

Puget Sound Regional Council

PSRC

Puget Sound Transportation Panel
Wave 9, October 2000 – January 2001

Summary Report

Submitted by:



Northwest Research Group, Inc.



Table of Contents

Table of Contents	2
Introduction	4
Background and Objectives	4
Scope of Work.....	5
Methodology.....	6
Wave 9 Panel Recruitment.....	6
Continuing Household Recruitment	6
Replacement Household Recruitment.....	12
Travel Diary / Attitude Survey	16
Questionnaire.....	17
Personal ID Numbers.....	18
Project Materials Mailing.....	19
Reminder Calls	20
Processing Returns	20
Data Entry	21
Sample.....	22
Stratification of Wave 9 Transportation Panel	22
Comparison of Travel Diary Participants and Wave 9 Non-respondents.....	23
Comparison by Travel Mode.....	25
Discussion of Wave 9 Attrition.....	28
Panel Retention Rates per Year	30
Project Materials	31
Recruitment.....	31
Continuing Screener	31
Replacement Screener	42

Screener Code Lists	52
Travel Diary.....	62
Cover Letter to Continuing Panel Members.....	62
Cover Letter to Replacement Panel Members.....	63
Wave 9 Travel Diary.....	64
Wave 9 Supplemental Travel Diary.....	67
Sample Diary	68
Diary Instructions	69
Diary Cleaning and Coding Rules.....	72
Attitude and Values Survey.....	82
Household Attitude and Values Survey.....	82
Personal Attitude and Values Survey.....	84
Cleaning, Coding, and Data Entry Instructions	92
Data Files	95
Transportation Panel Recruitment	95



Introduction

Background and Objectives

The Wave 9 Puget Sound Transportation Panel represents the ninth phase of a travel behavior survey of households in the four-county Puget Sound region. The use of a panel study in travel behavior research provides an opportunity to go beyond cross-sectional data measures to evaluate change by individuals over time. Moreover, the Puget Sound Transportation Panel has become a valuable tool for assisting with long-range forecasting of urban travel and the effects of transportation policies on travel behavior.

The Puget Sound Transportation Panel originated in 1989, with 1,712 households in King, Kitsap, Pierce, and Snohomish counties completing a telephone survey and two-day travel diaries. The most recent wave, Wave 8, was conducted during the Spring / Summer of 1999 with 1,808 participating households. More than one-fifth (23%, n = 392) of the original households had remained in the panel.

The Puget Sound Regional Council contracted Northwest Research Group, Inc. to conduct Wave 9 of the panel study during the Fall / Winter of 2000. This represents the second wave of the Puget Sound Transportation Panel conducted by Northwest Research Group. Wave 9 consists of a telephone screener to update household information and recruit Wave 9 participants, two-day travel diaries for each household member who is 15 years of age or older, and an attitude and values survey revisiting questions about awareness and use of traffic information that were first asked during Wave 7 in 1997. As a part of the USDOT Intelligent Transportation System (ITS) program, the Wave 7 survey evaluated traveler behavior in the presence of traffic information, ownership and use of telecommunications and computer services, and attitudes and values related to time, traffic, transit, technology and travel in greater Seattle.

Key objectives of Wave 9 include:

- To be a metropolitan "Current Population Survey;" tracking changes in employment, work characteristics, household composition, and vehicle availability.
- To monitor changes in travel behavior and responses to changes in the transportation environment.
- To describe the general commute, motivation, and information seeking behavior among Seattle residents.
- To retain the maximum number of households from Wave 8, so as to reduce the cost of implementing the study and to provide the continuity that is critical to the success of a panel survey.
- To gather accurate and sufficient household and personal information from continuing households, drop-out households, and replacement households in order to retain and match the composition of the panel, based on key demographics, as closely as possible.

In addition, the combination of data from Wave 9 and Wave 7 will:

- Provide a regional before-and-after measure of the impact of broad scale ITS deployment on the traveling public.
- Identify the benefits of ATIS to the consumer.
- Describe the influence of ATIS on traveler behavior at the trip level.
- Further refine ATIS consumer market segments identified in Wave 7.

Scope of Work

Northwest Research Group provided the following services for the Wave 9 Transportation Panel:

- Contacting, or attempting to contact, all Wave 8 households, identifying their household and personal information that may have changed during the last year, recruiting them to continue participating in the Puget Sound Transportation Panel, and providing updated household and personal information in final data file format;
- Identifying and retaining information on newly formed households from the Wave 8 sample, termed "Split Households," and recruiting them to continue participating in the Puget Sound Transportation Panel;
- Contacting households to replace Wave 8 participants who have left the Puget Sound region or who have chosen to no longer participate in the panel, termed "Replacement Households," recording their household and personal information, recruiting them to become Puget Sound Transportation Panel members, and providing household and personal information in final data file format;
- Questionnaire consultation; specifically assisting with revisions to the Wave 7 attitude and values survey and the development of the new supplemental trip diary for those who consulted travel information services;
- Administering the attitude and values mail-back questionnaire; including preparation of mailing materials, processing returns, cleaning, coding, data entry and verification, and creation of the final data file;
- Collecting two-day trip diary information – including the new supplemental trip diary for those who consulted travel information services – from all panel household members who are 15 years of age or older; including preparation of mailing materials, reminder calls to ensure receipt of materials and continued participation, follow-up telephone calls to non-respondents, processing returns, cleaning, coding, data entry and verification, and creation of the final data file;
- Reporting – including monthly progress reports, an Interim Report, and the Final Summary Report.

The Summary Report contains the following:

- A detailed project methodology
- Final sample stratification, comparisons, and a discussion of Panel attrition
- Project materials
- Cleaning and coding specifications
- Data files – each includes an SPSS data file, a layout file, and a description of data variable names and labels:
 - Wave 9 Panel Household Information
 - Wave 9 Panel Personal Information
 - Wave 9 Household Summary
 - Attitude and Values Household Survey
 - Attitude and Values Personal Survey
 - Travel Data – Day 1
 - Travel Data – Day 2

Methodology

There were two primary tasks involved in conducting Wave 9 of the Puget Sound Transportation Panel: a telephone survey to update and recruit Wave 9 panel households and a self-administered mail-out survey including travel diaries and attitude and values questionnaires. A detailed description of the methodology of each follows.

Northwest Research Group reverted to the traditional methodology used in Waves 1 through 7 of the Transportation Panel this year. In Wave 8 a new methodology was tested where diary data was collected by telephone. After evaluating the effectiveness of the telephone methodology, a decision was made to return to the original project methodology. Wave 9 Panel Households were mailed all project materials at one time (including Travel Diaries, a Household Attitude Survey, Personal Attitude Surveys, and the new Supplemental Travel Diary), and asked to return them in postage paid business reply envelopes. The diaries were then cleaned and data entered by Northwest Research Group.

All materials used to implement these tasks are located in the Project Materials section of this report.

Wave 9 Panel Recruitment

The Wave 9 panel was recruited by contacting, or attempting to contact, all Wave 8 households for participation in this year's study and replacing Wave 8 households who had moved, were unable to be contacted, or no longer wished to participate, with new households whose demographic characteristics matched those of Wave 8 drop-out households.

Continuing Household Recruitment

In order to recruit their ongoing participation in the Wave 9 Transportation Panel, Northwest Research Group was provided with contact information for 1,801 of the Wave 8 Continuing Households. Each of these households should have received a letter from PSRC preparing them for the upcoming Wave 9 study. Updated address and telephone information was also provided, if available, for those households that had moved within the past year.

Of the 1,801 Continuing Wave 8 Households, 7 were not attempted for the following reasons:

- 5 had moved out of the area prior to Wave 9, indicated by the return of their announcement letter or by personal notice.
- 1 Household refused prior to conducting Wave 9, due to a death in the family.
- 1 Household phone number was unable to be determined.

Additionally, 48 Households had either changed residence or were missing telephone numbers. Some of the announcement letters came back with updated residence information, which was incorporated into the database. Missing telephone numbers were looked up and incorporated into the database, as well.

Northwest Research Group attempted to contact **1,794** of the Continuing Wave 8 households via telephone to update their household information, to gather personal information on each member who is 15 years of age or older, and to invite the household to participate in Wave 9 of the Transportation Panel.

One primary contact person per household was interviewed, and he/she provided information on the other members of his/her household. The contact person was informed that Wave 9 involves each panel member completing new trip diaries on the same two days of the week assigned in Wave 8, filling out the new supplemental trip diaries, completing the attitude and values questionnaires, and returning all survey materials by mail. In order to encourage their continued participation, each household member was offered a \$2 bill as an incentive to complete Wave 9.

In order to assist with building the Replacement panel, efforts were made to collect and retain key demographic information from “drop-out” households, or those households that refused to participate in Wave 9, those that moved out of the Puget Sound region, and those that could not be reached after a minimum of 10 attempts. The outcome of the attempt to reach and recruit each Wave 9 Household is indicated in the Wave 9 Household Summary data file.

Questionnaire

The screener that was used to update information for Continuing Panel Households contained all of the same questions used in Wave 8 in order to track changes in key household and personal characteristics over time. Several new demographic questions were added this year to help refine the ATIS market segments.

The questionnaire used a variety of question formats, including closed single and multiple-response questions for all categorical data. In those situations where not all of the possible responses were known, an “other” category was included. These results were then reviewed and post-coded into the database. A number of open-ended questions were included to capture verbatim information on commute destinations and occupation information.

The screener was programmed into Sawtooth Software Ci3 System, a state-of-the-art computer-assisted interviewing package. Interviewing with Ci3 offers many advantages over the traditional pen-and-paper interviewing and data entry methods, including:

- Complete control of what the interviewer sees;
- Automatic skip or branch patterns based on previous answers, combinations of answers, or even mathematical computations performed on answers;
- Randomization of response categories or question order, thereby eliminating response order bias;
- Ability to incorporate mathematical computations;
- Customized questionnaires using respondents’ previous responses; and
- Incorporation of data from the sample directly into the sample database.

Sample Management

Sample information from all 1,794 Wave 8 households was entered into a database to be called by Northwest Research Group’s data collection staff. The sample information, which was ultimately exported to the final Wave 9 Household Data file, included telephone number, mailing address, county code, household transit type, household life cycle stage, household size, and the name, ID number, and gender of each household member 15 years of age or older.

All sampling and call management, including scheduling of callbacks, call disposition, quota controls, etc. was handled by Northwest Research Group’s Ci3 CATI (computer-assisted telephone interviewing) networked system.

In addition to the survey administration, Ci3 CATI managed callbacks, monitored call dispositions, consolidated data, and tracked interviewer productivity throughout the study. At the beginning of the study, the sample information was entered into the computer and each phone number was assigned a record number. Ci3 CATI tracked the sample record throughout the project. Ci3 CATI runs on a local area network (LAN) to allow information exchange and to coordinate activities among workstations.

Northwest Research Group employed the following methods of contact and dialing protocol:

- Interviewers were provided with a sample of up to 50 numbers at the beginning of any given shift. Numbers, which had scheduled callbacks, were given precedence in the sample.
- For each number dialed, interviewers reviewed a complete call history, which detailed the number of attempts made to a particular number and the status of the last attempt.
- Busy numbers were kept in the active queue and retried within 10 minutes of the first dialing.
- Numbers with a respondent no answer or with an answering machine were returned to the sample to be tried at a later time. These numbers were returned randomly at different days and times. A minimum of 10 callbacks were made on different days and at different times to reduce bias resulting from non-response due to respondent unavailability and busy numbers.
- Callback appointments were made with respondents who qualified and/or agreed to complete the survey but were not available for the required length of time. These numbers took precedence over all other calls and were automatically returned to the interviewer at the appointed time.

Final Sample Disposition

Of the 1,794 attempted Continuing Households from Wave 8:

- 2 additional Households had moved out of the area.
- Northwest Research Group was unable to locate 217 Households:
 - 163 Households had non-working telephone numbers,
 - A communication barrier existed with 10 Households, and
 - A wrong number was attempted for 44 Households, meaning that there were no PSRC transportation panel members residing at the telephone number reached.
- 135 Households were never reached, meaning they had a final call disposition of no answer, busy, answering machine, or call-back. All efforts were made to reach these Households, with each number receiving a minimum of 15 attempts.
- 173 Households refused to continue as Panel Households. Of these, 25 agreed to let Northwest Research Group update their household information.
- 7 Households refused to complete Wave 9 after initially agreeing to participate.
- 11 Households were initially recruited for Wave 9, but discrepancies existed in their household composition information, and without being able to clarify this information they were excluded from the Wave 9 Transportation Panel.
- Additionally, Split Households, or new households created by the separation of Continuing Households, were pursued for ongoing participation in the Transportation Panel. 51 Split Households were added to the sample and attempted for recruitment to the Wave 9 Panel. 28 Split Households were ultimately recruited as Wave 9 Panel Households.
- 1,300 of Wave 8 Panel Households, including new Split Households, agreed to continue participating in the Puget Sound Transportation Panel.

Final Sample Disposition Report

Final Sample Disposition Report		
<u>Disposition</u>	<u>Total Sample</u>	<u>% Of Sample</u>
No Answer	53	2.9%
Busy	13	0.7%
Answering Machine / Voice Mail	61	3.3%
Business / Nonworking ⁽⁵⁾	163	8.8%
Immediate Refusal ⁽⁴⁾	55	3.0%
Never Call ⁽⁴⁾	22	1.2%
Screener Refusal ⁽⁴⁾	1	0.1%
Communication Barrier ⁽³⁾	10	0.5%
Language Barrier ⁽³⁾	-	0.0%
Callback Intro / Callback Soft Refusal	5	0.3%
Callback Interview ⁽¹⁾⁽⁷⁾	3	0.2%
Mid-Terminate ⁽¹⁾⁽⁸⁾	13	0.7%
No One Over 15, Kids Line ⁽²⁾	-	0.0%
Moved Out of Puget Sound Area ⁽²⁾	2	0.1%
Unable to Locate Panel Household ⁽²⁾	44	2.4%
Panel Refusal (No Data) ⁽²⁾	57	3.1%
Panel Refusal (Save Data) ⁽²⁾	25	1.4%
Discrepancy in Hhold data ⁽²⁾	11	0.6%
Refusal After Recruit ⁽²⁾	7	0.4%
Complete - Diary Recruit ⁽¹⁾⁽⁶⁾	1,300	70.5%
Sample attempted ⁽⁵⁾	1,845	100.0%

- Effective Study Incidence = 90%. (Qualified Respondents(1) / [Qualified Respondents(1) + Unqualified Respondents(2)])
- Response Rate = 92.2%. ([Completed Interviews(6) + Unqualified Respondents(2) + Respondents Terminated(3) + Respondents Refused(4) + Callback Interviews(7) + Mid-Terminated Interviews(8)] / [(Attempted Sample - Numbers No Longer Available(5))])
- Cooperation Rate = 95%. ([Qualified Respondents(1) + Unqualified Respondents(2) + Respondents Terminated(3) - Mid-Terminated Interviews(8)] / [Qualified Respondents(1) + Unqualified Respondents(2) + Respondents Terminated(3) + Respondents Refused(4) - Mid-Terminated Interviews(8)])
- Completion Rate = 77.3%. (Completed Interviews(6) / [Attempted Sample - Numbers No Longer Available(5)])

Quota Management

While quota groups were not used to control the type of households recruited from the Wave 8 Continuing sample, certain key household characteristics were tallied throughout the Continuing Household recruitment process for assistance with accurate and efficient replacement recruiting.

Three primary household characteristics were tracked:

- County of Residence:
 - King
 - Kitsap
 - Pierce
 - Snohomish
- Household Transit Type:
 - SOV – No household members are regular transit users or carpoolers
 - Transit – One or more household members makes 4 or more one-way trips per week using public transit
 - Carpool – One or more household members take 4 or more one-way trips per week in a carpool or vanpool, and no household members are regular transit users
- Household Life Cycle Stage:
 - Stage 1 – Household with children under the age of 18
 - Stage 2 – One adult, no children
 - Stage 3 – Two or more adults, no children

While the three stages above were used for convenient quota management, Household Life Cycle Stage is further stratified by PSRC into more narrowly defined categories as follows (both the broad and narrow classification of Household Life Cycle are indicated in the Wave 9 Household Data file):

- Stage 1 – With pre-school age children (under 6 years old)
- Stage 2 – With school-age children (6 to 17 years old)
- Stage 3 – One adult under the age of 35, no children
- Stage 4 – One adult between the ages of 35 and 64, no children
- Stage 5 – One adult over the age of 64, no children
- Stage 6 – Two or more adults under the age of 35, no children
- Stage 7 – Two or more adults, between the ages of 35 and 64, no children
- Stage 8 – Two or more adults, over the age of 64, no children

Timeline

Telephone interviewing to screen and recruit Continuing Households took place between October 2 and December 6, 2000. Calling times were from 4:00 p.m. to 9:00 p.m. on weekdays and from 12:00 p.m. to 8:00 p.m. on weekends. Some weekday daytime hours were scheduled to reach people who are not typically at home during the evenings.

Wrap-Up

Of the 1,300 Wave 9 Panel Continuing recruits, 1,138 successfully completed their travel diaries and remain as Puget Sound Transportation Panel members. The following table shows the breakdown of the key demographic characteristics among the 1,138 participating Wave 9 Continuing recruits compared to the desired proportion of the Puget Sound Transportation Panel.

Participating Continuing Household Recruits by County, Transit Type, and Life Cycle Stage			
County	Wave 9 Continuing Recruits		Desired Panel Proportion
	Count	%	%
1 King (COUNTY = 1)	554	48.7%	46.0%
2 Kitsap (COUNTY = 2)	133	11.7%	11.0%
3 Pierce (COUNTY = 3)	228	20.0%	22.0%
4 Snohomish (COUNTY = 4)	223	19.6%	20.0%
TOTAL	1,138	100.0%	100.0%
Household Transit Type			
5 SOV (HHTYPE = 1)	833	73.2%	66.0%
6 Transit (HHTYPE = 2)	211	18.5%	22.0%
7 Carpool (HHTYPE = 3)	94	8.3%	12.0%
TOTAL	1,138	100.0%	100.0%
Life Cycle Stage			
8 With Kids (LIFESTG = 1)	323	28.4%	30.0%
9 1 Adult No Kids (LIFESTG = 2)	264	23.2%	23.0%
10 2+ Adults No Kids (LIFESTG = 3)	551	48.4%	47.0%
TOTAL	1,138	100.0%	100.0%

In summary, of the 1,794 Wave 8 Continuing Households attempted for recruitment 1,300 initially agreed to participate in Wave 9, including 28 new Split Households. Of these, **1,138** Continuing Households completed Wave 9 and, therefore, remain on the Transportation Panel.

Few challenges were encountered during Continuing Household Recruitment. Minor challenges faced during this first phase of the project include:

- With the year 2000 being a Presidential Election year, the number of telephone calls received by residents for surveys, polls, and other political inquiries had increased, and many people were apprehensive about telephone solicitations during this time period. Northwest Research Group, along with other market research firms, experienced a significant decline in response rates across all telephone survey projects, including Wave 9 Puget Sound Transportation Panel recruiting.
- Several of the Continuing Panel members we contacted insisted that they had received notice that the Transportation Panel had been discontinued. It is possible that they misunderstood the announcement letter sent by PSRC before Wave 9, which indicated that this current wave might be the Panel's final wave.
- Furthermore, since respondents were informed in advance that this may be the final wave of the project, some may have chosen not to participate because they no longer sensed the importance of their continued assistance with the project.

Replacement Household Recruitment

The next step was to recruit Replacement Households to bring the total panel size up to approximately 1,750, while attempting to match as closely as possible the proportion of Wave 8 Panel Households based on the criteria discussed above under quota management.

Questionnaire

The survey instrument used to screen and invite replacement households was similar to the Continuing Household screener. The same household and personal characteristics were covered. A more detailed and thorough explanation of the Puget Sound Transportation Panel was presented, emphasizing the importance of the participation of a diverse group of the region's residents. In addition, several questions addressing issues such as traffic congestion and gas prices, were included in the Replacement Household screener.

Sample Management

The sampling method used to replace "drop-out" households was largely RDD (random digit dialing). However, Kitsap County also provided Northwest Research Group with contact names and telephone numbers of Kitsap Transit users, and King County Metro allowed the use of carpool and transit contacts from their annual Rider / Nonrider survey. Efforts to obtain similar lists from the transit agencies in Pierce and Snohomish counties were unsuccessful.

Each Replacement record was loaded into the sample database with a specified telephone number, zip code, county code, and sample type (RDD, Transit, or Carpool). County of residence was used to assist with quota management - production was maximized by masking out sample by county when certain quota groups closed.

Northwest Research Group attempted 24,296 telephone numbers in order to recruit **929** participating Replacement Households. It was estimated that approximately 15% of panel recruits would ultimately drop out even after agreeing to complete Wave 9. Therefore, replacements were over-recruited above and beyond the expected panel size of 1,750 households. A total of 2,229 Continuing and Replacement Households were screened and recruited for Wave 9.

The same method of contact, survey administration, and sample management utilizing the Ci3 CATI network system was employed for replacement recruiting as was used to interview Continuing Households. Quota management was also handled by the Ci3 CATI system to help recruit Replacement Households that match the characteristics of "drop-out" Continuing Households.

Of the 929 Replacement Households recruited, **589** completed Wave 9 and are considered Puget Sound Transportation Panel Households.

Final Sample Disposition Report

Final Sample Disposition Report			
#	<u>Disposition</u>	<u>Total Sample</u>	<u>% Of Sample</u>
1	No Answer	4,141	17.0%
2	Busy	386	1.6%
3	Answering Machine / Voice Mail	2,324	9.6%
4	Business / Nonworking ⁽⁵⁾	6,395	26.3%
5	Immediate Refusal ⁽⁴⁾	3,143	12.9%
7	Never Call ⁽⁴⁾	332	1.4%
8	Screener Refusal ⁽⁴⁾	106	0.4%
9	Communication Barrier ⁽³⁾	239	1.0%
10	Language Barrier ⁽³⁾	267	1.1%
11	Callback Intro / Callback Soft Refusal	301	1.2%
12	Immediate Panel Refusal	1,200	4.9%
13	Out of Puget Sound Area	35	0.1%
14	Over Quota ⁽²⁾	1,711	7.0%
15	Panel Refusal After Qualifying ⁽⁴⁾	958	3.9%
20	Callback Interview ⁽⁷⁾	12	0.0%
21	Mid-Terminated Interviews ⁽⁸⁾	153	0.6%
22	OQ - No One 15 or Older / Kid's Line ⁽²⁾	124	0.5%
23	OQ - No Bus or Carpool ⁽²⁾	1,326	5.5%
24	OQ - Kids In Household ⁽²⁾	214	0.9%
40	Complete - Diary Recruit ^{(1) (6)}	929	3.8%
	Sample attempted ⁽⁵⁾	24,296	100.0%

- Effective Study Incidence = 38%. (Qualified Respondents(1) / [Qualified Respondents(1) + Unqualified Respondents(2)])
- Response Rate = 53%. ([Completed Interviews(6) + Unqualified Respondents(2) + Respondents Terminated(3) + Respondents Refused(4) + Callback Interviews(7) + Mid-Terminated Interviews(8)] / [(Attempted Sample - Numbers No Longer Available(5))])
- Cooperation Rate = 56%. ([Qualified Respondents(1) + Unqualified Respondents(2) + Respondents Terminated(3) - Mid-Terminated Interviews(8)] / [Qualified Respondents(1) + Unqualified Respondents(2) + Respondents Terminated(3) + Respondents Refused(4) - Mid-Terminated Interviews(8)])
- Completion Rate = 5%. (Completed Interviews(6) / [Attempted Sample - Numbers No Longer Available(5)])

Quota Management

Northwest Research Group attempted to match the composition of the Wave 9 Panel to that of the Wave 8 Panel based on county of residence, household transit type, and life cycle stage. Thirty-six quota groups, covering all possible combinations of these characteristics, were tracked during replacement recruiting. A formula was used to estimate the number of replacement recruits needed in each quota group to approximate the proportion of the total Wave 9 recruits in each group to the proportion of Wave 8 households in each group.

The following table illustrates the final proportions of Wave 9 Panel recruits compared to the desired proportion from the original updated Wave 8 Panel.

	Quota Group	Replacement Recruits	Continuing Recruits	Total	Actual Proportion	Desired Proportion
1	King, Stage 1, SOV	49	112	161	7.22%	7.39%
2	King, Stage 2, SOV	78	117	195	8.75%	8.12%
3	King, Stage 3, SOV	77	190	267	11.98%	12.89%
4	King, Stage 2, Transit	34	35	69	3.10%	2.91%
5	King, Stage 3, Transit	45	75	120	5.38%	6.16%
6	King, Stage 1, Transit	41	42	83	3.72%	3.53%
7	King, Stage 3, Carpool	46	20	66	2.96%	2.97%
8	King, Stage 1, Carpool	26	20	46	2.06%	1.85%
9	King, Stage 2, Carpool	7	7	14	0.63%	0.62%
10	Kitsap, Stage 2, Transit	9	2	11	0.49%	0.39%
11	Kitsap, Stage 3, Transit	24	12	36	1.62%	1.06%
12	Kitsap, Stage 1, Transit	22	11	33	1.48%	1.34%
13	Kitsap, Stage 3, Carpool	8	6	14	0.63%	0.45%
14	Kitsap, Stage 1, Carpool	17	8	25	1.12%	0.84%
15	Kitsap, Stage 2, Carpool	1	-	1	0.04%	0.06%
16	Kitsap, Stage 1, SOV	26	30	56	2.51%	2.24%
17	Kitsap, Stage 2, SOV	11	23	34	1.53%	1.34%
18	Kitsap, Stage 3, SOV	28	59	87	3.90%	3.70%
19	Pierce, Stage 3, Carpool	12	11	23	1.03%	1.29%
20	Pierce, Stage 1, Carpool	22	11	33	1.48%	1.40%
21	Pierce, Stage 2, Carpool	1	3	4	0.18%	0.22%
22	Pierce, Stage 1, SOV	46	55	101	4.53%	4.59%
23	Pierce, Stage 2, SOV	35	42	77	3.45%	4.03%
24	Pierce, Stage 3, SOV	66	111	177	7.94%	8.29%
25	Pierce, Stage 2, Transit	3	10	13	0.58%	0.39%
26	Pierce, Stage 3, Transit	4	16	20	0.90%	0.95%
27	Pierce, Stage 1, Transit	9	10	19	0.85%	0.73%
28	Snohomish, Stage 1, SOV	50	50	100	4.49%	4.20%
29	Snohomish, Stage 2, SOV	27	45	72	3.23%	3.14%
30	Snohomish, Stage 3, SOV	49	98	147	6.59%	6.95%
31	Snohomish, Stage 2, Transit	4	7	11	0.49%	0.56%
32	Snohomish, Stage 3, Transit	17	10	27	1.21%	1.29%
33	Snohomish, Stage 1, Transit	14	17	31	1.39%	1.29%
34	Snohomish, Stage 3, Carpool	16	9	25	1.12%	1.46%
35	Snohomish, Stage 1, Carpool	3	23	26	1.17%	1.12%
36	Snohomish, Stage 2, Carpool	2	3	5	0.22%	0.22%
	Total	929	1,300	2,229	100%	100%

Ultimately, the key demographic characteristics of the recruited Wave 9 panel members, Continuing and Replacement Households combined, closely approximate the desired proportion of the Puget Sound Transportation Panel.

Households Recruited for the Wave 9 Transportation Panel by County, Transit Type, and Life Cycle Stage			
County	Recruited Wave 9 Panel Households		Desired Panel Proportion
	Count	%	%
1 King (COUNTY = 1)	1,021	45.8%	46.0%
2 Kitsap (COUNTY = 2)	297	13.3%	11.0%
3 Pierce (COUNTY = 3)	467	21.0%	22.0%
4 Snohomish (COUNTY = 4)	444	19.9%	20.0%
TOTAL	2,229	100.0	100.0%
Household Transit Type			
5 SOV (HHTYPE = 1)	1,474	66.1%	66.0%
6 Transit (HHTYPE = 2)	473	21.2%	22.0%
7 Carpool (HHTYPE = 3)	282	12.7%	12.0%
TOTAL	2,229	100.0	100.0%
Life Cycle Stage			
8 With Kids (LIFESTG = 1)	714	32.0%	30.0%
9 1 Adult No Kids (LIFESTG = 2)	506	22.7%	23.0%
10 2+ Adults No Kids (LIFESTG = 3)	1,009	45.3%	47.0%
TOTAL	2,229	100.0%	100.0%

In-Migrant Households

Northwest Research Group also made an effort to recruit new residents to the four-county Puget Sound area, or in-migrant households, to replace the 7 panel members who had moved out of the region since Wave 8, as well any unreachable household that may have moved out of the area. An in-migrant household is defined as one that moved into the Puget Sound area within the past year. Replacement recruiting yielded 19 in-migrant households, distributed across the four counties as follows:

In-Migrant Households		
County	Count	Percent
King	7	37%
Kitsap	3	16%
Pierce	5	26%
Snohomish	4	21%
Total	19	100%

Timeline

Telephone interviewing to screen and recruit Replacement Households took place largely after finishing Continuing Household recruitment. Waiting until the near completion of Continuing Household recruitment ensured a more accurate representation of the Transportation Panel, in that we were able to calculate the number of households needed in each quota group to make up for "drop-out" households prior to recruiting Replacements. However, there was some overlap designed to expedite diary data collection. The original goal was to schedule all diary dates prior to the Thanksgiving weekend. This goal was not met, and panel recruitment took substantially longer than expected. The replacement screening and recruiting portion of data collection was spread out between November 2nd and January 15th, with reminder calls being made through February 15th.

Wrap-Up

In summary, 929 Replacement Households were initially recruited to the Puget Sound Transportation Panel. Of these, 589 successfully completed Wave 9 travel diaries. Therefore, the Wave 9 Puget Sound Transportation Panel consists of 1,727 households. This is lower than the expected panel size of 1,750, but it meets the minimum requirement of 1,715.

Challenges encountered during Replacement recruiting include:

- The lower response rate noted during Continuing Household recruitment due to the Presidential Election continued to be a barrier during Replacement recruiting.
- As a result of this lower response rate, there was a lag in building the panel, and consequently the schedule of diary dates extended past the Thanksgiving weekend. This delay, in turn, caused further difficulty in recruiting the panel, as many households were on vacation during the holiday season, missed their diary dates, and ultimately chose not to participate in the study. Therefore, it was necessary to recruit more Replacement Households than we had originally anticipated.
- Detailed management of quota groups - as diary collection transpired and panel recruits decided to discontinue their participation, quota groups had to be carefully monitored to maintain the required proportions.
- Soft refusals – data collection personnel were trained specifically to handle soft refusals when inviting new households to join the panel. The responsibility of being on the panel may have seemed too great to new respondents, so interviewers emphasized the importance of the panel to city planning and improvements and the importance of including all household types.

Travel Diary / Attitude Survey

For Wave 9 of the Transportation Panel, Northwest Research Group chose to use the same method of collecting diary data that had been used prior to Wave 8. During Wave 8, project materials were mailed to survey respondents, respondents were called to confirm receipt of their materials, and at that time they were also asked to make an appointment for reporting their household's trip diary information via telephone.

While this method of collecting the travel data has some advantages – such as the opportunity to probe for clarity, decrease the amount of missing data, and answer respondent questions – we decided that the quality of the data collected is not necessarily more accurate. Without being able to review travel diaries returned by respondents, we do not know whether they were filled out properly, if at all. Moreover, collecting the information over the telephone places a higher burden on respondents, and therefore, could negatively impact participation rates. From a management standpoint, multiple methodologies (respondents were also given the option to mail their diaries, if preferred) complicated the data preparation involved in the project, as well.

This year – similar to previous waves – travel diaries and attitude surveys were mailed to panel households along with written instructions, a letter from PSRC, a \$2 incentive, and return envelopes. All project materials were returned to Northwest Research Group by mail. Upon receiving the mail-in returns, travel information and attitude surveys were data entered, and respondents were called back for clarification when needed.

Moreover, Wave 9 methodology differed from Wave 8 in that this year all project materials – including travel diaries, diary supplements, and attitude and values surveys – were mailed to panel households in one survey packet. During Wave 8 there was a delay in finalizing the design of the attitude and values survey, so a separate mailing was conducted for this portion of the study.

Questionnaire

Travel Diary

The two-day travel diary and diary instructions used for Wave 9 were similar to the materials used during previous waves of the panel. A new Supplemental Diary form was implemented for Wave 9, to meet the objectives related to the influence of ATIS on traveler behavior at the trip level.

Each member of the household who is at least 15 years of age received a Day 1 and a Day 2 travel log plus a Supplemental Diary page. A label at the top of each diary page indicated the name, id number, and telephone number of the intended panel member and his/her assigned days of the week. All participating household members were instructed to complete their trip diaries on the same two days of the week.

The following information was gathered about personal travel during the assigned two-day period:

- Whether any trips were made on each assigned day,
- The starting location of each day and the reason for being there,
- The start and end times of each trip,
- The address of each destination,
- The trip purpose,
- The mode of travel,
- The total number of people travelling,
- The relationship to others travelling, and
- Whether traveler information was consulted in planning each trip.

The diaries were designed for respondents to give open-ended answers to the above questions about each trip he or she made on a given day. A list of possible of valid responses was provided on the survey instrument for assistance. All responses, with the exception of the address information, were coded into pre-existing categories. An "other" option was available for responses that interviewers could not fit into any existing category. The address information was entered as written by the respondent, and it was cleaned and standardized to the best of our ability.

Attitude and Values Survey

All Wave 9 panel recruits were also asked to complete an attitude and values survey that explored awareness and use of traveler information services related to time, traffic, transit, and technology in Seattle. Questions from the original Wave 7 attitude and values survey, which was designed to gather data on the influence of advanced traveler information systems (ATIS), were revised as necessary and re-asked this year. The Wave 9 attitude and values survey consisted of:

- A household survey addressing ownership of auto, telecommunications, and computer equipment and services, and
- A personal survey for each household member 15 years of age or older addressing traffic information services on the Internet and other media, and attitudes related to commuting and travel in the greater Seattle area.

The attitude and values survey contained mostly closed single and multiple response check-box and scaled response questions. Attitude scales were typically eleven points in length, ranging from 0 to 10. Respondents were given the opportunity to specify additional sources of traffic information that were not named in the survey, as well space to write in responses to questions where all possible choices were not already listed.

Supplemental Diary

As part of the Wave 9 attitude and values survey about ATIS, a supplement to the trip diary was included as part of the travel log. For each trip for which respondents consulted traffic, transit, or ferry information, he or she provided the following information:

- Trip number and day of trip from travel diary
- Whether travel information was consulted prior to the trip or en route
- Reason for consulting travel information
- Sources of travel information consulted
- Impact of travel information on the trip
- If changes were made to the trip, what prompted the change
- The primary benefit sought by consulting travel information

Respondents entered letter codes corresponding to possible answers from a pre-coded list written on the supplemental form.

Personal ID Numbers

In order to link the trip data to the personal information gathered during the screening process, each travel log was labeled with a name, personal id number, telephone number, and the day and date to which the household was assigned. The personal id number consists of a household id number (which is the same for all household members) followed by a person indicator – typically from 01 to 07 (for example: 20501-02 would represent the second person in household number 20501). The personal id numbers carried over from Wave 8 for Continuing Panel members. Therefore, Wave 9 personal and trip information can be connected to data from previous waves. As they were recruited, Replacement Panel members were assigned unique household and personal id numbers, beginning where the Wave 8 household id numbers left off.

Personal Attitude and Values surveys were also labeled with names and personal id numbers, so traveler information data can be linked to other demographic and trip characteristics. Household Attitude surveys were labeled with household id numbers, and can therefore be linked to other household information.

New household members were assigned personal id numbers and incorporated into the panel. Names of new members were cross-checked against a database of all current and past Transportation Panel members. Returning household members were given their original personal id numbers, and the id numbers assigned to true new household members were unique.

Project Materials Mailing

Distribution of the travel diaries and attitude surveys involved preparing the mail-out materials, accurately labeling the different questionnaires, scheduling the diary dates, and making reminder calls to panel participants. Each Continuing and Replacement Household was mailed a travel diary packet that included the following:

- Cover letter from PSRC
- Diary instruction sheet - explaining each section of the travel log, as well as how to handle special situations such as ferry trips, picking up carpool members, bus transfers, etc.
- A sample diary completed correctly, illustrating a variety of potential trips
- One \$2 bill for each participating household member
- Two clearly labeled travel logs (Day 1 and Day 2) for each participating household member
- A Supplemental Diary page for each participating household member
- One household attitude and values survey
- Personal attitude and values surveys for each participating household member
- A postage-paid return envelope addressed to Northwest Research Group

Diary packets were mailed to panel households in batches. Mailings took place within a week of contacting panel households. Mailings and panel recruiting were done concurrently, so that panel members who were recruited early in the process did not have to wait until the end of recruitment to receive their diaries.

Continuing Household mailings were prepared by pulling the names, household and personal id numbers, addresses, telephone numbers, and Wave 8 diary dates for all participating household members from the Wave 9 screener data. Replacement Household mailings were prepared by pulling the names, addresses, and telephone numbers of new recruits, assigning new household and personal id numbers, and assigning diary dates to households newly recruited for Wave 9.

If there were any discrepancies in the number of household members participating in the study, the contact person was re-called to clarify the correct number of people, their names, and to make sure their personal information was updated.

Wave 9 diary dates were assigned according to the following schedule:

Wave 9 Travel Diary Dates		
Continuing Households		
Mailing Date	Range of Diary Dates	
October 6	Wed, Oct 11 - Thurs, Oct 12	Tues, Oct 17 – Wed, Oct 18
October 12	Tues, Oct 17 – Wed, Oct 18	Mon, Oct 23 – Tues, Oct 24
October 18	Mon, Oct 23 – Tues, Oct 24	Thurs, Oct 26 – Wed, Oct 27
October 27	Wed, Nov 1 – Thurs, Nov 2	Tues, Nov 7 – Wed Nov 8
November 2	Wed, Nov 8 – Thurs, Nov 9	Thurs, Nov 16 – Fri Nov 17
November 9	Mon, Nov 13 – Tues, Nov 14	Thurs, Nov 23 – Fri Nov 24
November 21	Mon, Nov 27 – Tues, Nov 28	Thurs, Nov 30 – Fri Dec 1
December 1	Tues, Dec 5 – Wed 6	Mon, Dec 11 – Tues, Dec 12
December 11	Thurs, Dec 14 – Fri, Dec 15	Wed, Dec 20 – Thurs, Dec 21
Replacement Households		
Mailing Date	Range of Diary Dates	
November 9	Mon, Nov 13 – Tues, Nov 14	Thurs, Nov 16 – Fri Nov 17
November 25	Thurs, Nov 30 – Fri, Dec 1	Wed, Dec 6 – Thurs, Dec 7
December 1	Tues, Dec 5 – Wed 6	Mon, Dec 11 – Tues, Dec 12
December 6	Mon, Dec 11 – Tues, Dec 12	Tues, Dec 12 – Wed 13
December 11	Thurs, Dec 14 – Fri, Dec 15	Thurs, Dec 14 – Fri, Dec 15
December 14	Tues, Dec 19 – Wed, Dec 20	Tues, Dec 19 – Wed, Dec 20
December 15	Wed, Dec 20 – Thurs, Dec 21	Wed, Dec 20 – Thurs, Dec 21
December 18	Thurs, Dec 21 – Fri, Dec 22	Thurs, Dec 21 – Fri, Dec 22
January 8	Mon, Jan 15 – Tues, Jan 16	Wed, Jan 17 – Thurs, Jan 18
January 12	Wed, Jan 17 – Thurs, Jan 18	Wed, Jan 17 – Thurs, Jan 18
January 15	Thurs, Jan 18 – Fri, Jan 19	Thurs, Jan 18 – Fri, Jan 19
January 16	Mon, Jan 22 – Tues, Jan 23	Tues, Jan 23 – Wed, Jan 24

Reminder Calls

Survey respondents received reminder calls approximately two to three days before their assigned diary dates. Reminder calls served several purposes:

- Interviewers offered to answer any questions that respondents may have had,
- Households who did not receive their diary materials for one reason or another were identified and re-mailed survey packets, and
- Panel members who were unable to complete their diaries on their assigned dates were instructed to keep their materials and record their travel information on the same two days of a later week.

Processing Returns

Upon receiving the diary returns, data entry staff batched the various survey forms separately. Household Attitude Surveys were batched into envelopes of 100, the Personal Attitude Surveys were batched into envelopes of 100, and the diaries for each household member (including the Supplemental Diary) were stapled together by household and batched into envelopes of 50 households. For identification purposes, household id numbers were present on the Household Attitude Surveys, personal id numbers and names were indicated on the Personal Attitude Surveys, and personal id numbers, names, phone numbers, and diary dates were printed on the travel diaries.

As returns were received by Northwest Research Group, a spreadsheet was maintained so that households who returned their diaries were checked off and additional reminder calls were made to households who did not return their survey materials.

Data Entry

Once batched, the paper surveys were cleaned and coded by data entry staff according to predetermined rules. This standardized cleaning and coding procedure simplifies and expedites the task of data entry. These cleaning and coding rules can be found in the Project Materials section of this report.

Surveys were then data entered and verified for accuracy. Three different programs were set up for data entry: one for the Household Attitude Survey, one for the Personal Attitude Survey, and one for the travel diaries. While the Attitude Surveys were entered as one survey per data entry record, the travel diaries were entered as one household per record, and the individual household members were separated later during data preparation.

The final databases were reviewed for quality by the project manager before data preparation.

Wrap-Up

Diary data collection took place over a four-month period, from October 2 to January 15. However, no diary dates (including those that were re-assigned due to vacation or missed dates) extended past Friday, February 2nd.

All interviewers assigned to the project attended a project briefing / training session. The sessions included the purpose and background of the study, a discussion of issues and technical information specific to the study, and a question-by-question examination. Daily interviewing was continually monitored with a supervisor to interviewer ratio of 1:8. A complete interview was observed at least once every shift for each interviewer. A supervisor was immediately available to handle any questions that arose during an interview. Supervisors were also responsible for handling incoming calls from panel members and connecting callers to trained interviewers for immediate diary collection.

In summary, Northwest Research Group recruited a total of 2,229 households to reach a final panel size of 1,727 households with completed diaries. This includes 100 partial households. However, partial households may include those who originally named children who are away at school or other individuals who did not complete diaries because they are not actually current members of the household.

Challenges encountered during diary data collection include:

- Dates of data collection – this year recruiting fell directly during the 2000 Presidential Election, which made it more difficult to reach and gain the cooperation of potential respondents. To an extent, this delayed the dates of diary collection. Moreover, this obstacle pushed diary dates into the holiday season, which increased the potential for missed diary dates due to vacations and busy schedules, and in turn pushed the timing of re-assigned diary dates even further into the year 2001. Overall the timing of data collection resulted in more drop-out households due to missed dates and refusing the re-mailing of new diaries, as well as a longer and more drawn out diary collection period than originally anticipated.
- Respondents completing diaries incorrectly, doing their diaries on the wrong dates, or returning blank diaries when out of town during their assigned dates - whenever possible, respondents were called back to rectify their situations. This may have involved a simple clarification or having to issue new travel diaries and dates.
- High level of detail management needed to assign id numbers accurately and distribute materials to the correct households and household members – while limiting data collection to one methodology this year (self-administered mail-back questionnaires) improved our ability to accurately track households, attention to detail remained imperative.

- Sample management - because diary returns were not automatically updated in the computer, as they were in 1999 when Ci3 CATI was used to enter and process completed diaries, it was a more difficult task to keep track of who had and who had not returned their project materials. An Excel spreadsheet was used to indicate complete and partial returns as they came in based on household id number. Updates were given to the field staff daily, so that they would not make reminder calls to households that should be considered complete.
- Ensuring a final panel size of at least 1,715 - Replacement recruiting occurred simultaneously with diary collection, so that late "drop-out" households could be replaced in the appropriate proportions. Soft refusals and over quota households were saved and re-called if they fit the desired demographic profile. Each quota group was over-recruited by a calculated amount, in order to ensure a representative Wave 9 panel.

Sample

Stratification of Wave 9 Transportation Panel

One of the important goals of this study was to match the composition of the Wave 9 panel to that of previous Transportation Panels. Due to the increased number of drop-out households this year (among both drop-out Continuing and non-participating Replacement recruits), it was more of a challenge to approximate the stratification of the Wave 9 panel by County, Transit Type, and Life Cycle to the expected number of panel members in each category. The following table illustrates the final sample stratification of the Wave 9 participating panel households.

Actual vs. Expected Wave 9 Transportation Panel Households by County, Household Transit Type, and Life Cycle Stage			
County	Actual Wave 9 Panel Households		Desired Panel Proportion
	Count	%	%
1 King (COUNTY = 1)	810	46.9%	46.0%
2 Kitsap (COUNTY = 2)	225	13.0%	11.0%
3 Pierce (COUNTY = 3)	358	20.7%	22.0%
4 Snohomish (COUNTY = 4)	334	19.3%	20.0%
TOTAL	1,727	100.0	100.0%
Household Transit Type			
5 SOV (HHTYPE = 1)	1,193	69.1%	66.0%
6 Transit (HHTYPE = 2)	345	20.0%	22.0%
7 Carpool (HHTYPE = 3)	189	10.9%	12.0%
TOTAL	1,727	100.0	100.0%
Life Cycle Stage			
8 With Kids (LIFESTG = 1)	495	28.7%	30.0%
9 1 Adult No Kids (LIFESTG = 2)	417	24.1%	23.0%
10 2+ Adults No Kids (LIFESTG = 3)	815	47.2%	47.0%
TOTAL	1,727	100.0%	100.0%

Comparison of Travel Diary Participants and Wave 9 Non-respondents

It is also valuable to compare the demographic profiles of participating Wave 9 panel households and non-respondents to assess the possible effects of nonresponse bias in this study. The following tables outline the significant differences between Wave 9 panel households, or those who completed travel diaries, and those who did not participate. Those who did not participate include refusals post-recruitment and those who Northwest Research Group was unable to reach to clarify household composition information.

Demographic Differences Between Wave 9 Diary Returners and Non-respondents		
	Percent of Total	
	Diary Returners n = 1727	Non-respondents n = 502
Years at Current Address		
Less than 1	5%	13%
1 to 5	23	40
6 to 10	23	19
11 to 20	23	15
More than 20	27	13
Years in Current County		
Less than 1	1%	4%
1 to 5	10	20
6 to 10	12	8
11 to 20	20	20
More than 20	57	39
Household Size		
One	24%	18%
Two	42	31
Three	14	18
Four	13	22
Five	5	7
More than Five	2	4
Mean	2.4	2.8
Presence of Children		
Yes	29%	44%
No	71	56
Rent or Own Home		
Rent	15%	32%
Own	85	68
Number Employed Full-Time		
Zero	26%	9%
One	34	32
Two	33	48
Three	6	9
More than Three	1	3
Mean	1.2	1.7

Demographic Differences Between Wave 9 Diary Returners and Non-respondents [continued]		
	Percent of Total	
	Diary Returners	Non-respondents
Life Cycle Stage		
1 – Preschool Age Children	8%	18%
2 – School Age Children	20	26
3 – One Adult Under 35	2	4
4 – One Adult 35 to 64	14	10
5 – One Adult Over 65+	9	4
6 – Two Adults Under 35	3	8
7 – Two Adults 35 to 64	28	25
8 – Two Adults Over 65+	17	6
Household Transit Type		
SOV	69%	56%
Transit	20	26
Carpool	11	18
Wave		
One	18%	3%
Two	2	< 1
Three	3	< 1
Four	4	1
Five	4	1
Six	11	4
Seven	12	6
Eight	12	17
Nine	34	68

- Diary returners have lived at their current residence longer than non-respondents. Similarly, those who returned their diaries have lived in their current county longer than non-respondents. Perhaps longer-term residents are more inclined to participate because of a greater personal interest in the topic of this study.
- Households with only 1 or 2 members are more likely to be Wave 9 participants. Completing a diary for each household member 15 years of age or older may have been a more onerous task for larger households.
- Returning travel diaries is more common among households with children under the age of 18. Again, the respondent-burden of completing the survey may have played a role in the greater nonresponse among households with children, as these respondents are likely to be busier than those without children.
- Diary returners are more likely to be homeowners than renters.
- Travel diaries are more likely to have been completed by households with fewer full-time employees. Perhaps the individuals in these households had more time to fulfill their obligation to this study.
- Similar to the finding related to presence of children in the home, those who have completed travel diaries are less likely to be in life cycle stages 1 or 2 (meaning those with children). Additionally, Wave 9 participants are more likely than non-participants to be older, meaning over the age of 64.

- While returning travel diaries is more common among SOV households, non-respondents are more likely to be from transit and carpool households.
- Households that have been panel members since the beginning of the study are much more likely to have continued their participation. Only three percent of non-respondents were recruited in Wave 1, compared to eighteen percent of diary returners. Moreover, a large percentage of Replacement Households recruited for Wave 9 did not complete their travel diaries. Nearly two-thirds (64%) of non-respondents came from Wave 9 Replacement Households.
- Panel members from all four counties were equally likely to complete travel diaries. King County had the highest participation rate (79%), and Snohomish had the lowest (75%).
- Furthermore, no significant differences were found in the income, proximity to transit, or number of vehicles available for use among participating panel households and non-respondents.

Comparison by Travel Mode

Significant differences were also observed between panel households of the three transit types. Among the 1,727 Wave 9 Households, sixty-nine (69%) were SOV, one out of five (20%) had at least one regular transit user, and eleven percent (11%) had at least one carpooler.

Demographic Differences by Household Transit Type			
	Percent of Total		
	SOV N = 1,193	Transit N = 345	Carpool N = 189
County			
King	44%	59%	45%
Kitsap	12	16	12
Pierce	24	11	21
Snohomish	20	14	22
Years at Current Address			
Less than 1	5%	6%	5%
1 to 5	19	30	32
6 to 10	23	21	23
11 to 20	23	23	26
More than 20	31	20	14
Years in Current County			
Less than 1	2%	1%	1%
1 to 5	8	14	13
6 to 10	11	15	16
11 to 20	19	21	26
More than 20	61	49	45
Household Size			
One	26%	24%	11%
Two	44	37	38
Three	12	18	19
Four	11	15	18
Five	4	4	11
More than Five	2	2	4
Mean	2.3	2.4	2.9

Demographic Differences by Household Transit Type [continued]			
	SOV	Percent of Total Transit	Carpool
Presence of Children			
Yes	25%	32%	47%
No	75	68	53
Rent or Own Home			
Rent	13%	24%	12%
Own	87	76	88
Number Employed Full-Time			
Zero	34%	13%	0%
One	33	39	30
Two	28	39	55
Three	4	7	12
More than Three	1	1	3
Mean	1.1	1.4	1.9
Life Cycle Stage			
1 – Preschool Age Children	7%	8%	14%
2 – School Age Children	18	24	32
3 – One Adult Under 35	2	2	1
4 – One Adult 35 to 64	13	16	10
5 – One Adult Over 65+	11	5	0
6 – Two Adults Under 35	2	4	4
7 – Two Adults 35 to 64	27	28	34
8 – Two Adults Over 65+	20	13	5
Number of Vehicles			
Zero	2%	13%	0%
One	27	28	18
Two	42	39	42
Three	21	14	27
More than Three	9	6	13
Mean	2.2	1.7	2.4
Proximity to Transit			
1 Block or Less	22%	36%	22%
2 Blocks	13	19	13
3 to 12 Blocks	20	16	23
1 Mile	20	13	20
More than 1 Mile	26	16	22
Income			
Less than \$25,000	11%	15%	3%
\$25,000 to \$35,000	14	8	3
\$35,000 to \$45,000	16	13	10
\$45,000 to \$55,000	13	17	17
\$55,000 to \$75,000	18	21	31
\$75,000 or More	29	26	36

Demographic Differences by Household Transit Type [continued]			
	SOV	Percent of Total Transit	Carpool
Wave			
One	21%	12%	10%
Two	2	1	2
Three	3	3	2
Four	4	3	4
Five	4	5	2
Six	11	11	9
Seven	13	12	6
Eight	11	14	15
Nine	30	39	50

- Wave 9 panel households from King County have the highest incidence of transit users – 59% of Transit households are from King County.
- Drive-alone households are more likely to be longer-term Puget Sound residents. This may also reflect differences by household transit types among older panel members (meaning those over the age of 64).
- Carpool households are typically larger, with an average household size of three members. This would be expected, because commuting with other household members is considered carpooling for this study.
- Similarly, households with a member who regularly carpools to work are more likely to have children under 18 present in the home.
- Transit households are more likely to be renters than homeowners, while those from SOV and carpool households tend to own their homes.
- Carpooling is more common among households with two or more members who are employed full-time. This may suggest that members of these households are likely to commute to work together.
- Carpool households are more likely to be from life cycle stage 1 or stage 2 (with children), while SOV households are more commonly in stage 5 or stage 8 (over the age of 64).
- A relationship exists between the number of vehicles per household and household transit type. Those with a regular transit user in the household have fewer vehicles available for their use.
- Similarly, transit households tend to live within 2 blocks of a bus stop, while carpool and SOV households are more likely to live at least 1 mile away from a bus stop.
- It appears as if carpool households typically have higher incomes. However, by definition, carpool households had to have at least one member employed outside the home. This possibly explains the higher income among carpool households.
- A higher percentage of drive-alone households began the study during its first wave (21%), compared to transit and carpool households (12% and 10%, respectively). Moreover, Replacement Households make up thirty-nine percent of transit households and half of carpool households (50%). This could indicate a higher incidence of “drop-out” among transit and carpool households.

Discussion of Wave 9 Attrition

Throughout the course of this study, Panel Households may have moved out of the four-county Puget Sound Region or decided to discontinue their participation. The resulting panel attrition had to be offset by replacing "drop-out" households with new recruits.

- The attrition rate for Wave 9 was initially estimated at 15%.
- Of the original 1,801 Continuing Households, 1,138 successfully completed Wave 9 of the Transportation Panel. Therefore, the actual attrition rate for Wave 9 was approximately 37% - more than double what was anticipated.
- However, since the final Panel size was reduced to 1,727 this period, only one-third (34%) of the Wave 9 Panel is made up of Replacement Households.

The following table illustrates the breakdown by Wave of current Panel members:

Panel Households by Wave		
Wave	Wave 9 Participating Panel Households	
	Count	%
1	315	18.2%
2	34	2.0%
3	51	3.0%
4	70	4.1%
5	70	4.1%
6	184	10.7%
7	205	11.9%
8	209	12.1%
9	589	34.1%
TOTAL	1,727	100.0%

Since a primary objective of the Wave 9 Transportation Panel is to measure the impact of ITS efforts since the timing of the Wave 7 Panel survey, it was important to retain as many Wave 7 households as possible. Of the 1,351 Wave 7 households who were attempted this year, 929 remain. This is sixty-nine percent of the Wave 7 Continuing Households.

The following factors may have contributed to the attrition occurring in Wave 9:

- For the Wave 9 Transportation Panel, Northwest Research Group reverted to the traditional methodology that was used to collect diary data from Wave 1 to Wave 7. While this method is less of a burden to respondents than the telephone interviewing method employed in Wave 8, it also made it more difficult to ensure timely participation. When diary data was collected over the telephone, appointments were set with survey respondents for reporting their household's trip information to a telephone interviewer. The impression of a deadline, with an upcoming scheduled appointment, may have encouraged respondents to complete their obligation to the project more immediately.
- Wave 9 Panel Recruitment took place largely during the months of October and November, during which the 2000 Presidential Election was taking place. Due to apprehension among the public regarding increased political and election polling, Northwest Research Group, along with other market research firms, experienced a significant decline in response rates across all telephone survey projects, including Wave 9 Puget Sound Transportation Panel recruiting.

- Since recruiting got off to a slower-than-expected start, some diary dates were pushed into December and January, which is during the holiday season when many people are busy or out of town. We made certain not to assign any diary dates during the holidays (Thanksgiving, Christmas, the week between Christmas and New Years, and New Years). However, if respondents missed their dates around these time periods, they were left with fewer opportunities to complete their Travel Diaries. Moreover, many households chose not to continue after missing their diary dates this year, perhaps because their schedules were just too full.
- Several of the Panel members we contacted insisted that they had received notice that the Transportation Panel had been discontinued. It is possible that they misunderstood the announcement letter sent by PSRC before Wave 9, which indicated that this current wave might be the Panel's final wave. Furthermore, since respondents were informed in advance that this may be the final wave of the project, some may have chosen not to participate because they no longer sensed the importance of their continued assistance with the project.
- Finally, a new survey form, the Supplemental Travel Diary, was added to the responsibilities of Panel Household members this year. Once receiving and viewing the survey forms, some people may have felt that we were asking them to do too much, as we did experience an increase in the number of returned and refused survey packets this year.

Panel Retention Rates per Year

Survey Retention Rates per Year 1989 – 2000									
Wave	1	2	3	4	5	6	7	8	9
1 1989	Cont.	1,712 100%	1,385 81%	1,080 63%	937 55%	808 47%	543 32%	468 27%	315 18%
	Replace	399 100%	154 39%	137 34%	117 29%	78 20%	68 17%	47 12%	34 8%
2 1990	Total	1,784 100%	1,234 69%	1,074 60%	925 52%	621 35%	536 30%	439 25%	349 19%
	Replace		362 100%	267 74%	190 52%	116 32%	94 26%	70 19%	51 14%
3 1992	Total		1,596 100%	1,341 84%	1,115 70%	737 46%	630 39%	509 32%	400 25%
	Replace			565 100%	319 56%	175 31%	134 24%	97 17%	70 12%
4 1993	Total			1,906 100%	1,434 75%	912 48%	764 40%	606 32%	470 25%
	Replace				335 100%	173 52%	124 37%	92 27%	70 21%
5 1994	Total				1,769 100%	1,085 61%	888 50%	698 39%	540 31%
	Replace					668 100%	443 66%	297 44%	184 28%
6 1996	Total					1,753 100%	1,331 76%	995 57%	724 41%
	Replace						659 100%	360 55%	205 31%
7 1997	Total						1,990 100%	1,355 68%	929 47%
	Replace							453 100%	209 46%
1999	Total							1,808 100%	1,138 63%
9 2000	Replace								589
	Total								1,727

Project Materials

Recruitment

Continuing Screener

2000 Puget Sound Transportation Panel – Wave 9

SEA-00-153

Continuing Household Screener

INT1 May I please speak with _____?

[IF NECESSARY: This is _____ from Northwest Research Group, a public opinion research firm in Bellevue. We are working with the Puget Sound Regional Council and local transportation planners on a study of travel patterns, needs, and opinions in the Puget Sound area. Our records indicate that your household is a member of the Puget Sound Transportation Panel.]

- 1 [IF CONTACT AVAILABLE, PRESS "1"]
- 2 [IF CONTACT NO LONGER AT THIS NUMBER, PRESS "2"]
- 3 [IF CONTACT NOT AVAILABLE, HIT CTRL-END TO SCHEDULE A CALLBACK]

CMDI

INT2 IF CONTACT NO LONGER AT THIS NUMBER:

PROBE: "Are you a member of the Puget Sound Transportation Panel?"

- 1 YES [SKIPTO INTROA]
- 2 NO / DON'T KNOW / REFUSED

INT3 [IF INT2 = 2] Do you have a new phone number for _____?

- 1 YES
- 2 NO / DON'T KNOW / REFUSED [SKIPTO THANK5, DISPOS = 37]

INT4 [RECORD THE NEW PHONE NUMBER AND CONTACT INFORMATION ON YOUR CALL RECORD SHEET, HIT CTRL-END AND DISPOSITION AS A CALLBACK WITH THE NEW PHONE NUMBER]

INTROA

[CONTACT ON PHONE]

(Hello, this is _____ from Northwest Research Group, a public opinion research firm in Bellevue. We are working with the Puget Sound Regional Council and local transportation planners on a study of travel patterns, needs, and opinions in the Puget Sound area. Our records indicate that your household is a member of the Puget Sound Transportation Panel.) The Regional Council recently mailed you a letter regarding Wave 9 of this research project. The continuing participation of your household in Wave 9 is very important to the study and will help improve mobility for everyone in the region. I would like to take a few minutes to update your household information and note any changes from when you last participated in the study. This call may be monitored for quality purposes.

- 1 OK – CONTINUE [SKIPTO A1A]
- 2 CALL BACK AT A MORE CONVENIENT TIME [CTRL-END, SCHEDULE A CALL-BACK]
- 3 HOUSEHOLD DOES NOT WANT TO CONTINUE ON THE PANEL

INTROB [IF INTROA = 3] I would like to point out that the transportation panel is a unique study because the travel patterns of panel members are studied over time, and this is our only source of data on changes in transportation patterns. Therefore, your continuing participation is extremely important. The information you provide will be used to help us measure the impact and benefits of advanced traveler information systems in the region as well as update the region's Metropolitan Transportation Plan. Are you willing to continue as a panel household?

[IF NECESSARY: "I could call back at a more convenient time."]

- 1 OK – CONTINUE [SKIPTO A1A]
- 2 CALL BACK AT A MORE CONVENIENT TIME [CTRL-END]
- 3 HOUSEHOLD REFUSES TO CONTINUE ON THE PANEL

INTROC [IF INTROB = 3] Ok. It would be really helpful if I could ask you just a few brief questions to note any changes in your household information since the last wave of the study.

- 1 OK – CONTINUE [QUIT = 1]
- 2 NO – PANEL REFUSAL, NO INFO [SKIPTO THANK3, DISPOS = 38]

A1A Do you still live in _____ county?

- 1 YES [SKIPTO A2A]
- 2 NO
- 9 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]

QAL THANK4

A1B [IF A1A = 2] What county do you live in?

- 1 KING
- 2 KITSAP
- 3 PIERCE
- 4 SNOHOMISH
- 5 OTHER - MOVED OUT OF AREA [SKIPTO THANK2]
- 9 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]

CNTYCODE

1 = King
2 = Kitsap
3 = Pierce
4 = Snohomish

A2A To verify, is your home zip code still _____?

- 1 YES [SKIPTO A3]
- 2 NO
- 9 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]

A2B [IF A2A = 2] What is your correct zip code?

- _____ ENTER ZIP CODE
- 99999 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]

A3 [IF QUIT = 1, SKIP] How long have you lived in your current residence?

[READ IF REFUSED]

- 1 (Less Than One Year)
- 2 (One To Three Years)
- 3 (Four To Five Years)
- 4 (Six To Ten Years)
- 5 (Eleven To Twenty Years)
- 6 (More Than Twenty Years)
- 9 DON'T KNOW / REFUSED

A4 [IF QUIT = 1, SKIP] And how long have you lived in your county?

[READ IF REFUSED]

- 1 (Less Than One Year)
- 2 (One To Three Years)
- 3 (Four To Five Years)
- 4 (Six To Ten Years)
- 5 (Eleven To Twenty Years)
- 6 (More Than Twenty Years)
- 9 DON'T KNOW / REFUSED

A5 [IF QUIT = 1, SKIP] Do you rent or own your current home?

- 1 RENT
- 2 OWN
- 9 DON'T KNOW / REFUSED

C1A How many people in your household, age fifteen or older, ride a local bus at least four times a week? Please count a round-trip as two rides.

- _____ ENTER NUMBER OF PEOPLE
- 8 8 OR MORE
- 9 DON'T KNOW / REFUSED

C1B [IF QUIT = 1, SKIP] [IF C1A GT 0 AND LT 9] Which bus system is that?

- 1 METRO / KING COUNTY METRO
- 2 COMMUNITY TRANSIT / CT
- 3 EVERETT TRANSIT
- 4 PIERCE TRANSIT
- 5 KITSAP TRANSIT
- 6 OTHER: SPECIFY
- 7 SOUND TRANSIT
- 9 DON'T KNOW / REFUSED

- C2 How many household members are employed outside the home?
- ____ ENTER NUMBER OF PEOPLE
 8 8 OR MORE
 9 DON'T KNOW / REFUSED
- C3 **[IF C2 GT 0 AND LT 9]** How many, if any, in your household carpool or vanpool to work? Please count family members riding together as more than one person.
- ____ ENTER NUMBER OF PEOPLE
 8 8 OR MORE
 9 DON'T KNOW / REFUSED
- C4 **[IF C3 GT 0 AND LT 9]** Would that be four or more trips per week? Please count each way as one trip.
- 1 YES
 2 NO
 9 DON'T KNOW / REFUSED

HHTYPE

- 1 = SOV [DEFAULT]
 2 = TRANSIT [C1A GT 0 AND LT 9]
 3 = CARPOOL [C4 = 1 AND C1A = 0 OR 9]

DINT **[IF QUIT = 1, SKIP]** These next questions are to help us group your answers with the answers of other people in the survey.

[PRESS ANY KEY TO CONTINUE]

- D1 **[IF QUIT = 1, SKIP]** How many cars, vans, pick-up trucks, or motorcycles in working condition are available for use by members of your household? Please include company cars.
- ____ ENTER NUMBER OF VEHICLES
 8 8 OR MORE
 9 DON'T KNOW / REFUSED
- D2A **[IF QUIT = 1, SKIP]** To the best of your knowledge, how far is it from your home to the nearest bus stop, transit center, or park and ride? You can answer in blocks or miles.
- ____ RECORD DISTANCE
 99 DON'T KNOW / REFUSED [SKIPTO D3]
- D2B **[IF D2A < 99]** ENTER DISTANCE REFERENCE
- 1 BLOCKS
 2 MILES
 9 DON'T KNOW / REFUSED
- D3 Including yourself, how many people are currently living in your household?
- ____ ENTER NUMBER OF PEOPLE
 99 DON'T KNOW / REFUSED
- D4 How many of these are age eighteen or older?
- ____ ENTER NUMBER OF PEOPLE
 99 DON'T KNOW / REFUSED
- D5 **[IF D4 LT D3]** And how many are between six and seventeen?
- ____ ENTER NUMBER OF PEOPLE
 99 DON'T KNOW / REFUSED

D6 **[IF D4 + D5 LT D3]** And under age six?
 ____ ENTER NUMBER OF PEOPLE
 99 DON'T KNOW / REFUSED

[D4 + D5 + D6 MUST EQUAL D3]

[IF QUIT = 1 SKIP TO THANK1]

LIFESTG

1 = ANY CHILDREN **[(D5 +D6) GT 0]**
2 = 1 ADULT, NO CHILDREN **[D3 = 1 AND (D5 +D6) = 0]**
3 = 2+ ADULTS, NO CHILDREN **[D4 GT 0 AND (D5 +D6) = 0]**

D7 Is your total annual household income above or below \$35,000 per year?

- 1 BELOW \$35,000
- 2 ABOVE \$35,000 [SKIPTO D9]
- 9 DON'T KNOW / REFUSED [SKIPTO EEINT]

D8 **[IF D7 = 1]** Would that be . . .

- 1 Less than \$10,000,
- 2 \$10,000 to \$15,000,
- 3 \$15,000 to \$25,000, or
- 4 \$25,000 to \$35,000?
- 9 DON'T KNOW / REFUSED

D9 **[IF D7 = 2]** Would that be . . .

- 1 \$35,000 to \$45,000,
- 2 \$45,000 to \$55,000,
- 3 \$55,000 to \$75,000, or
- 4 \$75,000 or more?
- 9 DON'T KNOW / REFUSED

EEINT Now I need to update the information about the members of your household who will fill out the travel logs.

[PRESS ANY KEY TO CONTINUE]

EE1 How many household members are 15 years of age or older?

____ ENTER NUMBER OF PEOPLE
99 DON'T KNOW / REFUSED

EE2 thru EE7 Please tell me whether the following people are still living in the household.

[SHOW P1NAME]

- 1 YES
- 2 NO

F1A thru JJ1A **[IF EE2 = 2]** Does he / she still live in the four-county Puget Sound region?

- 1 YES
- 2 NO

F1B thru JJ1B **[IF F1A = 1]** May we update the telephone number for _____, so that we may ask him/her to continue as a panel household for this study?

- 1 YES
- 2 NO

F2 thru JJ2 **[IF F1B = 1]** ENTER TELEPHONE NUMBER

K3A thru P3A Are there any other household members, 15 years of age or older, who I have not yet named?

- 1 YES
- 2 NO

K3B thru P3B ENTER NAME OF NEW HOUSEHOLD MEMBER

K3C thru P3C ENTER GENDER OF NEW HOUSEHOLD MEMBER

- 1 MALE
- 2 FEMALE

[FINT THRU F18 WILL BE LABELED SEQUENTIALLY, F THRU P, FOR ALL HOUSEHOLD MEMBERS]

FINT Let's start with you. [NAME ON SCREEN] / Next I am going to ask you about

[PRESS ANY KEY TO CONTINUE]

F4 What is your age? / How old is he / she?

- ____ ENTER EXACT AGE
- 99 DON'T KNOW / REFUSED

F5 **[IF F4 = 99]** Are you between . . .

- 1 15 and 17,
- 2 18 and 24,
- 3 25 and 34,
- 4 35 and 44,
- 5 45 and 54,
- 6 55 and 64, or
- 7 65 and older?
- 9 DON'T KNOW / REFUSED

F6 Which of the following **best** describes your current employment status?

- 1 Employed full-time (that is 30 or more hours per week),
- 2 Employed part-time (that is less than 30 hours per week),
- 3 Self-employed or a business owner,
- 4 A student and working part or full-time,
- 5 A full-time student and not working, [SKIPTO F14A]
- 6 Retired, [SKIPTO F15]
- 7 Not employed outside the home, or [SKIPTO F15]
- 8 Currently unemployed? [SKIPTO F15]
- 9 OTHER [SPECIFY] [SKIPTO F15]
- 99 DON'T KNOW / REFUSED [SKIPTO F15]

F7 Are you paid hourly or are you salaried?

- 1 HOURLY
- 2 SALARIED
- 3 OTHER [SPECIFY]
- 4 COMMISSION
- 5 SELF-EMPLOYED
- 9 DON'T KNOW / REFUSED

F8 What is your occupation, that is, what type of work do you do?

[OPEN-END]

- 1 PROFESSIONAL / TECHNICAL
- 2 MANAGER / ADMIN. / BUSINESS OWNER
- 3 SECRETARY / CLERICAL
- 4 RETAIL SALES
- 5 OTHER SALES
- 6 SHOP OR PRODUCTION WORKER
- 7 CRAFTSMAN OR FOREMAN
- 8 EQUIPMENT / VEHICLE OPERATOR
- 9 SERVICE WORKERS
- 10 GENERAL LABORER
- 11 MILITARY
- 12 OTHER
- 99 DON'T KNOW / REFUSED

F9 How many days in a typical week do you commute to a work location outside your home?

- ____ ENTER NUMBER OF DAYS
9 DON'T KNOW / REFUSED

F10 How many days in a typical week do you work at home rather than commuting to a fixed work-site, that is, how many days in a typical week do you telecommute?

- ____ ENTER NUMBER OF DAYS
9 DON'T KNOW / REFUSED

F11A What is your work address?

[PROBE IF DK/REF: What are the nearest cross streets?]

[ENTER "HOME" FOR HOME ADDRESS, IF THEY WORK AT HOME]

F11B And in what town do you work?

[IF THE TOWN WAS PROVIDED IN F11A, VERIFY TOWN AND RE-ENTER]

[OPEN-END]

F12 **[IF F9 > 0]** How do you usually get to and from work?

- 1 CAR / VAN / SUV / TRUCK
- 2 BUS
- 3 MOTORCYCLE
- 4 BICYCLE
- 5 WALK
- 6 OTHER: : [SPECIFY] **[ENTER COMBINATION TRAVEL AS "OTHER" AND SPECIFY ALL MODES USED]**
- 7 CAR/BUS COMBINATION
- 8 METRO VANPOOL
- 10 FERRY/WALK
- 11 FERRY
- 12 CARPOOL
- 13 FERRY/CAR
- 14 SCHOOL BUS
- 15 BOAT
- 16 TRAIN
- 99 DK/REF

F13A **[IF F12 = 1 OR 12]** Do you drive alone, drive but with others in the vehicle, or ride with others?

- 1 DRIVE ALONE
- 2 DRIVE BUT WITH OTHERS IN THE VEHICLE
- 3 RIDE WITH OTHERS
- 4 TAKE TURNS / VARIES
- 5 CARPOOL - UNKNOWN
- 9 DON'T KNOW / REFUSED

F13B **[IF F12 = 1 OR 12]** In the past six months or so, have you regularly taken the bus to or from work?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F13C **[IF F12 = 1 OR 12]** In the past six months or so, have you regularly ridden to or from work with others or had others riding with you?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F13D **[IF F12 = 1]** Does your job require that you have a car at work?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F13E **[IF F12 = 1]** Do you need the car before or after work to pick up children?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F13F **[F13E = 1]** How many days a week?

[IF NECESSARY PROBE FOR NUMBER OF DAYS IN A TYPICAL WEEK]

- ENTER NUMBER OF DAYS
- 9 DON'T KNOW / REFUSED

F13G Within the past three years, have you changed either where you work or where you live to reduce the amount of time you spend commuting?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

[IF (F6 <> 4 AND F6 <> 5) SKIPTO F15]

F14A **[IF F6 = 4 OR F6 = 5]** What is the name of the school you currently attend?

[OPEN-END]

F14B **[IF F6 = 4 OR F6 = 5]** And in what town?

[OPEN-END]

F14C [IF F6 = 4 OR F6 = 5] How do you usually get to and from school?

- 1 CAR / VAN / SUV / TRUCK
- 2 BUS
- 3 MOTORCYCLE
- 4 BICYCLE
- 5 WALK
- 6 OTHER: : [SPECIFY] [ENTER COMBINATION TRAVEL AS "OTHER" AND SPECIFY ALL MODES USED]
- 7 CAR/BUS COMBINATION
- 8 METRO VANPOOL
- 10 FERRY/WALK
- 11 FERRY
- 12 CARPOOL
- 13 FERRY/CAR
- 14 SCHOOL BUS
- 15 BOAT
- 16 TRAIN
- 99 DK/REF

F14D [IF F14C = 1 OR 12] Do you drive alone, drive but with others in the vehicle, or ride with others?

- 1 DRIVE ALONE
- 2 DRIVE BUT WITH OTHERS IN THE VEHICLE
- 3 RIDE WITH OTHERS
- 4 TAKE TURNS / VARIES
- 5 **CARPOOL - UNKNOWN**
- 9 DON'T KNOW / REFUSED

F15 What is the highest level of education you have had the opportunity to complete?

[READ AS NECESSARY / PROBE FOR NEXT HIGHEST LEVEL]

- 1 (High school or less)
- 2 (High school graduate)
- 3 (Some college / Tech school / Vocational / AA degree)
- 4 (4 Year College Degree)
- 5 (Some post-graduate work / attended Graduate School)
- 6 (Post-Graduate degree)
- 9 REFUSED

F16 Do you have a transit pass?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F17 How many times a week do you ride the bus? Please count a round-trip as two rides.

[IF NECESSARY: PROBE FOR A "TYPICAL WEEK]

- ____ ENTER NUMBER OF ONE-WAY RIDES
- 99 DON'T KNOW / REFUSED

F18 Do you currently have a valid driver's license?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

[SKIPTO NEXT PERSON – CONTINUE UNTIL YOU REACH THE NUMBER RECORDED IN EE1]

THANKA Thank you for agreeing to continue as a member of the Puget Sound Transportation Panel!

As part of this year's study, we are also asking panel members to fill out an attitude survey and a supplement to your travel diary that will measure the impact and benefits of advanced traveler information systems in the region.

THANKB Within the next week we will be mailing a Wave 9 packet to your household. In the packet, you will find

- Travel diaries for each participating household member, to be filled out during your assigned two-day period,
- Travel diary instructions and a sample diary,
- A household attitude survey, to be filled out by one household member,
- Personal attitude surveys for each participating household member,
- Supplemental diary forms for each participating household member, to be filled out **after** completing the two-day trip logs,
- A postage-paid return envelope for you to conveniently return all of the Wave 9 materials when finished, and
- A new two-dollar bill to reward each participating household member.

CPL
DISPOS = 40

THANKC When the packets arrive in the mail, please distribute the contents to the appropriate household members. The name of each household member will be printed at the top of his or her materials. Please carefully review the instructions for filling out the travel-logs with all panel participants. Then, please fill out your diaries on the assigned two days of the week printed at the top of your diaries. **After** finishing your diaries, please proceed with filling out your attitude surveys and supplemental diary forms. We ask that you mail back your household's completed travel diaries, attitude surveys, and supplemental diary forms in the return envelope provided.

Do you have any additional questions about the travel diary or about the Attitude Survey?

[ANSWER IF POSSIBLE]

THANKD Finally, I would like to verify your mailing address, so that we can be sure to send the survey materials to the correct household.

[PRESS ANY KEY TO CONTINUE]

ADDR Do you still receive mail at . . .

ADDRESS:

ADDR1 [SHOW STREET ADDRESS]

ADDR1 CHANGE STREET

ADDR2 [SHOW CITY]

ADDR2 CHANGE CITY

ADDR3 [SHOW ZIP CODE]

ADDR3 CHANGE ZIP

THANKE Thank you very much for your time today, and we look forward to receiving your household's travel diary information soon.
ENDQUEST

THANK1 **[IF QUIT = 1]** Thank you very much for your time. The information you have provided will be very useful.
CPL
DISPOS = 39
ENDQUEST

THANK2 Thank you for your time, but in order to continue as a panel household, you must live in the four-county Puget Sound area.
DISPOS = 23
ENDQUEST

THANK3 Thank you for your time.
DISPOS = 38
ENDQUEST

THANK4 Thank you for your time.
DISPOS = 36
ENDQUEST

THANK5 Thank you for your time.
DISPOS = 37
ENDQUEST

THANK9 Thank you for your time, however, we cannot continue without that information.
DISPOS = 8
ENDQUEST

Replacement Screener

2000 Puget Sound Transportation Panel – Wave 9

SEA-00-153R

Replacement Household Screener

INT1 Hello, this is _____ from Northwest Research Group, a public opinion research firm in Bellevue. We are working with the Puget Sound Regional Council and local transportation planners on a study of travel patterns, needs, and opinions in the Puget Sound area. For this study, I need to speak with a household member who is 18 years of age or older. This call may be monitored for quality purposes.

- 1 OK – CONTINUE
- 2 CALL BACK AT A MORE CONVENIENT TIME [CTRL-END]
- 3 HOUSEHOLD DOES NOT WANT TO BE ON THE PANEL [SKIPTO THANK1; DISPOS = 12]

A1B First, what county do you live in?

- 1 KING
- 2 KITSAP
- 3 PIERCE
- 4 SNOHOMISH
- 5 OTHER [SKIPTO THANK2; DISPOS = 13]
- 9 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]

CNTYCODE

1 = King
2 = Kitsap
3 = Pierce
4 = Snohomish

A2B What is your home zip code?

- _____ ENTER ZIP CODE
- 99999 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]

A3 How long have you lived in your current residence?

[READ IF REFUSED]

- 1 (Less Than One Year)
- 2 (One To Three Years)
- 3 (Four To Five Years)
- 4 (Six To Ten Years)
- 5 (Eleven To Twenty Years)
- 6 (More Than Twenty Years)
- 9 DON'T KNOW / REFUSED

A4 And how long have you lived in your county?

[READ IF REFUSED]

- 1 (Less Than One Year)
- 2 (One To Three Years)
- 3 (Four To Five Years)
- 4 (Six To Ten Years)
- 5 (Eleven To Twenty Years)
- 6 (More Than Twenty Years)
- 9 DON'T KNOW / REFUSED

A4B [IF A4 = 1] What county did you live in one year ago?

- 1 KING
- 2 KITSAP
- 3 PIERCE
- 4 SNOHOMISH
- 5 OTHER [NEW = 1]
- 9 DON'T KNOW / REFUSED

A5 Do you rent or own your current home?

- 1 RENT
- 2 OWN
- 9 DON'T KNOW / REFUSED

B1 One topic that has received a lot of attention recently is traffic congestion. Do you believe that the state and local governments have adequate financial resources to meet transportation needs?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

B2 When beginning your commute, if you knew that you would be caught in traffic congestion due to an incident, would you...

- 1 Take an alternate route,
- 2 Delay your departure time,
- 3 Switch mode of travel,
- 4 Not make the trip, or
- 5 Not do anything different?
- 8 NONE OF THE ABOVE
- 9 DON'T KNOW / REFUSED

B3 What level of gas price **increase** would prompt you to drive less? Would you say...

- 1 10 cents per gallon,
- 2 11 to 25 cents per gallon,
- 3 25 to 50 cents per gallon,
- 4 More than 50 cents per gallon, or
- 5 Price has no effect?
- 9 DON'T KNOW / REFUSED

C1A How many people in your household, age fifteen or older, ride a local bus at least four times a week? Please count a round-trip as two rides.

- ____ ENTER NUMBER OF PEOPLE
- 8 8 OR MORE
- 9 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]

C1B **[IF C1A GT 0 AND LT 9]** Which bus system is that?

- 1 METRO / KING COUNTY METRO
- 2 COMMUNITY TRANSIT / CT
- 3 EVERETT TRANSIT
- 4 PIERCE TRANSIT
- 5 KITSAP TRANSIT
- 6 OTHER: SPECIFY
- 7 SOUND TRANSIT
- 9 DON'T KNOW / REFUSED

C2 How many household members are employed outside the home?

- _____ ENTER NUMBER OF PEOPLE
- 8 8 OR MORE
- 9 DON'T KNOW / REFUSED **[SKIPTO THANK9; DISPOS = 8]**

C3 **[IF C2 GT 0 AND LT 9]** How many, if any, in your household carpool or vanpool to work? Please count family members riding together as more than one person.

- _____ ENTER NUMBER OF PEOPLE
- 8 8 OR MORE
- 9 DON'T KNOW / REFUSED **[SKIPTO THANK9; DISPOS = 8]**

C4 **[IF C3 GT 0 AND LT 9]** Would that be four or more trips per week? Please count each way as one trip.

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED **[SKIPTO THANK9; DISPOS = 8]**

HHTYPE

- 1 = SOV **[DEFAULT]**
- 2 = TRANSIT **[C1A GT 0 AND LT 9]**
- 3 = CARPOOL **[C4 = 1 AND C1A = 0 OR 9]**

DINT These next questions are to help us group your answers with the answers of other people in the survey.

[PRESS ANY KEY TO CONTINUE]

D1 How many cars, vans, pick-up trucks, or motorcycles in working condition are available for use by members of your household? Please include company cars.

- _____ ENTER NUMBER OF VEHICLES
- 8 8 OR MORE
- 9 DON'T KNOW / REFUSED

D2A To the best of your knowledge, how far is it from your home to the nearest bust stop, transit center, or park and ride?

- _____ RECORD DISTANCE
- 99 DON'T KNOW / REFUSED **[SKIPTO D3]**

D2B **[IF D2A < 99]** ENTER DISTANCE REFERENCE

- 1 BLOCKS
- 2 MILES
- 9 DON'T KNOW / REFUSED

D3 Including yourself, how many people are currently living in your household?

- _____ ENTER NUMBER OF PEOPLE
- 99 DON'T KNOW / REFUSED **[SKIPTO THANK9; DISPOS = 8]**

- D4 How many of these are age eighteen or older?
 ___ ENTER NUMBER OF PEOPLE
 99 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]
- D5 [IF D4 LT D3] And how many are between six and seventeen?
 ___ ENTER NUMBER OF PEOPLE
 99 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]
- D6 [IF D4 + D5 LT D3] And under age six?
 ___ ENTER NUMBER OF PEOPLE
 99 DON'T KNOW / REFUSED [SKIPTO THANK9; DISPOS = 8]

[D4 + D5 + D6 MUST EQUAL D3]

LIFESTG

- 1 = ANY CHILDREN [(D5 +D6) GT 0]
 2 = 1 ADULT, NO CHILDREN [D3 = 1 AND (D5 +D6) = 0]
 3 = 2+ ADULTS, NO CHILDREN [D4 GT 0 AND (D5 +D6) = 0]

- D7 Is your total annual household income above or below \$35,000 per year?
 1 BELOW \$35,000
 2 ABOVE \$35,000 [SKIPTO D9]
 9 DON'T KNOW / REFUSED [SKIPTO EEINT1]
- D8 [IF D7 = 1] Would that be . . .
 1 Less than \$10,000,
 2 \$10,000 to \$15,000,
 3 \$15,000 to \$25,000, or
 4 \$25,000 to \$35,000?
 9 DON'T KNOW / REFUSED
- D9 [IF D7 = 2] Would that be . . .
 1 \$35,000 to \$45,000,
 2 \$45,000 to \$55,000,
 3 \$55,000 to \$75,000, or
 4 \$75,000 or more?
 9 DON'T KNOW / REFUSED

QAL THANK3

EEINT1 As you may know, planning organizations at the local, county, and state levels are looking at transportation and people's needs. As a further part of this study, we are putting together a panel of households in King, Kitsap, Pierce, and Snohomish counties, and the transportation patterns of the members of this panel will be studied over time. The information you provide as a panel member will be used to help us measure the impact and benefits of advanced traveler information systems in the region as well as plan for highway systems, transit systems, the state ferry system, and local roads.

It is important that the panel be truly representative across the Puget Sound area. We would like to include your household as a member.

EEINT2 As a first step, all household members, age fifteen and older, will be asked to keep a record of their local trips for an assigned two-day period. Actually, a lot of people find it kind of interesting to see where they really do go! Panel households may then be recontacted once or twice a year to update household member information or to be a part of additional transportation studies. Would you like to be a Puget Sound Transportation Panel household?

IF "I don't travel much...I wouldn't be of much help...etc." PROBE:

That's what we do need -- people with all types of activity, from a lot to a very little. It is important that we do include people like yourself.

1 YES, WILLING TO PARTICIPATE. **[CONTINUE]**

2 NO, NOT WILLING TO PARTICIPATE. **[SKIP TO THANK4; DISPOS = 15]**

EE1 Great! First, I need to get some background information about the members of your household. How many are 15 years of age or older?

____ ENTER NUMBER OF PEOPLE

99 DON'T KNOW / REFUSED

EE2A May I have their names so we can address the travel-log diary to each person? Let's start with you. Your first name is?

OPEN – ENDED

[PROBE FOR LAST NAME]

EE3A RECORD GENDER

1 MALE

2 FEMALE

EE2B And the next person's name is?

OPEN - ENDED

EE3B RECORD GENDER

1 MALE

2 FEMALE

[REPEAT THROUGH EE2A – EE2F TO OBTAIN NAME/GENDER OF EACH HH MEMBER]

FINT Let's start with you. / Next I am going to ask you about PERSON#X.

PRESS ANY KEY TO CONTINUE

F4 What is your age? / How old is PERSON#X?

____ ENTER EXACT AGE

99 DON'T KNOW / REFUSED

F5 **[IF F4 = 99]** Are you between . . .

1 15 and 17,

2 18 and 24,

3 25 and 34,

4 35 and 44,

5 45 and 54,

6 55 and 64, or

7 65 and older?

9 DON'T KNOW / REFUSED

- F6 Which of the following **best** describes your current employment status?
- 1 Employed full-time (that is 30 or more hours per week),
 - 2 Employed part-time (that is less than 30 hours per week),
 - 3 Self-employed or a business owner,
 - 4 A student and working part or full-time,
 - 5 A full-time student and not working, [SKIPTO F14A]
 - 6 Retired, [SKIPTO F14A]
 - 7 Not employed outside the home, or [SKIPTO F14A]
 - 8 Currently unemployed? [SKIPTO F14A]
 - 9 OTHER [SPECIFY] [SKIPTO F14A]
 - 99 DON'T KNOW / REFUSED
- F7 Are you paid hourly or are you salaried?
- 1 HOURLY
 - 2 SALARIED
 - 3 OTHER [SPECIFY]
 - 4 COMMISSION
 - 5 SELF-EMPLOYED
 - 9 DON'T KNOW / REFUSED
- F8 What is your occupation, that is, what type of work do you do?
- [OPEN-END]
- 1 PROFESSIONAL / TECHNICAL
 - 2 MANAGER / ADMIN. / BUSINESS OWNER
 - 3 SECRETARY / CLERICAL
 - 4 RETAIL SALES
 - 5 OTHER SALES
 - 6 SHOP OR PRODUCTION WORKER
 - 7 CRAFTSMAN OR FOREMAN
 - 8 EQUIPMENT / VEHICLE OPERATOR
 - 9 SERVICE WORKERS
 - 10 GENERAL LABORER
 - 11 MILITARY
 - 12 OTHER
 - 99 DON'T KNOW / REFUSED
- F9 How many days in a typical a week do you commute to a work location outside your home?
- _____ ENTER NUMBER OF DAYS
- 9 DON'T KNOW / REFUSED
- F10 How many days in a typical a week do you work at home rather than commuting to a fixed work-site, that is, how many days in a typical a week do you telecommute?
- _____ ENTER NUMBER OF DAYS
- 9 DON'T KNOW / REFUSED
- F11A What is your work address?
- [PROBE IF DK/REF: What are the nearest cross streets?]
- [ENTER "HOME" FOR HOME ADDRESS, IF THEY WORK AT HOME]
- F11B And in what town do you work?
- [IF THE TOWN WAS PROVIDED IN F11A, VERIFY TOWN AND RE-ENTER]
- [OPEN-END]

F12 **[IF F9 > 0]** How do you usually get to and from work?

- 1 CAR / VAN / SUV / TRUCK
- 2 BUS
- 3 MOTORCYCLE
- 4 BICYCLE
- 5 WALK
- 6 OTHER: : [SPECIFY] **[ENTER COMBINATION TRAVEL AS "OTHER" AND SPECIFY ALL MODES USED]**
- 7 CAR/BUS COMBINATION
- 8 METRO VANPOOL
- 10 FERRY/WALK
- 11 FERRY
- 12 CARPOOL
- 13 FERRY/CAR
- 14 SCHOOL BUS
- 15 BOAT
- 16 TRAIN
- 99 DK/REF

F13A **[IF F12 = 1 OR 12]** Do you drive alone, drive but with others in the vehicle, or ride with others?

- 1 DRIVE ALONE
- 2 DRIVE BUT WITH OTHERS IN THE VEHICLE
- 3 RIDE WITH OTHERS
- 4 TAKE TURNS / VARIES
- 5 CARPOOL - UNKNOWN
- 9 DON'T KNOW / REFUSED

F13B **[IF F12 = 1 OR 12]** In the past six months or so, have you regularly taken the bus to or from work?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F13C **[IF F12 = 1 OR 12]** In the past six months or so, have you regularly ridden to or from work with others or had others riding with you?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F13D **[IF F12 = 1]** Does your job require that you have a car at work?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F13E **[IF F12 = 1]** Do you need the car before or after work to pick up children?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F13F **[F13E = 1]** How many days a week?

[IF NECESSARY PROBE FOR NUMBER OF DAYS IN A TYPICAL WEEK]

- ENTER NUMBER OF DAYS
- 9 DON'T KNOW / REFUSED

F13G Within the past three years, have you changed either where you work or where you live to reduce the amount of time you spend commuting?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

[IF (F6 <> 4 AND F6 <> 5) SKIPTO F15]

F14A **[IF F6 = 4 OR F6 = 5]** What is the name of the school you currently attend?

[OPEN-END]

F14B **[IF F6 = 4 OR F6 = 5]** And in what town?

[OPEN-END]

F14C **[IF F6 = 4 OR F6 = 5]** How do you usually get to and from school?

- 1 CAR / VAN / SUV / TRUCK
- 2 BUS
- 3 MOTORCYCLE
- 4 BICYCLE
- 5 WALK
- 6 OTHER: : [SPECIFY] **[ENTER COMBINATION TRAVEL AS "OTHER" AND SPECIFY ALL MODES USED]**
- 7 CAR/BUS COMBINATION
- 8 METRO VANPOOL
- 10 FERRY/WALK
- 11 FERRY
- 12 CARPOOL
- 13 FERRY/CAR
- 14 SCHOOL BUS
- 15 BOAT
- 16 TRAIN
- 99 DK/REF

F14D **[IF F14C = 1 OR 12]** Do you drive alone, drive but with others in the vehicle, or ride with others?

- 1 DRIVE ALONE
- 2 DRIVE BUT WITH OTHERS IN THE VEHICLE
- 3 RIDE WITH OTHERS
- 4 TAKE TURNS / VARIES
- 5 CARPOOL - UNKNOWN
- 9 DON'T KNOW / REFUSED

F15 What is the highest level of education you have had the opportunity to complete?

[READ AS NECESSARY / PROBE FOR NEXT HIGHEST LEVEL]

- 1 (High school or less)
- 2 (High school graduate)
- 3 (Some college / Tech school / Vocational / AA degree)
- 4 (4 Year College Degree)
- 5 (Some post-graduate work / attended Graduate School)
- 6 (Post-Graduate degree)
- 9 REFUSED

F16 Do you have a transit pass?

- 1 YES
- 2 NO
- 9 DON'T KNOW / REFUSED

F17 How many times a week do you ride the bus? Please count a round-trip as two rides?

____ ENTER NUMBER OF ONE-WAY RIDES
99 DON'T KNOW / REFUSED

F18 Do you currently have a valid driver's license?

1 YES
2 NO
9 DON'T KNOW / REFUSED

[SKIPTO NEXT PERSON – CONTINUE UNTIL YOU REACH THE NUMBER RECORDED IN EE1]

THANKA Thank you for agreeing to be a member of the Puget Sound Transportation Panel!

This year will be the ninth wave of the Puget Sound Transportation Panel. As part of this year's study, we are also asking panel members to fill out an attitude survey and a supplement to the two-day travel diary that will measure the impact and benefits of advanced traveler information systems in the region.

THANKB Within the next week we will be mailing a Wave 9 packet to your household. In the packet, you will find

- Travel diaries for each participating household member, to be filled out during your assigned two-day period,
- Travel diary instructions and a sample diary,
- A household attitude survey, to be filled out by one household member,
- Personal attitude surveys for each participating household member,
- Supplemental diary forms for each participating household member, to be filled out **after** completing the two-day trip logs,
- A postage-paid return envelope for you to conveniently return all of the Wave 9 materials when finished, and
- A new two-dollar bill to reward each participating household member.

[PRESS ANY KEY TO CONTINUE]

CPL

DISPOS = 40

THANKC When the packets arrive in the mail, please distribute the contents to the appropriate household members. The name of each household member will be printed at the top of his or her materials. Please carefully review the instructions for filling out the travel logs with all panel participants. Then, please fill out your diaries on the assigned two days of the week printed at the top of your diaries. **After** finishing your diaries, please proceed with filling out your attitude surveys and supplemental diary forms. We ask that you mail back your household's completed travel diaries, attitude surveys, and supplemental diary forms in the return envelope provided.

Do you have any additional questions about the travel diary or about the Attitude Survey?

[ANSWER IF POSSIBLE]

THANKD Finally, I would like to get your mailing address, so that we can be sure to send the survey materials to the correct household.

Address:

Apt #:

City:

State:

Zip:

THANKE Thank you very much for your time today, and we look forward to receiving your household's travel diary information soon.

ENDQUEST

THANK1 Thank you very much for your time.

DISPOS = 12

ENDQUEST

THANK2 Thank you for your time, but today we are only interviewing households in the four-county Puget Sound area.

DISPOS = 13

ENDQUEST

THANK3 Those are all of the questions I have today. May I just get your first name?
Thank-you for your time.

**[RESPONDENT IS OVER QUOTA – PLEASE RECORD NAME, PHONE NUMBER,
COUNTY, TRANSIT TYPE, AND LIFE CYCLE STAGE ON OVER QUOTA SHEET]**

DISPOS = 14

ENDQUEST

THANK4 That concludes our survey. Thank you very much for your time.

DISPOS = 15

ENDQUEST

THANK9 Thank you for your time, however, we cannot continue without that information.

DISPOS = 8

ENDQUEST

Screeners Code Lists
Post-Codes in bold italics

C1B. Which bus system is that?

- 1 METRO / KING COUNTY METRO
- 2 COMMUNITY TRANSIT / CT
- 3 EVERETT TRANSIT
- 4 PIERCE TRANSIT
- 5 KITSAP TRANSIT
- 6 OTHER: SPECIFY
- 7 SOUND TRANSIT**
- 9 DON'T KNOW / REFUSED

F6 – P6. Which of the following best describes your current employment status?

- 1 Employed full-time (that is 30 or more hours per week),
- 2 Employed part-time (that is less than 30 hours per week),
- 3 Self-employed or a business owner,
- 4 A student and working part or full-time,
- 5 A full-time student and not working,
- 6 Retired,
- 7 Not employed outside the home, or
- 8 Currently unemployed?
- 9 OTHER [SPECIFY]
- 99 DON'T KNOW / REFUSED

F7 – P7. Are you paid hourly or salaried?

- 1 HOURLY
- 2 SALARIED
- 3 OTHER
- 4 COMMISSION**
- 5 SELF-EMPLOYED**
- 9 DON'T KNOW / REFUSED

F8 – P8. What is your occupation, that is, what type of work do you do?

- 1 PROFESSIONAL / TECHNICAL**
- 2 MANAGER / ADMIN. / BUSINESS OWNER**
- 3 SECRETARY / CLERICAL**
- 4 RETAIL SALES**
- 5 OTHER SALES**
- 6 SHOP OR PRODUCTION WORKER**
- 7 CRAFTSMAN OR FOREMAN**
- 8 EQUIPMENT / VEHICLE OPERATOR**
- 9 SERVICE WORKERS**
- 10 GENERAL LABORER**
- 11 MILITARY**
- 12 OTHER**
- 99 DON'T KNOW / REFUSED**

F11B – P11B. And in what town do you work?

F14B – P14B. And in what town (do you go to school)?

City Code List		
County	City	Code
King	Algona	001
King	Auburn	002
King	Ballard	003
King	Bellevue	004
King	Black Diamond	005
King	Bothell	006
King	Burien	007
King	Carnation	008
King	Clyde Hill	009
King	Covington	010
King	Des Moines	011
King	Duvall	012
King	Enumclaw	013
King	Fall City	014
King	Federal Way	015
King	Hunts Point	016
King	Issaquah	017
King	Kenmore	018
King	Kent	019
King	Kirkland	020
King	Lake Forest Park	021
King	Maple Valley	022
King	Medina	023
King	Mercer Island	024
King	Midway	025
King	Milton	026
King	Newcastle	027
King	Normandy Park	028
King	North Bend	029
King	Pacific	030
King	Redmond	031
King	Renton	032
King	Richmond Beach	033
King	Riverton Hgts	034
King	Sammamish	035
King	Sea-Tac	036
King	Seattle	037
King	Shoreline	038
King	Skykomish	039
King	Snoqualmie	040
King	Tukwila	041
King	Vashon Island	042
King	White Center	043
King	Woodinville	044
King	Yarrow Point	045

King	Eastside	099
City Code List (Continued)		
County	City	Code
Kitsap	Bainbridge Isl	200
Kitsap	Bangor	201
Kitsap	Bremerton	202
Kitsap	Gorst	203
Kitsap	Holly	204
Kitsap	Indianola	205
Kitsap	Keyport	206
Kitsap	Kingston	207
Kitsap	Manchester	208
Kitsap	Olalla	209
Kitsap	Port Gamble	210
Kitsap	Port Orchard	211
Kitsap	Poulsbo	212
Kitsap	Retsil	213
Kitsap	Silverdale	214
Kitsap	Southworth	215
Kitsap	Suquamish	216
Kitsap	Winslow	217
Kitsap	Kitsap County	299
Pierce	Bonney Lake	300
Pierce	Buckley	301
Pierce	Carbonado	302
Pierce	Du Pont	303
Pierce	Eatonville	304
Pierce	Edgewood	305
Pierce	Fife	306
Pierce	Fircrest	307
Pierce	Fort Lewis	308
Pierce	Fox Island	309
Pierce	Gig Harbor	310
Pierce	Graham	311
Pierce	Greenwater	312
Pierce	Lakebay	313
Pierce	Lakewood	314
Pierce	McChord AFB	315
Pierce	McKenna	316
Pierce	McMillan	317
Pierce	McNeil Island	318
Pierce	Milton	319
Pierce	Orting	320
Pierce	Parkland	321
Pierce	Purdy	322
Pierce	Puyallup	323
Pierce	Rainier	324
Pierce	Roy	325
Pierce	Ruston	326
Pierce	South Hill	327

Pierce	South Prairie	328
City Code List (Continued)		
County	City	Code
Pierce	Spanaway	329
Pierce	Steilacoom	330
Pierce	Sumner	331
Pierce	Tacoma	332
Pierce	Tillicum	333
Pierce	University Place	334
Pierce	Vaughn	335
Pierce	Wilkeson	336
Snohomish	Alderwood Manor	400
Snohomish	Arlington	401
Snohomish	Bothell	402
Snohomish	Brier	403
Snohomish	Canyon Park	404
Snohomish	Darrington	405
Snohomish	Edmonds	406
Snohomish	Everett	407
Snohomish	Gold Bar	408
Snohomish	Granite Falls	409
Snohomish	Index	410
Snohomish	Lake Stevens	411
Snohomish	Lynnwood	412
Snohomish	Machias	413
Snohomish	Maltby	414
Snohomish	Marysville	415
Snohomish	Mill Creek	416
Snohomish	Monroe	417
Snohomish	Mountlake Terr	418
Snohomish	Mukilteo	419
Snohomish	Oso	420
Snohomish	Silver Lake	421
Snohomish	Smokey Point	422
Snohomish	Snohomish	423
Snohomish	Stanwood	424
Snohomish	Sultan	425
Snohomish	Tulalip	426
Snohomish	Woodway	427
Snohomish	Snohomish County	499
Other	Belfair	251
Other	Forks	252
Other	Port Angeles	253
Other	Port Ludlow	254
Other	Port Townsend	255
Other	Shelton	256
Other	Elma	351
Other	Lacey	352
Other	Olympia	353
Other	Yelm	354

Other	Pierce County	399
City Code List (Continued)		
County	City	Code
Other	Anacortes	451
Other	Bellingham	452
Other	Blaine	453
Other	Burlington	454
Other	Camano Island	455
Other	Concrete	456
Other	Mount Vernon	457
Other	Sedro Wooley	458
Other	Whidbey Island	459
DK / N/A	Out of Region	800
DK / N/A	Multiple Location	998
DK / N/A	Non-specific	999

F12 – P12. How do you usually get to and from work?

F14C – P14C. How do you usually get to and from school?

- 1 CAR / ***VAN / SUV / TRUCK***
- 2 BUS
- 3 MOTORCYCLE
- 4 BICYCLE
- 5 WALK
- 6 OTHER
- 7 ***CAR/BUS COMBINATION***
- 8 ***METRO VANPOOL***
- 10 ***FERRY/WALK***
- 11 ***FERRY***
- 12 ***CARPOOL***
- 13 ***FERRY/CAR***
- 14 ***SCHOOL BUS***
- 15 ***BOAT***
- 16 ***TRAIN***
- 99 DK/REF

F14A – P14A. What is the name of the school?

School Code List		
County	School	Code
King	Auburn HS	001
King	Auburn Riverside HS	002
King	Ballard HS	003
King	Bellevue HS	004
King	Blanchet HS	005
King	Bothell HS	006
King	Cedarcrest HS	007
King	Cleveland HS	008
King	Decatur HS	009
King	Eastlake HS	010
King	Eastside Catholic HS	011

King	Enumclaw HS	012
King	Evergreen HS	013
School Code List (Continued)		
County	School	Code
King	Federal Way HS	014
King	Foster HS	015
King	Franklin HS	016
King	Garfield HS	017
King	Hazen HS	018
King	Highline HS	019
King	Inglemoor HS	020
King	Ingraham HS	021
King	Interlake HS	022
King	Issaquah HS	023
King	Jefferson HS	024
King	Juanita HS	025
King	Kennedy HS	026
King	Kent-Meridian HS	027
King	Kentlake HS	028
King	Kentridge HS	029
King	Kentwood HS	030
King	Kings HS	031
King	Lake Washington HS	032
King	Lakeside HS	033
King	Liberty HS	034
King	Lindberg HS	035
King	Maple Valley HS	036
King	Mercer Island HS	037
King	Mount Si HS	038
King	Mt Rainier HS	039
King	Nathan Hale HS	040
King	Newport HS	041
King	O'Dea HS	042
King	Rainier Beach HS	043
King	Redmond HS	044
King	Renton HS	045
King	Roosevelt HS	046
King	Sammish HS	047
King	Sealth HS	048
King	Seattle Prep HS	049
King	Shorecrest HS	050
King	Shorewood HS	051
King	Skyline HS	052
King	Tahoma HS	053
King	Tolt	054
King	Tyee HS	055
King	Vashon HS	056
King	West Seattle HS	057
King	Woodinville HS	058
King	Best Alternative HS	059

King	Northwest HS	060
King	Bellevue Christian	061
School Code List (Continued)		
County	School	Code
King	Heritage Christian School	062
King	Holy Names Academy	063
King	International Middle School	064
King	Kent View Christian School	065
King	Maywood Alternative School	066
King	Nova School	067
King	Seattle Christian	068
King	Watson-Groen Christian HS	069
King	University Prep Academy	070
King	Finn Hill JHS	071
King	Kenmore JHS	072
King	Kent JHS	073
King	Kilo JHS	074
King	Kirkland JHS	075
King	McKnight MS	076
King	Northshore JHS	077
King	Olympic JHS	078
King	Rose Hill JHS	079
King	Sacajawea JHS	080
King	Sequoia JHS	081
King	Skyview JHS	082
King	Antioch University	101
King	Bastyr College	102
King	Bellevue CC	103
King	City University	104
King	Cornish	105
King	Green River CC	106
King	Highline CC	107
King	Lk Wash Voc Tech	108
King	North Seattle CC	109
King	Northwest College	110
King	Renton Voc. Tech.	111
King	Seattle Art Inst	112
King	Seattle Central CC	113
King	Seattle Pacific Univ	114
King	Seattle Univ	115
King	Seattle Voc. Inst.	116
King	Shoreline CC	117
King	South Seattle CC	118
King	U.W. Extension	119
King	Univ. of Wash	120
King	Fuller Theological	121
King	Other	195
Kitsap	Bainbridge HS	201
Kitsap	Bremerton HS	202
Kitsap	Central Kitsap HS	203

Kitsap	Kings West HS	204
Kitsap	North Kitsap HS	205
School Code List (Continued)		
County	School	Code
Kitsap	Olympic HS	206
Kitsap	South Kitsap HS	207
Kitsap	Bremerton MS	211
Kitsap	Fairview MS	212
Kitsap	John Sedgwick JHS	213
Kitsap	Marcus JHS	214
Kitsap	Poulsbo JHS	215
Kitsap	Ridgetop Mid Sch	216
Kitsap	Chapman College	221
Kitsap	Olympic College	222
Kitsap	Other	295
Pierce	Bellarmine HS	301
Pierce	Bethel HS	302
Pierce	Challenger HS	303
Pierce	Chief Leschi HS	304
Pierce	Clover Park HS	305
Pierce	Curtis HS	306
Pierce	Fife HS	307
Pierce	Foss HS	308
Pierce	Franklin Pierce HS	309
Pierce	Gig Harbor HS	310
Pierce	Lakes HS	311
Pierce	Lincoln HS	312
Pierce	Mount Tahoma HS	313
Pierce	Oakland Alternative HS	314
Pierce	Orting HS	315
Pierce	Peninsula HS	316
Pierce	Puyallup HS	317
Pierce	Rogers HS	318
Pierce	Spanaway Lake HS	319
Pierce	Stadium HS	320
Pierce	Steilacoom HS	321
Pierce	Sumner HS	322
Pierce	Tacoma Baptist HS	323
Pierce	Washington HS	324
Pierce	White River HS	325
Pierce	Wilson HS	326
Pierce	Aylen JHS	331
Pierce	Ballou JHS	332
Pierce	Cedarcrest JHS	333
Pierce	Charles Wright Academy	334
Pierce	Curtis JHS	335
Pierce	Edgewood JHS	336
Pierce	Hudtloff JHS	337
Pierce	Kalles JHS	338
Pierce	Lakeridge JHS	339

Pierce	Lochburn JHS	340
Pierce	Spanaway JHS	341
School Code List (Continued)		
County	School	Code
Pierce	Bates Voc. Tech.	351
Pierce	City University	352
Pierce	Clover Park Voc Tech	353
Pierce	Griffin College	354
Pierce	Knapp College	355
Pierce	Pacific Lutheran U	356
Pierce	Pierce College	357
Pierce	Pierce College (Puyallup)	358
Pierce	S.U. Law School (Tacoma)	359
Pierce	Tacoma CC	360
Pierce	U.W. Tacoma Branch	361
Pierce	Univ of Puget Sound	362
Pierce	Other	395
Snohomish	Aces Alternative HS	401
Snohomish	Arlington HS	402
Snohomish	Cascade HS	403
Snohomish	Darrington HS	404
Snohomish	Edmonds HS	405
Snohomish	Everett Alternative HS	406
Snohomish	Everett HS	407
Snohomish	Granite Falls HS	408
Snohomish	Henry Jackson HS	409
Snohomish	Holy Cross HS	410
Snohomish	Kamiak HS	411
Snohomish	Lake Stevens HS	412
Snohomish	Lakewood HS	413
Snohomish	Lynnwood HS	414
Snohomish	Mariner HS	415
Snohomish	Marysville Pilchuck HS	416
Snohomish	Meadowdale HS	417
Snohomish	Monroe HS	418
Snohomish	Mountlake Terrace HS	419
Snohomish	Scriber Lake HS	420
Snohomish	Sno-King Lutheran HS	421
Snohomish	Snohomish Alternative HS	422
Snohomish	Snohomish HS	423
Snohomish	Stanwood HS	424
Snohomish	Sultan HS	425
Snohomish	Woodway HS	426
Snohomish	Grace Academy	432
Snohomish	Olympic View JHS	433
Snohomish	Snohomish JHS	434
Snohomish	Stanwood MS	435
Snohomish	Edmonds CC	441
Snohomish	Eton Tech. Inst.	442
Snohomish	Everett CC	443

Snohomish	U.W. Bothell Campus	444
Snohomish	Other	495
School Code List (Continued)		
County	School	Code
Other	Evergreen State College	363
Other	St Martins College	364
Other	Skagit Valley College	445
Other	West. Wash. Univ.	446
Other	Other	801
DK / N/A	Out of area	803
DK / N/A	Home Schooling	805
DK / N/A	Out of State	895
DK / N/A	DK / REF	999

Travel Diary

Cover Letter to Continuing Panel Members

Thank you again for your continuing participation with the Puget Sound Transportation Panel. This is the ninth and final wave of travel diaries, and also one of the most important. Those of you who were part of the Panel in 1997 filled out a questionnaire asking about your travel choices, attitudes, and values. The results from that survey influenced decisions about the content and format of traveler information services across the country.

In this year's survey, in addition to the questions asked in 1997, you will find a supplement to the travel diary. On this supplement we would like you to write down how you used traffic, transit, and ferry information to make the trip decisions you recorded in your diary and what your motivation was for making changes to your planned trips. When filling out the travel diaries and related surveys, please remember: do not change your usual travel activities for the sake of the survey. Your responses to these questions will help transportation planners across the country to make better decisions about the content and format of their traveler information service systems.

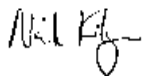
Based on our experience last year, we will not call you to collect your diary information over the phone. Instead, please put your diaries, along with the diary supplements and the questionnaires, in the postage-paid envelope provided in your packet, and mail everything back to Northwest Research Group. Please take a minute to read the instructions and review the sample diary to make sure that you fill out all of the forms correctly. Remember, whether you make a lot of trips or just a few, your information is important to us.

The diary and survey are an important part transportation planning efforts of both the Regional Council and local transportation planners. They have been used to implement transportation management programs in the region and will be used to refine the transportation plans in the future. The information we have gathered enhances our travel forecasting and transportation planning in the Puget Sound Region.

We have enclosed two dollars for each person aged fifteen and over as a small "Thank You" for your help. Northwest Research Group in Bellevue is conducting the survey this year. If you have any questions, don't hesitate to call Laurel White at (425) 635-7481. Or you can call me at (206) 464-7964.

Thanks again for your help.

Sincerely,



Neil Kilgren
Program Manager
Puget Sound Regional Council

Cover Letter to Replacement Panel Members

Welcome to the Puget Sound Transportation Panel!

This is the ninth wave of a continuing study to collect information on travel in the region. As the region's population changes -- in terms of age, the labor force participation, household composition, and so forth -- our transportation needs change too. Thus, planning for our future transportation needs depends on collecting and analyzing information about how travel behavior is changing. Information from this survey will help shape important transportation decisions, such as investments in highways, roads, ferries and transit and carpool services. This panel survey is the only one of its type in the United States.

Your household is one of a small number that was drawn at random. For the results to truly represent the travel needs of the population of the Puget Sound Region, it is important that each diary and diary supplement be completed and returned. The information you provide will be strictly confidential and will be combined with other households to analyze travel patterns and needs in the region. The identification numbers on the diaries allow us to correlate the travel patterns of members of the same household and allow us to check off your name when we receive your diaries.

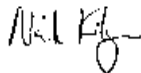
We have enclosed two dollars for each person aged fifteen and over as a small "Thank You" for your help. Each diary is labeled with the name of a member of your household and a day of the week. Please have each member record all of their trips for the two days indicated (the same two days for each member of the household) on the diary with his/her name. Instructions and an example are enclosed.

A survey about you and your household is also enclosed. This survey will help us find out how traveler behavior is affected by the presence of traffic information, ownership and use of telecommunications and computer services, as well as attitudes and values related to time, traffic, technology and travel in the Puget Sound Region.. For more information about this and other travel survey activities by the Regional Council, go to our Web site at <http://www.psrc.org>

Northwest Research Group of Bellevue is conducting the survey. If you have any questions, don't hesitate to call Laurel White at (425) 635-7481. Or you can call me at (206) 464-7964. Thanks again for your help.

Sincerely,

Neil Kilgren



Program Manager, Puget Sound Regional Council

Wave 9 Travel Diary

Wave 9 Supplemental Travel Diary

Sample Diary



Puget Sound Transportation Panel



TRAVEL DIARY INSTRUCTIONS



There are two diaries for each person in your household age 15 and older. Each diary is labeled with a name, ID#, and date/day of the week. You must fill out your diaries on the two consecutive days of the week indicated. If you forget or cannot fill out your diaries on your assigned dates, you may wait a week and fill the out on the same days of the following week. All members of the household should fill out diaries for the same two days.

UPDATE PHONE

Please check the telephone number printed on the diary labels and correct if necessary.

I STARTED THE DAY:

Record where you were first thing in the morning. This will be home for most people.

I LEFT AT:

In the "I Left At" column, write the time you left to begin your trip.

TO GO TO:

In the "To Go To" column, write the complete address of your stop. Please remember to include directionals (N, S, E, W, NE, SE, NW, SW) and street type (Ave, St, Ct, Rd, Cir, etc.). If you do not know the exact address, please give us the nearest cross streets. If you do not know those either -- then as a last resort -- please write the name of the area or building. Remember that some stores and services have more than one location. Thus, "Thriftway, Seattle" is not specific enough because there is more than one Thriftway in Seattle.

Please remember that the last line in the diary should show your last return trip of the day, or where you were at 1 a.m. This will be home for most people, so don't forget your trip home.

GOT THERE AT:

In this column, write the time at which you reached your stop.

REASON FOR TRIP:

What was the purpose of the trip? For example:
Commute to / from work, other work-related travel, commute to / from school, commute to / from college, taking child to / from school or lesson, visiting friends, errand, doctor appointment, delivery, shopping, dining, etc.

HOW?

What mode of transportation did you use? For example:
Car, truck, vanpool, motorcycle, bus, school bus, walk, walk-on ferry, drive-on ferry, bicycle, taxi, monorail, train.

DRIVER OR RIDER?

Circle "D" or "R" to show whether you were a driver or rider on the trip.

HOW MANY TOTAL?

Include yourself. If you and a friend take the bus shopping, record "2", but if you took the bus and met each other at the shopping center, record "1". If you take the bus, do not count the total number of people on the bus. However, if you carpool, do record the total number of people in the carpool.

WHO?

Please list the relationship -- such as husband, son or daughter, co-worker, friend, friend's child, child's friend -- of the people with whom you traveled.

TRAVEL INFORMATION?

Indicate whether or not you consulted traffic, transit, or ferry information prior to or during any part of your trip. Travel information may include things such as traffic reports on the radio or television, accessing bus route or traffic information online, etc. If you circle "yes" for any trips, please continue by filling out the **Diary Supplement**.

WHAT IS A TRIP?

Every stop you make should be recorded on a separate line. So, if you walk from home to Safeway, then to the post office and then back to home, you would record these individual trips on three separate lines, ending with your trip home.

FERRY TRIPS:

List as three trips: the first is the trip to the ferry terminal, the second is the trip across water, and the third is the trip to your next stop.

CARPOOLS/VANPOOLS:

If you ride in a carpool/vanpool, you do not need to show the stops to pick up or drop off riders. If you are the driver of a carpool/vanpool, please write down all of your stops, including pick-ups or drop-offs.

PARK-AND-RIDE USERS:

List as two trips: the first is the trip to the park-and-ride lot, and the second is the trip to your next stop.

WALKING TO THE BUS:

Walking to a nearby bus stop does not need to be shown as a separate trip.

BUS TRANSFERS:

Do not count transfers as another trip.

STAYED HOME:

If you did not go anywhere on your assigned day, please check the box on the right hand side of the diary.

VACATION:

If you were outside the four county area (King, Pierce, Snohomish, Kitsap) on both of your diary days, then please fill out your diaries the following week on the same days of the week.

**WHEN YOU COMPLETE
YOUR DIARIES:**
each

Please collect completed diaries **and Diary Supplements** from
household member and return them to Northwest Research
Group in the postage-paid envelope provided.

*** Please list ALL trips you make ** Please write each stop on a SEPARATE
LINE ***

QUESTIONS?

If you have my questions, please call us collect at 1-800-545-5909.
Laurel White will be glad to answer your questions.

**Cleaning and Coding Rules for
00-153 Puget Sound Regional Council Wave 9 Travel Diaries**

ID STICKER:

- Enter Name
- Enter ID # (this should be a 9-digit field)
- Day '1' or Day '2'
 - 1-Monday
 - 2-Tuesday
 - 3-Wednesday
 - 4-Thursday
 - 5-Friday
- Date (should be a 6-digit field)
- Phone (should be a 10-digit field)
- ! If respondent crossed out original day/date and hand-wrote new one – ENTER **NEW DAY/DATE**

I STARTED THE DAY AT:

- Enter Address or Cross Streets
- Enter City using code list (on separate sheet)
- ! Please be accurate in spelling.
- ! Use standardized address indicators:
 - **St, Ave, Blvd, Pl, Ln, Way**, etc.
 - **N, S, E, W, NW, SW, NE, SE**
- ! Do not use period “.”
- ! If “Apt” or “Apartment” or “Unit” etc., enter “#” instead
- ! After streets named with numbers, enter “st”, “nd”, “rd”, or “th” as appropriate (for example “123rd St)
- ! Enter in Title Case – Meaning Each Word Begins With a Capital Letter and the Other Letters Are Lower Case (except in the case of directionals, such as “Penny Ln **NW**”)

REASON FOR BEING THERE:

Code response according to this list and write it on hard copy:

01. HOME
02. COMMUTE TO/FROM WORK
03. OTHER WORK-RELATED TRAVEL
04. COMMUTE TO/FROM SCHOOL
05. TAKING CHILD TO/FROM SCHOOL OR A LESSON (DROPPING OFF OR PICKING UP A CHILD IN GENERAL)
06. VISITING FRIENDS / FAMILY
07. ERRAND (INCLUDES PICKING UP / DROPPING OFF FRIENDS OR OTHER FAMILY MEMBERS)
08. DOCTOR APPOINTMENT / ANY MEDICAL APPOINTMENT
09. DELIVERY
10. SHOPPING
11. DINING / COFFEE
12. RECREATION / PERSONAL (ENTERTAINMENT / EXERCISE / CHURCH / LESSONS, SPORTS, ETC.)
13. VOLUNTEERING
14. GOING TO ANOTHER TRAVEL MODE
15. OTHER APPOINTMENT OR MEETING
16. MEET, PICK UP, OR DROP OFF CARPOOLERS OR VANPOOLERS
17. LINKED COMMUTE TRIP TO/FROM WORK
18. COMMUTE TO / FROM COLLEGE
98. OTHER: SPECIFY
99. NO ANSWER

! If this field is left blank, but you can infer than the address he/she started the day at is his/her home address (either from other household members or from a trip home listed further down on the diary): Enter "1-Home" as the reason for being there.

NO TRAVEL:

- Enter "1" if the respondent DID Travel that day
- Enter "2" if the respondent checked the box indicating "I did not go anywhere on this day" OR if he/she has left the diary blank – This will skip you to the next day, person or record

NUMBER OF TRIPS:

- Enter the number of trips for that day circled at the top of the diary.
- ! Before data entry, the coder should add up the number of trips taken on the given day, write it at the top of the diary and circle it.
- ! You should be sure that you have cleaned, added, or deleted all possible trips before writing the total number of trips at the top.

I LEFT AT:

- Enter Time – Use 4 digits – For example: “0100” for 1:00 or “0830” for 8:30
- Enter “1” for AM Verify that appropriate AM/PM marker is circled
“2” for PM
“9” for NO ANSWER and cannot be determined

TO GO TO:

- Enter Address or Cross Streets
- Enter City using code list (on separate sheet)
- ! Please be accurate in spelling.
- ! Use standardized address indicators:
 - **St, Ave, Blvd, Pl, Ln, Way**, etc.
 - **N, S, E, W, NW, SW, NE, SE**
- ! Do not use period “.”
- ! If “Apt” or “Apartment” or “Unit” etc., enter “#” instead
- ! After streets named with numbers, enter “st”, “nd”, “rd”, or “th” as appropriate (for example “123rd St)
- ! Enter in Title Case – Meaning Each Word Begins With a Capital Letter and the Other Letters Are Lower Case (except in the case of directionals, such as “Penny Ln **NW**”)

I GOT THERE AT:

- Enter Time – Use 4 digits - For example: “0100” for 1:00 or “0830” for 8:30
- Enter “1” for AM - Verify that correct AM/PM marker is circled
“2” for PM
“9” for NO ANSWER and cannot be determined

REASON FOR TRIP:

- Code response according to this list and write it on hard copy:

01. HOME
02. COMMUTE TO/FROM WORK
03. OTHER WORK-RELATED TRAVEL
04. COMMUTE TO/FROM SCHOOL
05. TAKING CHILD TO/FROM SCHOOL OR A LESSON (DROPPING OFF OR PICKING UP A CHILD IN GENERAL)
06. VISITING FRIENDS / FAMILY
07. ERRAND (INCLUDES PICKING UP / DROPPING OFF FRIENDS OR OTHER FAMILY MEMBERS)
08. DOCTOR APPOINTMENT / ANY MEDICAL APPOINTMENT
09. DELIVERY
10. SHOPPING
11. DINING / COFFEE
12. RECREATION / PERSONAL (ENTERTAINMENT / EXERCISE / CHURCH / LESSONS, SPORTS, ETC.)
13. VOLUNTEERING
14. GOING TO ANOTHER TRAVEL MODE
15. OTHER APPOINTMENT OR MEETING
16. MEET, PICK UP, OR DROP OFF CARPOOLERS OR VANPOOLERS
17. LINKED COMMUTE TRIP TO/FROM WORK
18. COMMUTE TO / FROM COLLEGE
98. OTHER
99. DON'T KNOW / REFUSED

HOW (VEHICLE TYPE):

- Code response according to this list and write it on hard copy:

- 01. CAR / VAN / SUV / TRUCK
- 02. CARPOOL (2-6 people in the vehicle at a time)
- 03. VANPOOL (7 or more people in the vehicle at a time)
- 04. BUS
- 05. PARATRANSIT (e.g. ACCESS)
- 06. TAXI
- 07. WALK
- 08. BICYCLE
- 09. MOTORCYCLE
- 10. SCHOOL BUS
- 11. DRIVE-ON FERRY
- 12. WALK-ON FERRY
- 13. MONORAIL
- 14. BOAT
- 15. TRAIN
- 16. AIRPLANE
- 98. OTHER
- 99. DON'T KNOW / REFUSED

DRIVER OR RIDER:

- Enter "1" for Driver
"2" for Rider
"9" for NO ANSWER or cannot be determined

! SKIP this question (meaning code as a "9" on hard copy) unless Travel Mode was:

- 1 - CAR / VAN / SUV / TRUCK
- 2 - CARPOOL
- 3 - VANPOOL
- 9 - MOTORCYCLE, OR

HOW MANY TOTAL IN GROUP:

- Enter Number
- ! Make sure he/she is including him/herself
 - For example, if he/she indicated "rider" and Group Size is only "1," then you can infer "Group Size" to be "2"
 - For example, if he/she entered "1" as Group Size, but also listed a Relationship in the next field, then you can infer "Group Size" to be "2" (or whatever is appropriate).
- ! If Travel Mode was mass transit (i.e. bus, school bus, ferry, train, airplane), make sure that the Group Size includes only those in the immediate party.
 - For example, if group size is large and the Relationship recorded in the next field is "passengers" or "strangers," then re-code Group Size to "1" or whatever is appropriate (meaning that if "husband" is also indicated under Relationship, then Group Size can be inferred to be "2").

WHO (RELATIONSHIP OF OTHER PEOPLE):

- Code responses according to this list and write it on hard copy:
 01. HUSBAND
 02. WIFE
 03. SON
 04. DAUGHTER
 05. FRIEND'S CHILD
 06. FRIEND
 07. CO-WORKER
 08. FATHER
 09. MOTHER
 10. BROTHER
 11. SISTER
 12. OTHER RELATIVE
 13. OTHER KIDS / KIDS' FRIENDS
 14. NEIGHBOR
 15. GRANDCHILD
 16. UNSPECIFIED SON OR DAUGHTER

98 OTHER: SPECIFY

99 NO ANSWER / NO MORE APPLY

- ! This is a Multiple Response field – code all Relationships listed.
- ! Try to make the number of Relationships listed matches up with Group Size.
 - For example, if Group Size is “5” and the Relationship field says “Co-Workers,” then code and enter Relationship as “7,7,7,7” meaning four co-workers were in the group.
- ! If you cannot infer how many of each Relationship are in the group, that is ok. Just enter one of each Relationship listed and I will code it later.
 - For example, if Group Size is “6” and the Relationship field says “Parents, Brothers, Sisters” and you can code Relationship as “8,9,10,11” even though this is only a Group Size of 5 – I will fix it later.
- ! Sometimes respondents mistakenly enter the relationship **between** the people in the group, such as “husband and wife,” when the respondent himself is the husband. If you can infer who the respondent is in the relationship, then cross out his/her part so we are only entering the relationship of the other person in the group. If you can’t tell, then enter both Relationships and I will clean it later.

TRAVELER INFORMATION:

- Enter “1” for YES
“2” for NO
“9” for NO ANSWER or cannot be determined

DIARY SUPPLEMENT:

Q1:

- Enter Trip Number
- Enter “1” for DAY 1
“2” for DAY 2
- ! Coders – Make sure the trip number matches up to the diary. This is a point of confusion because the first line of the diary is numbered “2” when it is actually trip 1. So, I am thinking that a lot of people may mess this up. It should be a “1” if they consulted travel information on their first trip, and so forth.
- ! If Diary Supplement is filled out but the Traveler Information field is blank or “No”, circle “Yes” for the corresponding trip on the travel Diary. First, make sure the respondent has not just confused the trip numbers.

Q2:

- Enter "1" for PRIOR
"2" for EN ROUTE
"9" for NO ANSWER

Q3:

- Code up to 3 responses using this code list:

01 A. I anticipated traffic congestion
02 B. I wanted to be sure I would arrive on time at my destination
03 C. I wanted to get to my destination as fast as possible
04 D. I'd heard about an incident & wanted to know more about it
05 E. I could see congestion on my route
06 F. The weather was bad
07 G. My bus was late
08 H. My ferry was late
09 I. I was late
98 J. Other (please specify)
99 NO ANSWER / NO MORE APPLY

Q4:

- Code all responses using this code list:

01 A. Radio before departing
02 B. Radio while en-route
03 C. Cable Television
04 D. TV news traffic reports
05 E. Any traffic Web site
06 F. Any transit or ferry_Web site
07 G. Made a phone call before departing
08 H. Made a phone call while en-route
09 I. Received an email alert
10 J. Received a phone call alert
98 K. Other (please specify)

99 NO ANSWER / NO MORE APPLY

Q5:

- Code all responses using this code list:
 - 01 A. Made no change
 - 02 B. Changed the time I left
 - 03 C. Chose to travel by a different means of transport
 - 04 D. Took a whole different route from my planned_one
 - 05 E. Took my planned route, but with small changes to avoid a congested area
 - 06 F. Added trips that I otherwise wouldn't have made at that time
 - 07 G. Delayed a trip planned for that time
 - 08 H. Re-ordered my originally planned sequence of stops
 - 98 I. Other (please specify)
 - 99 NO ANSWER / NO MORE APPLY

Q6:

- Code all responses using this code list:
 - 01 A. There was an incident on my route, such as a car accident or overturned truck
 - 02 B. Some part of my route was closed or out of service for repairs or construction
 - 03 C. There was a weather-related hazard on my route, such as ice or flooding
 - 04 D. Transit vehicle or ferry was late or cancelled
 - 05 E. Nothing special happened, it was just traffic congestion
 - 08 F. Other (please specify)
 - 09 NO ANSWER / NO MORE APPLY

! Skip this question if the respondent answered "1 – Made no change" to Q5.

Q7:

- Code all responses using this code list:

01 A. Reduced trip time
02 B. Safer travel conditions
03 C. More predictable travel times
04 D. Less stressful travel conditions
08 E. Other (please specify)
09 NO ANSWER / NO MORE APPLY

- ! Skip this question if the respondent answered “1 – Made no change” to Q5.

GENERAL NOTES:

- ! Add trip home at end of the day IF APPROPRIATE.
 - If the respondent forgot to add their trip home, please add it – only enter as much information as you can infer – meaning leave the fields other than “To go to” and “Reason” blank, or as “no answer”.
 - If you are not sure if the respondent came home (for example if he/she went to a friend’s house and maybe stayed the night) you do not need to add it.
- ! Completely eliminate by drawing a line through any trips that are:
 - Transferring from one bus to another bus,
 - Walking less than 5 minutes to a bus stop, mailbox, etc.,
 - Stops made while riding in a carpool to pick up other passengers (NOTE that carpool drivers SHOULD enter these stops as separate trips)
 - Trips taken entirely outside of the Puget Sound area, such as on vacation in Oregon – Only the trip out of town and the trip back into town should be counted
- ! Make sure you have added and eliminated all trips before counting the total trips for the day. This will effect how many trips can be data entered.
- ! Any missing or confusing data can be cross-referenced to other household members who may have been taking the same trips and corrected on the hard copy before data entry.

Attitude and Values Survey

Household Attitude and Values Survey

Personal Attitude and Values Survey

PSRC Household Survey Instructions

Use Red Pen ONLY for coding.

Quest #	Coding / Cleaning	DE Notes
ID#	Make sure Sticker with HH ID# is attached. If not, set aside and inform supervisor.	
A	If number of private vehicles is not marked, look to see how many vehicles were answered for and enter this number	
B	For each vehicle, write the number of the response to the left of the check box.	
C		Enter only during Verification
D		Enter amount without commas (,).
E	Write the number for the response to the left of the check box.	
F	If both owned and leased have amounts written in, cross out owned.	Enter amount without commas (,).
G	Write the number of the response to the left of the check box. If 1-4 are marked and None of these is also marked, cross out None of these.	
H	Write the number of the response to the left of the check box. If 1-4 are marked and None of these is also marked, cross out None of these. If One or more computers is not marked and there is a number for how many computers are in the household, mark One or more computers.	
I	Write the number of the response to the left of the check box. If 1-4 are marked and None of these is also marked, cross out None of these.	

PSRC Personal Survey Instructions

Use Red Pen ONLY for coding.

Quest #	Coding / Cleaning	DE Notes
ID#	Make sure Sticker with name and ID# is attached. If not, set aside and inform supervisor.	
1A	Write the number of each response to the left of the check box. If None of the above is checked, and responses 1-4 are checked, cross out None of the above. If Internet accessed from home is not checked, but 1B is answered, mark Internet accessed from home.	
1B	Write the number of the response to the right of the check box.	
1C		Enter only during verification ONLY.
2A	Write the number of each response to the left of the check box. If None of the above is checked, and responses 1-4 are checked, cross out None of the above.	
2B	If neither response is checked, mark No	
3	If both owned and leased have amounts written in, cross out owned.	
5	Write the number of each response to the left of the check box. If None of the above is checked, and responses 1-3 are checked, cross out None of the above	
6	Write the number of each response to the left of the check box. If multiple responses are checked, cross out all except the highest of 1-3.	
7A	Write the number of the response to the left of the check box. If None of the above is checked and other responses are checked, cross out None of the above.	Enter Other responses during verification ONLY.
7B1	Write the number of the response to the left of the check box. If response is not marked and 7B2 is marked, mark Yes for 7B1.	Enter Other responses during verification ONLY.
7B2	If multiple responses are marked, cross out all responses and change 7B1 to No	
8	If multiple responses are checked, cross out entire row. If no responses are checked, cross out entire row.	
9	Write the number of the response to the left of the check box.	

10	Write the number of the response to the left of the check box.	Enter Other responses during verification ONLY.
11	If multiple responses are checked, cross out all responses.	
12	If multiple responses are checked, cross out entire row. If no responses are checked, cross out entire row.	
13	Write the number for the response corresponding to each letter to the left of the box. If the respondent did not fill in the boxes and only circled the letters, cross out the boxes. If the respondent ranked the choices, but did not fill in the boxes, write each letters numerical code inside the boxes.	
14	If multiple responses are checked, cross out entire row. If no responses are checked, cross out entire row.	
15	If multiple responses are checked, cross out entire row. If no responses are checked, cross out entire row.	

Data Files

Transportation Panel Recruitment

Data File Layout – Wave 9 Continuing Household Summary.sav

Variable	Rec	Start	End	Format
RESPNUM	1	1	9	F9.0
DISPOS	1	10	13	F4.0
A1A	1	14	14	F1.0
A1B	1	15	15	F1.0
A2A	1	16	16	F1.0
A2B	1	17	21	F5.0
C1A	1	22	23	F2.0
C2	1	24	25	F2.0
C3	1	26	27	F2.0
C4	1	28	28	F1.0
D3	1	29	30	F2.0
D4	1	31	32	F2.0
D5	1	33	34	F2.0
D6	1	35	36	F2.0
HHCOUNT	1	37	40	F4.0
SPLIT	1	41	48	F8.2
P1NAME	1	49	74	A26
P1ID	1	75	99	A25
P1GENDER	1	100	103	F4.0
P2NAME	1	104	127	A24
P2ID	1	128	152	A25
P2GENDER	1	153	156	F4.0
P3NAME	1	157	178	A22
P3ID	1	179	203	A25
P3GENDER	1	204	207	F4.0
P4NAME	1	208	227	A20
P4ID	1	228	252	A25
P4GENDER	1	253	256	F4.0
P5NAME	1	257	275	A19
P5ID	1	276	300	A25
P5GENDER	1	301	304	F4.0
P6NAME	1	305	318	A14
P6ID	1	319	343	A25
P6GENDER	1	344	347	F4.0
P7NAME	1	348	355	F8.2
P7ID	1	356	363	F8.2
P7GENDER	1	364	371	F8.2
STREET	1	372	403	A32
CITY	1	404	420	A17
MAILZIP	1	421	425	F5.0
HOMEZIP	1	426	430	F5.0
HHID	1	431	442	A12
DAY1	1	443	446	F4.0
DAY2	1	447	450	F4.0
COUNTY	1	451	454	F4.0
LIFESTG	1	455	458	F4.0
HHTYPE	1	459	462	F4.0
COMPLETE	1	463	470	F8.2
PHONE	1	471	482	A12

