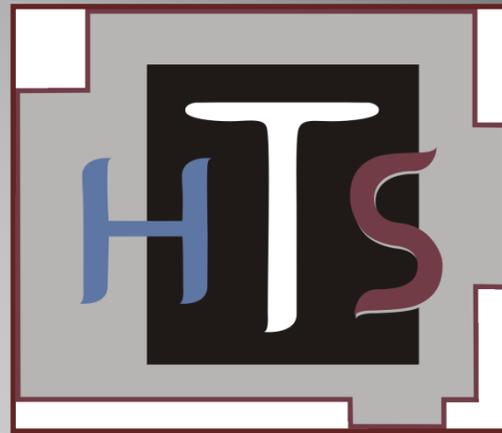
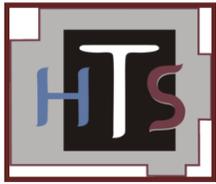


Wichita Area Metropolitan Planning Organization 2011 Regional Household Travel Survey

A Summary of Travel Characteristics in the WAMPO Region



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Overview of the Study

The Wichita Area Metropolitan Planning Organization (WAMPO) is the metropolitan planning organization for cities and counties in the Wichita area. The map below shows the region that was included in the regional travel survey. The names of the member governments are listed on the left side of this page.

What is a Regional Household Travel Survey

WAMPO Area Counties

Sedgwick
Western Butler
Northern Sumner

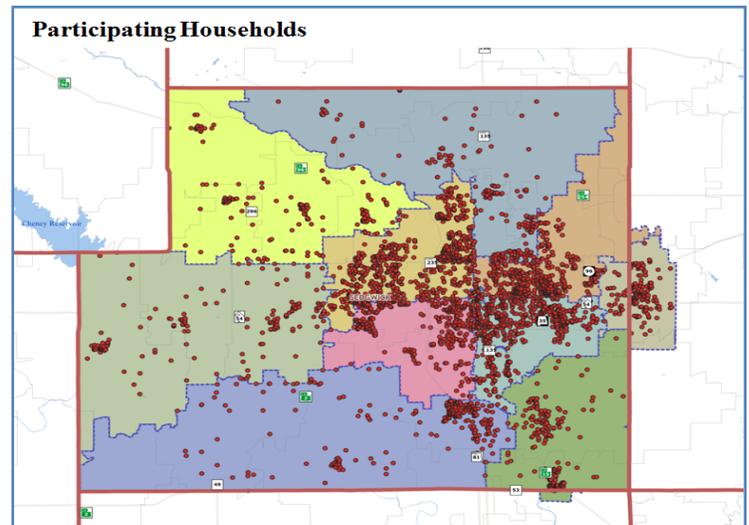
WAMPO Area Cities

Andale
Andover
Bel Aire
Bentley
Cheney
Clearwater
Colwich
Derby
Eastborough
Garden Plain
Goddard
Haysville
Kechi
Maize
Mount Hope
Mulvane
Park City
Sedgwick
Valley Center
Viola
Wichita

In 2011, Wichita Area Metropolitan Planning Organization (WAMPO) conducted a regional travel survey. The primary purpose of the survey was to collect data about the travel behavior of residents in the Wichita region to update the regional travel demand model. The model is used as a tool to plan for transportation improvements in the region.

The universe for the survey consisted of all households in the WAMPO regional planning area. The contract for the project was to obtain completed surveys from 3,200 households. Of these, 3,000 households were selected at random. An additional 200 surveys were administered to representatives of traditionally underserved populations in the region, which included residents without vehicles, transit users, low income residents, racial/ethnic minorities, seniors, and others who may have specialized transportation needs. The goal for the project was to complete a total of 3,200 surveys. The actual number of completed surveys was 3,576. This included 3,376 randomly selected households plus an oversampling of 200 additional surveys that were completed with traditionally underserved populations.

The map to the right shows the location of participating households, as well as the eleven subareas used to assure the results of the survey would be statistically valid at the subarea level.

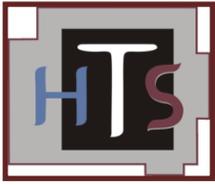


A **household** was defined as all persons who occupy a housing unit. A **housing unit** was defined as a house, apartment, mobile home, group of rooms, or single room occupied as separate living quarters. A household was considered "complete" for purposes of the survey when demographic, travel, and activity data had been collected from every household member who was age 5 years and older.

How the Household Survey was Administered

The Household Travel Survey was administered to a randomly selected sample of households in the WAMPO region in late August thru mid October, 2010 and from mid January to the end of March, 2011.

Stratified Random Sample. ETC Institute worked with the WAMPO and members of the project advisory committee to develop a sampling plan that would support the region's travel demand model. Based on input from the project advisory committee, ETC Institute developed a sampling plan for a stratified random sample of 3,000 completed sets of household travel surveys. The sampling plan was stratified by type of household and location. The type of household was based on two variables: (1) household size and (2) vehicle availability. Location was based on the zip code of the respondent.



Who Participated in the Household Travel Study?

4,590 men

4,913 women

1,964 children under age 15

5,801 people ages 15 to 64

1,738 people ages 65 or older

3,877 people who were employed

2,595 students

1,086 households with two vehicles

577 households with four or more vehicles

3,225 single family households

987 persons who work in the education field

541 manufacturing employees

297 persons with more than one job

3,316 persons employed outside their home

918 persons who live alone

Altogether, ETC Institute recruited 4,000 households at random to participate in the survey. The goal was to have at least 75% of the households recruited participate to obtain 3,000 completed surveys. As a result of the thorough recruitment and aggressive follow-up procedures used by ETC Institute, the actual participation rate was 84.4%. A total of 3,376 of the 4,000 households that were recruited completed the survey. The goals were met for all combinations of household size and vehicle availability. The overall results for all 3,376 surveys have a precision of at least +/-2% at the 95% level of confidence.

Oversampling of Traditionally Underserved Populations. The oversampling of traditionally underserved populations was done to collect travel data from persons who are typically under-represented in household surveys, such as residents without vehicles, transit users, low income residents, racial/ethnic minorities, seniors, and others. Since it is important to understand the travel patterns of residents who do not have cars and those who use public transportation as their primary form transportation, an additional 200 surveys were administered on site at locations that serve these populations, such as transit centers, community service organizations, and social service offices.

ETC Institute fielded a survey administration team during February and March, 2011. The survey team primarily consisted of ETC Institute employees who had previous experience with the administration of on-site surveys. Surveyors distributed the Survey of Traditionally Underserved Populations to transit users at the downtown transit centers, persons who were visiting social service organizations and persons who were receiving assistance from non-profit organizations in the region, such as the Salvation Army. The surveyors gathered contact information during the initial face-to-face interview. Those who agreed to participate were given an individual travel diary packet that was basically the same as the travel diary used by persons completing the household travel survey. The participants were asked to complete the travel diary at home and return their diary to ETC Institute in a postage-paid envelope. ETC Institute recruited 248 people for the survey of traditionally underserved populations. Of the 248 people who were recruited, 200 returned a properly completed travel diary.

Types of Information. The household travel survey gathered the following types of information:

Household Level

- Household size
- Number of autos available in household
- Number of workers in household
- Location/physical address
- Annual household income
- Type of home

Personal Level

- Valid driver's license
- Sex
- Age
- Disability status
- Employment Status
- Usual work location
- Student Status

Vehicle Level

- Model
- Year
- Ownership (lease, own or company)

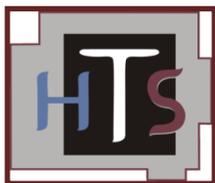
Trip Level

- Start and Arrival time
- Purpose
- Start and destination addresses
- Type of place
- Mode of travel
- Vehicle Occupancy

A total of 9,503 persons ages 5 to 98 completed a 24-hour travel diary.

Household Survey Administration Procedures. ETC Institute administered the Household Travel Survey to a randomly selected sample of households in the Wichita metropolitan areas in late August through mid October 2010 and from mid January to the end of March 2011. The process for recruiting households to participate is described below:

- ETC Institute sent an advance postcard to all households that were randomly selected to participate in the survey to provide information about the survey and encourage participation. The advance material listed the toll-free number so that households without listed phone numbers could request to participate in the study.
- ETC Institute conducted recruitment calls to households with listed phone numbers to request participation in the survey.
- ETC Institute personnel assigned participating households a travel day and asked them to confirm their home address. In addition, household level data (number of occupants, ages of occupants, number of vehicles, etc.) was collected from all households that agreed to participate in the study.
- ETC Institute then mailed a diary packet that contained a cover letter, refrigerator magnet travel day reminder, travel diaries for all household members, instructions, and a sample diary to all households who agreed to participate in the study.
- ETC Institute then mailed a reminder postcard to each of the households that agreed to participate to remind them of their travel day. The reminder postcard was mailed 7-10 days prior to the travel day.
- ETC Institute then placed follow-up calls the day after travel diary activity was scheduled to begin to verify participation. If the household indicated that they did not complete the diaries, ETC Institute personnel rescheduled the travel day for the household.



How Many Trips do People in the WAMPO Region Make?

The average household in the WAMPO region completes 9.33 trips per day. Since there are nearly 200,000 households in the WAMPO region, more than 1.8 million trips are completed by residents of the region on a typical weekday.

Of these, more than 275,000 trips are completed per day between homes in the region and the places residents work. This is one of the reasons the region's streets and highways have the most congestion between in morning and late afternoon.

Residents of the WAMPO Region Make More Trips Than Residents of Other Areas

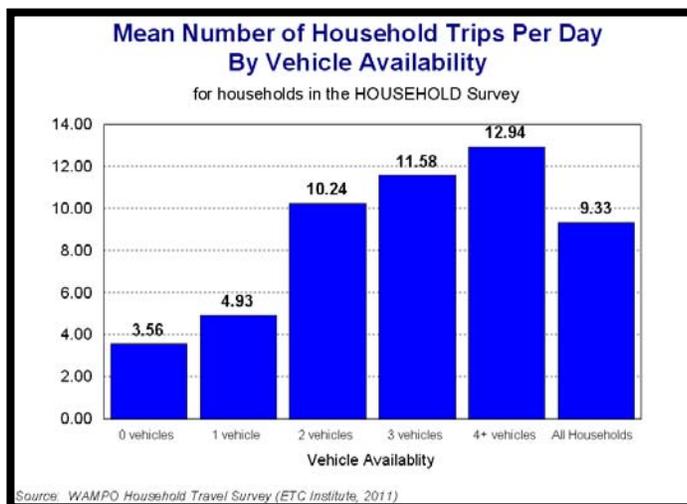
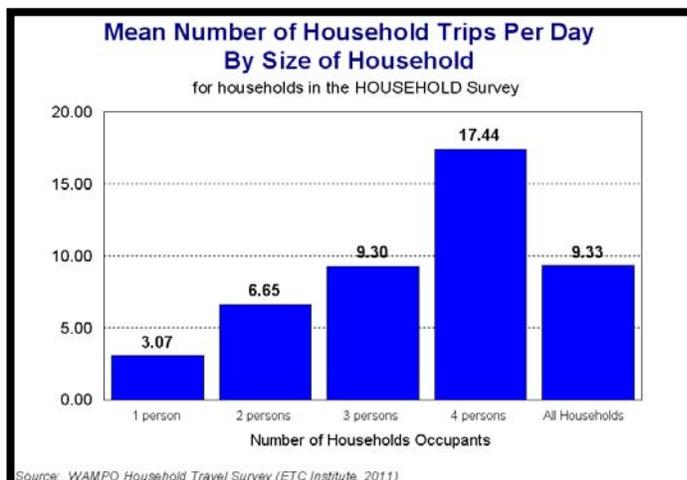
The average number of trips completed per day by households in the WAMPO region (9.33 trips per day) is significantly higher than the national average of 7.80 trips per day.

By comparison, households in the Oklahoma City region complete 8.60 trips per day and those in the Austin, Texas region complete 9.58 trips per day.

How Many Trips do Households Make Per Day in the Region?

Household trip generation rates are used to calibrate regional transportation demand models. The rates are presented in a format called a trip table which shows how the number of household trips vary based on the number of household occupants and number of household vehicles. The average number of trips per household was calculated for all households based on the number of vehicles that were available and the number of household occupants. There were five combinations of household size (1, 2, 3, and 4+ persons, and the overall). There were six combinations of vehicle availability (0, 1, 2, 3, 4+ vehicles, and the overall).

The average (or mean) number of trips per day for all households in the region was 9.33 trips per household. The chart to the right shows the mean number of household trips per day by the size of participants' households.

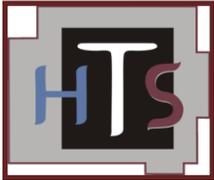


Where are Residents of the WAMPO Planning Area Going?

Over 32,000 trips were recorded by the 7,968 persons who traveled in the WAMPO region. Nearly three-fourths (72%) of all trips involved a return trip to a participant's home or a trip that originated at a participant's home. Excluding return trips home, the top five types of places visited by residents of the Wichita region were: schools, shopping areas, a resident's workplace, another person's home (e.g., a friend or relative), and restaurants. In order to better understand regional travel patterns, travel survey participants were asked to record the type of each place they visited on their travel day. This information was used to classify trips into one of three categories that are used by WAMPO for transportation modeling:

Home Based Work (HBW) Trips. HBW trips are those that either begin at home and end at the respondent's workplace or begin at the respondent's workplace and end at home. An example of a HBW trip would be a trip from a person's home to the office in the morning. Approximately 15% of all trips completed were HBW Trips.

Home Based Other (HBO) Trips. HBO trips are those that either begin or end at a home but do not involve a stop at the work place. Examples of HBO trips would be a trip from home to a church in the evening, a trip from home to school, and trips from home to a store. Approximately 58% of all trips completed were HBO Trips.



Mode to Trip Destination

Walking

Approximately three percent (3.2%) of all trips in the region are completed by people who walk to their destination. People living in households without vehicles were ten times more likely to complete trips by walking than those living in households with vehicles.

Bicycle Use

0.4% of all trips in the region are completed by residents who ride a bicycle to their destination.

National Comparison

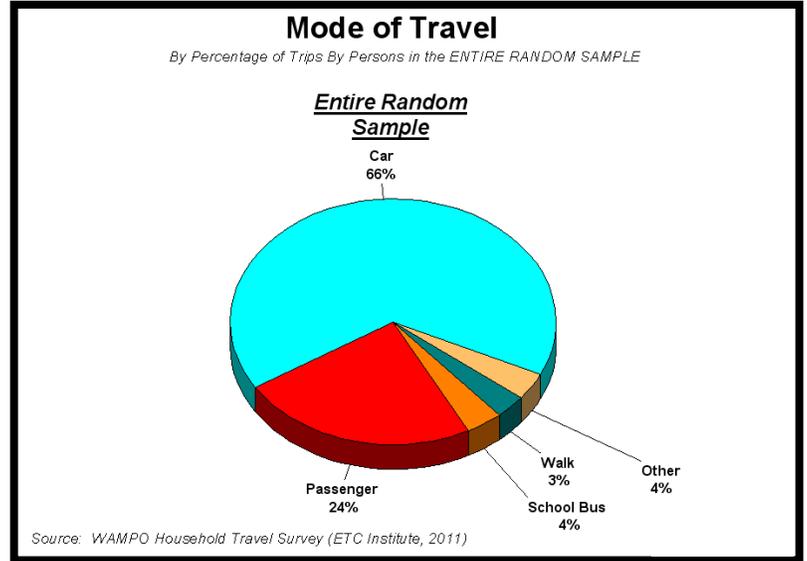
The majority of trips completed each day both nationally and in the WAMPO region are made in private vehicles. The results of the survey show that ninety percent (90%) of the trips in the WAMPO region are made by people who drive or travel as passengers in a private vehicle. The national average is slightly lower at eighty-seven percent (87%).

Non Home Based (NHB) Trips. NHB trips are those that do not involve a stop at home. An example of a NHB trip would be a trip from a restaurant to a movie theater in the evening. Approximately 27% of all trips completed were NHB Trips.

How Residents Travel to Their Destinations

Sixty-six percent (66%) of all trips by residents of the Wichita area were completed in private vehicles, such as a car or pickup. Only 0.9% of all trips were completed on public transportation.

Twenty-four percent (24%) of all trips were completed by people who were passengers in a private vehicle. Ninety-three percent (93%) of HBW trips completed by household survey participants who drove a private vehicle. The chart to the right shows the modes of travel residents used to get to their destination.



How Much Time Do Residents Travel Each Day?

The typical resident of the Wichita area spends almost one hour per day traveling to and from destinations in the region. The average trip by participants in the household survey took 14.31 minutes to complete. Fifty percent (50%) of all trips were 10 minutes or less. Ten percent (10%) of all trips took more than 25 minutes to complete.

Trips Between Home and Work. The average time it took household survey participants to travel between home and work was 18.37 minutes. Twenty-nine percent (29%) of all trips between home and work were 10 minutes or less and nineteen percent (19%) were more than 25 minutes.

Trips Between Home and Other Destinations. The average time it took household survey participants to travel between home and non-work destinations was 13.51 minutes. Fifty-three percent (53%) of trips between homes and non-work destinations took 10 minutes or less. Nine percent (9%) took more than 25 minutes.

Trips Not Involving the Home. The average time it took household survey participants to travel between destinations that did not involve their home was 13.77 minutes. Fifty-eight percent (58%) of trips that did not involve a stop at home were 10 minutes or less. Seven percent (7%) of these trips took more than 25 minutes.