



MI Travel Counts III Statewide Household Travel Survey Project Update

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MI Travel Counts History



- ▶ MI Travel Counts I - 2004-2005
 - ▶ 14,200 Households, 7 Sample Areas
- ▶ MI Travel Counts II - 2009
 - ▶ Re-survey of ~2,000 households from 2004-2005 study
- ▶ MI Travel Counts III - 2015
 - ▶ 14,100 Households, 16 Sample Areas

Why Conduct a Travel Survey?



- ▶ Data serves as the basis for statewide and urban travel demand models
 - ▶ Trip generation, trip length, mode choice
- ▶ Understand travel characteristics of residents

Project Description



- ▶ Joint effort with Southeast Michigan Council of Governments (SEMCOG)
- ▶ Collect demographic information and 24 hours of travel data from all household members
- ▶ 10% GPS subsample - 3 days GPS data collected with Day 1 Prompted Recall survey
- ▶ Goal of 14,100 completed households for MDOT and additional 6,800 for SEMCOG

Project Timing



- ▶ Contract began Oct. 1, 2014
- ▶ Pilot survey in February - March 2015
- ▶ Full survey
 - ▶ Spring 2015 (April - June)
 - ▶ Fall 2015 (September - November)
- ▶ Data cleaning and weighting in December - April 2016
- ▶ Reporting April - September 2016

Sampling Details



- ▶ Households stratified by size (4) and income (4)
- ▶ 16 statewide sample areas - 3 rural and 13 urban
- ▶ Minimum of 650 households per sample area

Participation



- ▶ Invitation letters sent to randomly selected U.S. Postal Service residential addresses
- ▶ Provide demographic information online or by phone
- ▶ Assigned travel day
- ▶ Report travel online or by phone
- ▶ Receive \$20 incentive

Complete Households



| Sample Areas | | Actual | Target | Percent | Rate |
|--------------------------------|---|---------------|---------------|-------------|--------------|
| Statewide | Southeast Michigan Council of Governments (SEMCOG) minus Washtenaw County (WATS) | 1,910 | 1,650 | 116% | 66.4% |
| | Southern Michigan Rural | 1,339 | 1,200 | 112% | 67.5% |
| | Northern Michigan Rural | 1,254 | 1,200 | 105% | 66.7% |
| | Small Cities | 1,124 | 1,000 | 112% | 65.9% |
| Statewide Model Total | | 5,628 | 5,050 | 111% | 66.6% |
| Urban Model Areas | Grand Valley Metropolitan Council (GVMC) | 1,066 | 1,000 | 107% | 67.0% |
| | Tri-County Regional Planning Commission (TCRPC) | 838 | 800 | 105% | 71.5% |
| | Genesee County Metropolitan Planning Commission (GCMPC) | 1,008 | 800 | 126% | 65.7% |
| | Great Lakes Bay Region (GLBR) | 896 | 800 | 112% | 67.8% |
| | Washtenaw Area Transportation Study (WATS) | 938 | 800 | 117% | 71.6% |
| | Kalamazoo Area Transportation Study (KATS) | 877 | 800 | 110% | 65.6% |
| | West Michigan Metropolitan Transportation Planning Program (WestPlan) | 748 | 650 | 115% | 64.5% |
| | Jackson Area Comprehensive Transportation Study (JACTS) | 952 | 650 | 146% | 66.0% |
| | Twin Cities Area Transportation Study (TwinCATS) and Niles/Buchanan/Cass Area Transportation Study (NATS) | 913 | 800 | 114% | 65.4% |
| | Macatawa Area Coordinating Council (MACC) | 908 | 650 | 140% | 67.8% |
| | Battle Creek Area Transportation Study (BCATS) | 841 | 650 | 129% | 65.2% |
| Traverse City (TVC) | 663 | 650 | 102% | 66.4% | |
| Urban Model Areas Total | | 10,648 | 9,050 | 118% | 67.0% |
| Grand Total | | 16,276 | 14,100 | 115% | 66.9% |

Products

- ▶ Travel Characteristics Report
- ▶ Methodology Report
- ▶ Data Sets
- ▶ Complete by Early September



Preliminary Results



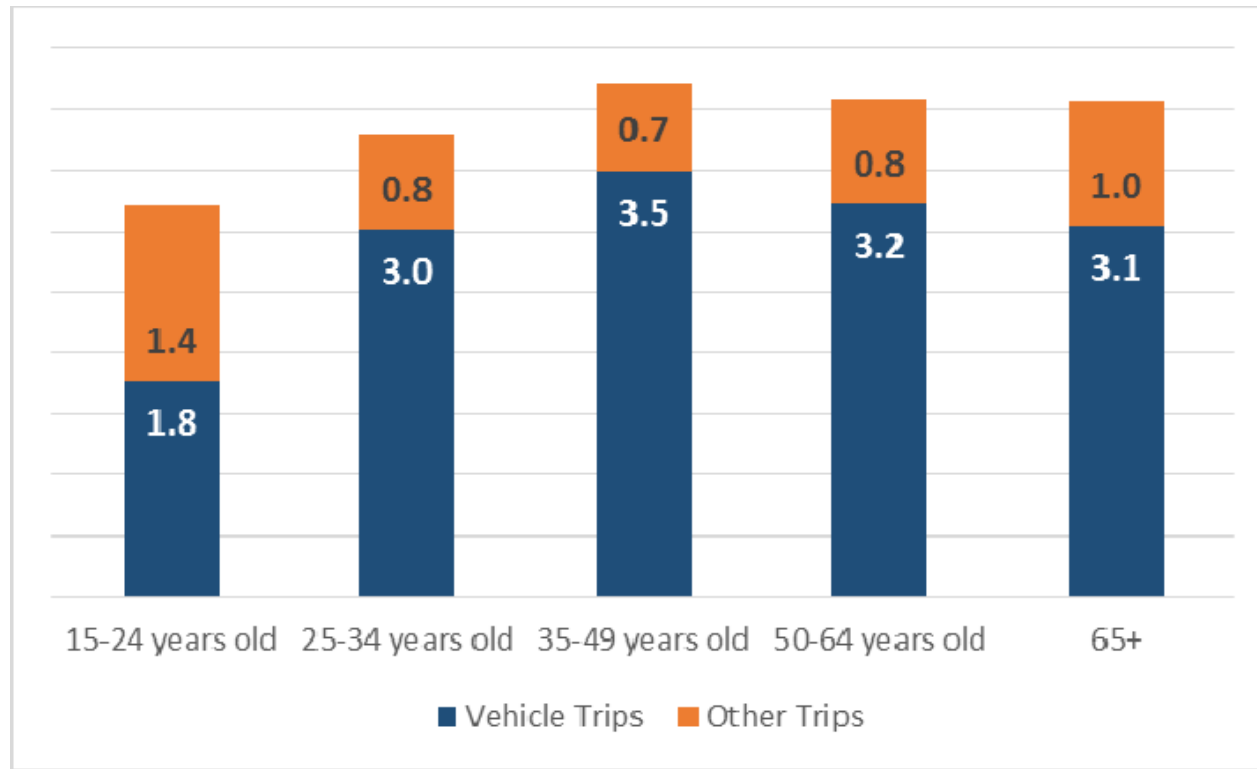
The following slides show preliminary results from the draft Travel Characteristics Report for MDOT households only and should not be considered as final.



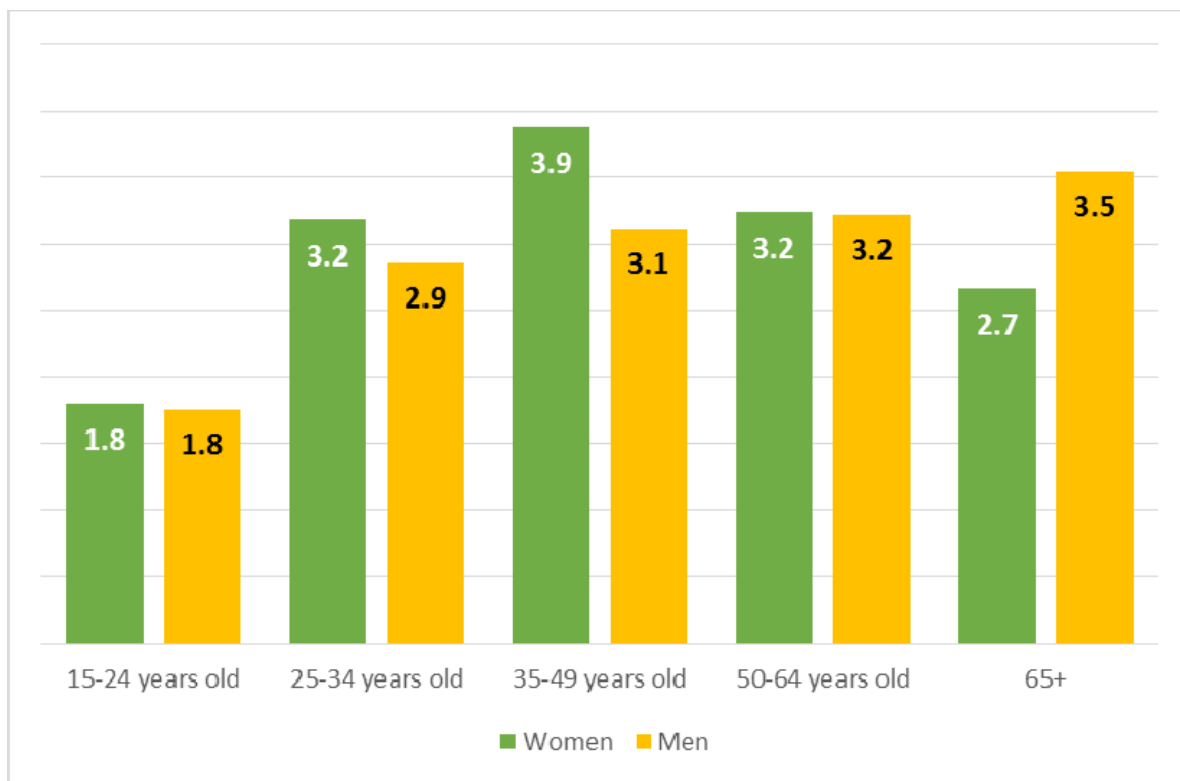
Number of Households, People, and Weekday Trips by Sample Area

| | Households | Person Counts | Trips per Household (Wtd) | Trips per Person (Wtd) | Vehicle Trips per Household (Wtd) | Vehicle Trips per Person (Wtd) |
|--|------------------|------------------|---------------------------|------------------------|-----------------------------------|--------------------------------|
| Southeast Michigan Council of Governments (SEMCOG) minus Washtenaw County | 1,707,565 | 4,359,950 | 10.9 | 3.8 | 6.7 | 2.4 |
| Southern Michigan Rural | 386,208 | 1,018,702 | 11.4 | 3.6 | 6.7 | 2.4 |
| Northern Michigan Rural | 306,995 | 735,146 | 10.1 | 3.7 | 6.4 | 2.4 |
| Small Cities | 130,357 | 329,776 | 11.1 | 4.0 | 6.6 | 2.5 |
| Grand Valley Metropolitan Council (GVMC) | 263,361 | 708,941 | 11.1 | 3.8 | 6.7 | 2.5 |
| Tri-County Regional Planning Commission (TCRPC) | 183,589 | 464,037 | 10.4 | 3.8 | 6.3 | 2.4 |
| Genesee County Metropolitan Planning Commission (GCMPC) | 169,202 | 425,793 | 10.8 | 3.7 | 6.9 | 2.4 |
| Great Lakes Bay Region (GLBR) | 157,051 | 391,570 | 11.1 | 3.9 | 7.0 | 2.6 |
| Washtenaw Area Transportation Study (WATS) | 137,193 | 344,793 | 10.7 | 4.0 | 6.1 | 2.3 |
| Kalamazoo Area Transportation Study (KATS) | 110,760 | 277,101 | 10.5 | 3.7 | 6.7 | 2.5 |
| West Michigan Metropolitan Transportation Planning Program (WestPlan) | 86,600 | 225,015 | 10.8 | 3.7 | 6.8 | 2.5 |
| Jackson Area Comprehensive Transportation Study (JACTS) | 60,771 | 160,249 | 10.7 | 3.7 | 6.6 | 2.5 |
| Twin Cities Area Transportation Study (TwinCATS) and Nilles/Buchanan/Cass Area | 57,322 | 144,073 | 11.8 | 3.9 | 7.0 | 2.5 |
| Macatawa Area Coordinating Council (MACC) | 43,752 | 122,842 | 12.1 | 3.9 | 7.0 | 2.6 |
| Battle Creek Area Transportation Study (BCATS) | 37,849 | 93,998 | 11.5 | 3.8 | 6.8 | 2.4 |
| Traverse City (TVC) | 33,933 | 81,664 | 10.4 | 3.8 | 6.1 | 2.5 |
| Total | 3,872,508 | 9,883,650 | 10.8 | 3.8 | 6.6 | 2.4 |

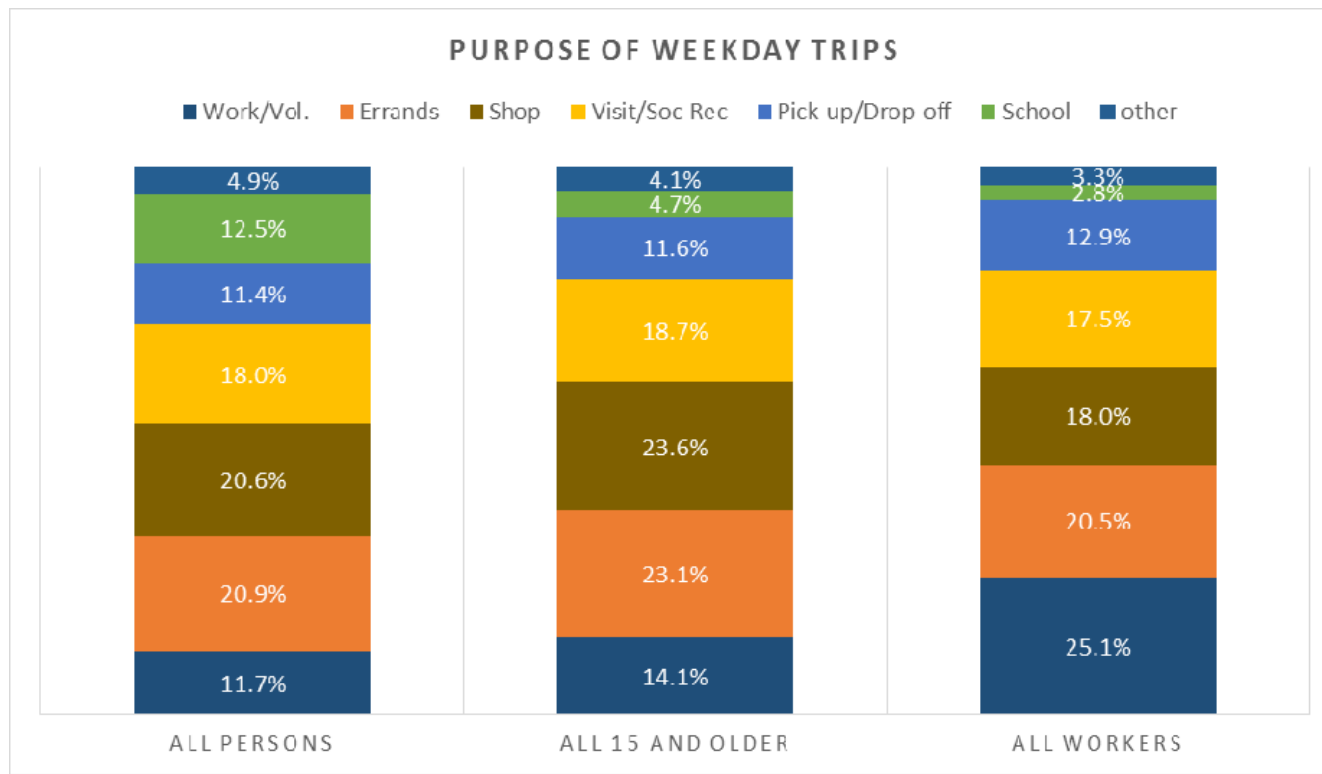
Weekday Trip Rates by Age



Weekday Trip Rates by Age and Gender



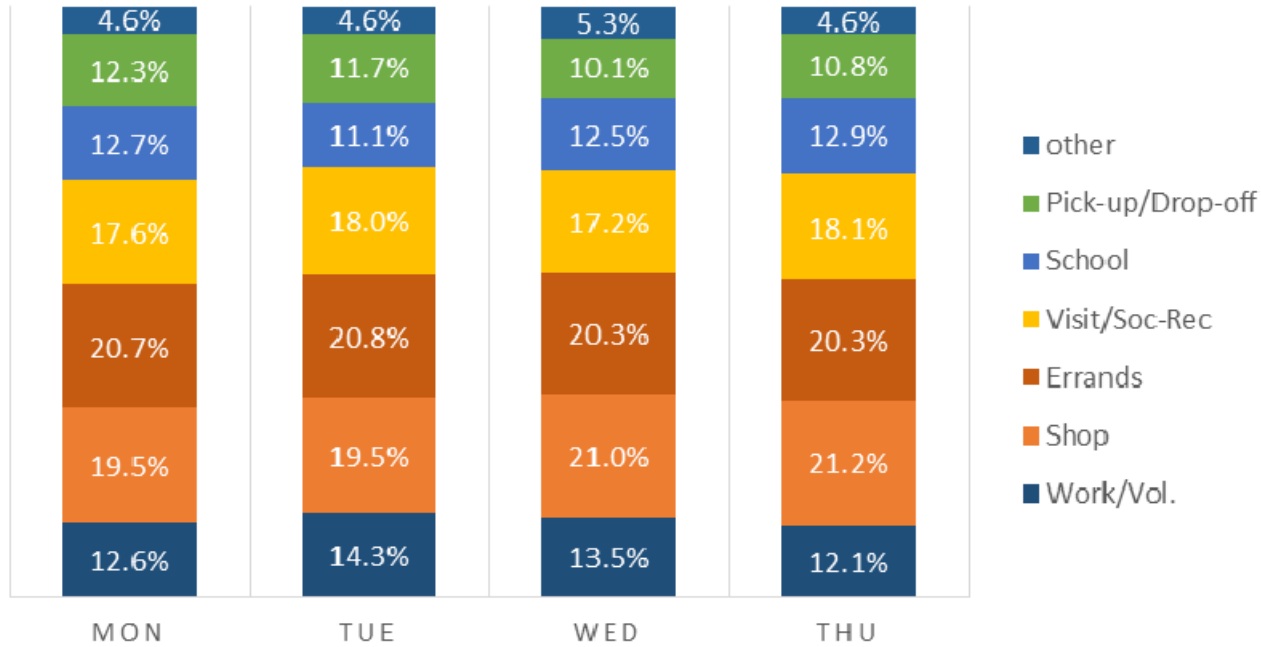
Distribution of Weekday Trips by Purpose for Three Groups



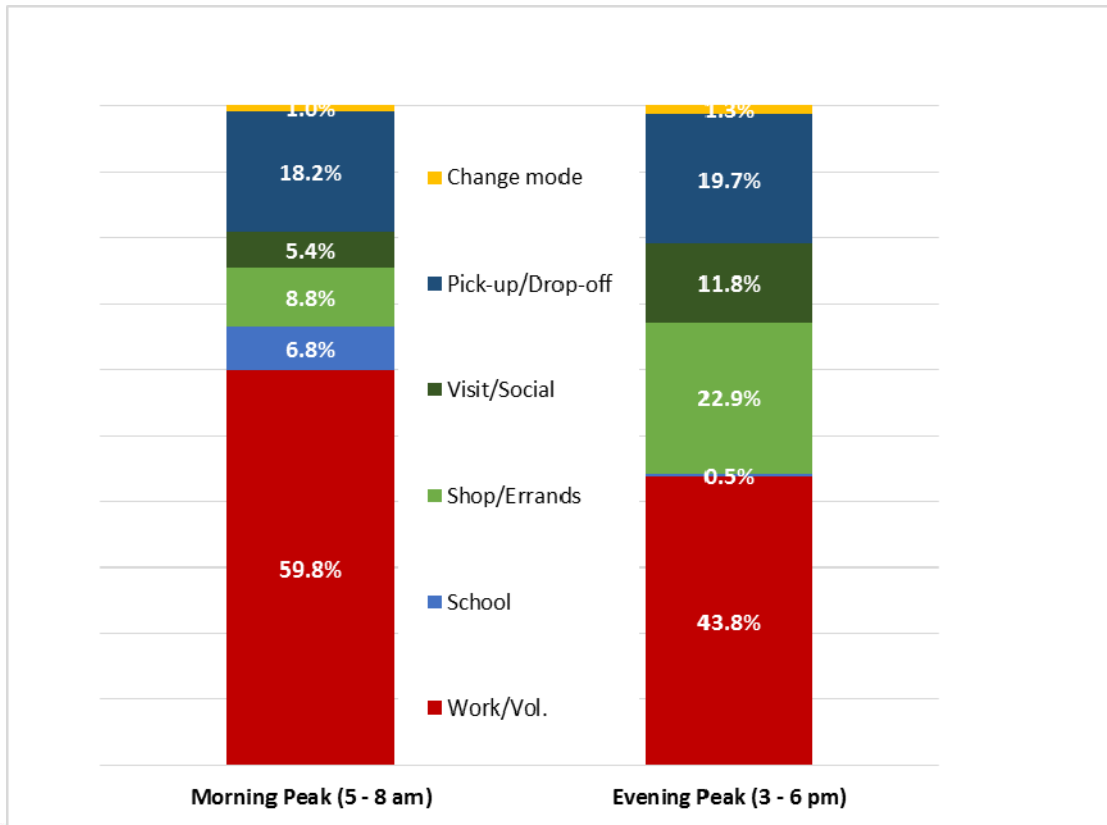
Person-Trip Distribution by Purpose by Day of the Week



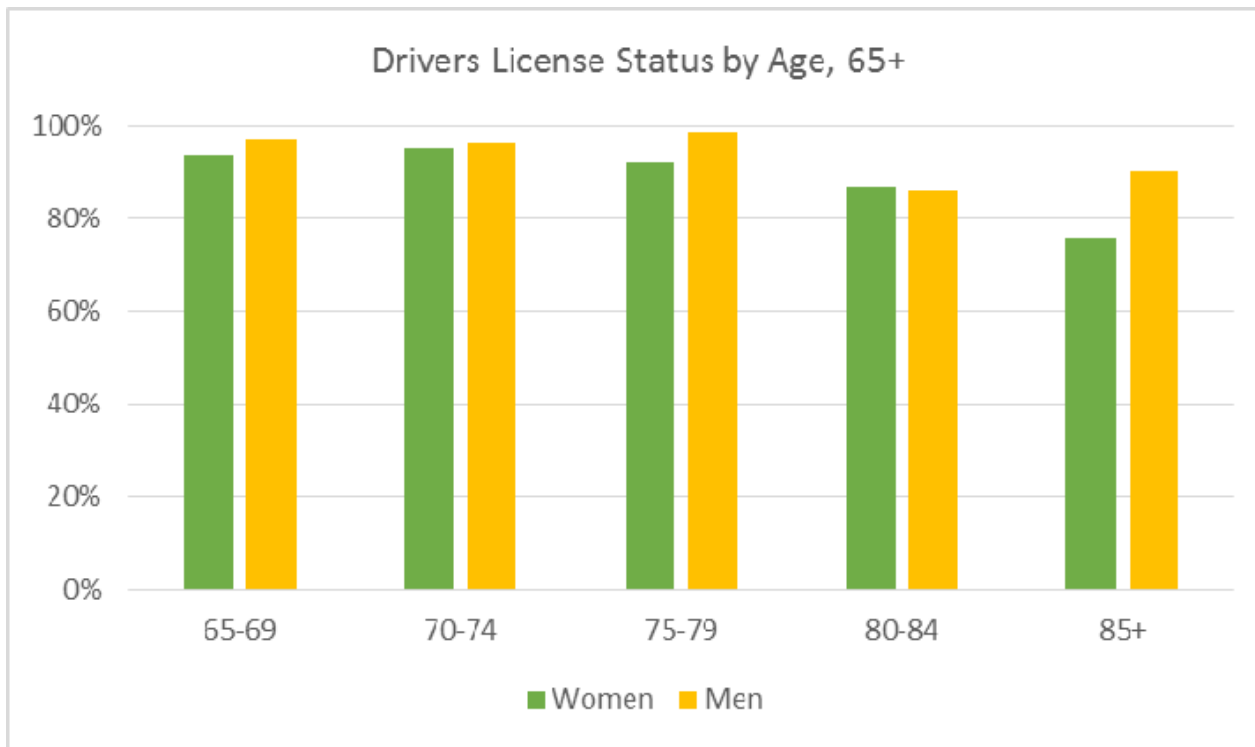
PURPOSE DISTRIBUTION BY DAY OF WEEK



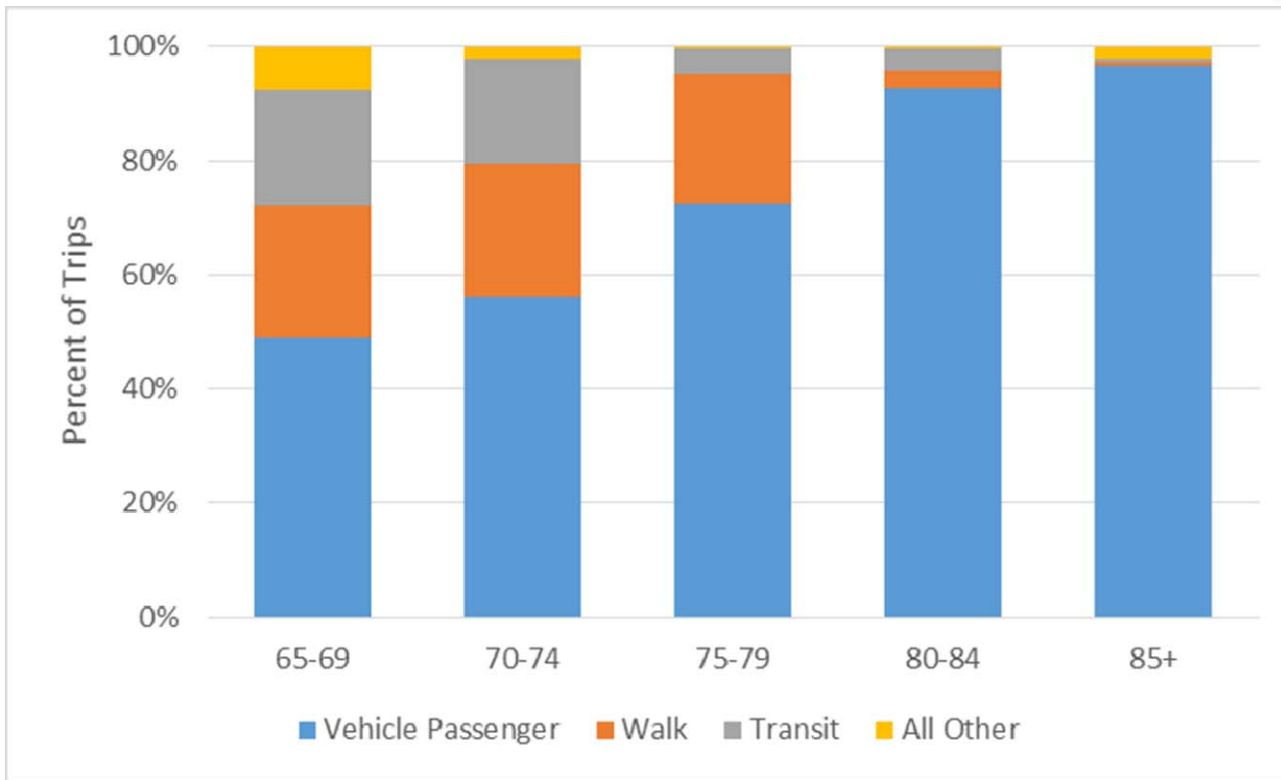
Percent of Vehicle Trips by Purpose, Weekday Peak Periods



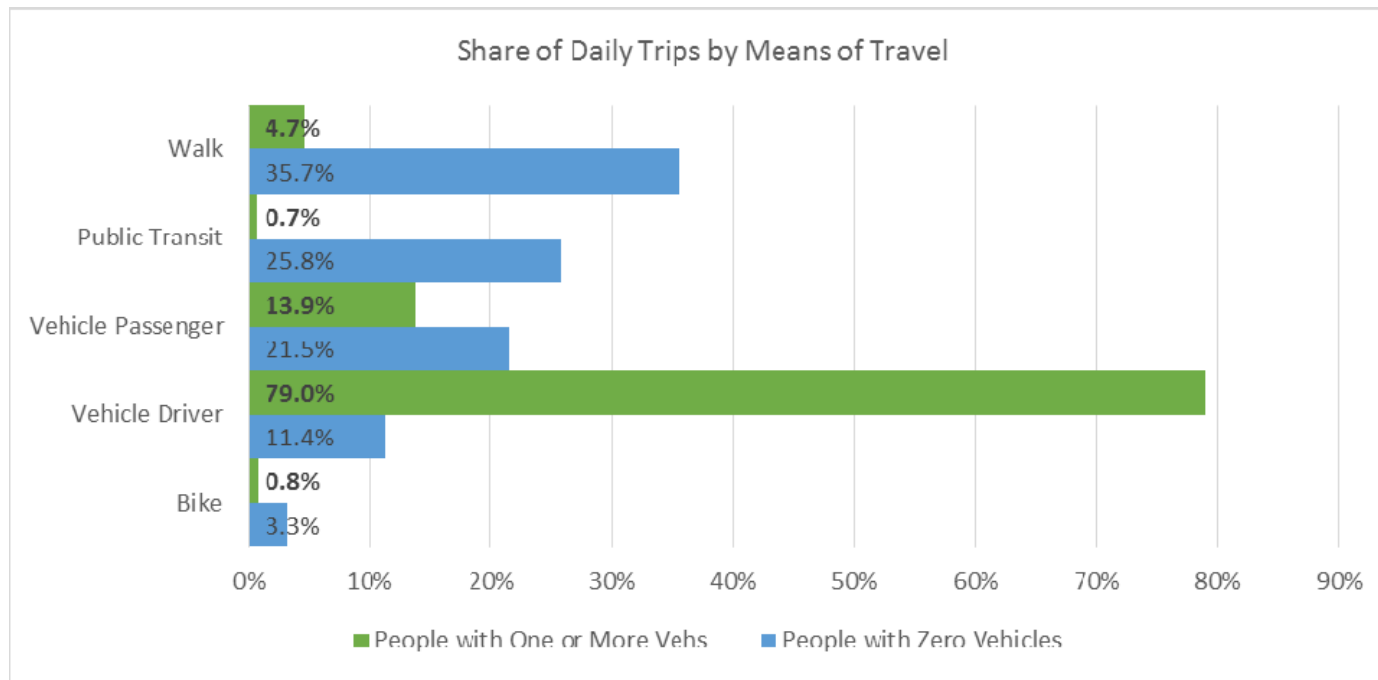
Comparison of Licensure Status by Age (65+) and Gender



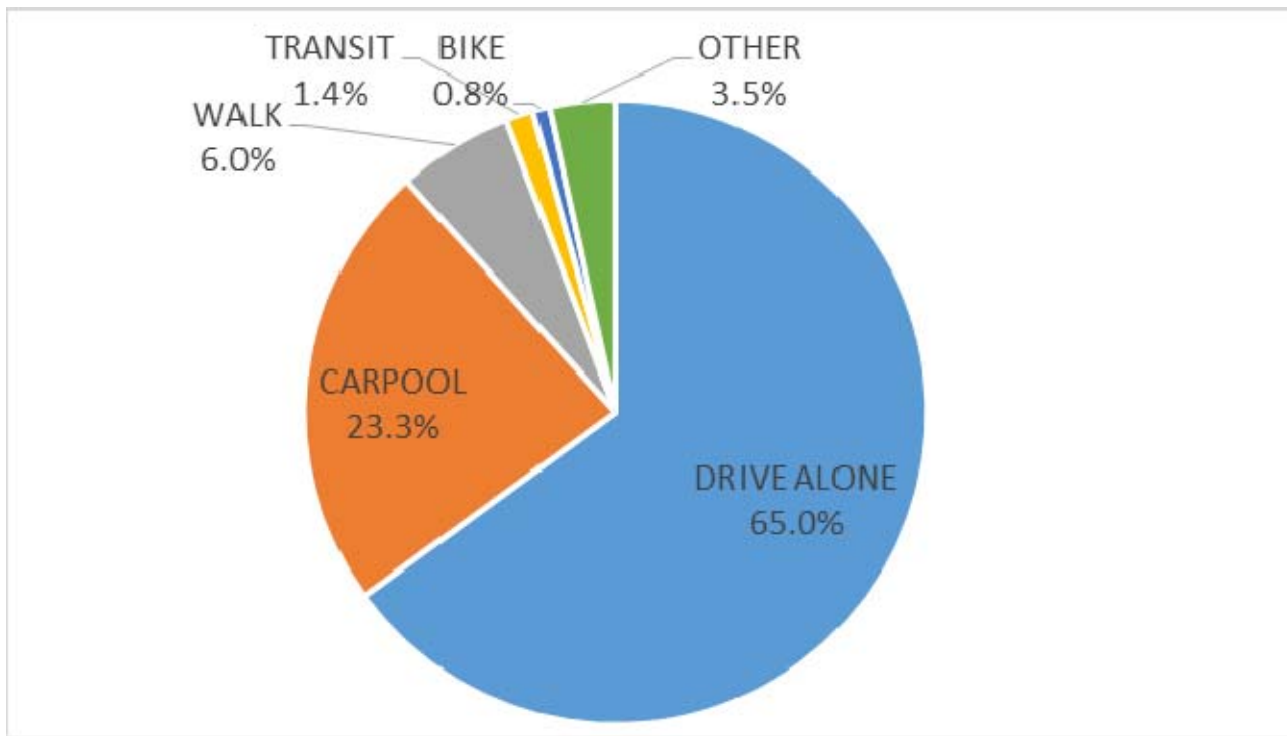
Means of Travel for Older Non-Drivers



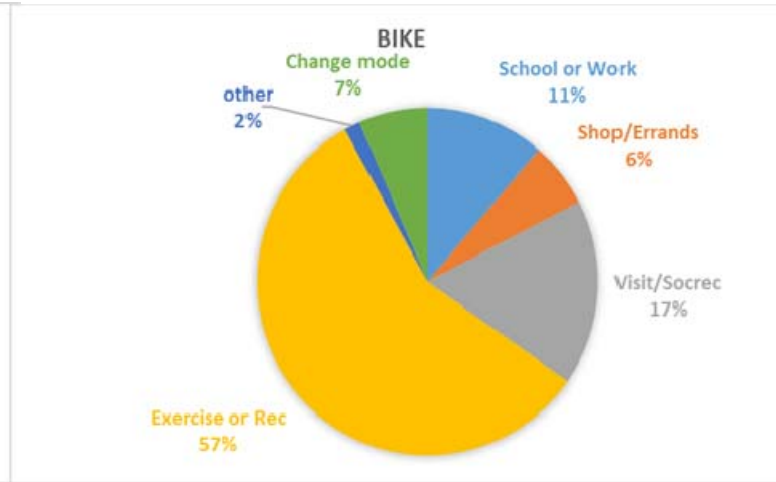
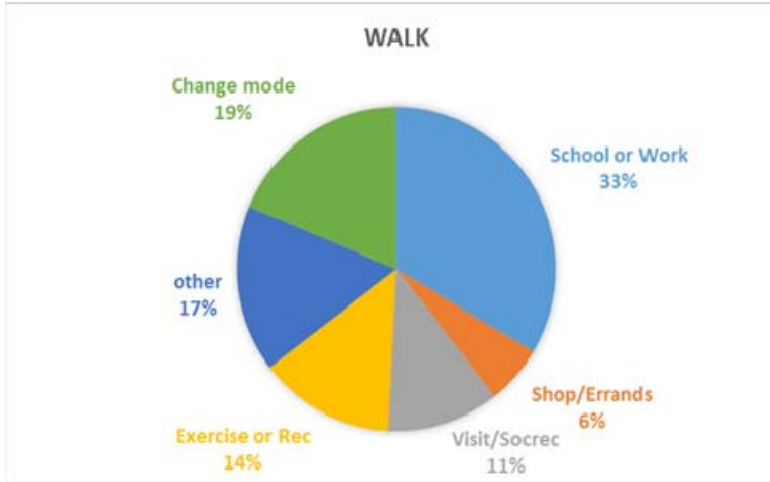
Comparison of Means of Travel by People in Households by Vehicle Availability (Age 15+)



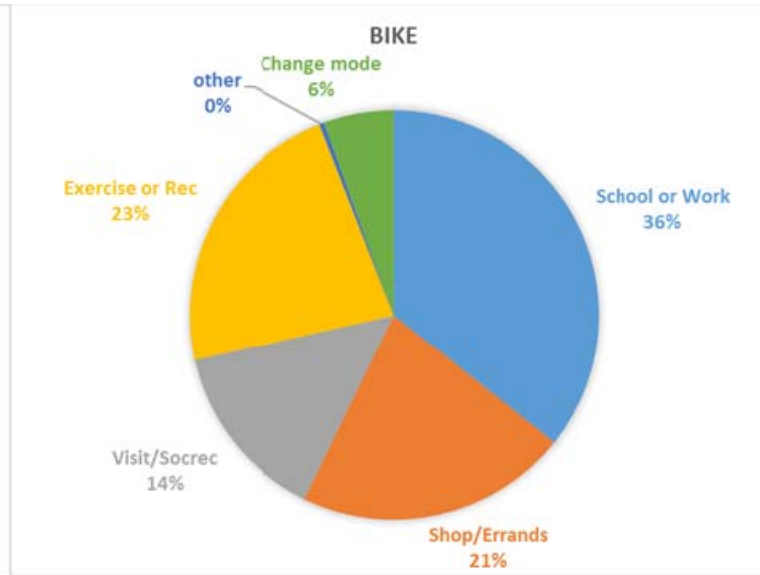
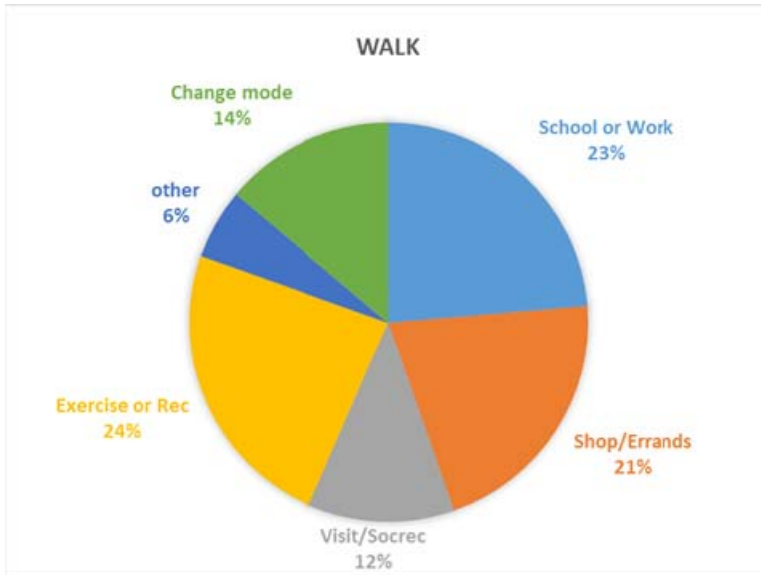
Means of Travel by All People for All Trip Purposes, Weekday



Walk and Bike Trips by People Age 14 and Under, by Purpose

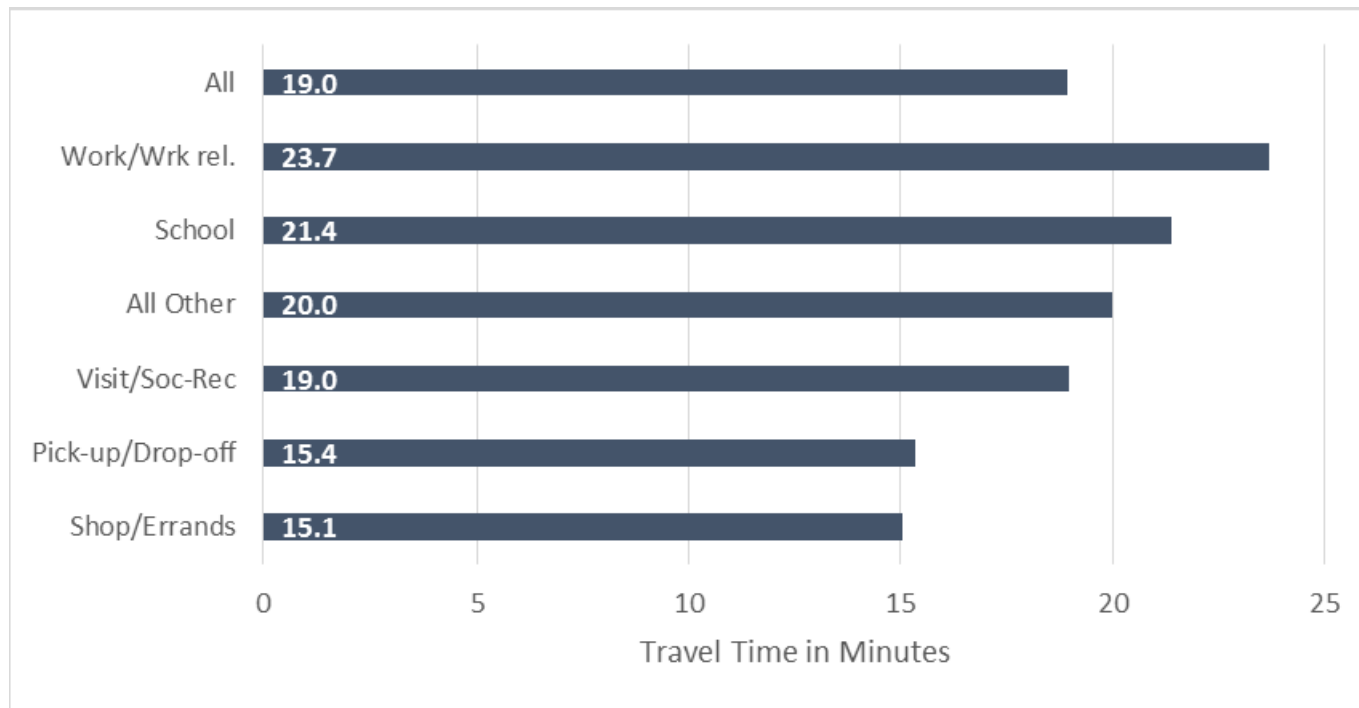


Walk and Bike Trips by People Age 15+, by Purpose

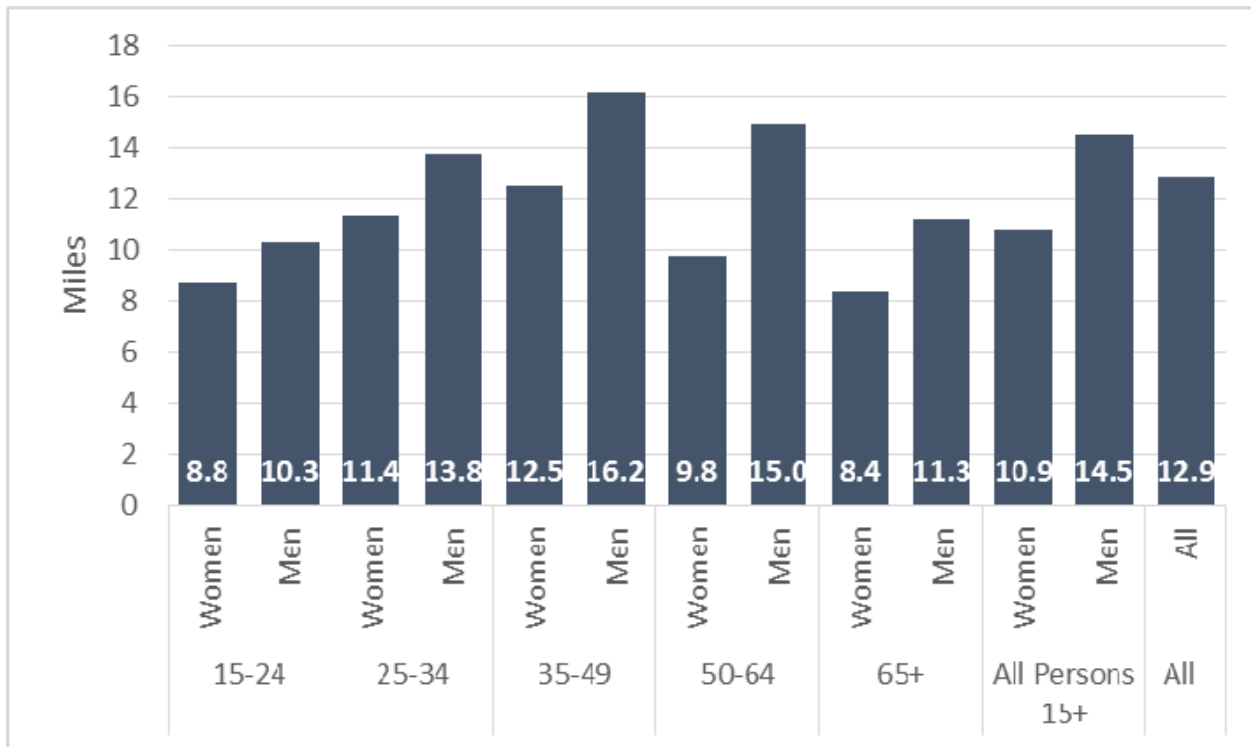




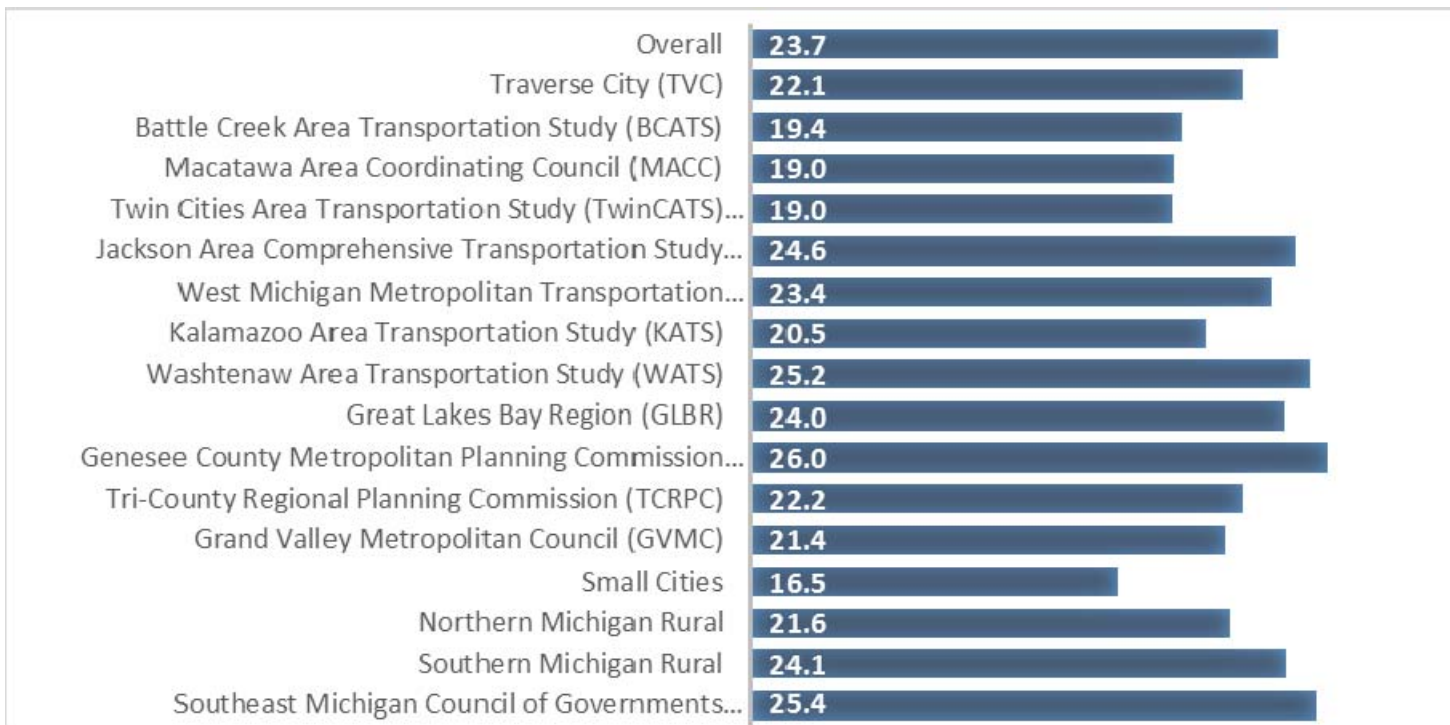
Average Weekday Trip Duration by Purpose: Vehicle Trips (Age 15+)



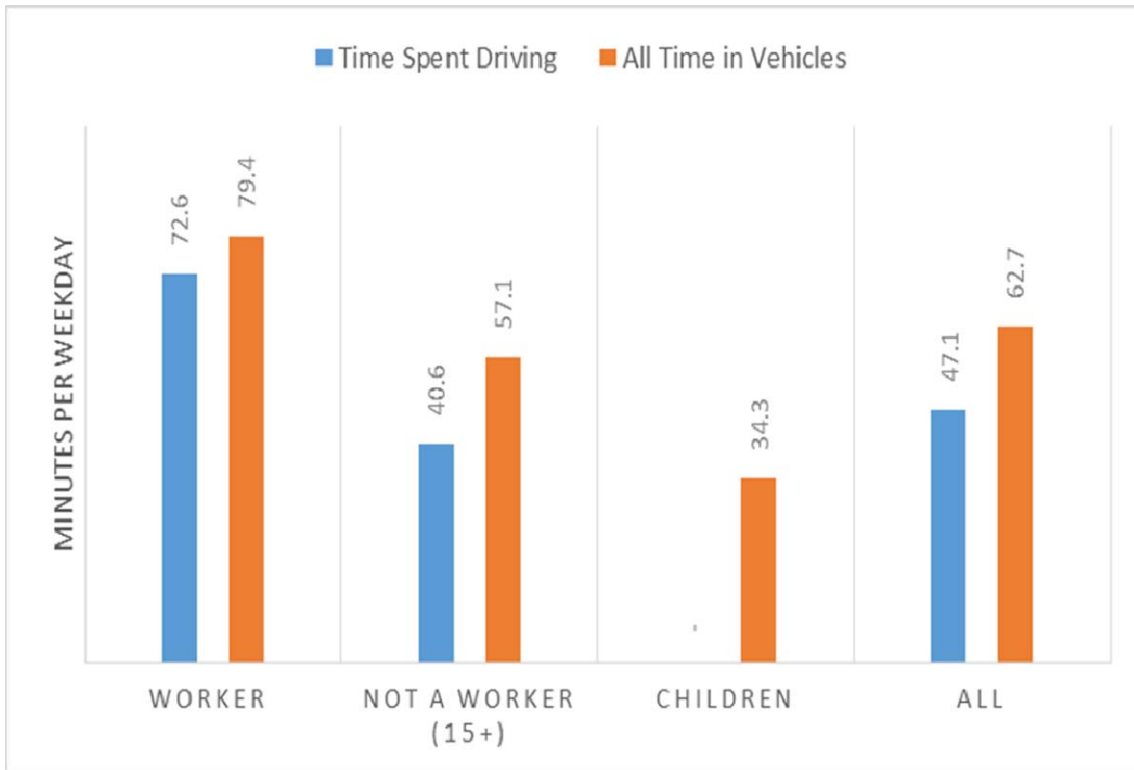
Average Commute Distance by Age and Gender



Average One-Way Commute Duration for Workers (Age 15+) by Sample Area



Minutes per Weekday Spent in Vehicles by Worker Status



Next Steps



- ▶ Finalize reports and data
- ▶ UTA Unit staff will analyze data for incorporation into small urban models as they are updated
- ▶ Data available for TMAs to use in their models



Questions?

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