	
Other Subtotal	0.08	0.03	0.02	0.00	0.00		0.03	
Unreported	0.06	0.03	0.02	0.00	0.00		0.03	0.00
Omeported	0.00	0.03	Weekend	0.00	0.00		0.00	0.00
TOTAL	2.72	0.92	1.03	0.36	0.14	0.05	0.21	
At work	0.16	0.03	0.06	0.05	0.14	0.01	0.21	
Work Related Business	0.07	0.01	0.01	0.01	0.02	0.01	0.03	
Earning a Living Subtotal	0.23	0.04	0.07	0.06	0.03	0.01	0.03	
Shopping	0.86	0.38	0.34	0.06	0.03	0.00	0.04	
Doctor/Dentist	0.00		0.00	0.00	0.00		0.00	
Other Family & Personal Business	0.31	0.18	0.09	0.03	0.00	0.00	0.01	
Family & Personal Business Subtotal	1.18	0.56	0.43	0.09	0.03	0.00	0.06	
School/Church	0.09	0.02	0.05	0.01	0.00		0.00	
School/Church Subtotal	0.09	0.02	0.05	0.01	0.00		0.00	
Vacation	0.06	0.00	0.01	0.02	0.01	0.00	0.01	
Visit Friends/Relatives	0.23	0.07	0.07	0.02	0.01	0.01	0.06	
Other Soc/Rec	0.87	0.23	0.40	0.13	0.05	0.01	0.04	
Social and Recreational Subtotal	1.16	0.30	0.48	0.18	0.08	0.02	0.12	
Other	0.03	0.00		0.03			0.00	
Other Subtotal	0.03	0.00		0.03			0.00	
Unreported	0.03	0.00	0.00	0.00		0.02	0.01	

#### New York State - 2009 NHTS Average Daily Person Trips per Person by Travel Time Category and Mode of Transportation Ithaca

All Days TOTAL 1-9 min 10-19 min 20-29 min 30-39 min 40-49 mir	50+ min
TOTAL 3.73 1.28 1.37 0.50 0.28 0.08	0.21
Private Vehicle 2.72 0.97 1.07 0.37 0.15 0.05	0.12
Bus/Streetcar 0.19 0.04 0.02 0.07 <b>0.01</b>	0.05
Rail/Subway 0.00 0.00	
Subtotal - Public 0.19 0.04 0.02 0.07 0.01	0.05
Amtrak 0.00	0.00
Airplane 0.02	0.02
Taxi/Shuttle 0.03 <b>0.01</b> 0.01 0.00 <b>0.01</b>	0.00
Bike 0.04 0.01 0.02 0.01 <b>0.00</b>	0.00
Walk 0.68 0.28 0.22 0.09 0.05 0.01	0.01
School Bus 0.03 <b>0.00</b> 0.01 0.01 0.01 0.00	0.00
Other 0.01 0.00 0.00 <b>0.00 0.00 0.00</b>	0.00
Subtotal - Other         0.81         0.31         0.26         0.11         0.07         0.03	0.03
Unreported 0.00 <b>0.00 0.00 0.00</b>	
Weekday	
TOTAL 1-9 min 10-19 min 20-29 min 30-39 min 40-49 mir	50+ min
<b>TOTAL</b> 4.20 1.45 1.53 0.57 0.35 0.10	0.20
<b>Private Vehicle</b> 2.97 1.11 1.13 0.41 0.16 0.06	0.09
Bus/Streetcar 0.27 0.06 0.03 0.10 <b>0.02</b>	0.06
Rail/Subway 0.00 0.00	
Subtotal - Public         0.27         0.06         0.03         0.10         0.02	0.06
Amtrak 0.00	0.00
Airplane 0.03	0.03
Taxi/Shuttle 0.03 <b>0.01</b> 0.02 <b>0.00</b>	0.00
Bike 0.05 0.02 0.03 0.01 <b>0.00</b>	0.00
Walk 0.79 0.31 0.28 0.10 0.07 0.02	0.01
School Bus 0.05 <b>0.00</b> 0.01 0.01 0.02 0.01	0.00
Other 0.01 <b>0.00</b> 0.00 <b>0.00</b>	0.00
Subtotal - Other         0.96         0.34         0.34         0.13         0.09         0.02	0.05
Unreported 0.00 0.00 0.00 0.00 0.00	
Weekend	
TOTAL 1-9 min 10-19 min 20-29 min 30-39 min 40-49 mir	50+ min
TOTAL 2.72 0.92 1.03 0.36 0.14 0.05	0.21
<b>Private Vehicle</b> 2.20 0.66 0.93 0.29 0.12 0.02	0.17
Bus/Streetcar 0.03 <b>0.00 0.00 0.00</b>	0.03
Subtotal - Public         0.03         0.00         0.00         0.00	0.03
Taxi/Shuttle         0.02         0.00         0.02	
Bike 0.01 0.01 0.00	0.00
Walk 0.44 0.23 0.09 0.07 0.02 0.01	0.01
Other 0.01 0.01 <b>0.00 0.00 0.00</b>	
Subtotal - Other         0.49         0.26         0.10         0.07         0.02         0.03	0.01
Unreported 0.00 0.00	

Note: Rail/Subway includes trips by subway, elevated rail and commuter train.

### New York State - 2009 NHTS Average Daily Person Trips per Person by Trip Length Category and Mode of Transportation Ithaca

			All Days				
		5 or less	•				31 or more
	TOTAL	miles	6-10 miles	11-15 miles	16-20 miles	21-30 miles	miles
TOTAL	3.73	2.50	0.72	0.23	0.07	0.06	0.10
Private Vehicle	2.72	1.65	0.61	0.22	0.06	0.06	0.10
Bus/Streetcar	0.19	0.10	0.08		0.01		
Rail/Subway	0.00		0.00				
Subtotal - Public	0.19	0.10	0.08		0.01		
Amtrak	0.00						0.00
Airplane	0.02						0.00
Taxi/Shuttle	0.03	0.02	0.01				
Bike	0.04	0.04	0.00			0.00	0.00
Walk	0.68	0.67	0.00				
School Bus	0.03	0.02	0.01	0.00		0.00	0.00
Other	0.01	0.01	0.00	0.00			0.00
Subtotal - Other	0.81	0.75	0.03	0.00		0.00	0.00
Unreported	0.00	0.00		0.00			
			Weekday				
	TOTAL	5 or less	6-10 miles	11-15 miles	16-20 miles	21-30 miles	31 or more
		miles					miles
TOTAL	4.20	2.86	0.82	0.25	0.09	0.04	0.08
Private Vehicle	2.97	1.84	0.68	0.25	0.07	0.04	0.07
Bus/Streetcar	0.27	0.15	0.10		0.02		
Rail/Subway	0.00		0.00				
Subtotal - Public	0.27	0.15	0.10		0.02		
Amtrak	0.00						0.00
Airplane	0.03						0.00
Taxi/Shuttle	0.03	0.02	0.01				
Bike	0.05	0.05	0.00				0.00
Walk	0.79	0.78	0.00				
School Bus	0.05	0.02	0.02	0.00		0.00	0.00
Other	0.01	0.01	0.00	0.00		0.00	0.00
Subtotal - Other	0.96	0.88	0.04	0.00		0.00	0.01
Unreported	0.00			0.00			
	TOTAL	F	Weekend	44.45	16 20 !	24 20!	24
	TOTAL	5 or less miles	6-10 miles	11-15 miles	16-20 miles	21-30 miles	31 or more miles
TOTAL	2.72	1.73	0.51	0.17	0.04	0.10	0.16
Private Vehicle	2.72	1.75	0.48	0.17	0.04	0.10	0.16
Bus/Streetcar	0.03	0.00	0.48	0.17	0.04	0.09	0.16
Subtotal - Public	0.03	0.00	0.03				
Taxi/Shuttle	0.03	0.00	0.03				
Bike	0.02	0.02				0.00	
Walk	0.01	0.01				0.00	
Other	0.44	0.43		0.00			
Subtotal - Other	0.01	0.48		0.00		0.00	
Unreported	0.49	0.48		0.00		0.00	
omeported	0.00	0.00					

Note: Rail/Subway includes trips by subway, elevated rail and commuter train.

#### New York State - 2009 NHTS Average Daily Person Trips per Person by Trip Length Category and Trip Purpose Ithaca

			All Days				
		5 or less	•				31 or more
	TOTAL	miles	6-10 miles	11-15 miles	16-20 miles	21-30 miles	miles
TOTAL	3.73	2.50	0.72	0.23	0.07	0.06	0.10
At work	0.73	0.42	0.16	0.09	0.02	0.01	0.02
Work Related Business	0.11	0.07	0.01	0.00	0.00	0.00	0.01
Earning a Living Subtotal	0.83	0.50	0.17	0.10	0.02	0.01	0.03
Shopping	0.70	0.51	0.10	0.03	0.00	0.02	0.02
Doctor/Dentist	0.05	0.04	0.01	0.00	0.00	0.00	0.00
Other Family & Personal Business	0.67	0.53	0.10	0.02	0.01	0.00	0.00
Family & Personal Business Subtotal School/Church	1.42 0.26	1.08 0.15	0.22 0.07	0.05 0.01	0.02 0.02	0.02 <b>0.00</b>	0.03 0.00
School/Church Subtotal	0.26	0.15	0.07	0.01	0.02	0.00	0.00
Vacation	0.28	0.15	0.07	0.01	0.02	0.00	0.00
Visit Friends/Relatives	0.02	0.01	0.00	0.00	0.00	0.00	0.01
Other Soc/Rec	0.24	0.13	0.00	0.02	0.00	0.00	0.02
Social and Recreational Subtotal	1.10	0.72	0.18	0.04	0.01	0.02	0.01
Other	0.06	0.02	0.02	0.00	0.01	0.03	0.00
Other Subtotal	0.06	0.02	0.02				0.00
Unreported	0.05	0.04	0.00	0.00	0.00	0.00	0.00
omeported	0.03	0.04	Weekday	0.00	0.00	0.00	0.00
	TOTAL	5 or less	6-10 miles	11-15 miles	16-20 miles	21-30 miles	31 or more
	.0.7.2	miles	0 10 1111103	11 15 111105	10 20 1111103	22 3063	miles
TOTAL	4.20	2.86	0.82	0.25	0.09	0.04	0.08
At work	1.00	0.58	0.22	0.13	0.02	0.01	0.02
Work Related Business	0.12	0.10	0.01	0.01	0.00	0.00	0.01
Earning a Living Subtotal	1.12	0.68	0.22	0.14	0.03	0.01	0.03
Shopping	0.62	0.48	0.09	0.01	0.00	0.01	0.01
Doctor/Dentist	0.08	0.05	0.01	0.00	0.00	0.00	
Other Family & Personal Business	0.84	0.67	0.13	0.02	0.02	0.00	0.00
Family & Personal Business Subtotal	1.54	1.20	0.24	0.03	0.02	0.02	0.01
School/Church	0.34	0.19	0.10	0.02	0.03	0.00	0.00
School/Church Subtotal	0.34	0.19	0.10	0.02	0.03	0.00	0.00
Vacation	0.01	0.00	0.00		0.00	0.00	0.00
Visit Friends/Relatives	0.24	0.13	0.06	0.02	0.00	0.00	0.02
Other Soc/Rec	0.83	0.59	0.19	0.04	0.00	0.01	0.00
Social and Recreational Subtotal	1.07	0.72	0.25	0.06	0.00	0.01	0.02
Other	0.08	0.03	0.02				0.00
Other Subtotal	0.08	0.03	0.02				0.00
Unreported	0.06	0.05	0.00	0.00	0.00	0.00	0.00
			Weekend				
	TOTAL	5 or less	6-10 miles	11-15 miles	16-20 miles	21-30 miles	31 or more
		miles					miles
TOTAL	2.72	1.73	0.51	0.17	0.04	0.10	0.16
At work	0.16	0.09	0.05	0.01	0.01	0.00	
Work Related Business	0.07	0.02	0.01	0.00		0.01	0.03
Earning a Living Subtotal	0.23	0.11	0.06	0.02	0.01	0.01	0.03
Shopping	0.86	0.59	0.12	0.08	0.00	0.02	0.05
Doctor/Dentist	0.00	0.00	0.00		0.00		0.00
Other Family & Personal Business	0.31	0.24	0.05	0.01			0.01
Family & Personal Business Subtotal	1.18	0.82	0.18	0.09	0.00	0.02	0.06
School/Church School/Church Subtotal	0.09 0.09	0.06	0.01	0.00	0.00		0.01
•		0.06	0.01	0.00	0.00		0.01
Vacation	0.06	0.03	0.01	0.00	0.00	0.01	0.01
Visit Friends/Relatives	0.23	0.12	0.05	0.02	0.01	0.01	0.03
Other Soc/Rec Social and Recreational Subtotal	0.87	0.57	0.17 0.23	0.04	0.02	0.04	0.02
Other	1.16 <b>0.03</b>	0.71 <b>0.00</b>	0.23 <b>0.03</b>	0.06	0.02	0.06	0.07
Other Subtotal	0.03	0.00	0.03				
Unreported	0.03	0.00	0.03	0.00	0.00		0.01
omeported	0.03	0.02	0.00	0.00	0.00		0.01

#### New York State - 2009 NHTS Average Daily Person Trips per Person by Seasonal Variation and Mode of Transportation Ithaca

	TOTAL	Winter	Spring	Summer	Fall
	All [	Days			
TOTAL	3.73	2.11	4.94	4.50	3.40
Auto,Van-driver	1.39	0.76	1.91	1.61	1.31
Auto, Van-passenger	0.61	0.35	0.66	0.92	0.54
Sports Utility	0.54	0.44	0.61	0.52	0.60
Pickup	0.15	0.12	0.23	0.08	0.17
Other POV	0.03		0.11	0.00	0.00
Subtotal - Private	2.72	1.66	3.51	3.13	2.62
Rail/Subway	0.00		0.00		
Bus/Streetcar	0.19	0.04	0.23	0.39	0.11
Subtotal - Public	0.19	0.04	0.24	0.39	0.11
Amtrak/InterCity Train	0.00			0.00	
Airplane	0.02		0.08		
Taxi/Shuttle	0.03		0.08	0.03	0.00
Bike	0.04	0.01	0.03	0.04	0.07
Walk	0.68	0.36	0.94	0.89	0.53
School Bus	0.03	0.04	0.05	0.01	0.05
Special Transit - People w/Disabilities	0.00		0.00		
Other	0.01	0.00	0.02	0.01	0.01
Subtotal - Other	0.81	0.41	1.19	0.99	0.66
Unreported	0.00	0.00	0.00	0.00	
		Wee	kday		
TOTAL	4.20	1.95	5.52	4.94	3.62
Auto, Van-driver	1.56	0.66	2.16	1.75	1.38
Auto, Van-passenger	0.60	0.30	0.58	1.01	0.39
Sports Utility	0.61	0.31	0.67	0.62	0.74
Pickup	0.16	0.12	0.23	0.10	0.16
Other POV	0.04		0.15	0.00	0.01
Subtotal - Private	2.97	1.39	3.78	3.48	2.68
Rail/Subway	0.00		0.00		
Bus/Streetcar	0.27	0.06	0.32	0.49	0.16
Subtotal - Public	0.27	0.06	0.33	0.49	0.16
Amtrak/InterCity Train	0.00			0.00	
Airplane	0.03		0.11		
Taxi/Shuttle	0.03		0.11	0.00	0.00
Bike	0.05	0.02	0.04	0.04	0.10
Walk	0.79	0.43	1.07	0.91	0.61
School Bus	0.05	0.05	0.07	0.01	0.06
Special Transit - People w/Disabilities	0.00		0.00		
Other	0.01	0.00	0.02		0.01
Subtotal - Other	0.96	0.50	1.42	0.97	0.78
Unreported	0.00	0.00	0.00		
TOTAL	2.72	Wee		2.42	2.02
TOTAL	2.72 1.04	2.53 1.00	3.47	3.42	2.82
Auto,Van-driver			1.30	1.25	
Auto, Van-passenger	0.65 0.39	0.48	0.85 0.47	0.68 0.29	0.92
Sports Utility		0.75			
Pickup Other POV	0.12 <b>0.00</b>	0.10	0.22	0.02 <b>0.00</b>	0.18
		2.24	2.04		2.40
Subtotal - Private Bus/Streetcar	2.20 0.03	2.34	2.84 <b>0.01</b>	2.24 <b>0.15</b>	2.48
Subtotal - Public	0.03		0.01	0.15	
Taxi/Shuttle				0.15 <b>0.09</b>	
Bike	0.02 0.01		0.01 0.01	0.09	0.01
Walk	0.01	0.18	0.60	0.04	0.01
Other	0.44	0.18	0.60	0.85	0.33
Subtotal - Other	0.01	0.00	0.62	1.03	0.35
Unreported	0.49	0.10	0.02	0.00	0.53
Omeported	0.00			0.00	

Note: Rail/Subway includes trips by subway, elevated rail and commuter train.

New York State - 2009 NHTS Average Daily Person Travel per Person by Day of Week Ithaca

	Person Trips	PMT	Average Trip	
			Length	
TOTAL	3.73	26.79	7.27	
Sunday	3.01	40.34	13.42	
Monday	4.12	17.90	4.36	
Tuesday	4.99	27.79	5.58	
Wednesday	4.49	25.96	5.99	
Thursday	2.89	12.59	4.39	
Friday	4.63	48.61	10.74	
Saturday	2.03	14.83	7.30	

Note: Average trip length is calculated using only those records with trip mile information present.

#### New York State - 2009 NHTS Average Daily Person Trips per Person by Day of Week and Trip Purpose Ithaca

	TOTAL	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
TOTAL	3.73	3.01	4.12	4.99	4.49	2.89	4.63	2.03
Earn a Living	0.83	0.15	1.05	1.35	1.23	0.69	1.21	0.18
Family & Personal Business	1.42	1.52	1.28	1.93	1.83	1.17	1.48	0.77
Civic, Educational & Religious	0.26	0.16	0.68	0.33	0.18	0.17	0.25	0.03
Social & Recreational	1.10	1.11	1.08	1.22	0.90	0.85	1.53	1.04
Other	0.06		0.00	0.00	0.28	0.01	0.16	0.00
Unreported	0.05	0.07	0.03	0.16	0.07	0.00	0.01	0.00

#### New York State - 2009 NHTS Average Daily Weekday Person Trips per Person by Time of Day and Trip Purpose Ithaca

	TOTAL	1-6 am	6-9 am	9 am-1 pm	1-4 pm	4-7 pm	7-10 pm	10 pm-1 am	Unreported
TOTAL	4.2	0.09	0.64	0.84	0.96	1.1	0.46	0.11	0
Earn a Living	1.12	0.03	0.28	0.23	0.14	0.33	0.08	0.03	
Family & Personal Business	1.54	0.01	0.17	0.41	0.42	0.41	0.10	0.02	
Civic, Educational & Religious	0.34		0.11	0.03	0.09	0.08	0.03		
Social & Recreational	1.07	0.04	0.07	0.15	0.27	0.26	0.22	0.06	
Other	0.08	0.00	0.00	0.03	0.03	0.02	0.00	0.00	
Unreported	0.06	0.00	0.00		0.02	0.00	0.03	0.00	0.00

#### New York State - 2009 NHTS Average Daily Weekend Person Trips per Person by Time of Day and Trip Purpose Ithaca

	TOTAL	1-6 am	6-9 am	9 am-1 pm	1-4 pm	4-7 pm	7-10 pm	10 pm-1 am
TOTAL	2.72	0.02	0.19	0.87	0.50	0.59	0.50	0.06
Earn a Living	0.23	0.02	0.02	0.04	0.03	0.11	0.01	0.01
Family & Personal Business	1.18	0.00	0.10	0.50	0.18	0.22	0.16	0.01
Civic, Educational & Religious	0.09		0.01	0.05	0.00	0.01	0.01	0.01
Social & Recreational	1.16		0.04	0.28	0.27	0.25	0.28	0.03
Other	0.03			0.00		0.00	0.03	
Unreported	0.03	0.00	0.03	0.01	0.00			

#### New York State - 2009 NHTS Average Daily Vehicle Trips per Driver by Trip Purpose and Driver Age Ithaca

			Family & Personal	Civic, Educational	Social &		
	TOTAL	Earn a Living	Business	& Religious	Recreational	Other	Unreported
			All	Days			
Driver's Age							
TOTAL	2.35	0.68	1.00	0.08	0.52	0.02	0.03
16-19	1.96	0.84	0.48	0.26	0.38		
20-29	1.93	0.63	0.53	0.03	0.56	0.09	0.10
30-39	3.01	0.87	1.42	0.01	0.69		0.02
40-49	2.64	0.81	1.23	0.06	0.51	0.01	0.02
50-59	2.68	0.68	1.40	0.09	0.49		0.03
60-64	2.50	0.55	1.40	0.03	0.51	0.00	0.01
65 and over	2.28	0.20	1.51	0.06	0.51	0.00	0.00
			We	ekday			
TOTAL	2.67	0.91	1.10	0.10	0.50	0.02	0.05
16-19	2.56	1.23	0.42	0.38	0.53		
20-29	2.29	0.86	0.54	0.04	0.64	0.06	0.14
30-39	3.57	1.22	1.83	0.01	0.49		0.02
40-49	2.75	1.03	1.27	0.05	0.38	0.02	
50-59	2.67	0.76	1.53	0.02	0.34		0.03
60-64	2.28	0.74	1.21	0.03	0.28	0.01	0.00
65 and over	2.73	0.24	1.86	0.04	0.58		0.01
			Wee	ekend			
TOTAL	1.66	0.20	0.80	0.06	0.56	0.03	0.01
16-19	0.69	0.01	0.62		0.07		
20-29	1.17	0.15	0.50		0.38	0.13	
30-39	1.84	0.13	0.56	0.01	1.13		0.01
40-49	2.40	0.34	1.16	0.08	0.77		0.05
50-59	2.70	0.50	1.14	0.24	0.81		0.02
60-64	2.95	0.15	1.79	0.02	0.98		0.01
65 and over	1.33	0.10	0.76	0.11	0.35	0.01	

#### New York State - 2009 NHTS Average Daily Vehicle Travel per Household by HH Composition Ithaca

	Vehicle Trips	VMT	Avg Trip Length
	vemere rrips	*****	20116111
	All Days		
Household Composition			
TOTAL	5.05	37.89	7.53
1 Adult, No Child	2.23	11.49	5.15
2+ Adults, No Child	6.14	40.55	6.68
1 Adult, Child <6	3.17	12.52	3.95
2+ Adults, Child <6	5.02	59.73	11.90
1 Adult, Child 6-15	3.60	32.20	8.94
2+ Adults, Child 6-15	7.99	58.75	7.36
1 Adult, Child 16-21	9.47	87.74	9.27
2+ Adults, Child 16-21	22.85	182.46	7.98
1 Adult, Retired, No Child	1.26	6.09	4.85
2+ Adults, Retired, No Child	3.29	23.49	7.16
	Weekday		
TOTAL	5.74	38.55	6.74
1 Adult, No Child	2.17	10.47	4.83
2+ Adults, No Child	7.09	38.65	5.53
1 Adult, Child <6	3.12	10.92	3.50
2+ Adults, Child <6	6.26	73.34	11.71
1 Adult, Child 6-15	2.06	13.85	6.72
2+ Adults, Child 6-15	8.41	60.81	7.24
1 Adult, Child 16-21	13.34	125.97	9.44
2+ Adults, Child 16-21	27.52	164.46	5.98
1 Adult, Retired, No Child	1.51	6.80	4.53
2+ Adults, Retired, No Child	3.68	24.13	6.56
	Weekend		
TOTAL	3.57	36.47	10.22
1 Adult, No Child	2.38	13.66	5.75
2+ Adults, No Child	4.13	44.58	10.79
1 Adult, Child <6	3.28	15.91	4.85
2+ Adults, Child <6	2.38	30.89	12.98
1 Adult, Child 6-15	6.86	71.08	10.36
2+ Adults, Child 6-15	7.08	54.39	7.68
1 Adult, Child 16-21	1.26	6.70	5.33
2+ Adults, Child 16-21	12.96	220.63	17.02
1 Adult, Retired, No Child	0.74	4.59	6.21
2+ Adults, Retired, No Child	2.44	22.14	9.09

Note: Average trip length is calculated using only those records where trip mileage is available

New York State - 2009 NHTS Average Daily Vehicle Travel per Household by Trip Purpose and MSA Status Ithaca

	All Days		Week	day	Weekend	
	Not in MSA	Total	Not in MSA	Total	Not in MSA	Total
			Vehicle	Trips		
TOTAL	5.05	5.05	5.74	5.74	3.57	3.57
Earn a Living	1.47	1.47	1.97	1.97	0.42	0.42
Family & Personal Business	2.15	2.15	2.36	2.36	1.71	1.71
Civic, Educational & Religious	0.18	0.18	0.21	0.21	0.13	0.13
Social & Recreational	1.12	1.12	1.07	1.07	1.21	1.21
Other	0.05	0.05	0.04	0.04	0.08	0.08
Unreported	0.07	0.07	0.10	0.10	0.02	0.02
			VM	Т		
TOTAL	37.89	37.89	38.55	38.55	36.47	36.47
Earn a Living	13.50	13.50	15.53	15.53	9.19	9.19
Family & Personal Business	11.93	11.93	12.65	12.65	10.39	10.39
Civic, Educational & Religious	1.19	1.19	1.38	1.38	0.79	0.79
Social & Recreational	9.12	9.12	7.40	7.40	12.78	12.78
Other	0.62	0.62	0.55	0.55	0.75	0.75
Unreported	1.53	1.53	1.04	1.04	2.57	2.57
			Average Tri	p Length		
TOTAL	7.53	7.53	6.74	6.74	10.22	10.22
Earn a Living	9.28	9.28	8.00	8.00	21.84	21.84
Family & Personal Business	5.55	5.55	5.36	5.36	6.07	6.07
Civic, Educational & Religious	6.58	6.58	6.67	6.67	6.27	6.27
Social & Recreational	8.16	8.16	6.90	6.90	10.54	10.54
Other	12.02	12.02	13.81	13.81	10.00	10.00
Unreported	21.09	21.09	10.76	10.76	118.72	118.72

Note: Average trip length is calculated using only those records where trip mileage is available

#### New York State - 2009 NHTS Average Weekday Trips per Driver by Trip Purpose Ithaca

	Vehicle	TOTAL	1-6 am	6-9 am	9 am-1 pm	1-4 pm	4-7 pm	7-10 pm	10 pm-1 am	Unreported
	Trips/Driver									
TOTAL	2.67	53,335,127	1,757,781	8,468,386	12,241,537	10,323,182	14,470,439	4,813,059	1,250,158	10,585
Earn a Living	0.91	18,259,125	790,887	4,958,908	3,904,781	2,281,620	5,042,882	1,024,790	255,257	
Family & Personal Business	1.10	21,922,964	153,139	2,535,818	6,613,036	5,325,965	5,969,585	915,796	409,623	
Civic, Educational & Religious	0.10	1,923,358		564,510	266,261	115,974	672,291	304,321		
Social & Recreational	0.50	9,956,966	791,836	367,418	1,457,459	2,576,735	2,458,516	1,839,511	465,492	
Other	0.02	372,816	21,919	2,959		2,959	323,060		21,919	
Unreported	0.05	899,900		38,772		19,930	4,105	728,640	97,867	10,585

#### New York State - 2009 NHTS Average Weekend Trips per Driver by Trip Purpose Ithaca

	Vehicle	TOTAL	1-6 am	6-9 am	9 am-1 pm	1-4 pm	4-7 pm	7-10 pm	10 pm-1 am
	Trips/Driver								
TOTAL	1.66	15,635,818	75,504	744,513	5,116,175	2,681,723	3,669,050	2,977,835	371,018
Earn a Living	0.20	1,842,879	69,797	165,621	258,884	219,331	905,682	130,708	92,855
Family & Personal Business	0.80	7,501,797		278,849	3,160,500	990,478	1,611,494	1,398,177	62,298
Civic, Educational & Religious	0.06	554,997		38,605	416,771	29,707	23,657	27,608	18,648
Social & Recreational	0.56	5,312,123		214,269	1,250,140	1,430,217	1,122,001	1,098,281	197,217
Other	0.03	329,277					6,217	323,060	
Unreported	0.01	94,746	5,707	47,169	29,881	11,990			

New York State - 2009 NHTS
Average Vehicle Trip Length (miles) by Time of Day and Trip Purpose

		TOTAL	Earn a Living	Family & Personal Business	Civic, Educational & Religious	Social & Recreational	Other	Unreported
Weekday	TOTAL	6.74	8	5.36	6.67	6.9	13.81	10.76
	1-6 am	7.66	8.28	1.56		6.82	58.00	
	6-9 am	7.49	10.01	3.48	4.20	5.66	3.00	17.16
	9 am-1 pm	4.99	4.10	4.79	12.10	6.97		
	1-4 pm	7.95	8.38	8.47	5.13	6.67	4.00	2.00
	4-7 pm	6.15	8.57	3.95	7.84	5.94	8.00	0.56
	7-10 pm	6.71	9.32	4.94	4.49	7.53		4.14
	10 pm-1 am	14.72	8.65	8.96		11.56	58.00	60.00
	Unreported	6.55						6.55
Weekend	TOTAL	10.22	21.84	6.07	6.27	10.54	10.00	118.72
	1-6 am	7.48	8.01					1.00
	6-9 am	8.11	7.94	5.81	21.96	6.48		18.35
	9 am-1 pm	9.10	4.43	6.50	2.77	13.05		246.97
	1-4 pm	11.51	4.86	8.91	28.25	11.97		250.00
	4-7 pm	15.16	37.62	5.91	11.79	10.41	10.00	
	7-10 pm	5.81	6.45	3.48	9.65	7.37	10.00	
	10 pm-1 am	7.80	13.49	2.87	5.00	6.95		

Note: Average trip length is calculated using only those records with trip mile information present.

New York State - 2009 NHTS
Average Daily Weekday Vehicle Trips per Driver by Trip Length and Trip Purpose

	TOTAL	Earn a Living	Family & Personal Business	Civic, Educational & Religious	Social & Recreational	Other	Unreported
TOTAL	2.67	0.91	1.10	0.10	0.50	0.02	0.05
5 or less miles	1.65	0.46	0.83	0.06	0.26	0.00	0.04
6-10 miles	0.60	0.22	0.19	0.01	0.17	0.02	
11-15 miles	0.24	0.14	0.03	0.01	0.06		
16-20 miles	0.07	0.03	0.02	0.01	0.00		0.00
21-30 miles	0.03	0.01	0.01		0.00		0.00
31 or more miles	0.06	0.03	0.01		0.01	0.00	0.00
Unreported	0.01	0.01	0.00				0.00

New York State - 2009 NHTS
Average Daily Weekend Vehicle Trips per Driver by Trip Length and Trip Purpose

	TOTAL	Earn a Living	Family & Personal Business	Civic, Educational & Religious	Social & Recreational	Other	Unreported
TOTAL	1.66	0.20	0.80	0.06	0.56	0.03	0.01
5 or less miles	0.99	0.07	0.56	0.04	0.32		0.00
6-10 miles	0.34	0.06	0.13	0.01	0.11	0.03	0.00
11-15 miles	0.14	0.02	0.08	0.00	0.05		0.00
16-20 miles	0.04	0.01	0.00	0.00	0.02		0.00
21-30 miles	0.05	0.00	0.02		0.03		
31 or more miles	0.09	0.03	0.01	0.00	0.04		0.00
Unreported	0.00		0.00				

#### New York State - 2009 NHTS Number of Workers (000) by Ability to Work from Home Ithaca

ALL	67
Appropriate skip	6
Refused	0
Don't know	0
Has Option to Work from Home	12
Does Not Have Option to Work from Home	50

#### New York State - 2009 NHTS Number of Workers (000) by Fixed Workplace Ithaca

ALL	67
Appropriate skip	66
No fixed workplace	1

#### New York State - 2009 NHTS Summary Statistics on Journey-to-Work and Work-Related Travel Ithaca

	Sum
Persons (000)	97
Workers (000)	67
Journey-to-Work Person Trips (000,000)	26
Journey-to-Work Vehicle Trips (000,000)	17
Journey-to-Work VMT (000,000)	140
Work Related Person Trips (000,000)	4
Work Related Vehicle Trips (000,000)	3
Work Related VMT (000,000)	44

#### New York State - 2009 NHTS Summary Statistics on Workers and Their Travel Ithaca

WORKERS (000)	67
% Male	54.46
% Female	45.54
Workers/Person	0.69
Workers/HH	1.79
Workers/Veh	1.21
Average Time to Work	17.07

### New York State - 2009 NHTS Distribution of Workers by Their Usual Mode to Work (000) Ithaca

All	67
%	100.00
Unreported	10
%	14.36
POV	45
%	67.65
Public Transit	4
%	5.64
Other	2
%	3.64
Walk	6
%	8.72

### New York State - 2009 NHTS Annual Journey-To-Work Person Trips by Gender and Actual Mode of Commuting Ithaca

	ALL	Male	Female
ALL	25,742,470	14,140,279	11,602,191
Unreported	15,562	15,562	
POV-driver	17,285,433	8,780,338	8,505,095
POV-passenger	3,663,236	2,612,195	1,051,042
Public Transit	1,837,508	590,362	1,247,147
Other	549,623	304,568	245,055
Walk	2,391,107	1,837,254	553,853

#### New York State - 2009 NHTS Average Journey-To-Work Commute Trip Distance by Mode of Transportation and MSA Status Ithaca

Average Commute Trip Distance (Miles)	ALL	Not in MSA
ALL	6.56	6.56
Other	6.90	6.90
Auto	6.65	6.65
Truck	8.90	8.90
Bus	2.44	2.44
Average Commute Travel Time (Minutes)		
ALL	17.07	17.07
Other	18.68	18.68
Auto	14.77	14.77
Truck	17.14	17.14
Bus	21.61	21.61
Average Commute Speed (Miles per Hour)		
ALL	24.63	24.63

#### Note:

Commute Travel Time includes both travel time and time spent waiting for transportation. Average commute speed is calculated using nonsegmented trips only.

#### New York State - 2009 NHTS Number of Households and Journey-To-Work Person Trips by Household Income Ithaca

	Households	Commute Person Trips	Daily Trips/HH
TOTAL	37,443	25,742,470	1.88
< \$10,000	2,838	74,282	0.07
\$10 to \$20,000	4,679	2,993,910	1.75
\$20 to \$30,000	3,787	1,517,493	1.10
\$30 to \$40,000	4,778	4,909,454	2.81
\$40 to \$50,000	3,203	1,689,105	1.44
\$50 to \$60,000	2,528	1,917,901	2.08
\$60 to \$70,000	2,701	1,689,164	1.71
\$70 to \$80,000	1,976	905,509	1.26
\$80 to \$100,000+	3,120	3,500,253	3.07
\$100,000+	5,690	6,040,209	2.91
Unreported	2,141	505,190	0.65

#### New York State - 2009 NHTS Workers and Their Home to Work Person Travel by Mode Ithaca

	TOTAL	POV	Public Transit	Other	Walk	Unreported
% Workers	100.00	67.65	5.64	3.64	8.72	14.36
Average Trip Length (miles)	6.56	7.67	2.45	2.19	1.00	12.00
Average Commute Time (Minutes)	17.07	16.39	21.72	14.31	19.95	30.00
Travel Speed (MPH)	24.63	28.01		9.20	3.01	24.00

#### Note:

- The percentage of workers traveling by different modes of transportation is based on the worker's usual mode of transportation. The rest of the statistics in this table are based on the actual mode of transportation as reported in the sample day.
- Average commute time includes both travel time and time waiting for transportation.
- Average commute speed is calculated using non-segmented trips only.

# New York State - 2009 NHTS Statistics on Journey-To-Work Person Travel per Worker by Actual Mode of Transportation Ithaca

			Average Trip
	Person Trips	PMT	Length
TOTAL	1.05	6.84	6.56
Auto, Van-driver	0.42	3.05	7.35
Auto, Van-passenger	0.14	0.68	4.78
Sports Utility	0.22	2.28	10.35
Pickup	0.05	0.45	8.97
Other POV	0.02	0.05	2.43
Subtotal - Private	0.86	6.50	7.67
Bus/Streetcar	0.08	0.18	2.45
Subtotal - Public	0.08	0.18	2.45
Walk	0.10	0.10	1.00
School Bus	0.00	0.00	2.00
Other	0.02	0.05	2.20
Subtotal - Other	0.12	0.15	1.23
Unreported	0.00	0.01	12.00

#### Note:

- Average trip length is calculated using only those records with trip mile informatio present.
- Rail/Subway includes trips by subway, elevated rail, and commuter train.

#### New York State - 2009 NHTS Statistics on Journey-To-Work Person Travel per Worker by Segmented vs Non-Segmented Trips and MSA Status Ithaca

	•	TOTAL			Segmented			Non-Segmented		
		Average Trip			Average Trip				Average Trip	
	Person Trips	PMT	Length	Person Trips	PMT	Length	Person Trips	PMT	Length	
Total	1.05	6.84	6.56	0.08	0.18	2.45	0.98	6.66	6.88	
Not in MSA	1.05	6.84	6.56	0.08	0.18	2.45	0.98	6.66	6.88	

#### Note:

 $\label{prop:condition} \mbox{Average trip length is calculated using only those records where trip mile information is available.}$ 

# New York State - 2009 NHTS Statistics on Journey-To-Work Person Trips per Worker by Segmented Status and Primary Mode of Transportation Ithaca

	TOTAL	Segmented	Non-Segmented
TOTAL	1.05	0.08	0.98
Auto,Van-driver	0.42		0.42
Auto, Van-passenger	0.14		0.14
Sports Utility	0.22		0.22
Pickup	0.05		0.05
Other POV	0.02		0.02
Subtotal - Private	0.86		0.86
Bus/Streetcar	0.08	0.08	
Subtotal - Public	0.08	0.08	
Bike	0.02		0.02
Walk	0.10		0.10
School Bus	0.00		0.00
Subtotal - Other	0.12		0.12
Unreported	0.00		0.00

#### Note:

- For segmented trips, primary mode refers to the mode used during the trip segment with the longest travel time in minutes
- Rail/Subway includes trips by subway, elevated rail and commuter train.

# New York State - 2009 NHTS Average Journey-To-Work Person Trip Length by Segmented Status and Primary Mode of Transportation Ithaca

	TOTAL	Segmented Non-Segmented
TOTAL	6.56	2.45 6.88
Auto, Van-driver	7.35	7.35
Auto, Van-passenger	4.78	4.78
Sports Utility	10.35	10.35
Pickup	8.97	8.97
Other POV	2.43	2.43
Subtotal - Private	7.67	7.67
Bus/Streetcar	2.45	2.45
Subtotal - Public	2.45	2.45
Bike	2.20	2.20
Walk	1.00	1.00
School Bus	2.00	2.00
Subtotal - Other	1.23	1.23
Unreported	12.00	12.00

- Average trip length is calculated using only those records where trip mileage information is available
- For segmented trips, primary mode refers to the mode used during the trip segment with the longest travel time in minutes
- Rail/Subway includes trips by subway, elevated rail and commuter train.

#### New York State - 2009 NHTS Number of Segmented Journey-To-Work Person Trips by Number of Segments Taken Ithaca

**Number of Segments** 

Three	6,992,235
Four or more	49,399
At Least One Segment Walked	6,956,808

#### New York State - 2009 NHTS Annual Journey-To-Work Person Trips by Travel Time and Mode of Transportation Ithaca

#### Travel Time in Minutes TOTAL Unreported 1-9 min 10-19 min 20-29 min 30-39 min 40-49 min 50+ min TOTAL 25,742,470 18,807 6,981,367 10,299,526 4,423,238 2,709,988 663,186 646,358 8,026,548 1,967,932 10,369,767 2,396,187 3,598,351 597,058 Auto, Van-driver 260,422 Auto, Van-passenger 3,482,426 1,153,870 1,016,478 320,350 454,663 1,719 44,299 Sports Utility 5,387,727 2,200,043 1,256,501 496,756 287,393 393,264 5,001 Pickup 1,213,383 18,807 286,364 10,299,526 4,423,238 2,709,988 663,186 646,358 Other POV 7,781 443,089 495,367 7,781 Subtotal - Private 20,948,670 18,807 6,479,552 4,749,696 2,205,213 782,482 145,411 90,778 Bus/Streetcar 1,837,508 1,898,074 356,968 46,417 27,097 Subtotal - Public 641,732 955,924 65,681 484,630 1,837,508 1,039,717 Walk 2,391,107 428,477 306,825 378,539 178,966 22,233 21,649 School Bus 30,893 32,236 15,900 4,142 Other 518,729 73,337 1,016,478 320,350 454,663 1,719 44,299

30,893

113,695

7,189

5,001

319,507

501,815

#### Note:

Subtotal - Other

Unreported

2,940,730

15,562

<sup>-</sup>  $\mbox{\sc Rail/Subway}$  includes trips by subway, elevated rail and commuter train.

#### New York State - 2009 NHTS Annual Journey-To-Work Person Trips by Trip Length and Mode of Transportation Ithaca

#### Trip Length in Miles

								31 or more
	TOTAL	Unreported	5 or less miles	6-10 miles	11-15 miles	16-20 miles	21-30 miles	miles
TOTAL	25,742,470	233,513	14,855,724	5,798,055	3,317,742	686,028	287,392	564,016
Auto, Van-driver	10,369,767	220,942	4,116,437	5,609,759	3,302,180	686,028	287,392	559,014
Auto, Van-passenger	3,482,426		2,288,930	160,003				
Sports Utility	5,387,727		3,016,339	28,293				5,001
Pickup	1,213,383		386,325	5,798,055	3,317,742	686,028	287,392	564,016
Other POV	495,367		475,325		15,562			
Subtotal - Private	20,948,670	220,942	10,283,355	4,035,303	1,381,364	304,955	197,685	113,082
Bus/Streetcar	1,837,508		1,677,506	778,762	372,362	42,372		
Subtotal - Public	1,837,508		1,677,506	539,729	1,111,413	251,145	26,127	442,974
Walk	2,391,107	12,571	2,378,536	244,207	428,757	87,556	63,580	2,959
School Bus	30,893		30,893	11,758	8,284			
Other	518,729		485,434	160,003				
Subtotal - Other	2,940,730	12,571	2,894,864					
Unreported	15,562			28,293				5,001

#### Note:

<sup>-</sup>  $\mbox{\sc Rail/Subway}$  includes trips by subway, elevated rail and commuter train.

### New York State - 2009 NHTS Annual Journey-To-Work Person Trips by Day of Week and Mode of Transportation Ithaca

	ALL	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
ALL	25,742,470	527,229	4,304,889	6,239,105	5,921,166	2,762,529	5,330,942	656,609
POV-driver	17,285,433	458,302	2,411,993	4,882,163	3,574,650	1,672,097	3,965,539	320,689
POV-passenger	3,663,236	68,927	1,582,917	454,825	1,283,457	68,374	204,736	
Other	549,623		5,001	113,988	112,559	220,502	42,120	55,453
Public Transit	1,837,508		156,365	320,394	356,875	192,698	811,175	
Walk	2,391,107		148,612	452,173	593,626	608,858	307,371	280,468
Unreported	15.562			15.562				

#### New York State - 2009 NHTS Annual Weekday Journey-To-Work Person Trips by Time of Day and Mode of Transportation Ithaca

	ALL	1-6 am	6-9 am	9 am-1 pm	1-4 pm	4-7 pm	7-10 pm	10 pm-1 am
ALL	23,929,180	805,940	6,447,475	3,638,536	2,997,159	7,619,077	1,757,398	663,595
Unreported	15,562		7,781			7,781		
Auto, Van-driver	9,461,674	341,925	3,324,387	1,005,233	1,304,934	2,668,735	650,615	165,845
Auto, Van-passenger	3,411,488		653,410	348,520	601,143	754,982	701,269	352,163
Sports Utility	5,115,439	103,181	1,224,917	875,641	518,949	2,053,394	249,944	89,413
Pickup	1,069,501	321,515	267,285	48,688	200,406	211,124	20,482	
Other POV	495,367		20,260	448,968		26,139		
Bus/Streetcar	1,837,508		145,561	538,711	46,067	1,107,169		
School Bus	30,893					30,893		
Bike	463,276		193,381	25,073	92,980	126,295	25,547	
Walk	2,028,471	39,319	610,493	347,702	232,678	632,564	109,541	56,174

Note: Rail/Subway includes trips by subway, elevated rail, and commuter train.

# New York State - 2009 NHTS Average Vehicle Occupancy by Number of Household Members and Vehicle Type (Person Miles per Vehicle Mile) Ithaca

	Number of Household Members									
	TOTAL	1	2	3	4	5 to 14				
			All Days							
TOTAL	1.61	1.17	1.51	1.41	1.77	2.19				
Auto	1.70	1.18	1.44	1.46	2.04	2.39				
Van	1.80	1.00	1.90	1.72	1.50	2.73				
Sports Utility	1.45	1.23	1.60	1.24	1.21	1.87				
Pickup	1.22	1.01	1.17	1.09	1.89	1.02				
Other Truck	1.00		1.00	1.00						
RV	2.00		2.00							
Motorcycle	1.05	1.00	2.27	1.00						
		,	Weekday							
TOTAL	1.54	1.13	1.31	1.27	2.01	1.62				
Auto	1.68	1.19	1.27	1.29	2.56	1.78				
Van	1.72	1.00	1.99	1.62	1.65	1.65				
Sports Utility	1.22	1.00	1.24	1.19	1.16	1.77				
Pickup	1.21	1.01	1.19	1.10	1.85	1.03				
Other Truck	1.00		1.00	1.00						
Motorcycle	1.05	1.00	2.27	1.00						
		,	Weekend							
TOTAL	1.77	1.26	1.85	2.08	1.20	2.98				
Auto	1.72	1.17	1.97	2.10	1.11	2.99				
Van	1.99	1.00	1.54	2.05	1.23	4.07				
Sports Utility	1.89	2.00	1.85	2.27	2.20	2.06				
Pickup	1.25	1.00	1.09	1.00	1.97	1.00				
RV	2.00		2.00							

#### New York State - 2009 NHTS Average Daily Vehicle Trips per Household by Number of Occupants and Household Income Ithaca

	Number of Persons on Trip					
	TOTAL	1	2	3	4	5 to 10
All Days						
TOTAL	5.05	3.55	0.98	0.25	0.24	0.03
< \$10,000	0.78	0.37	0.20	0.23	0.24	0.03
\$10 to \$20,000	2.85	1.45	0.92	0.05	0.36	0.08
\$20 to \$30,000	3.35	2.10	1.05	0.15	0.05	5.55
\$30 to \$40,000	5.46	4.88	0.45	0.10	0.04	
\$40 to \$50,000	5.11	2.52	0.69	0.20	1.69	0.01
\$50 to \$60,000	7.12	4.67	1.34	1.00	0.08	0.03
\$60 to \$70,000	4.42	3.69	0.59	0.14		
\$70 to \$80,000	2.79	2.21	0.32	0.12	0.03	0.11
\$80 to \$100,000+	10.26	7.32	2.41	0.38	0.11	0.04
\$100,000+	8.06	5.80	1.71	0.36	0.14	0.04
Unreported	2.30	1.78	0.32	0.13	0.06	
Weekday						
TOTAL	5.74	4.33	1.01	0.25	0.15	0.01
< \$10,000	0.91	0.31	0.29	0.31		
\$10 to \$20,000	3.11	1.63	1.10	0.04	0.33	
\$20 to \$30,000	3.94	2.45	1.21	0.21	0.07	
\$30 to \$40,000	7.22	6.64	0.54	0.03		
\$40 to \$50,000	4.13	2.94	0.40	0.03	0.76	
\$50 to \$60,000	6.94	4.78	0.98	1.16		0.02
\$60 to \$70,000	4.75	4.00	0.62	0.13		
\$70 to \$80,000	3.52	2.97	0.44	0.11		
\$80 to \$100,000+	13.04	9.60	2.88	0.40	0.10	0.07
\$100,000+	9.28	7.23	1.50	0.40	0.14	0.01
Unreported	2.10	1.52	0.37	0.14	0.06	
	Weekend					
TOTAL	3.57	1.90	0.93	0.23	0.44	0.07
< \$10,000	0.51	0.51				
\$10 to \$20,000	2.32	1.05	0.53	0.09	0.40	0.25
\$20 to \$30,000	2.10	1.37	0.71	0.02		
\$30 to \$40,000	1.75	1.13	0.25	0.24	0.13	
\$40 to \$50,000	7.19	1.65	1.31	0.55	3.67	0.03
\$50 to \$60,000	7.50	4.44	2.10	0.66	0.25	0.04
\$60 to \$70,000	3.71	3.03	0.52	0.16		
\$70 to \$80,000	1.25	0.60	0.09	0.14	0.08	0.36
\$80 to \$100,000+	4.37	2.48	1.42	0.33	0.13	
\$100,000+	5.47	2.77	2.17	0.29	0.14	0.09
Unreported	2.72	2.32	0.22	0.12	0.06	

# New York State - 2009 NHTS Average Daily Vehicle Trips per Household by Ridesharing Status and Household Composition Ithaca

		Single	Multi-
		Occupancy	Occupancy
	TOTAL	Trips	Trips
All D			
All Days	5		
Household Composition TOTAL	5.05	3.55	1.50
1 Adult, No Child	2.23	1.98	0.25
2+ Adults, No Child	6.14	4.67	1.47
1 Adult, Child <6	3.17	0.21	2.96
2+ Adults, Child <6	5.02	2.52	2.50
1 Adult, Child 6-15	3.60	1.34	2.26
2+ Adults, Child 6-15	7.99	5.33	2.66
1 Adult, Child 16-21	9.47	9.47	2.00
2+ Adults, Child 16-21	22.85	14.99	7.86
1 Adult, Retired, No Child	1.26	1.17	0.09
2+ Adults, Retired, No Child	3.29	2.13	1.16
Weekda			
Household Composition	•		
TOTAL	5.74	4.33	1.41
1 Adult, No Child	2.17	1.95	0.21
2+ Adults, No Child	7.09	6.01	1.08
1 Adult, Child <6	3.12	0.31	2.81
2+ Adults, Child <6	6.26	3.34	2.92
1 Adult, Child 6-15	2.06	1.24	0.82
2+ Adults, Child 6-15	8.41	6.17	2.25
1 Adult, Child 16-21	13.34	13.34	
2+ Adults, Child 16-21	27.52	19.11	8.41
1 Adult, Retired, No Child	1.51	1.43	0.08
2+ Adults, Retired, No Child	3.68	2.43	1.26
Weeken	d		
Household Composition			
TOTAL	3.57	1.90	1.67
1 Adult, No Child	2.38	2.04	0.34
2+ Adults, No Child	4.13	1.83	2.30
1 Adult, Child <6	3.28		3.28
2+ Adults, Child <6	2.38	0.78	1.60
1 Adult, Child 6-15	6.86	1.54	5.32
2+ Adults, Child 6-15	7.08	3.56	3.52
1 Adult, Child 16-21	1.26	1.26	
2+ Adults, Child 16-21	12.96	6.25	6.72
1 Adult, Retired, No Child	0.74	0.62	0.12
2+ Adults, Retired, No Child	2.44	1.49	0.95

# New York State - 2009 NHTS Average Vehicle Occupancy by Household Compositon and Trip Purpose (Person Miles per Vehicle Mile) Ithaca

	TOTAL	Earn a Living	Family & Personal Business	Civic, Educational & Religious	Social & Recreational	Other	Unreported			
	All Days									
TOTAL	1.61	1.05	2.15	1.63	1.71	1.03	2.00			
1 Adult, No Child	1.16	1.01	1.21	1.00	1.30		1.00			
2+ Adults, No Child	1.48	1.08	1.49	1.72	1.84	4.11	2.04			
1 Adult, Child <6	4.19	1.91	2.39		6.92					
2+ Adults, Child <6	2.61	1.08	3.44	3.22	1.92		3.12			
1 Adult, Child 6-15	1.68	1.06	1.87	1.67	1.93		1.00			
2+ Adults, Child 6-15	1.40	1.06	1.80	1.96	1.72	1.00	1.00			
1 Adult, Child 16-21	1.00	1.00	1.00	1.00	1.00					
2+ Adults, Child 16-21	1.35	1.01	2.33	1.58	1.42	1.00	1.17			
1 Adult, Retired, No Child	1.22	1.00	1.11	1.31	1.38		1.00			
2+ Adults, Retired, No Child	1.53	1.04	1.50	1.89	1.90		1.37			
Weekday										
TOTAL	1.54	1.05	2.23	1.49	1.48	1.00	1.15			
1 Adult, No Child	1.11	1.00	1.14	1.00	1.47					
2+ Adults, No Child	1.27	1.08	1.39	1.84	1.58	1.43	2.00			
1 Adult, Child <6	2.32	1.91	2.39							
2+ Adults, Child <6	2.49	1.08	3.44	4.00	1.45		1.00			
1 Adult, Child 6-15	1.44	1.06	1.74	1.67	2.38					
2+ Adults, Child 6-15	1.26	1.06	1.87	1.62	1.62	1.00	1.00			
1 Adult, Child 16-21	1.00	1.00	1.00	1.00	1.00					
2+ Adults, Child 16-21	1.36	1.01	1.93	1.44	1.38	1.00	1.17			
1 Adult, Retired, No Child	1.17	1.00	1.05	1.00	1.35		1.00			
2+ Adults, Retired, No Child	1.46	1.04	1.43	1.39	1.89		2.00			
			Weekend							
TOTAL	1.77	1.02	1.95	2.17	2.00	1.08	2.73			
1 Adult, No Child	1.24	1.03	1.32		1.23		1.00			
2+ Adults, No Child	1.88	1.06	1.82	1.49	1.93	5.00	2.04			
1 Adult, Child <6	6.92				6.92					
2+ Adults, Child <6	3.21	1.04	3.33	3.00	3.69		3.15			
1 Adult, Child 6-15	1.78		1.90		1.92		1.00			
2+ Adults, Child 6-15	1.72	1.11	1.75	4.11	1.81					
1 Adult, Child 16-21	1.00		1.00		1.00					
2+ Adults, Child 16-21	1.34	1.01	3.50	2.34	2.20	1.00				
1 Adult, Retired, No Child	1.36		1.24	1.83	1.58		1.00			
2+ Adults, Retired, No Child	1.71	1.01	1.65	1.91	1.92		1.00			

# New York State - 2009 NHTS Daily Weekday Vehicle Trips per Household Categorized by CDTC Home Based Trip Purpose Category and Vehicle Availability Ithaca

Vehicle Availability	Home to Work	Work to Home	Home to Other	Other to Home	Other to Other	All Purposes
0			0.10	0.10		0.19
1	0.36	0.32	0.62	0.65	1.25	3.19
2	1.04	0.63	1.38	1.70	2.31	7.06
3+	2.75	2.32	2.90	4.04	6.47	18.48
All	0.80	0.61	1.06	1.30	2.03	5.81

### New York State - 2009 NHTS

# AM Peak Period (7:00 AM to 9:00 AM) Daily Weekday Vehicle Trips per Household Categorized

### by CDTC Home Based Trip Purpose Category and Vehicle Availability

#### Ithaca

Vehicle Availability	Home to Work	Work to Home	Home to Other	Other to Home	Other to Other	All Purposes
1	0.17		0.10	0.04	0.05	0.36
2	0.50	0.01	0.33	0.17	0.17	1.18
3+	0.90	0.02	0.58	0.04	0.75	2.29
All	0.34	0.01	0.21	0.08	0.16	0.80

### New York State - 2009 NHTS

#### PM Peak Period (4:00 PM to 4:00 PM)

# Daily Weekday Vehicle Trips per Household Categorized by CDTC Home Based Trip Purpose Category and Vehicle Availability

#### Ithaca

Vehicle Availability	Home to Work	Work to Home	Home to Other	Other to Home	Other to Other	All Purposes
0				0.10		0.10
1	0.01	0.13	0.12	0.10	0.14	0.50
2	0.05	0.33	0.24	0.45	0.82	1.89
3+	0.37	0.50	0.35	1.36	1.45	4.02
All	0.06	0.22	0.17	0.35	0.49	1.30

#### New York State - 2009 NHTS Average Daily Weekday Person Trips By Time of Day and Trip Purpose Ithaca

	7:00 AM	7:30 AM	8:00 AM	8:30 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	12:30 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM
TOTAL	2,795,696	4,275,000	3,693,440	2,621,036	5,857,076	4,407,437	4,176,171	3,226,271	2,485,732	6,558,920	7,244,810	9,279,300	5,702,338	5,363,126	4,201,804	4,216,755	7,589,101	3,697,293	4,853,732	2,418,787	1,106,201
At work	1,089,086	1,492,540	1,676,470	635,807	1,541,804	915,913	192,302	475,077	513,439	770,183	956,750	1,270,226	1,943,040	545,185	1,476,286	1,243,971	2,430,643	410,333	1,079,310	267,755	264,502
Work Related Business	10,274	77,105	168,218	36,816	1,101,524	309,029	46,918	304,417	49,778	114,599	76,718	178,539	64,510	68,309	21,847	7,178	383,582	90,567	7,178	6,004	6,007
Earning a Living Subtotal	1,099,361	1,569,644	1,844,688	672,623	2,643,328	1,224,942	239,220	779,494	563,218	884,782	1,033,468	1,448,765	2,007,550	613,494	1,498,133	1,251,149	2,814,225	500,900	1,086,488	273,759	270,509
Shopping		78,717	239,533	127,983	818,157	1,202,122	1,175,636	640,349	644,573	1,199,623	1,323,639	1,515,294	776,983	592,038	751,952	617,385	1,690,719	766,062	617,194	68,305	
Doctor/Dentist	38,341	41,725	51,085	15,643	116,991	194,084	197,843	67,094	16,297	243,019	432,079	161,114	165,109	20,523	34,590				29,986		
Other Family & Personal Business	567,708	800,499	711,829	1,323,227	1,010,787	823,964	1,112,313	1,153,440	614,170	1,548,919	1,148,139	2,414,867	750,265	2,399,483	783,328	533,251	843,931	375,121	475,435	51,755	19,528
Family & Personal Business Subtotal	606,049	920,942	1,002,448	1,466,853	1,945,935	2,220,170	2,485,792	1,860,883	1,275,039	2,991,561	2,903,857	4,091,276	1,692,358	3,012,044	1,569,870	1,150,636	2,534,650	1,141,184	1,122,616	120,060	19,528
School/Church	533,893	1,273,701	615,654	252,587	411,775	9,332	10,097	20,802	218,040	151,875	1,086,174	837,332	756,104	360,026	70,759	552,536	130,232	123,932	356,328	306,467	
School/Church Subtotal	533,893	1,273,701	615,654	252,587	411,775	9,332	10,097	20,802	218,040	151,875	1,086,174	837,332	756,104	360,026	70,759	552,536	130,232	123,932	356,328	306,467	
Vacation	3,631							9,224		5,907		61,357	20,999		16,428	2,959	8,486				
Visit Friends/Relatives		21,919	8,953	12,595	108,329	178,593	281,594	110,816	53,881	157,517	534,081	862,837	131,460	89,187	458,405	159,673	501,545	49,293	269,594	404,416	322,922
Other Soc/Rec	513,990	472,187	193,408	213,419	433,129	774,400	839,371	445,051	375,554	1,573,744	1,348,387	1,938,991	1,048,261	1,226,145	579,719	776,742	1,599,963	1,878,053	1,996,788	589,374	373,456
Social and Recreational Subtotal	517,621	494,105	202,360	226,014	541,458	952,993	1,120,965	565,091	429,435	1,737,169	1,882,468	2,863,185	1,200,721	1,315,332	1,054,552	939,374	2,109,994	1,927,347	2,266,381	993,790	696,378
Other		10,552	28,290	2,959	314,581		320,097			444,155	326,015	35,984	45,606	7,593		323,060			21,919		21,919
Other Subtotal		10,552	28,290	2,959	314,581		320,097			444,155	326,015	35,984	45,606	7,593		323,060			21,919		21,919
Unreported	38,772	6,056								349,379	12,828	2,758		54,638	8,490			3,930		724,710	97,867

# New York State - 2009 NHTS Daily Weekday Vehicle Trips per Household Categorized by Trip Purpose and Vehicle Availability Ithaca

	Vehicle Availability					
	0	1	2	3+	All	
TOTAL	0.19	3.19	7.06	18.48	5.81	
At work		0.75	2.24	5.89	1.72	
Work Related Business		0.11	0.60	0.34	0.28	
Earning a Living Subtotal		0.87	2.84	6.22	2.00	
Shopping		0.64	1.02	1.97	0.83	
Doctor/Dentist	0.19	0.10	0.21	0.04	0.14	
Other Family & Personal Business		0.84	2.15	2.88	1.39	
Family & Personal Business Subtotal	0.19	1.58	3.39	4.90	2.36	
School/Church		0.10	0.03	1.33	0.21	
School/Church Subtotal		0.10	0.03	1.33	0.21	
Vacation			0.01	0.01	0.01	
Visit Friends/Relatives		0.26	0.10	1.63	0.33	
Other Soc/Rec		0.38	0.69	3.23	0.76	
Social and Recreational Subtotal		0.63	0.80	4.87	1.09	
Other				0.35	0.04	
Other Subtotal				0.35	0.04	
Unreported		0.01	0.00	0.81	0.10	

## APPENDIX A

## TRAVEL CONCEPTS AND GLOSSARY

#### **GLOSSARY OF TERMS**

This glossary provides the most commonly used terms in the NHTS and definitions of those terms. These definitions are provided to assist the user in the interpretation of the NHTS data.

**Adult** For NHTS, this is defined as a person 18 years or older.

**Block Group** A subdivision of a Census tract that averages 1000 to 1100 people, and

approximately 400-500 housing units. The source used for the 2009 NHTS was TeleAtlas MatchMaker (derived from Census 2000

defintion).

**Census Region** and **Division** 

The Census Bureau divides the states into four regions and nine divisions. Note that the divisions are wholly contained within a region, i.e., region lines do not split division lines. The regions and their component divisions are:

#### **Northeast Region:**

- New England Division: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
- Middle Atlantic Division: New Jersey, New York, Pennsylvania

#### **North Central Region:**

- East North Central Division: Illinois, Indiana, Michigan, Ohio, Wisconsin
- West North Central Division: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

#### **South Region:**

- South Atlantic Division: Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
- East South Central Division: Alabama, Kentucky, Mississippi, Tennessee
- West South Central Division: Arkansas, Louisiana, Oklahoma, Texas

#### West Region:

- Mountain Division: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
- Pacific Division: Alaska, California, Hawaii, Oregon, Washington

#### Puerto Rico.

For the 2009 NHTS the source used for the 2000 Census Region was: http://www.census.gov/geo/www/cob/rg2000.html. The source used for the 2000 Census Division was:

http://www.census.gov/geo/www/cob/dv2000.html.

**Census Tract** 

A small subdivision of a county, containing approximately 4,000 persons. Tracts can range in population from 2,500 to 8,000. The geographic size of the tract may vary considerably, depending on population density. Tracts were designed to be homogeneous in regard to population characteristics, economic status and living conditions when they were first delineated. Since the first tracts were delineated for the 1890 Census, today's tracts may be far from homogeneous. The source used for the 2009 NHTS was TeleAtlas MatchMaker (derived from Census 2000 defintion).

Child

A child is normally defined as a person under the age of 18. An exception to this is for life cycle, where a child can be anyone through the age of 21 who is listed as a child to the household respondent.

Consolidated Metropolitan Statistical Area (CMSA) A large metropolitan complex of 1 million or more population, containing two or more identifiable component parts designated as primary metropolitan statistical areas (PMSAs). For example, the New York-Northern New Jersey-Long Island CMSA is composed of the following fourteen PMSAs: Bridgeport, Danbury, Dutchess County, Jersey City, Middlesex-Somerset-Hunterdon, Monmouth-Ocean, Nassau-Suffolk, New Haven-Meriden, New York, Newark, Newburgh, Stamford-Norwalk, Trenton, Waterbury.

**Destination** 

For travel day trips, the destination is the point at which there is a break in travel, except if the break is only to change vehicles or means of transport.

**Driver** 

A driver is a person who operates a motorized vehicle. If more than one person drives on a single trip, the person who drives the most miles is classified as the principal driver.

**Employed** 

A person is considered employed if (s)he worked for pay, either full time or part time, during the week before the interview. This includes persons who work at home or persons who have more than one job.

**Education Level** 

The number of years of regular schooling completed in graded public, private, or parochial schools, or in colleges, universities, or professional schools, whether day school or night school. Regular schooling advances a person toward an elementary or high school diploma, or a

college, university, or professional school degree.

#### Household

A group of persons whose usual place of residence is a specific housing unit; these persons may or may not be related to each other. The total of all U.S. households represents the total civilian non-institutionalized population. A household does not include group quarters (i.e., 10 or more persons living together, none of whom are related).

#### **Household Income**

Household income is the money earned by all family members in a household, including those temporarily absent. Annual income consisted of the income earned 12 months preceding the interview. Household income includes monies from all sources, such as wages and salary, commissions, tips, cash bonuses, income from a business or farm, pensions, dividends, interest, unemployment or workmen's compensation, social security, veterans' payments, rent received from owned property (minus the operating costs), public assistance payments, regular gifts of money from friends or relatives not living in the household, alimony, child support, and other kinds of periodic money income other than earnings. Household income excludes in-kind income such as room and board, insurance payments, lump-sum inheritances, occasional gifts of money from persons not living in the same household, withdrawal of savings from banks, tax refunds, and the proceeds of the sale of one's house, car, or other personal property.

#### Household Members

Household members include all people, whether present or temporarily absent, whose usual place of residence is in the sample unit. Household members also include people staying in the sample unit who have no other usual place of residence elsewhere.

#### **Household Vehicle**

A household vehicle is a motorized vehicle that is owned, leased, rented or company-owned and available to be used regularly by household members during the two-week travel period. Household vehicles include vehicles used solely for business purposes or business-owned vehicles, so long as they are driven home and can be used for the home to work trip, (e.g., taxicabs, police cars, etc.). Household vehicles include all vehicles that were owned or available for use by members of the household during the travel period, even though a vehicle may have been sold before the interview. Vehicles excluded from household vehicles are those which were not working and were not expected to be working within 60 days, and vehicles that were purchased or received after the designated travel day.

#### Journey-to-Work Trips (Commute trips)

Includes travel to and from a place where one reports for work. Does not include any other work-related travel. Does not include any trips for persons who work at home.

# Means of Transportation

A mode of travel used for going from one place (origin) to another (destination). A means of transportation includes private and public transit modes, as well as walking.

The following transportation modes, grouped by major mode, are included in the NHTS data.

**Private Vehicle** – a stipulation for being a private vehicle is that the vehicle is privately owned or operated.

- 1. Car. Includes cars and station wagons. Leased and rented cars are included if they are privately operated and not used for picking up passengers in return for fare.
- 2. Van. Includes vans or minivans designed to carry 5 to 13 passengers, or to haul cargo.
- 3. Sport Utility Vehicle. Includes vehicles that are a hybrid of design elements from a van, a pickup truck and a station wagon. Examples include a Ford Explorer, Jeep Cherokee, or Nissan Pathfinder.
- 4. Pickup Truck. Includes vehicles with an enclosed cab that usually accommodates 2-3 passengers, and has an open cargo area in the rear. Late model pickups often have a back seat that allows for total seating of 4-6 passengers. Pickup trucks usually have the same size of wheel-base as a full-size station wagon. This category also includes pickups with campers.
- 5. Other Truck: This category consists of all trucks other than pickup trucks (i.e., dump trucks, trailer trucks, etc.).
- 6. RV or Motor Home: An RV or motor home includes a self-powered recreational vehicle that is operated as a unit without being towed by another vehicle (e.g., a Winnebago motor home).
- 7. Motorcycle: This category includes large, medium, and small motorcycles and mopeds.
- 8. Golf Cart: This includes all electric or gas operated vehicles designed for use on a golf course, but whose use has recently extended to use within smaller, often gated, communities.

**Public Transportation,** as used in FHWA publications and analysis of NHTS data, typically includes the following that are indicated in bold below, mass transit bus, commuter bus, commuter train, subway/elevated rail, and streetcar/trolley.

Bus. This category includes:

- 9. **mass transit systems**, these are local public transit buses that are available to the general public,
- 10. **commuter buses**, these are buses used for short-distance public transport purposes (e.g., city bus or public bus),school buses, and
- 12. charter/tour buses, these are private buses operating on a fixed schedule between population centers, and
- 13. city to city buses, these are buses that run from one urban center to the other (e.g., Greyhound), and
- 14. shuttle buses, these are buses that shuttle passengers from one fixed place to another (e.g., airport shuttles).

Train: This category includes:

- 15. Amtrak/Intercity Train that run from one urban center to another,
- 16. **Commuter** trains and passenger trains
- 17. **Subway and elevated rail** (also known as rail rapid transit) is a high capacity system operated on a fixed rail or guide way system on a private right of way, and
- 18. **Trolley/streetcars** are vehicles that run on a fixed rail system powered by electricity obtained from an overhead power distribution system.

#### **Other Modes**

- 11. School Buses.
- 19. Taxi. Taxis include the use of a taxicab by a passenger for fare, including limousines. The taxi category does not include rental cars if they are privately operated.
- 20. Ferry. This includes travel by passenger line ferries.
- 21. Airplane. . Airplanes include commercial airplanes and smaller planes that are available for use by the general public in exchange for a fare. Private and corporate planes and helicopters are also included.
- 22. Bicycle: This category includes bicycles of all speeds and sizes that do not have a motor.
- 23. Walk: This category includes walking and jogging.
- 24. Special Transit for People with Disabilities. This includes things like "Dial-A-Ride"
- 97. Other. Includes any type of transportation not previously listed, (e.g. skate boards, roller blades, sailboats, cruise ships, etc).

Metropolitan Statistical Area (MSA) Except in the New England States, a Metropolitan Statistical Area is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined

population of at least 50,000. In addition, contiguous counties are included in an MSA if, according to certain criteria, they are socially and economically integrated with the central city. In the New England States, MSA's consist of towns and cities instead of counties. The source used for the 2009 NHTS was 1999 Metropolitan Areas: Cartographic

Boundary Files. File ma99\_99.shp from

http://www.census.gov/geo/www/cob/ma1999.html.

**Motorized Vehicle** Motorized vehicles are all vehicles that are licensed for highway driving.

Snow mobiles and minibikes are specifically excluded.

**New York City** New York City is defined in this report as the five county area: Bronx,

Kings, Queens, New York (Manhattan), and Richmond.

New York State Metro Area

The New York State Metro area includes the following three areas: (1) Nassau, Suffolk; (2) New York City, (which includes the following counties: Bronx, Kings, Queens, New York, and Richmond); and (3)

Putnam, Rockland, and Westchester.

**Occupancy** Occupancy is the number of persons, including driver and passenger(s) in

a vehicle. NHTS occupancy rates are generally defined as person miles

divided by vehicle miles.

**Origin** Origin is the starting point of a trip.

**Passenger** For a specific trip, a passenger is any occupant of a motorized vehicle,

other than the driver.

Person Miles of Travel (PMT) PMT is a primary measure of person travel. When one person travels one mile, one person mile of travel results. Where 2 or more persons travel together in the same vehicle, each person makes the same number of person miles as the vehicle miles. Therefore, four persons traveling 5 miles in the same vehicle results in 20 person miles ( $4 \times 5 = 20$ ).

**Person Trip** A person trip is a trip by one or more persons in any mode of

transportation. Each person is considered as making one person trip. For example, four persons traveling together in one auto are counted as four

person trips.

**POV** A privately-owned vehicle or privately-operated vehicle. Either way, the

intent here is that this is not a vehicle available to the public for a fee,

such as a bus, subway, taxi, etc.

**Seasonal Variation** Season is defined as:

Winter: December through February;

Spring: March through May; Summer: June through August; Fall: September through November.

#### **Travel Day**

A travel day is a 24-hour period from 4:00 a.m. to 3:59 a.m. designated as the reference period for studying trips and travel by members of a sampled household.

#### **Travel Day Trip**

A travel day trip is defined as any time the respondent went from one address to another by private motor vehicle, public transportation, bicycle, walking, or other means. However, a separate trip is not counted in two instances:

- 1. When the sole purpose for the trip is to get to another vehicle or mode of transportation in order to continue to the destination.
- 2. Travel within a shopping center, mall or shopping areas of 4-5 blocks is to be considered as travel to one destination.

#### Travel Day Trip Purpose

A trip purpose is the main reason that motivates a trip. There are 36 travel day trip purposes used in the 2009 NHTS.

Trip purposes were collected using a From-To approach. For each trip, the origin and destination are on the file in specific terms if reported by the respondent (e.g. from work to Bob's Beef Pit). The 36 trip reasons are defined below. The numbers in parentheses represent the value of WHYTO (trip purpose) in the dataset.

- To Home (01). Represents a trip to the respondents' primary residence.
- 2. Go to Work (11). This is the first trip to the work location on travel day.
- Return to Work (12). A trip to work that is not the first trip to the workplace on the travel day (e.g., returning to work after lunch).
- 4. Attend Business Meeting/Trip (13). Represents a work related trip whose purpose is to attend a business meeting.
- 5. Other Work Related (14). A work related trip whose purpose is not specified.
- 6. Go to School as a Student (21). Represents a trip whose purpose is to go to school as a student.
- 7. Go to Religious Activity (22). Represents a trip whose purpose is to go to a place to attend a religious activity.

- 8. Go to Library, School Related (23). Represents a trip whose purpose is to go to the library as part of a school related activity.
- Go to Daycare/Before or After School Care (24). Represents atrip whose purpose is to attend day care or a supervised before or after school care program
- Other School/Religious Activity (20). Represents school and religious activities that are not captured in WHYTO 21-24 above.
- Medical/Dental Services (30). Represents a trip made to obtain medical, dental, or mental health treatment, or other related professional services.
- Buy Goods: groceries/clothing/hardware store (41). Represents a shopping trip whose purpose is to purchase commodities for use or consumption elsewhere. This purpose also includes all shopping trips even if nothing is purchased.
- Buy Services: video rentals/dry cleaning/post office/car service/bank (42). This category includes the purchase of services other than medical/dental or other professional services.
- 14. Buy Gas (43). Represents a trip made specifically to get gas.
- 15. Shopping/Errands (40). Represents shopping and errand trips that are not captured in WHYTO 41-43 above.
- Go to the Gym/Exercise/Play Sports (51). Represents a trip made for exercise, to engage in exercise or to participate in a sport.
- Rest or Relaxation/Vacation (52). Represents a trip made for the purpose of relaxing or taking a vacation, but does not include visiting family.
- 18. Visit Friends/Relatives (53). Represents the social/recreational trip whose purpose is to visit with family and friends.
- Go out/Hang out: entertainment/theater/sports event/go to bar (54). Represents trips whose purpose is entertainment related or hanging out with friends. Typically this event takes place in a public venue.
- Visit Public Place: historical site/museum/park/library (55). Represents a trip purpose that is educational or enlightening.
- 21. Social/Recreational (50). This category includes social and recreational trips that are not captured in WHYTO 51-55 above.

- Use Professional Services: attorney/accountant (61). Represents a trip made for to engage professional services other than for medical/dental purposes.
- 23. Attend Funeral/Wedding (62). Represents a trip whose purpose is to attend a funeral or a wedding.
- Use Personal Services: grooming/haircut/nails (63). Represents a trip for personal services such as to get a massage or get a haircut.
- 25. Pet Care: walk the dog/vet visits (64).
- Attend Meeting: PTA/home owner's association/local government (65). Represents a trip purpose to attend a non-work related meeting, such as a community meeting
- Family Personal Business/Obligations (60). Represents a trip for 13 personal business but is not captured in WHYTO 61-65 above.
- Pickup Someone (71). Represents a trip whose purpose was to pick up a passenger.
- Take and Wait (72). Represents a trip made to take someone to a destination and then wait with or for them at the destination and then depart together.
- 30. Drop Someone Off (73). Represents a trip whose purpose was to drop off a passenger (but not wait for them).
- Transport Someone (70). Represents trips with a passenger that are related to picking up or dropping off someone but is not captured in WHYTO 71-73 above.
- Social Event (81). Represents a trip whose purpose is to attend a social event but eating a meal is not a key component of the event.
- Get/Eat Meal (82). Represents a trip whose primary purpose is to get and eat a meal.
- Coffee/Ice Cream/Snacks (83). Represents a trip whose purpose is to get/eat a snack or drink, something less than a meal.
- Meals (80). Represents a trip whose purpose is to eat or get a meal but is not captured in WHYTO 81-83 above.
- Other (97). Represents a trip purpose not captured by any of the specific WHYTO categories described above.

#### **Urbanized Area**

An urbanized area consists of the built up area surrounding a central core (or central city), with a population density of at least 1,000 persons per square mile. Urbanized areas do not follow jurisdictional boundaries thus it is common for the urbanized area boundary to divide a county. For the 2009 NHTS, Urban Areas were calculated two ways.

 Variable URBAN uses the 2000 Urbanized Areas: Cartographic Boundary Files. File ua00\_d00.shp from http://www.census.gov/geo/www/cob/ua2000.html. Two codes are

used: 0 = Not in Urban Area, 1 = in Urban Area

Variable URBAN1 uses the 2000 Urbanized Areas: Cartographic Boundary Files. File ua00\_d00.shp from http://www.census.gov/geo/www/cob/ua2000.html. Three codes are

used: 0 = Not in Urban Area, 1 = in Urban Cluster, 2 = in Urban Area,

3 = in area surrounded by urban areas.

#### Vehicle

In the 2009 NHTS, the term vehicle includes autos, passenger vans, sport utility vehicles, pickups and other light trucks, RV's, motorcycles and mopeds owned or available to the household.

#### Vehicle Miles of Travel (VMT)

VMT is a unit to measure vehicle travel made by a private vehicle, such as an automobile, van, pickup truck, or motorcycle. Each mile traveled is counted as one vehicle mile regardless of the number of persons in the vehicle.

#### Vehicle Occupancy

Vehicle occupancy is the number of persons, including driver and passenger(s) in a vehicle; also includes persons who did not complete a whole trip. NHTS occupancy rates are generally calculated as person miles divided by vehicle miles.

#### Vehicle Trip

A trip by a single privately-operated vehicle (POV) regardless of the number of persons in the vehicle.

**Vehicle Type** 

For purposes of the 2009 NHTS, one of the following:

- 1. Automobile (including station wagon)
- 2. Van
- 3. Sport Utility Vehicle
- 4. Pickup Truck (including pickup with camper)
- 5. Other Truck
- 6. RV or Motor Home
- 7. Motorcycle
- 8. Other

Weekday

Weekday is defined as Monday through Friday. In the previous comparison reports, it was defined as the time between 12:01 a.m. Monday and 6:00 p.m. Friday. This was modified to correctly estimate per person statistics.

Weekend

Weekend is defined as Saturday and Sunday. See "Weekday" for more on the difference between previous reports.

Work-Related Travel (WR) These are trips related to business activities except travel to the place of work: for example, a plumber drives to a wholesale dealer to purchase supplies for his business or a company executive travels from his office to another firm to attend a business meeting. Business, out-of-town trips, and professional conventions are also included.

Worker

See "Employed."

## **APPENDIX B**

## SUPPLEMENTARY TABLES

#### New York State - 2009 NHTS Number of Persons by Age and Gender Ithaca MPO

	TOTAL	Male	Female
TOTAL	96,674	51,043	45,631
5-15	9,585	5,313	4,272
16-19	15,669	10,067	5,601
20-29	20,958	11,038	9,920
30-39	11,728	5,835	5,893
40-49	12,809	6,867	5,942
50-59	12,229	5,731	6,498
60-64	3,785	1,962	1,823
65+	9,911	4,230	5,681

#### New York State - 2009 NHTS Number of Persons by Age and Driver Status Ithaca MPO

	TOTAL	Not Ascertained	Driver	Non-Driver
TOTAL	96,674	8,411	80,502	7,761
5-15	9,585	8,411	87	1,087
16-19	15,669		14,485	1,184
20-29	20,958		20,690	269
30-39	11,728		10,872	856
40-49	12,809		10,860	1,949
50-59	12,229		11,781	448
60-64	3,785		3,666	119
65+	9.911		8.061	1.850

#### New York State - 2009 NHTS Number of Persons by Under Age 65 and 65+ Ithaca MPO

TOTAL 96,674 Under 65 86,763 65+ 9,911

#### New York State - 2009 NHTS Number of Persons by MSA Status Ithaca MPO

TOTAL 96,674 Not in MSA 96,674 New York State - 2009 NHTS Number of Persons by MSA Size Ithaca MPO

> TOTAL 96,674 MSA Size Not in MSA 96,674

#### New York State - 2009 NHTS Number of Persons by Availability of Rail Ithaca MPO

TOTAL 96,674 MSA does not have rail, or hh not in an MSA 96,674

New York State - 2009 NHTS Number of Drivers by Driver Age Ithaca MPO

TOTAL	80,502
14-15	87
16-19	14,485
20-29	20,690
30-39	10,872
40-49	10,860
50-59	11,781
60-64	3,666
65 and over	8,061

#### New York State - 2009 NHTS Number of Households by MSA Status Ithaca MPO

TOTAL 37,443 Not in MSA 37,443

#### New York State - 2009 NHTS Number of Workers by MSA Status Ithaca MPO

TOTAL 66,992 Not in MSA 66,992