

1999 Puget Sound Household Travel Survey

The 1999 Puget Sound Household Travel Survey, conducted between July and November 1999, is an essential element in the regional study of transportation activity and travel patterns within the four-county jurisdiction of the Puget Sound Regional Council (PSRC).

The purpose of the study, consisting of 6,000 households, was to provide data for the continuing development and refinement of the Regional Travel Demand Forecasting Model, as well as to provide a better understanding of travel behavior in the Puget Sound region and to support some of the work for the Metropolitan Transportation Plan Update. The resultant data set has been used to fulfill the model's functions of estimating trip generation and distribution, mode choice, and assignments. It also helps us better understand household travel behavior and an individual's activity-based decision-making process of why, where, how, and when (or whether) to make a trip.

The study consisted of households keeping track of travel for a 48-hour period. And for those household members sixteen years of age or older, an "attitude" survey about transportation issues was also administered. A four-phase data collection procedure was used: 1) advance calls, 2) recruitment, 3) reminder calls, 4) data retrieval. A total of 9,985 households agreed to receive a letter and a brochure about the survey; 9,028 households were recruited to participate and 6,000 households completed 48-hour place-based diaries. A completion rate of 66.5%, which is the percentage of completes to recruited households, was achieved (each person in the household had to provide trip information in order for the household to be considered a complete).

The data collected included information about the household (size, income, vehicles, and residency), persons in the household (age, ethnicity, work and school characteristics, transit and carpool use, and disability status), and travel (purpose/activity, mode, travel time, and parking cost).

Survey Statistics

- 5,875 Households
 - Seattle/Shoreline 1,395
 - King County Eastside 800
 - South King County 1,021
 - Snohomish County 977
 - Pierce County 1,183
 - Kitsap County 499
- 14,487 persons, all ages
- 127,286 activity records, 99,054 trips

Each location a person was at over a two-day period was considered an activity and recorded in a diary. By inference, each of these locations, after leaving the first location of the day, implied a trip taken to that next location.

- Survey cost: \$500,000
- Incentives: \$2 per diary sent out. In addition, a drawing was held at the end of the survey to award a vacation for two to a household that had completed the survey.

- Survey instruments
 - Activity Diary, a 2-day booklet, with each page representing an activity location
 - Stated preference and attitude survey
 - Recruitment questionnaire, which collected household and person characteristics

How the 1999 Survey Has Been Applied

- Update of all parts of the Travel Demand Model
 - Trip Generation
 - Redistribution
 - Mode Choice
- Time-of-day model
- Congestion relief analysis
- Location Choice models
- Tour and activity modeling
- Only source for information about trip-making behavior for non-commute travel