USER'S GUIDE FOR THE PUBLIC USE DATA FILES

1995 NATIONWIDE PERSONAL TRANSPORTATION SURVEY

October 1997

Research Triangle Institute
Research Triangle Park, North Carolina

Federal Highway Administration
United States Department of Transportation

1995 NPTS USER'S GUIDE

TABLE OF CONTENTS   PAGE

CHAPTER 5. USING THE DATA

CHAPTER 6. 1995 NPTS RESULTS

APPENDIXES

CHAPTER I - INTRODUCTION

1995 NPTS   This User's Guide provides details of the 1995 Nationwide Personal Transportation Survey (NPTS). It provides information to assist transportation planners and others who need comprehensive data on travel and transportation patterns in the United States. The 1995 NPTS updates information gathered in similar studies in 1969, 1977, 1983, and 1990.

DATA FILES   Publicly available data files containing data from the 1995 study have the following general features:
- it is a microdata data set, which contains the record of each interview (with information deleted that would identify the specific person or household),
- the data are arranged in six hierarchical files to facilitate analysis, and
- the data are available in the Statistical Analysis System (SAS), standard ASCII, and DBF format.

USER'S GUIDE   This guide includes descriptions of the survey procedures and methodology used for the 1995 NPTS, the questionnaire, the public use data files, and the weighting procedures for 1995 NPTS data. Appendices provide sample tables, SAS Proc Contents Listings, data file code books, glossary of NPTS terms, a copy of the 1995 NPTS questionnaire, discussion of estimating sampling errors, and additional background information.

1-A. SURVEY SPONSORS

Research Triangle Institute (RTI) conducted the 1995 NPTS under the sponsorship of four agencies of the U.S. Department of Transportation:
Federal Highway Administration (FHWA)
Bureau of Transportation Statistics (BTS)
Federal Transit Administration (FTA)

National Highway Traffic Safety Administration (NHTSA)

FHWA has the lead role in coordinating the survey.

1-B. PURPOSE OF THE SURVEY

DATA COLLECTED

The NPTS serves as the nation's inventory of daily personal travel. It is the only authoritative source of national data on the daily trips including, but not limited to:
- purpose of the trip (work, shopping, etc.)
- means of transportation used (car, bus, subway, walk, etc.)
- how long the trip took , i.e., travel time
- time of day the trip took place
- day of week the trip took place, and, if a private vehicle trip:
- number of people in the vehicle , i.e., vehicle occupancy
- driver characteristics (age, sex, worker status, education level, etc.)
- vehicle attributes (make, model, model year, amount of miles driven in a year).

These data are collected for:
- all trips,
- all modes,
- all purposes,
- all trip lengths, and
- all areas of the country, urban and rural.

USES OF NPTS

NPTS data are used to:
- quantify travel behavior
- analyze changes in travel trends over time
- relate travel behavior to the demographics of the traveller
- look at the relationship of demographics and travel over time
- look at the relationship of travel and land use

The NPTS data are used primarily for gaining a better understanding of travel behavior. The data are used to enable DOT officials to assess program initiatives, review programs and policies, and plan for the future.

The NPTS is a tool in the urban transportation planning process; it provides data on personal travel behavior, trends in travel over time, trip generation rates, national data to use as a benchmark in reviewing local data, and data for various other planning and modeling applications.

The transportation research community, including academics, consultants and government, use the NPTS extensively to examine:

- Travel behavior at the individual and household level
- The characteristics of travel, such as trip chaining, use of the various modes, amount and purpose of travel by time of day & day of week, vehicle occupancy, and a host of other attributes
- The relationship between demographics and travel, e.g. the 1990 NPTS showed increases in personal mobility among women, older Americans, youth, and to some degree, low-income households
- The public's perceptions of the transportation system

People in various fields use the NPTS data to connect the role of transportation with other aspects of our lives. Medical researchers use the data to determine accident exposure rates of school-age children, particularly when they are travelling on their own by walking or biking. Social service agencies need to know more about how low-income households currently travel, which has taken on heightened importance with the employment initiatives for unemployed portion of the welfare population.

1- C. COVERAGE AND SCOPE

COVERAGE-WHO
The NPTS is a survey of the civilian, non-institutionalized population of the United States. As such, it does not include:

- military personnel living on base or overseas, OR
- residents of group quarters, such as nursing homes or assisted-living facilities, college dormitories, long-term medical institutions, and prisons.

Military personnel are included if they live in civilian housing. College students are included if they live in apartments or other off-campus housing, or if they live at home for the summer.

WHEN

The 1995 NPTS was conducted over a period from May 1995 to July 1996. Travel data were collected for all seven days of the week, including all holidays.

WHERE

All trips by U. S. residents were recorded, including those where the destination was a foreign country.

SCOPE-WHAT THE NPTS INCLUDES -

The 1995 NPTS data set includes:

- Household data on relationship of household members, education level, income categories, housing characteristics, and other demographic information.
- Motor vehicle information including year, make, model, and odometer readings, converted to annual estimates.
- Information on the availability of public transportation.
- Data about drivers, including information on travel as part of work.
- Data about one-way trips taken during a designated 24-hour period (the household's travel day) including the time the trip began, length of trip, composition of the travel party, mode of transportation, purpose of the trip, and specific vehicle used (if a household vehicle).
- Data describing round-trips taken during a 14-day period (the household's travel period) where the farthest point of the trip was at least 75 miles from home, including the destination, mode, and purpose.

- Information to describe characteristics of the geographic area in which the sample household and workplace of sample persons are located.
- Data on telecommuting.
- Data on people who use transit occasionally.
- Public perceptions of the transportation system.
- Reasons for not car-pooling or using public transit for the work trip.
- Incidence of seat belt use, and reasons people don't always wear seat belts.

WHAT IS NOT INCLUDED IN THE NPTS

In the past there have been many requests for data that are closely related to the NPTS, but are not available in the NPTS. Examples of the most common requests for data that are NOT included in NPTS are:

- Information on costs of travel (other than parking costs at work).
- Information about specific travel routes or types of roads used.
- How travel of the sampled household changes over time. Note: The NPTS is a cross-sectional survey, which means that different households are selected for the sample each time it is conducted. The NPTS is not currently a longitudinal survey, which would involve tracking the same sample households over time.
- Information that would identify the exact household or workplace location.
- Travel by household members under the age of 5 when they travel with non-household members, e.g., a day care provider takes your child to the park, another parent takes your child to their house.
- Information on the fuel economy of vehicles, i.e., miles per gallon or MPG. However, the NPTS vehicle file includes the vehicle make, model and model year, which would allow linking the NPTS with another source of MPG.
- The traveller's reason for selecting a specific mode of travel over another mode

1-5

1-D. COMPARABILITY WITH EARLIER NPTS DATA

1969 NPTS   The original Nationwide Personal Transportation Survey (NPTS) was conducted from 1969 to 1970 by the U.S. Bureau of the Census, who collected the survey data for the Federal Highway Administration (FHWA) of the U.S. Department of Transportation. That first NPTS survey was based on a multi-state probability sample of housing units located in 235 sample areas, which included 485 counties and independent cities representing every state of the U.S. and the District of Columbia. Experienced Census Bureau field staff conducted personal interviews in some 15,000 households, obtaining transportation-related information for all occupants.

Sections of that initial questionnaire provided information including:
- automobile record (ownership, whether an automobile was purchased new or used, and annual miles driven)
- proximity to public transportation and shopping
- travel to work
- driver information, such as estimated annual miles driven by licensed drivers
- travel to school
- all one-way trips by motor vehicle or some form of public transportation during the previous 24 hours (referred to as the travel day)
- record of all trips lasting one or more nights during the seven days that ended the day before the pre-assigned travel day.

1977 NPTS   During the 1977 NPTS, an update of the 1969 nationwide survey, the data were again collected from households in a national sample of area segments, with basically the same sampling, collection, and processing procedures as the 1969 version.   The Census Bureau collected the data from approximately 18,000

households nationwide. The 1977 survey questionnaires were expanded considerably and updated to better address then-current issues, and the survey procedures were modified to upgrade the effort.

One of the major differences between the 1969 and the 1977 surveys was the extension of vehicle coverage to all motor vehicles owned by a sample household. While the 1969 survey included only automobiles as part of the vehicle record, the 1977 survey also included personal trucks and vans, camper vehicles, motorcycles, and mopeds.

1983 NPTS

When the 1983 NPTS was conducted between February 1983 and January 1984 the Census Bureau again collected survey data by using face-to-face interviews in an area probability sample of nearly 6,500 households. Additional, information was obtained about the use of safety devices in household vehicles including seatbelt usage: when, how often, under what conditions; and information about child safety topics such as type of safety seat used and its position in the vehicle, internal harnesses in use, and injuries sustained from an emergency stop when a child was not using a child safety seat or other safety device.

1990 NPTS

Research Triangle Institute (RTI) conducted the 1990 NPTS using a computer-assisted telephone interviewing (CATI) technology. This was a significant change from the in-home interview methodology previously used for the NPTS. The national sample consisted of 18,000 households. One state and two Metropolitan Planning Organizations purchased additional interviews in their areas, increasing the total sample to more than 22,000 households.

Other methodology changes in 1990 were:
- the use of the random-digit dialing (RDD) sampling procedures,
- greater utilization of proxy respondents, and
- an increase in the allowable window for interviewing

sampled persons about their travel from four to six days.

The 1990 NPTS included new questions about vehicle accidents that members of the household had experienced and the highway types used for selected vehicle trips on the household's travel day. The core data components, however, were comparable to previous surveys in the series.

The 1990 NPTS features which were the same as in previous NPTS surveys included the:
- definitions of eligible persons, trip purposes, and modes of transportation,
- concepts of a travel-day section for all trips taken on the travel day and a travel period section for reporting long trips taken during a 14-day period, and
- core information collected for sample households, persons, vehicles, drivers, travel period, and travel day trips. For each travel day trip, information was collected regarding the trip purpose, mode, distance, time taken, and accompanying persons, as it was during earlier surveys.

1995 METHODS STUDIED

Prior to the 1995 NPTS pretest, the following methodology issues, which might improve the survey results or strengthen analysis capability, were studied:
- Methods to obtain more complete trip reporting
- Alternate definitions of a completed household interview
- Use of proxy respondents
- Obtaining data on trip chaining
- Enhanced geographic coding of household and work locations
- Expanded on-line editing during the interviews
- Vehicle odometer readings to obtain more accurate miles traveled (VMT) estimates.

1995 PRETEST   In preparation for the 1995 NPTS, a large methodological pretest was conducted from November 1994 through January 1995 to identify problems with new questions, determine the average interview time, and test the data collection procedures. A methodological experiment was embedded within the pretest sample in order to test three different survey methods: recall, memory jogger, and travel diary. The major pretest result was the indication that the use of travel diaries would lead to more complete NPTS trip reporting, and FHWA decided to utilize a one-day trip diary in the 1995 NPTS.

Other pretest results included the following:
- Practicality of mailing advance letters to selected households
- Feasibility of collecting more detailed information about the household location
- Feasibility of collecting paired odometer readings for the sample vehicles
- Advantage of using a household roster of trips to reduce respondent burden and increase trip recall

The household roster of trips allowed the CATI interviewer to skip trip detail for a specific respondent if information about that trip had already been reported by another household member.

Mailing advance letters informed the sample households of their selection for the 1995 NTPS, legitimized the survey and presented it in the larger context, and notified them that an interviewer would telephone their household to interview the members.

1995 NEW CONTENT   The 1995 NPTS included new questions to:
- Measure the public's perceptions of, or satisfaction with, the nation's transportation system
- Determine respondents usual modes of travel
- Elicit their reactions to statements about mobility and congestion
- Identify perceived difficulties in travel
- Collect information on the use of seat belts

- Describe the household's location, type of structure, and tenure
- Improve trip purpose coding

1-E. TYPICAL NPTS HOUSEHOLD

To illustrate key NPTS concepts, an example may be helpful. We introduce at this point a hypothetical sample household consisting of the following four persons:

> **Typical NPTS Household:**
>
> Terry and Keith live in a metropolitan area with their two children Lucy and Ben. When Keith picked up their mail in early October, 1995, he read the letter from Rodney Slater, the Administrator of the Federal Highway Administration, advising that their home telephone number had been selected in the sample for the Nationwide Personal Transportation Survey, and that they would be receiving a telephone call from an interviewer at Research Triangle Institute.

We will refer back to this typical NPTS household from time to time in later sections of this User's Guide, to illustrate aspects of the NPTS survey procedures or methodology.

CHAPTER 2.   SURVEY CONTENT AND INTERVIEWS

2-A. INTERVIEW PROCESS

OVERVIEW　　An understanding of the data collection for the NPTS is essential to the proper use and interpretation of the data. FHWA staff and other survey sponsors occasionally monitored the data collection interviews from the Telephone Survey Unit at Research Triangle Institute. Everyone who had the experience of monitoring the interviews came away with a better understanding of the survey data.

For purposes of this User's Guide we have attempted to give the reader a better understanding of the interview process by using the Typical NPTS Household example. Basic background on the interview process, as contained in the next few sections, will aid the reader in understanding the Typical Household's involvement in the survey.

THREE PHASES　　The NPTS data collection consists of three main phases:

Household Interview - collects information about the household, the household members, vehicles owned by or available to the household, and to obtain the mailing address for the travel diaries.   It is conducted once per household.

Person Interview - collects the travel day data, the long trip (travel period) data, information about worker status and the typical trip to work, baseline data on occasional use of transit and occasional working from home, and customer satisfaction with the transportation system. A person interview is attempted for each household member 5 years and older, with an adult reporting the travel of those 5-13 years old. For the household to be included in the final data set, interviews had to be completed with at least half of the household adults (defined as persons 18 years and older)

Odometer Readings - are collected for each household vehicle at two points in time. The first is at or around the time of the person interviews. The second is 2-6 months later.

2-B. INTERVIEWS

HOUSEHOLD INTERVIEW

Once a sample telephone number was selected, an advance letter was sent to the household if a mailing address for that telephone number was available from computerized telephone directory services. After the advance letter mailing, an interviewer would call the number, ask some screening questions to determine that it was a household, and complete the household interview portion of the survey by interviewing one of the adult household members. The household interview questions are contained in Sections A through D of the CATI questionnaire (see **Appendix E.**)   Exhibit 1 describes screening and interviewing in the sample household.

Exhibit 1- Household Screening and Interview Contents

Data Collected	1. Information to determine whether the selected telephone number is a household and not a business, fax line, etc. 2. Characteristics of the household members, vehicles, and address for mailing the travel diaries.
Who is contacted	1. Any household member who can respond (screening questions). 2. A household member 18 years or older can answer the questions about household members and vehicles.
When collected	The first contact with the household can occur any time after the telephone number is placed in the sample. Follow-up contacts are scheduled as part of the data collection
Why collected	1. To insure the sampled number is a household, not group quarters, business, etc. 2. To introduce the survey and obtain the household-level and address information.

How collected	1. Telephone screening contact (1 to 2 minutes)
	2. Household interview (8 to 10 minutes)

AFTER THE HOUSEHOLD INTERVIEW

At the time the household interview was completed, the computer would assign a pre-selected travel day 12 to 18 days in the future. The travel diaries would be prepared and mailed to the household, along with odometer forms, a reminder to complete the diaries on the travel day, response incentive money ($2.00 per person), and other instructions to the household.   On the day before the household's travel day, an NPTS interviewer would call and briefly remind the person answering the telephone to ask the members to complete their travel diaries on the following day.

PERSON INTERVIEW

Attempts to complete the person interviews began on the day following the travel day, and generally continued (with a maximum limit of six days) until all person interviews had been completed for all household members 5 years of age and older.   Proxy interviews would be conducted, for persons 5 to 13 years of age, by interviewing another household member 14 or older. Persons 14 and older would be interviewed individually as often as possible, with proxy interviews allowed with other household members when necessary. Exhibit 2 describes the person interview.

Exhibit 2 - Person Interview Content by Age of Household Member

	Age 16 and older	Age 5 to 15 years
Data Collected	Customer satisfaction Driver information Education level Usual travel to work Travel day trip information Travel period trip information	Travel day trip information Travel period trip information
Who is contacted	Each household member 16 years and older	Each household member 14 and 15 years old, Proxy for those 5 to 13 years of age.
When collected	Within 6 days following travel day	Within 6 days following travel day
Why collected	To obtain the person-level data. The travel day trip information collectd in the person interview is considered the core NPTS data	To obtain the person-level data. The travel day trip information is considered the core NPTS data
How collected	Travel diaries mailed; Person interview by telephone (10 - 15 minutes)	Travel diaries mailed; Person interview by telephone (5 - 10 minutes)

ODOMETER READINGS   The third portion of the NPTS survey involves collecting odometer readings two times for each of the household's vehicles. A form listing each vehicle and requesting the information was mailed with the travel diaries. The first odometer readings and the dates they were made were collected during the person interviews if possible. If the readings were not available, household members were asked to record the readings within a few days. Additional odometer reading call back attempts were made if the readings had not been obtained when person interviews were completed for the household, or when the six day interviewing window had

expired.

At least 2 months after the first odometer readings, another letter was mailed to the sample household. This letter also listed the vehicles and requested that another reading be taken and the date recorded on the form, for each of the vehicles.

Subsequently, NPTS interviewers called the households to collect the second odometer reading information. The exhibit that follows describes the odometer reading contacts.

Exhibit 3 - Contents of the Odometer Reading Contacts

	First Odometer Reading	Second Odometer Reading
Data Collected	Date and odometer reading for each vehicle	Date and odometer reading for each vehicle
Who is contacted	Any household member who can provide the information	Any household member who can provide the information
When collected	During person interviews, or shortly after	From 2 to 6 months following the first readings
Why collected	Obtain better information on vehicle miles of travel	Obtain better information on vehicle miles of travel
How collected	Recording form mailed with travel diaries; results collected by phone	Recording form sent in separate mailing; results collected by phone

2-C. NPTS CORE DATA

There is a group of data that is considered "core" NPTS data, and it is largely composed of the items that have been collected in all five NPTSs to date. It is very likely that this core data will be included in future NPTS efforts. The data items that are considered core and their item number on the 1995 NPTS questionnaire are:

HOUSEHOLD LEVEL   FOR EACH HOUSEHOLD:

Household size - item D.1

Household composition - derived from items D.1-D.4, D.7-D.8

Number of vehicles - item B.1

Race & Hispanic status of household respondent - items D.5-D.6

Household location - items D.17-D.18, J.1-J.2, plus information
from the sample frame

Income - Sections K and I

Availability of public transportation - items C.1 - C.5

PERSON LEVEL   FOR EACH HOUSEHOLD MEMBER:

Age - item D.3

Sex -item D.4

Education level - item F.1

Worker status- items D.12 and F.2

If worker - typical work trip- items F.5-F.9

Driver status - items D.11 and E.6

If driver- annual miles driven - item E.8

If driver- drive as part of work - items G.3-G.8

VEHICLE LEVEL   FOR EACH HOUSEHOLD VEHICLE:

Make - item B.2

Model - item B.2

Model year - item B.2

Purchased new or used - item B.6

Annual miles driven - item B.7

Primary driver - item D.15

TRAVEL DAY   FOR EACH TRIP EACH HOUSEHOLD MEMBER 5 YEARS AND
OLDER TOOK ON THE HOUSEHOLD'S ASSIGNED TRAVEL
DAY:

Time trip began - item G.17

Trip purpose - item G.20

Distance to destination - G.22

Time trip took - G.27

Means of transportation - item G.25

If private vehicle trip, was household vehicle used - item G.23

If household vehicle used, which vehicle - item G.24

If private vehicle trip, did a household member drive - G.37
If household member drove, which one - item G.38
Any other household members on trip - item G.35
If household members, which ones - item G.36
Any non-household members in trip- item G.39
If non-household members on trip, how many - item G. 40

The answers to this series of core questions about each trip taken by the members of the household on their travel day provide the most sought after and most used data from NPTS and all other household travel surveys.

TRAVEL PERIOD   FOR EACH TRIP OF 75 MILES OR MORE (ONE-WAY) TAKEN IN THE TWO WEEK PERIOD ENDING ON, AND INCLUDING, TRAVEL DAY:
Trip purpose - item H.6
Means of transportation - item H.8
Destination - item H.2

SEGMENTED TRIPS   FOR EACH <u>PORTION</u> OF A TRIP TAKEN BY PUBLIC TRANSIT OR AMTRAK:
Means of transportation - item G.28
Travel time - G. 30

2-D. SURVEY CONTENT CHANGES IN 1995

The core questions in the 1995 survey remained the same as in previous NPTS surveys. However, a number of content changes were made in the 1995 NPTS, as described in this section.

ODOMETER READINGS   Two odometer readings and the associated date of the readings, planned to be taken two to six months apart, were attempted for each household vehicle. A model to estimate annual miles driven from these two readings and other information was developed. The odometer readings were collected and annualized to produce a separate estimate of vehicle miles of travel (VMT), in addition to the owner's estimate and the summation of travel day trips made

in that vehicle.

CENSUS TRACT AND BLOCK GROUP CHARACTER-ISTICS

The first three NPTS surveys were conducted by the U.S. Census Bureau using an area household sample in 1969, 1977 and 1983. However, because the Census Bureau had conducted the survey, there were very strict confidentiality requirements and the neither the address nor the Census tract could be identified outside the Bureau. For the 1990 NPTS FHWA chose not to collect address information. It was not necessary to do so because the survey was conducted totally by phone with no diary mailings.

Home and work addresses were collected in the 1995 NPTS. The purpose of collecting the addresses in 1995 was to mail the travel diaries, and also to add additional geographic detail to the data files. However, addresses are not part of the dataset. Appending a series of characteristics of the area of the residence and workplace locations to the data files will allow analyses of the land use-transportation connection, and may also facilitate the potential creation of synthetic travel survey data for states or metropolitan areas.

CUSTOMER SATISFAC-TION QUESTIONS

For the first time in the NPTS series, the 1995 survey contained questions on the public's opinion of transportation services and systems. The data user can analyze these attitudes in the context of how much the respondent travels, which modes are used, vehicle ownership, income, and so forth. It is anticipated that customer satisfaction questions will continue to be incorporated in future NPTS work.

SEAT BELT USE

Questions were included on how often people use seat belts. For those using seat belts some or most of the time, additional questions were asked on the reasons for not using them all of the time. This will benefit safety analysis of seat belt use, and provide a thorough catalog of reasons people do not always use seat belts.

**TRIP
PURPOSES**

In an effort to better understand travel, more detailed trip purpose data were collected. New trip purpose categories in the 1995 NPTS are:

- return to work
- take someone somewhere
- pick up someone
- out to eat
- return home.

The collection of trip purposes changed from a descriptive format (e.g., what best describes your reason for making this trip) to a FROM-TO format (e.g., a trip from "other family and personal business" to "home"). This is a more objective and more straightforward way to collect the data. This approach also allows for an improved analysis of trip chaining.

See **Appendix M** for a more detailed explanation of trip purpose coding and the trip purpose variables on the 1995 NPTS dataset.

2-E. TYPICAL NPTS HOUSEHOLD

**HOUSEHOLD
INTERVIEW**

At this point, we continue the example of the hypothetical household mentioned in Section E of Chapter 1. Here we describe their interactions with the 1995 NPTS project, by walking through the types of information collected.

First, an interviewer called and spoke with Terry; the household was screened to verify that it was a legitimate household sample and the household interview was conducted. In this example case, only one call was required to both screen, and complete the household interview.

Household Interview - Terry gave the household interview on October 15, 1995 and she is termed the Household respondent
- the '89 Camry was driven 14,000 miles in the past year
- the Ford Contour was driven 11,000 miles in the past year
- there is a bus stop one block from the townhouse they own
- there is a subway, but the nearest stop is about 2 miles away
- Terry is 37 years old, a female, an African-American. She is employed and is the primary driver of the Ford Contour.
- Keith is 39, a male, the husband of Terry, employed, and the primary driver of the Toyota Camry.
- Lucy is 16, female, and has begun driving.
- Ben is 10 years old, male.
- their mailing address is 2370 SW Fifth Street, Anytown, Anystate
        (Note that the mailing address is used to send the diaries. It is not kept on the datafile.)

AFTER HOUSEHOLD INTERVIEW

At the end of the household interview, the interviewer told Terry that the computer had selected October 29, 1995 as the random travel day for the household and asked that each family member keep a diary with key information about their travel on that day. The diaries were prepared and mailed to the household on October 22, along with instructions, $8.00 in incentives, the odometer reading form, and a reminder that their travel day was October 29.

PERSON INTERVIEW

On November 1, after several no-answer calls, an interviewer reached Terry at home and completed her person-level interview.

Person Interview with Terry - about 2 weeks after the Household Interview

- highway congestion is not a problem for her
- rough pavement on the highways is a small problem for her
- she has used public transportation three times in the past two months
- she is a driver and always wears her seat belts when in a private vehicle
- she drove about 12,500 miles in the past year
- she has completed some college, but does not have a Bachelor's degree
- she works full time--her workplace is at 123 Frontage Road, which is 9 miles from her home
- she usually leaves home at 7:45 AM to go to work--the trip usually takes 20 minutes one-way and she drives alone in the Contour
- she does not pay to park at work
- she never works at home in place of going to her workplace

Person Interview continues with Terry's Travel Day

Inventory of Terry's trips on the travel day,
October 29:

> 7:45 am - to work
> 12:30 pm - to lunch
> 1:20 pm - return to work
> 5:15 pm - leave work
> 5:35 pm - stop at bank
> 5:45 pm- return home
> 7:25 pm - walk the dogs,
> with Keith

Detailed information collected on sample trip to lunch:
> started at 12:30 pm
> from work to eat out
> walked 3 blocks to
> restaurant,
> took 10 minutes
> was with two coworkers

Detailed information collected on sample trip to the Bank
> started at 5:15 pm
> from work to other family & personal business
> trip was 8 miles, it took 20 minutes
> she drove alone in the Contour.

**TRAVEL
PERIOD**   Terry has not made any trips of 75 miles or more one-way in the
two week period ending on Travel Day

> **Additional information gathered from Terry at the end of her person interview**
>
> - they have one phone number for their household
> - their annual household income is in the $35,000-$40,000 range
>
> Interviewer asked for the odometer readings but they were not available. Terry agreed to make the readings and the interviewer said she would call back to record them.

FIRST ODOMETER READINGS

The same interviewer called again on November 3 and completed the odometer readings and the date they were taken for both vehicles.

> **Callback for odometer reading two days after Terry's person interview**
>
> - Contour is 14,355, Camry is 73,940
> - both readings were recorded on November 2, 1995

SECOND ODOMETER READINGS

Around February 1, Terry received a letter from RTI asking that another recording be made of the odometer readings of the two vehicles. Keith completed the form and placed it by the telephone. On February 20, another interviewer called for the readings. Lucy was the only person home at the time; she found the completed form by the phone and gave the information to the interviewer.

> **Callback for second odometer reading three months later**
>
> -Contour has 17,923, Camry has 78,125
> -both readings were recorded on February 5,1996.

CHAPTER 3 - SURVEY PROCEDURES AND METHODOLOGY

3-A. OVERVIEW

WHO IS INCLUDED
The NPTS collected travel data from the civilian, non-institutionalized population of the United States. People living in college dormitories, nursing homes, other medical institutions, prisons, and on military bases were excluded from the sample.

There are a total of 42,033 households on the final 1995 NPTS dataset. Approximately half of the households are in the "national sample" and the other half represent the add-on areas of:
New York State
Commonwealth of Massachusetts
Oklahoma City, Oklahoma
Tulsa, Oklahoma, and
Seattle, Washington.
These areas purchased larger samples to support their planning needs. Interview data from all 42,033 households are included on the public use data file. For areas that conducted add-on surveys, the weights were adjusted downward so their inclusion does not skew the national estimates.

All household members age 5 or older were eligible to be interviewed. For children ages 5 through 13, an adult member of the household reported for them.

HOW THE DATA ARE COLLECTED
The NPTS was conducted as a telephone survey, using Computer-Assisted Telephone Interviewing (CATI) technology. The sample was a list-assisted telephone number sample.

Each household in the sample was assigned a specific 24-hour "Travel Day" and a 14-day "Travel Period" for which detailed data on all travel were collected.

The households were contacted by an advance letter, followed by a telephone contact. After the first telephone interview, the household interview, travel diaries were mailed to the household so that each household member could record their travel on the assigned Travel Day.

Residents of the sampled households were contacted by telephone as soon as possible after Travel Day to record their travel. A six-day window was established to obtain the travel day data.

Odometer readings from each household vehicle were also collected by telephone contacts at two points in time.

WHEN THE DATA ARE COLLECTED

The NPTS interviews were conducted from May 1995 through June 1996.

The survey is conducted over a 12-month period so that seasonal variations in travel are represented. The 1995 NPTS took 14 months, rather than 12, because the number of interviewers working on the project varied throughout the year. The weighting adjusts for the monthly differences in number of interviews.

Travel days were assigned to all seven days of the week, including holidays. The intent is to represent travel across an entire year.

GEOGRAPHIC COVERAGE

Interviews were conducted with households in all 50 States and the District of Columbia.   A new sample of telephone numbers located throughout the United States was used every quarter to insure that all geographic areas were represented in all seasons.

The following section contains more information on the add-on areas.

3-B. SAMPLE DESIGN AND SELECTION

OVERVIEW

The 1995 NPTS sample was designed as a list-assisted telephone number sample. The sample design yields a representative national sample of all U.S. telephone households.

The national sample was increased within the planning areas of two States and three local transportation planning organizations, who purchased additional samples to provide data for their planning efforts. These areas are referred to as "add-ons".

The sampling frame was designed to cover all U.S. telephone households, both listed and unlisted. The sample was stratified by:

- geography (Census divisions),
- metropolitan area size,
- presence of subway/elevated rail transit systems, and
- two levels of telephone number density (low and high).

The target sample size for the 1995 NPTS included the:
- national sample of 21,120 completed households, and
- 20,895 additional households within the five add-on areas,

for a total planned sample size of 42,015 completed households.

See **Chapter 5-D** for a table showing the national and add-on components of the NPTS sample.

SAMPLING FRAME

The sampling frame was constructed using information listing all valid residential NPA/NXX (area code/telephone exchange) codes associated with the fifty states and the District of Columbia, obtained from Bell Communications Research (Bellcore). The sampling frame, which excluded some NPA/NXX codes used exclusively for nonresidential purposes, was created in February 1995 and updated in June and September, 1995 and in January, 1996.

The sampling frame also utilized counts of listed telephone numbers for each group of 100 consecutive number (100-block) within the NPA/NXX codes. This information on telephone number listings was developed by Donelly Marketing Systems and obtained from Nielsen Media Research (Nielsen).

STRATIFYING THE SAMPLE

To control sampling variation and increase coverage of transit trips, the sampling frame was stratified by:
- geography (Census division)
- metropolitan area status
- the presence of subway or elevated rail systems, and
- the density of listed telephone numbers.

Prior to stratification, each NPA/NXX code was assigned to the county (or county-equivalent) expected to contain the majority of its telephone households.

First, each block of 100 telephone numbers was assigned to one of the nine Census divisions, based on its county assignment. Within the nine Census divisions, counties were classified first by metropolitan area size, as follows:

    1) in a consolidated metropolitan statistical area (CMSA) or metropolitan statistical area (MSA) of 1,250,000 population,

    2) in a CMSA or MSA of less than 1,250,000 population, or

    3) not in an MSA.

Next, the counties were stratified according to the presence or absence of subway/elevated rail transit systems.

Special add-on strata were defined within the:
- State of New York,
- Commonwealth of Massachusetts
- Oklahoma City, Oklahoma planning area,
- Tulsa, Oklahoma planning area, and
- Puget Sound, Washington planning area.

These strata were needed to control allocation of the additional sample to subareas within New York and Massachusetts, as well as to effect the over-sampling necessary to obtain the desired sample size in each add-on area. A total of 70 major strata were defined, based on the stratification variables mentioned above.

Finally, within the 70 major strata, each 100-block was assigned to one of two density substrata:

    1) low density - those 100-blocks containing zero residential listings, or

    2) high density - those 100-blocks containing one or more residential listings.

Low density substrata were retained because they contain newly assigned telephone numbers and unlisted numbers.

SAMPLE ALLOCATION AND SELECTION

The sample size was allocated to the major strata in proportion to estimates of the total number of households, except for:

- 25 percent over-sampling in 11 large metropolitan areas with subway/elevated rail systems, designed to increase the number of transit trips in the sample, and

- additional over-sampling to obtain the increased sample

sizes contracted for in the add-on areas.

Due to the large add-on sample increases in New York and Massachusetts, the New York City and Boston metropolitan areas were over-sampled more than 25 percent.

The sample allocated to each major stratum was further allocated to the high- and low-density substrata within them. The high density substrata were sampled at a rate three times more heavily than the low density strata, in order to offset the higher costs of identifying and completing interviews within the low density strata.

The sample of telephone numbers allocated to substrata were then selected randomly with equal probabilities within substrata.

3-C. DATA COLLECTION PROCEDURES

OVERVIEW

The 1995 NPTS interviews were completed by the staff of RTI's Telephone Survey Unit. Each interviewer was thoroughly trained before beginning work on the survey.

A number of quality control measures were implemented during the data collection. Supervisors were present to observe interviewing and assist with problem cases at all times during interviewing. Numerous real-time edits were performed by the CATI system during the interview process. In addition, monitoring of interviews in progress was conducted by supervisors, NPTS project staff, and others throughout the data collection period. Periodic meetings were held with groups of interviewers to discuss issues in conducting the interviews and to document suggestions for resolving issues.

ADVANCE LETTER TO HOUSEHOLDS

Addresses were obtained for those selected telephone numbers which were listed (i.e., the number is published in the phone book). Advance letters from the Federal Highway Administrator were sent to households with listed phone numbers; no letters could be sent to households that had unlisted telephone numbers. Advance letter mailings were performed about once a month, using the phone numbers periodically added to the sample.

Approximately 70 percent of the households in the U.S. have listed numbers. About 10 percent of the advance letters could not

be delivered, so more than 60 percent of sample households probably received the letter. The primary purpose of the letter was to inform the prospective respondents that this was a legitimate survey, not a marketing or fundraising call.

Though it is not possible to measure the impact of the advance letter in the absence of a designed experiment, we believe it may have legitimized the survey with many respondents, resulting in greater participation in the survey.

Appendix F contains a copy of the advance letter to sample households.

TRAVEL DAY ASSIGNMENT

Travel characteristics are known to vary by season of the year and day-of-the week.

The 1995 NPTS had more seasonal variation than planned because the number of interviewers did not remain stable throughout the 14-month survey period. To correct for seasonal variations, an element of the sample weighting was developed to specifically address this issue. Each household and person weight was adjusted so that the weighted data reflect an equal number of household and person interviews for each month. See Control Totals in **Appendix A.**

The variation in travel by day of the week was balanced by assigning the travel days for one-seventh of the sample telephone numbers to each day of the week.   When the calls to a sample phone number resulted in a completed household interview, the CATI system determined the household's travel day on the selected day of the week 12 to 18 days in the future, which allowed time for dairy mailings to reach the household. This proved reasonably effective in distributing the survey travel days to the seven days of the week.

TRAVEL DIARIES

Travel diaries were used in the 1995 NPTS because, in the pretest for this survey, they proved to be the most effective method to capture full reporting of personal travel. After the household interview, a packet of survey materials was mailed to each household. The packet contained:
- A travel diary for each household member age 5 and older - a label was affixed to each diary with the

first name of one household member.
- Two $1 bills were clipped to each diary.
- Instructions for filling out the travel diary, including a sample diary.
- A brightly colored 8 ½ x 11 reminder sheet identifying the household's travel day.
- A form identifying the make, model and year of each household vehicle, with spaces to enter the odometer readings and the dates they were taken.

Appendix F contains samples of the materials sent to respondents.

The use of travel diaries represents a significant change in survey methods from earlier NPTSs. The purpose of the travel diary was to have respondents write down each place they went as they proceeded through the day in order to obtain a more complete reporting of travel and better reporting of trip characteristics, such as time of day the trip started, the trip duration, trip distance in miles, etc.

Travel diaries have long been successfully used in urban travel surveys. A methodological pretest conducted prior to the 1995 NPTS demonstrated that using travel diaries caused more complete reporting, particularly for incidental trips, such as stopping at a convenience store, which are the most difficult to capture in a household travel survey. In addition, the overall response rates for the diary method were comparable to the retrospective method used in earlier NPTSs, thus the diary method was chosen for the 1995 survey.

CALL-BACK PERIOD

There was a six-day call-back period for reporting Travel Day trips. Phone calls to collect the diary information from the household started the day after the travel day, and continued for the next five days.   Any diary information not collected during this six-day window was lost for purposes of the survey. Even though the respondent may have recorded basic information on their trips in their diary, the details of travel on a particular day should ideally be captured within the first three days, and the time interval should not be allowed to exceed six-days. Note that approximately two-thirds of the 1995 NPTS trip and travel data were obtained within three days following the household's travel day.

RESPONSE INCENTIVES

A $2 incentive for each household member 5 and older was clipped to the diary for that person. Because respondents were being asked to fill out a travel diary, it was decided to give a small cash incentive. The literature on survey incentives is fairly clear in two respects:

- cash is the preferred incentive
- the incentive should be given in advance, rather than after the interview.

Thus, $2 in cash was sent with each travel diary.

HOUSEHOLD ROSTER OF TRIPS

The household roster of trips captured some trips that may otherwise have been overlooked. In "household rostering" the interviewer has the benefit of trip data from all household members who had already been interviewed.

For example, suppose person #1 took a trip and reported that persons #2 and #3 were with him. When persons #2 and #3 were interviewed, they were asked to confirm that they were on the trip with person #1. If they were, the trip characteristics were copied from person #1's record to person #2 and person #3. If person #2 or person #3 said they were not on the trip with person #1, this was accepted.

This system resulted in a number of benefits to the survey operations, including making the tedious travel day reporting easier and, of course, in aiding the memory of the respondent. The 1995 NPTS may be the first large-scale household travel survey that used the household rostering concept as part of a CATI (computer-aided telephone interview) survey.

PROXY INTERVIEW PROCEDURES

A proxy interview is one in which someone else in the household reports for the respondent. In the NPTS data collection, an adult household member always serves as the proxy for a child between the ages of 5 and 13. There are also a number of proxy interviews given by household adults for teens aged 14 through 17.

An issue with proxy interviews is under what circumstances to allow one household member to report for another respondent. In

NPTS, proxies for adult members of the household were allowed if:

- the respondent was not capable of being interviewed because of an impairment or a language barrier
- the interviewer was told that this respondent would not be available for the entire six-day recall period, or
- the interviewers have been attempting to reach the respondent for the first three days of the six-day call-back period, and have not been successful.

If the respondent filled out a travel diary for travel day, the proxy household member is asked to find the diary and use it when they served as a proxy for the respondent. Note that the conditions of each interview are a part of the datafile. Thus there is a variable for:

- whether the interview was with the respondent or a proxy (PROXY),
- if a travel diary was completed, and
- if so, who completed the diary, the respondent or another household member (DIARYCMP).

CONFIRMING ZERO TRIPS

When a respondent reports not going anywhere on travel day, that may really be a "soft refusal". The respondent may not want to report their travel, but may want to still appear to be cooperative. In previous NPTS surveys reports of zero trips were not questioned or confirmed. The 1995 NPTS still did not go as far as many of the US urban travel surveys in questioning a report of no trips on travel day, but a followup question was added: "Does that mean you stayed at the same place all day?" The rate of persons reporting zero trips dropped from approximately 25 percent in 1990 to 12 percent in 1995. This change was one of many things contributing to an increased level of trip reporting in the 1995 NPTS.

3-D. DATA EDITING

ONLINE EDITS

Several variables were edited in real-time during the NPTS interviews. The on-line edit checks notified the interviewers of a possible discrepancy and allowed them an opportunity to correct an entry or other errors. For example, the combination of trip

length and time reported in the travel day section were checked against pre-programmed miles per hour ranges for most modes of travel. Reported sample person ages in the person interview were checked for consistency with the ages and relationships reported by the household's reference person. Reported zip codes were checked against pre-entered lists of valid codes.

APPROACH TO POST-INTERVIEW EDITING

In surveys with complex questionnaires and procedures, such as the NPTS, the final dataset reflects certain approaches taken in the data collection and editing processes. For the 1995 NPTS, two approach issues may have had considerable impact on the resulting data.

The first is the **reluctance to impute data.** If the respondent did not answer an item, we generally did not impute it, i.e., determine what the logical response would be given the response to other items. Carefully performed imputation has its place in many statistical surveys, however FHWA and RTI that imputation would be extremely limited in the NPTS data.

Second, we were **conservative in changing reported data**, unless it was clear that what was reported could not have happened. The classic example of this type of situation is the one-half hour walking trip, in which 500 miles were covered. In this type of situation we would look at the other trips of this respondent and the trips of any household members who were with him/her. Often that will clarify what should have been entered. If that effort was not successful, in this particular example it is most likely that miles would have been changed to "not reported."

PRELIMINARY EDITS

The first step in preparation for editing and cleaning the data was to extract the survey responses from the CATI data files. In doing this, it was also necessary to import data from problem sheets and supplemental trip files.

Problem sheets were completed by interviewers to indicate how to correct a problem they encountered during the interview, but were unable to correct because of CATI program limitations or respondent considerations. For example, the interviewer realized that she had entered an incorrect start time for trip number four when she was several trips further into the interview, and judged

that the interview would be lost if she asked the respondent to wait while she backed up to that trip and make the correction. In such cases the changes needed were recorded on a problem sheet , which was entered into the CATI system after the interview by supervisory staff.

SUPPLEMEN-TAL FILES

The main CATI program recorded trip data for up to 15 trips for each person interviewed. When a person took more than 15 trips on their travel day, data for the additional trips were recorded in a supplemental data file and the two files were subsequently merged.

HOUSEHOLD ROSTERING

Trip details recorded with the first household member reporting the trip were accessed and added to trip records for the other household members who reported being on the same trip.

DATA FILES

Next, the survey data was separated into several different data files:

Household file - data collected once for the household (one record per household).

Person file - data items collected once for each household member (one record for each completed person interview).

Vehicle file - data items related to the household's vehicles (one record for each household vehicle).

Travel day trip file - data items collected for each trip a person made on the household's travel day (one record for each trip each person made) .

Segmented trip file - additional data collected for each of the travel day trips that involved two or more trip segments, at least one of which involved public transit or Amtrak (one record for each segmented trip).

Travel period file - data items collected for each longer trip taken by each person interviewed during a 14-day period (one record for each travel period person trip).

USEABLE

A useable household was defined for the 1995 NPTS as one in

HOUSEHOLDS which the household interview was completed, and person interviews were completed with at least 50 percent of the adult (age 18+) household members. The data were examined in order to determine which households met this "useable household" definition.

In order for the household interview to be considered complete the household respondent must have:
- provided the complete household roster information for the household members, and
- given an address for mailing the travel diaries to the household.

In order for a person interview to be considered complete:
- travel day trip data must have been obtained for at least the destination and start time for each of the person's travel day trips.

In other words, the person interview must have been completed at least through question G.17, the person's inventory of travel day trips.

Interview data for all households not meeting the 1995 NPTS definition of a "useable household" were removed from all data files at this point, prior to any further data editing and cleaning.

This definition of useable household also increased the data collection effort. For example, if a household was composed of three adults and two children, and interviews for only one adult and two children were completed by the sixth day after travel day, all of the work for that household was discarded.   There were 16,243 households in the 1995 NPTS that were considered non-useable.

RECODING Several coding and re-coding operations were necessary to put the data in the desired form, including:
- Examining all "other, specify" responses for all items in which the interviewer had marked this option and entered text describing a non-coded response category. In many cases, the "other, specify" responses could appropriately fit into one of the previously listed categories for the questionnaire item and these were corrected.
- In other cases, additional response categories which had

not been anticipated were reported with sufficient frequency to be added to the list of response options.

- Reported vehicle make and model information was edited for reasonableness and National Accident Sampling System (NASS) make and model codes were added to the data base.

- Standard codes were added to the data base to replace the "don't know" and "refused" responses, and to indicate items which were not applicable to this respondent or this trip, and thus were not asked due to skip patterns in the survey questionnaire.

- In the travel day section, trips with the purpose of "change transportation means" were edited and combined with adjacent trips. Interviewers had been instructed to use the "change means" trip purpose only for those cases in which respondents insisted that this was the only purpose of the trip, and they were unable to determine what the trip purpose should have been. These trips were later combined with the trips the person took before or after the change means trip.

- Segmented trips were defined for the 1995 NPTS as trips which involved a change of vehicle or means and at least one of the trip portions or segments must have been on public transit or Amtrak. If these conditions were met, and a change means trip was involved, that trip was converted to a segment of a segmented trip.

LOGICAL EDITS

Various edit routines were implemented to check the consistency of the reported data and to identify reporting or entry errors. Actual responses for all variables were examined for reasonableness and consistency across items. Extreme values that were either impossible or unlikely were identified, and inconsistent data were corrected when possible. For example:

- Very long walking trips, very short airplane trips, and very long waiting times were examined to determine whether they were legitimate data or probable entry errors.

- Calendar dates outside the survey period were edited based on other reported or assigned dates for the household.

- Some extreme or inconsistent data values which could not be corrected were edited to missing

values

- Edit flag variables were added to the data base to identify key variables that had received logical edits
- The relationship between the reported time and distance for all trips was examined by mode. Obvious entry errors were corrected.
- Trips with impossible miles per hour (MPH) for the reported mode of travel (e.g., 20 MPH walk trips) were either corrected or edited by changing the reported time or distance to missing values.
- The travel party size, computed by adding the number of household members and non-household members reportedly on the trip was also edited, by mode for all trips. It appears that some respondents reported the total number of persons on the transportation means (e.g., airplane, bus or school bus trips) even though interviewers had been instructed to define the travel party as friends, relatives or other persons the respondent knew and who were traveling together. In a number of cases, the reported number of non-household members on the trips was edited to a missing value.
- Reporting vehicle odometer readings was apparently difficult for many respondents. Many cases were noted in which the two reported readings were impossible (second reading less than the first reading) or unlikely (over 100,000 driven in a few months). Many of these reporting or entry errors were obvious and were corrected (e.g., reporting the tenths of miles on one but not both odometer readings.)
- The reported miles specific vehicles were driven by a certain person during the year and the number of miles persons reported driving in all vehicles during a year were capped at maximum values of 115,000 miles per vehicle and 200,000 miles per driver.

3-E. SURVEY RESPONSE RATES

OVERVIEW   The 1995 NPTS data were collected during the period from May 1995 through July 1996. There were several stages of data collection. First, a sample of telephone numbers was screened to identify residential households. Second, an adult member of the

household was asked a series of questions about the persons and vehicles of the household. Following this household interview, the household was assigned a travel day for trip reporting. Then, travel diaries for each person 5 years and older were prepared and mailed to the household. Following the household's travel day, interviewers called to conduct the person interview for each eligible household member. During the person interviews, travel diary information was recorded in the computer, along with responses to a number of additional questionnaire items. A summary of the overall response rates, as well as the rates obtained at each stage of the survey process are documented in this section.

SUMMARY OF RESPONSE RATES

The 1995 NPTS response rates are summarized in Table 3-1, which includes the partial response rate experienced at each stage of the survey, and the overall response rate up to that point in the process. The table shows that 73.2 percent of the in-scope sample numbers completed the screening process. Household interviews were completed for 75.6 percent of the completed screening cases, or 55.3 percent of all in-scope sample cases. Over 93 percent of the completed household interview cases accepted the travel diaries, and sufficient person-level interviews were completed for 72.1 percent of these households to classify them as "useable" for the 1995 NPTS. Within the useable households, person level interviews were completed with 92.2 percent of the eligible persons. Table 3-1 shows that the overall response rates were 55.3 percent for household level data and 34.3 percent for person level data.

Table 3-1 - Summary of Overall Response Rates

	Rate	Rate	Calculation
Telephone Number Screening	73.2	73.2%	-------
Household Interview Rate	**75.6**	**55.3%**	73.2 x 75.6
Diary Acceptance Rate	93.3	51.6%	55.3 x 93.3
Useable Household Rate	72.1	37.2%	51.6 x 72.1
Person Interview Rate	**92.2**	**34.3%**	37.2 x 92.2

Another way of viewing the survey response rates, is with the

actual numbers of sample cases, as follows:

112,960 - telephone numbers in-scope
82,663 - households completing screening
58,276 - households accepting diary
42,033 - useable households, that contained:
103,466 - persons eligible
95,360 - persons interviewed.

TELEPHONE
NUMBER
SCREENING

Table 3-2 shows the results of telephone calls to screen the 160,048 sample telephone numbers.

- Most of the 27.4 percent of telephone numbers determined to be out-of-scope (i.e., non-residential) phone numbers were business and non-working numbers.
- Residential telephone numbers accounted for 65.8 percent of the sample numbers. While telephone number screening, questionnaire section A, was completed for 73.2 percent of them, Table 3-2 shows that there were substantial numbers of refusals and other non-interview cases.
- There were also 10,897 sample numbers, or 6.8 percent of the total sample, that the interviewers were unable to classify as residential or non-residential numbers.

Table 3-2 - Telephone Number Screening Response Data

	Number	Percent
Out-of-Scope -Total	43,882	27.4%
Non-working number	15,393	9.6%
Beeper/pager	2,089	1.3%
Mobile phone	953	0.6%
Modem/fax	4,193	2.6%
Other nonresidential	1,204	0.8%
Business	19,270	12.0%
Group Quarters	483	0.3%
Determined later	297	0.2%
In-Scope - Total	105,269	65.8%
Completed Screening	**82,663**	**51.6%**

Answering Machine	4,938	3.1%
Refusal	12,233	7.6%
Language Barrier	1,315	0.8%
Other non-interview	2,393	1.5%
Trials exhausted	1,727	1.1%
Eligibility Unknown		
No Contact	10,897	6.8%
Total Sample Cases	160,048	100.0%

SCREENING RESPONSE RATE

The telephone number screening response rate calculation is illustrated in Table 3-3. The total of in-scope numbers was estimated by adding a portion of the numbers whose eligibility status was unknown to the number determined to be in-scope. More specifically, the 70.58 percent rate of in-scope numbers was applied to the 10,897 numbers whose scope could not be determined, which yielded 7,691 numbers that were presumed to be in scope. These were added to the 105,269 in-scope numbers, for an estimated total in-scope of 112,960 numbers. Of this total, 82,663 numbers, or 73.2 percent, completed eligible screening.

Table 3-3 - Screening Response Rate Calculation

	Number
Total Sample Cases	160,048
Telephone Number Screening:	
Out-of-Scope Numbers	43,882
In-Scope Numbers	105,269
Scope Determined	149,151
Percent In-Scope	70.58%
Scope not Determined	10,897
Presumed In-Scope	7,691
Estimated Total In-Scope	112,960
Completed Eligible Screenings	**82,663**
Screening Response Rate	**73.2%**

HOUSEHOLD   The interviewers attempted to complete both the household

INTERVIEW RATES screening and the household interview on a single call whenever possible. Toward the end of the household interview, the respondents were told the travel day selected for the household, and they were asked to complete the travel diaries they would be receiving in the mail in a few days. They were also told that a monetary incentive of $2.00 per eligible person would be sent along with the diaries, as a token of appreciation for the time it takes to complete them.

As Table 3-4 shows, over 19 percent of the 82,663 households identified in the telephone number screening process refused to provide the household interview information. In total, household interviews were completed with 62,468 household respondents, or 75.6 %.   In 4,192 of these, the household respondent either refused to verify their mailing address, if we knew it before the interview, or refused to provide the mailing address, if we didn't know it in advance. These cases are shown in Table 3-4 as completing the household interview, but refusing to accept the travel diaries.

Table 3-4 - Household Interview Response Data

	Number	Percent
Household Interviews:		
Completed - diary accepted	**58,276**	**70.5%**
Completed - diary refused	4,192	5.1%
Completed - total	**62,468**	**75.6%**
Refusal	16,039	19.4%
Language Barrier	704	0.9%
Other non-interview	888	1.1%
Trials exhausted	2,564	3.1%
Total	82,663	100.0%

PERSON INTERVIEW RATES At the completion of the household interview, the household's travel day was assigned 12 to 18 days in the future. This allowed time to prepare and mail the diaries, and for the mail to be delivered to the household shortly before their travel day. Following the travel day, interviewers called to retrieve the diary information and complete the person interview for each eligible household member.

Table 3-5 shows that there were 146,317 eligible persons in the 58,276 households that completed the household interview and accepted the diary. Of these 146,317 people, person interviews were completed with 97,881 people or 66.9 percent. An additional 5.1 percent were refusals and 14.6 percent were for persons that could not be contacted despite repeated attempts during the six-day interviewing period. Table 3-5 also shows the breakdown of completed interviews by whether they were completed by the persons themselves or by proxy respondents. Note that the 1995 NPTS required proxy interviews for all eligibles 5 to 13 years of age; it allowed proxy interviews for eligibles who were 14 years and older.

Table 3-5 - Person Interview Response Data - All Households

	Number	Percent
Completed - self interviews	65,869	45.0%
Completed - proxy interviews	32,012	21.9%
Total Completed interviews	**97,881**	**66.9%**
Partial interview	776	0.5%
No Contact	21,366	14.6%
Refusal	7,433	5.1%
Language Barrier	0	0.0%
Incapable	594	0.4%
Deceased	47	0.0%
Other non-interview	496	0.3%
Trials exhausted	17,724	12.1%
Total	146,317	100.0%

USEABLE HOUSEHOLD RATE

The 1995 NPTS defined a useable household as one in which person interviews were completed with at least 50 percent of the household's eligible adults. Table 3-6 shows that 42,033, or 72.1 percent, of the 58,276 households that accepted the travel diaries met this requirement. Person interviews were completed for all eligible persons in the majority of the useable households. The 1995 NPTS data files contain the information collected from these 42,033 useable households.

Table 3-6 - Useable Household Response Data

Person Interview Results:	Number of Households	Percent of Households
All persons completed	35,914	61.6%
Enough persons completed	6,119	10.5%
Total Useable households	**42,033**	**72.1%**
Too few persons completed	16,243	27.9%
Total households accepting dairies	58,276	100.0%

PERSONS IN USEABLE HOUSEHOLDS

Table 3-7 shows the person response rate information within 1995 NPTS useable households. Data for each of the 95,360 responding persons in useable households is included in the 1995 NPTS data files, and accounts for nearly all of the 97,881 (see Table 3-5) person interviews completed in the 1995 NPTS survey.

Note that the proxy interviews include persons age 5 through 13 where the interview must be by proxy, and 14 through 17 year-olds who have a high incidence of proxy interviews.

Table 3-7 - Person Response Rate Within Useable Households

	Number	Percent
Completed - self interviews	63,646	61.5%
Completed - proxy interviews	31,714	30.7%
Total Completed interviews	**95,360**	**92.2%**
Not Completed	8,106	7.8%
Total Eligible Persons in Useable Households	103,466	100.%

3-F. CONFIDENTIALITY ASSURANCE

CONFIDEN-TIALITY MEASURES

The following measures were taken in producing this public use data set to assure respondent confidentiality:

- All direct identifiers, such as telephone numbers, zip codes, county codes, names of individuals, and addresses were removed from the files.
- Metropolitan Statistical Areas (MSAs) of less than 1 million population and states with less than 2 million population are not specifically identified on the datafile.
- Other geographic variables were examined to prevent identification of geographic areas with less than 50,000 population (1990 Census). These variables included the MSA size code, Census division, and the specifically-identified MSAs and states.
- The data files contain a number of population and workforce variable estimates at Census Tract and Block Group levels. These variables will help describe the area of the sample members' household and work locations. The values published for these variables were rounded and/or placed into intervals to lessen the likelihood of users identifying specific areas from these variables.
- The specific dates of travel day and travel period trips were removed from the file.
- Data values for certain other variables were coded into intervals or suppressed, and some data distributions were capped. For example, detailed year/make/model information for antique and classic autos could compromise respondent confidentiality if fully revealed. In the public use files, rare make and model codes were re-coded as "other" makes and models. The year data for 1919 to 1969 model vehicles was re-coded into intervals.

3-G. WEIGHT CALCULATIONS

WEIGHTS

The purpose of weighting in NPTS is to expand the sample data to estimates for the U.S. population. There are four different NPTS weights that are used to compute different kinds of population estimates. The methods used to calculate each of the four weights are discussed in the sections which follow.

HOUSEHOLD WEIGHTS

With the NPTS list-assisted sample design, all in-sample households have a known, nonzero probability of selection. The

3-21

unadjusted household weight is simply the reciprocal of the household's selection probability.

Since household telephone numbers were selected with equal probabilities within each sample stratum, the initial household sampling weights are computed simply as the ratio of the number of sampling units (telephone numbers) in the sampling frame for a stratum to the number of sample telephone numbers released for calling.

The initial sampling weights were adjusted for multiplicities arising from households that had more than one residential telephone number in the sampling frame, i.e., more than one chance of being in the sample.

Then the household weights were adjusted to sum to 98,990,000, an estimate of the number of U.S. households in 1995, to correct for non-responding households. Note that the estimated number of households includes those with and without telephones.

The household weights were then adjusted to equal marginal totals for the important variables listed below, to correct for non-response and non-coverage, and to reduce non-response bias. The basic concept is to adjust the sampling weights of the survey respondents so that they sum to known external totals, e.g., Census totals. A method of iterative proportional fitting was used to adjust the household weights simultaneously so the sums agreed closely with the following marginal controls:
- Equal weight totals for each of the 12 months of the year.
- Geographic areas - estimated total households in the four Census regions plus sub-regions associated with the add-on areas (39 total areas).
- U.S. level Current Population Estimates of the numbers of Black and non-Black households.
- U.S. level Current Population Estimates of the numbers of Hispanic and non-Hispanic households.
- Five categories of MSA population sizes.
- Four household size categories (1, 2, 3, 4 or more persons).

The adjusted household weights are appropriate for use in weighting all NPTS household variable data and vehicle variable data, since information on vehicles was collected at the household level. This variable is WTHHFIN.

NOTE: It is NOT appropriate to summarize travel day or travel period travel at the household level and then weight the estimate by the household weight. Travel data was collected at the person level, and a derivation of the person weight, such as the trip weight, must be used to obtain accurate estimates of travel day and travel period data. This is primarily because the person weight and the trip weights have been adjusted to account for non-interviewed persons within an interviewed household.

PERSON WEIGHTS

Since there was no sub-sampling of age-eligible persons within NPTS sample households, the household weights would also be appropriate for weighting the person data if data for 100 percent of the eligible persons within sample households had been obtained. Since that was not the case, the person weights were adjusted to compensate for person-level non-response in the 1995 NPTS. The sum of all person weights was adjusted to equal 241,675,000, an estimate of the number of U.S. residents in 1995 five years and older. Post-stratification weight adjustments were also made to adjust the person weights to the following external known totals:

- Equal weight totals for each of the 12 months of the year.
- Geographic areas - estimated total persons in the four Census regions plus sub-regions associated with the add-on areas (39 total areas).
- U.S. level Current Population Estimates of the numbers of Black and non-Black persons.
- U.S. level Current Population Estimates of the numbers of Hispanic and non-Hispanic persons.
- Ten categories of U.S. level age by gender populations (males and females each by the following ages: 5 - 17 years; 18 - 34; 35 - 44, 45 - 64, and 65 years and older).

The adjusted person weight , variable WTPERFIN, should be used to weight all person-level data from the 1995 NPTS survey. Person weights form the basis of the travel day and travel period weights, since person weights are adjusted to account for non-interviewed persons within an interviewed household.

TRAVEL FILE WEIGHTS

The two trip-level weights are simple functions of the adjusted person weights. There is no adjustment to be made for trip-level non-response, since the trip data had to be obtained in order for the person to be treated as a responding person. Each person's

travel-day trip weight, variable WTTRDFIN, was calculated by multiplying the final person weight, WTPERFIN, times 365 to expand the person's travel day to an annual total. This weight is appropriate for weighting data from the travel day trip file and the segmented travel day trip file. The travel period weight, variable WTTRPFIN, for a person was calculated by dividing their travel day weight by 14, to reflect the 14-day travel period.

3-H. SURVEY METHOD AND PROCEDURE CHANGES

1995 NPTS CHANGES
In many ways the 1995 NPTS represents a significant change in survey methods and procedures from earlier NPTSs. These survey changes, which are listed in Exhibit 3.1, have had a significant impact on the results of the survey. The greatest impacts are most likely from:

1. Use of a written diary to help remember travel on a specific day. In the pretest conducted in 1994 for the 1995 NPTS, a written diary was compared to the retrospective, or recall, method. The diary method averaged 0.5 trips more per person per day than the retrospective method. (Reference: PlanTrans, Draft report on NPTS Pretest Methods, Spring 1997)

2. The household roster of trips, that maintained a list of trips that household members already interviewed had been on with, or accompanied by, this respondent.

3. The $2.00 incentive that was sent with each travel diary. This may have made the respondents feel obligated to record and report all of their travel.

4. Use of an advance letter to notify potential respondents that they would be recruited for the survey. We believe that the advance letter added legitimacy to the telephone recruitment, which contributed to higher quality data. The effect of the advance letter cannot be measured quantitatively.

5. Confirmation of "no travel" to distinguish from "soft refusals." The proportion of persons who said they made no trips on the assigned travel day was approximately 12

percent in 1995 , compared to about 25 percent in 1990.

Exhibit 3.1 - Changes in the 1995 NPTS Survey Methodology and Their Probable Impacts

TOPIC	FROM	TO	PROBABLE IMPACTS
Respondent Contact	No advance letters	Advance letters	Improved response Legitimizes the survey with respondents
	No incentive	Incentive ($2/person)	Improved respondent cooperation rates, may have increased trip reporting
Trip reporting	Recall	Travel Diary	More trips reported More shorter, incidental trips More trips for family & personal business and social & recreational purposes
	All trips for each person collected independently	Household rostering of trips	Include trips that may have been forgotten More consistent trip data Lower respondent burden More coherent picture of household tripmaking
	Did not specifically confirm zero trips	Specifically confirmed zero trips	More accurate count of persons who made no trips on their travel day
	Proxy from memory	Proxy from diary	More trips reported More accurate reporting of trip characteristics
	Trip definition	Clearer trip definition	Easier for respondent to report trips Interviewers more attuned to pick up incidental trips
	On-line edits	Additional on-line edits	More coherent trip reporting Improved data quality
Completed household definition	At least one person completed the travel day trip section	At least 50% of the adults completed the travel day trip section	A more accurate representation of travel by the household unit

CHAPTER 4. DESCRIPTION OF DATA FILES

4-A. STRUCTURE OF THE DATA FILES

BASIC STRUCTURE

The 1995 NPTS Public Use Data are organized into six different data files, which are available to users in SAS, ASCII, or DBF formats. Exhibit 4.1 illustrates the structure of the six files, with a description of which data are included in each file, the applicable questionnaire sections, the record level, and the variables which are needed to uniquely identify a record (ID variables).

The file variables are identified by variable name in the SAS versions. For each file variable, the code book contains:

- the variable type & length
- whether it was a variable on the 1990 NPTS dataset
- the label, which is a brief description of the variable
- the section and item number of the questionnaire or other source of the data
- value ranges and special codes
- the frequency of responses for each value or code shown
- comments, as necessary

The variables in the ASCII files are on the file in the following order:

- ID and weight variables, followed by
- question response variables in questionnaire order, and ending with
- variables used to describe the geography, stratification variables, date of interview variables, and derived variables.

See **Appendix I** for the lists of ASCII variables, including the starting position and length of each variable and their order on the NPTS files.

Users should be aware that the ID variables TRPNUM (for travel day trips) and TRIPNUM (for travel period trips) are two different variables. Also, data for all of the travel day trips, including segmented trips, are included in the travel day trip file. More detail about the segmented trips is included in the segmented

travel day trip file.

Exhibit 4.1 - Structure of 1995 NPTS Data Files

Data Files	Information Included	Record Level	ID Variables
Household file	Data unique to a household, or questions asked once for each sample household. Questions from interview sections: C -Home and Neighborhood D -Person Data J - Household Location, and K -Household Income	One record per household	HOUSEID
Person file	Data determined once for each completed person interview. Questions from interview sections: E - Driver Info. & Customer Eval. F - Education & Travel to Work I - Income of Persons not included in Household Income	One record per person	HOUSEID and PERSONID
Vehicle file	Data relating to each of the household's vehicles. Questions from interview section: B - Vehicle Data	One record per vehicle	HOUSEID and VEHID
Travel day trip file	Data about each trip the person made on the household's randomly-assigned travel day. Questions from interview section: G - Travel Day	One record per travel day trip	HOUSEID, PERSONID, and TRPNUM
Segmented travel day trip file	Data for up to 4 segments of each segmented travel day trip the person made on travel day. Based on responses to questions 28-30 and other questions of interview section G - Travel Day	One record per segmented travel day trip.	HOUSEID, PERSONID, and TRPNUM

Travel period file	Data that is asked once for every trip of at least 75 miles one way that the person took during a 14-day period ending on travel day. Questions from interview section: H - Travel Period	One record per travel period (14 days) trip.	HOUSEID, PERSONID, and TRIPNUM

4-B. RELATIONSHIP BETWEEN THE SIX NPTS DATA FILES

The chart below depicts the six NPTS data files and their relationship.
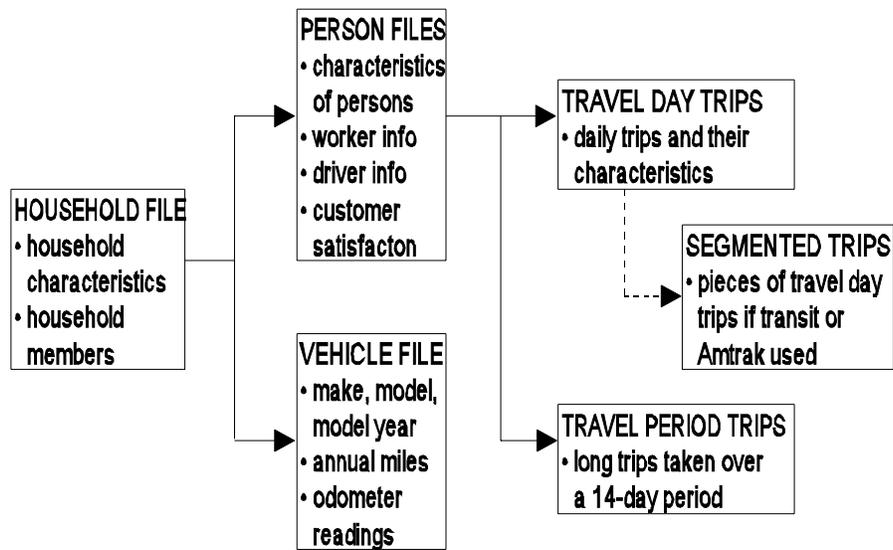
TYPICAL NPTS HOUSEHOLD

The next chart shows how the records would appear for the data reported by the Typical NPTS Household example introduced in Chapters 1 and 2. Remember that this household reported only a portion of what would have been reported in an actual NPTS interview.


```
┌─────────────┐                  ┌─────────────┐        ┌─────────────┐
│ T Y P I C A L│                 │  Person     │        │ Travel Day  │
│ N P T S      │                 │  Records    │        │ Trip Records│
│ H O U S EHOLD│                 ├─────────────┤        ├─────────────┤
└─────────────┘                  │   Terry     │        │  to work    │
                                 ├─────────────┤        ├─────────────┤
      ┌─────────────┐            │   Keith     │        │  to lunch   │
      │ Household   │            ├─────────────┤        ├─────────────┤
      │ Record      │            │   Lucy      │        │ return to   │
      └─────────────┘            ├─────────────┤        │   work      │
                                 │   Ben       │        ├─────────────┤
                                 └─────────────┘        │  to bank    │
                                 ┌─────────────┐        ├─────────────┤
                                 │  Vehicle    │        │  to home    │
                                 │  Records    │        ├─────────────┤
                                 ├─────────────┤        │  walk dogs  │
                                 │   Ford      │        └─────────────┘
                                 │   Contour   │
                                 ├─────────────┤
                                 │   Toyota    │
                                 │   Camry     │
                                 └─────────────┘
```
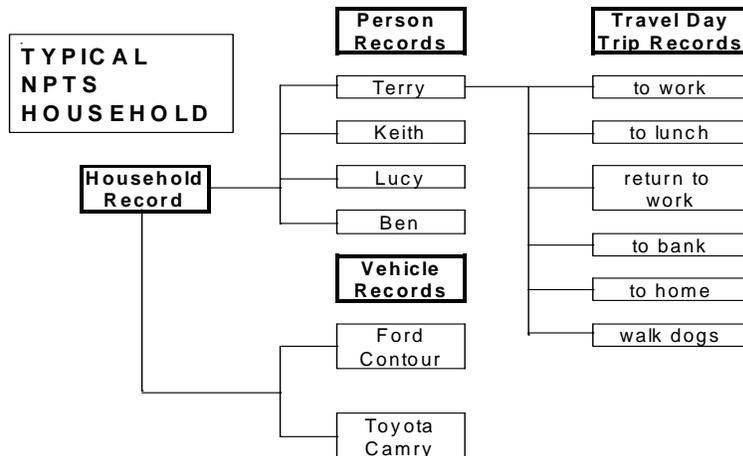
NOTES: - This follows the Typical NPTS Household material in Chapter 2. In a real household, there would probably be trips by each household member.
- Terry had no long trips, so there is no Travel Period file for her
- Terry had no segmented trips, so there are no Segmented trip files for her

TRAVEL DAY AND TRAVEL PERIOD TRIPS

These two sections of the questionnaire are designed to complement each other. When the data from the two sections are combined, a more complete picture of personal travel is obtained.

In the travel day section, the respondent is asked to report all trips of any length during the 24-hour period designated as their "travel day." The travel day is designed to collect the types of trips typically made on a daily basis, such as trips to work, to the store, running errands, and visiting friends.

Because people make longer trips less frequently, respondents are asked to report any long trips, defined as 75 miles or more one-way, taken over a two week period. This is known as the travel period.

Once the travel day is designated for a household, the travel period becomes the thirteen days preceding the travel day plus the travel day. Because the travel day is also included in the travel period, if the respondent took a long trip on travel day, this would be reported in both trip sections of the questionnaire. These trips, which are called "overlap" trips, must be subtracted from travel day data when the user combines travel day and travel period. To do this, omit the trips on travel day that have the a "yes" response (code=01) in the OVERLAP variable.

SEGMENTED TRIPS

In the 1995 NPTS, as in the 1990, certain trips were "segmented", that is, they were broken into their component parts. A trip was segmented if both of these conditions were met:

- there was a change of vehicle or a change of mode on the trips, AND
- one of the modes used was a public transit mode or Amtrak. Public transit modes include bus, subway, elevated rail, commuter train, streetcar or trolley car.

This was done to collect more complete data on multi-modal trips, with particular emphasis on the use of public transit.

There was a limit of four segments per trip, and the typical travel day trip information was collected, along with the mode, start time and duration of each of the segments.

TRIPS NOT SEGMENTED

Trips in which the respondent went from one private vehicle (POV) to another were not segmented. For example, the respondent drives his sport utility vehicle to the pickup point for his carpool, then rides to work in the car of another carpool member. These POV-to-POV transfers were not segmented because they would have added to the respondent burden in reporting travel day trips, without an offsetting value in improving

our understanding of travel behavior. When more than one POV was used for a trip, the travel mode was assigned to the vehicle type used for the longest distance. In the example above, the car was probably the mode used for the longest distance.

RELATION-SHIP OF TRAVEL DAY TRIPS AND SEGMENTED TRIPS

Segmented trips are a small subset of the universe of NPTS travel day trips. Of the 409,025 travel day trips collected in the 1995 NPTS , 3,779 or less than one percent, are segmented. When a travel day trip is segmented, most of the trip information is on the travel day trip record. In addition, a segmented trip record is established on the segmented trip file. This segmented record, which has the same ID variables as the travel day trip record, contains the unique information on each of the segments of the trip, such as the mode, start time and duration in minutes. Even though a trip can have up to four segments, there is only one segmented trip record established. The data for each segment is listed in variables with names like SEG1_MIN, SEG2_MIN, SEG3_MIN, etc. to accommodate the characteristics of up to four segments in one record.

WHEN IS A RECORD ON THE FILE

The purpose of this subsection is to present information on the NPTS file structure that has confused data users in the past.

Household Record - There is one record for each household in the dataset, also called a "useable" household.

Vehicle Record - There is a vehicle record for each vehicle owned by or available to a useable household. If the household has no vehicles, there will not be any vehicle records. The number of household vehicles, including zero vehicles, is available on the household record in the variable, HHVEHCNT.

Person Record - There is a person record for each **interviewed** person in the household. For example, a household consists of three people, Tom, Dick & Harry. Tom and Dick were interviewed for the NPTS, but Harry was never available, despite repeated attempts. There will be a person record for Tom and one for Dick. No person record will exist for Harry, but his characteristics will be available to the analyst on the household file (see **HOUSEHOLD**

MEMBER VARIABLES below.)

Travel Day Trip Record - There is a trip record for each trip taken by an interviewed person in a useable household. So, in our example above, if Tom makes six trips, there will be six travel day trip records on the file. Suppose Dick was ill and stayed home all day. There are no travel day trips records for Dick, however, there is a person record for him, since he was interviewed. The person file variable, SAMEPLC, i.e. "stayed in the same place all day?", will confirm that Dick was interviewed for travel day and reported no trips. No travel day trip records will exist for Harry, since he was not interviewed. Likewise, there will be no person file record for Harry.

In earlier NPTSs, before "stayed in same place all day?" was asked, data users assumed that the lack of a travel day trip record for Dick meant that he was not interviewed for his travel day travel. This is not true. If there is a person record for that person, they were interviewed for travel day. Note that about 12 percent of the 1995 NPTS respondents reported no travel day trips. While some of these non-travelling people may be "soft refusals" who did not want to bother reporting their trips, many of them are legitimate non-travellers. Remember that the NPTS travel days encompass all 365 days of the year, including holidays and weekends.

Segmented Trip Record - A segmented trip record will be present only when a travel day trip meets the two conditions for segmented treatment (see **SEGMENTED TRIPS** discussion above). In our example, assuming that none of Tom's six trips met those conditions, there would be no segmented trip records for him.

Travel Period Trip Record - A record is present only when a qualifying trip was made by the respondent. Thus, if Dick, who was sick on travel day, had made a 250-mile trip the week before travel day, there would a travel period trip record for him. Because little detail is collected on the long trips in the travel period section, there is only one record for each roundtrip.

HOUSEHOLD MEMBER VARIABLES

For the 1995 NPTS, the characteristics of all household members, whether interviewed or not, are available on the Household File. These characteristics were included to allow the user to address a number of travel behavior and survey method research issues. The characteristics are contained in the variables starting with P1 through P10 and, for each household member, the information includes:

- age (P1_AGE, P2_AGE,etc.)
- sex (P1_SEX, etc.)
- relationship to household respondent (P1_RELAT, etc.)
- driver status (P1_DRVR, etc.)
- worker status (P1_WKR, etc.) and
- response status, i.e., eligible or not eligible, interviewed or not interviewed, self interview or proxy (P1_STAT, etc.).

In earlier NPTSs it was difficult to obtain a complete picture of the household members, because a person record is only on the datafile when a household member is interviewed for the survey. The characteristics of all household members were gathered in the household interview, but in the 1990 NPTS the characteristics of those household members not interviewed were discarded. This caused some limitations on the analyses that could be performed, so it was decided to retain characteristics of all household members in the 1995 NPTS.

4-C. CODEBOOK

CODEBOOK FORMAT

The documentation includes a codebook, with sections for each of the data files. The codebook contains critical user information about each variable in each of the files. The codebook is arranged in a two-page format, with the variables in Exhibit 4.2 beginning on the left-hand side and continuing across the two facing pages. Exhibit 4.2 lists the items that correspond to the codebook columns, along with a brief description of the contents of each column.

CODEBOOK EXAMPLE

As an example, the third column of Exhibit 4.2 shows the codebook information for the variable named BUS_DIST.

- It is a numeric variable of width 5 including the decimal point (up to 3 digits before the decimal and one after).
- This question was not asked in the 1990 NPTS.
- This variable contains the distance in miles from the home to the nearest bus stop, reported in response to item 2.1 of questionnaire section C.
- The value range and the frequencies show that the file contains 26,160 reports ranging from 0 to 100 miles; that 1,245 household respondents said they could not ascertain the distance, and 15 refused to answer the question. It also shows that the question was legitimately skipped in the 14,613 households in which the household respondent answered no or don't know to question C-1 "Is local bus service available in your town or city?"
- The comment for this variable tells the user that the responses in blocks have been converted to miles using a factor of 9 blocks per mile.

Exhibit 4.2 - Contents of the 1995 NPTS Code Books

Column Heading	Description of Contents	Example Variable (from Household File)
Target Variable	The variable name	BUS_DIST
Variable Type	C = character; N = numeric	N
Width	Maximum variable length	5.1
1990 Variable Name	S = same name in 1990 NPTS N = new variable in 1995 NPTS * = variable values external to the survey	N
Variable Label	Short description of the variable	Distance to bus (miles)
Section	Source section(s) of the questionnaire	C
Item ID	Source item(s) in the questionnaire section	2.1
Value Range & Codes	Either lists all possible values of the variable, a range of the values, or a combination of the two	(0 - 100) 994 = Legitimate skip 998 = Not ascertained 999 = Refused
Frequencies	Shows the number of records in the file for each listed value	0-100 = 26,160 994 =14,613 998 = 1,245 999 = 15
Comments	Gives additional information to users, or refers to relevant discussion in other sections of the documentation	Miles as reported, blocks converted to miles (9/mile)

COMPAR-ABILITY WITH 1990 NPTS

Emphasis was placed on making the 1995 NPTS data files comparable with the 1990 NPTS data files.

• To the extent possible, the same variable names as in 1990 were used for variables based upon the same information. In cases where the information is basically the same as 1990, but it was asked in a slightly different way or context, the similar 1990 variable name will be listed in the codebook column labeled "1990 variable".

• The same general scheme was used again for legitimate skip, not ascertained and refusal codes.

• The documentation in this volume is intended to cover at least the same content as the "1990 NPTS User's Guide for the Public Use Tapes", (Publication FHWA-PL-92-007).

4-D. VARIABLES REPEATED

REPEATED VARIABLES

In addition to the information specific to its file (e.g., the travel day file contains data on the individual travel day trips), each of the six files includes variables from other files to be used along with its own variables. This is done for the convenience of the data user, to minimize the need to merge data from multiple files. Although this format is less desirable from a data storage standpoint, it significantly simplifies subsequent data manipulation.

HOUSEHOLD LEVEL REPEATED VARIABLES

The following commonly used variables are included in all six data files:

VARIABLE DESCRIPTION	VARIABLE NAME
Census Division	CENSUS_D
Census Region	CENSUS_R
Number of household drivers	DRVRCNT
CMSA of household (Consolidated Metropolitan Statistical Area)	HHCMSA

Household family income category	HHFAMINC
MSA of household (Metropolitan Statistical Area)	HHMSA
Number of household members	HHSIZE
Number of household vehicles	HHVEHCNT
Hispanic status of household reference person	HH_HISP
Race of household reference person	HH_RACE
Household life cycle	LIF_CYC
Population size of MSA	MSASIZE
Presence or absence of rapid rail (i.e., subway, elevated rail)	RAIL
Substratum within major stratum for low-density or high-density residential phone numbers	SUBSTRAT
Travel day month (May 1995 through June 1996)	TDAY_MON
Travel day year	TDAY_YR
Major sample stratum	VARSTRAT
Number of household workers	WRKCOUNT.

BLOCK GROUP REPEATED VARIABLES - Four of the variables that describe the block group of the interviewed household are also repeated on the other files (except the segmented trip file). These four variables are:

VARIABLE DESCRIPTION	VARIABLE NAME
Median household income, block group	HBHINMED
Housing unit density, block group	HBHRESDN
Urban/rural code, block group	HBHUR
Population density, block group	HBPPOPDN

PERSON LEVEL REPEATED VARIABLES There are a few person-level variables that are repeated on the three trip files (travel day, travel period, and segmented trips.). These are:

VARIABLE DESCRIPTION	VARIABLE NAME
Whether respondent is a driver	DRIVER
Was this a proxy interview	PROXY
Respondent's age	R_AGE

Respondent's sex   R_SEX
Whether respondent is a worker   WORKER.

4- E. VARIABLES ADDED

**ADDED
VARIABLES**

An added variable is an item on the dataset that is not a response to a question in the interview.   Numerous variables were developed and added to the data base, including:

- summary variables to aid data analysis,
- external variables to describe the geographic area surrounding the respondents' household and work locations, and
- flag variables to identify data records that have been edited.

**HOUSEHOLD
LEVEL**

Common-required variables were calculated and included on the data files so they would not need to be constructed each time they were needed. The variables that are repeated on all six files are indicated with an asterisk.

VARIABLE DESCRIPTION	VARIABLE NAME
* Number of drivers in the household	DRVRCNT
Number of eligible household members	HHELGCNT
* Total number of persons in the household	HHSIZE
* Number of household vehicles	HHVEHCNT
Number of household members under 5 years of age	HH_0TO4
Number of household members not eligible for NPTS (e.g., under 5 years of age, determined not to reside in the household, or incapable of being interviewed)	INELGCNT
* Life cycle of the household	LIF_CYC
Variable indicating non-family income reported in the person file	NONFMFLG
Number of person interviews completed for the household	RESP_CNT

Day of week for the household's
travel day   TRAVDAY
* Number of workers in the household   WRKCNT.

**TRACT &
BLOCK
GROUP
CHARACTER-
ISTICS**

A number of geographically-based variables obtained from Claritas, Inc. were added to the database. These variables are based on Census tract or block group level projections of 1990 Census data to 1995. They provide the data user with characteristics of the respondent's neighborhood, which can supplement to the data collected on the respondent's household.

The tract and block group were identified by geocoding the reported home and work addresses from the survey. The addresses used to geocode the home and workplace locations were removed from the dataset for confidentiality reasons.

All of the household level variables are on the Household file, and the workplace variables are on the Person file. Four of these variables were repeated on all files except the Segmented Trip file (see **BLOCK GROUP REPEATED VARIABLES** above).

Appendix L contains more information on the tract and block group variables.

TRAVEL DAY

The derived variables added to the travel day file are:

VARIABLE DESCRIPTION	VARIABLE NAME
Whether the trip began during AM or PM hours	DAYNIGHT
Difference in days between the household travel day and the person interview date	DIFFDATE
The number of minutes spent at destination of previous trip	DWELTIME
Total number of persons on the travel day trip	NUMONTRP
Variable identifying travel day	

POV trips for which the
respondent was the driver   VTR_FLG

TRAVEL   There are two derived variables added to this file:
PERIOD

VARIABLE DESCRIPTION   VARIABLE NAME
Straight line distance of the travel
period trip, based on household
location and reported trip
destination   CALCDIST
Imputed variable identifying the
driver of a travel period trip   DRVR_TRP.

1990 TRIP   The trip purpose definitions for the 1995 NPTS differed from
PURPOSES   those used in the 1990 NPTS.   In addition to the 1995 trip
                    purpose, each trip was recoded into the variable WHYTRP90 to
                    mimic the 1990 NPTS trip purpose definitions.

                    The 1995 trip purposes use a "from-to" format, while the 1990
                    purposes were based on coding a "main reason" for the trip. As a
                    result, the trip purpose codes used in 1995 differed from the
                    1990 trip purposes in the following ways:
                    • 	Returning home is a 1995 trip purpose but was not a 1990
                        NPTS trip purpose. In 1990, the trip purpose was assigned
                        to the activity that was the main reason the person was
                        away from home.
                    • 	In 1990, if one of the reasons was work, the return trip
                        home was assigned a work purpose, even if there were
                        incidental trips made on the way home.
                    • 	In 1990, if there were multiple purposes for being away
                        from home and work was not one of them, the respondent
                        was asked main reason for the trips. Because this "main
                        reason" format was not used in the 1995 survey, when the
                        1995 purposes were recoded to the 1990 scheme, the
                        activity the person spent the most time at while away from
                        home was assigned as the main purpose for the return trip
                        home. The variable, DWELTIME, was created to
                        determine this.

The recoded 1990 trip purposes will be particularly useful for analyses comparing the 1990 and 1995 data by purpose. See **Appendix M** for more detail on trip purposes and trip purpose variables on the 1995 dataset.

TRIP CHAINING

Part of the recoding of trip purposes to the 1990 purpose involved creating trip chains. For this purpose, the chains were defined by trips ending at home, work or someplace else.

There are several derived variables on the Travel Day file developed to define trip chains. The variable CHAIN file indexes the trip chains defined for each a person's travel day. Each trip reported for a respondent was assigned to a "chain", after ordering the person's travel day trips by STRTTIME from 4:00 am to 3:59 am. Trips with missing STRTTIME values were sorted to the beginning of the list. All trips within a chain are sequentially numbered in the variable CHAINTRP. Variables TRPNUM_A and TRPNUM_B identify the first and last trips in each chain. The variables FROM_A and TO_B identify the origin and destination of the chains in terms of home, work or someplace else (H, W, or S).

Some of these chains do not begin or end at either home or work, as some respondents did not take such trips. Also, some persons reported only a single trip on the travel day, such as returning home from vacation. It is possible to select a subset of chains that are anchored by home and work using FROM_A and TO_B. Note that some trip chains involve only one or two trips, which might exclude them from other types of trip chaining analyses.

CHAPTER 5 . USING THE DATA

5-A. TRAVEL CONCEPTS

OVERVIEW

The Travel Concepts portion of **Appendix D** is primarily geared toward NPTS data users who are not familiar with household travel survey data. However, it may also be useful to the transportation planning professional because the use of certain travel terms and concepts often vary by individual survey. **Appendix D** contains definitions of the following measures of personal travel, when to use each, and how to compute them with the NPTS data:

- Person Trips
- Person Miles of Travel (PMT)
- Vehicle Trips
- Vehicle Miles of Travel (VMT)
- Vehicle Occupancy
- Trip Chains
- Overlap Trips (used when adding Travel Day and Travel Period data)

5-B. TABULATING THE DATA

SAMPLE TABLES & LOGIC

Appendix B contains 12 sample tables, computed at the national level. The sample tables were chosen to illustrate frequently used data tabulations. Tables were chosen to illustrate the national-level estimates which would be tabulated by many data users, such as estimated:

- total households by income and vehicle ownership pattens
- total persons by age, race and gender
- total numbers of workers, drivers, person trips, person miles, vehicle trips, and vehicle miles.

The 12 sample tables in **Appendix B** also include vehicle occupancy and commute time tabulations.

Each cell of each of the tables contains the:

- sample size
- weighted estimate, and
- sampling error of each weighted estimate.

These tables were prepared using the SUDAAN survey data analysis software developed by RTI. The computer logic used to prepare the data input to make the tables is also included in **Appendix B.**

ADDITIONAL RESOURCES

NPTS Website: **http://www-cta.ornl.gov/npts**
The NPTS Website offers:
- analysis capability which will include production of user-defined tables,
- a component for exploratory analysis of the data,
- a number of standard NPTS tables, and
- a conference portion to allow the data user to communicate with others, share code, etc.

NPTS Training - FHWA is developing an interactive CD-ROM as a stand-alone training tool. This will allow individuals to obtain training that fits with their needs.

Contact information for user support:

NPTS Website:　　　Oak Ridge National Laboratories
　　　　　　　　　　　ORNL, (423) 574-5958
　　　　　　　　　　　rtg@ornl.gov

User Support　　　　FHWA, (202) 366-5026
(Non-Web)　　　　　OHIM.gatekeeper@fhwa.dot.gov
　　　　　　　　　　　Fax (202) 366-7742

5-C. CONTROL NUMBERS

Two kinds of control numbers, control totals and weight sums, are described briefly below.

CONTROL TOTALS

Control totals are known values, external to the survey itself, which are used to adjust the survey weights for non-response and non-coverage. Control totals were used to adjust the 1995 NPTS weights for:
　　　　(1) the number of U.S. households, and
　　　　(2) the number of persons five years of age and older.
The control categories chosen for the 1995 NPTS and the method used to make the adjustments, also known as a post-stratification

weight adjustment procedure, are described in Section 3-G of this User's Guide. **Appendix A** contains the full complement of Control numbers for the 1995 NPTS data set.

WEIGHT SUMS   Weight sums are simply the calculated sums of the survey weights. These values are helpful to users in verifying the correctness of data tabulations. The 1995 NPTS total sample sizes and weight sums for the six data files are as follows:

Exhibit 5.1 - File Sample Sizes and Weight Sums

Data File	Sample Size	Weight Sum
Household	42,033	98,990,000
Person	95,360	241,675,000
Vehicle	75,217	176,066,658
Travel day trip	409,025	378,930,363,336
Segmented trip	3,779	3,440,664,924
Travel period trip	29,647	1,996,178,135

5-D. WEIGHTING THE DATA

MUST USE   Calculation of survey weighting factors for the 1995 NPTS data
THE WEIGHTS   was discussed earlier in Section 3-G of this User's Guide. The weights reflect the sample design and selection probabilities, over-sampling of certain strata, and adjustments to compensate for survey non-response and non-coverage.

The weights are multiplicative factors that **must** be applied to the file variables in order to obtain valid estimates of population values. If the weights are not used, the tabulations will give incorrect results. For example, overall unweighted daily sample trips per household are 9.73, whereas overall weighted daily trips per household are 10.49. Sample error can be magnified and lead to serious inaccuracies when weights are not used in tabulating these data.

The estimated weighted totals are obtained by multiplying each data value by the appropriate weight and summing the results. The purpose of weighting the data is to obtain valid estimates of national and regional totals for the U.S. population.

OVER-SAMPLING

Large metropolitan areas with subway or elevated rail transit systems were over-sampled in order to increase the number of in-sample transit trips. Also, several geographic areas purchased NPTS add-on contracts, increasing the sample sizes within their planning areas in order to provide small-area data for transportation planning. The target sample size for the national sample was 21,120 useable households. Additional samples of useable households were provided to five add-on areas, as shown in Exhibit 5.2.

ADD-ON AREAS

Over-sampling certain strata to increase the sample sizes increases the selection probabilities for each household in the sampling frame for the over-sampled areas. The larger selection probabilities translate into smaller weighting factors for the over-sampled strata, correcting the weighted results for the effect of the over-sampling. Note that Exhibit 5.2 shows that the five add-on areas accounted for 55.2 percent of the final useable households in the 1995 NPTS data set, though they accounted for only 10.8 percent of the initial 1995 NPTS target sample size at the national level, and 10 to 11 percent of U. S. households.   It would be especially dangerous to rely on unweighted tabulations made from the 1995 NPTS data files, because of the heavy over-sampling rates applied in the add-on areas. That is, national data tabulations made without weighting the data would look a lot like data for New York and Massachusetts. Weighting the data eliminates this problem and corrects the sample estimates.

Exhibit 5.2 - Target and Final Sample Sizes, at the National and Add-on Levels

Geographic Area	National Sample	Add-on Sample	Total Target	Final Actual
New York	1,683	9,189	10,872	11,004
Massachusetts	490	7,500	7,990	7,801
Central Oklahoma	68	2,944	3,012	2,956
Tulsa, Oklahoma	51	962	1,013	976
Puget Sound	-	300	300	326
Remainder of United States	18,828	-	18,828	18,970
Totals	21,120	20,895	42,015	42,033

5-E. SAMPLING ERRORS

EXAMPLE

Sample surveys are conducted when time or resources are not available to enumerate every household or person. Because every person was not included, the sample has an error associated with the results. Calculating sampling errors allows the measurement of the variability in the estimated statistics, and allows analysts to make probability statements about how large the difference may be between a sample statistic and its population value.

For example, the 1995 NPTS estimated number of household vehicles in the United States is 176,067,000 with an estimated standard error of 828,000 (see Table 2 in **Appendix B).** This standard error estimate allows one to make the following probability statement

> "We are 95 percent confident that the number of household vehicles in the United States in 1995 was between 174,411,000 and 177,723,000."

That is, statistical theory tells us that estimated statistics will be within two standard errors of the census value in 95 percent of the possible samples that we may select. Here the census value is the value that would have resulted had the 1995 NPTS survey

been conducted in all United States households, rather than in a sample of households.

USE THE WEIGHTS When calculating sampling error estimates, it is absolutely necessary to use the survey weights and formulas which properly account for the sample design used for the survey. The 1995 NPTS survey data set is based on a complex sampling design that includes stratification, unequal weighting and clustering of persons, vehicle, and trips. Sampling errors are typically decreased by stratification and increased by sample clustering and unequal weighting, with clustering normally being the dominant factor. **Many standard statistical packages, including SAS, do not calculate sampling errors properly using data from the NPTS or other complex samples.**   See **Appendix G** for additional information about properly computing NPTS sampling errors.

5-F. FINDING THE VARIABLES YOU WANT

VARIABLE LISTS The 1995 NPTS data sets are large and complex, containing numerous survey and external variables. In addition to the code books for each of the six NPTS data files, the following variable lists are available to assist users in locating NPTS variables:

> 1. SAS Proc Contents - **Appendix I** contains SAS proc contents lists for each of the six NPTS data files. The survey variables are listed in alphabetic order on each of these six listings.
>
> 2. ASCII File Variable Lists - **Appendix I** also contains the list of each ASCII variable, with its position and length on each of the six files. The ASCII variables for each NPTS file are ordered as follows:
>> first, ID and weight variables
>> second, questionnaire variables in order by
>>> questionnaire section and item number; and
>> last, all stratification variables, computed or derived
>>> variables and external variables.
>
> 3. Data Dictionary Listing - This list shows all of the variables that are contained in all six 1995 NPTS data files in a single alphabetic listing. Since many variables are in

more than one file, the data dictionary list has six columns indicating which data files contain each of the variables. The data dictionary is **Appendix H.**

5-G. USING THE DATA FROM MULTIPLE FILES

MERGING FILES

Despite the effort to include as many "common" variables as possible (see Section 4-D), there still comes a time when it is necessary to use information from separate files for an analysis. For example, to study the daily trip patterns of different types of privately-owned vehicles (POVs), one needs to use the variable VEHTYPE (vehicle type) from the Vehicle file and link it to trip characteristics maintained in the Travel-day file. In these types of circumstances, one needs to merge together two or more of the six files.

File merging can be complicated and confusing, and a mistake can lead to invalid analysis results. However, an understanding of how the six files are structured and related to each other can significantly help clarify the process.

ID NUMBERS

Each unit (e.g. households, persons) in the survey has its unique identification number (ID). For example, each household is identified by a unique household ID (HOUSEID). Within each household, household members are numbered by a person number (PERSONID) and, similarly, household vehicles are numbered by a vehicle number (VEHID). Again, trips taken by an individual are numbered by a trip number (TRPNUM for a travel day trip or TRIPNUM for a travel period trip).

With this numbering system, the number that identifies a unit within a household (e.g., the household's vehicles and household members) needs to be used in conjunction with the household ID to **uniquely** identify that unit. For example, if a household has a HOUSEID of 12345678, its first member has a PERSONID of 01, and its second member has a PERSONID of 02, then the first household member is uniquely identified by an ID of 12345678 **01** and the second member 12345678 **02.**

Similarly, the number that identifies a trip taken by an individual needs to be used in conjunction with the person's **unique** ID (i.e., HOUSEID and PERSONID) to uniquely identify that trip.

Continuing the above example, assume that the first household member took three trips during the sample day. Thus, the number TRPNUM for the first trip is 01, the second trip 02 and the third trip 03. An ID of 1234567801**01** will uniquely identify the first trip taken by the first household member of Household 12345678. Likewise, an ID of 1234567801**02** and an ID of 1234567801**03** will uniquely identify the second and the third trips taken by the same person, respectively. The last trip ID is represented as:

HOUSEID;PERSONID;TRPNUM = {12345678}{01}{03}

Exhibit 5.3 shows which ID variables to use in the most common data linking of any two data files. Note that the linking ID must be common to both the "from" and "to" files. For example, in linking Person file data with Travel Day trip data, the variable TRIPNUM would not be used because it is only on the Travel Day file, not on the Person file.

Exhibit - Examples of Link Variables Between the Six 1995 NPTS Data Files

From File 1	To File 2	Linking ID Variables
Household file	Person file	HOUSEID
Household file	Vehicle file	HOUSEID
Household file	Travel day trip file	HOUSEID
Household file	Travel period file	HOUSEID
Person file	Vehicle file	HOUSEID
Person file	Travel day trip file	HOUSEID and PERSONID
Person file	Travel period file	HOUSEID and PERSONID
Vehicle file	Travel day trip file	HOUSEID
Travel day trip file	Segmented trip file	HOUSEID, PERSONID, and TRPNUM
Travel day trip file	Travel period file	HOUSEID and PERSONID

ID VARIABLES NOT ALWAYS SEQUENTIAL

The ID variables within a file are not always sequential. There are a number of reasons for this, including the following:

- Some persons and vehicles reported by the household respondent were later found not to belong with the household and were deleted from the data set
- Some trip segments reported as separate trips were combined during editing
- When a person took more than 15 travel day trips, the additional trips were numbered starting with 21 in numbering the person's trips (TRPNUM) and starting with 101 in numbering the household's trips (HHTRIPID) .

EXAMPLE OF A MERGE

Depending on the nature of the analysis, merging files is typically based on a variable common to the files. The file-merging approach is illustrated here using an example. In this example, one wants to analyze the impact, if any, of occasional telecommuting on the number of daily trips. The trip-making data are contained in the Travel Day file while the variable indicating occasional telecommuting is in the Person file (WKFMHM2M). That is, the Travel-day file needs to be merged with the Person file.

The variables HOUSEID and PERSONID combined enable one to use the Person file to identify those who occasionally telecommute and those who do not. Using the combined identification number for HOUSEID and PERSONID, one can identify trips taken by that person in the Travel Day file. In this case, HOUSEID and PERSONID combined is the common identification needed to merge the Travel-Day and Person files.

In layman's language, the computer is first instructed to "grab" the variable WKFMHM2M, which holds the data on whether the respondent occasionally telecommutes, along with the associated HOUSEID and PERSONID variables from the Person file. Next, the computer is instructed to identify from the Travel-day file all trips that are taken by that person i.e., having the same combined HOUSEID and PERSONID identification number.

Finally, the computer is told to "match" information on occasional telecommuting to the travel-day trips based on the combined HOUSEID and PERSONID identification number.

WHICH WEIGHT TO USE

After the files are successfully merged, the next question in using the merged file is which weighting factor to use. In our example, there is a weighting factor in the Person file and one in the Travel-day file. Chapter 3-G describes the calculations of the different weights in the NPTS. In essence, a weighting factor expands the sample data to a population from which the sample is selected. Thus, a household weight indicates the number of households with similar characteristics in the overall population that are represented by the sampled household.

For example, a household with a weight of 100 means that it represents itself and 99 other households of similar characteristics that were not sampled for the survey. This implies that these 99 households have travel patterns that are similar to those of the sampled household. One purpose of a sample design is to ensure that such similarity is maximized.

The rule in deciding which weight to use depends on the unit (e.g., households, persons, vehicles, or trips) on which the analysis is performed. For example, if an analysis is to be performed on a collection of trips, then the trip is the unit and the trip weight should be used. On the other hand, if an analysis is to be performed on a set of vehicles, then the vehicle is the unit and the vehicle weight should be used. In the above example, number of daily trips by telecommuting status, the main interest is on the trips, the individual trip is the unit and thus the trip weight is the appropriate factor.

Another way to explain this, using our example is:

Distribution of Persons by Telecommuting Status and Number of Daily Trips - Hypothetical Data

Tele-commute Status	0-4 daily trips	5-9 daily trips	10 or more daily trips	All
Sometime	45.9 %	38.9%	15.6%	100.0%
Never	56.7	33.7	9.6	100.0
Total	54.9	34.2	10.9	100.0

In this example, the row data on telecommuting frequency is from the Person file, and the column data, number of daily trips, is computed from the travel day file. The determining factor in which weight to apply is always "where does the cell data come from?". For this example, the cell data is percent of persons, which is from the person file, and the person weight, WTPERFIN, is the correct weight to apply.

5-H. SPECIAL USER NOTES

DATA FILE CONVEN-TIONS

There are a number of conventions followed throughout the NPTS data files. These are also listed in **Appendix J**, Documentation Notes, and they include:

Yes/No questions - coded as 01 = yes and 02 = no.

Calendar Dates - separate variables were constructed for the month, day and year of reported dates.

Times - all reported time variables are in military time from 0000 to 2359.

Legitimate skip codes - questions intentionally skipped in the instrument were generally denoted by a field filled with 9's with a 4 in the last digit.

Don't know - responses of don't know or not ascertained were generally denoted by a field filled with 9's with an 8 in the last digit.

Refused - responses of refused were generally denoted by a field completely filled with 9's

Survey weights - there is one only one weight variable on each file. It is the weight that is appropriate for use in preparing tabulations of data from that file.

ADDING TRAVEL DAY AND TRAVEL PERIOD DATA

Special procedures must be followed for adding the data from Travel Day and Travel Period. See Section 4-B for a description of the relationship between these two files.

If the respondent took a trip of 75 miles or more and returned

home on Travel Day, that trip will be collected in both the travel day and the travel period sections of the questionnaire. Note that, for travel period trips, it does not matter when the outgoing portion of the trip took place, the return trip must be made during the 14-day travel period. And the trip will be collected twice only for the travel that took place on the travel day.

Because of the difference in the definition of travel day and travel period trips, it is likely that the long-distance travel will be one trip on the travel period file, but will be counted as several trips on the travel day file. The variable, OVERLAP, will identify which travel day trips are part of the long trip reported in the travel period file.

To run a combined estimate, run the travel day file omitting the OVERLAP trips, and combine that result with all trips from the travel period file.

ESTIMATES OF VMT FROM THE 1995 NPTS

There are multiple ways of computing vehicle miles of travel (VMT) from the 1995 NPTS. Which one is used for a specific analysis should depend on the nature of that analysis. For many data inquiries, more than one way would be appropriate. The intent of this subsection is to make the data users aware of the various ways VMT estimates can be made, which are:

- travel day
- travel day plus travel period
- travel day plus travel period plus commercial driving
- annual estimate of driver miles
- annual estimate of vehicle miles
- annualized estimate of odometer readings

FHWA will be conducting analysis of the differences in the estimates derived from each of these sources.

CHAPTER 6. 1995 NPTS RESULTS

6-A. COMPARABILITY OF 1995 RESULTS WITH EARLIER NPTSs

CHANGES IN TRAVEL BETWEEN 1990 AND 1995

It is important that the data user not attempt to directly compare the data on daily travel from the 1995 NPTS with the 1990 or any of the earlier NPTSs.

When comparing the 1995 and 1990 NPTS datasets directly, there is nearly an increase of about 1.1 trips per person per day in 5 years, or 35% increase (3.1 trips in 1990 compared to 4.2 trips in 1995). However, much of this apparent increase is due to changes in survey methods. **We estimate that one-third of this increase is a real increase in travel, and two-thirds due to changes in survey methods implemented in the 1995 survey.** That is, between 1990 and 1995, daily person trips increased from 3.8 trips to 4.2 trips. By comparing the 1990 and 1995 NPTS data to regional data, we estimate that an increase of 0.4 trips per person per day can be attributed to "real" increases in travel, and 0.7 trips per day are attributable to changes in survey methods. Thus, to make 1990 NPTS more comparable to 1995 NPTS, the 1990 overall trip rates should increase by 22%. The remainder of this section describes the basis for these adjustments to the 1990 data.

NPTS Trip Rates
(1990 with and without Adjustment)
Persons age 5 and over

Daily Person Trips per Person

- 1990: 3.8 (Adjusted 1990) / 3.1
- 1995: 4.2

Change in Daily Trips per Person
1990-1995

Increase in Trips
36.0%

* Use of Diary
* Reduce Proxy
* Advance Letter
* Reduce "no travel"
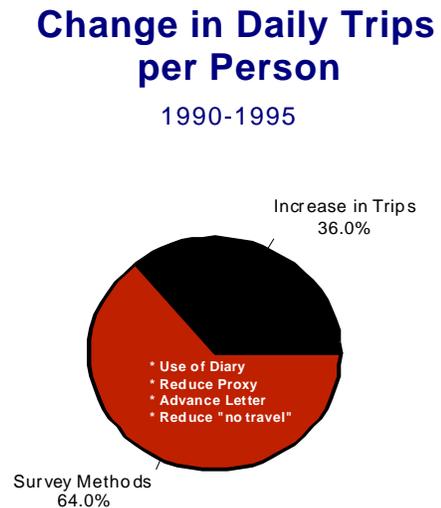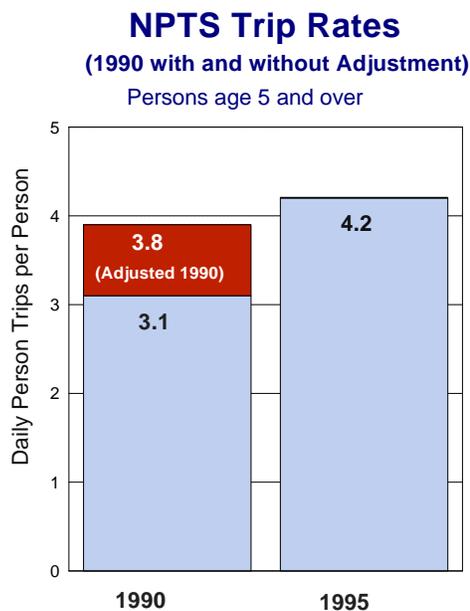
Survey Methods
64.0%

METHOD OF COMPARISON

Step 1. Using regional data sets from approximately the same time period.

Six regional travel surveys for 1990 were used in the analysis, and seven different regional surveys were used for 1995 data. Data for these cities was extracted from the 1990 and 1995 NPTS for comparison.

Step 2. Making the data sets comparable

Several controls were established to reduce the possible impact of differences in survey implementation, between the various regional data sets, and with the NPTS. These controls, which were placed on the regional data sets and the NPTS, included:

- Travel days Monday through Friday only
- Persons age 5 and over
- Bike and walk trips included ONLY if traveling to/from work
- People who made no trips were excluded
- Proxy reports excluded (when identifiable)
- Travel reported within 3 days of assigned travel day (when identifiable).

Step 3. Calculating daily trips rates per person- total and by trip purpose.

Using these controlled datasets, the 1990 NPTS daily person trip rate is slightly lower than the 1990 regional data. In 1995, the reverse is true. When the data were controlled by the attributes listed above, NPTS shows an increase of 0.6 daily person trips per person between 1990 and 1995. With the same controls in place, the regional datasets show an increase of 0.4 trips per person over the same time.

Step 4. Adjusting for the difference.

Overall, to adjust for total trips, it is estimated that the 1990 trips should be increased by 22% to account for the difference in survey methods. NOTE: When using the datasets with the

controls in place an adjustment of 0.5 daily trips per person is sufficient. However, once the controls are removed a 22% increase in the 1990 NPTS is required.

IMPACT OF TRIP PURPOSE

The accuracy of trip reporting varies by trip purpose. Typically, important trips, such as to work or school, are less likely to be forgotten even when a diary is not used. Thus the 1990 NPTS, which was conducted from memory, has good coverage of home to work trips. Less important trips, such as trips to the gas station, dry cleaner, post office, etc. which may be considered incidental are more likely to be forgotten. Therefore, the number of trips directly from home to work or from work to home are overstated, and the non-home and non-work trips are understated. For basic comparisons, one should reduce the 1990 NPTS home-based Work trips, and increase both the home-based non-work trips and the non-home-based trips.

Trip purpose	Percent change	1990 daily trips per person	1990 adjusted daily trips
Home-based Work	**Decrease by 14%**	**0.87**	**0.75**
Home-based Other	**Increase by 19%**	**1.60**	**1.91**
Non-home based	**Increase by 55%**	0.73	**1.13**
Total		3.2	3.8

In the 1995 NPTS, which used a diary, there is a dramatic increase in the number of non-home-based trips, such as trips from work to shopping or personal errands, before going home. Concurrently, there is a decrease in the number of home-based work trips. Again, this indicates that people were more likely in 1990 to report a trip made directly from work to home, rather than reporting that they stopped along the way before returning home. Note that people are more likely to make stops on the way home from work, compared to making stops on the way to work.

(Reference: 1990 NPTS, Strathman and Dueker, "Understanding Trip Chaining".)

The most significant difference is that in 1990, the NPTS reports many more home-based work trips relative to the number of non-home-based trips. In 1995, the results are much more similar to the data collected in regional surveys all over the country.

FOR MORE DETAIL AND FURTHER ANALYSIS

A copy of the full report on this comparison of trip rates can be obtained from FHWA, NPTS User Support (see below).

FHWA will also be conducting and publishing further analysis of how to adjust 1990 NPTS data, so that it can be compared with 1995 NPTS results without the change in survey methods skewing the results. This analysis will cover trips and travel by major mode and major purpose. Data users on the FHWA mailing list will be issued updates to this User's Guide, or the reader may contact either the NPTS Website at:

      http://www-cta.ornl.gov/npts

or   NPTS Data User Support, FHWA
       voice 202-366-5026, fax 202-366-7742
       OHIM.gatekeeper@fhwa.dot.gov.

APPENDIX A
1995 NPTS CONTROL NUMBERS

There are two kinds of control numbers contained in this Appendix. The first control numbers are those that were used to expand the sample to the total population, e.g. households by region and msa size, persons by age, sex and race. The second set of control numbers, contained on the last page of the Appendix, are the weighted numbers that should be obtained when the data are properly weighted and tabulated. These include vehicles, drivers, workers, person trips and person miles of travel, vehicle trips and vehicle miles of travel.

CONTROL NUMBERS FOR SAMPLE EXPANSION:

Household Weight Sums by **Ethnicity**

ETHNICITY	Hhld weight	COUNT
Hispanic	7,735,000	1,735
nonHisp.	91,255,000	40,298
	========	=======
	98,990,000	42,033

Household Weight Sums by **Race**

RACE	Hhld weight	COUNT
black	11,655,002	2,997
nonblack	87,334,998	39,036
	=========	=======
	98,990,000	42,033

Household Weight Sums by **Region**

REGION	Hhld weight	COUNT
Northeast Region	19,593,000	21,163
MidwestRegion	23,683,013	5,114
South Region	34,765,980	11,112
West Region	20,948,007	4,644
	==========	=======
	98,990,000	42,033

Household Weight Sums by **Travel Month**

Travel day date (MM)	Hhld weight	COUNT
Jan	8,249,171	2,598
Feb	8,249,165	3,691
Mar	8,249,167	4,770
Apr	8,249,170	3,812
May	8,249,168	4,827
Jun	8,249,175	3,723
Jul	8,249,169	3,166
Aug	8,249,165	2,531
Sep	8,249,166	2,833
Oct	8,249,152	3,305
Nov	8,249,168	3,400
Dec	8,249,163	3,377
	===========	=======
	98,990,000	42,033

Household Weight Sums by **MSA Size**

MSA SIZE	Hhld weight	COUNT
msa 2.5M+	32,810,839	10,852
msa 1M - 2.5M	17,961,022	6,404
msa < 1M	27,822,102	18,707
not in msa	20,396,037	6,070
	==========	=======
	98,990,000	42,033

Household Weight Sums by **HHld Size**

| | Hhld | |
HHSIZE	weight	COUNT
1	24,732,000	8,219
2	31,834,000	15,263
3	16,827,000	7,392
4+	25,597,000	11,159
	==========	======
	98,990,000	42,033

Person Weight Sums by **Ethnicity of Respondent**

| | Person | |
ETHNIC	weight	COUNT
Hispanic	23,888,001	4,322
NonHisp.	217,786,999	91,038
	==========	======
	241,675,000	95,360

Person Weight Sums by **Race of Respondent**

| | Person | |
RACE	weight	COUNT
black	30,001,008	6,596
nonblack	211,673,992	88,764
	==========	======
	241,675,000	95,360

Person Weight Sums by **Age and Gender of Respondent**

Respondent person sex	Age Category	Person weight	COUNT
male	05-17	25,690,000	10,159
	18-34	33,083,000	10,049
	35-44	20,968,000	8,481
	45-64	24,893,000	10,942
	65+	13,002,000	5,528
	----------	------------	-------
	male	17,636,000	45,159
female	05-17	24,531,000	9,677
	18-34	33,356,000	11,563
	35-44	21,361,000	9,513
	45-64	26,544,000	12,285
	65+	18,247,000	7,163
	----------	------------	-------
	female	124,039,000	50,201
		============	=======
		241,675,000	95,360

Person Weight Sums by **Region**

REGION	Person weight	COUNT
North East Region	47,522,003	48,184
North Central Region	56,600,031	11,703
South Region	84,786,949	24,862
West Region	52,766,017	10,611
	==========	=======
	241,675,000	95,360

Person Weight Sums by **Travel Month**

Person

A-4

MONTH	weight	COUNT
Jan	20,139,591	5,771
Feb	20,139,591	8,449
Mar	20,139,593	10,767
Apr	20,139,580	8,269
May	20,139,583	10,974
Jun	20,139,578	8,500
Jul	20,139,587	7,243
Aug	20,139,572	5,860
Sep	20,139,581	6,313
Oct	20,139,582	7,682
Nov	20,139,585	7,760
Dec	20,139,575	7,772
	==========	=======
	241,675,000	95,360

CONTROL TOTALS FOR CHECKING OUTPUT:

Variable	Sample Size	Weighted Sum *	95% Confidence Interval Estimate*** (Units=000)	File Processed	Comments (Variable names are capitalized)
Households	42,033	98,990,000	98,329 to 99,651	Household	Sum over WTHHFIN
Persons	95,360	241,675,000	239,113 to 244,237	Person	Sum over WTPERFIN
Household Vehicles	75,217	176,066,660	174,411 to 177,722	Vehicle	Sum over WTHHFIN
Drivers **	69,990	176,798,290	175,186 to 178,410	Person	Sum over WTPERFIN where DRIVER="01"
Workers **	51,928	131,697,367	130,381 to 133,014	Person	Sum over WTPERFIN where WORKER="01"
TRAVEL DAY: Person Trips	409,025	378,930,363,336	373,823,600 to 384,037,120	Travel Day	Sum over WTTRDFIN
Person Miles of Travel (PMT)	402,298	3,411,121,810,000	3,313,725,600 to 3,508,518,000	Travel Day	If TRPMILES=9996 then set TRPMILES=0.06;If TRPMILES=9997 then set TRPMILES=0.50;Then sum over TRPMILES weighted with WTTRDFIN where TRPMILES does not equal 9998 or 9999
Segmented Trips (subset of person trips)	3,779	3,440,664,924	---	Segment	Sum over WTTRDFIN
Vehicle Trips (travel day) **	250,181	229,745,329,785	226,830,150 to 232,660,149	Travel Day	Sum over WTTRDFIN where VTR_FLG="01" See **** below
Vehicle Miles of Travel (VMT) **		2,068,368,000,000	2,022,487,420 to 2,114,248,580	Travel Day	If TRPMILES=9996 then set TRPMILES=0.06;If TRPMILES=9997 then set TRPMILES=0.50;Then sum over TRPMILES weighted with WTTRDFIN where TRPMILES does not equal 9998 or 9999 and VTR_FLG="01" See **** below.

A-6

TRAVEL PERIOD: Person Trips	29,647	1,996,178,135	1,949,858 to 2,042,498	Travel Period	Sum over WTTRPFIN

*   annual, national estimates

**   There are slight differences between these estimates and those in Appendix B. See Appendix B Notes on page B-2.

***   The end points of a confidence interval are formed by subtracting 2 standard errors from each estimate and adding 2 standard errors to each estimate. For example, the standard error for the number of household vehicles is 828,000, making the 95% Confidence Interval estimate range from 174,411,320 to 177,722,000.

****   Instead of using VTR_FLG="01", setting DRVR_FLG="01" and TRPTRANS less than or equal to "08" will produce similar results.

WARNING: Do not compare the 1995 data on trips and travel directly to the 1990 NPTS data. See Chapter 6 of this User's Guide.

APPENDIX B
STANDARD TABLES AND LOGIC

This appendix contains the commonly-requested tables listed below. For each cell, the table contains the sample size (unweighted number of cases), weighted size, and the standard error of the weighted estimate. Standard errors are more important when sample sizes are smaller. The cells of the tables show the standard errors for subsets of the data. The tables are followed by the logic, in the form of table statements, used to produce them.

Table 1 -   Number of Households by Household Income and Household Vehicles

Table 2 -   Number of Household Vehicles by Vehicle Age and Type

Table 3 -   Number of Persons 5 Years and Older in Households, by Age and Sex

Table 4 -   Number of Drivers by Annual Miles Category, Age and Sex

Table 5 -   Number of Workers by Work Trip Time and MSA Size

Table 6 -   Number of Travel Day Person Trips by Mode and Purpose

Table 7 -   Average Number of Travel Day Trips per Person by Age and Sex
               (NOTE: The rates in this table are per travelling person. Persons who made no travel day trips are
               excluded from the rates shown here.)

Table 8 -   Number of Travel Day Person Miles Travelled by Mode and Purpose

Table 9 -   Number of Travel Day Vehicle Trips by Trip Length Category and Purpose

Table 10 -   Number of Travel Day Vehicle Miles of Travel by Trip Length Category and Purpose

Table 11 -   Number of Travel Period Person Trips by Mode and Purpose

Table 12 -   Average Vehicle Occupancy by Trip Length and Purpose
             (NOTE: The rates in this table are computed as POV person trips divided by vehicle trips. A different rate
             will be obtained if POV person miles are divided by vehicle miles of travel.)

Appendix B Notes

There are some differences between the totals shown in Appendix A, pages A-6 and A-7, and those shown in the
Appendix B tables. The reason for the differences in Workers and Drivers is that legitimate skip responses were
excluded because they add nothing to the understanding of the data in the Appendix B tables and they result in
extraneous records being included in the table totals.

The specific differences and the reasons for them are shown below.

Variable	Appendix A #	Appendix B #	Reason
Drivers	n= 69,990 wgt= 176,798,290	n= 69,876 wgt= 176,330,410	Appendix A uses all records where DRIVER=01 Appendix B uses DRIVER=01 and YEARMILE not equal 999994 (legitimate skip)
Workers	n= 51,928 wgt= 131,697,367	n= 46,679 wgt= 117,746,380	Appendix A uses all workers (WORKER=01) Appendix B table presents workers by travel time and MSA size, and excludes 5,249 workers for whom travel time was legitimately skipped (TIMETOWK=994) for reasons including work from home and or no fixed place of work
Vehicle Trips	n= 250,181 wgt = 229,745,329,785	n= 250,173 wgt= 229,737,860,000	the Appendix B totals inadvertently omitted 8 trips because their trip distance fell between the categories as defined in the table code, e.g., a trip of 5.2 miles was not included in the <=5 category
VMT	wgt= 2,068,368,000,000	wgt= 2,068,326,640,000	this difference is the result of the 8 trips inadvertently omitted from the Appendix B table

APPENDIX C
CODEBOOK FOR NPTS PUBLIC USE DATA FILES

Codebook Version Date 9/29/97

This appendix contains information on the variables in each of the NPTS data files. The first line of each page identifies the file being documented. The following is the file order as well as the length of the documentation:

Household   64 pages

Person   52 pages

Vehicle   18 pages

Travel Day   30 pages

Segment   16 pages

Travel Period   20 pages

Pagination restarts at one for each file. The information on each variable is intended to be view across two pages. The columns of the left hand page are:

Target Variable   This is the variable name.

Variable Type   "N"indicates the data is numeric
                       "C"indicates character (alphanumeric) data

Width   This is the maximum number of characters for the variable. If a numeric variable has decimals, the number of allowable decimal places is shown after the total number of characters. For example, and entry of 6.1 would mean that six characters are allowed and the last character is in tenths.

1990 Var   "N"indicates a new variable,
                       "S"indicates that the same variable name is used as in 1990,
                       "*"(asterisk) is used if the 1995 variable has no comparable 1990 variable, and
                       If a variable name is shown, identifies the 1990 variable similar to this one.

Variable Label   Provides a short explanation of what the variable describes.

Section and Item ID   Together the Section and Item ID document the survey section and question that was the source of the data. Other possible entries include:

CLAR   Tract and block group characteristics purchased from Claritas, Inc. (See Appendix L)

OAKR   Product of Oak Ridge National Lab (e.g. annualized odometer readings)

"*"   An asterisk notes a value derive from data collected on the questionnaire or another source, such as the sampling frame or the geocoding process

On the second page, the following columns appear:

Target Variable   This is the variable name.

Value Range and Codes   The legitimate data entries are identified. If special codes are used, they are also identified and defined.

Freqs   For each item identified in the column Value Range and Codes, the frequency of its occurrence is documented.

Comments   Provides additional details on the variable.

The following pages of this appendix are best displayed and/or printed as Courier set to 7 points and the text left justified.

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                     Section:   Item ID:

-----------------------------------------------------------------------------------------------------


     BUSBLOCK   N      3       N         Reported dist. to bus (blocks)        C          2.2



     BUSMILE    N      3       N         Reported dist. to bus (miles)         C          2.2



     BUS_AVL    C      2       N         Bus service available                 C          1



     BUS_DIST   N      5.1     N         Distance to bus (miles)               C          2.1



     CENSUS_D   C      2       S         Census division                       *          *




     CENSUS_R   C      2       S         Census region                         *          *



     DRVRCNT    N      2       S         Number of drivers in HH               D          *




     GHMXIN     N      2       *         Basis for geocoding - household       GEOH       *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                    Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------


  BUSBLOCK  (1 - 100)                                 10,568  Blocks as reported
            994= Legitimate skip                      24,637
            996= < 1 block                             5,568
            998= Not ascertained                       1,245
            999= Refused                                  15


  BUSMILE   (1 - 100)                                  6,545  Miles as reported
            994= Legitimate skip                      30,749
            997= Half a mile                           3,479
            998= Not ascertained                       1,245
            999= Refused                                  15

  BUS_AVL   01= Yes                                   27,420
            02= No                                    13,791
            94= Legitimate skip                            0
            98= Not Ascertained                          816
            99= Refused                                    6

  BUS_DIST  (0 - 100)                                 26,160  Miles as reported, blocks converted (9/mile)
            994= Legitimate skip                      14,613
            998= Not ascertained                       1,245
            999= Refused                                  15

  CENSUS_D  01= New England                            8,373
            02= Middle Atlantic                       12,790
            03= East North Central                     3,636
            04= West North Central                     1,478
            05= South Atlantic                         4,065
            06= East South Central                     1,174
            07= West South Central                     5,873
            08= Mountain                               1,104
            09= Pacific                                3,540

  CENSUS_R  01= Northeast                             21,163
            02= North Central                          5,114
            03= South                                 11,112
            04= West                                   4,644

  DRVRCNT   0                                          2,118  Derived from the variable DRIVER
            1                                         11,390
            2                                         22,956
            3                                          4,249
            4                                          1,136
            5                                            155
            6                                             26
            7                                              3

  GHMXIN     Address not geocoded                        333
            0= Address match                          35,800
            2= Zip + 2 match                             947
            4= Zip + 4 match                           1,049
            5= Five digit zip centroid                 3,904
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
 Target    Var
Variable: Type: Width: 1990 Var: Variable Label:                              Section: Item ID:
-------------------------------------------------------------------------------------------------

 HBHHSMLT   N     3       *        Percent multiple unit housing, BG            CLAR      *




 HBHHSOTH   N     3       *        Percent other housing, BG                    CLAR      *




 HBHHSSNG   N     3       *        Percent single family housing, BG            CLAR      *




 HBHINCH    N     3       *        Percent HHs, income $60000 and up, BG        CLAR      *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target
Variable  Value Range and Codes:                      Freqs:  Comments:
-----------------------------------------------------------------------------------------------------

HBHHSMLT   0=  0 to  4%                               12,508  Variables beginning with HB are external
                                                             Census block level variables describing the
                                                             location of the household.
           5=  5 to 14%                                8,214
          20= 15 to 24%                                4,595
          30= 25 to 34%                                3,280
          40= 35 to 44%                                2,898
          50= 45 to 54%                                2,231
          60= 55 to 64%                                1,885
          70= 65 to 74%                                1,558
          80= 75 to 84%                                1,431
          90= 85 to 94%                                1,548
          95= 95 to 100%                               1,552
         998= Not ascertained                            333

HBHHSOTH   0=  0 to  4%                               40,777
           5=  5 to 14%                                  851
          20= 15 to 24%                                   49
          30= 25 to 34%                                   16
          40= 35 to 44%                                    1
          50= 45 to 54%                                    4
          60= 55 to 64%                                    1
          70= 65 to 74%                                    0
          80= 75 to 84%                                    0
          90= 85 to 94%                                    1
          95= 95 to 100%                                   0
         998= Not ascertained                            333

HBHHSSNG   0=  0 to  4%                                1,674
           5=  5 to 14%                                1,515
          20= 15 to 24%                                1,425
          30= 25 to 34%                                1,552
          40= 35 to 44%                                1,924
          50= 45 to 54%                                2,225
          60= 55 to 64%                                2,857
          70= 65 to 74%                                3,296
          80= 75 to 84%                                4,618
          90= 85 to 94%                                7,948
          95= 95 to 100%                              12,666
         998= Not ascertained                            333

HBHINCH    0=  0 to  4%                                2,751
           5=  5 to 14%                               10,231
          20= 15 to 24%                                9,414
          30= 25 to 34%                                7,283
          40= 35 to 44%                                4,751
          50= 45 to 54%                                3,413
          60= 55 to 64%                                2,032
          70= 65 to 74%                                1,156
          80= 75 to 84%                                  508
          90= 85 to 94%                                  148
          95= 95 to 100%                                  13
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:
-------------------------------------------------------------------------------------------------------

     HBHINCH     N      3       *         Percent HHs, income $60000 and up, BG     CLAR      *

     HBHINCL     N      3       *         Percent HHs, income < $15000, BG          CLAR      *




     HBHINCM1    N      3       *         Percent HHs, income $15000-$39999, BG     CLAR      *




     HBHINCM2    N      3       *         Percent HHs, income $40000-$59999, BG     CLAR      *




     HBHINMED    N      6       *         Median household income, BG               CLAR      *
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------
            998= Not ascertained                          333

   HBHINCL   0=  0 to  4%                               4,638
             5=  5 to 14%                               15,531
            20= 15 to 24%                               11,142
            30= 25 to 34%                                5,597
            40= 35 to 44%                                2,664
            50= 45 to 54%                                1,116
            60= 55 to 64%                                  617
            70= 65 to 74%                                  267
            80= 75 to 84%                                   87
            90= 85 to 94%                                   27
            95= 95 to 100%                                  14
           998= Not ascertained                            333

   HBHINCM1  0=  0 to  4%                                   11
             5=  5 to 14%                                  244
            20= 15 to 24%                                2,366
            30= 25 to 34%                                6,383
            40= 35 to 44%                               11,154
            50= 45 to 54%                               12,755
            60= 55 to 64%                                7,065
            70= 65 to 74%                                1,525
            80= 75 to 84%                                  168
            90= 85 to 94%                                   28
            95= 95 to 100%                                   1
           998= Not ascertained                            333

   HBHINCM2  0=  0 to  4%                                    3
             5=  5 to 14%                                  803
            20= 15 to 24%                                7,595
            30= 25 to 34%                               19,915
            40= 35 to 44%                               11,669
            50= 45 to 54%                                1,591
            60= 55 to 64%                                  104
            70= 65 to 74%                                   13
            80= 75 to 84%                                    3
            90= 85 to 94%                                    1
            95= 95 to 100%                                   3
           998= Not ascertained                            333

   HBHINMED 15,000=   0 to 20K                            3,387
            22,000= 20K to 25K                            3,667
            27,000= 25K to 30K                            5,086
            32,000= 30K to 35K                            5,755
            37,000= 35K to 40K                            5,093
            45,000= 40K to 50K                            8,395
            60,000= 50K to 70K                            7,805
            80,000= 70K to 999K                           2,512
           999998= Not ascertained                          333
```

```
 Target    Var
 Variable: Type: Width: 1990 Var: Variable Label:                    Section:  Item ID:
----------------------------------------------------------------------------------------------------

   HBHMEDHS   N    6       *        Median housing unit value, BG          CLAR      *




   HBHRECNT   N    3       *        Percent units built last 10 years, BG  CLAR      *





   HBHRESDN   N    6       *        HU density (units/square mile), BG     CLAR      *




   HBHTNOWN   N    3       *        Percent owner-occupied housing, BG     CLAR      *





   HBHTNRNT   N    3       *        Percent renter-occupied housing, BG    CLAR      *
```

```
    Target
    Variable  Value Range and Codes:                        Freqs:  Comments:
    ------------------------------------------------------------------------------------------------------------


    HBHMEDHS  30000=   0  to  50K                            4,995
              60000=  50K to  70K                            5,883
              85000=  70K to 100K                            8,798
              125000= 100K to 150K                          10,102
              175000= 150K to 200K                           6,396
              300000= 200K to 999K                           5,526
              999998= Not ascertained                          333


    HBHRECNT   0=  0 to  4%                                  18,198
               5=  5 to 14%                                  12,755
              20= 15 to 24%                                   5,796
              30= 25 to 34%                                   2,349
              40= 35 to 44%                                   1,202
              50= 45 to 54%                                     577
              60= 55 to 64%                                     337
              70= 65 to 74%                                     220
              80= 75 to 84%                                     122
              90= 85 to 94%                                      88
              95= 95 to 100%                                     56
              998= Not ascertained                             333


    HBHRESDN   25=    0 to    50                             5,815
              150=   50 to   250                             6,730
              700=  250 to 1000                              9,109
              2000= 1000 to 3000                            11,873
              4000= 3000 to 5000                             3,626
              6000= 5000 to 999K                             4,547
              999998= Not ascertained                          333


    HBHTNOWN   0=  0 to  4%                                     813
               5=  5 to 14%                                   1,074
              20= 15 to 24%                                   1,375
              30= 25 to 34%                                   2,032
              40= 35 to 44%                                   2,319
              50= 45 to 54%                                   3,123
              60= 55 to 64%                                   3,885
              70= 65 to 74%                                   5,905
              80= 75 to 84%                                   8,997
              90= 85 to 94%                                   9,837
              95= 95 to 100%                                  2,340
              998= Not ascertained                             333


    HBHTNRNT   0=  0 to  4%                                   1,678
               5=  5 to 14%                                   9,432
              20= 15 to 24%                                   9,377
              30= 25 to 34%                                   6,113
              40= 35 to 44%                                   4,011
              50= 45 to 54%                                   3,215
              60= 55 to 64%                                   2,355
              70= 65 to 74%                                   2,122
              80= 75 to 84%                                   1,393
              90= 85 to 94%                                   1,128
```

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                               Section:  Item ID:
---------------------------------------------------------------------------------------------------------

  HBHTNRNT    N      3        *         Percent renter-occupied housing, BG           CLAR       *


  HBHUR       C      1        *         Urban/rural code, block group                 CLAR       *




  HBP65P      N      3        *         Percent 65 & older, block group               CLAR       *






  HBPCOLGD    N      3        *         Pcnt Colg Grads(over 25), block group         CLAR       *






  HBPFORBN    N      3        *         Percent foreign born 1990, block group        CLAR       *






  HBPHISP     N      3        *         Percent Hispanic, block group                 CLAR       *
```

```
   Target
   Variable  Value Range and Codes:                        Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------------

             95= 95 to 100%                                    876
             998= Not ascertained                              333

   HBHUR     8= Not ascertained                                333
             C= Second city                                  8,811
             R= Rural                                         6,669
             S= Suburban                                     10,017
             T= Town                                         10,243
             U= Urban                                         5,960

   HBP65P    0=  0 to  4%                                     2,866
             5=  5 to 14%                                    23,257
             20= 15 to 24%                                   12,313
             30= 25 to 34%                                    2,437
             40= 35 to 44%                                      502
             50= 45 to 54%                                      188
             60= 55 to 64%                                       54
             70= 65 to 74%                                       28
             80= 75 to 84%                                       27
             90= 85 to 94%                                       27
             95= 95 to 100%                                       1
             998= Not ascertained                              333

   HBPCOLGD  0=  0 to  4%                                       771
             5=  5 to 14%                                     6,982
             20= 15 to 24%                                   10,476
             30= 25 to 34%                                    8,984
             40= 35 to 44%                                    6,314
             50= 45 to 54%                                    3,928
             60= 55 to 64%                                    2,463
             70= 65 to 74%                                    1,253
             80= 75 to 84%                                      424
             90= 85 to 94%                                       89
             95= 95 to 100%                                      16
             998= Not ascertained                              333

   HBPFORBN  0=  0 to  4%                                    23,594
             5=  5 to 14%                                    13,070
             20= 15 to 24%                                    2,828
             30= 25 to 34%                                    1,162
             40= 35 to 44%                                      541
             50= 45 to 54%                                      270
             60= 55 to 64%                                      149
             70= 65 to 74%                                       70
             80= 75 to 84%                                       15
             90= 85 to 94%                                        1
             95= 95 to 100%                                        0
             998= Not ascertained                              333

   HBPHISP   0=  0 to  4%                                    30,560
             5=  5 to 14%                                     6,966
             20= 15 to 24%                                    1,693
```

```
   Target    Var
   Variable: Type: Width: 1990 Var: Variable Label:                       Section:  Item ID:
-------------------------------------------------------------------------------------------------------

   HBPHISP    N     3      *        Percent Hispanic, block group          CLAR       *




   HBPHSGD    N     3      *        Pcnt HS grads (over 25), block group    CLAR       *




   HBPLTPOV   N     3      *        Percent families below poverty, blk grp CLAR       *




   HBPPOPDN   N     6      *        Population density, block group         CLAR       *




   HBPPOPNO   N     6      *        Current population, block group         CLAR       *
```

```
 Target
 Variable  Value Range and Codes:                        Freqs:  Comments:
 ------------------------------------------------------------------------------------------------------------

           30= 25 to 34%                                    813
           40= 35 to 44%                                    498
           50= 45 to 54%                                    340
           60= 55 to 64%                                    263
           70= 65 to 74%                                    202
           80= 75 to 84%                                    179
           90= 85 to 94%                                    135
           95= 95 to 100%                                    51
          998= Not ascertained                              333

 HBPHSGD   0=  0 to  4%                                     251
            5=  5 to 14%                                  3,090
           20= 15 to 24%                                  8,732
           30= 25 to 34%                                 15,191
           40= 35 to 44%                                 11,476
           50= 45 to 54%                                  2,690
           60= 55 to 64%                                    251
           70= 65 to 74%                                     11
           80= 75 to 84%                                      4
           90= 85 to 94%                                      2
           95= 95 to 100%                                     2
          998= Not ascertained                              333

 HBPLTPOV  0=  0 to  4%                                  17,101
            5=  5 to 14%                                 16,861
           20= 15 to 24%                                  4,583
           30= 25 to 34%                                  1,696
           40= 35 to 44%                                    829
           50= 45 to 54%                                    356
           60= 55 to 64%                                    153
           70= 65 to 74%                                     80
           80= 75 to 84%                                     26
           90= 85 to 94%                                      8
           95= 95 to 100%                                     7
          998= Not ascertained                              333

 HBPPOPDN     50=   0 to 100                              4,936
             300= 100 to 500                              6,552
             750= 500 to  1K                              3,634
           1,500=  1K to  2K                              4,717
           3,000=  2K to  4K                              6,943
           7,000=  4K to 10K                              9,536
          17,000= 10K to 25K                              3,284
          30,000= 25K to 999K                             2,098
          999998= Not ascertained                           333

 HBPPOPNO  500=    0 to 1000                             13,058
          1250= 1000 to 1500                             11,771
          1750= 1500 to 2000                              6,555
          2500= 2000 to 3000                              5,450
          3500= 3000 to 999K                              4,866
        999998= Not ascertained                             333
```

 Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:
-----------------------------------------------------------------------------------------------------

HBPRCAA     N      3       *         Percent African-Am., block group      CLAR      *




HBPRCASN    N      3       *         Percent Asian- Am., block group       CLAR      *




HBPRCCAU    N      3       *         Percent White, block group            CLAR      *




HBPRCOTH    N      3       *         Percent Other races, block group      CLAR      *
```

```
   Target
   Variable  Value Range and Codes:                  Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------

   HBPRCAA   0=  0 to  4%                             29,471
             5=  5 to 14%                              6,282
            20= 15 to 24%                              1,833
            30= 25 to 34%                                977
            40= 35 to 44%                                570
            50= 45 to 54%                                432
            60= 55 to 64%                                370
            70= 65 to 74%                                344
            80= 75 to 84%                                330
            90= 85 to 94%                                411
            95= 95 to 100%                               680
           998= Not ascertained                          333

   HBPRCASN  0=  0 to  4%                             34,725
             5=  5 to 14%                              5,553
            20= 15 to 24%                                886
            30= 25 to 34%                                270
            40= 35 to 44%                                111
            50= 45 to 54%                                 82
            60= 55 to 64%                                 22
            70= 65 to 74%                                 20
            80= 75 to 84%                                 18
            90= 85 to 94%                                  9
            95= 95 to 100%                                 4
           998= Not ascertained                          333

   HBPRCCAU  0=  0 to  4%                                688
             5=  5 to 14%                                466
            20= 15 to 24%                                372
            30= 25 to 34%                                437
            40= 35 to 44%                                447
            50= 45 to 54%                                614
            60= 55 to 64%                                914
            70= 65 to 74%                              1,572
            80= 75 to 84%                              3,451
            90= 85 to 94%                             10,598
            95= 95 to 100%                            22,141
           998= Not ascertained                          333

   HBPRCOTH  0=  0 to  4%                             39,577
             5=  5 to 14%                              1,897
            20= 15 to 24%                                155
            30= 25 to 34%                                 33
            40= 35 to 44%                                 14
            50= 45 to 54%                                  6
            60= 55 to 64%                                  6
            70= 65 to 74%                                  3
            80= 75 to 84%                                  4
            90= 85 to 94%                                  2
            95= 95 to 100%                                 3
           998= Not ascertained                          333
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:   Item ID:
--------------------------------------------------------------------------------------------------------

    HHCMSA     C      4       SMSA       CMSA identification code                  *          *




    HHELGCNT   N      2       S          # of eligible persons in HH               D          3




    HHFAMINC   C      2       S          HH family income category                 K          1 & 2
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------

   HHCMSA    Chicago-Gary-Kenosha, IL-IN-WI CMSA            833
             Cincinnati-Hamilton, OH-KY-IN CMSA            176
             Cleveland-Akron, OH CMSA                      240
             Dallas-Fort Worth, TX CMSA                    307
             Denver-Boulder-Greeley, CO CMSA               152
             Detroit-Ann Arbor-Flint, MI CMSA             334
             Houston-Galveston-Brazoria, TX CMSA           268
             Los Angeles-Riverside-Orange County          962
             Miami-Fort Lauderdale, FL CMSA                291
             Milwaukee-Racine, WI CMSA                     136
             New York-No. New Jersey-Long Island        5,407
             Philadelphia-Wilmington-Atlantic City        598
             Portland-Salem, OR-WA CMSA                   217
             Sacramento-Yolo, CA CMSA                      159
             San Francisco-Oakland-San Jose, CA CMSA      587
             Seattle-Tacoma-Bremerton, WA CMSA            696
             Washington-Baltimore, DC-MD-VA-WV CMSA       798
             Not in a CMSA                             29,872

   HHELGCNT  1                                           8,555  Number of persons 5 years and older
             2                                          17,668
             3                                           7,428
             4                                           5,706
             5                                           1,940
             6                                             543
             7                                             134
             8                                              42
             9                                              13
             10                                              4

   HHFAMINC  01= Less than $5,000                          814  Based on questions of Section K.See olso
                                                                 NONFMFLG and NONFMINC

             02= $5,000 - 9,999                          2,183
             03= $10,000 - 14,999                        2,388
             04= $15,000 - 19,999                        3,011
             05= $20,000 - 24,999                        2,371
             06= $25,000 - 29,999                        3,696
             07= $30,999 - 34,999                        2,084
             08= $35,000 - 39,999                        3,338
             09= $40,000 - 44,999                        1,582
             10= $45,000 - 49,999                        2,799
             11= $50,000 - 54,999                        1,110
             12= $55,000 - 59,999                        2,178
             13= $60,000 - 64,999                          762
             14= $65,000 - 69,999                        1,492
             15= $70,000 - 74,999                          496
             16= $75,000 - 79,999                        1,037
             17= $80,000 - 99,999                        1,614
             18= $100,000 and over                       1,855
             98= Not ascertained                         2,969
             99= Refused                                 4,254
```

```
  Target    Var
  Variable: Type:  Width:  1990 Var:  Variable Label:                          Section:   Item ID:

  ----------------------------------------------------------------------------------------------------

  HHMSA     C      4       S          MSA identification code                  *          *

  HHRESP    C      2       N          HH respondent                            D          13




  HHSIZE    N      2       S          Total number of persons in HH            D          1




  HHSTATE   C      2       S          State postal code                        *          *
```

```
Target
Variable  Value Range and Codes:                    Freqs:  Comments:
-----------------------------------------------------------------------------------------------------

HHMSA     (0520-8840)                    .

HHRESP    1                                         27,878  Person number of household respondent
          2                                         12,483
          3                                          1,242
          4                                            328
          5                                             76
          6                                             19
          7                                              6
          8                                              1
          9                                              0
          10                                             0
          Not ascertained                                0
          Refused                                        0

HHSIZE    1                                          8,219  Number of persons - all ages (derived)
          2                                         15,263
          3                                          7,392
          4                                          7,043
          5                                          2,852
          6                                            873
          7                                            247
          8                                             85
          9                                             33
          10                                            26

HHSTATE   State population < 2 million               1,513
          94= Legitimate skip (Foreign Country)          0
          98= Not ascertained                            0
          99= Refused                                    0
          Alaska                                         0
          Alabama                                      308
          Arkansas                                     227
          Arizona                                      274
          California                                 2,262
          Colorado                                     272
          Connecticut                                  225
          District of Columbia                           0
          Delaware                                       0
          Florida                                    1,129
          Georgia                                      582
          Hiwaii                                         0
          Iowa                                         236
          Idaho                                          0
          Illinois                                   1,093
          Indiana                                      465
          Kansas                                       205
          Kentucky                                     261
          Louisiana                                    354
          Massachusetts                              7,801
          Maryland                                     542
          Maine                                          0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:

  ---------------------------------------------------------------------------------------------------------

  HHSTATE     C      2        S        State postal code (   See Appendix N for detail ) *          *
```

```
  HHSTFIPS    N      2        S        State FIPS code                         *          *

  HHVEHCNT    N      2        S        No. of vehicles in household (derived)  B          *
```

```
  HH_0TO4     N      2        S        Number of persons in HH age 0-4         C          3
```

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------------

             Michigan                                        671
             Minnesota                                       380
             Missouri                                        393
             Mississippi                                     174
             Montana                                           0
             North Carolina                                  623
             North Dakota                                      0
             Nebraska                                          0
             Hew Hampshire                                     0
             New Jersey                                       616
             New Mexico                                        0
             Nevada                                            0
             New York                                     11,004
             Ohio                                            932
             Oklahoma                                      4,073
             Oregon                                          327
             Pennsylvania                                  1,170
             Rhode Island                                      0
             South Carolina                                  317
             South Dakota                                      0
             Tennessee                                       431
             Texas                                         1,219
             Utah                                              0
             Virginia                                        613
             Vermont                                           0
             Washington                                      866
             Wisconsin                                       475
             West Virginia                                     0
             Wyoming                                           0

   HHSTFIPS  (1 - 55)                                     42,033

   HHVEHCNT  0                                             3,343  Count of all vehicles for the household
             1                                            12,678
             2                                            18,277
             3                                             5,716
             4                                             1,488
             5                                               378
             6                                               104
             7                                                31
             8                                                10
             9                                                 6
             10                                                2

   HH_0TO4   0                                            35,968  Number of persons in the household who are
                                                                  under 5 years of age
             1                                             4,526
             2                                             1,399
             3                                               132
             4                                                 6
             5                                                 2
             6                                                 0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                           Section:   Item ID:
--------------------------------------------------------------------------------------------------------

HH_HISP     C      2       S          Hispanic status of ref. person            D          5


HH_RACE     C      2       S          Race of reference person                  D          6


HOMEOWN     C      2       N          Tenure of housing unit                    C          8


HOMETYPE    C      2       N          Type of housing unit                      C          6



HOUSEID     N      8       S          Household identification number           *          *

HSTORIES    C      2       N          Stories in apt. building                  C          7


HTEEMPDN    N      6       *          Jobs per square mile, census tract        CLAR       *




HTHHSMLT    N      3       *          Percent multiple unit housing, CT         CLAR       *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------------


  HH_HISP   01= Hispanic                                  1,735
            02= Non-hispanic                             40,202
            98= Not Ascertained                              42
            99= Refused                                      54


  HH_RACE   01= White                                    35,854
            02= African-american                          2,997
            03= Asian                                       703
            04= Other                                     2,010
            98= Not Ascertained                             150
            99= Refused                                     319


  HOMEOWN   01= Owned                                    30,571
            02= Rented                                    11,229
            03= Provided by job or military                 108
            04= Other, specify                               55
            98= Not ascertained                              20
            99= Refused                                       50


  HOMETYPE  01= Single house (detached)                  29,292
            02= Duplex                                     2,004
            03= Rowhouse or townhouse                      1,922
            04= Apartment                                  7,006
            05= Mobile home or trailer                     1,749
            06= Other, specify                               34
            94= Legitimate skip                               0
            98= Not ascertained                              12
            99= Refused                                       14

  HOUSEID   (1000371 - 12227427)                         42,033

  HSTORIES  01= Five or more stories                      1,679
            02= Less than five stories                    5,305
            94= Legitimate skip                          35,027
            98= Not ascertained                              20
            99= Refused                                        2

  HTEEMPDN    25=   0 to   49                              8,411  Variables beginning with HT are external
                                                                 Census tract level variables describing the
                                                                 location of the household.
             150= 100 to  249                              8,109
             350= 250 to  500                              4,716
             750= 500 to 1000                              5,964
            1500=  1K to 2000                              6,148
            3000=  2K to 4000                              4,187
            5000=  4K to 999K                              4,165
          999998= Not ascertained                            333

  HTHHSMLT    0=   0 to  4%                                7,328
              5=   5 to 14%                                9,707
             20= 15 to 24%                                6,903
             30= 25 to 34%                                4,824
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:
-------------------------------------------------------------------------------------------------------

HTHHSMLT    N     3        *         Percent multiple unit housing, CT       CLAR      *




HTHHSOTH    N     3        *         Percent other housing, CT               CLAR      *




HTHHSSNG    N     3        *         Percent single family housing, CT       CLAR      *




HTHINCH     N     3        *         Percent HHs, income $60000 and up, CT   CLAR      *




HTHINCL     N     3        *         Percent HHs, income < $15000, CT        CLAR      *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target
Variable  Value Range and Codes:                         Freqs:  Comments:
-----------------------------------------------------------------------------------------------------------

          40= 35 to 44%                                   3,445
          50= 45 to 54%                                   2,513
          60= 55 to 64%                                   1,919
          70= 65 to 74%                                   1,321
          80= 75 to 84%                                   1,123
          90= 85 to 94%                                   1,400
          95= 95 to 100%                                  1,217
          998= Not ascertained                              333

HTHHSOTH  0=  0 to  4%                                    41,116
           5=  5 to 14%                                      560
          20= 15 to 24%                                       19
          30= 25 to 34%                                        3
          40= 35 to 44%                                        0
          50= 45 to 54%                                        1
          60= 55 to 64%                                        0
          70= 65 to 74%                                        0
          80= 75 to 84%                                        0
          90= 85 to 94%                                        1
          95= 95 to 100%                                       0
          998= Not ascertained                              333

HTHHSSNG  0=  0 to  4%                                     1,337
           5=  5 to 14%                                     1,373
          20= 15 to 24%                                     1,076
          30= 25 to 34%                                     1,352
          40= 35 to 44%                                     1,942
          50= 45 to 54%                                     2,391
          60= 55 to 64%                                     3,511
          70= 65 to 74%                                     4,752
          80= 75 to 84%                                     7,021
          90= 85 to 94%                                     9,554
          95= 95 to 100%                                    7,391
          998= Not ascertained                              333

HTHINCH   0=  0 to  4%                                     1,560
           5=  5 to 14%                                    10,679
          20= 15 to 24%                                    10,201
          30= 25 to 34%                                     8,126
          40= 35 to 44%                                     4,988
          50= 45 to 54%                                     3,243
          60= 55 to 64%                                     1,755
          70= 65 to 74%                                       817
          80= 75 to 84%                                       282
          90= 85 to 94%                                        47
          95= 95 to 100%                                        2
          998= Not ascertained                              333

HTHINCL   0=  0 to  4%                                     2,145
           5=  5 to 14%                                    15,879
          20= 15 to 24%                                    13,433
          30= 25 to 34%                                     6,114
```

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:

--------------------------------------------------------------------------------------------------------

HTHINCL     N      3        *         Percent HHs, income < $15000, CT         CLAR       *




HTHINCM1    N      3        *         Percent HHs, income $15000-$39999, CT    CLAR       *




HTHINCM2    N      3        *         Percent HHs, income $40000-$59999, CT    CLAR       *




HTHINMED    N      6        *         Median household income, CT              CLAR       *




HTHMEDHS    N      6        *         Median housing unit value, CT            CLAR       *
```

```
 Target
 Variable  Value Range and Codes:                    Freqs:  Comments:
 -------------------------------------------------------------------------------------------------------------

            40= 35 to 44%                              2,564
            50= 45 to 54%                                946
            60= 55 to 64%                                406
            70= 65 to 74%                                153
            80= 75 to 84%                                 39
            90= 85 to 94%                                 10
            95= 95 to 100%                                11
            998= Not ascertained                         333

 HTHINCM1   0=  0 to  4%                                  59
             5=  5 to 14%                              1,351
            20= 15 to 24%                              5,579
            30= 25 to 34%                             11,627
            40= 35 to 44%                             16,979
            50= 45 to 54%                              5,676
            60= 55 to 64%                                360
            70= 65 to 74%                                 46
            80= 75 to 84%                                 22
            90= 85 to 94%                                  1
            95= 95 to 100%                                 0
            998= Not ascertained                         333

 HTHINCM2   0=  0 to  4%                                 234
             5=  5 to 14%                              5,565
            20= 15 to 24%                             25,004
            30= 25 to 34%                             10,580
            40= 35 to 44%                                312
            50= 45 to 54%                                  3
            60= 55 to 64%                                  1
            70= 65 to 74%                                  1
            80= 75 to 84%                                  0
            90= 85 to 94%                                  0
            95= 95 to 100%                                 0
            998= Not ascertained                         333

 HTHINMED  15,000=   0 to 20K                          2,617
           22,000= 20K to 25K                          3,713
           27,000= 25K to 30K                          5,367
           32,000= 30K to 35K                          6,171
           37,000= 35K to 40K                          6,146
           45,000= 40K to 50K                          8,607
           60,000= 50K to 70K                          7,303
           80,000= 70K to 999K                         1,776
           999998= Not ascertained                       333

 HTHMEDHS  30000=    0 to  50K                         4,412
           60000=   50K to  70K                        6,230
           85000=   70K to 100K                        8,870
           125000= 100K to 150K                       10,233
           175000= 150K to 200K                        6,714
           300000= 200K to 999K                        5,241
           999998= Not ascertained                       333
```

```
 Target    Var
 Variable: Type: Width: 1990 Var: Variable Label:                    Section:  Item ID:

 -------------------------------------------------------------------------------------------------

 HTHRECNT   N    3      *        Percent units built last 10 years, CT   CLAR      *




 HTHRESDN   N    6      *        HU density (units/square mile), CT      CLAR      *




 HTHTNOWN   N    3      *        Percent owner-occupied housing, CT      CLAR      *




 HTHTNRNT   N    3      *        Percent renter-occupied housing, CT     CLAR      *




 HTHUR      C    1      *        Urban/rural code, census tract          CLAR      *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                        Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------------

  HTHRECNT   0=  0 to  4%                                 14,725
             5=  5 to 14%                                 16,468
            20= 15 to 24%                                  6,739
            30= 25 to 34%                                  1,952
            40= 35 to 44%                                  1,028
            50= 45 to 54%                                    366
            60= 55 to 64%                                    213
            70= 65 to 74%                                    104
            80= 75 to 84%                                     59
            90= 85 to 94%                                     23
            95= 95 to 100%                                    23
           998= Not ascertained                              333

  HTHRESDN   25=    0 to   49                               6,237
            150=   50 to  249                               7,570
            700=  250 to 1000                               9,851
           2000= 1000 to 3000                              11,502
           4000= 3000 to 5000                               2,745
           6000= 5000 to 999K                               3,795
         999998= Not ascertained                             333

  HTHTNOWN   0=  0 to  4%                                    482
             5=  5 to 14%                                    886
            20= 15 to 24%                                  1,174
            30= 25 to 34%                                  1,794
            40= 35 to 44%                                  2,269
            50= 45 to 54%                                  3,308
            60= 55 to 64%                                  5,192
            70= 65 to 74%                                  7,959
            80= 75 to 84%                                 10,778
            90= 85 to 94%                                  7,060
            95= 95 to 100%                                   798
           998= Not ascertained                              333

  HTHTNRNT   0=  0 to  4%                                    488
             5=  5 to 14%                                  6,345
            20= 15 to 24%                                 10,798
            30= 25 to 34%                                  8,387
            40= 35 to 44%                                  5,351
            50= 45 to 54%                                  3,452
            60= 55 to 64%                                  2,317
            70= 65 to 74%                                  1,886
            80= 75 to 84%                                  1,228
            90= 85 to 94%                                    840
            95= 95 to 100%                                   608
           998= Not ascertained                              333

  HTHUR      8= Not ascertained                              333
             C= Second city                               8,549
             R= Rural                                     6,827
             S= Suburban                                 10,179
             T= Town                                     10,139
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:

   ----------------------------------------------------------------------------------------------------------

   HTHUR      C      1       *          Urban/rural code, census tract       CLAR      *

   HTINDRET   N      3       *          Pct 16+ workplace pop, retl trd ind, CT  CLAR  *




   HTP65P     N      3       *          Percent 65 & older, census tract     CLAR      *




   HTPCOLGD   N      3       *          Pcnt Colg Grads(over 25), census tract  CLAR   *




   HTPFORBN   N      3       *          Percent foreign born 1990, census tract  CLAR  *
```

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------------

             U= Urban                                      6,006

   HTINDRET   0=  0 to  4%                                 2,878
              5=  5 to 14%                                13,184
             20= 15 to 24%                                12,527
             30= 25 to 34%                                 7,027
             40= 35 to 44%                                 3,364
             50= 45 to 54%                                 1,735
             60= 55 to 64%                                   690
             70= 65 to 74%                                   211
             80= 75 to 84%                                    53
             90= 85 to 94%                                    31
             95= 95 to 100%                                    0
            998= Not ascertained                             333

   HTP65P     0=  0 to  4%                                 1,850
              5=  5 to 14%                                23,460
             20= 15 to 24%                                14,440
             30= 25 to 34%                                 1,562
             40= 35 to 44%                                   235
             50= 45 to 54%                                    76
             60= 55 to 64%                                    31
             70= 65 to 74%                                    14
             80= 75 to 84%                                    14
             90= 85 to 94%                                    18
             95= 95 to 100%                                    0
            998= Not ascertained                             333

   HTPCOLGD   0=  0 to  4%                                   179
              5=  5 to 14%                                 6,170
             20= 15 to 24%                                11,958
             30= 25 to 34%                                 9,560
             40= 35 to 44%                                 6,685
             50= 45 to 54%                                 3,678
             60= 55 to 64%                                 2,121
             70= 65 to 74%                                 1,020
             80= 75 to 84%                                   300
             90= 85 to 94%                                    24
             95= 95 to 100%                                    5
            998= Not ascertained                             333

   HTPFORBN   0=  0 to  4%                                22,909
              5=  5 to 14%                                13,824
             20= 15 to 24%                                 2,822
             30= 25 to 34%                                 1,179
             40= 35 to 44%                                   539
             50= 45 to 54%                                   219
             60= 55 to 64%                                   137
             70= 65 to 74%                                    62
             80= 75 to 84%                                     8
             90= 85 to 94%                                     1
             95= 95 to 100%                                    0
```

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:

------------------------------------------------------------------------------------------------

HTPFORBN    N     3       *          Percent foreign born 1990, census tract   CLAR      *

HTPHISP     N     3       *          Percent Hispanic, census tract            CLAR      *




HTPHSGD     N     3       *          Pcnt HS grads (over 25), census tract     CLAR      *




HTPLTPOV    N     3       *          Percent families below poverty, cen. tr.  CLAR      *




HTPPOPDN    N     6       *          Population density, census tract          CLAR      *




HTPPOPNO    N     6       *          Current population, census tract          CLAR      *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
   Target
   Variable  Value Range and Codes:                          Freqs:  Comments:
   --------------------------------------------------------------------------------------------------------------

             998= Not ascertained                             333

   HTPHISP   0=  0 to  4%                                   30,074
             5=  5 to 14%                                    7,308
            20= 15 to 24%                                    1,770
            30= 25 to 34%                                      888
            40= 35 to 44%                                      484
            50= 45 to 54%                                      337
            60= 55 to 64%                                      311
            70= 65 to 74%                                      210
            80= 75 to 84%                                      159
            90= 85 to 94%                                      123
            95= 95 to 100%                                      36
           998= Not ascertained                               333

   HTPHSGD   0=  0 to  4%                                       67
             5=  5 to 14%                                    2,336
            20= 15 to 24%                                    7,932
            30= 25 to 34%                                   17,806
            40= 35 to 44%                                   12,156
            50= 45 to 54%                                    1,377
            60= 55 to 64%                                       23
            70= 65 to 74%                                        1
            80= 75 to 84%                                        1
            90= 85 to 94%                                        1
            95= 95 to 100%                                       0
           998= Not ascertained                               333

   HTPLTPOV  0=  0 to  4%                                   14,107
             5=  5 to 14%                                   20,328
            20= 15 to 24%                                    4,693
            30= 25 to 34%                                    1,501
            40= 35 to 44%                                      659
            50= 45 to 54%                                      293
            60= 55 to 64%                                       84
            70= 65 to 74%                                       21
            80= 75 to 84%                                        7
            90= 85 to 94%                                        5
            95= 95 to 100%                                       2
           998= Not ascertained                               333

   HTPPOPDN    50=   0 to 100                                5,377
              300= 100 to 500                                7,270
              750= 500 to  1K                                4,244
            1,500=  1K to  2K                                5,145
            3,000=  2K to  4K                                7,185
            7,000=  4K to 10K                                8,000
           17,000= 10K to 25K                                2,577
           35,000= 25K to 999K                               1,902
          999998= Not ascertained                             333

   HTPPOPNO 1500=  0  to  3K                                 6,303
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
 Target     Var
 Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:

 ------------------------------------------------------------------------------------------------------

 HTPPOPNO    N      6        *        Current population, census tract       CLAR      *



 HTPRCAA     N      3        *        Percent African-Am., census tract      CLAR      *




 HTPRCASN    N      3        *        Percent Asian- Am., census tract       CLAR      *




 HTPRCCAU    N      3        *        Percent White, census tract            CLAR      *




 HTPRCOTH    N      3        *        Percent Other races, census tract      CLAR      *
```

 Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
   Target
   Variable  Value Range and Codes:                        Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------------

             4000=   3K to   5K                            14,926
             6000=   5K to   7K                            11,043
             8000=   7K to  10K                             6,542
             12000= 10K to 999K                             2,886
             999998= Not ascertained                          333

   HTPRCAA   0=   0 to  4%                                  28,293
             5=   5 to 14%                                   7,044
             20= 15 to 24%                                   2,140
             30= 25 to 34%                                   1,027
             40= 35 to 44%                                     685
             50= 45 to 54%                                     493
             60= 55 to 64%                                     409
             70= 65 to 74%                                     341
             80= 75 to 84%                                     287
             90= 85 to 94%                                     407
             95= 95 to 100%                                    574
             998= Not ascertained                             333

   HTPRCASN  0=   0 to  4%                                  34,625
             5=   5 to 14%                                   5,744
             20= 15 to 24%                                     860
             30= 25 to 34%                                     237
             40= 35 to 44%                                      89
             50= 45 to 54%                                      66
             60= 55 to 64%                                      25
             70= 65 to 74%                                      20
             80= 75 to 84%                                      23
             90= 85 to 94%                                      10
             95= 95 to 100%                                      1
             998= Not ascertained                             333

   HTPRCCAU  0=   0 to  4%                                     570
             5=   5 to 14%                                     456
             20= 15 to 24%                                     340
             30= 25 to 34%                                     440
             40= 35 to 44%                                     490
             50= 45 to 54%                                     645
             60= 55 to 64%                                   1,000
             70= 65 to 74%                                   1,648
             80= 75 to 84%                                   3,806
             90= 85 to 94%                                  11,505
             95= 95 to 100%                                 20,800
             998= Not ascertained                             333

   HTPRCOTH  0=   0 to  4%                                  39,534
             5=   5 to 14%                                   1,963
             20= 15 to 24%                                     148
             30= 25 to 34%                                      24
             40= 35 to 44%                                      13
             50= 45 to 54%                                       4
             60= 55 to 64%                                       3
```

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:

   --------------------------------------------------------------------------------------------------------

   HTPRCOTH   N      3        *          Percent Other races, census tract     CLAR      *



   INELGCNT   N      2        S          # of ineligible persons in HH         C         3




   LIF_CYC    C      2        S          Family life cycle                     D         3




   MSASIZE    C      2        S          Size of MSA of household              *         *



   MSTR_MON   N      2        S          Date of master interview - month      *         *




   MSTR_YR    N      2        S          Date of master interview - year       *         *
```

```
  Target
  Variable  Value Range and Codes:                         Freqs:  Comments:
-------------------------------------------------------------------------------------------------------------
            70= 65 to 74%                                       4
            80= 75 to 84%                                       1
            90= 85 to 94%                                       3
            95= 95 to 100%                                      3
            998= Not ascertained                              333

  INELGCNT  0                                             35,688  Number of persons rostered who were
                                                                  determined to be ineligible (includes age
                                                                  0-4, persons living elsewhere, students away
                                                                  at school, etc.)
            1                                              4,725
            2                                              1,449
            3                                                147
            4                                                 18
            5                                                  4
            6                                                  1
            7                                                  1

  LIF_CYC   01= One adult, no children                     5,507  See documentation notes for LIF_CYC
            02= 2+ adults, no children                    10,943
            03= One adult, youngest child age 0-5            667
            04= 2+ adults, youngest child age 0-5          6,385
            05= One adult, youngest child age 6-15         1,151
            06= 2+ adults, youngest child age 6-15         6,417
            07= One adult, youngest child age 16-21          460
            08= 2+ adults, youngest child age 16-21        1,916
            09= One adult, retired, no children            2,736
            10= 2+ adults, retired, no children            5,831

  MSASIZE   01= Less than 250,000                          3,979  See documentation notes for MSASIZE

            02= 250,000 - 499,999                          2,597
            03= 500,000 - 999,999                          5,161
            04= 1,000,000 - 2,999,999                      8,022
            05= 3,000,000 or more                         16,236
            94= Legitimate skip, not in an MSA             6,038

  MSTR_MON  1= January                                     3,971  Date of the household interview
            2= February                                    3,662
            3= March                                        4,129
            4= April                                        3,474
            5= May                                          4,926
            6= June                                         4,013
            7= July                                         2,700
            8= August                                       2,472
            9= September                                    2,745
            10= October                                     3,387
            11= November                                    3,591
            12= December                                    2,963

  MSTR_YR   95                                            24,429  Date of the household interview
            96                                            17,604
```

```
 Target     Var
 Variable:  Type:  Width:  1990 Var:  Variable Label:                         Section:   Item ID:

 -------------------------------------------------------------------------------------------------------

 NONFMFLG   C      2       S          Non-family income reported for HH       K          10




 NOTELWKS   C      2       N          No. of weeks w/o telephone service      J          5

 NOTELYR    C      2       N          Without telephone service in past year? J          4




 NUMADLT    N      2       S          # of adults in HH                       D          3




 OTHERPTR   C      2       N          Other public transit available          C          3




 P10_AGE    N      3       N          Age of person 10                        D          3




 P10_DRVR   C      2       N          Driver status of person 10              D          9




 P10_REL    C      2       N          Person 10 relation to ref. person       D          7
```

```
  Target
  Variable  Value Range and Codes:                    Freqs:  Comments:
  --------------------------------------------------------------------------------------------------

  NONFMFLG  01= Yes                                     262  Indicates one or more persons reported their
                                                             income in NONFMINC, which was NOT included in
                                                        HHFAMINC
            02= No                                   41,771
            94= Legitimate skip                           0
            98= Not Ascertained                           0
            99= Refused                                   0

  NOTELWKS  (00          - 99          )                  .  No. of weeks (months converted to weeks)


  NOTELYR   01= Yes                                     946
            02= No                                   40,847
            94= Legitimate skip                           0
            98= Not Ascertained                         188
            99= Refused                                  52

  NUMADLT   0                                             5  Number of persons 18 years and older
            1                                        10,062
            2                                        26,071
            3                                         4,436
            4                                         1,199
            5                                           212
            6                                            40
            7                                             6
            8                                             2

  OTHERPTR  01= Yes                                   8,231
            02= No                                   18,970
            94= Legitimate skip                      14,606
            98= Not Ascertained                         225
            99= Refused                                   1

  P10_AGE   (0 - 75)                                     26
            994= Legitimate skip                     42,007
            998= Not ascertained                          0
            999= Refused                                  0

  P10_DRVR  01= Yes                                       1
            02= No                                       25
            94= Legitimate skip                      42,007
            98= Not Ascertained                           0
            99= Refused                                   0

  P10_REL   01= Reference person                          0
            02= Spouse of ref. person                     0
            03= Child of ref. person                     16
            04= Parent of ref. person                     0
            05= Sibling of ref. person                    0
            06= Other relative of ref. person             8
            07= Unmarried partner of ref. person          0
            08= Not related to ref. person                2
            94= Legitimate skip                      42,007
            98= Not ascertained                           0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
   Target      Var
   Variable:   Type:   Width:   1990 Var:   Variable Label:                    Section:   Item ID:

   -------------------------------------------------------------------------------------------------------

   P10_REL     C       2        N           Person 10 relation to ref. person   D         7

   P10_SEX     C       2        N           Sex of person 10                    D         4



   P10_STAT    C       2        N           Response status of person 10        *         *




   P10_WKR     C       2        N           Worker status of person 10          D         12



   P1_AGE      N       3        N           Age of person 1                     D         3

   P1_DRVR     C       2        N           Driver status of person 1           D         9



   P1_REL      C       2        N           Person 1 relation to ref. person    D         7




   P1_SEX      C       2        N           Sex of person 1                     D         4
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                          Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------------------

            99= Refused                                          0

  P10_SEX   01= Male                                            12
            02= Female                                          14
            94= Legitimate skip                             42,007
            98= Not ascertained                                  0
            99= Refused                                          0

  P10_STAT  01= Ineligible, too young                           20  See documentation notes for Pi_STAT
            02= Other ineligible                                 0
            03= Complete, self interview                         0
            04= Complete, proxy interview                        2
            05= No contact made                                 0
            06= Refused                                          1
            07= Contact made, time expired                       3
            08= Other non-interview                              0
            94= Legitimate skip                             42,007

  P10_WKR   01= Yes                                              1
            02= No                                              25
            94= Legitimate skip                             42,007
            98= Not Ascertained                                  0
            99= Refused                                          0

  P1_AGE    (1 - 88)                                        42,023
            994= Legitimate skip                                 0
            998= Not ascertained                                 4
            999= Refused                                         6

  P1_DRVR   01= Yes                                          38,544
            02= No                                            3,489
            94= Legitimate skip                                  0
            98= Not Ascertained                                  0
            99= Refused                                          0

  P1_REL    01= Reference person                             41,957
            02= Spouse of ref. person                            3
            03= Child of ref. person                            64
            04= Parent of ref. person                            1
            05= Sibling of ref. person                           2
            06= Other relative of ref. person                    4
            07= Unmarried partner of ref. person                 1
            08= Not related to ref. person                       1
            94= Legitimate skip                                  0
            98= Not ascertained                                  0
            99= Refused                                          0

  P1_SEX    01= Male                                         26,595
            02= Female                                       15,438
            94= Legitimate skip                                  0
            98= Not ascertained                                  0
            99= Refused                                          0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                          Section:   Item ID:
  --------------------------------------------------------------------------------------------------------

  P1_STAT    C      2       N          Response status of person 1              *          *



  P1_WKR     C      2       N          Worker status of person1                 D          12



  P2_AGE     N      3       N          Age of person 2                          D          3


  P2_DRVR    C      2       N          Driver status of person 2                D          9


  P2_REL     C      2       N          Person 2 relation to ref. person         D          7




  P2_SEX     C      2       N          Sex of person 2                          D          4


  P2_STAT    C      2       N          Response status of person 2              *          *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                         Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------------

  P1_STAT   01= Ineligible, too young                           13  See documentation notes for Pi_STAT
            02= Other ineligible                                52
            03= Complete, self interview                    33,678
            04= Complete, proxy interview                    6,075
            05= No contact made                                684
            06= Refused                                        543
            07= Contact made, time expired                     824
            08= Other non-interview                            164
            94= Legitimate skip                                  0

  P1_WKR    01= Yes                                         28,994
            02= No                                          13,039
            94= Legitimate skip                                  0
            98= Not Ascertained                                  0
            99= Refused                                          0

  P2_AGE    (0 - 88)                                        33,792
            994= Legitimate skip                             8,219
            998= Not ascertained                                 9
            999= Refused                                        13

  P2_DRVR   01= Yes                                         28,840
            02= No                                           4,974
            94= Legitimate skip                              8,219
            98= Not Ascertained                                  0
            99= Refused                                          0

  P2_REL    01= Reference person                                33
            02= Spouse of ref. person                       25,663
            03= Child of ref. person                         4,045
            04= Parent of ref. person                          462
            05= Sibling of ref. person                         452
            06= Other relative of ref. person                  516
            07= Unmarried partner of ref. person             1,199
            08= Not related to ref. person                   1,399
            94= Legitimate skip                              8,219
            98= Not ascertained                                 17
            99= Refused                                         28

  P2_SEX    01= Male                                         8,860
            02= Female                                      24,951
            94= Legitimate skip                              8,219
            98= Not ascertained                                  3
            99= Refused                                          0

  P2_STAT   01= Ineligible, too young                          345  See documentation notes for Pi_STAT
            02= Other ineligible                                89
            03= Complete, self interview                    22,970
            04= Complete, proxy interview                    7,635
            05= No contact made                                896
            06= Refused                                        617
            07= Contact made, time expired                     993
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                        Section:   Item ID:
-----------------------------------------------------------------------------------------------------

P2_STAT      C      2       N         Response status of person 2               *          *

P2_WKR       C      2       N         Worker status of person 2                 D          12

P3_AGE       N      3       N         Age of person 3                           D          3

P3_DRVR      C      2       N         Driver status of person 3                 D          9

P3_REL       C      2       N         Person 3 relation to ref. person          D          7

P3_SEX       C      2       N         Sex of person 3                           D          4

P3_STAT      C      2       N         Response status of person 3               *          *

P3_WKR       C      2       N         Worker status of person 3                 D          12
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
   Target
   Variable  Value Range and Codes:                            Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------------

             08= Other non-interview                              269
             94= Legitimate skip                                8,219

   P2_WKR    01= Yes                                            20,846
             02= No                                             12,968
             94= Legitimate skip                                 8,219
             98= Not Ascertained                                    0
             99= Refused                                            0

   P3_AGE    (0 - 88)                                           18,537
             994= Legitimate skip                               23,482
             998= Not ascertained                                    9
             999= Refused                                            5

   P3_DRVR   01= Yes                                             5,975
             02= No                                             12,576
             94= Legitimate skip                                23,482
             98= Not Ascertained                                    0
             99= Refused                                            0

   P3_REL    01= Reference person                                   22
             02= Spouse of ref. person                             232
             03= Child of ref. person                           16,034
             04= Parent of ref. person                             284
             05= Sibling of ref. person                            167
             06= Other relative of ref. person                   1,033
             07= Unmarried partner of ref. person                   49
             08= Not related to ref. person                        704
             94= Legitimate skip                                23,482
             98= Not ascertained                                   14
             99= Refused                                            12

   P3_SEX    01= Male                                            9,600
             02= Female                                          8,947
             94= Legitimate skip                                23,482
             98= Not ascertained                                    4
             99= Refused                                            0

   P3_STAT   01= Ineligible, too young                           2,673  See documentation notes for Pi_STAT

             02= Other ineligible                                  141
             03= Complete, self interview                        4,865
             04= Complete, proxy interview                       9,257
             05= No contact made                                  509
             06= Refused                                           219
             07= Contact made, time expired                       676
             08= Other non-interview                              211
             94= Legitimate skip                                23,482

   P3_WKR    01= Yes                                             4,955
             02= No                                             13,596
             94= Legitimate skip                                23,482
             98= Not Ascertained                                    0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                       Section:  Item ID:

  -----------------------------------------------------------------------------------------------------

  P3_WKR     C      2       N          Worker status of person 3             D         12


  P4_AGE     N      3       N          Age of person 4                       D         3



  P4_DRVR    C      2       N          Driver status of person 4             D         9



  P4_REL     C      2       N          Person 4 relation to ref. person      D         7




  P4_SEX     C      2       N          Sex of person 4                       D         4



  P4_STAT    C      2       N          Response status of person 4           *         *




  P4_WKR     C      2       N          Worker status of person 4             D         12



  P5_AGE     N      3       N          Age of person 5                       D         3
```

```
Target
Variable  Value Range and Codes:                        Freqs:  Comments:
--------------------------------------------------------------------------------------------------------------------

          99= Refused                                         0

P4_AGE    (0 - 88)                                       11,151
          994= Legitimate skip                           30,874
          998= Not ascertained                                3
          999= Refused                                         5

P4_DRVR   01= Yes                                         1,688
          02= No                                          9,471
          94= Legitimate skip                            30,874
          98= Not Ascertained                                 0
          99= Refused                                         0

P4_REL    01= Reference person                               12
          02= Spouse of ref. person                         104
          03= Child of ref. person                        9,773
          04= Parent of ref. person                          81
          05= Sibling of ref. person                         82
          06= Other relative of ref. person                 746
          07= Unmarried partner of ref. person               15
          08= Not related to ref. person                    331
          94= Legitimate skip                            30,874
          98= Not ascertained                                 8
          99= Refused                                         7

P4_SEX    01= Male                                        5,717
          02= Female                                      5,441
          94= Legitimate skip                            30,874
          98= Not ascertained                                 1
          99= Refused                                         0

P4_STAT   01= Ineligible, too young                       2,632  See documentation notes for Pi_STAT
          02= Other ineligible                               69
          03= Complete, self interview                    1,676
          04= Complete, proxy interview                   5,848
          05= No contact made                              318
          06= Refused                                       118
          07= Contact made, time expired                   416
          08= Other non-interview                            82
          94= Legitimate skip                            30,874

P4_WKR    01= Yes                                         1,400
          02= No                                          9,759
          94= Legitimate skip                            30,874
          98= Not Ascertained                                 0
          99= Refused                                         0

P5_AGE    (0 - 88)                                        4,114
          994= Legitimate skip                           37,917
          998= Not ascertained                                2
          999= Refused                                         0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target      Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:   Item ID:
  ----------------------------------------------------------------------------------------------------

  P5_DRVR     C      2       N         Driver status of person 5             D          9



  P5_REL      C      2       N         Person 5 relation to ref. person      D          7




  P5_SEX      C      2       N         Sex of person 5                       D          4



  P5_STAT     C      2       N         Response status of person 5           *          *




  P5_WKR      C      2       N         Worker status of person 5             D          12



  P6_AGE      N      3       N         Age of person 6                       D          3


  P6_DRVR     C      2       N         Driver status of person 6             D          9



  P6_REL      C      2       N         Person 6 relation to ref. person      D          7
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------

   P5_DRVR   01= Yes                                       371
             02= No                                      3,745
             94= Legitimate skip                        37,917
             98= Not Ascertained                             0
             99= Refused                                     0

   P5_REL    01= Reference person                            8
             02= Spouse of ref. person                      35
             03= Child of ref. person                    3,422
             04= Parent of ref. person                      45
             05= Sibling of ref. person                     24
             06= Other relative of ref. person            438
             07= Unmarried partner of ref. person           4
             08= Not related to ref. person               135
             94= Legitimate skip                        37,917
             98= Not ascertained                             3
             99= Refused                                     2

   P5_SEX    01= Male                                    2,040
             02= Female                                  2,075
             94= Legitimate skip                        37,917
             98= Not ascertained                             1
             99= Refused                                     0

   P5_STAT   01= Ineligible, too young                   1,325  See documentation notes for Pi_STAT
             02= Other ineligible                           35
             03= Complete, self interview                  376
             04= Complete, proxy interview              2,063
             05= No contact made                           97
             06= Refused                                    27
             07= Contact made, time expired               165
             08= Other non-interview                        28
             94= Legitimate skip                        37,917

   P5_WKR    01= Yes                                       318
             02= No                                      3,797
             94= Legitimate skip                        37,917
             98= Not Ascertained                             1
             99= Refused                                     0

   P6_AGE    (0 - 88)                                    1,263
             994= Legitimate skip                       40,769
             998= Not ascertained                            1
             999= Refused                                    0

   P6_DRVR   01= Yes                                        90
             02= No                                      1,174
             94= Legitimate skip                        40,769
             98= Not Ascertained                             0
             99= Refused                                     0

   P6_REL    01= Reference person                            1
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
 Target     Var
 Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:
 ------------------------------------------------------------------------------------------------------

 P6_REL      C      2        N        Person 6 relation to ref. person          D        7




 P6_SEX      C      2        N        Sex of person 6                           D        4



 P6_STAT     C      2        N        Response status of person 6               *        *




 P6_WKR      C      2        N        Worker status of person 6                 *        *



 P7_AGE      N      3        N        Age of person 7                           D        3


 P7_DRVR     C      2        N        Driver status of person 7                 D        9



 P7_REL      C      2        N        Person 7 relation to ref. person          D        7
```

 Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  -------------------------------------------------------------------------------------------------------------

            02= Spouse of ref. person                       11
            03= Child of ref. person                       928
            04= Parent of ref. person                       14
            05= Sibling of ref. person                      10
            06= Other relative of ref. person              235
            07= Unmarried partner of ref. person             1
            08= Not related to ref. person                  62
            94= Legitimate skip                         40,769
            98= Not ascertained                              2
            99= Refused                                      0

  P6_SEX    01= Male                                       666
            02= Female                                     598
            94= Legitimate skip                         40,769
            98= Not ascertained                              0
            99= Refused                                      0

  P6_STAT   01= Ineligible, too young                      474  See documentation notes for Pi_STAT
            02= Other ineligible                            16
            03= Complete, self interview                    78
            04= Complete, proxy interview                  588
            05= No contact made                             28
            06= Refused                                       8
            07= Contact made, time expired                  64
            08= Other non-interview                           8
            94= Legitimate skip                         40,769

  P6_WKR    01= Yes                                         86
            02= No                                       1,176
            94= Legitimate skip                         40,769
            98= Not Ascertained                              2
            99= Refused                                      0

  P7_AGE    (0 - 88)                                       390
            994= Legitimate skip                        41,642
            998= Not ascertained                             1
            999= Refused                                     0

  P7_DRVR   01= Yes                                         24
            02= No                                         367
            94= Legitimate skip                         41,642
            98= Not Ascertained                              0
            99= Refused                                      0

  P7_REL    01= Reference person                             0
            02= Spouse of ref. person                        2
            03= Child of ref. person                       261
            04= Parent of ref. person                        7
            05= Sibling of ref. person                       2
            06= Other relative of ref. person               92
            07= Unmarried partner of ref. person             1
            08= Not related to ref. person                  25
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:

-------------------------------------------------------------------------------------------------------

P7_REL     C      2       N          Person 7 relation to ref. person       D         7


P7_SEX     C      2       N          Sex of person 7                        D         4


P7_STAT    C      2       N          Response status of person 7            *         *




P7_WKR     C      2       N          Worker status of person 7              D         12


P8_AGE     N      3       N          Age of person 8                        D         3


P8_DRVR    C      2       N          Driver status of person 8              D         9


P8_REL     C      2       N          Person 8 relation to ref. person       D         7




P8_SEX     C      2       N          Sex of person 8                        D         4
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                       Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------------------

            94= Legitimate skip                           41,642
            98= Not ascertained                                0
            99= Refused                                        1

  P7_SEX    01= Male                                         201
            02= Female                                       190
            94= Legitimate skip                           41,642
            98= Not ascertained                                0
            99= Refused                                        0

  P7_STAT   01= Ineligible, too young                        162  See documentation notes for Pi_STAT
            02= Other ineligible                               7
            03= Complete, self interview                      21
            04= Complete, proxy interview                    166
            05= No contact made                                9
            06= Refused                                        5
            07= Contact made, time expired                    18
            08= Other non-interview                            3
            94= Legitimate skip                           41,642

  P7_WKR    01= Yes                                           25
            02= No                                           366
            94= Legitimate skip                           41,642
            98= Not Ascertained                                0
            99= Refused                                        0

  P8_AGE    (0 - 82)                                         144
            994= Legitimate skip                          41,889
            998= Not ascertained                               0
            999= Refused                                       0

  P8_DRVR   01= Yes                                            8
            02= No                                           136
            94= Legitimate skip                           41,889
            98= Not Ascertained                                0
            99= Refused                                        0

  P8_REL    01= Reference person                               0
            02= Spouse of ref. person                          2
            03= Child of ref. person                          93
            04= Parent of ref. person                          3
            05= Sibling of ref. person                         0
            06= Other relative of ref. person                 34
            07= Unmarried partner of ref. person               0
            08= Not related to ref. person                    11
            94= Legitimate skip                           41,889
            98= Not ascertained                                1
            99= Refused                                        0

  P8_SEX    01= Male                                          76
            02= Female                                        67
            94= Legitimate skip                           41,889
```

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:   Item ID:
   ------------------------------------------------------------------------------------------------------

   P8_SEX     C      2       N          Sex of person 8                        D          4


   P8_STAT    C      2       N          Response status of person 8            *          *




   P8_WKR     C      2       N          Worker status of person 8             *          *



   P9_AGE     N      3       N          Age of person 9                        D          3



   P9_DRVR    C      2       N          Driver status of person 9              D          9



   P9_REL     C      2       N          Person 9 relation to ref. person       D          7




   P9_SEX     C      2       N          Sex of person 9                        D          4



   P9_STAT    C      2       N          Response status of person 9            *          *
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   --------------------------------------------------------------------------------------------------------

             98= Not ascertained                            1
             99= Refused                                    0

   P8_STAT   01= Ineligible, too young                     77  See documentation notes for Pi_STAT

             02= Other ineligible                           2
             03= Complete, self interview                   5
             04= Complete, proxy interview                 45
             05= No contact made                            4
             06= Refused                                    3
             07= Contact made, time expired                 7
             08= Other non-interview                        1
             94= Legitimate skip                       41,889

   P8_WKR    01= Yes                                       10
             02= No                                       134
             94= Legitimate skip                       41,889
             98= Not Ascertained                            0
             99= Refused                                    0

   P9_AGE    (0 - 67)                                      58
             994= Legitimate skip                      41,974
             998= Not ascertained                           1
             999= Refused                                   0

   P9_DRVR   01= Yes                                        4
             02= No                                        55
             94= Legitimate skip                       41,974
             98= Not Ascertained                            0
             99= Refused                                    0

   P9_REL    01= Reference person                           0
             02= Spouse of ref. person                      1
             03= Child of ref. person                      37
             04= Parent of ref. person                      1
             05= Sibling of ref. person                     0
             06= Other relative of ref. person            14
             07= Unmarried partner of ref. person           0
             08= Not related to ref. person                 6
             94= Legitimate skip                       41,974
             98= Not ascertained                            0
             99= Refused                                    0

   P9_SEX    01= Male                                      41
             02= Female                                    18
             94= Legitimate skip                       41,974
             98= Not ascertained                            0
             99= Refused                                    0

   P9_STAT   01= Ineligible, too young                     37  See documentation notes for Pi_STAT
             02= Other ineligible                           0
             03= Complete, self interview                   3
             04= Complete, proxy interview                  9
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                                    Section:   Item ID:
---------------------------------------------------------------------------------------------------------------

   P9_STAT     C      2        N         Response status of person 9                         *          *


   P9_WKR      C      2        N         Worker status of person 9                           D          12


   RAIL        C      2        N         Presence/absence of rail                            *          *


   REF_AGE     N      3        S         Age of reference person (yr)                        D          3


   REF_DRVR    C      2        N         Driver status of reference person                   D          9


   REF_EDUC    C      2        S         Education of HH reference person                    F          1


   REF_SEX     C      2        S         Sex of ref person                                   D          4

   REF_STAT    C      2        N         Response status of reference person                 *          *


   REF_WKR     C      2        N         Worker status of reference person                   D          10
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   --------------------------------------------------------------------------------------------------------

             05= No contact made                            3
             06= Refused                                    1
             07= Contact made, time expired                 6
             08= Other non-interview                        0
             94= Legitimate skip                       41,974

   P9_WKR    01= Yes                                         2
             02= No                                         57
             94= Legitimate skip                       41,974
             98= Not Ascertained                            0
             99= Refused                                     0

   RAIL      01= Yes                                     3,071  01=Urban areas 1,250,000 population or
                                                                greater with subway/elevated rail,02=other
                                                                areas
             02= No                                     38,962

   REF_AGE   (16 - 88)                                  42,024
             16-75= Ages 16-75                          39,210
              77= Ages 76-79                             1,259
              82= Ages 80-84                               997
              88= Ages 85-100                              558
             994= Legitimate skip                           0
             998= Not ascertained                           4
             999= Refused                                   5

   REF_DRVR  01= Yes                                    38,599
             02= No                                      3,434
             94= Legitimate skip                             0
             98= Not Ascertained                             0
             99= Refused                                      0

   REF_EDUC  11= Less than H.S. graduate                 4,271
             12= H.S. graduate (includes GED)           12,546
             21= Some college, no degree                 7,655
             22= Associate degree in college             2,272
             24= Bachelors degree in college             6,995
             25= Some grad/prof school                   1,001
             26= Grad/prof school degree                 4,729
             98= Not ascertained                         2,476
             99= Refused                                    88

   REF_SEX   01= Male                                   26,569
             02= Female                                 15,464

   REF_STAT  01= Ineligible, too young                       0  See documentation notes for Pi_STAT
             02= Other ineligible                           52
             03= Complete, self interview               33,725
             04= Complete, proxy interview               6,042
             05= No contact made                           684
             06= Refused                                   544
             07= Contact made, time expired               823
             08= Other non-interview                       163
             94= Legitimate skip                             0

   REF_WKR   01= Yes                                    29,035
             02= No                                     12,998
```

(This page revised March 1999)

Target Variable:	Var Type:	Width:	1990 Var:	Variable Label:	Section:	Item ID:
REF_WKR	C	2	N	Worker status of reference person	D	10
RESP_CNT	N	2	S	# of respondents in HH	*	*
STCBLOCK	N	3	N	Reported dist to streetcar (blocks)	C	5
STCMILE	N	3	N	Reported dist to streetcar (miles)	C	5
STC_AVL	C	2	N	Streetcar service available	C	4
STC_DIST	N	5.1	N	Distance to streetcar (miles)	C	5
SUBBLOCK	N	3	N	Reported dist to subway (blocks)	C	5
SUBMILE	N	3	N	Reported dist to subway (miles)	C	5

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------------
             94= Legitimate skip                              0
             98= Not Ascertained                              0
             99= Refused                                      0

   RESP_CNT  1                                           11,912  Number of person interviews completed for the
                                                                 household
             2                                           16,441
             3                                            6,893
             4                                            4,746
             5                                            1,509
             6                                              405
             7                                               97
             8                                               23
             9                                                5
             10                                               2

   STCBLOCK  (1 - 50)                                       316  Blocks as reported
             994= Legitimate skip                         41,310
             996= < 1 block                                   89
             998= Not ascertained                            311
             999= Refused                                      7

   STCMILE   (1 - 45)                                       437  Miles as reported
             994= Legitimate skip                         41,213
             997= Half a mile                                 65
             998= Not ascertained                            311
             999= Refused                                      7

   STC_AVL   01= Yes                                         999
             02= No                                        7,232
             94= Legitimate skip                          33,576
             98= Not Ascertained                             225
             99= Refused                                       1

   STC_DIST  (0 - 45)                                       907  Miles as reported, blocks converted (9/mile).
                                                                 See documentation notes for STC_DIST.

             994= Legitimate skip                         40,808
             998= Not ascertained                            311
             999= Refused                                      7

   SUBBLOCK  (1 - 200)                                     1,854  Blocks as reported
             994= Legitimate skip                         39,716
             996= < 1 block                                  143
             998= Not ascertained                            316
             999= Refused                                      4

   SUBMILE   (1 - 60)                                     1,264  Miles as reported
             994= Legitimate skip                         40,243
             997= Half a mile                                206
             998= Not ascertained                            316
             999= Refused                                      4
```

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:   Item ID:
---------------------------------------------------------------------------------------------------------

SUBSTRAT   N      1       *          Substratum within VARSTRAT             *          *


SUB_AVL    C      2       N          01= if subway service is available     C          4



SUB_DIST   N      5.1     N          Distance to subway                     C          5



SUM_STAT   C      3       N          Summary status code for household      *          *


TDAY_MON   N      2       S          Travel day date (MM)                   *          *







TDAY_YR    N      2       S          Travel day date (YY)                   *          *

TELNUMCT   C      2       N          No. of phone numbers in HH             J          3






TEL_HHS    C      2       N          No. of HHs this phone number serves    A          7
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------

  SUBSTRAT  1                                               679
            2                                            41,354

  SUB_AVL   01= Yes                                       3,561
            02= No                                        4,670
            94= Legitimate skip                          33,576
            98= Not Ascertained                             225
            99= Refused                                       1

  SUB_DIST  (0 - 60)                                      3,467  Miles as reported, blocks converted (9/mile).
                                                                 See documentation notes for SUB_DIST.
       994= Legitimate skip                    38,246
            998= Not ascertained                            316
            999= Refused                                      4

  SUM_STAT  050 - All elig persons completed intervi     35,914  50=all adults responded, 51=at least 50% of
                                                                 adults responded
            051 - >50% of adults completed interview      6,119

  TDAY_MON  1= January                                    2,598  Date of travel day for the household
            2= February                                   3,691
            3= March                                      4,770
            4= April                                      3,812
            5= May                                        4,827
            6= June                                       3,723
            7= July                                       3,166
            8= August                                     2,531
            9= September                                  2,833
            10= October                                   3,305
            11= November                                  3,400
            12= December                                  3,377

  TDAY_YR   95                                            23,129  Date of travel day for the household

            96                                            18,904

  TELNUMCT  1                                             37,193  No. of different residential phone numbers in
                                                                 the sample household
            2                                             4,068
            3                                               448
            4                                                94
            5                                                26
            6                                                 8
            7                                                 2
            8                                                 0
            9                                                 3
            10                                                0
            Not ascertained                                 133
            Refused                                          58

  TEL_HHS   1                                             41,817
            2                                               153
            3                                                23
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target    Var
Variable: Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:

-----------------------------------------------------------------------------------------------------

TEL_HHS    C     2       N          No. of HHs this phone number serves       A        7




TPER_BMO   N     2       S          Travel period beginning date (MM)         *        *




TPER_BYR   N     2       S          Travel period beginning date (YY)         *        *

TPER_EMO   N     2       S          Travel period ending date (MM)            *        *




TPER_EYR   N     2       S          Travel period ending date (YY)            *        *

TRNBLOCK   N     3       N          Reported dist to train (blocks)           C        5



TRNMILE    N     3       N          Reported dist to train (miles)            C        5
```

```
   Target
   Variable  Value Range and Codes:                        Freqs:  Comments:
   ----------------------------------------------------------------------------------------------------------
                4                                               16
                5                                               11
                6                                                4
                7                                                0
                8                                                0
                9                                                0
                10                                               1
                Not ascertained                                 4
                Refused                                          4

   TPER_BMO   1= January                                    3,791
              2= February                                   3,812
              3= March                                      4,183
              4= April                                      3,415
              5= May                                        5,040
              6= June                                       4,119
              7= July                                       2,637
              8= August                                     2,419
              9= September                                  2,685
              10= October                                   3,377
              11= November                                  3,564
              12= December                                  2,991

   TPER_BYR   95                                           24,156
              96                                           17,877

   TPER_EMO   1= January                                    2,598
              2= February                                   3,691
              3= March                                      4,770
              4= April                                      3,812
              5= May                                        4,827
              6= June                                       3,723
              7= July                                       3,166
              8= August                                     2,531
              9= September                                  2,833
              10= October                                   3,305
              11= November                                  3,400
              12= December                                  3,377

   TPER_EYR   95                                           23,129
              96                                           18,904

   TRNBLOCK   (1 - 200)                                     1,251  Blocks as reported
              994= Legitimate skip                         40,278
              996= < 1 block                                   72
              998= Not ascertained                            425
              999= Refused                                      7

   TRNMILE    (1 - 60)                                      3,612  Miles as reported
              994= Legitimate skip                         37,536
              997= Half a mile                                453
              998= Not ascertained                            425
```

Progid: disk46:[wmynpts.pubfiles]cbrp_hh.sas Date: 23SEP97

```
Target       Var
Variable:    Type:  Width:  1990 Var:  Variable Label:                    Section:  Item ID:

-----------------------------------------------------------------------------------------------------

  TRNMILE     N      3       N          Reported dist to train (miles)     C         5

  TRN_AVL     C      2       N          01= if commuter train service available  C    4



  TRN_DIST    N      5.1     N          Distance to commuter train         C         5



  URBAN       C      2       *          Urbanized area code                *         *



  VARSTRAT    N      2       S          Sample stratum                     *         *

  WRKCOUNT    N      2       WRKRCNT    No. of workers in HH               *         *



  WTHHFIN     N      11.5    S          Final household weight             *         *
```

```
  Target
  Variable  Value Range and Codes:                  Freqs:  Comments:
  ------------------------------------------------------------------------------------------------

            999= Refused                                 7

  TRN_AVL   01= Yes                                  5,594
            02= No                                   2,637
            94= Legitimate skip                     33,576
            98= Not Ascertained                        225
            99= Refused                                  1

  TRN_DIST  (0 - 60)                                 5,388  Miles as reported, blocks converted
                                                            (9/mile).See documentation notes for TRN_DIST
            994= Legitimate skip                    36,213
            998= Not ascertained                       425
            999= Refused                                 7

  URBAN     01= Yes                                 26,578  1= HH is in an urbanized area, 2 = HH is not
                                                            in urbanized area, 8 = not determined
            02= No                                  15,122
            94= Legitimate skip                          0
            98= Not Ascertained                        333
            99= Refused                                  0

  VARSTRAT  (1 - 70)                                42,033

  WRKCOUNT  0                                        9,066  Derived from WORKER variable
            1                                       13,730
            2                                       15,726
            3                                        2,721
            4                                          682
            5                                           89
            6                                           15
            7                                            3
            8                                            1

  WTHHFIN   (0 - 47981)                             42,033  Used to weight household file and vehicle
                                                            file data
```

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                          Section:  Item ID:
------------------------------------------------------------------------------------------------

  ALWYSDRV   C      2       N          Always the driver?                         F         16




  CENSUS_D   C      2       S          Census division                            *         *




  CENSUS_R   C      2       S          Census region                              *         *



  DIARYCMP   C      2       N          Who completed diary                        G         9




  DIARYGET   C      2       N          Can get diary now                          G         11




  DIARYHAV   C      2       N          Have the diary now                         G         10




  DISTTOWK   N      6.2     N          One-way distance to work                   F         5.1




  DRIVER     C      2       LIC_DRVR   Person is a driver D9                       D         9
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------------


   ALWYSDRV  01= Always drive                            1,295
             02= Share the drive                         1,883
             03= Rarely or Never                         1,726
             94= Legitimate skip                        90,451
             98= Not ascertained                             3
             99= Refused                                     2

   CENSUS_D  01= New England                            19,056
             02= Middle Atlantic                        29,128
             03= East North Central                      8,439
             04= West North Central                      3,264
             05= South Atlantic                          9,083
             06= East South Central                      2,672
             07= West South Central                     13,107
             08= Mountain                                2,648
             09= Pacific                                 7,963

   CENSUS_R  01= Northeast                              48,184
             02= North Central                          11,703
             03= South                                  24,862
             04= West                                   10,611

   DIARYCMP  01= Completed on own                       52,231
             02= Someone else completed                 14,542
             03= Not completed at all                   15,897
             04= Did not recieve materials              12,523
             94= legitimate skip                             0
             98= Not ascertained                           167

   DIARYGET  01= Yes                                       971
             02= No                                      5,504
             94= Legitimate skip                        88,715
             98= Not ascertained                           170
             99= Refused                                     0

   DIARYHAV  01= Yes                                    60,295
             02= No                                      6,475
             94= Legitimate skip                        28,420
             98= Not ascertained                           170
             99= Refused                                     0

   DISTTOWK  (0 - 990)                                  45,668  See documantation notes
             993= No fixed place                           327
             994= Legitimate skip                       47,577
             995= Works at home                            777
             998= Not ascertained                          980
             999= Refused                                   31

   DRIVER    01= Yes                                    69,990  Driver status reported in D-9, and verified
                                                                or corrected in E-6 or E-7
             02= No                                     25,369
             94= Legitimate skip                             0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

Target Variable:	Var Type:	Width:	1990 Var:	Variable Label:	Section:	Item ID:
DRIVER	C	2	LIC_DRVR	Person is a driver D9	D	9
DRVRCNT	N	2	S	Number of drivers in HH	D	*
DTACDT	C	2	N	Worry about traffic accident	E	1.D
DTCONJ	C	2	N	Highway congestion	E	1.AFK
DTCRIME	C	2	N	Worry about crimes against motorists	E	1.J
DTNTFMLR	C	2	N	Unfamiliar local areas or neighborhood	E	1.C
DTPAVE	C	2	N	Rough pavement on highways	E	1.BL
DTPOLLTN	C	2	N	Air pollution by cars, trucks, and buses	E	1.GN

```
  Target
  Variable  Value Range and Codes:                    Freqs:  Comments:
  --------------------------------------------------------------------------------------------------------

            98= Not ascertained                           1
            99= Refused                                   0

  DRVRCNT   0                                         3,195  Derived from the variable DRIVER
            1                                        16,907
            2                                        55,528
            3                                        14,398
            4                                         4,465
            5                                           729
            6                                           127
            7                                            11

  DTACDT    01= Large problem                         4,234
            02= Small problem                         8,317
            03= No problem                            7,926
            94= Legitimate skip                      74,741
            98= Not ascertained                         128
            99= Refused                                  14

  DTCONJ    01= Large problem                        11,306
            02= Small problem                        20,435
            03= No problem                           29,651
            94= Legitimate skip                      33,447
            98= Not ascertained                         484
            99= Refused                                  37

  DTCRIME   01= Large problem                         4,433
            02= Small problem                         7,272
            03= No problem                            8,706
            94= Legitimate skip                      74,773
            98= Not ascertained                         168
            99= Refused                                   8

  DTNTFMLR  01= Large problem                         2,491
            02= Small problem                         5,420
            03= No problem                           12,571
            94= Legitimate skip                      74,741
            98= Not ascertained                         127
            99= Refused                                  10

  DTPAVE    01= Large problem                        10,145
            02= Small problem                        15,621
            03= No problem                           15,170
            94= Legitimate skip                      54,034
            98= Not ascertained                         361
            99= Refused                                  29

  DTPOLLTN  01= Large problem                         7,892
            02= Small problem                        14,091
            03= No problem                           18,926
            94= Legitimate skip                      54,066
            98= Not ascertained                         361
```

```
Target     Var
Variable:  Type: Width: 1990 Var: Variable Label:                      Section:  Item ID:
------------------------------------------------------------------------------------------------

DTPOLLTN   C     2      N        Air pollution by cars, trucks, and buses  E        1.GN

DTSTRTS    C     2      N        Rough pavement on neighborhood streets    E        1.IM




DTTIEUP    C     2      N        Traffic tie-ups or road construction      E        1.HO



DTWALK     C     2      N        Poor walkways or sidewalks                E        1.E



EDUC       C     2      S        Highest grade or yr of school completed   F        1




FQSTBELT   C     2      N        How often wear seat belt when driving     E        4



GT1JBLWK   C     2      N        Have more than one job last week          F        3



GWKXIN     N     2      *        Basis for geocoding - workplace location  GEOW     *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
  Target
  Variable  Value Range and Codes:                       Freqs:  Comments:
  -------------------------------------------------------------------------------------------------------------

            99= Refused                                      24

  DTSTRTS   01= Large problem                            12,266
            02= Small problem                            14,977
            03= No problem                               13,742
            94= Legitimate skip                          54,066
            98= Not ascertained                             286
            99= Refused                                      23

  DTTIEUP   01= Large problem                             9,917
            02= Small problem                            14,918
            03= No problem                               16,090
            94= Legitimate skip                          54,066
            98= Not ascertained                             343
            99= Refused                                      26

  DTWALK    01= Large problem                             3,370
            02= Small problem                             5,660
            03= No problem                               11,355
            94= Legitimate skip                          74,741
            98= Not ascertained                             223
            99= Refused                                      11

  EDUC      11= Less than high school graduate           10,686
            12= High school graduate include GED         25,264
            21= Some college, but no degree              15,355
            22= Associate degree in college               4,454
            24= Bachelor's degrees                       12,685
            25= Some graduate/professional degree         1,734
            26= Graduate/professional shcool degrees      7,448
            94= Legitimate skip                          17,082
            98= Not ascertained                             481
            99= Refused                                     171

  FQSTBELT  01= Always                                   69,350
            02= Most of the time                         13,653
            03= Sometimes                                 7,859
            04= Never                                     3,968
            98= Not ascertained                             471
            99= Refused                                      59

  GT1JBLWK  01= Yes                                       6,079
            02= No                                       45,606
            94= Legitimate skip                          43,643
            98= Not ascertained                             23
            99= Refused                                       9

  GWKXIN    0= Street address level match                30,059
            2= Zip+2 Centroid                               268
            4= Zip+4 Centroid                             1,043
            5= 5-Digit Zip code centroid                  4,903
            94= Legitimate skip                          43,432
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:
------------------------------------------------------------------------------------------------

GWKXIN      N      2       *          Basis for geocoding - workplace location  GEOW    *

HBHINMED    N      6       *          Median household income, BG          CLAR      *




HBHRESDN    N      6       *          HU density (units/square mile), BG   CLAR      *




HBHUR       C      1       *          Urban/rural code, block group        CLAR      *




HBPPOPDN    N      6       *          Population density, block group      CLAR      *




HHCMSA      C      4       SMSA       CMSA identification code             *         *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
   Target
   Variable  Value Range and Codes:                        Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------------

             98= Not ascertained                           15,655

   HBHINMED  15,000=   0 to 20K                              7,061
             22,000= 20K to 25K                              7,798
             27,000= 25K to 30K                             11,091
             32,000= 30K to 35K                             12,789
             37,000= 35K to 40K                             11,527
             45,000= 40K to 50K                             19,536
             60,000= 50K to 70K                             18,722
             80,000= 70K to 999K                             6,168
             999998= Not ascertained                          668

   HBHRESDN    25=    0 to   50                             14,059
              150=   50 to  250                             16,152
              700=  250 to 1000                             21,390
             2000= 1000 to 3000                             26,386
             4000= 3000 to 5000                              7,615
             6000= 5000 to 999K                              9,090
             999998= Not ascertained                          668

   HBHUR      8= Not ascertained                               668
              C= Second city                                18,706
              R= Rural                                      15,968
              S= Suburban                                   23,377
              T= Town                                       24,283
              U= Urban                                      12,358

   HBPPOPDN    50=   0 to 100                               11,840
              300= 100 to 500                               15,655
              750= 500 to  1K                                8,608
             1,500=  1K to   2K                             10,957
             3,000=  2K to   4K                             15,629
             7,000=  4K to 10K                              20,786
             17,000= 10K to 25K                              7,071
             30,000= 25K to 999K                             4,146
             999998= Not ascertained                          668

   HHCMSA    Chicago-Gary-Kenosha, IL-IN-WI CMSA             1,958
             Cincinnati-Hamilton, OH-KY-IN CMSA                393
             Cleveland-Akron, OH CMSA                          562
             Dallas-Fort Worth, TX CMSA                        722
             Denver-Boulder-Greeley, CO CMSA                   330
             Detroit-Ann Arbor-Flint, MI CMSA                  790
             Houston-Galveston-Brazoria, TX CMSA               563
             Los Angeles-Riverside-Orange County             2,185
             Miami-Fort Lauderdale, FL CMSA                    600
             Milwaukee-Racine, WI CMSA                         314
             New York-No. New Jersey-Long Island            12,217
             Phila-Wilmington-Atlantic City                  1,412
             Portland-Salem, OR-WA CMSA                        477
             Sacramento-Yolo, CA CMSA                          345
             San Francisco-Oakland-San Jose                  1,266
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

Target Variable:	Var Type:	Width:	1990 Var:	Variable Label:	Section:	Item ID:
HHCMSA	C	4	SMSA	CMSA identification code	*	*
HHFAMINC	C	2	S	HH family income category	K	1 & 2
HHMSA	C	4	S	MSA identification code	*	*
HHRESP	C	2	N	HH respondent	D	13
HHSIZE	N	2	S	Total number of persons in HH	D	1
HHVEHCNT	N	2	S	No. of vehicles in household (derived)	B	*

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
  Target
  Variable  Value Range and Codes:                        Freqs:  Comments:
-------------------------------------------------------------------------------------------------------------

            Seattle-Tacoma-Bremerton                        1,588
            Washington-Baltimore                            1,800
            Not in a CMSA                                  67,838

  HHFAMINC  01= Less than $5,000                            1,382  Based on questions of Section K.See olso
                                                                   NONFMFLG and NONFMINC
            02= $5,000 - 9,999                              3,603
            03= $10,000 - 14,999                            4,405
            04= $15,000 - 19,999                            5,745
            05= $20,000 - 24,999                            4,893
            06= $25,000 - 29,999                            8,047
            07= $30,999 - 34,999                            4,759
            08= $35,000 - 39,999                            8,018
            09= $40,000 - 44,999                            3,870
            10= $45,000 - 49,999                            7,161
            11= $50,000 - 54,999                            2,781
            12= $55,000 - 59,999                            5,484
            13= $60,000 - 64,999                            1,998
            14= $65,000 - 69,999                            3,941
            15= $70,000 - 74,999                            1,308
            16= $75,000 - 79,999                            2,718
            17= $80,000 - 99,999                            4,334
            18= $100,000 and over                           4,776
            94= Legitimate skip                                 0
            98= Not ascertained                             7,262
            99= Refused                                     8,875

  HHMSA     (0520 - 8840)                         .

  HHRESP    01                                             57,133  Person number of household respondent
            02                                             32,535
            03                                              4,046
            04                                              1,218
            05                                                315
            06                                                 82
            07                                                 30
            08                                                  1

  HHSIZE    1                                               8,219  Number of persons - all ages (derived)
            2                                              27,965
            3                                              18,872
            4                                              22,744
            5                                              11,327
            6                                               4,084
            7                                               1,300
            8                                                 503
            9                                                 196
            10                                                150

  HHVEHCNT  0                                               5,523  Count of all vehicles for the household
            1                                              21,928
            2                                              44,923
```

  Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target    Var
Variable: Type: Width: 1990 Var: Variable Label:                   Section: Item ID:
------------------------------------------------------------------------------------------

HHVEHCNT   N     2      S          No. of vehicles in household (derived)   B        *




HH_HISP    C     2      S          Hispanic status of ref. person           D        5



HH_RACE    C     2      S          Race of reference person                 D        6




HOUSEID    N     8      S          Household identification number          *        *

INTRVMON   N     2      S          Person interview date - month            *        *






INTRVYR    N     2      S          Person interview date - year             *        *

JOBLSTWK   C     2      N          Have full, part time job last wk or not  F        2




LIF_CYC    C     2      S          Family life cycle                        D        3
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target
Variable  Value Range and Codes:                          Freqs:  Comments:
-------------------------------------------------------------------------------------------------------------

          3                                                16,537
          4                                                 4,703
          5                                                 1,242
          6                                                   342
          7                                                   110
          8                                                    31
          9                                                    15
          10                                                    6

HH_HISP   01= Hispanic                                      4,322
          02= Non-hispanic                                 90,851
          98= Not Ascertained                                  79
          99= Refused                                         108

HH_RACE   01= White                                        81,141
          02= African-american                              6,596
          03= Asian                                         1,743
          04= Other                                         4,845
          98= Not Ascertained                                 348
          99= Refused                                         687

HOUSEID   (1000371 - 12227427)                             95,360

INTRVMON  1                                                 5,998
          2                                                 8,374
          3                                                10,456
          4                                                 8,437
          5                                                10,325
          6                                                 8,862
          7                                                 7,387
          8                                                 6,226
          9                                                 5,862
          10                                                7,692
          11                                                7,697
          12                                                8,044

INTRVYR   95                                               52,654
          96                                               42,706

JOBLSTWK  01= Full time                                    41,196
          02= Part time                                    10,521
          03= Not at all                                   14,227
          04= Retired                                       11,830
          94= Legitimate skip                               17,082
          98= Not ascertained                                 418
          99= Refused                                          86

LIF_CYC   01= 1 adult, no children                          5,507  See documentation notes for LIF_CYC
          02= >1 adult, no children                        21,644
          03= 1 adult, child age 0-5                        1,332
          04= >1 adult, child age 0-5                       18,137
          05= 1 adult, child age 6-15                        3,001
```

```
   Target     Var
   Variable:  Type: Width:  1990 Var:  Variable Label:                                          Section:  Item ID:
   -----------------------------------------------------------------------------------------------------------------

   LIF_CYC    C      2      S          Family life cycle                                        D         3


   MSASIZE    C      2      S          Size of MSA of household                                 *         *


   MSTR_MON   N      2      S          Date of master interview - month                         *         *




   MSTR_YR    N      2      S          Date of master interview - year                          *         *

   NCCOMCR    C      2      N          Not carpool-have company car                             F         17.11


   NCINCVNT   C      2      N          Not carpool-it's inconvenient                            F         17.03


   NCIRRHR    C      2      N          Not carpool-irregular/unusual hours                      F         17.01


   NCLVFAR    C      2      N          Not carpool-live far from work                           F         17.1
```

```
     Target
     Variable  Value Range and Codes:                    Freqs:  Comments:
     ---------------------------------------------------------------------------------------------------------

               06= >1 adult, child age 6-15              23,697
               07= 1 adult, child age 16-21                 865
               08= >1 adult, child age 16-21              6,144
               09= 1 adult, retired, no children          2,736
               10= >1 adult, retired, no children        12,297

     MSASIZE   01= Less than 250,000                      8,840  See documentation notes for MSASIZE
               02= 250,000 - 499,999                      5,943
               03= 500,000 - 999,999                     11,717
               04= 1,000,000 - 2,999,999                 17,870
               05= 3,000,000 or more                     36,980
               94= Legitimate skip, not in an MSA        14,010

     MSTR_MON  1                                          9,024  Date of the household interview
               2                                          8,256
               3                                          9,128
               4                                          7,537
               5                                         11,351
               6                                          9,242
               7                                          6,187
               8                                          5,502
               9                                          6,344
               10                                         7,761
               11                                         8,348
               12                                         6,680

     MSTR_YR   95                                        56,194  Date of the household interview
               96                                        39,166

     NCCOMCR   01= Yes                                       88
               02= No                                    20,337
               94= Legitimate skip                       74,902
               98= Not ascertained                           33
               99= Refused                                    0

     NCINCVNT  01= Yes                                    1,569
               02= No                                    18,856
               94= Legitimate skip                       74,902
               98= Not ascertained                           33
               99= Refused                                    0

     NCIRRHR   01= Yes                                    4,275
               02= No                                    16,150
               94= Legitimate skip                       74,902
               98= Not ascertained                           33
               99= Refused                                    0

     NCLVFAR   01= Yes                                       65
               02= No                                    20,360
               94= Legitimate skip                       74,902
               98= Not ascertained                           33
               99= Refused                                    0
```

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:
--------------------------------------------------------------------------------------------------

  NCNEEDCR   C      2       N        Not carpool-need car at/bfr/aft work      F       17.04



  NCNEVER    C      2       N        Not carpool-never thought of it           F       17.08



  NCNLIKE    C      2       N        Not carpool-don't like to do it           F       17.09



  NCNOONE    C      2       N        Not carpool-no one to carpool with        F       17.02



  NCONLY     C      2       N        Not carpool-only one works there          F       17.07



  NCOTHRES   C      2       N        Not carpool-other reasons                 F       17.06



  NCSHRTDI   C      2       N        Not carpool-short distance/unnecessary    F       17.05



  NONFMINC   C      2       S        Individual income category                I       1 & 2
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   ---------------------------------------------------------------------------------------------------------

   NCNEEDCR  01= Yes                                     1,749
             02= No                                     18,676
             94= Legitimate skip                        74,902
             98= Not ascertained                           33
             99= Refused                                    0

   NCNEVER   01= Yes                                       269
             02= No                                     20,156
             94= Legitimate skip                        74,902
             98= Not ascertained                           33
             99= Refused                                    0

   NCNLIKE   01= Yes                                       145
             02= No                                     20,280
             94= Legitimate skip                        74,902
             98= Not ascertained                           33
             99= Refused                                    0

   NCNOONE   01= Yes                                     13,293
             02= No                                      7,132
             94= Legitimate skip                        74,902
             98= Not ascertained                           33
             99= Refused                                    0

   NCONLY    01= Yes                                     1,222
             02= No                                     19,203
             94= Legitimate skip                        74,902
             98= Not ascertained                           33
             99= Refused                                    0

   NCOTHRES  01= Yes                                     1,195
             02= No                                     19,230
             94= Legitimate skip                        74,902
             98= Not ascertained                           33
             99= Refused                                    0

   NCSHRTDI  01= Yes                                     1,584
             02= No                                     18,841
             94= Legitimate skip                        74,902
             98= Not ascertained                           33
             99= Refused                                    0

   NONFMINC  01= Less than $5,000                           91  Based on questions of Section I
             02= $5,000 - 9,999                             85
             03= $10,000 - 14,999                           56
             04= $15,000 - 19,999                           60
             05= $20,000 - 24,999                           42
             06= $25,000 - 29,999                           60
             07= $30,999 - 34,999                           26
             08= $35,000 - 39,999                           22
             09= $40,000 - 44,999                           16
             10= $45,000 - 49,999                           16
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:
  ----------------------------------------------------------------------------------------------------

  NONFMINC   C      2       S          Individual income category             I         1 & 2




  NPT2EXPV   C      2       N          Public transp. too expensive           F         18.03


  NPT2FRWK   C      2       N          Public trans. not available at work    F         18.01


  NPT2MCTM   C      2       N          Public trans. takes too much time      F         18.02


  NPTCOMCR   C      2       N          Not used public trans. have com car    F         18.11


  NPTDLPT    C      2       N          Not used public trans. dont like to    F         18.09


  NPTFMHM    C      2       N          Public trans. stops too far from home   F        18.06


  NPTHVCAR   C      2       N          Not used public trans. have onw car    F         18.1
```

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------

             11= $50,000 - 54,999                             15
             12= $55,000 - 59,999                              8
             13= $60,000 - 64,999                             10
             14= $65,000 - 69,999                              2
             15= $70,000 - 74,999                              8
             16= $75,000 - 79,999                              3
             17= $80,000 - 99,999                              0
             18= $100,000 and over                             5
             94= Legitimate skip                          94,764
             98= Not ascertained                             46
             99= Refused                                     25

   NPT2EXPV  01= Yes                                         122
             02= No                                        8,899
             94= Legitimate skip                          86,321
             98= Not ascertained                             18
             99= Refused                                      0

   NPT2FRWK  01= Yes                                       3,381
             02= No                                        5,641
             94= Legitimate skip                          86,321
             98= Not ascertained                             17
             99= Refused                                      0

   NPT2MCTM  01= Yes                                       1,070
             02= No                                        7,952
             94= Legitimate skip                          86,321
             98= Not ascertained                             17
             99= Refused                                      0

   NPTCOMCR  01= Yes                                          27
             02= No                                        8,995
             94= Legitimate skip                          86,321
             98= Not ascertained                             17
             99= Refused                                      0

   NPTDLPT   01= Yes                                       3,395
             02= No                                        5,629
             94= Legitimate skip                          86,321
             98= Not ascertained                             15
             99= Refused                                      0

   NPTFMHM   01= Yes                                         778
             02= No                                        8,244
             94= Legitimate skip                          86,321
             98= Not ascertained                             17
             99= Refused                                      0

   NPTHVCAR  01= Yes                                         186
             02= No                                        8,836
             94= Legitimate skip                          86,321
             98= Not ascertained                             17
```

Target Variable:	Var Type:	Width:	1990 Var:	Variable Label:	Section:	Item ID:
NPTHVCAR	C	2	N	Not used public trans. have onw car	F	18.1
NPTLVCLS	C	2	N	Not used public trans. short distance	F	18.08
NPTNTCNV	C	2	N	Public trans. schedule not convenient	F	18.05
NPTOTHER	C	2	N	Not used public trans. for other reasons	F	18.07
NPTOTHTG	C	2	N	Need own vehicle to do other things	F	18.04
NSBBACK	C	2	N	Not wear seat belt when in back seat	E	5.05
NSBBROKE	C	2	N	Not wear seat belt when broken/unavail	E	5.02
NSBDRVR	C	2	N	Not wear seat belt when driver	E	5.07
NSBFGET	C	2	N	Not wear seat belt when forget	E	5.01
NSBHURRY	C	2	N	Not wear seat belt when in a hurry	E	5.12

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target
Variable  Value Range and Codes:                        Freqs:  Comments:
--------------------------------------------------------------------------------------------------------------

          99= Refused                                         0

NPTLVCLS  01= Yes                                           496
          02= No                                          8,526
          94= Legitimate skip                            86,321
          98= Not ascertained                                17
          99= Refused                                         0

NPTNTCNV  01= Yes                                         2,182
          02= No                                          6,840
          94= Legitimate skip                            86,321
          98= Not ascertained                                17
          99= Refused                                         0

NPTOTHER  01= Yes                                         1,337
          02= No                                          7,684
          94= Legitimate skip                            86,321
          98= Not ascertained                                18
          99= Refused                                         0

NPTOTHTG  01= Yes                                         1,373
          02= No                                          7,648
          94= Legitimate skip                            86,321
          98= Not ascertained                                18
          99= Refused                                         0

NSBBACK   01= Yes                                         1,283
          02= No                                         20,225
          94= Legitimate skip                            73,848
          98= Not ascertained                                 4
          99= Refused                                         0

NSBBROKE  01= Yes                                           367
          02= No                                         21,137
          94= Legitimate skip                            73,848
          98= Not ascertained                                 8
          99= Refused                                         0

NSBDRVR   01= Yes                                           348
          02= No                                         21,156
          94= Legitimate skip                            73,848
          98= Not ascertained                                 8
          99= Refused                                         0

NSBFGET   01= Yes                                         4,873
          02= No                                         16,631
          94= Legitimate skip                            73,848
          98= Not ascertained                                 8
          99= Refused                                         0

NSBHURRY  01= Yes                                         1,293
          02= No                                         15,900
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                                    Section:  Item ID:
------------------------------------------------------------------------------------------------------------

NSBHURRY     C      2       N         Not wear seat belt when in a hurry                 E         5.12


NSBLONG      C      2       N         Not wear seat belt when taking long trip E         E         5.04



NSBMED       C      2       N         Not wear seat belt: medical reasons                E         5.15



NSBNLIKE     C      2       N         Not wear seat belt: don't like to                  E         5.16



NSBNOASK     C      2       N         Not wear seat belt when not asked                  E         5.14



NSBOTHER     C      2       N         Not wear seat belt: other specify                  E         5.11



NSBPOLIC     C      2       N         Not wear seat belt when police not aroun E         E         5.18



NSBPSNG      C      2       N         Not wear seat belt when passenger                  E         5.06



NSBSHORT     C      2       N         Not wear seat belt when short trips                E         5.03
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target
Variable  Value Range and Codes:                    Freqs:  Comments:
-------------------------------------------------------------------------------------------------------

          94= Legitimate skip                        73,848
          98= Not ascertained                         4,319
          99= Refused                                     0

NSBLONG   01= Yes                                        237
          02= No                                      21,267
          94= Legitimate skip                        73,848
          98= Not ascertained                             8
          99= Refused                                     0

NSBMED    01= Yes                                        449
          02= No                                      21,055
          94= Legitimate skip                        73,848
          98= Not ascertained                             8
          99= Refused                                     0

NSBNLIKE  01= Yes                                        326
          02= No                                      21,178
          94= Legitimate skip                        73,848
          98= Not ascertained                             8
          99= Refused                                     0

NSBNOASK  01= Yes                                        719
          02= No                                      16,410
          94= Legitimate skip                        73,848
          98= Not ascertained                         4,383
          99= Refused                                     0

NSBOTHER  01= Yes                                      2,915
          02= No                                      18,589
          94= Legitimate skip                        73,848
          98= Not ascertained                             8
          99= Refused                                     0

NSBPOLIC  01= Yes                                         36
          02= No                                      21,468
          94= Legitimate skip                        73,848
          98= Not ascertained                             8
          99= Refused                                     0

NSBPSNG   01= Yes                                        903
          02= No                                      20,601
          94= Legitimate skip                        73,848
          98= Not ascertained                             8
          99= Refused                                     0

NSBSHORT  01= Yes                                     10,538
          02= No                                      10,967
          94= Legitimate skip                        73,848
          98= Not ascertained                             7
          99= Refused                                     0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                                  Section:  Item ID:
--------------------------------------------------------------------------------------------------------

NSBSPCLH    C      2       N          Not wear seat belt w/ certain clothes        E         5.13


NSBSPPER    C      2       N          Not wear seat belt w/ a certain person       E         5.1


NSBSPVEH    C      2       N          Not wear seat belt when in a certain veh     E         5.08


NSBTOWN     C      2       N          Not wear seat belt when in town/city         E         5.09


NSBTOWRK    C      2       N          Not wear seat belt when going to work        E         5.17


NSBWTHR     C      2       N          Not wear seat belt when good weather         E         5.19


OUTCNTRY    C      2       N          Out of country                               G         14

PARKAMNT    N      7.2     S          Parking fee to pay at work                   F         14.1


PARKCODE    C      2       S          Unit of amount paid for parking at work      F         14.2
```

```
  Target
  Variable  Value Range and Codes:                        Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------


  NSBSPCLH  01= Yes                                           660
            02= No                                         20,844
            94= Legitimate skip                            73,848
            98= Not ascertained                                 8
            99= Refused                                         0

  NSBSPPER  01= Yes                                           213
            02= No                                         21,288
            94= Legitimate skip                            73,848
            98= Not ascertained                                11
            99= Refused                                         0

  NSBSPVEH  01= Yes                                           708
            02= No                                         20,796
            94= Legitimate skip                            73,848
            98= Not ascertained                                 8
            99= Refused                                         0

  NSBTOWN   01= Yes                                           749
            02= No                                         20,755
            94= Legitimate skip                            73,848
            98= Not ascertained                                 8
            99= Refused                                         0

  NSBTOWRK  01= Yes                                           141
            02= No                                         21,363
            94= Legitimate skip                            73,848
            98= Not ascertained                                 8
            99= Refused                                         0

  NSBWTHR   01= Yes                                            72
            02= No                                         21,432
            94= Legitimate skip                            73,848
            98= Not ascertained                                 8
            99= Refused                                         0

  OUTCNTRY  01= Out of country                                171  Sample person out of US for the entire travel
                                                                    day
            02= Was not out of country                     95,189

  PARKAMNT  (0 - 850)                                        2,479
            9994= Legitimate skip                          92,861
            9998= Not ascertained                              20
            9999= Reused                                        0

  PARKCODE  01= Hour                                            52
            02= Day                                           672
            03= Week                                          166
            04= Month                                       1,047
            05= Year                                          466
            06= Quarter                                        40
            07= Other                                          41
            94= Legitimate skip                            92,861
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                     Section:   Item ID:
-------------------------------------------------------------------------------------------------

PARKCODE    C      2       S          Unit of amount paid for parking at work  F      14.2


PAYTOPRK    C      2       S          Pay parking at work?                     F      13




PERSONID    N      2       S          Person ID number                         *      *






PROXY       C      2       H_PROXY    Proxy respondent for person data         *      *




PTCARND     C      2       N          Having access to a car when you need it  E      3.I




PTCOST      C      2       N          Cost of travel by public transportation  E      3.G




PTCRIME     C      2       N          Worry w/ crime on public transportation  E      3.C




PTCROWD     C      2       N          Difficulty w/ crowding or getting a seat E      3.AF
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------------
             98= Not ascertained                           13
             99= Refused                                    2

   PAYTOPRK  01= Yes                                     2,499
             02= No                                     40,613
             94= Legitimate skip                        52,122
             98= Not ascertained                           119
             99= Refused                                     7

   PERSONID  1                                          39,753
             2                                          30,605
             3                                          14,122
             4                                           7,524
             5                                           2,439
             6                                             666
             7                                             187
             8                                              50
             9                                              12
             10                                              2

   PROXY     01= Yes                                    31,714  01=person and trip data were collected from
                                                                proxy respondent
             02= No                                     63,646
             94= Legitimate skip                             0
             98= Not ascertained                             0
             99= Refused                                      0

   PTCARND   01= Large problem                             836
             02= Small problem                             749
             03= No problem                              2,372
             94= Legitimate skip                        91,382
             98= Not ascertained                            15
             99= Refused                                     6

   PTCOST    01= Large problem                             850
             02= Small problem                           1,108
             03= No problem                              2,013
             94= Legitimate skip                        91,382
             98= Not ascertained                             6
             99= Refused                                     1

   PTCRIME   01= Large problem                           1,016
             02= Small problem                           1,256
             03= No problem                              1,532
             94= Legitimate skip                        91,544
             98= Not ascertained                            11
             99= Refused                                     1

   PTCROWD   01= Large problem                           1,732
             02= Small problem                           2,319
             03= No problem                              3,723
             94= Legitimate skip                        87,566
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:
----------------------------------------------------------------------------------------------------

PTCROWD    C      2       N          Difficulty w/ crowding or getting a seat  E       3.AF

PTNTCLN    C      2       N          Transit stations/vehicles not clean   E         3.D

PTTIMEON   C      2       N          Time spent on public transportation   E         3.BJ

PTTMND     C      2       N          Public transp avail time of day needed  E        3.H

PTTRANSF   C      2       N          Time and aggrevation with transferes   E        3.E

PTUSED     C      2       N          How often used public transportation   E        2

RAIL       C      2       N          Presence/absence of rail              *         *

REF_AGE    N      3       S          Age of reference person (yr)          D         3

REF_EDUC   C      2       S          Education of HH reference person      F         1
```

 Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   ---------------------------------------------------------------------------------------------------------

             98= Not ascertained                             17
             99= Refused                                      3

   PTNTCLN   01= Large problem                              682
             02= Small problem                            1,350
             03= No problem                               1,773
             94= Legitimate skip                         91,544
             98= Not ascertained                             10
             99= Refused                                      1

   PTTIMEON  01= Large problem                            1,809
             02= Small problem                            2,755
             03= No problem                               3,192
             94= Legitimate skip                         87,566
             98= Not ascertained                             34
             99= Refused                                      4

   PTTMND    01= Large problem                              779
             02= Small problem                            1,222
             03= No problem                               1,962
             94= Legitimate skip                         91,382
             98= Not ascertained                             15
             99= Refused                                      0

   PTTRANSF  01= Large problem                              561
             02= Small problem                            1,170
             03= No problem                               2,039
             94= Legitimate skip                         91,544
             98= Not ascertained                             44
             99= Refused                                      2

   PTUSED    01= Two or more days/week (11+ times)        5,172
             02= About once a week (5-10 times)           1,457
             03= Once or twice a month (2-4 times)        2,817
             04= Less than once a month (one time)        2,048
             05= Never                                   38,541
             06= Not available                           27,982
             94= Legitimate skip                         17,082
             98= Not ascertained                            239
             99= Refused                                     22

   RAIL      01= Yes                                       6,908  01=Urban areas 1,250,000 population or
                                                                  greater with subway/elevated rail,02=other
                                                                  areas
             02= No                                       88,452
             94= Legitimate skip                              0
             98= Not ascertained                              0
             99= Refused                                       0

   REF_AGE   (16 - 88)                                    95,360
             16-75= Ages 16-75                            91,023
             77= Ages 76-79                                2,003
             82= Ages 80-84                                1,508
             88= Ages 85-100                                 812
             998= Not Ascertained                             6
             999= Refused                                      8

   REF_EDUC  11= Less than high school graduate           9,115
             12= High school graduate include GED        29,335
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:
----------------------------------------------------------------------------------------------------

REF_EDUC   C      2       S          Education of HH reference person        F         1




REF_ROST   N      2       N          Reference roster number                 A         2




REF_SEX    C      2       S          Sex of ref person                       D         4

R_AGE      N      3       S          Age of sample person                    D         3




R_AGEFLG   C      2       N          Age imputed                             *         *

R_RELAT    C      2       S          Relationship to ref person              D         7






R_SEX      C      2       S          Sex of sample person                    D         4

SAMEPLC    C      2       N          Same place all day                      G         13

SIT2AMTR   C      2       N          Usually sit or stand most on AMTRAK     F         12.1




SIT2BUS    C      2       N          Usually sit or stand most on bus        F         12.2
```

(This page revised March 1999)

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------------

            21= Some college, but no degree             17,506
            22= Associate degree in college              5,440
            24= Bachelor's degrees                      16,245
            25= Some graduate/professional degree        2,277
            26= Graduate/professional shcool degrees    11,041
            94= Legitimate skip                              0
            98= Not ascertained                          4,226
            99= Refused                                    175

  REF_ROST  1                                           95,194  Roster number of Household reference person
            2                                               45
            3                                               40
            4                                               37
            5                                               23
            98                                              21

  REF_SEX   01= Male                                    64,910
            02= Female                                  30,450

  R_AGE     (5 - 88)                                    95,360  See documentation notes for R_AGE.
            5-75= (ages 5-75)                           91,386
            77= (ages 76-79)                             1,748
            82= (ages 80-84)                             1,358
            88= (ages 85-102)                              868

  R_AGEFLG  01= Yes                                      1,107
            02= No                                      94,253

  R_RELAT   01= Reference person                        39,766  Sample persons relationship to the household
                                                                reference person
            02= Spouse of ref. person                   24,230
            03= Child of ref. person                    24,505
            04= Parent of ref. person                      806
            05= Brother/sister of ref. person              591
            06= Other relative of ref. person            2,167
            07= Unmarried partner of ref. person         1,112
            08= Non-relative of ref. person              2,125
            98= Not ascertained                             22
            99= Refused                                      36

  R_SEX     01= Male                                    45,159
            02= Female                                  50,201

  SAMEPLC   01= Same place all day                      11,131  Sample person didn't go anywhere on travel
                                                                day
            02= Was not same place all day              84,229

  SIT2AMTR  01= Sit                                          0
            02= Stand                                        2
            94= Legitimate skip                         95,358
            98= Not ascertained                              0
            99= Refused                                       0

  SIT2BUS   01= Sit                                         289
            02= Stand                                       135
            94= Legitimate skip                         94,921
            98= Not ascertained                              15
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                           Section:  Item ID:
--------------------------------------------------------------------------------------------------

SIT2BUS    C      2       N          Usually sit or stand most on bus          F         12.2

SIT2SBWY   C      2       N          Usually sit or stand most on subway       F         12.3



SIT2STCR   C      2       N          Usually sit/stand most on strcr/trolley   F         12.4



SIT2TRAN   C      2       N          Usually sit or stand most on comm train   F         12.5



SITAMTR    C      2       N          Usually sit, stand or both on AMTRAK      F         11.1



SITBUS     C      2       N          Usually sit, stand or both on bus         F         11.2



SITSBWY    C      2       N          Usually sit/stand/both on rail/subway     F         11.3



SITSTCR    C      2       N          Usually sit/stand/both on strtcr/trolley  F         11.4



SITTRAN    C      2       N          Usually sit/stand/both on commuter train  F         11.5
```

```
   Target
   Variable  Value Range and Codes:                       Freqs:  Comments:
   ---------------------------------------------------------------------------------------------------------------

             99= Refused                                      0

   SIT2SBWY  01= Sit                                         88
             02= Stand                                       65
             94= Legitimate skip                         95,199
             98= Not ascertained                             8
             99= Refused                                      0

   SIT2STCR  01= Sit                                          7
             02= Stand                                        3
             94= Legitimate skip                         95,348
             98= Not ascertained                             2
             99= Refused                                      0

   SIT2TRAN  01= Sit                                         99
             02= Stand                                       58
             94= Legitimate skip                         95,195
             98= Not ascertained                             8
             99= Refused                                      0

   SITAMTR   01= Sit only                                    10
             02= Stand only                                   1
             03= Some of both                                 2
             94= Legitimate skip                         95,346
             98= Not ascertained                             1
             99= Refused                                      0

   SITBUS    01= Sit only                                  1,240
             02= Stand only                                 165
             03= Some of both                               439
             94= Legitimate skip                         93,465
             98= Not ascertained                            49
             99= Refused                                      2

   SITSBWY   01= Sit only                                   152
             02= Stand only                                 147
             03= Some of both                               161
             94= Legitimate skip                         94,167
             98= Not ascertained                           733
             99= Refused                                      0

   SITSTCR   01= Sit only                                    11
             02= Stand only                                   3
             03= Some of both                                12
             94= Legitimate skip                         95,330
             98= Not ascertained                             4
             99= Refused                                      0

   SITTRAN   01= Sit only                                   458
             02= Stand only                                  68
             03= Some of both                               165
             94= Legitimate skip                         94,660
```

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:
------------------------------------------------------------------------------------------------

SITTRAN     C      2       N         Usually sit/stand/both on commuter train  F      11.5


SUBSTRAT    N      1       *         Substratum within VARSTRAT               *        *


TDAY_MON    N      2       S         Travel day date (MM)                     *        *




TDAY_YR     N      2       S         Travel day date (YY)                     *        *


TIMELEAV    N      4       N         Time usually leave for work              F        6


TIMETOWK    N      3       N         Minutes it took from home to work        F        7


UNITDIST    C      2       N         Unit of distance to work                 F        5.2


USULDRV     C      2       N         Usually drive to work alone or carpool   F        15



VARSTRAT    N      2       S         Sample stratum                          *        *

WAITAMTR    N      3       N         Minutes wait for AMTRAK                   F        10.1



WAITBUS     N      3       N         Minutes wait for bus                     F        10.2
```

 Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------------

             98= Not ascertained                            8
             99= Refused                                    1

   SUBSTRAT  1                                          1,524
             2                                         93,836

   TDAY_MON  1= January                                 5,771  Date of travel day for the household
             2= February                                8,449
             3= March                                  10,767
             4= April                                   8,269
             5= May                                    10,974
             6= June                                    8,500
             7= July                                    7,243
             8= August                                  5,860
             9= September                               6,313
             10= October                                7,682
             11= November                               7,760
             12= December                               7,772

   TDAY_YR   95                                        53,269  Date of travel day for the household
             96                                        42,091

   TIMELEAV  (0 - 2355)                                45,396
             9994= Legitimate skip                     48,681
             9998= Not ascertained                      1,283
             9999= Refused                                  0

   TIMETOWK  (0 - 680)                                 45,963
             994= Legitimate skip                      48,681
             998= Not ascertained                         680
             999= Refused                                  36

   UNITDIST  94= Legitimate skip                       48,681  Indicates if distance reported in blocks or
                                                               miles
             98= Not ascertained                          988
             B= Block                                   1,804
             M= Mile                                   43,887

   USULDRV   01= Yes                                   38,106
             02= No                                     4,909
             94= Legitimate skip                       52,122
             98= Not ascertained                          187
             99= Refused                                   36

   VARSTRAT  (1 - 70)                                  95,360

   WAITAMTR  (0 - 15)                                       13
             994= Legitimate skip                      95,346
             998= Not ascertained                           1
             999= Refused                                   0

   WAITBUS   (0 - 60)                                   1,837
             994= Legitimate skip                      93,465
```

 Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                            Section:  Item ID:
-------------------------------------------------------------------------------------------------

WAITBUS    N      3       N          Minutes wait for bus                       F         10.2

WAITSBWY   N      3       N          Minutes wait for elevated rail/subway      F         10.3

WAITSTCR   N      3       N          Minutes wait for streetcar/trolley         F         10.4

WAITTRAN   N      3       N          Minutes wait for commuter train            F         10.5

WKBYAIR    C      2       N          Get to work usually by airplane            F         8.14

WKBYAMTR   C      2       N          Get to work usually by AMTRAK              F         8.1

WKBYAUTO   C      2       N          Get to work usually by auto                F         8.01

WKBYBIKE   C      2       N          Get to work usually by bicycle             F         8.16

WKBYBUS    C      2       N          Get to work usually by bus                 F         8.09

WKBYHOME   C      2       N          Worked from home                           F         8.19
```

```
  Target
  Variable  Value Range and Codes:                        Freqs:  Comments:
  --------------------------------------------------------------------------------------------------------------

            998= Not ascertained                             57
            999= Refused                                      1

  WAITSBWY  (0 - 50)                                        456
            994= Legitimate skip                          94,167
            998= Not ascertained                             737
            999= Refused                                      0

  WAITSTCR  (1 - 20)                                         26
            994= Legitimate skip                          95,330
            998= Not ascertained                              4
            999= Refused                                      0

  WAITTRAN  (0 - 60)                                        684
            994= Legitimate skip                          94,660
            998= Not ascertained                             15
            999= Refused                                       1

  WKBYAIR   01= Yes                                          37
            02= No                                        46,592
            94= Legitimate skip                           48,681
            98= Not ascertained                              50
            99= Refused                                       0

  WKBYAMTR  01= Yes                                          14
            02= No                                        46,615
            94= Legitimate skip                           48,681
            98= Not ascertained                              50
            99= Refused                                       0

  WKBYAUTO  01= Yes                                       35,798
            02= No                                        10,841
            94= Legitimate skip                           48,681
            98= Not ascertained                              40
            99= Refused                                       0

  WKBYBIKE  01= Yes                                        1,880
            02= No                                        44,749
            94= Legitimate skip                           48,681
            98= Not ascertained                              50
            99= Refused                                       0

  WKBYBUS   01= Yes                                        1,895
            02= No                                        44,734
            94= Legitimate skip                           48,681
            98= Not ascertained                              50
            99= Refused                                       0

  WKBYHOME  01= Yes                                          21
            02= No                                        46,608
            94= Legitimate skip                           48,681
            98= Not ascertained                              50
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                              Section:  Item ID:
------------------------------------------------------------------------------------------------------------

WKBYHOME    C      2       N          Worked from home                            F         8.19

WKBYMCYC    C      2       N          Get to work usually by motorcycle           F         8.07



WKBYOPOV    C      2       N          Get to work usually by other POV            F         8.08



WKBYOTHR    C      2       N          Get to work by other means                  F         8.2



WKBYOTTK    C      2       N          Get to work usually by other truck          F         8.05



WKBYRV      C      2       N          Get to work usually by RV                   F         8.06



WKBYSBWY    C      2       N          Get to work usually by elev. rail/subway    F         8.13



WKBYSCBS    C      2       N          Get to work usually by school bus           F         8.18



WKBYSTCR    C      2       N          Get to work usually by strtcar/trolley      F         8.12



WKBYTAXI    C      2       N          Get to work usually by taxi                 F         8.15
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
    Target
    Variable  Value Range and Codes:                        Freqs:  Comments:
    ---------------------------------------------------------------------------------------------------------

              99= Refused                                        0

    WKBYMCYC  01= Yes                                           282
              02= No                                         46,347
              94= Legitimate skip                            48,681
              98= Not ascertained                                50
              99= Refused                                         0

    WKBYOPOV  01= Yes                                            64
              02= No                                         46,565
              94= Legitimate skip                            48,681
              98= Not ascertained                                50
              99= Refused                                         0

    WKBYOTHR  01= Yes                                           341
              02= No                                         46,288
              94= Legitimate skip                            48,681
              98= Not ascertained                                50
              99= Refused                                         0

    WKBYOTTK  01= Yes                                           213
              02= No                                         46,416
              94= Legitimate skip                            48,681
              98= Not ascertained                                50
              99= Refused                                         0

    WKBYRV    01= Yes                                            20
              02= No                                         46,609
              94= Legitimate skip                            48,681
              98= Not ascertained                                50
              99= Refused                                         0

    WKBYSBWY  01= Yes                                         1,193
              02= No                                         45,436
              94= Legitimate skip                            48,681
              98= Not ascertained                                50
              99= Refused                                         0

    WKBYSCBS  01= Yes                                            43
              02= No                                         46,587
              94= Legitimate skip                            48,681
              98= Not ascertained                                49
              99= Refused                                         0

    WKBYSTCR  01= Yes                                            30
              02= No                                         46,599
              94= Legitimate skip                            48,681
              98= Not ascertained                                50
              99= Refused                                         0

    WKBYTAXI  01= Yes                                           232
              02= No                                         46,397
```

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                          Section:  Item ID:
-------------------------------------------------------------------------------------------------------

WKBYTAXI    C      2       N          Get to work usually by taxi              F         8.15


WKBYTRAN    C      2       N          Get to work usually by commuter train    F         8.11


WKBYTRUK    C      2       N          Get to work usually by pickup truck      F         8.04


WKBYUV      C      2       N          Get to work usually by UV                F         8.03


WKBYVAN     C      2       N          Get to work usually by van               F         8.02


WKBYWALK    C      2       N          Get to work usually by walking           F         8.17


WKFMHM2M    C      2       N          Worked from home any day last two month? F         20


WKFMHMLW    C      2       N          Worked from home any day last week?      F         19
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
  -----------------------------------------------------------------------------------------------------------

            94= Legitimate skip                        48,681
            98= Not ascertained                            50
            99= Refused                                     0

  WKBYTRAN  01= Yes                                       700
            02= No                                     45,930
            94= Legitimate skip                        48,681
            98= Not ascertained                            49
            99= Refused                                     0

  WKBYTRUK  01= Yes                                     5,191
            02= No                                     41,439
            94= Legitimate skip                        48,681
            98= Not ascertained                            49
            99= Refused                                     0

  WKBYUV    01= Yes                                     1,304
            02= No                                     45,326
            94= Legitimate skip                        48,681
            98= Not ascertained                            49
            99= Refused                                     0

  WKBYVAN   01= Yes                                     1,813
            02= No                                     44,816
            94= Legitimate skip                        48,681
            98= Not ascertained                            50
            99= Refused                                     0

  WKBYWALK  01= Yes                                     2,843
            02= No                                     43,786
            94= Legitimate skip                        48,681
            98= Not ascertained                            50
            99= Refused                                     0

  WKFMHM2M  01= Yes                                     8,604  Includes persons who said they work at home
                                                              in questions F-4,F-5 or F-19. See
                                                              documentation notes for WKFMHM2M
            02= No                                     41,652
            94= Legitimate skip                        44,973
            98= Not ascertained                           115
            99= Refused                                     16

  WKFMHMLW  01= Yes                                     6,154  Includes persons who said they work at home
                                                              in questions F-4 or F-5. See documentation
                                                              notes for WKFMHMLW
            02= No                                     44,109
            94= Legitimate skip                        44,973
            98= Not ascertained                           103
            99= Refused                                     21
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                    Section:  Item ID:
---------------------------------------------------------------------------------------------------

WKFMHMXX    C      2       N         How often worked from home last 2 months  F       21




WORKDAYS    N      2       S         Days per week on job                G         8




WORKER      C      2       S         Respondent is a worker              D        12




WORKLOC     N      2       *         Work location                      *         *




WORKSTAT    C      2       N         State of workplace                  F        4.2
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
  Target
  Variable  Value Range and Codes:                        Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------------


  WKFMHMXX  01= Two or more days/week (11+ times)           4,850  Their question was asked of persons answering
                                                                     YES to F-19 or F-20. A response of 1 was
                                                                   imputed for persons who said they worked at
                                                                       home in questions F-4 or F-5.
                                                                     See documentation notes for WKFMHMXX
            02= About once a week (5-10 times)                927
            03= Once or twice a month (2-4 times)          1,881
            04= Less than once a month (one time)            753
            05= Never                                        121
            06= Not available                                  0
            94= Legitimate skip                           86,625
            98= Not ascertained                              193
            99= Refused                                       10


  WORKDAYS  1                                                  6
            2                                                 18
            3                                                 23
            4                                                 51
            5                                                671
            6                                                160
            7                                                 71
            94= legitimate skip                           94,332
            98= Not ascertained                               28


  WORKER    01= Yes                                       51,928  Response to question D-12, as verified or
                                                                    corrected by the response to F-2
            02= No                                        43,432
            94= Legitimate skip                                0
            98= Not ascertained                                0
            99= Refused                                        0


  WORKLOC   1= Work from home                              2,931
            2= No fixed work place                         1,024
            3= Work at work location                      47,783
            94= Legitimate skip                           43,622
            98= Not ascertained                                0


  WORKSTAT  State population < 2 million                   2,082
            Not ascertained                               48,287
            Refused                                           55
            AK                                                 0
            AL                                               308
            AR                                               250
            AZ                                               223
            CA                                             2,412
            CO                                               330
            CT                                               427
            DC                                                 0
            DE                                                 0
            Foreign Country                                    4
            FL                                             1,104
            GA                                               638
            HI                                                 0


  Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97
```

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                              Section:  Item ID:
   ------------------------------------------------------------------------------------------------------

   WORKSTAT   C      2       N          State of workplace                          F         4.2
```

```
   WRKCOUNT   N      2       WRKRCNT    No. of workers in HH                        *         *
```

```
   WRKDRIVE   C      2       S          Drive lisensed vehicle in work              G         3
```

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   ----------------------------------------------------------------------------------------------------------

             IA                                            278
             ID                                              0
             IL                                          1,281
             IN                                            508
             KS                                            227
             KY                                            279
             LA                                            363
             MA                                          8,813
             MD                                            536
             ME                                              0
             MI                                            809
             MN                                            450
             MO                                            446
             MS                                            181
             MT                                              0
             NC                                            739
             ND                                              0
             NE                                              0
             NH                                              0
             NJ                                            857
             NM                                              0
             NV                                              0
             NY                                         11,867
             OH                                          1,072
             OK                                          4,492
             OR                                            364
             PA                                          1,292
             RI                                              0
             SC                                            350
             SD                                              0
             TN                                            502
             TX                                          1,358
             UT                                              0
             VA                                            717
             VT                                              0
             WA                                            893
             WI                                            566
             WV                                              0
             WY                                              0

   WRKCOUNT  0                                          14,492  Derived from WORKER variable
             1                                          27,665
             2                                          40,452
             3                                           9,523
             4                                           2,716
             5                                             418
             6                                              75
             7                                              18
             8                                               1

   WRKDRIVE  01= Yes                                     5,570
             02= No                                     43,459
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                                   Section:  Item ID:
-----------------------------------------------------------------------------------------------------------

WRKDRIVE    C      2        S         Drive lisensed vehicle in work                    G          3


WRKMILES    N      3        N         Travel day miles driven on job                    G          6


WRKTRANS    C      2        S         Main means of transportation to work              F          9
```

```
WRKTRPS     C      2        N         10 or more trips on job during day                G          5


WRKVTYPE    C      2        S         Type vehicle driven on job                        G          7
```

```
  Target
  Variable  Value Range and Codes:                    Freqs:  Comments:
  -------------------------------------------------------------------------------------------------------------

            94= Legitimate skip                        46,193
            98= Not ascertained                          138
            99= Refused                                    0

  WRKMILES  (1 - 800)                                     936
            994= Legitimate skip                       94,332
            998= Not ascertained                          91
            999= Refused                                   1

  WRKTRANS  01= Automobile                             34,329
            02= Van                                     1,639
            03= Sport utility vehicle                   1,200
            04= Pickup truck                            4,822
            05= Other truck                               159
            06= RV (recreational vehicle)                  13
            07= Motorcycle                                 65
            08= Other private vehicle                      33
            09= Bus                                      1,161
            10= Amtrak                                      6
            11= Commuter train                            547
            12= Streetcar/trolley                          15
            13= Subway/elevated rail                      825
            14= Airplane                                   19
            15= Taxicab                                     73
            16= Bicycle                                    200
            17= Walk                                     1,326
            18= School bus                                 31
            19= Other public transit                        9
            20= Other                                     155
            94= Legitimate skip                        48,681
            98= Not ascertained                            52
            99= Refused                                     0

  WRKTRPS   01= Yes                                     1,028
            02= No                                      4,541
            94= Legitimate skip                        89,790
            98= Not ascertained                             1
            99= Refused                                     0

  WRKVTYPE  01= Automobile                                319
            02= Van                                       162
            03= Sport utility vehicle                      49
            04= Pickup truck                              139
            05= Other truck                               241
            06= RV (recreational vehicle)                   2
            07= Motorcycle                                  2
            08= Other private vehicle                      24
            09= Bus                                        26
            10= School Bus                                 40
            11= Taxicab                                      8
            94= Legitimate skip                        94,332
            98= Not ascertained                            15
```

```
 Target     Var
 Variable: Type: Width: 1990 Var: Variable Label:                          Section: Item ID:
 -------------------------------------------------------------------------------------------------

 WRKVTYPE   C     2      S        Type vehicle driven on job               G        7

 WTEMPLDN   N     6      *        Jobs per square mile, census tract       CLAR     *




 WTINDAGR   N     3      *        Pct 16+ workers, agr/mining/const, CT    CLAR     *




 WTINDFIN   N     3      *        Pct 16+ workers, fin/ins/rl est ind, CT  CLAR     *




 WTINDMAN   N     3      *        Pct 16+ workers, manuf. industries, CT   CLAR     *
```

```
Target
Variable  Value Range and Codes:                        Freqs:  Comments:
---------------------------------------------------------------------------------------------------------

            99= Refused                                      1

WTEMPLDN     25=   0 to  49                               3,998
            150=  50 to 249                               4,642
            300= 250 to 499                               2,951
            750= 500 to  1K                               4,432
           1500=  1K to  2K                               5,416
           3000=  2K to  4K                               5,003
           7000=  4K to 10K                               4,295
          30000= 10K to 50K                               3,179
          60000= 50K to 999K                              2,357
         999994= Legitimate skip                         43,432
         999998= Not ascertained                         15,655

WTINDAGR   0=   0 to  4%                                 22,663
          10=   5 to 14%                                 11,603
          20=  15 to 24%                                  1,516
          30=  25 to 34%                                    333
          40=  35 to 44%                                     90
          50=  45 to 54%                                     28
          60=  55 to 64%                                     19
          70=  65 to 74%                                     12
          80=  75 to 84%                                      3
          90=  85 to 94%                                      3
          95=  95 to 100%                                     3
         994= Legitimate skip                           43,432
         998= Not ascertained                           15,655

WTINDFIN   0=   0 to  4%                                 22,090
          10=   5 to 14%                                 10,770
          20=  15 to 24%                                  1,997
          30=  25 to 34%                                    768
          40=  35 to 44%                                    313
          50=  45 to 54%                                     94
          60=  55 to 64%                                    104
          70=  65 to 74%                                     60
          80=  75 to 84%                                     76
          90=  85 to 94%                                      1
          95=  95 to 100%                                     0
         994= Legitimate skip                           43,432
         998= Not ascertained                           15,655

WTINDMAN   0=   0 to  4%                                 14,885
          10=   5 to 14%                                  9,944
          20=  15 to 24%                                  4,514
          30=  25 to 34%                                  2,628
          40=  35 to 44%                                  1,612
          50=  45 to 54%                                  1,217
          60=  55 to 64%                                    609
          70=  65 to 74%                                    373
          80=  75 to 84%                                    296
          90=  85 to 94%                                    173
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
   Target      Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:
   -------------------------------------------------------------------------------------------------

   WTINDMAN    N     3       *          Pct 16+ workers, manuf. industries, CT   CLAR      *


   WTINDRET    N     3       *          Pct 16+ workplace pop, retl trd ind, CT  CLAR      *




   WTINDSVC    N     3       *          Pct 16+ workers, service industries, CT  CLAR      *




   WTINDTRN    N     3       *          Pct 16+ workers, tran/comm/ util ind, CT CLAR      *




   WTINDWHL    N     3       *          Pct 16+ workers, wholesale trade ind, CT CLAR      *
```

```
   Target
   Variable  Value Range and Codes:                        Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------------

               95= 95 to 100%                                   22
               994= Legitimate skip                        43,432
               998= Not ascertained                        15,655

   WTINDRET   0=  0 to  4%                                  4,012
              10=  5 to 14%                                 13,220
              20= 15 to 24%                                  9,920
              30= 25 to 34%                                  4,968
              40= 35 to 44%                                  2,330
              50= 45 to 54%                                  1,140
              60= 55 to 64%                                    492
              70= 65 to 74%                                    128
              80= 75 to 84%                                     39
              90= 85 to 94%                                     24
              95= 95 to 100%                                     0
              994= Legitimate skip                         43,432
              998= Not ascertained                         15,655

   WTINDSVC   0=  0 to  4%                                  1,365
              10=  5 to 14%                                  6,997
              20= 15 to 24%                                  9,773
              30= 25 to 34%                                  7,797
              40= 35 to 44%                                  4,229
              50= 45 to 54%                                  2,611
              60= 55 to 64%                                  1,349
              70= 65 to 74%                                    936
              80= 75 to 84%                                    621
              90= 85 to 94%                                    479
              95= 95 to 100%                                   116
              994= Legitimate skip                         43,432
              998= Not ascertained                         15,655

   WTINDTRN   0=  0 to  4%                                 24,669
              10=  5 to 14%                                  9,175
              20= 15 to 24%                                  1,564
              30= 25 to 34%                                    433
              40= 35 to 44%                                    211
              50= 45 to 54%                                     85
              60= 55 to 64%                                     68
              70= 65 to 74%                                     41
              80= 75 to 84%                                     24
              90= 85 to 94%                                      1
              95= 95 to 100%                                     2
              994= Legitimate skip                         43,432
              998= Not ascertained                         15,655

   WTINDWHL   0=  0 to  4%                                 23,250
              10=  5 to 14%                                 10,005
              20= 15 to 24%                                  2,025
              30= 25 to 34%                                    670
              40= 35 to 44%                                    235
              50= 45 to 54%                                     54
```

Progid: disk46:[wmynpts.pubfiles]cbrp_per.sas Date: 26SEP97

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                            Section:  Item ID:
-----------------------------------------------------------------------------------------------------

WTINDWHL    N      3        *        Pct 16+ workers, wholesale trade ind, CT  CLAR       *




WTPERFIN    N      11.5     S        Final person wt person-nonresp adjusted    *         *

YEARMILE    N      6        S        How many miles did you drive per year       E         8




YEARMIL2    N      6        S        Revised YEARMILE.                           E         8




YMILEFLG    C      2        *        Yearmile mileage was capped at 200,000      E         8
```

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  --------------------------------------------------------------------------------------------------------

            60= 55 to 64%                                  18
            70= 65 to 74%                                  11
            80= 75 to 84%                                   1
            90= 85 to 94%                                   4
            95= 95 to 100%                                  0
            994= Legitimate skip                       43,432
            998= Not ascertained                       15,655

  WTPERFIN  (0 - 65264)                                 95,360  Used to weight person file data

  YEARMILE  (0 - 200000)                                65,718
            999994= Legitimate skip                     25,194
            999998= Not ascertained                      4,422
            999999= Refused                                 26

  YEARMIL2  (0 - 200,000)                               95,360 See Documentation notes in Appendix J.
            0                                            1,061  for more detail on YEARMIL2
            1-200,000                                   61,138
              999994                                    25,194
              999998                                     7,941
              999999                                        26

  YMILEFLG  01= Yes                                         28
            02= No                                      95,332
```

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                       Section:   Item ID:
  ------------------------------------------------------------------------------------------------

  ANNMILES    N      6        S         Self-reported annualized vmt          B          7


  ANNUALZD    N      6        *         Odometer-based annualized vmt         OAKR       *


  ANN_EDIT    C      2        *         Flag any edits/adjustments to ANNUALZD OAKR      *


  ANN_FLG     C      2        *         Reasons for missing ANNUALZD value    OAKR       *


  ANN_OUT     C      2        *         Flag identifying ANNUALZD outlier values OAKR    *


  ANULZDSE    N      9.2      *         Standard error of ANNUALZD estimate   OAKR       *


  CENSUS_D    C      2        S         Census division                       *          *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------


  ANNMILES  (0 - 115000)                                65,628  Vehicle mileage reported in B-7 or E-9,
                                                                converted to annual mileage based on B-5
                                                                response
            999994= Legitimate skip                          0
            999998= Not ascertained                      9,463
            999999= Refused                                 126

  ANNUALZD  (0 - 115000)                                32,153  Annualized mileage estimated from odometer
                                                                readings
            999994= Legitimate skip                          0
            999998= Not ascertained                     43,064
            999999= Refused                                  0

  ANN_EDIT  01= ANNUALZD<odo, days<366, set ANNUALZD     3,799  Crude estimate is 365
                                                                (daily rate obtained from odometer reading)
            02= ANNUALZD>odo, days>365, set ANNUALZD        16
            03= ANNUALZD<0,   days>365, set ANNUALZD         4
            04= ANNUALZD capped at 115,000                 568
            05= Codes 1 and 4                                1
            94= Legitimate skip                         70,829

  ANN_FLG   01= Incomplete information                  32,811
            02= Neg. diff. between 2 readings            1,040
            03= Diff. between 2 readings too large          53
            04= Reading spans a period of < 6 weeks        419
            05= Codes 1 and 2                               33
            06= Codes 2 and 4                               16
            07= Codes 3 and 4                                5
            08= Other, no primary driver                 4,099
            09= Other, vehicle type 7 or 8                 632
            10= Estimated ANNUALZD was an outlier        3,956
            94= Legitimate skip                         32,153

  ANN_OUT   01= ANNUALZD<(crude estimate)/2                336  Crude estimate is 365
                                                                (daily rate obtained from odometer reading)
            02= ANNUALZD<(self estimate)/4               1,164
            03= Codes 1 and 2                               83
            04= ANNUALZD>2*(crude estimate)                 75
            05= ANNUALZD>4*(self estimate)               2,293
            06= Codes 4 and 5                                5
            94= Legitimate skip                         71,261

  ANULZDSE  (3566 - 36676)                              32,147  Standard error of the ANNUALZD estimate
            999994= Legitimate skip                          0
            999998= Not ascertained                     43,070
            999999= Refused                                  0

  CENSUS_D  01= New England                             14,613
            02= Middle Atlantic                         20,731
            03= East North Central                       6,865
            04= West North Central                       2,898
            05= South Atlantic                           7,524
            06= East South Central                       2,278
            07= West South Central                      11,230
```

```
   Target      Var
   Variable:   Type:  Width:  1990 Var:  Variable Label:                                              Section:   Item ID:
   --------------------------------------------------------------------------------------------------------------------

   CENSUS_D    C      2       S          Census division                                              *          *


   CENSUS_R    C      2       S          Census region                                                *          *



   DRVRCNT     N      2       S          Number of drivers in HH                                      D          *




   HBHINMED    N      6       *          Median household income, BG                                  CLAR       *




   HBHRESDN    N      6       *          HU density (units/square mile), BG                           CLAR       *




   HBHUR       C      1       *          Urban/rural code, block group                                CLAR       *




   HBPPOPDN    N      6       *          Population density, block group                              CLAR       *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
Target
Variable  Value Range and Codes:                        Freqs:  Comments:
---------------------------------------------------------------------------------------------------------

          08= Mountain                                    2,284
          09= Pacific                                     6,794

CENSUS_R  01= Northeast                                  35,344
          02= North Central                               9,763
          03= South                                      21,032
          04= West                                        9,078

DRVRCNT   0                                                 215  Derived from the variable DRIVER
          1                                              12,332
          2                                              46,328
          3                                              11,671
          4                                               3,921
          5                                                 616
          6                                                 126
          7                                                   8

HBHINMED  15,000=   0 to 20K                               4,186
          22,000= 20K to 25K                               5,759
          27,000= 25K to 30K                               8,624
          32,000= 30K to 35K                              10,181
          37,000= 35K to 40K                               9,296
          45,000= 40K to 50K                              15,950
          60,000= 50K to 70K                              15,403
          80,000= 70K to 999K                              5,278
          999998= Not ascertained                           540

HBHRESDN    25=    0 to   50                              12,199
           150=   50 to  250                              13,718
           700=  250 to 1000                              17,696
          2000= 1000 to 3000                              21,186
          4000= 3000 to 5000                               5,518
          6000= 5000 to 999K                               4,360
          999998= Not ascertained                           540

HBHUR     8= Not ascertained                                540
          C= Second city                                 14,529
          R= Rural                                       13,732
          S= Suburban                                    19,290
          T= Town                                        20,182
          U= Urban                                        6,944

HBPPOPDN    50=   0 to 100                               10,374
           300= 100 to 500                               13,310
           750= 500 to  1K                                7,200
          1,500=  1K to  2K                                9,062
          3,000=  2K to  4K                               12,831
          7,000=  4K to 10K                               16,147
          17,000= 10K to 25K                               4,419
          30,000= 25K to 999K                              1,334
          999998= Not ascertained                           540
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
  Target     Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                              Section:  Item ID:
  --------------------------------------------------------------------------------------------------------

  HHCMSA      C      4       SMSA       CMSA identification code                        *         *




  HHELGCNT    N      2       S          # of eligible persons in HH                     D         3




  HHFAMINC    C      2       S          HH family income category                       K         1 & 2
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:

-------------------------------------------------------------------------------------------------------
---

   HHCMSA    1602= Chicago-Gary-Kenosha, IL-IN-WI CMS    1,416
             1642= Cincinnati-Hamilton, OH-KY-IN CMSA      312
             1692= Cleveland-Akron, OH CMSA               451
             1922= Dallas-Fort Worth, TX CMSA             596
             2082= Denver-Boulder-Greeley, CO CMSA        305
             2162= Detroit-Ann Arbor-Flint, MI CMSA       678
             3362= Houston-Galveston-Brazoria, TX CMS     477
             4472= Los Angeles-Riverside-Orange Count   1,799
             4992= Miami-Fort Lauderdale, FL CMSA         473
             5082= Milwaukee-Racine, WI CMSA             266
             5602= New York-No. New Jersey-Long Islan   7,645
             6162= Philadelphia-Wilmington-Atlantic C     976
             6442= Portland-Salem, OR-WA CMSA             400
             6922= Sacramento-Yolo, CA CMSA              293
             7362= San Francisco-Oakland-San Jose, CA   1,086
             7602= Seattle-Tacoma-Bremerton, WA CMSA    1,406
             8872= Washington-Baltimore, DC-MD-VA-WV    1,396
             9998= Not in a CMSA                        55,242

   HHELGCNT  1                                            7,991  Number of persons 5 years and older
             2                                           32,023
             3                                           15,821
             4                                           12,991
             5                                            4,602
             6                                            1,339
             7                                              316
             8                                              100
             9                                               21
             10                                              13

   HHFAMINC  01= Less than $5,000                          624  Based on questions of Section K.See olso
                                                                 NONFMFLG and NONFMINC
             02= $5,000 - 9,999                          1,899
             03= $10,000 - 14,999                        2,863
             04= $15,000 - 19,999                        4,109
             05= $20,000 - 24,999                        3,649
             06= $25,000 - 29,999                        6,232
             07= $30,999 - 34,999                        3,738
             08= $35,000 - 39,999                        6,450
             09= $40,000 - 44,999                        3,131
             10= $45,000 - 49,999                        5,824
             11= $50,000 - 54,999                        2,317
             12= $55,000 - 59,999                        4,721
             13= $60,000 - 64,999                        1,658
             14= $65,000 - 69,999                        3,359
             15= $70,000 - 74,999                        1,106
             16= $75,000 - 79,999                        2,374
             17= $80,000 - 99,999                        3,738
             18= $100,000 and over                       4,371
             98= Not ascertained                         5,467
             99= Refused                                 7,587
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                                      Section:   Item ID:
---------------------------------------------------------------------------------------------------------------

HHMSA      C      4       S          MSA identification code                              *          *

HHSIZE     N      2       S          Total number of persons in HH                        D          1




HHVEHCNT   N      2       S          No. of vehicles in household (derived)               B          *




HH_HISP    C      2       S          Hispanic status of ref. person                       D          5


HH_RACE    C      2       S          Race of reference person                             D          6



HOUSEID    N      8       S          Household identification number                      *          *

LIF_CYC    C      2       S          Family life cycle                                    D          3




MAINDRVR   C      2       S          Does one HH mem. usually drive this veh  D          14
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------------

  HHMSA     (0520           - 8840          )                 .

  HHSIZE    1                                             7,684  Number of persons - all ages (derived)
            2                                            27,337
            3                                            15,466
            4                                            15,494
            5                                             6,331
            6                                             2,031
            7                                               567
            8                                               184
            9                                                66
            10                                               57

  HHVEHCNT  1                                            12,678
            2                                            36,554
            3                                            17,148
            4                                             5,952
            5                                             1,890
            6                                               624
            7                                               217
            8                                                80
            9                                                54
            10                                               20

  HH_HISP   01= Hispanic                                  2,500
            02= Non-hispanic                             72,577
            98= Not ascertained                             53
            99= Refused                                     87

  HH_RACE   01= White                                    66,693
            02= African-american                          3,619
            03= Asian                                     1,140
            04= Other                                     3,014
            98= Not ascertained                             207
            99= Refused                                     544

  HOUSEID   (1000371 - 12227427)                         75,217

  LIF_CYC   01= 1 adult, no children                      5,414  See documentation notes for LIF_CYC
            02= >1 adult, no children                    22,389
            03= 1 adult, child age 0-5                      540
            04= >1 adult, child age 0-5                  12,754
            05= 1 adult, child age 6-15                   1,211
            06= >1 adult, child age 6-15                 14,008
            07= 1 adult, child age 16-21                    719
            08= >1 adult, child age 16-21                 5,383
            09= 1 adult, retired, no children             2,310
            10= >1 adult, retired, no children           10,489

  MAINDRVR  01= Yes                                      66,765
            02= No                                        6,623
            94= Legitimate skip                              0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                           Section:  Item ID:
-------------------------------------------------------------------------------------------------------

MAINDRVR    C      2       S          Does one HH mem. usually drive this veh    D         14


MAKECODE    C      2       S          First 2 char of NASS code                  B         1

MILELIMT    C      2       S          =1 if annmiles capped at 115K              B         7


MODLCODE    C      3       S          Last 3 char of NASS code                   B         1

MSASIZE     C      2       S          Size of MSA of household                   *         *




MSTR_MON    N      2       S          Date of master interview – month           *         *




MSTR_YR     N      2       S          Date of master interview – year            *         *


OD_DAY1     N      2       N          Date of first odometer reading – day       *         *


OD_DAY2     N      2       N          Date of second odomete reading – day       *         *


OD_MON1     N      2       N          Date of first odometer reading – month     *         *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
   Target
   Variable  Value Range and Codes:                     Freqs:  Comments:
   ----------------------------------------------------------------------------------------------------------------

             98= Not ascertained                         1,763
             99= Refused                                    66

   MAKECODE  (01          - 99          )                    .  NASS codes are described in appendix O

   MILELIMT  01= Yes                                        188
             02= No                                      75,029

   MODLCODE  (001         - 999          )                   .  NASS codes are described in appendix O

   MSASIZE   01= Less than 250,000                        7,208  See documentation notes for MSASIZE
             02= 250,000 - 499,999                        4,897
             03= 500,000 - 999,999                        9,514
             04= 1,000,000 - 2,999,999                   14,974
             05= 3,000,000 or more                       26,986
             94= Legitimate skip, not in an MSA          11,638

   MSTR_MON  1= January                                   6,926  Date of the household interview
             2= February                                  6,360
             3= March                                     7,286
             4= April                                     6,057
             5= May                                       9,048
             6= June                                      7,375
             7= July                                      4,995
             8= August                                    4,612
             9= September                                 4,984
             10= October                                  6,014
             11= November                                 6,364
             12= December                                 5,196

   MSTR_YR   95                                          44,282  Date of the household interview
             96                                          30,935

   OD_DAY1   (1 - 31)                                    65,079
             98= Not ascertained                         10,138

   OD_DAY2   (1 - 31)                                    42,321
             98= Not ascertained                         32,896

   OD_MON1   1= January                                   3,622
             2= February                                  5,728
             3= March                                     7,190
             4= April                                     6,030
             5= May                                       7,409
             6= June                                      6,227
             7= July                                      5,269
             8= August                                    4,371
             9= September                                 4,406
             10= October                                  5,414
             11= November                                 5,193
             12= December                                 4,220
             98= Not ascertained                         10,138
```

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                             Section:  Item ID:
---------------------------------------------------------------------------------------------------------

OD_MON2     N      2       N          Date of second odomete reading - month        *         *




OD_READ1    N      6       N          First odometer reading                        *         *



OD_READ2    N      6       N          Second odometer reading                       *         *



OD_YR1      N      2       N          Date of first odometer reading - year         *         *



OD_YR2      N      2       N          Date of second odomete reading - year         *         *


PURCHMON    N      2       N          Month of purchase                             B         5






PURCHYR     N      4       N          Year vehicle was purchas (yyyy)               B         5
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  -------------------------------------------------------------------------------------------------------------

  OD_MON2   1= January                                   1,146
            2= February                                  1,270
            3= March                                     1,952
            4= April                                     4,120
            5= May                                       4,613
            6= June                                     14,035
            7= July                                      5,748
            8= August                                    2,689
            9= September                                   910
            10= October                                  1,296
            11= November                                 1,499
            12= December                                 3,043
            98= Not ascertained                         32,896

  OD_READ1  (0 - 997564)                                65,056
            999995= No longer have vehicle                   0
            999996= Broken odometer                          0
            999998= Not ascertained                     10,154
            999999= Refused                                  7

  OD_READ2  (2 - 999625)                                40,689
            999995= No longer have vehicle               5,553
            999996= Broken odometer                        331
            999998= Not ascertained                     23,246
            999999= Refused                              5,398

  OD_YR1    95= 1995                                     36,031
            96= 1996                                     29,049
            98= Not ascertained                          10,137

  OD_YR2    95= 1995                                      7,694
            96= 1996                                     34,627
            98= Not ascertained                          32,896

  PURCHMON  1= January                                   1,090  Month vehicle obtained, if in past 12 months
            2= February                                  1,109
            3= March                                     1,245
            4= April                                     1,260
            5= May                                       1,344
            6= June                                      1,400
            7= July                                      1,238
            8= August                                    1,379
            9= September                                 1,146
            10= October                                  1,374
            11= November                                 1,301
            12= December                                 1,008
            94= Legitimate skip                         59,191
            98= Not ascertained                          1,063
            99= Refused                                     69

  PURCHYR   1994                                          2,744
            1995                                         11,490
```

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                              Section:  Item ID:
   ------------------------------------------------------------------------------------------------------

   PURCHYR    N      4       N          Year vehicle was purchas (yyyy)              B         5



   RAIL       C      2       N          Presence/absence of rail                     *         *


   SUBSTRAT   N      1       *          Substratum within VARSTRAT                   *         *

   SUM_STAT   C      3       N          Summary status code for household            *         *


   TDAY_MON   N      2       S          Travel day date (MM)                         *         *






   TDAY_YR    N      2       S          Travel day date (YY)                         *         *

   VARSTRAT   N      2       S          Sample stratum                               *         *

   VEH12MNT   C      2       S          Vehicle received in last 12 mo               *         *



   VEHID      N      2       S          HH vehicle number                            G         24
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------

             1996                                        1,360
             9994= Legitimate skip                      59,191
             9998= Not ascertained                         385
             9999= Refused                                  47

   RAIL      01= Yes                                     5,165  01=Urban areas 1,250,000 population or
                                                                greater with subway/elevated rail,02=other
                                                                areas
             02= No                                     70,052

   SUBSTRAT  1                                           1,243
             2                                          73,974

   SUM_STAT  050 - All elig persons completed intervi   63,003  50=all adults responded, 51=at least 50% of
                                                                adults responded
             051 - >50% of adults completed interview   12,214

   TDAY_MON  1= January                                  4,463  Date of travel day for the household
             2= February                                 6,452
             3= March                                    8,342
             4= April                                    6,693
             5= May                                      8,723
             6= June                                     6,869
             7= July                                     5,806
             8= August                                   4,727
             9= September                                5,214
             10= October                                 5,911
             11= November                                6,030
             12= December                                5,987

   TDAY_YR   95                                         42,037  Date of travel day for the household
             96                                         33,180

   VARSTRAT  (1 - 70)                                   75,217

   VEH12MNT  01= Yes                                    15,609
             02= No                                     59,191
             94= Legitimate skip                             0
             98= Not ascertained                          372
             99= Refused                                    45

   VEHID     1                                          38,633
             2                                          25,988
             3                                           7,780
             4                                           2,041
             5                                             540
             6                                             153
             7                                              50
             8                                              20
             9                                               9
             10                                              3
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                                   Section:  Item ID:
--------------------------------------------------------------------------------------------------------

VEHMILES   N      6       S          Reported mileage for last 12 mo                   B         7


VEHNEW     C      2       S          Purchased new (=1) or used (=2)                   B         6


VEHTYPE    C      2       S          Vehicle type                                      B         3




VEHYEAR    N      4       S          Model year of veh (yyyy)                          B         2.3
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   --------------------------------------------------------------------------------------------------------


   VEHMILES  (0 - 500000)                               66,313  Miles vehicle was driven in past 12 months,
                                                                as reported in B-7 or in E-9
             999998= Not ascertained                     8,778
             999999= Refused                               126


   VEHNEW    01= Yes                                     35,726
             02= No                                      38,760
             94= Legitimate skip                              0
             98= Not ascertained                            620
             99= Refused                                     111


   VEHTYPE   01= Automobile                              49,409
             02= Van                                      6,026
             03= Sport utility vehicle                    5,414
             04= Pickup truck                            12,001
             05= Other truck                                274
             06= RV (recreational vehicle)                  333
             07= Motorcycle                                 742
             08= Other POV                                   82
             98= Not ascertained                            919
             99= Refused                                      17


   VEHYEAR   1955= 1919 to 1964                             443
             1967= 1965 to 1969                             711
             1970                                           188
             1971                                           197
             1972                                           280
             1973                                           278
             1974                                           283
             1975                                           272
             1976                                           489
             1977                                           653
             1978                                           951
             1979                                         1,178
             1980                                           863
             1981                                           986
             1982                                         1,279
             1983                                         1,772
             1984                                         3,036
             1985                                         3,954
             1986                                         4,881
             1987                                         5,316
             1988                                         5,554
             1989                                         6,001
             1990                                         4,991
             1991                                         5,106
             1992                                         5,163
             1993                                         5,621
             1994                                         5,983
             1995                                         5,223
             1996                                           973
             1997                                            23
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                                          Section:  Item ID:
----------------------------------------------------------------------------------------------------------------

VEHYEAR     N      4       S          Model year of veh (yyyy)                                 B         2.3

WHOMAIN     C      2       N          Who drives veh most of time                              D         15




WRKCOUNT    N      2       WRKRCNT    No. of workers in HH                                     *         *




WTHHFIN     N      11.5    S          Final household weight                                   *         *
```

```
    Target
    Variable  Value Range and Codes:                   Freqs:  Comments:
    -------------------------------------------------------------------------------------------------------

              9998= Not ascertained                    2,569

    WHOMAIN   01                                       37,570  Person ID for main driver of vehicle
              02                                       23,752
              03                                        4,168
              04                                        1,039
              05                                          187
              06                                           38
              07                                            5
              08                                            4
              94= Legitimate skip                       6,623
              98= Not ascertained                       1,765
              99= Refused                                  66

    WRKCOUNT  0                                        10,638  Derived from WORKER variable
              1                                        21,294
              2                                        33,002
              3                                         7,539
              4                                         2,323
              5                                           348
              6                                            63
              7                                             9
              8                                             1

    WTHHFIN   (0 - 47981)                              75,217  Used to weight household file and vehicle
                                                               file data
```

Progid: disk46:[wmynpts.pubfiles]cbrp_veh.sas Date: 24SEP97

```
Target     Var
Variable: Type: Width: 1990 Var: Variable Label:                        Section:  Item ID:
-----------------------------------------------------------------------------------------------

AWAYHOME   C     2      N        Reason started day away from home        G        18




















CENSUS_D   C     2      S        Census division                         *        *








CENSUS_R   C     2      S        Census region                           *        *




CHAIN      N     2      N        Trip chain number for this person        G        *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
   Target
   Variable  Value Range and Codes:                Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------------

   AWAYHOME  01= To work                              834  Asked only when first trip was to home
             02= Work-related business                 36
             03= Return to work                         0
             04= Shopping                               4
             05= School                                16
             06= Religious activity                     3
             07= Medical/dental                        19
             08= Other family or personal bus          83
             09= Take someone somewhere                 4
             10= Pick up someone                        6
             11= Vacation                              83
             12= Visit friends or relatives           368
             13= Went out to eat                        4
             14= Other social/recreational            121
             15= Change means of transportati           0
             16= Other, specify                        48
             17= Home                                   2
             94= Legitimate skip                  407,129
             98= Not ascertained                      265
             99= Refused                                0

   CENSUS_D  01= New England                       83,567
             02= Middle Atlantic                  118,666
             03= East North Central                37,201
             04= West North Central                14,918
             05= South Atlantic                    38,241
             06= East South Central                11,248
             07= West South Central                58,635
             08= Mountain                          12,070
             09= Pacific                           34,479

   CENSUS_R  01= Northeast                        202,233
             02= North Central                     52,119
             03= South                            108,124
             04= West                              46,549

   CHAIN     1                                    194,036  See documentation notes for CHAIN
             2                                    113,372
             3                                     56,707
             4                                     24,423
             5                                     10,563
             6                                      4,677
             7                                      2,317
             8                                      1,275
             9                                        745
             10                                       391
             11                                       238
             12                                       132
             13                                        74
             14                                        41
             15                                        22
             16                                         4
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
Target     Var
Variable: Type: Width: 1990 Var: Variable Label:                              Section:  Item ID:
-------------------------------------------------------------------------------------------------

CHAIN      N     2      N         Trip chain number for this person            G        *



CHAINTRP   N     2      N         # of trip within chain                       G        *



DATEFLG    C     1      N         Intrv date imputed from trav date plus o  G     *

DAYNIGHT   C     2      S         Trip started AM or PM G17A                   G        17.04



DAYNGHT2   C     2      S         Corrected DAYNIGHT Variable



DIFFDATE   N     3      S         Days between travel & interview dates        G        *



DRIVER     C     2      LIC_DRVR  Person is a driver D9                        D        9
```

```
  Target
  Variable  Value Range and Codes:                   Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------

            17                                            2
            18                                            2
            19                                            1
            20                                            1
            21                                            1
            22                                            1

  CHAINTRP  1                                       197,748  See documentation notes for CHAIN
            2                                       126,086
            3                                        43,713
            4                                        20,975
            5                                        10,029
            6                                         5,070
            7                                         2,558
            8                                         1,365
            9                                           716
            10                                          372
            11                                          189
            12                                           98
            13                                           50
            14                                           31
            15                                           15
            16                                            3
            17                                            2
            18                                            2
            19                                            2
            20                                            1

  DATEFLG   01= Yes                                   1,362  Interview date imputed as travel day plus one
            02= No                                  407,663

  DAYNIGHT  98= Not ascertained                         111
            99= Refused                                   8
            AM                                      137,520
            PM                                      271,386

  DAYNGHT2  98= Not ascertained                         121
            AM                                      137,541
            PM                                      271,363




  DIFFDATE  1                                       126,106  Indicates days after travel day when person and trip
                                                             date were collected
            2                                        81,890
            3                                        60,269
            4                                        54,490
            5                                        47,414
            6                                        38,750
            7                                           106

  DRIVER    01= Yes                                 324,343  Driver status reported in D-9, as verified or
                                                             corrected in E-6 or E-7
            02= No                                   84,680
            94= Legitimate skip                          0
            98= Not Ascertained                          2
            99= Refused                                  0
```

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                           Section:  Item ID:
--------------------------------------------------------------------------------------------------------

DRVRCNT     N      2       S          Number of drivers in HH                   D         *


DRVR_FLG    C      2       S          1= person drove on trip                   G         21&38


DWEL2_HM    N      4       N          DWELTIM2 in easy to HH:MM format          G         *

DWELSEC2    N      4       N          Time in seconds spent at destination of   G         *
                                      current record calcluated by STRTIM2

DWELTIME    N      4       N          Time spent at destination of prev trip    G         17


DWELTIM2    N      4       N          Time spent at destination of current      G         *
                                      record and calculated using STRTIM2

EDITMILE    C      2       S          1= trip miles were edited                 G         22

EDITMODE    C      2       S          1= transportation mode was edited         G         25

EDITNONH    C      2       N          1= variable NONHHCNT was edited           G         40

EDIT_MIN    C      2       S          1= trip duration was edited               G         27

FROM_A      C      1       N          Where trip chain started (H,W,S)          G         16


FRSTHM      C      2       N          1=persons 1st trip began at home          G         19


HBHINMED    N      6       *          Median household income, BG               CLAR      *


HBHRESDN    N      6       *          HU density (units/square mile), BG        CLAR      *
```

```
   Target
   Variable  Value Range and Codes:             Freqs:  Comments:
   ------------------------------------------------------------------------------------------------

   DRVRCNT   0                                   8,778  Derived from the variable DRIVER
             1                                  68,389
             2                                 244,382
             3                                  64,340
             4                                  19,457
             5                                   3,082
             6                                     574
             7                                      23

   DRVR_FLG  01= Yes                           252,574  Indicates that the sample person drove on the trip
                                                        (PERSONID=WHODROVE)
             02= No                            156,451

   DWEL2_HM (0 - 1250)                          409,025  Shows DWELTIM2 in easy to read HH:MM format.

   DWELSEC2 (0 - 75,000)                        409,025  Variable is DWLETIM2 in Seconds.

   DWELTIME  (-540 - 1250)                      409,025  Calculated as the minutes at the destination of the
                                                         previous trip,before starting the current trip.
                                                         Missing for each person's first trip on travel
                                                         day,and when STRTTIME or TRVL_MIN was not determined.

   DWELTIM2 (0 - 1250)                          409,025  New variable compareable to DWELTIME except DWELTIM2
             0                                   14,404    sets negative values to missing.
             1-1250                             295,556
          Missing                              99,065

   EDITMILE  01= Yes                                20
             02= No                            409,005

   EDITMODE  01= Yes                                15
             02= No                            409,010

   EDITNONH  01= Yes                               934
             02= No                            408,091

   EDIT_MIN  01= Yes                             1,752
             02= No                            407,273

   FROM_A    8= Not Ascertained                     0  See documentation notes for CHAIN
             H= Home                           311,744
             S= Other                           19,345
             W= Work                            77,936

   FRSTHM    01= Yes                            76,148  Asked when the person's first trip was not to home
             02= No                             2,599
             94= Legitimate skip              327,426
             98= Not Ascertained                2,852
             99= Refused                            0

   HBHINMED  15,000=   0 to 20K                 27,558
             22,000= 20K to 25K                32,612
             27,000= 25K to 30K                47,386
             32,000= 30K to 35K                55,152
             37,000= 35K to 40K                49,987
             45,000= 40K to 50K                84,220
             60,000= 50K to 70K                81,849
             80,000= 70K to 999K               27,615
             999998= Not ascertained            2,646

   HBHRESDN  25=   0 to   50                    57,776
```

```
Target    Var
Variable: Type: Width: 1990 Var: Variable Label:                          Section: Item ID:
--------------------------------------------------------------------------------------------------

HBHRESDN   N    6      *         HU density (units/square mile), BG       CLAR     *



HBHUR      C    1      *         Urban/rural code, block group            CLAR     *



HBPPOPDN   N    6      *         Population density, block group          CLAR     *




HHCMSA     C    4      SMSA      CMSA identification code                 *        *




HHFAMINC   C    2      S         HH family income category                K        1 & 2
```

```
   Target
   Variable  Value Range and Codes:              Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------------

             150=   50 to  250              69,304
             700=  250 to 1000              94,608
            2000= 1000 to 3000             116,942
            4000= 3000 to 5000              32,771
            6000= 5000 to 999K             34,978
          999998= Not ascertained           2,646

   HBHUR    8= Not ascertained              2,646
            C= Second city                 82,719
            R= Rural                       66,816
            S= Suburban                   102,788
            T= Town                       105,507
            U= Urban                       48,549

   HBPPOPDN    50=   0 to 100               48,565
              300= 100 to 500              66,491
              750= 500 to  1K              38,355
            1,500=  1K to  2K              48,184
            3,000=  2K to  4K              69,730
            7,000=  4K to 10K              91,408
           17,000= 10K to 25K              28,544
           30,000= 25K to 999K             15,102
          999998= Not ascertained           2,646

   HHCMSA   Chicago-Gary-Kenosha, IL-IN-WI    8,179
            Cincinnati-Hamilton, OH-KY-IN C   1,685
            Cleveland-Akron, OH CMSA          2,341
            Dallas-Fort Worth, TX CMSA        3,201
            Denver-Boulder-Greeley, CO CMSA   1,500
            Detroit-Ann Arbor-Flint, MI CMS   3,570
            Houston-Galveston-Brazoria, TX    2,632
            Los Angeles-Riverside-Orange Co   9,492
            Miami-Fort Lauderdale, FL CMSA    2,483
            Milwaukee-Racine, WI CMSA         1,288
            New York-No. New Jersey-Long Is  47,451
            Philadelphia-Wilmington-Atlanti   5,680
            Portland-Salem, OR-WA CMSA        2,042
            Sacramento-Yolo, CA CMSA          1,443
            San Francisco-Oakland-San Jose,   5,590
            Seattle-Tacoma-Bremerton, WA CM   6,905
            Washington-Baltimore, DC-MD-VA-   7,231
            Not in a CMSA                   296,312

   HHFAMINC 01= Less than $5,000            4,652  Based on questions of Section K.See olso NONFMFLG and
                                                   NONFMINC
            02= $5,000 - 9,999             12,555
            03= $10,000 - 14,999           16,907
            04= $15,000 - 19,999           22,986
            05= $20,000 - 24,999           20,875
            06= $25,000 - 29,999           34,724
            07= $30,999 - 34,999           21,554
            08= $35,000 - 39,999           35,378
```

```
Target     Var
Variable: Type: Width: 1990 Var: Variable Label:                                    Section: Item ID:
------------------------------------------------------------------------------------------------------

HHFAMINC   C     2       S         HH family income category                        K        1 & 2




HHMEMDRV   C     2       S         1= household member drove G37                     G        37




HHMSA      C     4       S         MSA identification code                          *        *

HHSIZE     N     3       S         Total number of persons in HH                    D        1




HHTRIPID   N     3       N         Trip number for household travel day             *        *

HHVEHCNT   N     2       S         No. of vehicles in household (derived)           B        *




HH_HISP    C     2       S         Hispanic status of ref. person                  D        5
```

```
  Target
  Variable  Value Range and Codes:              Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------------
            09= $40,000 - 44,999               17,770
            10= $45,000 - 49,999               32,322
            11= $50,000 - 54,999               12,689
            12= $55,000 - 59,999               25,149
            13= $60,000 - 64,999                9,466
            14= $65,000 - 69,999               17,882
            15= $70,000 - 74,999                5,986
            16= $75,000 - 79,999               12,597
            17= $80,000 - 99,999               20,155
            18= $100,000 and over              22,300
            98= Not ascertained                28,582
            99= Refused                        34,496

  HHMEMDRV  01= Yes                           325,183  See documentation notes
            02= No                             29,344
            03= Some                              218
            94= Legitimate skip                51,923
            98= Not ascertained                 2,357
            99= Refused                             0

  HHMSA     (0520        - 8840       )             .

  HHSIZE    1                                  34,019  Number of persons - all ages (derived)
            2                                 117,313
            3                                  81,658
            4                                 101,601
            5                                  49,200
            6                                  17,143
            7                                   4,977
            8                                   1,923
            9                                     628
            10                                    563

  HHTRIPID  (1 - 119)                         409,025  Travel day trip ID within a household. See
                                                       documentation notes

  HHVEHCNT  0                                  17,204  Count of all vehicles for the household
            1                                  90,488
            2                                 198,654
            3                                  73,787
            4                                  21,223
            5                                   5,467
            6                                   1,552
            7                                     449
            8                                     119
            9                                      60
            10                                     22

  HH_HISP   01= Hispanic                       17,398
            02= Non-hispanic                  390,919
            98= Not Ascertained                   260
            99= Refused                           448
```

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                            Section:  Item ID:
-------------------------------------------------------------------------------------------------------

HH_ONTRP   N      2       S          #  of HH members on the trip (derived)     G         36




HH_RACE    C      2       S          Race of reference person                  D         6




HOUSEID    N      8       S          Household identification number            *         *

HOWFARU    C      2       N          Units of reported dist: B)locks, M)iles    G         22.02




INTRVMON   N      2       S          Person interview date - month              *         *






INTRVYR    N      2       S          Person interview date - year               *         *

LIF_CYC    C      2       S          Family life cycle                          D         3
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
Target
Variable  Value Range and Codes:                Freqs:  Comments:
------------------------------------------------------------------------------------------------------------

HH_ONTRP  1                                      254,400  Includes the person reporting the trip and other
                                                          household members
          2                                       96,726
          3                                       33,341
          4                                       16,640
          5                                        5,810
          6                                        1,413
          7                                          420
          8                                          171
          9                                           24
          10                                          80

HH_RACE   01= White                             354,061
          02= African-american                   25,093
          03= Asian                               6,410
          04= Other                              19,073
          98= Not Ascertained                     1,339
          99= Refused                             3,049

HOUSEID   (1000371 - 12227427)                  409,025

HOWFARU   98=Not Ascertained                      6,619
          99=Refused                                  3
          B = Reported in blocks                 50,893
          M = Reported in miles                 351,510

INTRVMON  1= January                             22,074
          2= February                            34,768
          3= March                               45,329
          4= April                               37,834
          5= May                                 45,254
          6= June                                39,524
          7= July                                33,140
          8= August                              28,038
          9= September                           24,896
          10= October                            34,061
          11= November                           32,022
          12= December                           32,085

INTRVYR   95                                     229,409
          96                                     179,616

LIF_CYC   01= 1 adult, no children               24,605  See documentation notes for LIF_CYC
          02= >1 adult, no children              92,455
          03= 1 adult, child age 0-5              5,598
          04= >1 adult, child age 0-5            78,402
          05= 1 adult, child age 6-15            13,174
          06= >1 adult, child age 6-15          106,948
          07= 1 adult, child age 16-21            3,940
          08= >1 adult, child age 16-21          27,455
          09= 1 adult, retired, no childre        9,535
          10= >1 adult, retired, no childr       46,913
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                          Section:   Item ID:
----------------------------------------------------------------------------------------------------

MATCH       N      3       N          ID of matching prev. reported trip       G          17.05


MSASIZE     C      2       S          Size of MSA of household                 *          *


MSTR_MON    N      2       S          Date of master interview - month         *          *




MSTR_YR     N      2       S          Date of master interview - year          *          *

NONHHACC    C      2       S          1= non-HH members on trip                G          39


NONHHCNT    N      3       S          # of non-HH members on trip              G          40


NUMONTRP    N      3       S          Total # of persons on trip (derived)     G          36&40


OVERLAP     C      2       S          =1 if trip part of travel period trip     H          5

PASSPURP    C      2       S          Trip purpose for passenger               G          21
```

```
   Target
   Variable  Value Range and Codes:                   Freqs:  Comments:
   -------------------------------------------------------------------------------------------------

   MATCH    (1 - 51)                                   74,044  Identifies the HHTRIPID where the trip was first
                                                               reported. See PREVREP
            994= Legitimate skip                      333,626
            998= Not ascertained                        1,355
            999= Refused                                    0

   MSASIZE  01= Less than 250,000                      39,330  See documentation notes for MSASIZE
            02= 250,000 - 499,999                      25,962
            03= 500,000 - 999,999                      50,386
            04= 1,000,000 - 2,999,999                  78,338
            05= 3,000,000 or more                     153,991
            94= Legitimate skip, not in an M           61,018

   MSTR_MON 1= January                                 37,037  Date of the household interview
            2= February                                35,511
            3= March                                   40,295
            4= April                                   33,696
            5= May                                     50,016
            6= June                                     41,370
            7= July                                    27,934
            8= August                                  23,591
            9= September                               27,599
            10= October                                34,440
            11= November                               33,846
            12= December                               23,690

   MSTR_YR  95                                        241,364  Date of the household interview
            96                                        167,661

   NONHHACC 01= Yes                                    73,068
            02= No                                    334,452
            94= Legitimate skip                             0
            98= Not Ascertained                         1,441
            99= Refused                                    64

   NONHHCNT (1 - 28)                                   71,677
            994= Legitimate skip                      334,452
            998= Not ascertained                        2,827
            999= Refused                                    69

   NUMONTRP (1 - 32)                                  406,230  Total of HH_ONTRP and NONHHCNT
            994= Legitimate skip                            0
            998= Not ascertained                        2,728
            999= Refused                                    67

   OVERLAP  1= Yes                                      2,900
            2= No                                     406,125

   PASSPURP 01= To work                                 1,399  PASSPURP is  asked only when WHYTRIP95=09
            02= Work-related business                      99
            03= Return to work                             70
            04= Shopping                                  310
```

```
 Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                              Section:   Item ID:
----------------------------------------------------------------------------------------------------------

PASSPURP    C      2       S          Trip purpose for passenger                  G          21




PERSONID    N      2       S          Person ID number                           *          *




PREVREP     C      2       N          This trip also reported by other HH mem     G          17



PROXY       C      2       H_PROXY    Proxy respondent for person data            *          *


PUBTRANS    C      2       S          Used public transit (8<trptrans<14)         G          25.CK


RAIL        C      2       N          Presence/absence of rail                    *          *


REF_AGE     N      3       S          Age of reference person (yr)                D          3
```

```
1NPTS Travel Day File Code Book - Public Use              16:29 Wednesday, September 24, 1997  16
                                                               (This page revised March 1999)
   Target
   Variable  Value Range and Codes:              Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------------
             05= School                           3,390
             06= Religious activity                 162
             07= Medical/dental                     551
             08= Other family or personal bus     2,398
             09= Take someone somewhere              17
             10= Pick up someone                      1
             11= Vacation                            45
             12= Visit friends or relatives         654
             13= Went out to eat                     87
             14= Other social/recreational        1,544
             15= Change means of transportati       76
             16= Other, specify                      19
             17= Home                             4,076
             94= Legitimate skip                393,953
             98= Not ascertained                    174
             99= Refused                              0

   PERSONID  1                                  178,717  Person ID within household
             2                                  134,130
             3                                   56,007
             4                                   28,468
             5                                    8,852
             6                                    2,178
             7                                      526
             8                                      114
             9                                       29
             10                                       4

   PREVREP   01= Yes                             74,123  01=trip was previously reported by another household
                                                          member,02=not.See documentation notes for PREVREP
             02= No                             333,626
             94= Legitimate skip                      0
             98= Not Ascertained                  1,276
             99= Refused                              0

   PROXY     01= Yes                            115,463  01=person and trip data were collected from proxy
                                                          respondent
             02= No                             293,562

   PUBTRANS  01= Yes                              7,458  Indicates public transit was the main mode used for
                                                          the trip
             02= No                             401,567

   RAIL      01= Yes                             28,499  01=Urban areas 1,250,000 population or greater with
                                                          subway/elevated rail,02=other areas
             02= No                             380,526

   REF_AGE   (16 - 88)                          408,961
             5-75= Ages 5-75                    395,781
               77= Ages 76-79                     6,891
               82= Ages 80-84                     4,539
               88= Ages 85-98                     1,750
             994= Legitimate skip                     0
             998= Not ascertained                    27
             999= Refused                             37


   Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97
```

1NPTS Travel Day File Code Book - Public Use   16:29 Wednesday, September 24, 1997 17

```
Target    Var
Variable: Type: Width: 1990 Var: Variable Label:                        Section: Item ID:
------------------------------------------------------------------------------------------------

REF_EDUC   C     2       S        Education of HH reference person        F         1




REF_SEX    C     2       S        Sex of ref person                       D         4

R_AGE      N     3       S        Age of sample person                    D         3



R_SEX      C     2       S        Sex of sample person                    D         4

SEGMENTD   C     2       S        1= if trip is segmented                 G         *

SITMOST    C     2       S        Sit or stand most on trip               G         33



STANDSIT   C     2       S        1=sat, 2=stood, 3=both on trip          G         32




STRTTIME   N     4       S        Start time of trip                      G         15&17



STRTTIM2   N     4       S        New revised STRTTIME, which sets        G         *
                                  Zero to missing.

SUBSTRAT   N     1       *        Substratum within VARSTRAT              *         *

TDAY_MON   N     2       S        Travel day date (MM)                    *         *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

C-154

```
  Target
  Variable  Value Range and Codes:              Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------------

  REF_EDUC  11= Less than H.S. graduate          30,980
            12= H.S. graduate (includes GED)    120,726
            21= Some college, no degree          78,795
            22= Associate degree in college      24,200
            24= Bachelors degree in college      73,913
            25= Some grad/prof school            10,833
            26= Grad/prof school degree          52,085
            98= Not ascertained                  16,968
            99= Refused                             525

  REF_SEX   01= Male                            283,415
            02= Female                          125,610

  R_AGE     (5 - 88)                            409,025   See documentation notes for R_AGE
             5-75= (Ages 5-75)                  398,376
               77= (Ages 76-79)                   5,536
               82= (Ages 80-84)                   3,703
               88= (Ages 85-102)                  1,410

  R_SEX     01= Male                            194,351
            02= Female                          214,674

  SEGMENTD  01= Yes                               3,779
            02= No                              405,246

  SITMOST   01= Sit                                 525
            02= Stand                               349
            94= Legitimate skip                 408,113
            98= Refused                              38

  STANDSIT  01= Sit only                          4,912
            02= Stand only                        1,182
            03= Some of both                        912
            94= Legitimate skip                 401,596
            98= Not ascertained                     415
            99= Refused                               8

  STRTTIME  (0 - 2359)                          408,905
            9994= Legitimate skip                     0
            9998= Not ascertained                   114
            9999= Refused                              6

  STRTTIM2 (1-2359)                             408,905


  SUBSTRAT  1                                     6,616
            2                                   402,409

  TDAY_MON  1= January                          21,448   Date of travel day for the household
            2= February                         35,270
            3= March                            46,354
            4= April                            37,213
            5= May                              48,086
            6= June                             38,347
            7= July                             32,126
            8= August                           26,585
            9= September                        26,806
            10= October                         34,161
            11= November                        32,064
```

```
    Target     Var
    Variable:  Type:  Width:  1990 Var:  Variable Label:                          Section:   Item ID:
    -----------------------------------------------------------------------------------------------------

    TDAY_MON    N      2        S         Travel day date (MM)                        *          *

    TDAY_YR     N      2        S         Travel day date (YY)                        *          *

    TO_B        C      1        N         Where trip chain ended                      G         16

    TRANSFER    C      2        S         =01 if changed mode from/to pub trans       G         26

    TRAVDAY     N      2        S         Travel day - day of week                    *          *

    TRAVWKND    C      2        S         Travel day on weekend (1=Y, 2=N)            *          *

    TRPHHACC    C      2        S         Other HH mem were also on trip?             G         35

    TRPHHVEH    C      2        S         Was HH vehicle used on trip?                G         23

    TRPMILES    N      6.1      S         Distance (miles)                            G         22.03

    TRPNUM      N      2        S         Travel day trip number for sample person    G          *

    TRPNUM2     N      2        S         Travel day trip number to be used to        G          *
                                         Chronologically reorder trip with each
                                         Person's records.

    TRPNUM_A    N      2        N         Person trip # of first trip in chain        *          *

    TRPNUM_B    N      2        N         Person trip # of last trip in chain         *          *

    TRPTRANS    C      2        S         Mode of transportation code                 G         25
```

 Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
  Target
  Variable  Value Range and Codes:            Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------

            12= December                      30,565

  TDAY_YR   95                               231,718  Date of travel day for the household
            96                               177,307

  TO_B      8= Not Ascertained                    0  See documentation notes for CHAIN
            H= Home                          324,359
            S= Other                          13,089
            W= Work                           71,577

  TRANSFER  01= Yes                            3,779  Only for trip that involved public transportation
            02= No                             3,501
            94= Legitimate skip              401,567
            98= Not Ascertained                  177
            99= Refused                            1

  TRAVDAY   1= Sunday                          43,277
            2= Monday                          59,175
            3= Tuesday                         62,826
            4= Wednesday                       62,236
            5= Thursday                        61,842
            6= Friday                          67,711
            7= Saturday                        51,958

  TRAVWKND  01= Yes                            95,235
            02= No                            313,790

  TRPHHACC  01= Yes                           154,625
            02= No                            254,400

  TRPHHVEH  01= Yes                           320,646
            02= No                             69,043
            03= Some                              909
            94= Legitimate skip               17,204
            98= Not ascertained                1,127
            99= Refused                           96

  TRPMILES  (0 - 1200)                        409,025  Distance reported in miles.
            <1 mile                           68,703  See documenation notes for TRPMILES.
            1-1200                           333,595
            9998= Not ascertained              6,615
            9999= Refused                        112


  TRPNUM    (1 - 39)                          409,025  See documentation notes for TRPNUM

  TRPNUM2   (1 - 39)                          409,025  See documentation notes for TRPNUM2


  TRPNUM_A  (1 - 31)                          409,025  See documentation notes for CHAIN

  TRPNUM_B  (1 - 39)                          409,025  See documentation notes for CHAIN

  TRPTRANS  01= Automobile                    240,373  Main transportation means for the trip
            02= Van                            41,735
```

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                            Section:  Item ID:
--------------------------------------------------------------------------------------------------------

TRPTRANS   C      2       S          Mode of transportation code                G         25




















TRVL_MIN   N      4       S          Travel time (min)                          G         27




VARSTRAT   N      2       S          Sample stratum                             *         *

VEHID      N      2       S          HH vehicle number                          G         24










VTR_FLG    C      2       *          1=POV trip, respondent drove               *         *

WAIT_MIN   N      4       S          Time waited for transportation (min)       G         31



WHERE      C      1       N          H=home, W=work, S=other-specify            G         16.01
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
   Target
   Variable  Value Range and Codes:              Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------------

             03= Sport utility vehicle           25,203
             04= Pickup truck                    41,599
             05= Other truck                      2,397
             06= RV (recreational vehicle)          189
             07= Motorcycle                         441
             08= Other POV                          234
             09= Bus                              4,681
             10= Amtrak                              37
             11= Commuter train                     778
             12= Streetcar/trolley                   54
             13= Subway/elevated rail             1,986
             14= Airplane                           346
             15= Taxicab                            971
             16= Bicycle                          3,108
             17= Walk                            21,113
             18= School bus                       8,807
             19= Other non-POV                    1,105
             94= Legitimate skip                      0
             98= Not ascertained                 13,735
             99= Refused                            133

   TRVL_MIN  (1 - 1020)                          404,256  For segmented trips, derived as the sum of
                                                          SEGi_MIN.See documentaion notes for TRVL_MIN.
             9994= Legitimate skip                    0
             9998= Not ascertained                4,633
             9999= Refused                          136

   VARSTRAT  (1 - 70)                            409,025

   VEHID     1                                   201,606
             2                                    95,925
             3                                    19,096
             4                                     3,959
             5                                       594
             6                                       168
             7                                        35
             8                                        12
             9                                        10
             94= Legitimate skip                 87,470
             98= Not ascertained                    150

   VTR_FLG   01= Yes                             250,181
             02= No                              158,844

   WAIT_MIN  (0 - 9999)                            6,774
             9994= Legitimate skip              401,567
             9998= Not ascertained                  670
             9999= Refused                           14

   WHERE     8= Not Ascertained                       14  Trip destination is home, work, or other
             H= Home                            137,598
             S= Other                           230,557
```

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                                    Section:  Item ID:
------------------------------------------------------------------------------------------------------------

WHERE       C      1       N          H=home, W=work, S=other-specify                    G         16.01

WHOACC_A    N      2       S          Roster # of other HH mem on trip G36               G         36.01




WHOACC_B    N      2       S          Roster # of other HH mem on trip G36               G         36.02




WHOACC_C    N      2       S          Roster # of other HH mem on trip G36               G         36.03




WHOACC_D    N      2       S          Roster # of other HH mem on trip G36               G         36.04




WHOACC_E    N      2       S          Roster # of other HH mem on trip G36               G         36.05
```

```
   Target
   Variable  Value Range and Codes:            Freqs:  Comments:
   ---------------------------------------------------------------------------------------------------------

             W= Work                          40,856

   WHOACC_A  1                                60,331
             2                                52,360
             3                                25,434
             4                                11,564
             5                                 3,704
             6                                   917
             7                                   226
             8                                    69
             9                                    11
             10                                    9
             94= Legitimate skip             254,400

   WHOACC_B  Missing                         351,126
             1                                     0
             2                                11,526
             3                                21,384
             4                                18,204
             5                                 4,910
             6                                 1,368
             7                                   364
             8                                    96
             9                                    35
             10                                   12

   WHOACC_C  Missing                         384,467
             1                                     0
             2                                     0
             3                                 3,790
             4                                12,528
             5                                 6,490
             6                                 1,343
             7                                   257
             8                                    88
             9                                    45
             10                                   17

   WHOACC_D  Missing                         401,107
             1                                     0
             2                                     0
             3                                     0
             4                                   913
             5                                 4,909
             6                                 1,679
             7                                   281
             8                                    77
             9                                    32
             10                                   27

   WHOACC_E  Missing                         406,917
             1                                     0
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                              Section:  Item ID:
-----------------------------------------------------------------------------------------------------

WHOACC_E    N      2       S          Roster # of other HH mem on trip G36         G         36.05




WHOACC_F    N      2       S          Roster # of other HH mem on trip G36         G         36.06




WHOACC_G    N      2       S          Roster # of other HH mem on trip G36         G         36.07




WHOACC_H    N      2       S          Roster # of other HH mem on trip G36         G         36.08




WHOACC_I    N      2       S          Roster # of other HH mem on trip G36         G         36.09




WHOACC_J    N      2       S          Roster # of other HH mem on trip G36         G         36.1




WHODROVE    N      2       S          ID of  HH mem who drove on trip G38          G         38
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
  Target
  Variable  Value Range and Codes:              Freqs:  Comments:
  -------------------------------------------------------------------------------------------------------

            2                                        0
            3                                        0
            4                                        0
            5                                      167
            6                                    1,390
            7                                      430
            8                                       86
            9                                       26
            10                                       9

  WHOACC_F  Missing                            408,330
            6                                       43
            7                                      415
            8                                      205
            9                                       27
            10                                       5

  WHOACC_G  Missing                            408,750
            6                                        0
            7                                       14
            8                                      225
            9                                       26
            10                                      10

  WHOACC_H  Missing                            408,921
            6                                        0
            7                                        0
            8                                        4
            9                                       78
            10                                      22

  WHOACC_I  Missing                            408,945
            6                                        0
            7                                        0
            8                                        0
            9                                        0
            10                                      80

  WHOACC_J  Missing                            409,025
            6                                        0
            7                                        0
            8                                        0
            9                                        0
            10                                       0

  WHODROVE  1                                  181,679
            2                                  117,285
            3                                   19,788
            4                                    5,106
            5                                    1,052
            6                                      250
            7                                       54
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                          Section:  Item ID:
   -----------------------------------------------------------------------------------------------------

   WHODROVE    N      2       S          ID of  HH mem who drove on trip G38      G         38


   WHYFROM     C      2       N          1995 purpose - from                      G         20


   WHYTO       C      2       N          1995 purpose - to                        G         20


   WHYTRP90    C      2       WHYTRP     Purpose of trip (1990 definition)        G         20
```

```
   Target
   Variable  Value Range and Codes:              Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------------

             8                                     28
             94= Legitimate skip                83,624
             98= Not ascertained                   143
             99= Refused                            16

   WHYFROM   01= To work                         35,865  See documentation for WHYFROM
             02= Work-related business           11,354
             03= Return to work                   7,160
             04= Shopping                        55,992
             05= School                          13,238
             06= Religious activity               6,042
             07= Medical/dental                   4,055
             08= Other family or personal bus    40,273
             09= Take someone somewhere          14,891
             10= Pick up someone                 12,501
             11= Vacation                           531
             12= Visit friends or relatives      19,110
             13= Went out to eat                 18,907
             14= Other social/recreational       25,709
             15= Change means of transportati        0
             16= Other, specify                     432
             17= Home                           136,218
             94= Legitimate skip                      0
             98= Not ascertained                  6,732
             99= Refused                             15

   WHYTO     01= To work                         36,274  See documentation for WHYTO
             02= Work-related business           11,541
             03= Return to work                   7,229
             04= Shopping                        56,312
             05= School                          13,301
             06= Religious activity               6,075
             07= Medical/dental                   4,083
             08= Other family or personal bus    41,227
             09= Take someone somewhere          15,065
             10= Pick up someone                 12,589
             11= Vacation                           747
             12= Visit friends or relatives      20,321
             13= Went out to eat                 19,020
             14= Other social/recreational       26,391
             15= Change means of transportati        0
             16= Other, specify                     612
             17= Home                           138,166
             94= Legitimate skip                      0
             98= Not ascertained                     53
             99= Refused                             19

   WHYTRP90  01= To or from work                 73,897  Trip purpose by 1990 NPTS definition (derived).See
                                                         documentation notes
             02= Work-related business           10,709
             03= Shopping                        82,292
             04= Other family or personal bus   100,680

   Progid: disk46:[wmynpts.pubfiles]cbrp_tday.sas Date: 24SEP97
```

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                            Section:  Item ID:
------------------------------------------------------------------------------------------------------

WHYTRP90    C      2       WHYTRP     Purpose of trip (1990 definition)          G        20




WHYTRP95    C      2       N          Purpose of trip (1995 definition)          G        20












WORKER      C      2       S          Respondent is a worker                     D        12


WRKCOUNT    N      2       WRKRCNT    No. of workers in HH                       *        *






WTTRDFIN    N      11.2    S          Final travel day trip weight               *        *
```

```
  Target
  Variable  Value Range and Codes:              Freqs:  Comments:
  -----------------------------------------------------------------------------------------------------------

            05= School/Church                   35,550
            06= Medical/dental                   6,564
            07= Vacation                           777
            08= Visit friends or relatives      31,504
            10= Other social/recreational       66,307
            11= Other, specify                     657
            98= Not ascertained                     88

  WHYTRP95  01= To work                         36,281  See documentation notes
            02= Work-related business           11,544
            03= Return to work                   7,229
            04= Shopping                        56,326
            05= School                          13,304
            06= Religious activity               6,080
            07= Medical/dental                   4,084
            08= Other family or personal bus    41,238
            09= Take someone somewhere          15,072
            10= Pick up someone                 12,590
            11= Vacation                           749
            12= Visit friends or relatives      20,336
            13= Went out to eat                 19,026
            14= Other social/recreational       26,405
            15= Change means of transportati         0
            16= Other, specify                     612
            17= Home                           138,077
            94= Legitimate skip                      0
            98= Not ascertained                     53
            99= Refused                             19

  WORKER    01= Yes                            245,870  Response to question D-12, as verified or corrected
                                                        by the response to F-2
            02= No                             163,155

  WRKCOUNT  0                                   52,330  Derived from WORKER variable
            1                                  118,673
            2                                  181,557
            3                                   42,259
            4                                   12,043
            5                                    1,752
            6                                      350
            7                                       57
            8                                        4

  WTTRDFIN  (48 - 23821385)                    409,025  Used to weight travel day trip file and segmented
                                                        trip file data (weights up to annual estimates)
```

```
Target     Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                          Section:  Item ID:
---------------------------------------------------------------------------------------------------

CENSUS_D    C      2       S          Census division                            *         *




CENSUS_R    C      2       S          Census region                              *         *



DRIVER      C      2       LIC_DRVR   Person is a driver D9                       D         9




DRVRCNT     N      2       S          Number of drivers in HH                    D         *




HHCMSA      C      4       SMSA       CMSA identification code                    *         *









HHFAMINC    C      2       S          HH family income category                  K       1 & 2
```

 Progid: disk46:[wmynpts]cbrp_seg.sas Date: 23SEP97

```
   Target
   Variable  Value Range and Codes:                        Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------


   CENSUS_D  01= New England                                  525
             02= Middle Atlantic                            2,430
             03= East North Central                           230
             04= West North Central                            16
             05= South Atlantic                               196
             06= East South Central                            12
             07= West South Central                            67
             08= Mountain                                      27
             09= Pacific                                      276


   CENSUS_R  01= Northeast                                  2,955
             02= North Central                                246
             03= South                                        275
             04= West                                         303


   DRIVER    01= Yes                                        1,954  Driver status reported in D-9, as verified or
                                                                   corrected in E-6 or E-7
             02= No                                         1,825
             94= Legitimate skip                                0
             98= Not Ascertained                                0
             99= Refused                                        0


   DRVRCNT   0                                                920  Derived from the variable DRIVER
             1                                              1,255
             2                                              1,178
             3                                                324
             4                                                 82
             5                                                 17
             6                                                  3
             7                                                  0


   HHCMSA    Chicago-Gary-Kenosha, IL-IN-WI CMSA              161
             Cincinnati-Hamilton, OH-KY-IN CMSA                14
             Cleveland-Akron, OH CMSA                          14
             Dallas-Fort Worth, TX CMSA                        10
             Denver-Boulder-Greeley, CO CMSA                    9
             Detroit-Ann Arbor-Flint, MI CMSA                   5
             Houston-Galveston-Brazoria, TX CMSA                6
             Los Angeles-Riverside-Orange County               72
             Miami-Fort Lauderdale, FL CMSA                    15
             Milwaukee-Racine, WI CMSA                          7
             New York-No. New Jersey-Long Island            2,079
             Phila-Wilmington-Atlantic City                   115
             Portland-Salem, OR-WA CMSA                        13
             Sacramento-Yolo, CA CMSA                           8
             San Francisco-Oakland-San Jose                    89
             Seattle-Tacoma-Bremerton                          69
             Washington-Baltimore                             108
             Not in a CMSA                                    985


   HHFAMINC  01= Less than $5,000                             166  Based on questions of Section K.See olso
                                                                   NONFMFLG and NONFMINC


   Progid: disk46:[wmynpts]cbrp_seg.sas Date: 23SEP97
```

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                                    Section:  Item ID:
   -------------------------------------------------------------------------------------------------------

   HHFAMINC   C      2       S          HH family income category                          K         1 & 2




   HHMSA      C      4       S          MSA identification code                            *         *

   HHSIZE     N      2       S          Total number of persons in HH                      D         1




   HHTRIPID   N      3       N          Trip number for household travel day               *         *

   HHVEHCNT   N      2       S          No. of vehicles in household (derived)             B         *




   HH_HISP    C      2       S          Hispanic status of ref. person                     D         5


   HH_RACE    C      2       S          Race of reference person                           D         6
```

 Progid: disk46:[wmynpts]cbrp_seg.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                      Freqs:  Comments:
  --------------------------------------------------------------------------------------------------------

            02= $5,000 - 9,999                            358
            03= $10,000 - 14,999                          253
            04= $15,000 - 19,999                          301
            05= $20,000 - 24,999                          202
            06= $25,000 - 29,999                          258
            07= $30,999 - 34,999                          166
            08= $35,000 - 39,999                          221
            09= $40,000 - 44,999                          115
            10= $45,000 - 49,999                          197
            11= $50,000 - 54,999                           69
            12= $55,000 - 59,999                          152
            13= $60,000 - 64,999                           46
            14= $65,000 - 69,999                          135
            15= $70,000 - 74,999                           32
            16= $75,000 - 79,999                          112
            17= $80,000 - 99,999                          153
            18= $100,000 and over                         205
            98= Not ascertained                           351
            99= Refused                                   287

  HHMSA     (0160 - 9998)                                   .

  HHSIZE    1                                             605  Number of persons - all ages (derived)
            2                                           1,099
            3                                             786
            4                                             699
            5                                             326
            6                                             194
            7                                              44
            8                                              21
            9                                               4
            10                                              1

  HHTRIPID  (1 - 108)                                   3,779  Travel day trip ID within a household. See
                                                              documentation notes

  HHVEHCNT  0                                           1,820  Count of all vehicles for the household
            1                                           1,059
            2                                             626
            3                                             209
            4                                              45
            5                                              18
            6                                               2
            7                                               0

  HH_HISP   01= Hispanic                                  571
            02= Non-hispanic                            3,204
            98= Not Ascertained                             0
            99= Refused                                     4

  HH_RACE   01= White                                   1,946
            02= African-american                        1,136
```

Progid: disk46:[wmynpts]cbrp_seg.sas Date: 23SEP97

```
  Target      Var
  Variable:   Type:  Width:  1990 Var:  Variable Label:                              Section:  Item ID:
  --------------------------------------------------------------------------------------------------------

  HH_RACE     C      2       S          Race of reference person                     D         6



  HOUSEID     N      8       S          Household identification number              *         *

  HOWFARU     C      2       N          Units of reported dist: B)locks, M)iles      G         22.02



  LIF_CYC     C      2       S          Family life cycle                            D         3







  MSASIZE     C      2       S          Size of MSA of household                     *         *




  PERSONID    N      2       S          Person ID number                             *         *






  PROXY       C      2       H_PROXY    Proxy respondent for person data             *         *


  RAIL        C      2       N          Presence/absence of rail                     *         *
```

```
  Target
  Variable  Value Range and Codes:                    Freqs:  Comments:
  ------------------------------------------------------------------------------------------------------------
            03= Asian                                   144
            04= Other                                   475
            98= Not Ascertained                          34
            99= Refused                                  44

  HOUSEID   (1002591 - 12221586)                      3,779

  HOWFARU   98=Not Ascertained                          567
            99=Refused                                    0
            B = Reported in blocks                      367
            M = Reported in miles                     2,845

  LIF_CYC   01= 1 adult, no children                    509  See documentation notes for LIF_CYC
            02= >1 adult, no children                 1,143
            03= 1 adult, child age 0-5                  240
            04= >1 adult, child age 0-5                 494
            05= 1 adult, child age 6-15                 208
            06= >1 adult, child age 6-15                598
            07= 1 adult, child age 16-21                 56
            08= >1 adult, child age 16-21               192
            09= 1 adult, retired, no children            96
            10= >1 adult, retired, no children          243

  MSASIZE   01= Less than 250,000                        88  See documentation notes for MSASIZE
            02= 250,000 - 499,999                        47
            03= 500,000 - 999,999                       147
            04= 1,000,000 - 2,999,999                   246
            05= 3,000,000 or more                     3,178
            94= Legitimate skip, not in an MSA           73

  PERSONID  1                                         1,945  Person ID within household
            2                                         1,061
            3                                           484
            4                                           199
            5                                            56
            6                                            25
            7                                             9
            8                                             0
            9                                             0
            10                                            0

  PROXY     01= Yes                                      802  01=person and trip data were collected from
                                                             proxy respondent

            02= No                                    2,977

  RAIL      01= Yes                                      488  01=Urban areas 1,250,000 population or
                                                             greater with subway/elevated rail,02=other
                                                             areas
            02= No                                    3,291
            94= Legitimate skip                           0
            98= Not Ascertained                           0
            99= Refused                                   0
```

Progid: disk46:[wmynpts]cbrp_seg.sas Date: 23SEP97

```
    Target     Var
    Variable:  Type:  Width:  1990 Var:  Variable Label:                              Section:  Item ID:
    --------------------------------------------------------------------------------------------------------

    R_AGE      N      3       S          Age of sample person                         D         3


    R_SEX      C      2       S          Sex of sample person                         D         4


    SEG1TIME   N      4       S          Start time for segment 1                     G         29.01


    SEG1TRAN   C      2       S          Mode code for segment 1                      G         28.01


    SEG1_MIN   N      4       S          Duration of segment 1 (min)                  G         30.01


    SEG2TIME   N      4       S          Start time for segment 2                     G         29.02


    SEG2TRAN   C      2       S          Mode code for segment 2                      G         28.02
```

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   -----------------------------------------------------------------------------------------------------

   R_AGE      (5 - 88)                                    3,779 See documentation notes for R_AGE.
              5-75= (Ages 5-75)                           3,717
                77= (Ages 76-79)                             35
                82= (Ages 80-84)                             21
                88= (Ages 85-102)                             6

   R_SEX     01= Male                                     1,632
             02= Female                                   2,147

   SEG1TIME  (0 - 2355)                                   3,757
             9994= Legitimate skip                            0
             9998= Not ascertained                           22
             9999= Refused                                    0

   SEG1TRAN  01= Automobile                                 168
             02= Van                                         11
             03= Sport utility vehicle                        5
             04= Pickup truck                                 6
             05= Other truck                                  0
             06= RV (recreational vehicle)                    0
             07= Motorcycle                                   0
             08= Other POV                                    3
             09= Bus                                      1,084
             10= Amtrak                                       3
             11= Commuter train                             148
             12= Streetcar/trolley                           15
             13= Subway/elevated rail                       458
             14= Airplane                                     0
             15= Taxicab                                      20
             16= Bicycle                                       2
             17= Walk                                     1,798
             18= School bus                                   1
             19= Other non-POV                               18
             94= Legitimate skip                              0
             98= Not ascertained                             36
             99= Refused                                      3

   SEG1_MIN  (0 - 240)                                    3,710
             9994= Legitimate skip                            0
             9998= Not ascertained                           64
             9999= Refused                                    5

   SEG2TIME  (0 - 2353)                                   3,689
             9994= Legitimate skip                            0
             9998= Not ascertained                           90
             9999= Refused                                    0

   SEG2TRAN  01= Automobile                                  46
             02= Van                                          5
             03= Sport utility vehicle                        1
             04= Pickup truck                                 4
             05= Other truck                                  0
             06= RV (recreational vehicle)                    0
             07= Motorcycle                                   0
             08= Other POV                                    3
             09= Bus                                      1,538
```

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                             Section:  Item ID:
   ----------------------------------------------------------------------------------------------------------

   SEG2TRAN   C      2       S          Mode code for segment 2                      G         28.02




   SEG2_MIN   N      4       S          Duration of segment 2 (min)                 G         30.02


   SEG3TIME   N      4       S          Start time for segment 3                    G         29.03


   SEG3TRAN   C      2       S          Mode code for segment 3                      G         28.03










   SEG3_MIN   N      4       S          Duration of segment 3 (min)                 G         30.03
```

```
   Target
   Variable  Value Range and Codes:                        Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------------
             10= Amtrak                                         12
             11= Commuter train                               425
             12= Streetcar/trolley                             19
             13= Subway/elevated rail                       1,107
             14= Airplane                                       7
             15= Taxicab                                        7
             16= Bicycle                                        0
             17= Walk                                         549
             18= School bus                                     1
             19= Other non-POV                                 40
             94= Legitimate skip                                0
             98= Not ascertained                               14
             99= Refused                                        1

   SEG2_MIN  (0 - 840)                                      3,695
             9994= Legitimate skip                              0
             9998= Not ascertained                             81
             9999= Refused                                      3

   SEG3TIME  (10 - 2350)                                    1,864
             9994= Legitimate skip                          1,884
             9998= Not ascertained                             30
             9999= Refused                                      1

   SEG3TRAN  01= Automobile                                    91
             02= Van                                            6
             03= Sport utility vehicle                          7
             04= Pickup truck                                   1
             05= Other truck                                    0
             06= RV (recreational vehicle)                      0
             07= Motorcycle                                     0
             08= Other POV                                      0
             09= Bus                                          282
             10= Amtrak                                         2
             11= Commuter train                                82
             12= Streetcar/trolley                              8
             13= Subway/elevated rail                         208
             14= Airplane                                       2
             15= Taxicab                                       23
             16= Bicycle                                        2
             17= Walk                                       1,145
             18= School bus                                     0
             19= Other non-POV                                 23
             94= Legitimate skip                            1,884
             98= Not ascertained                               13
             99= Refused                                        0

   SEG3_MIN  (0 - 480)                                      1,871
             9994= Legitimate skip                          1,884
             9998= Not ascertained                             24
             9999= Refused                                      0
```

```
   Target     Var
   Variable: Type: Width: 1990 Var: Variable Label:                                Section: Item ID:
   ----------------------------------------------------------------------------------------------------

   SEG4TIME   N     4      S         Start time for segment 4                      G        29.04


   SEG4TRAN   C     2      S         Mode code for segment 4                       G        28.04




   SEG4_MIN   N     4      S         Duration of segment 4 (min)                   G        30.04


   SEGNUM     C     1      N         Number of segments (derived)                  *        *


   STRTTIME   N     4      S         Start time of trip                            G        15&17


   SUBSTRAT   N     1      *         Substratum within VARSTRAT                    *        *

   TDAY_MON   N     2      S         Travel day date (MM)                          *        *
```

```
Target
Variable  Value Range and Codes:                     Freqs:  Comments:
--------------------------------------------------------------------------------------------------------

SEG4TIME  (45 - 2340)                                   450
          9994= Legitimate skip                       3,314
          9998= Not ascertained                          15
          9999= Refused                                   0

SEG4TRAN  01= Automobile                                  40
          02= Van                                         1
          03= Sport utility vehicle                       1
          04= Pickup truck                                3
          05= Other truck                                 0
          06= RV (recreational vehicle)                   0
          07= Motorcycle                                  0
          08= Other POV                                   0
          09= Bus                                        56
          10= Amtrak                                      1
          11= Commuter train                             12
          12= Streetcar/trolley                           1
          13= Subway/elevated rail                       39
          14= Airplane                                    0
          15= Taxicab                                     4
          16= Bicycle                                     0
          17= Walk                                      295
          18= School bus                                  0
          19= Other non-POV                               6
          94= Legitimate skip                         3,314
          98= Not ascertained                             6
          99= Refused                                     0

SEG4_MIN  (1 - 360)                                     450
          9994= Legitimate skip                       3,314
          9998= Not ascertained                          15
          9999= Refused                                   0

SEGNUM    1                                               0  Number of segments in the trip
          2                                           1,883
          3                                           1,431
          4                                             465

STRTTIME  (0 - 2355)                                  3,776
          9994= Legitimate skip                           0
          9998= Not ascertained                           3
          9999= Refused                                   0

SUBSTRAT  1                                              92
          2                                           3,687

TDAY_MON  1= January                                   296  Date of travel day for the household
          2= February                                 397
          3= March                                     482
          4= April                                     419
          5= May                                       411
          6= June                                      237
```

Progid: disk46:[wmynpts]cbrp_seg.sas Date: 23SEP97

```
Target      Var
Variable:   Type:  Width:  1990 Var:  Variable Label:                              Section:  Item ID:
------------------------------------------------------------------------------------------------------

TDAY_MON    N      2       S          Travel day date (MM)                         *         *




TDAY_YR     N      2       S          Travel day date (YY)                         *         *

TRANSFER    C      2       S          =01 if changed mode from/to pub trans        G         26




TRPMILES    N      6.1     S          Distance (miles)                             G         22.03




TRPNUM      N      2       S          Travel day trip number for sample person     G         *

TRPTRANS    C      2       S          Mode of transportation code                  G         25
```

```
TRVL_MIN    N      4       S          Travel time (min)                            G         27
```

```
  Target
  Variable  Value Range and Codes:                        Freqs:  Comments:
  --------------------------------------------------------------------------------------------------------------
            7= July                                          182
            8= August                                        162
            9= September                                     191
            10= October                                      424
            11= November                                     355
            12= December                                     223

  TDAY_YR   95                                             1,828  Date of travel day for the household
            96                                             1,951

  TRANSFER  01= Yes                                        3,779  Only for trip that involved public
                                                                  transportation
            02= No                                             0
            94= Legitimate skip                                0
            98= Not Ascertained                                0
            99= Refused                                        0

  TRPMILES  (0 - 916)                                      3,148  Distance reported in miles, blocks corrected
                                                                  (9/mile). See documentaion notes for TRPMILES.
            9996= < 1 block                                    7
            9997= Half a mile                                 41
            9998= Not ascertained                            579
            9999= Refused                                      4

  TRPNUM    (1 - 28)                                       3,779  See documentation notes for TRPNUM

  TRPTRANS  01= Automobile                                    11  Main transportation means for the trip
            02= Van                                            0
            03= Sport utility vehicle                          1
            04= Pickup truck                                   1
            05= Other truck                                    0
            06= RV (recreational vehicle)                      0
            07= Motorcycle                                     0
            08= Other POV                                      2
            09= Bus                                         1,957
            10= Amtrak                                        17
            11= Commuter train                               500
            12= Streetcar/trolley                             21
            13= Subway/elevated rail                       1,254
            14= Airplane                                       9
            15= Taxicab                                        1
            16= Bicycle                                        0
            17= Walk                                           0
            18= School bus                                     0
            19= Other non-POV                                  3
            94= Legitimate skip                                0
            98= Not ascertained                                2
            99= Refused                                        0

  TRVL_MIN  (3 - 945)                                      3,671  For segmented trips, derived as the sum of
                                                                  SEGi_MIN.See documentaion notes for TRVL_MIN.
            9994= Legitimate skip                              0
            9998= Not ascertained                            108
```

Progid: disk46:[wmynpts]cbrp_seg.sas Date: 23SEP97

```
 Target      Var
 Variable:  Type:  Width:  1990 Var:  Variable Label:                        Section:  Item ID:
 ----------------------------------------------------------------------------------------------------------

 TRVL_MIN    N      4       S          Travel time (min)                      G         27

 VARSTRAT    N      2       S          Sample stratum                         *         *

 WHYTRP95    C      2       N          Purpose of trip (1995 definition)      G         20
```

```
 WORKER      C      2       S          Respondent is a worker                 D         12
```

```
 WRKCOUNT    N      2       WRKRCNT    No. of workers in HH                   *         *
```

```
 WTTRDFIN    N      11.2    S          Final travel day trip weight           *         *
```

```
    Target
    Variable  Value Range and Codes:                        Freqs:  Comments:
    ------------------------------------------------------------------------------------------------------------

              9999= Refused                                      0

    VARSTRAT  (1 - 70)                                       3,779

    WHYTRP95  01= To work                                     909  See documentation notes
              02= Work-related business                        56
              03= Return to work                               11
              04= Shopping                                    237
              05= School                                      198
              06= Religious activity                           36
              07= Medical/dental                              101
              08= Other family or personal business          286
              09= Take someone somewhere                       28
              10= Pick up someone                              32
              11= Vacation                                      6
              12= Visit friends or relatives                  199
              13= Went out to eat                              39
              14= Other social/recreational                  204
              15= Change means of transportation               0
              16= Other - specify                              6
              17= Home                                       1,431
              94= Legitimate skip                              0
              98= Not ascertained                              0
              99= Refused                                      0

    WORKER    01= Yes                                        2,387  Response to question D-12, as verified or
                                                                    corrected by the response to F-2
              02= No                                         1,392
              94= Legitimate skip                              0
              98= Not Ascertained                              0
              99= Refused                                      0

    WRKCOUNT  0                                                651  Derived from WORKER variable
              1                                              1,343
              2                                              1,285
              3                                                359
              4                                                110
              5                                                 22
              6                                                  8
              7                                                  1

    WTTRDFIN  (49 - 17201955)                               3,779  Used to weight travel day trip file and
                                                                    segmented trip file data (weights up to
                                                                    annual estimates)
```

Progid: disk46:[wmynpts]cbrp_seg.sas Date: 23SEP97

```
   Target    Var
   Variable: Type: Width: 1990 Var: Variable Label:                              Section:  Item ID:
   ------------------------------------------------------------------------------------------------------

   CALCDIST   N    5      *         Calculated distance home to destination    *         *


   CENSUS_D   C    2      S         Census division                            *         *




   CENSUS_R   C    2      S         Census region                              *         *



   COUNTRY    C    3      S         Destination country code                   H         2
```

```
1NPTS Travel Period File Code Book - Public Use          15:06 Tuesday, September 23, 1997   2
                                                         (This page revised March 1999)
  Target
  Variable  Value Range and Codes:                    Freqs:  Comments:
--------------------------------------------------------------------------------------------------

  CALCDIST  (0.08 - 11767.29)                         27,091  Calculated as straight-line distance
            99998= Not ascertained                     2,556

  CENSUS_D  01= New England                            6,046
            02= Middle Atlantic                        8,055
            03= East North Central                     2,646
            04= West North Central                     1,214
            05= South Atlantic                         2,833
            06= East South Central                       860
            07= West South Central                     4,542
            08= Mountain                                 912
            09= Pacific                                2,539

  CENSUS_R  01= Northeast                             14,101
            02= North Central                          3,860
            03= South                                  8,235
            04= West                                   3,451

  COUNTRY   Inside the United States                  29,105
            Former Soviet Union                            1
            South Africa                                   2
            Greece                                         1
            Netherlands                                    1
            France                                         6
            Spain                                          2
            Italy                                          3
            United Kingdom                                10
            Norway                                         1
            Germany                                        2
            Peru                                           3
            Mexico                                        52
            Argentina                                      1
            Brazil                                         2
            Chile                                          1
            Australia                                      2
            New Zealand                                    0
            Japan                                          1
            Republic of Korea                              1
            China                                          2
            Turkey                                         1
            India                                          1
            Ghana                                          1
            Congo                                          2
            246                                            2
            Aruba                                          1
            Lithuania                                      1
            Bosnia or Herzegovina                          1
            Bermuda                                        7
            Belize                                         1
            Guatemala                                      1
            Honduras                                       1
            Costa Rica                                     0

 Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97
```

```
   Target      Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                                          Section:  Item ID:
   -----------------------------------------------------------------------------------------------------------------

   COUNTRY     C       3        S         Destination country code                                 H          2




   DESTSTAT    C       2        S         Destination state of travel period trip   H          2
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   -------------------------------------------------------------------------------------------------------

             Ecuador                                       1
             The Carribbean                               15
             Hong Kong                                     1
             Saudi Arabia                                  1
             Israel                                        4
             British Columbia                             19
             Quebec, Canada                                4
             Ontario, Canada                               8
             New Brunswick, Canada                         0
             Unknown province of Canada                  199
             Not ascertained                             176

   DESTSTAT  94= Legitimate skip (Foreign Country)       395
             98= Not ascertained                         131
             99= Refused                                  16
             Alaska                                       51
             Alabama                                      217
             Arkansas                                     269
             Arizona                                      175
             California                                 1,569
             Colorado                                    251
             Connecticut                                 848
             District of Columbia                        152
             Delaware                                      88
             Florida                                      838
             Georgia                                      436
             Hiwaii                                        31
             Iowa                                         189
             Idaho                                         98
             Illinois                                     582
             Indiana                                      335
             Kansas                                       255
             Kentucky                                     204
             Louisiana                                    280
             Massachusetts                             2,935
             Maryland                                     305
             Maine                                        462
             Michigan                                     603
             Minnesota                                    350
             Missouri                                     445
             Mississippi                                  180
             Montana                                       97
             North Carolina                              552
             North Dakota                                 97
             Nebraska                                     115
             Hew Hampshire                               806
             New Jersey                                 1,021
             New Mexico                                   119
             Nevada                                       184
             New York                                   5,016
             Ohio                                         650
             Oklahoma                                   2,096
```

```
  Target      Var
  Variable:  Type:  Width:  1990 Var:  Variable Label:                                          Section:  Item ID:
  -------------------------------------------------------------------------------------------------------------

  DESTSTAT    C      2       S          Destination state of travel period trip   H         2



  DRIVER      C      2       LIC_DRVR   Person is a driver D9                      D         9


  DRVRCNT     N      2       S          Number of drivers in HH                    D         *



  DRVR_TPT    C      2       *          Person was the main driver on trip         *         *



  HBHINMED    N      6       *          Median household income, BG                CLAR      *



  HBHRESDN    N      6       *          HU density (units/square mile), BG         CLAR      *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------

             Oregon                                       303
             Pennsylvania                               1,189
             Rhode Island                                 311
             South Carolina                               293
             South Dakota                                  65
             Tennessee                                    426
             Texas                                      1,343
             Utah                                         129
             Virginia                                     534
             Vermont                                      380
             Washington                                   541
             Wisconsin                                    501
             West Virginia                                126
             Wyoming                                       63

   DRIVER    01= Yes                                   25,699  Driver status reported in D-9, and verified
                                                               or corrected in E-6 or E-7
             02= No                                     3,948

   DRVRCNT   0                                            306  Derived from the variable DRIVER
             1                                          4,334
             2                                         18,602
             3                                          4,743
             4                                          1,436
             5                                            182
             6                                             41
             7                                              3

   DRVR_TPT  01= Yes                                   17,860  Imputed variable indicating that the sample
                                                               person drove on the travel period trip
             02= No                                     8,175
             94= Legitimate skip                        2,425
             98= Not Ascertained                        1,187
             99= Refused                                    0

   HBHINMED  15,000=   0 to 20K                         1,698
             22,000= 20K to 25K                         2,279
             27,000= 25K to 30K                         3,323
             32,000= 30K to 35K                         4,196
             37,000= 35K to 40K                         3,529
             45,000= 40K to 50K                         6,103
             60,000= 50K to 70K                         6,116
             80,000= 70K to 999K                        2,217
             999998= Not ascertained                      186

   HBHRESDN    25=    0 to   50                         5,262
              150=   50 to  250                         5,559
              700=  250 to 1000                         7,040
             2000= 1000 to 3000                         7,816
             4000= 3000 to 5000                         1,862
             6000= 5000 to 999K                         1,922
             999998= Not ascertained                      186
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                            Section:  Item ID:
-----------------------------------------------------------------------------------------------------

HBHUR       C      1       *          Urban/rural code, block group              CLAR      *



HBPPOPDN    N      6       *          Population density, block group            CLAR      *




HHCMSA      C      4       SMSA       CMSA identification code                   *         *










HHFAMINC    C      2       S          HH family income category                  K         1 & 2
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97

```
   Target
   Variable  Value Range and Codes:                      Freqs:  Comments:
   ---------------------------------------------------------------------------------------------------------

   HBHUR     Not ascertained                                186
             Second city                                  5,811
             Rural                                        5,916
             Suburban                                     6,704
             Town                                         8,499
             Urban                                        2,531

   HBPPOPDN     50=   0 to 100                            4,412
               300= 100 to 500                            5,509
               750= 500 to  1K                            3,038
             1,500=  1K to   2K                           3,567
             3,000=  2K to   4K                           4,904
             7,000=  4K to 10K                            5,709
            17,000= 10K to 25K                            1,476
            30,000= 25K to 999K                             846
            999998= Not ascertained                         186

   HHCMSA    Chicago-Gary-Kenosha, IL-IN-WI CMSA            445
             Cincinnati-Hamilton, OH-KY-IN CMSA              96
             Cleveland-Akron, OH CMSA                       116
             Dallas-Fort Worth, TX CMSA                     224
             Denver-Boulder-Greeley, CO CMSA                 81
             Detroit-Ann Arbor-Flint, MI CMSA               222
             Houston-Galveston-Brazoria, TX CMSA            204
             Los Angeles-Riverside-Orange County            617
             Miami-Fort Lauderdale, FL CMSA                 146
             Milwaukee-Racine, WI CMSA                      104
             New York-No. New Jersey-Long Island          3,136
             Philadelphia-Wilmington-Atlantic City          395
             Portland-Salem, OR-WA CMSA                     167
             Sacramento-Yolo, CA CMSA                       137
             San Francisco-Oakland-San Jose, CA CMSA        337
             Seattle-Tacoma-Bremerton, WA CMSA              481
             Washington-Baltimore, DC-MD-VA-WV CMSA         522
             Not in a CMSA                               22,217

   HHFAMINC  01= Less than $5,000                           212  Based on questions of Section K.See olso
                                                                 NONFMFLG and NONFMINC
             02= $5,000 - 9,999                             616
             03= $10,000 - 14,999                           841
             04= $15,000 - 19,999                         1,349
             05= $20,000 - 24,999                         1,275
             06= $25,000 - 29,999                         2,325
             07= $30,999 - 34,999                         1,482
             08= $35,000 - 39,999                         2,514
             09= $40,000 - 44,999                         1,303
             10= $45,000 - 49,999                         2,405
             11= $50,000 - 54,999                         1,017
             12= $55,000 - 59,999                         2,108
             13= $60,000 - 64,999                           742
             14= $65,000 - 69,999                         1,478
             15= $70,000 - 74,999                           556
```

```
   Target      Var
   Variable:   Type:  Width:  1990 Var:  Variable Label:                           Section:  Item ID:
   ------------------------------------------------------------------------------------------------------

   HHFAMINC    C      2       S          HH family income category                 K         1 & 2



   HHMSA       C      4       S          MSA identification code                   *         *

   HHSIZE      N      2       S          Total number of persons in HH             D         1




   HHTRPID     N      3       N          Trip number for household travel period   *         *




   HHVEHCNT    N      2       S          No. of vehicles in household (derived)    B         *
```

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------------

            16= $75,000 - 79,999                         1,107
            17= $80,000 - 99,999                         1,730
            18= $100,000 and over                        2,229
            98= Not ascertained                          1,776
            99= Refused                                  2,582

   HHMSA    (0520          - 8840        )                   .

   HHSIZE   1                                            2,489  Number of persons - all ages (derived)
            2                                            9,923
            3                                            6,018
            4                                            6,709
            5                                            3,048
            6                                            1,033
            7                                              290
            8                                               91
            9                                               19
            10                                              27

   HHTRPID  1                                           13,923  Travel period trip ID within sample household
            2                                            7,620
            3                                            3,673
            4                                            2,150
            5                                            1,141
            6                                              491
            7                                              255
            8                                              171
            9                                              103
            10                                              77
            11                                              14
            12                                               8
            13                                               5
            14                                               4
            15                                               3
            16                                               2
            17                                               2
            18                                               2
            19                                               1
            20                                               1
            21                                               1
            22                                               0

   HHVEHCNT 0                                              749  Count of all vehicles for the household
            1                                            5,431
            2                                           14,925
            3                                            5,916
            4                                            1,867
            5                                              549
            6                                              156
            7                                               46
            8                                                5
            9                                                3
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                      Section:  Item ID:
------------------------------------------------------------------------------------------------

HHVEHCNT    N      2       S         No. of vehicles in household (derived)  B        *

HH_HISP     C      2       S         Hispanic status of ref. person          D        5



HH_RACE     C      2       S         Race of reference person                D        6




HOUSEID     N      8       S         Household identification number         *        *

LIF_CYC     C      2       S         Family life cycle                       D        3






MSASIZE     C      2       S         Size of MSA of household                *        *




MSTR_MON    N      2       S         Date of master interview - month        *        *







MSTR_YR     N      2       S         Date of master interview - year         *        *

PERSONID    N      2       S         Person ID number                        *        *
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97

```
  Target
  Variable  Value Range and Codes:                        Freqs:  Comments:
  ----------------------------------------------------------------------------------------------------------

            10                                                  0

  HH_HISP  01= Hispanic                                       865
           02= Non-hispanic                                28,735
           98= Not Ascertained                                 10
           99= Refused                                         37

  HH_RACE  01= White                                       26,622
           02= African-american                             1,256
           03= Asian                                          346
           04= Other                                        1,123
           98= Not Ascertained                                 83
           99= Refused                                        217

  HOUSEID  (1000454 - 12227328)                            29,647

  LIF_CYC  01= 1 adult, no children                         2,081  See documentation notes for LIF_CYC
           02= >1 adult, no children                        8,560
           03= 1 adult, child age 0-5                         228
           04= >1 adult, child age 0-5                      5,511
           05= 1 adult, child age 6-15                        623
           06= >1 adult, child age 6-15                     6,689
           07= 1 adult, child age 16-21                       258
           08= >1 adult, child age 16-21                    2,035
           09= 1 adult, retired, no children                  414
           10= >1 adult, retired, no children              3,248

  MSASIZE  01= Less than 250,000                            3,234  See documentation notes for MSASIZE
           02= 250,000 - 499,999                            1,864
           03= 500,000 - 999,999                            3,672
           04= 1,000,000 - 2,999,999                        5,186
           05= 3,000,000 or more                           10,110
           94= Legitimate skip, not in an MSA               5,581

  MSTR_MON 1= January                                       2,071  Date of the household interview
           2= February                                      2,347
           3= March                                         3,069
           4= April                                         2,447
           5= May                                           3,684
           6= June                                          3,442
           7= July                                          2,396
           8= August                                        2,139
           9= September                                     1,748
           10= October                                      2,469
           11= November                                     2,156
           12= December                                     1,679

  MSTR_YR  95                                              17,962  Date of the household interview
           96                                              11,685

  PERSONID 1                                               15,517
           2                                                9,333
```

Target Variable:	Var Type:	Width:	1990 Var:	Variable Label:	Section:	Item ID:
PERSONID	N	2	S	Person ID number	*	*
PROXY	C	2	H_PROXY	Proxy respondent for person data	*	*
RAIL	C	2	N	Presence/absence of rail	*	*
RET_MON	C	2	S	Return month of travel period trip	H	3
RET_YR	C	2	S	Return year of travel period trip	H	3
R_AGE	N	3	S	Age of sample person	D	3
R_SEX	C	2	S	Sex of sample person	D	4
SUBSTRAT	N	1	*	Substratum within VARSTRAT	*	*
SUM_STAT	C	3	N	Summary status code for household	*	*
TDAY_MON	N	2	S	Travel day date (MM)	*	*

```
   Target
   Variable  Value Range and Codes:                    Freqs:  Comments:
   ------------------------------------------------------------------------------------------------------

             3                                          3,046
             4                                          1,316
             5                                            339
             6                                             73
             7                                             22
             8                                              1
             9                                              0
            10                                              0

   PROXY     01= Yes                                    6,999  01=person and trip data were collected from
                                                               proxy respondent
             02= No                                    22,648

   RAIL      01= Yes                                    1,753  01=Urban areas 1,250,000 population or
                                                               greater with subway/elevated rail,02=other
                                                               areas
             02= No                                    27,894

   RET_MON   1= January                                 1,597  Date returned home (travel period trip)
             2= February                                2,147
             3= March                                   3,373
             4= April                                   2,628
             5= May                                     3,623
             6= June                                    3,158
             7= July                                    2,660
             8= August                                  2,108
             9= September                               1,921
            10= October                                 2,457
            11= November                                2,272
            12= December                                1,687
            98= Not ascertained                            16

   RET_YR    95                                        17,517  Date returned home (travel period trip)
             96                                        12,114
             98= Not ascertained                           16

   R_AGE     (5 - 88)                                  29,647
             5-75= (ages 5-75)                         29,135
              77= (ages 76-79)                            299
              82= (ages 80-84)                            164
              88= (ages 85-102)                            49

   R_SEX     01= Male                                  16,663
             02= Female                                12,984

   SUBSTRAT  1                                            471
             2                                         29,176

   SUM_STAT  050                                       26,396  50=all adults responded, 51=at least 50% of
                                                               adults responded
             051                                        3,251

   TDAY_MON  1= January                                 1,489  Date of travel day for the household
             2= February                                2,035
             3= March                                   3,299
             4= April                                   2,868
             5= May                                     3,322
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97

(This page revised March 1999)

```
   Target     Var
   Variable:  Type:  Width:  1990 Var:  Variable Label:                                           Section:  Item ID:
   -------------------------------------------------------------------------------------------------------------------

   TDAY_MON   N      2       S          Travel day date (MM)                                      *         *




   TDAY_YR    N      2       S          Travel day date (YY)                                      *         *

   TOWHYPAS   C      2       N          Trip purpose for passenger                                H         7













   TOWHYTRP   C      2       S          Trip purpose travel period trip                           H         6
```

```
   Target
   Variable  Value Range and Codes:                          Freqs:  Comments:
   ----------------------------------------------------------------------------------------------------------------

             6= June                                          3,039
             7= July                                          2,826
             8= August                                        2,306
             9= September                                     2,098
             10= October                                      2,337
             11= November                                     2,353
             12= December                                     1,675

   TDAY_YR   95                                              17,139  Date of travel day for the household
             96                                              12,508

   TOWHYPAS  01= To work                                         20  Question is asked only if TOWHYTRP=09
             02= Work-related business                          24
             03= Return to work                                  2
             04= Shopping                                        8
             05= School                                         91
             06= Religious activity                              1
             07= Medical/dental                                 65
             08= Other family or personal business             48
             09= Take someone somewhere                         0
             10= Pick up someone                                0
             11= Vacation                                       22
             12= Visit friends or relatives                    80
             13= Went out to eat                                0
             14= Other social/recreational                     48
             15= Change mode of transportation                  0
             16= Other, specify                                 0
             17= Home                                          131
             94= Legitimate skip                            29,103
             98= Not ascertained                               4
             99= Refused                                        0

   TOWHYTRP  01= To work                                      1,845  Sample person's main purpose for trip
             02= Work-related business                        4,895
             03= Return to work                                  0
             04= Shopping                                     1,239
             05= School                                         294
             06= Religious activity                            231
             07= Medical/dental                                570
             08= Other family or personal business           3,018
             09= Take someone somewhere                        544
             10= Pick up someone                               514
             11= Vacation                                     1,915
             12= Visit friends or relatives                   7,713
             13= Went out to eat                                84
             14= Other social/recreational                   6,275
             15= Change mode of transportation                  0
             16= Other, specify                                494
             17= Home                                            0
             94= Legitimate skip                                0
             98= Not ascertained                                15
             99= Refused                                        1
```

Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97

```
 Target     Var
 Variable: Type: Width: 1990 Var: Variable Label:                                    Section: Item ID:
 -------------------------------------------------------------------------------------------------------

 TO_TRANS   C     2       N          Main transporation means - period trip     H          8
```

```
 TPER_BMO   N     2       S          Travel period beginning date (MM)          *          *
```

```
 TPER_BYR   N     2       S          Travel period beginning date (YY)          *          *

 TPER_EMO   N     2       S          Travel period ending date (MM)             *          *
```

```
  Target
  Variable  Value Range and Codes:                        Freqs:  Comments:
  ---------------------------------------------------------------------------------------------------------

  TO_TRANS  01= Automobile                                 19,467  Main  means of transportation
            02= Van                                         2,997
            03= Sport utility vehicle                       1,254
            04= Pickup truck                                2,594
            05= Other truck                                   704
            06= RV (recreational vehicle)                      89
            07= Motorcycle                                     44
            08= Other POV                                      73
            09= Bus                                           507
            10= Amtrak                                        103
            11= Commuter train                               115
            12= Streetcar/trolley                             11
            13= Subway/elevated rail                          33
            14= Airplane                                    1,283
            15= Taxicab                                        3
            16= Bicycle                                        4
            17= Walk                                           6
            18= School bus                                    130
            19= Other non-POV                                190
            94= Legitimate skip                                0
            98= Not ascertained                               40
            99= Refused                                         0

  TPER_BMO  1= January                                      1,980
            2= February                                     2,435
            3= March                                        3,024
            4= April                                        2,433
            5= May                                          3,783
            6= June                                         3,524
            7= July                                         2,280
            8= August                                       2,167
            9= September                                    1,762
            10= October                                     2,464
            11= November                                    2,148
            12= December                                    1,647

  TPER_BYR  95                                             17,777
            96                                             11,870

  TPER_EMO  1= January                                      1,489
            2= February                                     2,035
            3= March                                        3,299
            4= April                                        2,868
            5= May                                          3,322
            6= June                                         3,039
            7= July                                         2,826
            8= August                                       2,306
            9= September                                    2,098
            10= October                                     2,337
            11= November                                    2,353
            12= December                                    1,675

  Progid: disk46:[wmynpts.pubfiles]cbrp_tper.sas Date: 23SEP97
```

```
Target      Var
Variable:  Type:  Width:  1990 Var:  Variable Label:                            Section:  Item ID:
------------------------------------------------------------------------------------------------------

TPER_EYR    N      2       S          Travel period ending date (YY)            *         *


TRIPNUM     N      2       S          Persons travel period trip number         H         *




VARSTRAT    N      2       S          Sample stratum                            *         *

WORKER      C      2       S          Respondent is a worker                    D         12



WRKCOUNT    N      2       WRKRCNT    No. of workers in HH                      *         *




WTTRPFIN    N      11.3    S          Final travel period trip weight           *         *
```

```
  Target
  Variable  Value Range and Codes:                     Freqs:  Comments:
  -------------------------------------------------------------------------------------------------------

  TPER_EYR  95                                          17,139
            96                                          12,508

  TRIPNUM   1                                           20,945  ID number of trip for sample person. See
                                                                documentation for TRIPNUM
            2                                            5,104
            3                                            1,842
            4                                            1,016
            5                                              607
            6                                               43
            7                                               31
            8                                               25
            9                                               18
            10                                              12
            11                                               3
            12                                               1

  VARSTRAT  (1 - 70)                                    29,647

  WORKER    01= Yes                                     20,462  Response to question D-12, as verified or
                                                                corrected by the response to F-2
            02= No                                       9,185

  WRKCOUNT  0                                            3,120  Derived from WORKER variable
            1                                            8,806
            2                                           13,785
            3                                            2,955
            4                                              853
            5                                              113
            6                                               10
            7                                                5

  WTTRPFIN  (3 - 1416647)                               29,647  Used to weight travel period trip file data
                                                                (weights up to annual estimates)
```

APPENDIX D. TRAVEL CONCEPTS AND GLOSSARY OF TERMS

TRAVEL CONCEPTS

PERSON TRIP
DEFINITION - A trip by one person in any mode of transportation. This is the most basic and universal measure of personal travel. Each record in the Travel Day and Travel Period files in the NPTS dataset represents one person trip.

EXAMPLES - Two people travelling together in one car are counted as two person trips. Three people walking to the store together are counted as three person trips.

WHEN TO USE -The unit of person trips must be used when comparing travel by various modes (e.g., private vehicles, public transportation, walking, school bus, air, etc.). It is the appropriate unit of measure for the movement of people, as opposed to vehicles, e.g., "the High Occupancy Vehicle (HOV) lanes carry 42 percent of all person trips to the central city."

HOW TO COMPUTE - Because the person trip is the basic unit of measure on the Travel Day files, to obtain total person trips, the user should sum the weighted travel day records, i.e. sum WTTRDFIN. The resulting estimate is 378,930,000,000 person trips made by U.S. residents in the course of a year.

PERSON MILES OF TRAVEL (PMT)
DEFINITION - The number of miles travelled by each person on a trip.

EXAMPLES - If two people travelling together take a six-mile subway trip to the airport, that trip results in 12 person miles of travel. A four-mile van trip with a driver and three passengers counts as 16 person miles of travel.

WHEN TO USE - As with person trips, person miles must be used when analyzing travel by the various modes of transport. It is the appropriate measure when the topic of analysis is the miles travelled by people, not vehicles.

ALIAS - Person miles is often called Passenger Miles, particularly in the transit and airline industries.

HOW TO COMPUTE- Multiply each weighted person trip (WTTRDFIN) by the trip distance in miles (TRPMILES). When this is done for all trips on the Travel Day file with miles reported, the resulting estimate is 3,411,122 million person miles of travel by U.S. residents in the course of a year.

WARNING - When computing TRPMILES, be sure to exclude entries of:
      9998, miles not ascertained, and
      9999, refused to report miles.
 Also, remember to convert any special codes, such as:
      9996, less than one block, to some appropriate measure such as 0.06 mile, and
      9997, half a mile, to 0.5 miles.

VEHICLE TRIPS

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

EXAMPLES - Two people travelling together in a car would be counted as one vehicle trip. Four people going to a restaurant in a van is considered one vehicle trip.

NPTS MODE RESTRICTIONS - To be considered a vehicle trip in NPTS, the trip must have been made in a privately operated vehicle, namely a household-based car, van, sport utility vehicle, pickup truck, other truck, recreational vehicle, motorcycle or other POV. The vehicle does not need to belong to the household.

Trips made in other highway vehicles, such as buses, streetcars, taxis, and school buses are collected in the NPTS, but these are shown as person trips by those modes. The design of the NPTS is such that it does not serve as a source for vehicle trips in modes such as buses, because there is no way to trace the movement of the bus fleet throughout the day. Those interested in vehicle trips by buses, taxis, etc. need to use a data source that relies on reports from the fleet operators of those vehicles. The Section 15 report published by the Federal Transit Administration is one such source.

WHEN TO USE -   The unit of vehicle trips is most appropriately

used when considering POV travel, e.g., " 20 percent of all POV trips are for commuting to and from work."

HOW TO COMPUTE -The variable VTR_FLG was created to allow the data user to select the vehicle trip records from the travel day file.   The typical manner of computing vehicle trips from the NPTS file is to impose two limits on the full universe of Travel Day trips:
- travel mode must be POV (TRPTRANS = 01 -08), and
- only the driver's trip is captured (DRVR_FLG = 01).
The second limitation is to insure that the trip is counted only once. Remember that the NPTS Travel Day file is a person trip file, so if three household members went somewhere by car, that trip is reflected in three travel day trip records. To insure that it is only counted once as a vehicle trip, the driver's record is used.

To obtain the total of all vehicle trips, sum all weighted trips that meet the two conditions above, i.e., where VTR_FLG = 01. The resulting estimate is 229,745,000,000 vehicle trips made by U.S. residents in the course of a year.

VEHICLE MILES OF TRAVEL (VMT)

DEFINITION - One vehicle mile of travel is the movement of one privately operated vehicle (POV) for one mile, regardless of the number of people in the vehicle.

EXAMPLES- When one person drives her car 12 miles to work, 12 vehicle miles of travel have been made. If two people travel three miles by pickup, three vehicle miles of travel have been made.

SAME MODE RESTRICTIONS - For NPTS data, vehicle miles are restricted to the same privately-operated vehicles as vehicle trips(see above), that is a household-based car, van, sport utility vehicle, pickup truck, other truck, recreational vehicle, or other POV. .

WHEN TO USE- Vehicle miles of travel (VMT) are a very commonly used measure of highway travel. This measure is particularly important when analyzing highway capacity, congestion and air quality.

HOW TO COMPUTE -   Multiply each weighted vehicle trip by the distance. In terms of NPTS variables, this would look like

(VTR_FLG=01 times WTTRDFIN) times TRPMILES.

WARNING - When computing TRPMILES, be sure to exclude entries of:

    9998, miles not ascertained, and

    9999, refused to report miles.

Also, remember to convert any special codes, such as:

    9996, less than one block, to some appropriate measure such as 0.06 mile, and

    9997, half a mile, to 0.5 miles.

The annual estimate for VMT from the 1995 NPTS is 2,068,368 million vehicle miles.

VEHICLE OCCUPANCY

DEFINITION - For NPTS data, vehicle occupancy is generally computed as person miles of travel per vehicle mile (referred to as the travel method) . Note that the other commonly-used definition of vehicle occupancy is persons per vehicle trip (referred to as the trip method) .

COMMENTS - Because longer trips often have higher occupancies, the travel method generally yields a higher rate (1.59 for the 1995 NPTS)   than the trip method (1.50). The calculation of the travel method requires that trip miles be reported, thus it is calculated on a slightly smaller number of trips than the trip method.

HOW TO COMPUTE - The four variables that may be used in the computation are described earlier in this section. Just remember to limit the denominator to person trips or person miles **in POVs**.

GLOSSARY

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

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

Block Group   A subdivision of a Census tract that averages 1000 to 1100 people, and approximately 400-500 housing units.

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

Northeast Region
> **New England Division**: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
> **Middle Atlantic Division** : New Jersey, New York, Pennsylvania

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

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

West Region
> **Mountain Division**: Arizona, Colorado, Idaho, Montana,

Nevada, New Mexico, Utah, Wyoming
Pacific Division: Alaska, California, Hawaii, Oregon, Washington

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

Consolidated Metropolitan Statistical Area (CMSA)   A large metropolitan complex of 1 million or more population, containing two or more identifiable component parts designated as primary metropolitan statistical areas (PMSAs). For example, the Boston CMSA is composed of six PMSAs.

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

For travel period trips, the destination is the farthest point of travel.

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

Employed   A person is considered employed if he/she worked for pay, either full time or part time, during the week before the interview.

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

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

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

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

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

Licensed Driver

A licensed driver is any person who holds a valid driver's license from any state.

Means of Transportation

A mode of travel used for going from one place (origin) to another (destination). A means of transportation includes private and public modes, as well as walking. For travel day trips, each new destination constitutes a separate trip, UNLESS it was to change vehicles or means of transport. A trip made to change means was given segmented treatment if one of the means used was public transportation or Amtrak (see discussion of segmented trips in Chapter 4, Section B of this Guide.)

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

Private Vehicle

Automobile A privately owned and/or operated licensed motorized vehicle including cars and station wagons. Leased and rented cars are included if they are privately operated and not used for picking up passengers in return for fare.

Van A privately owned and/or operated van or minivan designed to carry 5 to 13 passengers, or to haul cargo.

Sport Utility Vehicle A privately owned and/or operated vehicle that is a hybrid of design elements from a van, a pickup truck and a station wagon. Examples include a Chevrolet Blazer, Ford Bronco, Jeep Cherokee, or Nissan Pathfinder.

Pickup Truck A pickup truck is a motorized vehicle, privately owned and/or operated, with an enclosed cab that usually accommodates 2-3 passengers, and an open cargo area in the rear. Pickup trucks usually have the same size of wheel-base as a full-size station wagon. This category also includes pickups with campers.

Other Truck This category consists of all trucks other than pickup trucks (i.e., dump trucks, trailer trucks, etc.).

RV or Motor Home An RV or motor home includes a self-powered recreational vehicle that is operated as a unit without being towed by another vehicle (e.g., a Winnebago motor home).

Motorcycle This category includes large, medium, and small motorcycles. Minibikes are excluded because they cannot be licensed for highway use.

Other POV   A vehicle that cannot be classified into one of the categories above.

Public Transportation

Bus The bus category includes intercity buses, mass transit systems, and shuttle buses that are available to the general public. Also, Dial-A-Bus and Senior Citizen buses that are available to the public are included in this category. However, shuttle buses operated by a government agency or private industry for the convenience of employees, contracted or chartered buses, or school buses are excluded from this category.

Commuter Train This category includes commuter trains and passenger trains other than elevated rail trains and subways. Commuter Train also includes local and commuter train service. Amtrak intercity service is excluded from this category.

Streetcar/Trolley This category includes trolleys, streetcars, and cable cars.

Elevated Rail/Subway This category includes elevated railways and subway trains in a city.

Other Modes

Amtrak   Amtrak is defined as the U.S. national passenger railroad service providing intercity train service. Amtrak intercity service is excluded from the commuter train data.

Airplane Airplanes include commercial airplanes and smaller planes that are available for use by the general public in exchange for a fare. Private planes and helicopters are included under "Other."

Taxi Taxis include the use of a taxicab by a driver for hire, or by a passenger for fare, and airport limousines. The taxi category does not include rental cars if they are privately operated and not picking up passengers in return for fare.

Bicycles This category includes bicycles of all speeds and sizes that do not have a motor.

Walk This category includes walking and jogging.

School Bus This category includes county school buses, private school buses, and buses chartered from private companies for the express purposes of carrying students to or from school and/or school-related activities.

Moped (Motorized Bicycle) This category includes motorized bicycles equipped with a small engine, typically characteristic of a two horsepower motor or less. Minibikes, dirt bikes, and trail bikes are excluded from this category. Note that a motorized bicycle may or may not be licensed for highway use.

Other Includes any types of transportation not previously listed, e.g. ferry boat.

Metropolitan Statistical Area (MSA)	Except in the New England States, a Metropolitan Statistical Area is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition, contiguous counties are included in an MSA if, according to certain criteria, they are socially and economically integrated with the central city. In the New England States, MSA's consist of towns and cities instead of counties.
Motorized Vehicle	Motorized vehicles are all vehicles that are licensed for highway driving. Snow mobiles and minibikes are specifically excluded.

Occupancy   Occupancy is the number of persons, including driver and passenger(s) in a vehicle. NPTS occupancy rates are generally calculated as person miles divided by vehicle miles.

Origin   Origin is the starting point of a trip.

Overlap Trip   A travel period trip that occurs on travel day, and is thus collected in both portions of the NPTS questionnaire. To insure that this trip is not counted twice, eliminate overlap trips from travel day data when travel day and travel period data will be added together.

Passenger   For a specific trip, a passenger is any occupant of a motorized vehicle, other than the driver.

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

Person Trip   A person trip is a trip by one or more persons in any mode of transportation. Each person is considered as making one person trip. For example, four persons traveling together in one auto are counted as four person trips.

POV   A privately-owned vehicle or privately-operated vehicle. Either way, the intent here is that this is not a vehicle available to the public for a fee, such as a bus, subway, taxi, etc.

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

Travel Period   A travel period consists of 14 days. The travel period is the 13 day period which precedes the travel day, and includes the 14th day as the travel day for a sampled household.

Travel Day Trip   A travel day trip is defined as any time the respondent went from one address to another by private motor vehicle, public transportation, bicycle, walking, or other means. However, a separate trip is not counted in two instances:
1. When the sole purpose for the trip is to get to another vehicle or mode of transportation in order to continue to the destination.
2. Travel within a shopping center, mall or shopping areas of 4-5 blocks is to be considered as travel to one destination.

Travel Period Trip   A travel period trip is a roundtrip of 75 miles or more with the return home portion taking place during the 14-day travel period. The outgoing portion of this trip can take place at any time, but the return must be within the 14-day period. Note that a trip made to move the household to a new residence would be counted as a travel period trip, even though it is not a roundtrip.

Trip Purpose   A trip purpose is the main reason that motivates a trip. There are 17 trip purposes used in the 1995 NPTS. For travel day trips, if there is more than one reason, and the reasons do not involve different destinations, then only the main reason is chosen. If there are two or more reasons, and they each involve different destinations, then each reason is classified as a separate trip. For travel period trips, if there is more than one reason, the primary reason is collected.

For the 1995 survey, trip purposes were collected using a From-To approach. For each trip, the origin and destination are on the file in generic terms, e.g. from work to shopping.

Note that there are two major purpose categories, Family and Personal Business and Social and Recreational, that are used to group like purposes. The 17 trip reasons are defined as follows:

To or From Work Travel between home and a place where one

reports for work.

Work-Related Trips for the respondent's job or business, other than to or from the workplace. Examples: a plumber drives to a wholesale dealer to purchase supplies for his business, or a company executive travels from his office to another firm to attend a business meeting. Out-of-town business trips and professional conventions are included in this category.

Return to Work Returning to the workplace after leaving for some reason. Examples: returning to work from lunch, shopping, a meeting, etc.

FAMILY AND PERSONAL BUSINESS:

>**Shopping** Trips to purchase commodities such as groceries, furniture, clothing, etc. for use or consumption elsewhere. This purpose also includes window-shopping and trip made to shop even if nothing is purchased.

>**Doctor/Dentist** This category includes trips made for medical, dental, or psychiatric treatment, or other related professional services.

>**Take someone somewhere (Dropoff)** Escorting someone else to their destination. Examples: taking a child to school or daycare, taking someone to a friend's house, a doctor's appointment, etc.

>**Pick up someone** Escorting someone on the return from their trip destination. Examples: return from school or daycare, a friend's house, a doctor's appointment, etc.

>**Other Family or Personal Business** This category includes the purchase of services such as dry cleaning, auto repair, haircuts, banking, legal services, etc.

School Trips to school, college or university classes, or attending school-related functions, such as PTA meetings, seminars, etc. Community meetings or activities that use the school building are not considered trips to school.

Religious Activities Trips to attend religious services or to participate in other religious activities. Social activities that take

place at a house of worship, but cannot be classified as religious, are not included in this category.

SOCIAL AND RECREATIONAL:

> **Visit Friends or Relatives** Trips made primarily to visit friends or relatives.

> **Out to Eat** Trips made to go to restaurants or other eating establishments, such as coffee shops, ice cream shops, bagel shops, etc. Note that trips made to purchase food for take-out are not included here, they are considered shopping trips.

> **Vacation** This category is for trips reported by the respondent as their vacation.

> **Other Social or Recreational** Trips taken to enjoy some form of social activity involving friends or acquaintances. This category includes trips for general entertainment or recreation (as an observer or a participant.) Examples: movies, video rentals, plays, parties, dancing, sporting events, sightseeing.

Return home - A trip made to go to the respondent's residence .

Other Trips that do not fit in any of the other trip purposes above.

For more on trip purpose coding and variables, see **Appendix M.**

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

For the 1995 NPTS, an approximate classification of sample households was based upon the population density of the Census block group containing the household. Households in block groups estimated to have at least 1,000 persons per square mile were classed as urban; those in block groups with less than 1,000 persons per square miles were classed as not urban.

Vehicle   In the 1995 NPTS, the term vehicle includes autos, passenger vans, sport utility vehicles, pickups and other light trucks, RV's, motorcycles and mopeds owned or available to the household. Note that in the 1969 NPTS, the term vehicle was limited to cars or passenger vans. Estimates show that in 1969 there were an additional 7.5 million pickups and other light trucks that are not reflected in the 1969 NPTS data.

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

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

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

Vehicle Type   For purposes of the 1995 NPTS, one of the following:
                        1. Automobile (including station wagon)
                        2. Van
                        3. Sport Utility Vehicle
                        4. Pickup Truck (including pickup with camper)
                        5. Other Truck
                        6. RV or Motor Home
                        7. Motorcycle
                        8. Other
                        See "Means of Transportation" for definitions of these vehicle types. For NPTS, vehicle types are limited to privately operated vehicles (POV) because other vehicles that the respondent may have rode in (e.g., bus) were not tracked throughout the day, as was the case with household vehicles.

Worker   See "Employed".

APPENDIX E
1995 NPTS QUESTIONNAIRE

9/29/97 This copy of the questionnaire has been annotated with the variable names in bold and enclosed in brackets, e.g. **{VARIABLE}.**

SECTION A - TELEPHONE NUMBER SCREENING

NOTE: THROUGHOUT SECTION A, A NOTE WILL BE DISPLAYED IN THE TOP RIGHT CORNER OF EVERY SCREEN INDICATING WHETHER OR NOT AN ADVANCE LETTER WAS SENT TO THE CASE. THE MESSAGE WILL BE "LETTER SENT" OR "NO LETTER."

1. Hello, this is _____, calling on behalf of the U.S. Department of Transportation. Have I reached (NUMBER)?

   1   YES → GO TO QUESTION 3
   2   NO
   3   LANGUAGE BARRIER → GO TO QUESTION 11
   -1   DK → GO TO QUESTION 3
   -2   RE → GO TO QUESTION 3

2. What number have I reached?

   NUMBER: _____ → THANK RESPONDENT; HANG UP

   -1   DK
   -2   RE

   CATI CHECK: IS THIS THE SECOND TIME THIS SAME WRONG NUMBER HAS BEEN REACHED?

   1   YES → SET OUTCOME=30 (NONWORKING NUMBER)
   2   NO → RETURN TO DIAL SCREEN FOR INTERVIEWER TO DIAL AGAIN.

3. We are conducting an important study on transportation in the U.S. We are calling a random sample of telephone numbers, and I need to know if this is a home, a business, or something else?

   1   HOME → GO TO QUESTION 6
   2   BUSINESS/INSTITUTION
   3   OTHER

4. Does anyone live there on the premises?

   1   YES
   2   NO → GO TO QUESTION 11

5.   Is this the number they use as their home phone?

    1   YES
    2   NO → GO TO QUESTION 11
    -1   DK
    -2   RE

6.   Does this telephone number serve only (your/one) household or more than one household?

    1   SERVES ONE HOUSEHOLD → GO TO QUESTION 8
    2   SERVES MORE THAN ONE HOUSEHOLD
    -1   DK → GO TO QUESTION 8
    -2   RE → GO TO QUESTION 8

7.   Can you tell me the total number of households served by this telephone number?

    {TEL_HHS}

    NUMBER OF HOUSEHOLDS SERVED: _____

    -1   DK
    -2   RE

Now, I would like to talk about <u>your</u> household only.

8.   Do ten or more persons currently live in this household?

    1   YES
    2   NO → GO TO QUESTION 10
    -1   DK → GO TO QUESTION 10
    -2   RE → GO TO QUESTION 10

9.   Are any of these persons related to each other?

    1   YES
    2   NO → GO TO QUESTION 11

10.   CATI: SET SCREENING LEVEL STATUS CODE=50.

For the rest of the questions, I need to speak to a member of the household who is at least 18 years old.

Are you a member of this household and at least 18 years old?

1   YES → GO TO HOUSEHOLD QUESTIONNAIRE   **{HHRESP}**
2   NO →   ASK TO SPEAK TO A MEMBER 18+; IF NONE AVAILABLE, MAKE
                 ARRANGEMENTS FOR CALLBACK. WHEN AVAILABLE,
                 CONTINUE WITH HOUSEHOLD QUESTIONNAIRE.
3   NO ONE 18 OR OLDER LIVES HERE → GO TO HOUSEHOLD
         QUESTIONNAIRE
4   NO ADULT RESIDENT SPEAKS ENGLISH → GO TO QUESTION 11

11.   That is all the questions I have. Thank you very much for your help.

CATI: SET OUTCOME AND STATUS CODES AND EXIT CASE

SECTION B - VEHICLE DATA - (HOUSEHOLD RESPONDENT)

(Hello, this is _____ calling on behalf of the U.S. Department of Transportation.) We are conducting the Nationwide Personal Transportation Survey. The results will be used for future planning of roads and other transportation needs. This interview will take about 8 minutes. Your participation is voluntary, and we can skip any question you choose not to answer.

(IF ASKED: The study has been authorized by Title 23, United States Code. The OMB clearance number is 2125-0545, expiration June 30, 1996.)

First, I would like to ask you some questions about motor vehicles owned or used by the household. Please do not include the vehicle of anyone visiting or staying with you if they usually live somewhere else, such as a college student away at school.

1.   How many licensed vehicles were owned, or available for regular use by members of your household during the past two weeks?

            _____ NUMBER OF VEHICLES → IF NONE, GO TO NEXT SECTION

            (INCLUDE LEASED OR COMPANY-OWNED LICENSED MOTORIZED VEHICLES IF THEY ARE USED BY HOUSEHOLD MEMBERS ON A REGULAR BASIS.)

            IF MORE THAN ONE, SAY: I have a few questions about each of these vehicles. Let's start with the newest one.

2.   What are the make, model and year (of the newest one/of the next newest vehicle)?

        {MAKECODE, MODLCODE, VEHYEAR}

        NOTE: AN ON-LINE LOOK-UP TABLE IS USED. INTERVIEWER SELECTS MAKE AND THEN SELECTS MODEL AND YEAR FROM DISPLAYED LIST.

3.   IF VEHICLE TYPE IS IN LOOKUP TABLE, CATI WILL CODE QUESTION 3 AUTOMATICALLY AND GO TO QUESTION 4.

        What type vehicle is it? (READ CHOICES AS NECESSARY.)

        {VEHTYPE}

         01   AUTOMOBILE   05   OTHER TRUCK

02	VAN (MINI, CARGO, PASSENGER)	06	RV (RECREATIONAL
03	UTILITY VEHICLE (BRONCO, BLAZER, 4RUNNER, PATHFINDER, ETC.)		VEHICLE)
		07	MOTORCYCLE
04	PICKUP TRUCK	08	OTHER → SPECIFY:

4.   Did you get the vehicle in the past 12 months (that is, since (MONTH/YEAR))?

{VEH12MNT}

1   YES
2   NO → GO TO QUESTION 6

5.   In what month and year?

{PURCHMON, PURCHYR}

MONTH _____   YEAR _____

CATI EDIT CHECK: VERIFY THAT DATE GIVEN IS WITHIN THE PAST 12 MONTHS BUT EQUAL TO OR EARLIER THAN TODAY'S MONTH/YEAR.

6.   Was it new or used when you got it?

{VEHNEW}

1   NEW
2   USED

(CODE DEMONSTRATORS, PROGRAM CARS, OR EXECUTIVE CARS AS NEW.)

CATI EDIT CHECK: IF VEHICLE PURCHASED NEW IN PAST 12 MONTHS [Q4=YES AND Q6=NEW], VERIFY THAT MODEL YEAR IS 94, 95, OR 96.

7.   About how many miles was this vehicle driven [during the last 12 months/since (MONTH/YEAR BOUGHT OR RECEIVED)]? Include mileage driven by all drivers.

{VEHMILES, ANNMILES}

_____ MILES

CATI: IF VEHICLE ACQUIRED IN PAST 12 MONTHS, CONVERT MILES REPORTED TO ANNUALIZED MILEAGE. [CALCULATE NUMBER OF DAYS BETWEEN TODAY'S DATE AND FIRST DAY OF MONTH/YEAR REPORTED IN Q5. DIVIDE 365 BY THIS NUMBER AND MULTIPLY BY MILEAGE REPORTED IN Q7.]

IF ANNUALIZED MILEAGE > 40,000, CATI WILL PROMPT INTERVIEWER TO VERIFY WITH R.

RETURN TO QUESTION 2 AND OBTAIN INFORMATION ON THE NEXT VEHICLE UNTIL INFORMATION HAS BEEN OBTAINED FOR ALL HOUSEHOLD VEHICLES.

8.   I have listed...
      [CATI WILL DISPLAY VEHICLES BY MAKE/MODEL/YEAR].

      Are these all the vehicles that were in working condition and available to your household in the past 2 weeks?

      1   CORRECT → GO TO NEXT SECTION
      2   INCORRECT → MAKE CORRECTIONS AS NEEDED

SECTION C - HOME AND NEIGHBORHOOD - (HOUSEHOLD RESPONDENT)

1. Is local bus service available in your town or city?

    {BUS_AVL}

    1   YES
    2   NO → GO TO QUESTION 6

    (INCLUDE ONLY SERVICES THAT ARE AVAILABLE FOR USE BY THE
    GENERAL PUBLIC FOR LOCAL OR COMMUTER TRAVEL, INCLUDING DIAL-
    A-BUS AND SENIOR CITIZEN BUS SERVICE. DO NOT INCLUDE LONG
    DISTANCE BUSES OR THOSE CHARTERED FOR SPECIFIC TRIPS.)

2. How far is it from your home to the nearest bus stop?

    {BUS_DIST, BUSBLOCK, BUSMILE}

    _____ BLOCKS   OR _____ MILES

    996 = LESS THAN 1 BLOCK
    997 = 1/2 MILE

3. Is subway, commuter train, or streetcar service available in your town or city?

    {OTHERPTR}

    1   YES
    2   NO → GO TO QUESTION 6

    (INCLUDE ONLY SERVICES THAT ARE AVAILABLE FOR USE BY THE
    GENERAL PUBLIC FOR LOCAL OR COMMUTER TRAVEL, INCLUDING
    ELEVATED TRAINS. DO NOT INCLUDE LONG DISTANCE SERVICES OR
    THOSE CHARTERED FOR SPECIFIC TRIPS.)

4. (Which of these are available?) (CODE ALL THAT APPLY.)

    {SUB_AVL, TRN_AVL, STC_AVL}

    1   SUBWAY
    2   COMMUTER TRAIN
    3   STREETCAR

E- 8

Section C (continued)

5.   REPEAT QUESTION 5 FOR EACH SERVICE MENTIONED IN QUESTION 4.

How far is it from your home to the nearest (subway/commuter train/streetcar) stop?

{SUB_DIST, SUBBLOCK, SUBMILE, TRN_DIST, TRNBLOCK, TRMILE, STC_DIST,   STCBLOCK, STCMILE}

_____ BLOCKS   OR _____ MILES

996 = LESS THAN 1 BLOCK
997 = 1/2 MILE

6.   Do you live in a...

{HOMETYPE}

1   Single house (detached),
2   Duplex,
3   Rowhouse or townhouse,
4   Apartment,
5   Mobile home or trailer?
6   OTHER → SPECIFY: _____

(CODE CONDOMINIUMS INTO APPROPRIATE CATEGORY BASED ON TYPE OF STRUCTURE. CODE DOUBLE TOWNHOUSE AS DUPLEX.)

CHECK ITEM: DOES R LIVE IN APARTMENT? [DOES Q6=4?]

1   YES
2   NO → GO TO QUESTION 8

7.   Is your apartment in a building with...

{HSTORIES}

1   5 or more stories, or
2   less than 5 stories?

Section C (continued)

8.   Is your home owned or rented?

        {HOMEOWN}

        1   OWNED
        2   RENTED
        3   PROVIDED BY JOB OR MILITARY
        4   OTHER → SPECIFY: _____

        (IF HOME IS NOT OWNED OUTRIGHT, BUT UNDER MORTGAGE, CODE "OWNED."
        IF R RENTS BUT SOMEONE WHO LIVES IN THE HOME OWNS IT, CODE "OWNED.")

SECTION D - PERSON DATA FOR EACH HOUSEHOLD MEMBER (ROSTER) - (HOUSEHOLD RESPONDENT)

Now I would like to ask you a couple of questions about each person in your household.

1.   How many people live in your household? Please do <u>not</u> include anyone who usually lives somewhere else or is just visiting, such as a college student away at school. (Please include anyone living or staying there now, and anyone who usually lives there but is now away from home such as traveling, or in the hospital.)

        TOTAL NUMBER: _____

2.   What is the first name of (the household member, or one of the members, who (owns/rents) the home/the next person who lives there)? (IF ASKED: We are not collecting last names for this survey, only first names. If you prefer, we can use initials if everyone in your home has different initials.)

        NAME OF (REFERENCE/NEXT) PERSON: _____

3.   How old is (PERSON)?

        {R_AGE, REF_AGE, P1_AGE through P10_AGE}

        AGE: _____

4.   ASK IF NOT APPARENT:

        Is (PERSON) male or female?

        {R_SEX, REF_SEX, P1_SEX through P10_SEX, HH_0TO4}

        1   MALE
        2   FEMALE

5.   ASK ONLY FOR REFERENCE PERSON:

        Is (PERSON) Hispanic?

        {HH_HISP}

        1   YES
        2   NO

6.   ASK ONLY FOR REFERENCE PERSON:

Is (he/she)...

{HH_RACE}

1   White
2   African American (Black),
3   Asian, or
4   some other race?
(ASIAN INCLUDES PACIFIC ISLANDERS SUCH AS HAWAIIANS AND
FILIPPINOS.)

7.   FOR REFERENCE PERSON, CATI WILL CODE "1" AND GO TO NEXT CHECK
      ITEM.

What is (PERSON)'s relationship to (REFERENCE PERSON)?

{R_RELAT, P1_REL through P10_REL}

ENTER CODE FOR RELATIONSHIP <u>TO REFERENCE PERSON</u>; FOR EXAMPLE
IF REFERENCE PERSON SAYS: I'm his mother", ENTER "3", NOT "4".

1   REFERENCE PERSON (NAME)
2   SPOUSE OF (NAME)
3   CHILD OF (NAME)
4   PARENT OF (NAME)
5   BROTHER/SISTER OF (NAME)
6   OTHER RELATIVE OF (NAME)
7   UNMARRIED PARTNER OF (NAME)
8   NON-RELATIVE OF (NAME)

CATI EDIT CHECK: IF THIS PERSON IS CHILD OF REFERENCE PERSON
[Q7=3], VERIFY THAT AGE IS LESS THAN REFERENCE PERSON'S AGE. IF
THIS PERSON IS PARENT OF REFERENCE PERSON [Q7=4], VERIFY THAT AGE
IS GREATER THAN REFERENCE PERSON'S AGE. MAKE SURE THAN NOT
MORE THAN ONE SPOUSE IS CODED.

CHECK ITEM: ARE THERE MORE PERSONS TO BE ASKED ABOUT?

        1   YES → RETURN TO QUESTION 2
        2   NO

8.   I have listed...

[CATI WILL DISPLAY ALL ROSTER INFORMATION FOR ALL PERSONS, INCLUDING NAME, AGE, GENDER, AND RELATIONSHIP TO REFERENCE PERSON.]

Is this correct?

1   YES
2   NO → MAKE CORRECTIONS AS NECESSARY. IF MORE THAN ONE PERSON OF DRIVING AGE IN THE HOUSEHOLD, GO TO QUESTION 11.

9.   Are you a driver?

{DRIVER, REF_DRVR}

1   YES
2   NO

10.   Do you have a job?

{WORKER, REF_WKR}

1   YES
2   NO

(HAVING A JOB MEANS WORKING FOR PAY OR PROFIT.)

GO TO QUESTION 13

11.   Which of the persons you have listed are drivers?

{DRVRCNT, P1_DRVR through P10_DRVR}

ENTER ROSTER NUMBER(S): _____

(CODE ALL DRIVERS MENTIONED, WHETHER LICENSED OR NOT.)

12.   Which of the persons work at a job?

{WKRCOUNT, P1_WKR through P10_WKR}

ENTER ROSTER NUMBER(S): _____

(HAVING A JOB MEANS WORKING FOR PAY OR PROFIT.)

13. IF THIS IS A SINGLE PERSON HOUSEHOLD, CATI WILL CODE QUESTION 13 AUTOMATICALLY AND GO TO QUESTION 14.

ASK IF NOT APPARENT:

And with whom am I speaking now?

{HHRESP}
ENTER ROSTER NUMBER: _____

14. CATI: SET HOUSEHOLD LEVEL STATUS CODE=50 AND DETERMINE TRAVEL DAY.

IF NO VEHICLES OR NO DRIVERS IN HOUSEHOLD, CATI WILL SKIP TO QUESTION 16.
IF SINGLE-PERSON HOUSEHOLD, CATI WILL CODE "1" FOR QUESTIONS 14 AND 15 FOR ALL VEHICLES AND GO TO QUESTION 15.

ASK QUESTIONS 14 AND 15 FOR EACH HOUSEHOLD VEHICLE.

(Now, about the household vehicle(s) you told me about earlier), Does one household member drive the (VEHICLE) most of the time?

{MAINDRVR}

1   YES
2   NO → ASK ABOUT NEXT VEHICLE

15. (Who is that?)

{WHOMAIN}

ENTER ROSTER NUMBER: _____

CATI EDIT CHECK: VERIFY THAT PERSON IS OF DRIVING AGE AND IS A DRIVER.

16. To better understand people's travel patterns, we would like to mail a one-day diary to (you/each person in your household who is 5 or older). We ask you to record each trip you make on DAY, DATE. (We/Along with each diary, we) will send 2 dollars in appreciation for the time it takes to complete. Then after (DATE), we will call you back to collect the information.

    CHECK ITEM: IS HOUSEHOLD ADDRESS KNOWN?

     1   YES
     2   NO → GO TO QUESTION 18

17. In order to mail the (diary/diaries) to you, I need to verify that your address is:

    (ADDRESS)
    (CITY, STATE)
    (ZIP CODE)

    1   CORRECT → GO TO QUESTION 19
    2   INCORRECT

    INTERVIEWER: WHICH DO YOU NEED TO MODIFY?

     1   STREET ADDRESS → ENTER CORRECT ADDRESS
     2   CITY → ENTER CORRECT CITY
     3   STATE → ENTER CORRECT STATE
     4   ZIP CODE → ENTER CORRECT ZIP CODE
     5   ALL CORRECT → GO TO QUESTION 19

18. In order to mail the (diary/diaries) to you, would you please tell me your mailing address?

    STREET ADDRESS _____
    CITY _____ STATE _____
    ZIP CODE _____

19. INTERVIEWER: HAS THE RESPONDENT AGREED TO COMPLETE THE DIARY AND PROVIDED MAILING ADDRESS?

    1   YES
    2   NO → Thank you very much for your time. EXIT CASE.

20. To whom should we address the envelope?

_____

21.   INTERVIEWER: DID THE RESPONDENT GIVE A HOME OR WORK ADDRESS?

1   HOME--STREET ADDRESS
2   HOME--PO BOX OR RR
3   WORK/OTHER
4   DON'T KNOW

CHECK ITEM: ARE THERE CHILDREN AGED 5-13 IN THE HOUSEHOLD?

1   YES
2   NO → GO TO QUESTION 23

22.   When we call back to collect the data, household members 14 and older will be asked to answer questions for themselves; however, someone else will need to answer for younger household members. Who would be the best person to give the information about them?

ENTER ROSTER NUMBER: _____

23.   We will mail the (diary/diaries) to you in a few days and will call you again after (TRAVEL DATE). Thank you for your time.

EXIT CASE

SECTION E - DRIVER INFORMATION AND CUSTOMER EVALUATION
(HOUSEHOLD MEMBERS 16 YEARS OR OLDER; PROXY PERMITTED)

1.   I'm going to read some difficulties people sometimes have when traveling. Thinking about your <u>day-to-day</u> travel, please tell me whether each of these is a large problem, a small problem, or no problem at all for you.

BASED UPON THE PREASSIGNED RANDOM INDICATOR, CATI WILL ADMINISTER THE APPROPRIATE SUBSET OF ITEMS FOR QUESTION 6. IF INDICATOR=1, FIRST BLOCK WILL BE ADMINISTERED. IF INDICATOR=2, THE SECOND BLOCK WILL BE ADMINISTERED. IF INDICATOR=3, THE THIRD BLOCK WILL BE ADMINISTERED.

		LG	SM	NO
BLOCK 1				
A Highway congestion	**{DTCONJ}**	1	2	3
B Rough pavement on highways	**{DTPAVE}**	1	2	3
C Being worried about getting lost in areas or neighborhoods you're not familiar with	**{DTNTFMLR}**	1	2	3
D Being worried about traffic accidents	**{DTACDT}**	1	2	3
E Poor walkways or sidewalks	**{DTWALK}**	1	2	3
BLOCK 2				
F Highway congestion	**{DTCONJ}**	1	2	3
G Air pollution caused by cars, trucks, and buses	**{DTPOLLTN}**	1	2	3
H Not knowing about traffic tie-ups or road construction	**{DTTIEUP}**	1	2	3
I Rough pavement on neighborhood streets	**{DTSTRTS}**	1	2	3
J Being worried about crime against motorists	**{DTCRIME}**	1	2	3
BLOCK 3				
K Highway congestion	**{DTCONJ}**	1	2	3
L Rough pavement on highways	**{DTPAVE}**	1	2	3
M Rough pavement on neighborhood streets	**{DTSTRTS}**	1	2	3
N Air pollution caused by cars, trucks, and buses	**{DTPOLLTN}**	1	2	3

    O Not knowing about traffic tie-ups or road construction **{DTTIEUP}**   1   2   3

Section E (continued)

CHECK ITEM 2: WAS PUBLIC TRANSPORTATION REPORTED AS AVAILABLE TO THE HOUSEHOLD? [DOES QUESTION C1=1]

    1   YES
    2   NO → GO TO QUESTION 4

2.   In the past two months, about how often (have you/has PERSON) used public transportation such as buses, subways, streetcars, or commuter trains?

{PTUSED}

    1   TWO OR MORE DAYS A WEEK (11+ TIMES)
    2   ABOUT ONCE A WEEK (5-10 TIMES)
    3   ONCE OR TWICE A MONTH (2-4 TIMES)
    4   LESS THAN ONCE A MONTH (ONE TIME)
    5   NEVER
    6   NOT AVAILABLE
(DO NOT INCLUDE TAXIS. DO INCLUDE FERRIES.)

CHECK ITEM 3: IS THIS A PROXY INTERVIEW?

    1   YES → GO TO QUESTION 4
    2   NO

CHECK ITEM 4: DOES R USE PUBLIC TRANSPORTATION REGULARLY? [DOES Q2 = 1, 2, OR 3]?

    1   YES
    2   NO → GO TO QUESTION 4

3.   Thinking about your use of public transportation, please tell me whether each of these is a large problem, a small problem, or no problem at all for you.

BASED UPON THE PREASSIGNED RANDOM INDICATOR, CATI WILL ADMINISTER THE APPROPRIATE SUBSET OF ITEMS FOR QUESTION 8. IF INDICATOR=1, FIRST BLOCK WILL BE ADMINISTERED. IF INDICATOR=2, THE SECOND BLOCK WILL BE ADMINISTERED.

                                                   LG   SM   NO

BLOCK 1

A Crowding or difficulty getting a seat   **{PTCROWD}**   1   2
3

B The time it takes to use public transportation   **{PTTIMEON}**   1   2
                                                                                      3
C Being worried about crime   **{PTCRIME}**   1   2   3
D Public transportation stations and vehicles not being clean**{PTNTCLN}**1   2   3
E The difficulty of transfering between buses or other   **{PTTRANSF}** 1   2   3
        transit vehicles   1   2   3

BLOCK 2

F Crowding or difficulty getting a seat   **{PTCROWD}**   1   2
                                                                                      3
G The cost of using public transportation   **{PTCOST}**   1   2   3
H Public transportation being available at the times of day
        you need it   **{PTTMND}** 1   2   3
I Having access to a car when you need it   **{PTCARND}** 1   2   3
J The time it takes to use public transportation   **{PTTIMEON}**   1   2
3

4. How often (do you/does PERSON) wear (your/his/her) seat belt when driving or riding in
    a car or other private vehicle? Would you say...

    {FQSTBELT}

    1   Always, → GO TO CHECK ITEM 5
    2   Most of the time,
    3   Sometimes, or
    4   Never? → GO TO CHECK ITEM 5

5. What are the typical situations when (you do/PERSON does) not wear seat belts? (CODE
    ALL THAT APPLY.)
                                                                        SEE ALSO:
    1   WHEN FORGET   **{NSBFGET}**
    2   WHEN BROKEN/UNAVAILABLE   **{NSBBROKE}**
    3   SHORT TRIPS   **{NSBSHORT}**
            {NSBHURRY}
    4   LONG TRIPS   **{NSBLONG}**
            {NSBMED}
    5   IN BACK SEAT   **{NSBBACK}**   **{NSBNLIKE}**
    6   WHEN PASSENGER   **{NSBPSNG}**
            {NSBNOASK}
    7   WHEN DRIVER   **{NSBDRVR}**   **{NSBPOLIC}**

8   WHEN IN A CERTAIN VEHICLE (E.G. PICKUP)**{NSBSPVEH}**
{NSBSPCLH}

9   IN TOWN/CITY   **{NSBTOWN}**
{NSBSPPER}

11   OTHER → SPECIFY:_____**{NSBOTHER}**
{NSBTOWRK}

                    '   **{NSBWTHR}**

CHECK ITEM 5: WAS R LISTED AS DRIVER IN HOUSEHOLD ROSTER?

      1   YES
      2   NO → GO TO QUESTION 7

6.   IF THIS IS A SINGLE-PERSON HOUSEHOLD CATI WILL CODE "1" FOR QUESTION 6 AND GO TO QUESTION 8.

Just to verify, (you are/PERSON is) a driver, is that correct?

{DRIVER}

1   CORRECT, R DRIVES → GO TO QUESTION 8
2   INCORRECT, R DOES NOT DRIVE → CORRECT DRIVER FLAG ON HOUSEHOLD ROSTER AND GO TO CHECK ITEM 6

7.   IF THIS IS A SINGLE-PERSON HOUSEHOLD CATI WILL CODE "1" FOR QUESTION 7 AND GO TO CHECK ITEM 6

(You are not/PERSON is not) a driver, is that correct?

1   CORRECT, R DOES NOT DRIVE → GO TO CHECK ITEM 6
2   INCORRECT, R DOES DRIVE → CORRECT DRIVER FLAG ON HOUSEHOLD ROSTER AND GO TO QUESTION 8

8.   About how many miles did (you/PERSON) personally drive during the past 12 months in all licensed motorized vehicles?

{YEARMILE}

(INCLUDE MILES DRIVEN AS A PART OF WORK.)

_____ MILES

[IF RESPONSE > 40,000 MILES, CATI WILL PROMPT INTERVIEWER TO VERIFY WITH R.]

CHECK ITEM 6: IS THIS A PROXY INTERVIEW?

      1   YES → GO TO NEXT SECTION
      2   NO

CHECK ITEM 7: WAS R DESIGNATED AS THE PRIMARY DRIVER FOR ANY HOUSEHOLD VEHICLES?

      1   YES
      2   NO → GO TO NEXT SECTION

CHECK ITEM 8: IS THIS THE HOUSEHOLD RESPONDENT?

      1   YES → GO TO NEXT SECTION
      2   NO

9. ASK THIS QUESTION FOR EACH VEHICLE FOR WHICH R IS PRIMARY DRIVER.

    I understand that you are the person who drives the (VEHICLE) most.

    About how many miles was the (VEHICLE) driven (during the last 12 months/since MONTH/YEAR BOUGHT OR RECEIVED)? Include mileage driven by you and all other drivers.

    {VEHMILES}

    _____ MILES

    CATI: IF VEHICLE ACQUIRED IN PAST 12 MONTHS, CONVERT MILES REPORTED TO ANNUALIZED MILEAGE. [CALCULATE NUMBER OF DAYS BETWEEN TODAY'S DATE AND FIRST DAY OF MONTH/YEAR REPORTED IN B6. DIVIDE 365 BY THIS NUMBER AND MULTIPLY BY MILEAGE REPORTED IN Q14.]
    IF ANNUALIZED MILEAGE > 40,000, CATI WILL PROMPT INTERVIEWER TO VERIFY WITH R.

SECTION F - EDUCATION AND TRAVEL TO WORK - (HOUSEHOLD MEMBERS 16 YEARS OR OLDER; PROXY PERMITTED)

1. What is the highest grade or year of school (you have/PERSON has) <u>completed</u>? READ CHOICES AS NECESSARY.

    {EDUC}

    11   LESS THAN HIGH SCHOOL GRADUATE
    12   HIGH SCHOOL GRADUATE, INCLUDING EQUIVALENT SUCH AS GED
    21   SOME COLLEGE, BUT NOT A COLLEGE GRADUATE
    22   ASSOCIATE DEGREE IN COLLEGE (FOR EXAMPLE, AA)
    24   BACHELOR'S DEGREE (FOR EXAMPLE, BA, AB, BS)
    25   SOME GRADUATE OR PROFESSIONAL SCHOOL, BUT NO DEGREE
    26   GRADUATE OR PROFESSIONAL SCHOOL DEGREE (FOR EXAMPLE, MA, MS, MBA, MD, DDS, PHD, EdD, JD)

    CATI EDIT CHECK: IF RESPONSE IS CODE 22, VERIFY THAT AGE IS 18 OR OLDER. IF RESPONSE IS CODE 24 OR CODE 25, VERIFY THAT AGE IS 20 OR OLDER. IF RESPONSE IS CODE 26, VERIFY THAT AGE IS 22 OR OLDER.

2. (Do you/Does PERSON) have a job full time, part time or not at all?

    {WORKER, JOBLSTWK}

    1   FULL TIME
    2   PART TIME
    3   NOT AT ALL → GO TO NEXT SECTION
    4   RETIRED → GO TO NEXT SECTION

    (IF ASKED, FULL TIME IS 35 OR MORE HOURS A WEEK. DO NOT INCLUDE VOLUNTEER WORK.

    IF "SELF-EMPLOYED" PROBE FOR NUMBER OF HOURS R USUALLY WORKS AND CODE INTO APPROPRIATE CATEGORY.)

3. (Do you/Does PERSON) have more than one job?

    {GT1JBLWK}

    1   YES →   The next question are about (you/PERSON's) primary job or occupation.

Section F (continued)

> (IF R CAN'T DECIDE WHICH JOB IS PRIMARY, USE THE ONE AT WHICH HE/SHE USUALLY WORKS THE MOST HOURS.)

  2   NO

4.   What is the street address of (your/PERSON's) workplace?

STREET NUMBER _____ STREET NAME _____
FIRST ROAD _____
SECOND ROAD _____
CITY _____ STATE _____
ZIP CODE _____

      DO NOT ENTER POST OFFICE BOX!

(IF R WORKS AT OR OUT OF HOME, ENTER "HOME" FOR STREET NUMBER. IF R HAS NO FIXED WORKPLACE, ENTER "NONE" FOR STREET NUMBER.)

IF NEEDED: It is important that we get at least a general location of (your/PERSON's) workplace. Would you please identify the intersection of roads which is closest to (your/his/her) workplace?

IF NEEDED: We are not going to contact you there, we just want to know the location of your workplace.

NOTE: IF R PROVIDES STREET NUMBER AND STREET NAME, FIELDS FOR ROAD INTERSECTION WILL BE SKIPPED. IF EITHER STREET NUMBER OR NAME IS MISSING, INTERSECTION DATA WILL BE OBTAINED.

IF STREET NUMBER = "HOME" OR "NONE," GO TO NEXT SECTION.
CATI EDIT CHECK: VERIFY THAT STATE ABBREVIATION AND ZIP CODE ARE LEGAL VALUES.

5.   What is the one-way distance from (your/PERSON's) home to (your/his/her) workplace?

{DISTTOWK}

_____ BLOCKS OR MILES

996 = LESS THAN 1 BLOCK
997 = 1/2 MILE
-3   NO FIXED WORKPLACE → GO TO NEXT SECTION

Section F (continued)

-4 WORKS AT OR OUT OF HOME → GO TO NEXT SECTION

6. What time (do you/does PERSON) usually leave home to go to work?

{TIMELEAV}

_____

Section F (continued)

7.   How many minutes does it usually take (you/PERSON) to get from home to work?

{TIMETOWK}

_____ MINUTES

(DO NOT INCLUDE TIME TAKEN TO DROP OFF CHILDREN OR MAKE OTHER
STOPS. PROBE FOR TIME IT WOULD TAKE TO GO STRAIGHT FROM HOME
TO WORK.)

CATI EDIT CHECK: IF RESPONSE IS 60 MINUTES OR GREATER, CATI WILL
PROMPT INTERVIEWER TO VERIFY WITH R.

8.   How (do you/does PERSON) usually get to work? Please tell me all the kinds of
transportation (you/he/she) usually (use/uses).   (CODE ALL THAT APPLY.)

01	AUTOMOBILE	**{WKBYAUTO}**
02	VAN (MINI, CARGO, PASSENGER)	**{WKBYVAN}**
03	UTILITY VEHICLE (BRONCO, BLAZER 4RUNNER, PATHFINDER, ETC.)	**{WKBYUV}**
04	PICKUP TRUCK	**{WKBYTRUK}**
05	OTHER TRUCK	**{WKBYOTTK}**
06	RV (RECREATIONAL VEHICLE)	**{WKBYRV}**
07	MOTORCYCLE	**{WKBYMCYC}**
08	OTHER P.O.V. → SPECIFY	
	_____	**{WKBYOPOV}**
09	BUS	**{WKBYBUS}**
10	AMTRAK	**{WKBYAMTR}**
11	COMMUTER TRAIN	**{WKBYTRAN}**
12	STREETCAR/TROLLEY	**{WKBYSTCR}**
13	SUBWAY/ELEVATED RAIL	**{WKBYSBWY}**
14	AIRPLANE	**{WKBYAIR}**
15	TAXICAB	**{WKBYTAXI}**
16	BICYCLE	**{WKBYBIKE}**
17	WALK	**{WKBYWALK}**
18	SCHOOL BUS	{WKBYSCBS}
19	WORKED FROM HOME/ TELECOMMUTED	**{WKBYHOME}**
20	OTHER → SPECIFY:	
	_____	**{WKBYOTHR}**

Section F (continued)

CATI EDIT CHECK: VERIFY THAT MILES PER HOUR FOR QUESTION 8 IS WITHIN ACCEPTABLE RANGE BASED ON DISTANCE, TIME, AND MODE.

MODE IN Q8	VALID MPH RANGE
01 - 09, 15, 18, 19	10-90
10-13	20-100
14	80-600
16	1-20
17	1-10

GO TO NEXT CHECK ITEM

9. What is the main means of transportation (you/PERSON) usually use to get to work--that is, the one used for most of the distance?

{WRKTRANS}

01	AUTOMOBILE	09	BUS
02	VAN (MINI, CARGO, PASSENGER)	10	AMTRAK
03	UTILITY VEHICLE (BRONCO, BLAZER 4RUNNER, PATHFINDER, ETC.)	11	COMMUTER TRAIN
		12	STREETCAR/TROLLEY
04	PICKUP TRUCK	13	SUBWAY/ELEVATED RAIL
05	OTHER TRUCK	14	AIRPLANE
06	RV (RECREATIONAL VEHICLE)	15	TAXICAB
07	MOTORCYCLE	16	BICYCLE
08	OTHER P.O.V. → SPECIFY _____	17	WALK
		18	SCHOOL BUS
		19	WORKED FROM HOME/ TELECOMMUTED
		20	OTHER → SPECIFY: _____

CATI EDIT CHECK: ALLOW ONLY RESPONSES WHICH WERE REPORTED IN QUESTION 8.

Section F (continued)

MODE IN Q9	VALID MPH RANGE
01 - 09, 15, 18, 19	10-90
10-13	20-100
14	80-600
16	1-20
17	1-10

CHECK ITEM: IS PUBLIC TRANSPORTATION USED? [DOES Q8=09, 10, 11, 12, OR 13?]

    1   YES
    2   NO → GO TO NEXT CHECK ITEM

10.   REPEAT QUESTIONS 10-12 FOR EACH PUBLIC TRANSPORTATION METHOD REPORTED IN QUESTION 8.

How many minutes (do you/does PERSON) usually have to wait for the (PUBLIC TRANSPORTATION MEANS IN Q8)?

{WAITAMTR, WAITBUS, WAITSBWY, WAITSTRC, WAITTRAN}

_____ MINUTES

11.   (Do you/Does PERSON) usually sit, stand, or do both on the (PUBLIC TRANSPORTATION MEANS IN Q8)?

{SITAMTR, SITBUS, SITSBWY, SITSTCR, SITTRAN}

1   SIT ONLY → GO TO NEXT CHECK ITEM
2   STAND ONLY → GO TO NEXT CHECK ITEM
3   SOME OF BOTH

12.   Which (do you/does PERSON) usually do most, sit or stand?

{SIT2AMTR, SIT2BUS, SIT2SBWY, SIT2STCR, SIT2TRAN}

1   SIT
2   STAND

Section F (continued)

13.   Do you pay for parking at work (or on your way to work)?

      {PAYTOPK}

      1   YES
      2   NO → GO TO QUESTION 15

14.   How much do you usually pay?

      {PARKAMT}
      AMOUNT: _____

      UNIT:

      {PARKCODE}

      1   HOUR
      2   DAY
      3   WEEK
      4   MONTH
      5   YEAR
      6   QUARTER
      7   OTHER → SPECIFY: _____

15.   (Do you/Does PERSON) <u>usually</u> drive to work alone or (do you/does he/does she) carpool?

      {USULDRV}

      1   DRIVE ALONE → GO TO NEXT CHECK ITEM
      2   CARPOOL

      (CARPOOLING DOES NOT INCLUDE THE PRESENCE OF A CHILD BEING TAKEN TO SCHOOL OR DAY CARE. DOES INCLUDE ONE ADULT DROPPING OFF ANOTHER ON THE WAY.)

Section F (continued)

16. (Are you/Is PERSON) always the driver, (do you/does PERSON) share the driving on a regular basis, or (do you/does PERSON) rarely or never drive?

    {ALWYSDRV}

    1   ALWAYS DRIVE
    2   SHARE THE DRIVING
    3   RARELY OR NEVER DRIVE

    GO TO QUESTION 19

    CHECK ITEM: IS THIS A PROXY INTERVIEW?
             1   YES → GO TO QUESTION 19
             2   NO

    CHECK ITEM: IS PUBLIC TRANSPORTATION USED? [DOES F8 = 09, 10, 11, 12, OR 13?]

             1   YES → GO TO QUESTION 19
             2   NO

    CHECK ITEM: DID R REPORT THAT PUBLIC TRANSPORTATION IS NOT AVAILABLE? [DOES E2 = 6?]

             1   YES → GO TO QUESTION 17
             2   NO

    CHECK ITEM: WAS PUBLIC TRANSPORTATION REPORTED AS AVAILABLE IN SECTION C? [DOES C1 = 1?]

             1   YES
             2   NO → GO TO QUESTION 17

    CHECK ITEM: IS CASE ASSIGNED TO "CARPOOL" TREATMENT? [DOES PRE-ASSIGNED RANDOM INDICATOR FOR "WHY NOT" = 1]?

             1   YES
             2   NO → GO TO QUESTION 18

17. What are the reasons you do not carpool to work? (CODE ALL THAT APPLY.)

    1   WORK IRREGULAR/UNUSUAL HOURS   **{NCIRRHR}**

2	NO ONE TO CARPOOL WITH	**{NCNOONE}**
3	DON'T WANT INCONVENIENCE/HASSLE	**{NCINCVNT}**
4	NEED OWN VEHICLE AT/BEFORE/AFTER WORK	**{NCNEEDCR}**
5	SHORT DISTANCE--DON'T THINK IT'S NECESSARY	**{NCSHRTDI}**
6	OTHER → SPECIFY: _____	**{NCOTHRES}**

{SEE ALSO: **NCCOMCR, NCLVFAR, NCNEVER, NCNLIKE, NCONLY**}

GO TO QUESTION 19

18. What are the reasons you do not use public transportation such as buses or subways to travel to work? (CODE ALL THAT APPLY.)

1	NOT AVAILABLE AT WORKPLACE	**{NPT2FRWK}**
2	TAKES TOO MUCH TIME	**{NPT2MCHT}**
3	COSTS TOO MUCH	**{NPT2EXPV}**
4	NEED OWN VEHICLE AT/BEFORE/AFTER WORK	**{NPTOTHTG}**
5	SCHEDULE IS NOT CONVENIENT	**{NPTNTCNV}**
6	CLOSEST STOP IS TOO FAR FROM HOME	**{NPTFMHM}**
7	OTHER → SPECIFY: _____	**{NPTOTHER}**

{ SEE ALSO: **NPTCOMCR, NPTDLPT, NPTNVCAR, NPTLVCLS**}

19. On any day <u>last week</u>, did (you/PERSON) work from home <u>instead</u> of traveling to (your/his/her) usual workplace?

{WKFMHMLW}

1 YES → GO TO QUESTION 21
2 NO

(CODE YES ONLY IF R WORKED AT HOME <u>INSTEAD</u> OF GOING TO THE WORKPLACE. DO NOT INCLUDE WORKING AT HOME IN <u>ADDITION</u> TO WORKING AT THE WORKPLACE.)

20. On any day in the past <u>two</u> <u>months</u>, did (you/PERSON) work from home <u>instead</u> of traveling to (your/his/her) usual workplace?

{WKFMHM2M}

1 YES

2   NO → GO TO NEXT SECTION

(CODE YES ONLY IF R WORKED AT HOME <u>INSTEAD</u> OF GOING TO THE WORKPLACE. DO NOT INCLUDE WORKING AT HOME IN <u>ADDITION</u> TO WORKING AT THE WORKPLACE.)

21.   In the past <u>two months</u>, about how often (have you/has PERSON) worked from home instead of traveling to (your/his/her) usual workplace?

{WKFMHMXX}

1   TWO OR MORE DAYS A WEEK (11+ TIMES)
2   ABOUT ONCE A WEEK (5-10 TIMES)
3   ONCE OR TWICE A MONTH (2-4 TIMES)
4   LESS THAN ONCE A MONTH (ONE TIME)

(INCLUDE ONLY THE DAYS R WORKED AT HOME <u>INSTEAD</u> OF AT THE WORKPLACE. DO <u>NOT</u> INCLUDE DAYS WORKED AT HOME IN <u>ADDITION</u> TO AT THE WORKPLACE.)

SECTION G - TRAVEL DAY (HOUSEHOLD MEMBERS 5 YEARS OR OLDER; PROXY PERMITTED UNDER PROXY RULES. PROXY REQUIRED FOR PERSONS 5-13 YEARS)

CHECK ITEM 1: IS R 5-15 YEARS OF AGE?

    1   YES
    2   NO → GO TO INTRO

1. How often (do you/does PERSON) wear (your/his/her) seat belt when riding in a car or other private vehicle? Would you say...

{FQSTBELT}

1   Always, → GO TO INTRO
2   Most of the time,
3   Sometimes, or
4   Never? → GO TO INTRO

2. What are the typical situations when (you do/PERSON does) not wear seat belts? (CODE ALL THAT APPLY.)

1	WHEN FORGET	**{NSBFGET}**
2	WHEN BROKEN/UNAVAILABLE	**{NSBBROKE}**
3	SHORT TRIPS	**{NSBSHORT}**
4	LONG TRIPS	**{NSBLONG}**
5	IN BACK SEAT	**{NSBBACK}**
8	WHEN IN A CERTAIN VEHICLE (E.G. PICKUP)	**{NSBSPVEH}**
9	IN TOWN/CITY	**{NSBTOWN}**
10	WHEN WITH A CERTAIN PERSON (E.G. OTHER PARENT)	**{NSBSPPER}**
11	OTHER → SPECIFY: _____	**{NSBOTHER}**

{SEE ALSO: **NSBHURRY, NSBMED, NSBNLIKE, NSBNOASK, NSBPOLIC, NSBSPCLH, NSBWTHR**}

INTRO Now I have some questions about all trips (you/PERSON) took (yesterday/on TRAVEL DAY). Even though (your/his/her) travel on this day may have been unusual for some reason, we still want to know about (your/PERSON's) trips on this particular day.

CHECK ITEM 2: IS R A WORKER, AS REPORTED IN QUESTION F2?

Section G (continued)

3.   (Yesterday/On TRAVEL DAY), did (you/PERSON) work at a job that required (you/him/her) to drive a licensed motor vehicle as part of the job--for example a cab or truck driver, delivery person, police officer, or traveling salesperson? Please do not include just getting to and from the workplace.

      {WRKDRIVE}

      1   YES
      2   NO → GO TO QUESTION 9

4.   What is that job or occupation?

      OCCUPATION _____

5.   While working at this job on (TRAVEL DAY), did you travel from one place to another more than ten times?

      {WRKTRPS}

      1   YES
      2   NO → GO TO QUESTION 9

6.   On (TRAVEL DAY) about how many miles did (you/PERSON) drive as part of (your/his/her) work, not counting miles driven to and from (your/his/her) place of work?

      {WRKMILES}

      _____ MILES

7.   What type of vehicle did (you/PERSON) drive as part of this job?

Section G (continued)

{WRKVTYPE}

IF MORE THAN ONE TYPE, MARK THE TYPE DRIVEN MOST. READ CHOICES AS NECESSARY.

01	AUTOMOBILE	07	MOTORCYCLE
02	VAN (MINI, CARGO, PASSENGER)	08	OTHER

VEHICLE→SPECIFY:

03	UTILITY VEHICLE (BRONCO, BLAZER,		
	4RUNNER, PATHFINDER, ETC.)	09	BUS
04	PICKUP TRUCK	10	SCHOOL BUS
05	OTHER TRUCK	11	TAXICAB
06	RV (RECREATIONAL VEHICLE)		

8.　How many days a week (do you/does PERSON) usually work at this job?

{WORKDAYS}

NUMBER OF DAYS _____ (1-7)

9.　Several days ago we mailed a diary to your household for (you/PERSON) to complete about (your/his/her) travel on (TRAVEL DAY). Did (you/PERSON) complete the diary on (your/his/her) own or did someone else complete it for (you/him/her)?

{DIARYCMP}

1　COMPLETED ON OWN
2　SOMEONE ELSE COMPLETED IT
3　DIARY WAS NOT COMPLETED AT ALL → GO TO QUESTION 11a
4　DID NOT RECEIVE MATERIALS → GO TO QUESTION 11a

CHECK ITEM 3A: DID R MAKE MORE THAN 10 TRIPS AS PART OF WORK ON TRAVEL DAY? [DOES G5=1?]

1　YES
2　NO → GO TO QUESTION 10

9a.　Did (you/PERSON) record the trips (you/he/she) made as part of (your/his/her) work?

1　YES →　Since it would be too difficult to cover all these trips over the phone, we will send you a self-addressed, stamped envelope to mail

(your/his/her) diary to us. For this interview, we'll focus on (your/his/her) non-work trips.

2   NO

10.   Do you have (your/PERSON's) completed diary with you now?

        {DIARYHAV}

        1   YES→ GO TO QUESTION 12
        2   NO

11.   Can you get the diary?

        {DIARYGET}

        1   YES (WAIT FOR R TO RETRIEVE THE DIARY; GO TO QUESTION 12)
        2   NO

11a.   Let's continue with the interview anyway. Information on (you/PERSON's) travel is important to us. Please try to recall the information as best you can.

12.   For the next questions, a "trip" is any time (you/PERSON) went from one address to another in a vehicle or by walking or biking. Each stop you make is a separate trip, including picking up or dropping off someone.

        To be sure we get all the trips (you/PERSON) took during the day, we'll list all (your/PERSON's) trips starting at 4 a.m. in the morning and ending at 4 a.m. the next morning.

        IF QUESTION 5 = YES: We do <u>not</u> want to include the trips you made as part of your job, but we do want to include trips to and from your workplace.

        IF QUESTION 5 = NO: Please include the trips you made as part of your work.

        NOTE: WHILE ASKING QUESTIONS 12 THRU 17, THE INTERVIEWER WILL HAVE INFORMATION REPORTED BY OTHER HOUSEHOLD MEMBERS DISPLAYED ON THE SCREEN: FOR EXAMPLE:

TRIP	DESCRIPTION	TIME	REPORTED BY
1	post office	9:00am	John
2	work	9:15am	John
3	home	3:00pm	Karen

Where did (you/PERSON) go first (yesterday/on TRAVEL DAY)?

{WHERE, FROM_A}

1   HOME → GO TO QUESTION 15
2   WORK → GO TO QUESTION 15
3   OTHER → SPECIFY: _____ → GO TO QUESTION 15
4   NOWHERE
5   OUT OF COUNTRY → GO TO QUESTION 14

13.   Does this mean (you/PERSON) stayed at the same place all day?

{SAMEPLC}

1   YES → GO TO NEXT SECTION
2   NO → REASK QUESTION 12

14.   Just to verify, (you were/PERSON was) out of the country for the entire day
        (yesterday/on TRAVEL DAY), is that correct?

{OUTCNTRY}

1   YES → GO TO NEXT SECTION
2   NO → REASK QUESTION 12

15.   What time did this trip begin?

{STRTTIME, DAYNIGHT}

_____

INTERVIEWER: IS THIS THE SAME OR SIMILAR TO ANY TRIP DISPLAYED
ABOVE?

        1   YES → VERIFY WITH R AND ENTER TRIP NUMBER
        2   NO

16.   Where did (you/he/she) go next?

{WHERE, FROM_A, TO_B}

1   HOME
2   WORK

Section G (continued)

    3   OTHER → SPECIFY: _____

17.   What time did this trip begin?

    {STRTTIME, DAYNIGHT, DWELTIME}

    _____

    INTERVIEWER: IS THIS THE SAME OR SIMILAR TO ANY TRIP DISPLAYED ABOVE?

    {PREVREP, MATCH}

        1   YES → VERIFY WITH R AND ENTER TRIP NUMBER
        2   NO

    REPEAT QUESTIONS 16 AND 17 UNTIL NO MORE TRIPS.

RECONCILIATION

IF ANY PREVIOUSLY-REPORTED TRIPS REMAIN:

    I also show a trip to (DESCRIPTION) at (TIME) reported by (NAME). Did you take this trip?

    1   YES → INDICATE WHICH TRIP THIS WAS OR ADD TO LIST OF TRIPS
    2   NO

WHEN ALL TRIPS MADE ON TRAVEL DAY HAVE BEEN LISTED, SAY: While I read the trips, please think back to see if there were any additional ones.

READ LIST; ADD ADDITIONAL TRIPS IF REPORTED. WHEN ALL TRIPS HAVE BEEN LISTED AND VERIFIED, CONTINUE.

    CHECK ITEM 4: IS DESTINATION FOR FIRST TRIP HOME? [DOES Q12 = 1?]
        1   YES
        2   NO → GO TO QUESTION 19

18.   Now I have a few questions about each trip.
    You told me the first place (you/PERSON) went was home. What was the main reason (you were/PERSON was) away from home?

Section G (continued)

{AWAYHOME}

01	AT WORK	09	TAKE SOMEONE SOMEWHERE
02	WORK RELATED BUSINESS	10	PICK UP SOMEONE
		11	VACATION
04	SHOPPING	12	VISIT FRIENDS OR RELATIVES
05	AT SCHOOL	13	WENT OUT TO EAT
06	AT RELIGIOUS ACTIVITY	14	OTHER SOCIAL/RECREATIONAL
07	MEDICAL/DENTAL		
08	OTHER FAMILY OR PERSONAL BUSINESS	16	OTHER ⇁ SPECIFY: _____

19. Now I have a few questions about each trip.

    Did the trip to (FIRST DESTINATION) begin at home?

    {FRSTHM}

    1 YES
    2 NO

20. IF DESTINATION = HOME, CATI WILL CODE "17" AND SKIP TO CHECK ITEM 6.

    What was the <u>main</u> purpose of the trip to (DESTINATION)?

    {WHYFROM, WHYTO, WHYTRP90, WHYTRP95}

01	TO WORK	09	TAKE SOMEONE SOMEWHERE
02	WORK RELATED BUSINESS	10	PICK UP SOMEONE
03	RETURN TO WORK	11	VACATION
04	SHOPPING	12	VISIT FRIENDS OR RELATIVES
05	SCHOOL	13	WENT OUT TO EAT
06	RELIGIOUS ACTIVITY	14	OTHER SOCIAL/RECREATIONAL
07	MEDICAL/DENTAL	15	CHANGE MEANS OF TRANSP.
08	OTHER FAMILY OR PERSONAL BUSINESS	16	OTHER ⇁ SPECIFY: _____

Section G (continued)

CHECK ITEM 5: IS PURPOSE TO TAKE SOMEONE SOMEWHERE? [DOES Q20=09]?

    1   YES
    2   NO → GO TO CHECK ITEM 6

21.   What was (passenger's) main reason for the trip?

{PASSPURP}

01   TO WORK
02   WORK RELATED BUSINESS
03   RETURN TO WORK   11   VACATION
04   SHOPPING   12   VISIT FRIENDS OR RELATIVES
05   SCHOOL   13   WENT OUT TO EAT
06   RELIGIOUS ACTIVITY   14   OTHER SOCIAL/RECREATIONAL
07   MEDICAL/DENTAL
08   OTHER FAMILY OR PERSONAL 16   OTHER → SPECIFY:
        BUSINESS
                               17   HOME

(CODE CHILD BEING TAKEN TO DAY CARE AS OTHER FAMILY OR PERSONAL BUSINESS.)

CHECK ITEM 6: HAVE DATA ON THIS TRIP ALREADY BEEN REPORTED BY ANOTHER HOUSEHOLD MEMBER?

    1   YES
    2   NO → GO TO QUESTION 22 OR ORIGIN/DESTINATION

CHECK ITEM 7: IS THIS A PROXY INTERVIEW?

    1   YES → GO TO QUESTION 20 FOR NEXT TRIP/NEXT SECTION
    2   NO

CHECK ITEM 8: WAS R THE DRIVER ON THIS TRIP, AS REPORTED BY OTHER HOUSEHOLD MEMBER?

Section G (continued)

{DRVR_FLG}

1   YES
2   NO → RETURN TO QUESTION 20 FOR NEXT TRIP/NEXT SECTION

ORIGIN/DESTINATION ITEMS:

FOR MPO ADD-ONS ONLY

IF DESTINATION = HOME OR WORK, SKIP THIS ITEM.

What are the full name and address of the (DESTINATION)?

    NAME OF PLACE_____

    STREET ADDRESS_____

    CITY _____ STATE _____ ZIP   _____

(IF NAME OF PLACE IS OBVIOUS, ENTER WITHOUT ASKING. IF R DOES NOT
KNOW EXACT ADDRESS, PROBE FOR NEAREST ROAD INTERSECTION AND
ENTER THIS.)

---

22.   How far is it from where (you/PERSON) started to (DESTINATION)?

{TRPMILES, HOWFARU}

_____ BLOCKS OR MILES
996 = LESS THAN 1 BLOCK
997 = 1/2 MILE

(IF ASKED, RECORD ACTUAL DISTANCE TRAVELED, NOT DISTANCE "AS
THE CROW FLIES.")

CHECK ITEM 9: HAVE DATA ON THIS TRIP ALREADY BEEN REPORTED BY
ANOTHER HOUSEHOLD MEMBER? [NOTE: IF DATA WERE ALREADY
REPORTED BUT R WAS NOT DRIVER, R WILL ALREADY HAVE SKIPPED OUT
IN CHECK ITEM 8.]

1   YES → GO TO QUESTION 27
2   NO

Section G (continued)

23.

    Was a household vehicle used on this trip?

    {TRPHHVEH}

    1   YES
    2   NO → GO TO QUESTION 25
    3   PART OF TRIP

24.

    Which vehicle? (IF NEEDED: Which one was used for the longest distance?)

    {VEHID}

    _____ VEHICLE NUMBER OR

    -3   HOUSEHOLD VEHICLE THAT NEEDS TO BE ADDED TO VEHICLE ROSTER → AT COMPLETION OF TRAVEL DAY SECTION, CATI WILL ROUTE THROUGH QUESTIONS TO ADD VEHICLE TO ROSTER AND THEN CHANGE -3 CODE TO THE PROPER VEHICLE NUMBER.

    CHECK ITEM 10: WAS VEHICLE USED FOR THE ENTIRE TRIP [DOES Q23=1]?

    1   YES → GO TO QUESTION 27
    2   NO

25. IF Q23=2 THEN ASK: How did (you/PERSON) get to (DESTINATION)? (That is, what means of transportation did (you/PERSON) use for this trip?) (IF MORE THAN ONE MODE, CODE THE ONE USED FOR THE LONGEST DISTANCE.)

    {TRPTRANS}

    IF Q23=3 THEN ASK: What other means of transportation did (you/PERSON) use?

01	AUTOMOBILE	09	BUS
02	VAN (MINI, CARGO, PASSENGER)	10	AMTRAK
03	UTILITY VEHICLE (BRONCO, BLAZER	11	COMMUTER TRAIN
	4RUNNER, PATHFINDER, ETC.)	12	STREETCAR/TROLLEY

Section G (continued)

04	PICKUP TRUCK	13	SUBWAY/ELEVATED RAIL
05	OTHER TRUCK	14	AIRPLANE
06	RV (RECREATIONAL VEHICLE)	15	TAXICAB
07	MOTORCYCLE	16	BICYCLE
08	OTHER P.O.V. → SPECIFY	17	WALK
	_____	18	SCHOOL BUS
		19	OTHER → SPECIFY:
			_____

{PUBTRANS}

1 YES
2 NO → GO TO QUESTION 27

26. Did (you/PERSON) make a transfer, walk, or use any other methods of transportation along the way?

{TRANSFER}

1 YES → GO TO QUESTION 28
2 NO

27. About how many minutes did it take to get there?

{TRVL_MIN}

_____ MINUTES   OR   _____ HOURS

CATI EDIT: CATI WILL CALCULATE END TIME.
CATI EDIT CHECK: VERIFY THAT MILES PER HOUR IS WITHIN ACCEPTABLE RANGE BASED ON DISTANCE, TIME, AND MODE.

MODE IN Q25	VALID MPH RANGE
01 - 09, 15, 18, 19	10-90
10-13	20-100
14	80-600
16	1-20

Section G (continued)

NOTE: QUESTIONS 28-30 ARE FOR MULTI-SEGMENT TRIPS.

28.   ASK ONLY IF NOT KNOWN: What means of transportation did (you/PERSON) use for the (first/next) part of this trip?

{SEG1TRAN, SEG2TRAN, SEG3TRAN, SEG4TRAN}

97   NO OTHER PORTION OF TRIP → GO TO CHECK ITEM 13

01	AUTOMOBILE	09	BUS
02	VAN (MINI, CARGO, PASSENGER)	10	AMTRAK
03	UTILITY VEHICLE (BRONCO, BLAZER 4RUNNER, PATHFINDER, ETC.)	11 / 12	COMMUTER TRAIN / STREETCAR/TROLLEY
04	PICKUP TRUCK	13	SUBWAY/ELEVATED RAIL
05	OTHER TRUCK	14	AIRPLANE
06	RV (RECREATIONAL VEHICLE)	15	TAXICAB
07	MOTORCYCLE	16	BICYCLE
08	OTHER P.O.V. → SPECIFY	17	WALK
	_____	18	SCHOOL BUS
		19	OTHER → SPECIFY: _____

29.   What time did (you/PERSON) begin this part of the trip?

{SEG1TIME, SEG2TIME, SEG3TIME, SEG4TIME}

_____

30.   About how many minutes did this part of the trip take?

E- 45

Section G (continued)

{SEG1_MIN, SEG2_MIN, SEG3_MIN, SEG4_MIN}

_____ MINUTES

CHECK ITEM 13: WAS PUBLIC TRANSPORTATION USED? [DOES Q25=09, 10, 11, 12, OR 13 OR DOES Q28=09, 10, 11, 12, OR 13 FOR ANY SEGMENT?]

       1   YES
       2   NO → GO TO CHECK ITEM 14

31.   How many minutes did (you/PERSON) have to wait for the (TRANSPORTATION MEANS)?

{WAIT_MIN}

_____ MINUTES

32.   Did (you/PERSON) sit, did (you/PERSON) stand, or did (you/PERSON) do both on the (TRANSPORTATION MEANS)?

{STANDSIT}

1   SIT ONLY → GO TO CHECK ITEM 14
2   STAND ONLY → GO TO CHECK ITEM 14
3   SOME OF BOTH

33.   Which did (you/PERSON) do most of the time, sit or stand?

{SITMOST}

1   SIT
2   STAND

GO TO QUESTION 35

CHECK ITEM 14: WAS A PRIVATE VEHICLE USED FOR THIS TRIP? [DOES Q23=1 OR Q25=01, 02, 03, 04, 05, 06 ,07 OR 08?]

       1   YES
       2   NO → GO TO QUESTION 35

Section G (continued)

34.   Was anyone with you on this trip?

    1   YES
    2   NO → CATI WILL CODE "NO" FOR QUESTIONS 35 AND 39 AND ENTER
                R'S ROSTER NUMBER AS THE DRIVER ON THE TRIP. THEN GO
                TO QUESTION 20 FOR NEXT TRIP/NEXT SECTION.

35.   IF THIS IS A SINGLE-PERSON HOUSEHOLD, GO TO CHECK ITEM 15.

    Were any household members with (you/PERSON) on this trip?

    {TRPHHACC}

    1   YES
    2   NO → GO TO CHECK ITEM 15

36.   (Which household members?)

    {HH_ONTRP, NUMONTRP, WHOACC_A through WHOACC_J}

    ENTER ROSTER NUMBER (S): _____

    CHECK ITEM 15: WAS A PRIVATE VEHICLE USED FOR THIS TRIP? [DOES Q23
    = YES OR DOES Q25=01, 02, 03, 04, 05, 06, 07, OR 08?]

        1   YES
        2   NO → GO TO CHECK ITEM 16

37.   IF NO HOUSEHOLD MEMBERS WERE WITH R [Q35=2] AND R IS NOT A
    DRIVER, CATI WILL CODE "NO" FOR QUESTION 37 AND GO TO CHECK ITEM
    16.

    Did (you/PERSON/a member of the household) drive on the trip?

    {HHMEMDRV}

    1   YES
    2   NO → GO TO CHECK ITEM 16
    3   PART OF TRIP

38.   IF SINGLE-PERSON HOUSEHOLD, CATI WILL CODE "1" FOR QUESTION 38
    AND GO TO CHECK ITEM 16.

Section G (continued)

Who was that? (IF NEEDED: Which one drove the longest distance?)

{DRVR_FLG, WHODROVE}

ENTER ROSTER NUMBER: _____

CATI EDIT CHECK: VERIFY THAT PERSON ENTERED WAS REPORTED TO BE ON THIS TRIP (Q36) AND THAT HE/SHE IS LISTED AS DRIVER IN HOUSEHOLD ROSTER.

CHECK ITEM 16: HAVE DATA ON THIS TRIP ALREADY BEEN REPORTED BY ANOTHER HOUSEHOLD MEMBER? [NOTE: IF DATA WERE ALREADY REPORTED BUT R WAS NOT DRIVER, R WILL ALREADY HAVE SKIPPED OUT IN CHECK ITEM 8.]

    1   YES→ GO TO QUESTION 20 FOR NEXT TRIP/NEXT SECTION
    2   NO

39.   Did any non-household members go with (you/PERSON) on this trip, (such as friends, relatives, or other people you know)?

{NONHHACC}

1   YES
2   NO → GO TO QUESTION 20 FOR NEXT TRIP/NEXT SECTION

40.   How many non-household members went on this trip with (you/PERSON)?

{NONHHCNT, NUMONTRP}

NUMBER: _____

CATI EDIT CHECK: RANGE CHECK BASED UPON MODE, ESPECIALLY FOR BUS, AIRPLANE, TRAIN, ETC.
GO TO QUESTION 20 FOR NEXT TRIP/NEXT SECTION

SECTION H - TRAVEL PERIOD - COLLECT ONLY TRIPS OF 75 MILES OR MORE FROM HOME TAKEN DURING THE 14 DAY TRAVEL PERIOD (HOUSEHOLD MEMBERS 5 YEARS OR OLDER. PROXY PERMITTED UNDER PROXY RULES. PROXY REQUIRED FOR PERSONS 5-13 YEARS)

1.   Now I would like to ask about any trips of 75 miles or more one way that (you/PERSON) may have taken recently. How many trips of 75 miles or more one way did (you/PERSON) take where (you/he/she) <u>returned home</u> between _____ and _____?

_____ TRIPS

IF NONE, GO TO NEXT SECTION

2.   What was the farthest point (you/PERSON) traveled to on (this/the first/the next) trip? Please tell me the city and state, or foreign country.

{COUNTRY, DESTSTAT}

CITY OR PLACE _____   STATE OR FOREIGN COUNTRY _____

3.   On what date did (you/PERSON) return home from the trip to (DESTINATION)?

{RET_MON, RET_YR}

DATE: _____

CATI EDIT CHECK: VERIFY THAT DATE GIVEN IS WITHIN 14 DAY TRAVEL PERIOD.

CHECK ITEM: IS DATE IN QUESTION 3 = TRAVEL DAY?

1   YES
2   NO → GO TO QUESTION 6

4.   Were any of the trips you told me about earlier on (TRAVEL DAY) part of this trip to (DESTINATION)?

1   YES
2   NO → GO TO QUESTION 6

5.   Which trips were part of this longer trip?

Section H (continued)

{OVERLAP}

(DISPLAY TRAVEL DAY TRIP ROSTER. READ TRIPS IF NECESSARY.)

ENTER ROSTER NUMBER(S): _____

6.   What was the <u>main</u> reason (you/PERSON) made the trip to (DESTINATION)?

{TOWHYTRP}

01	TO WORK	09	TAKE SOMEONE SOMEWHERE
02	WORK RELATED BUSINESS	10	PICK UP SOMEONE
		11	VACATION
04	SHOPPING	12	VISIT FRIENDS OR RELATIVES
05	SCHOOL	13	WENT OUT TO EAT
06	RELIGIOUS ACTIVITY	14	OTHER SOCIAL/RECREATIONAL
07	MEDICAL/DENTAL		
08	OTHER FAMILY OR PERSONAL BUSINESS	16	OTHER → SPECIFY: _____

CHECK ITEM: IS PURPOSE TO TAKE SOMEONE SOMEWHERE? [DOES Q6=09?

1   YES
2   NO → GO TO QUESTION 8

7.   What was (passenger's) main reason for the trip?

{TOWHYPAS}

01	TO WORK		
02	WORK RELATED BUSINESS		
03	RETURN TO WORK	11	VACATION
04	SHOPPING	12	VISIT FRIENDS OR RELATIVES
05	SCHOOL	13	WENT OUT TO EAT
06	RELIGIOUS ACTIVITY	14	OTHER SOCIAL/RECREATIONAL
07	MEDICAL/DENTAL		
08	OTHER FAMILY OR PERSONAL	16	OTHER → SPECIFY:

Section H (continued)

        BUSINESS   _____

                                  17   HOME

8.   What was the <u>main</u> means of transportation used for the trip to (DESTINATION)?

      (IF NEEDED: What means of transportation was used for the <u>longest</u> distance.)

      {TO_TRANS}

01	AUTOMOBILE	09	BUS
02	VAN (MINI, CARGO, PASSENGER)	10	AMTRAK
03	UTILITY VEHICLE (BRONCO, BLAZER 4RUNNER, PATHFINDER, ETC.)	11	COMMUTER TRAIN
		12	STREETCAR/TROLLEY
04	PICKUP TRUCK	13	SUBWAY/ELEVATED RAIL
05	OTHER TRUCK	14	AIRPLANE
06	RV (RECREATIONAL VEHICLE)	15	TAXICAB
07	MOTORCYCLE	16	BICYCLE
08	OTHER P.O.V. ⇁ SPECIFY	17	WALK
	_____	18	SCHOOL BUS
		19	OTHER ⇁ SPECIFY:
			_____

CHECK ITEM: ARE THERE MORE TRIPS TO BE ASKED ABOUT?
        1   YES ⇁ RETURN TO QUESTION 2 FOR NEXT TRIP
        2   NO

ROUTING INSTRUCTIONS:

FOR ALL CASES, SET PERSON LEVEL STATUS CODE TO 50 (SELF) OR 51
   (PROXY)

PERSON UNDER 18 ⇁ CONCLUDE INTERVIEW. SEEK TO INTERVIEW ANY
OTHER   PERSONS IN THE HOUSEHOLD STILL NEEDING TO BE
         INTERVIEWED.
PERSON WHOSE INCOME WAS NOT INCLUDED IN HOUSEHOLD
  ESTIMATE ⇁ SECTION I
PERSON 18 OR OLDER ⇁ SECTION J, K, OR L IF THERE IS INFORMATION
     MISSING IN THESE SECTIONS; OTHERWISE, CONCLUDE INTERVIEW AND
SEEK   TO INTERVIEW ANY OTHER PERSONS IN THE HOUSEHOLD STILL
NEEDING TO   BE INTERVIEWED.

Section H (continued)

SECTION I - INCOME OF PERSONS NOT INCLUDED IN HOUSEHOLD INCOME
(PERSONS WHO ROSTER NUMBER WAS REPORTED IN QUESTION K11.)

1.   In order to classify your household for statistical purposes, we need an estimate of (your/PERSON's) total income in the past 12 months. Please stop me when I get to the category that best describes (your/his/her) income.

{NONFMINC}

(Total income includes income from all sources such as wages and salaries, income from business or farm, Social Security, pensions, dividends, interest, rent, and any other income received.)

(IF R VOLUNTEERS AMOUNT THAT IS ON THE BREAKPOINT, CODE TO HIGHER CATEGORY.)

1   Less than $10,000 → GO TO QUESTION 2
2      $10,000 to $20,000 → GO TO QUESTION 3
3      $20,000 to $30,000 → GO TO QUESTION 4
4      $30,000 to $40,000 → GO TO QUESTION 5
5      $40,000 to $50,000 → GO TO QUESTION 6
6      $50,000 to $60,000 → GO TO QUESTION 7
7      $60,000 to $70,000 → GO TO QUESTION 8
8      $70,000 to $80,000 → GO TO QUESTION 9
9      $80,000 to $100,000 → GO TO CHECK ITEM
10     $100,000 OR MORE → GO TO CHECK ITEM

2.   Was (your/PERSON's) income more or less than $5,000?

1      $5,000 OR MORE → GO TO CHECK ITEM
2   LESS THAN $5,000 → GO TO CHECK ITEM

3.   Was (your/PERSON's) income more or less than $15,000?

1      $15,000 OR MORE → GO TO CHECK ITEM
2   LESS THAN $15,000 → GO TO CHECK ITEM

4.   Was (your/PERSON's) income more or less than $25,000?

1      $25,000 OR MORE → GO TO CHECK ITEM
2   LESS THAN $25,000 → GO TO CHECK ITEM

Section I (continued)

5.   Was (your/PERSON's) income more or less than $35,000?

      1       $35,000 OR MORE → GO TO CHECK ITEM
      2   LESS THAN $35,000 → GO TO CHECK ITEM

6.   Was (your/PERSON's) income more or less than $45,000?

      1       $45,000 OR MORE → GO TO CHECK ITEM
      2   LESS THAN $45,000 → GO TO CHECK ITEM

7.   Was (your/PERSON's) income more or less than $55,000?

      1       $55,000 OR MORE → GO TO CHECK ITEM
      2   LESS THAN $55,000 → GO TO CHECK ITEM

8.   Was (your/PERSON's) income more or less than $65,000?

      1       $65,000 OR MORE → GO TO CHECK ITEM
      2   LESS THAN $65,000 → GO TO CHECK ITEM

9.   Was (your/PERSON's) income more or less than $75,000?

      1       $75,000 OR MORE
      2   LESS THAN $75,000

GO TO SECTION J, K, OR L IF THERE IS INFORMATION MISSING IN THESE SECTIONS; OTHERWISE, CONCLUDE INTERVIEW AND SEEK TO INTERVIEW ANY OTHER PERSONS IN THE HOUSEHOLD STILL NEEDING TO BE INTERVIEWED.

SECTION J - HOUSEHOLD LOCATION AND TELEPHONE NUMBER INFORMATION (ANY HOUSEHOLD MEMBER 18 OR OLDER)

1.   Transportation planners use data from this study to assess current travel patterns and anticipate new ones. These patterns are affected by where people choose to live. (I'd like to verify that your home is located at:/Would you please tell me the address of your home?)

STREET NUMBER _____ STREET NAME _____
FIRST ROAD _____
SECOND ROAD _____
CITY _____ STATE _____
ZIP CODE _____

DO NOT ENTER POST OFFICE BOX OR RURAL ROUTE!!!

IF NEEDED: It is important that we get at least a general location of your household. Would you please identify the intersection of roads which is closest to your home?

NOTE: IF R PROVIDES STREET NUMBER AND STREET NAME, FIELDS FOR ROAD INTERSECTION WILL BE SKIPPED. IF EITHER STREET NUMBER OR NAME IS MISSING, INTERSECTION DATA WILL BE OBTAINED.

CATI EDIT CHECK: VERIFY THAT STATE ABBREVIATION AND ZIP CODE ARE LEGAL VALUES.

CHECK ITEM: WAS ZIP CODE GIVEN IN QUESTION 1?

     1   YES → GO TO QUESTION 3
     2   NO

2.   Would you please tell me your ZIP code?

_____

CATI EDIT CHECK: VERIFY THAT ZIP CODE IS VALID FOR THE STATE.

3.   How many different residential telephone numbers, including this number, are there for your household?

{TELNUMCT}

NUMBER OF TELEPHONE NUMBERS: _____

-1   DK
-2   RE

4.   During the past 12 months, has there been any time when you did not have telephone service at your home for one week or longer?

{NOTELYR}

1   YES
2   NO → GO TO NEXT SECTION

(IF NEEDED: Since we are doing this survey by telephone, we cannot study the travel of people without phones. Identifying people who were without phones at an earlier time helps us understand what kinds of travel may be missing from our data.)

5.   About how many weeks or months were you without service (in the past 12 months)?

{NOTELWKS}

ENTER NUMBER: _____

UNIT: 1   WEEKS
       2   MONTHS

(IF WITHOUT SERVICE MULTIPLE TIMES, ADD TOGETHER AND ENTER TOTAL NUMBER OF WEEKS OR MONTHS.)

SECTION K - HOUSEHOLD INCOME (ANY HOUSEHOLD MEMBER 18 OR OLDER)

1. In order to classify your household for statistical purposes, we need an estimate of your total <u>household</u> income in the past 12 months. Please stop me when I get to the category that best describes the total income of your household in the past 12 months.

    (Total income includes income from all sources such as wages and salaries, income from business or farm, Social Security, pensions, dividends, interest, rent, and any other income received.)

    {HHFAMINC}

    (IF R VOLUNTEERS AMOUNT THAT IS ON THE BREAKPOINT, CODE TO HIGHER CATEGORY.)

    1   Less than $10,000 → GO TO QUESTION 2
    2   $10,000 to $20,000 → GO TO QUESTION 3
    3   $20,000 to $30,000 → GO TO QUESTION 4
    4   $30,000 to $40,000 → GO TO QUESTION 5
    5   $40,000 to $50,000 → GO TO QUESTION 6
    6   $50,000 to $60,000 → GO TO QUESTION 7
    7   $60,000 to $70,000 → GO TO QUESTION 8
    8   $70,000 to $80,000 → GO TO QUESTION 9
    9   $80,000 to $100,000 → GO TO QUESTION 10
    10 $100,000 or more? → GO TO QUESTION 10

2. Was your household income more or less than $5,000?

    1   $5,000 OR MORE → GO TO QUESTION 10
    2   LESS THAN $5,000 → GO TO QUESTION 10

3. Was your household income more or less than $15,000?

    1   $15,000 OR MORE → GO TO QUESTION 10
    2   LESS THAN $15,000 → GO TO QUESTION 10

4. Was your household income more or less than $25,000?

    1   $25,000 OR MORE → GO TO QUESTION 10
    2   LESS THAN $25,000 → GO TO QUESTION 10

5. Was your household income more or less than $35,000?

Section K (continued)

       1        $35,000 OR MORE → GO TO QUESTION 10

       2   LESS THAN $35,000 → GO TO QUESTION 10

Section K (continued)

6. Was your household income more or less than $45,000?

     1     $45,000 OR MORE → GO TO QUESTION 10
     2   LESS THAN $45,000 → GO TO QUESTION 10

7. Was your household income more or less than $55,000?

     1     $55,000 OR MORE → GO TO QUESTION 10
     2   LESS THAN $55,000 → GO TO QUESTION 10

8. Was your household income more or less than $65,000?

     1     $65,000 OR MORE → GO TO QUESTION 10
     2   LESS THAN $65,000 → GO TO QUESTION 10

9. Was your household income more or less than $75,000?

     1     $75,000 OR MORE
     2   LESS THAN $75,000

10. IF THIS IS A SINGLE PERSON HOUSEHOLD, CATI WILL SKIP TO CHECK ITEM.

      INTERVIEWER: DOES THIS INCLUDE INCOME OF <u>ALL</u> HOUSEHOLD MEMBERS?

      {NONFMFLG}

        1   YES → GO TO QUESTION CHECK ITEM
        2   NO

11. WHOSE INCOME ISN'T INCLUDED?

                ROSTER NUMBER(S): _____

IF AT LEAST ONE VEHICLE IN HOUSEHOLD, GO TO SECTION L.

IF NO VEHICLES, CONCLUDE INTERVIEW AND SEEK TO INTERVIEW ANY OTHER PERSONS IN THE HOUSEHOLD STILL NEEDING TO BE INTERVIEWED.

SECTION L - COLLECTION OF ODOMETER READINGS (ANY HOUSEHOLD MEMBER 18 OR OLDER)

1. In the packet we sent to (you/your household), there was a form to record the odometer reading(s) for your vehicle(s).

   (Is the reading/Are any of the readings) available now?

   {OD_READ1, OD_READ2, OD_MON1, OD_YEAR1, OD_MON2, OD_YEAR2}

   1   YES
   2   NO → GO TO QUESTION 3

2. INTERVIEWER: RECORD ANY READINGS THAT ARE NOW AVAILABLE.

   [CATI WILL DISPLAY ALL VEHICLES AND ODOMETER READINGS THAT HAVE BEEN RECORDED TO DATE. INTERVIEWER WILL SELECT APPROPRIATE VEHICLE AND ENTER ODOMETER MILEAGE AND DATE THE READING WAS RECORDED.]

   CONCLUDE INTERVIEW AND SEEK TO INTERVIEW ANY OTHER PERSONS IN THE HOUSEHOLD STILL NEEDING TO BE INTERVIEWED.

3. When would be a good time to call back when the readings will be available?

   SET CALLBACK

   CONCLUDE INTERVIEW AND SEEK TO INTERVIEW ANY OTHER PERSONS IN THE HOUSEHOLD STILL NEEDING TO BE INTERVIEWED.

APPENDIX F
SURVEY DOCUMENTS

This Appendix contains samples of the documents sent to the respondents, including:

Pre-Interview Letter

Cover letter sent with travel diaries

Travel diary

Reminder note for Travel Day

Odometer reading card.

The survey process is described in **Chapter 2** of this User's Guide.

U.S.Department
of Transportation

**Federal Highway
Administration**

Office of the Administrator

400 Seventh St., S.W.
Washington, D.C. 20590

Resident

Refer to: HPM-40

Dear Resident:

I am writing to ask your cooperation in a survey of the daily travel experiences of a representative sample of U.S. households. We at the U.S. Department of Transportation recognize that transportation is much more than streets and highways, public transit, walkways, bike paths, and carpool services. Transportation is really about your ability to get where you need to go, whether it is to work, school, shopping, or someplace else. Occasionally, we need to ask you about your daily travel so we can determine if we are moving in the right direction.

Our computer randomly selected your telephone number from all possible phone numbers in the U.S. We then obtained your address from the telephone directory in order to mail you this letter. Within a few weeks your household will be contacted and asked to provide information on your local and long distance travel for a single day. The interview will be conducted by telephone. The information you provide will be kept strictly confidential.

The survey is being conducted for the Department of Transportation by Research Triangle Institute (RTI), a not-for-profit research firm affiliated with Duke University, the University of North Carolina, and North Carolina State University. An interviewer from RTI will telephone you within the next few weeks. Your participation, while strictly voluntary, is extremely important in assessing the Nation's transportation needs. The survey results will be used to determine transportation patterns of the U.S. population and to project the amount and type of travel that will take place in the future.

If you have any questions or concerns, please contact Brett Anderson at RTI by calling 1-800-334-8571, ext. 6038 between the hours of 9 a.m. and 5 p.m. Eastern time. The project manager at the Federal Highway Administration is Susan Liss who can be reached at 1-800-307-8243 between the hours of 9 a.m. and 5 p.m. Eastern time. You may also leave a message for her after hours and she will return your call.

Thank you for your help.

Sincerely yours,

Rodney E. Slater
Federal Highway Administrator

RTI

Dear NPTS Household:

Recently you completed a telephone interview as part of the 1995 Nationwide Personal Transportation Survey (NPTS). As we discussed on the phone, this envelope contains a one-day diary for each member of your household who is 5 years old or older. We ask that each household member complete his or her own diary for the one day listed at the top of the form. Even though your household's travel on this day may be unusual for some reason, we still want to know about your trips on this particular day. If there are young children in your household, please have an adult household member who knows about the child's activities complete the diary. An example diary is enclosed. (If you should run out of space on the diary, please continue recording trips on the back or on a separate piece of paper.) In appreciation of your help in our research, we have enclosed a two-dollar payment for each diary.

After your designated diary completion day, one of our professional telephone interviewers will call to collect the information and ask some additional transportation-related questions. We would like to talk with each person 14 or older individually and ask an adult to respond for younger household members.

If any vehicles were reported for your household, you will also find an Odometer Reading Form enclosed. By collecting odometer readings now and again in a few months, the Department of Transportation obtains accurate data on the miles vehicles are driven.

It may be helpful for household members to leave their completed diaries and the Odometer Reading Form by the telephone so they are available when our interviewer calls. If you have any questions about completing your diary or collecting the odometer readings, please call Research Triangle Institute at 1-800-334-8571 between the hours of 9:00 am and 5:00 pm Eastern time and ask for Brett Anderson. Thank you in advance for your cooperation. Your participation is critical to the success of our study.

Sincerely,
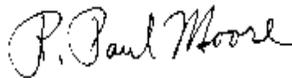
R. Paul Moore

R. Paul Moore, Project Director
Nationwide Personal Transportation Survey

SPECIAL INSTRUCTIONS FOR HOUSEHOLDS

WITH YOUNG CHILDREN

We have enclosed a travel diary for every member of your household 5 years old or older. We prefer that household members complete their own travel diary. However, we understand that this will not be possible in all cases. For households with young children please follow these guidelines:

- Children who are old enough to read and write may enjoy completing their own travel diary. With help from an adult household member it is perfectly acceptable for these children to complete their own diaries.

- For children who are not able to complete their own travel diaries, we ask that an adult household member who is knowledgeable about the child's activities complete the diary.

- Household members who report for children should use their best judgement to answer the detailed questions about trips made by the child.

- Remember to include trips made by the child which do not include other members of the household. Examples include: bus rides or walking to school, class trips, traveling to after school activities, and biking or walking to visit friends.

omplete one line below for each time you traveled from one place to another on your travel day.

- Remember to record each time you traveled from one place to another on your travel day.
- Remember to record each **return** trip to home or work.
- Be **specific**. Record each place you went on a separate line, even if you stopped several places on one journey.
- The first trip should be the first place you traveled to after 4 a.m.
- The last trip should be to your home, or wherever you ended the day.

	WHERE DID YOU GO? (home, bank, restaurant, work, friend's house, etc.)	WHAT TIME DID YOU BEGIN YOUR TRIP?	HOW FAR DID YOU TRAVEL TO GET THERE? (6 blocks, 3 miles, etc.)	WHAT MEANS OF TRANSPORTATION DID YOU USE? (car, bus, subway, walk, bike, etc.)	HOW LONG DID IT TAKE TO GET THERE?	WHO WAS WITH (friends, son, wi coworker, no on
1		☐ am ☐ pm				
2		☐ am ☐ pm				
3		☐ am ☐ pm				
4		☐ am ☐ pm				
5		☐ am ☐ pm				
6		☐ am ☐ pm				
7		☐ am ☐ pm				
8		☐ am ☐ pm				
9		☐ am ☐ pm				
10		☐ am ☐ pm				
11		☐ am ☐ pm				
12		☐ am ☐ pm				
13		☐ am ☐ pm				
14		☐ am ☐ pm				
15		☐ am ☐ pm				

REMEMBER

Complete your diary for:
Thursday
September 14th

An RTI interviewer will call you within a few days to collect the diary information. If you have any questions in the meantime, you can call Brett Anderson

at 1-800-334-8571

between the hours of 9:00 am and 5:00 pm Eastern time.

ODOMETER READING FORM

1995 Nationwide Personal Transportation Survey

Please record the odometer (mileage) reading and the date of the reading for each vehicle and keep the form by your telephone so it will be available when our interviewer calls.

Please be sure to record the odometer reading which reflects the mileage for the entire life of the car, not the meter which can be manually reset to zero for specific trips or to calculate mileage per tank of gasoline. Also, please be sure not to record the last digit if it represents the tenth of the mile. For example, if the odometer reading is 60,551.3, record 60,551.

It is not necessary that odometer readings be taken on the same day that you complete your diary, but this may be a convenient way to make certain that the readings are made.

Thank you for your cooperation in this important part of the study.

APPENDIX G
ESTIMATING SAMPLING ERRORS

The final adjusted weights are used in calculating parameter estimates and their sample variances. RTI uses SUDAAN for these calculations. Variance estimation for the statistics computed in the SUDAAN series of procedures for survey data analysis is based on a first-order Taylor series approximation of the deviations of estimates from their expected values. This approximation for large samples is well-known (see Kendall and Stuart, 1961, p. 231). Woodruff (1971) presented applications of this technique to sample surveys. This method yields one of the best known numerical approximations currently available in the statistical literature for ratio estimates. The general approach taken to compute variances is to first form the Taylor series linearization for a particular statistic. These linearized values are referred to as Z_i for the ith sample unit throughout this appendix. Once the linearized values are formed, they are substituted into the formula for computing the variance of a total estimate that is appropriate for the design.

Estimating the total number of individuals who belong to an arbitrarily defined domain or subpopulation provides a convenient example. Denote the total in question by $\hat{N}_d$, where d denotes the domain. Establish a domain indicator

$$I_{hijk} = \begin{cases} 1 \text{ if the k}^{th} \text{ person is in the domain} \\ 0 \text{ if the k}^{th} \text{ person is not in the domain} \end{cases}$$

where
h is the stratum, h = 1, ..., H
i is the ith cluster, in stratum h, i=1, ..., n_h
j is the jth household in the cluster i in stratum h, j=1, ..., n_i
k is the kth person in the household; in cluster i in stratum h, k=1, ..., n_j

and w_{hijk} is the population weight for person k in household j in cluster i in stratum h.

Then, $z_{hijk} = I_{hijk} \cdot w_{hijk}$

and the estimate of the domain total is

$$\hat{N}_d = \sum_h \sum_i \sum_j \sum_k z_{hijk}$$

and the variance of this estimate is
$$Var(z) = \sum_h n_h s_h^2$$

where

$$s_h^2 = \frac{\sum\limits_i \left(z_{hi} - \bar{z}_h\right)^2}{n_h - 1}$$, the stratum-level sum of squares,

with

$$z_{hi} = \sum\limits_j \sum\limits_k z_{hijk}$$, the cluster-level sum,

and

$$\bar{z}_h = \frac{\sum\limits_i z_{hi}}{n_h}$$, the stratum-level mean.

Other methods of obtaining the variance estimates could be used instead of the first order Taylor series linearizations. Examples include such pseudorandomization techniques as balanced repeated replications (BRR), jackknifing and boot-strapping. The Taylor series linearization is preferred by many because of its computational efficiency (generally less demanding of computer time).

The most commonly used statistical packages, such as SAS, BMDP, and SPSS, do <u>not</u> calculate standard errors of survey estimates accounting for complex sample designs. There are, however, several commercially available packages that can correctly calculate the standard errors for designs such as the one used in NPTS, among them are:

- ■ Clusters (World Health Organization
- ■ Osiris (University of Michigan)
- ■ SUDAAN (RTI)
- ■ Super Carp (Iowa State University)
- ■ Wesvar Procedures (Westat)

Of these, all use Taylor series linearization except Wesvar, which uses BRR.

APPENDIX H
NPTS DATA DICTIONARY

PURPOSE

The NPTS is a large, complex dataset, with hundreds of variables contained in six files. For ease in running tabulations and analyzing the data, a number of the variables are repeated on several files.   The data dictionary contained in this Appendix is designed to assist the data user in finding the variables they need or in placing a variable in context when all that is known is the variable name.

The data dictionary is a consolidated list of all NPTS variables in alphabetic order by variable name. It contains much of the information that is in the Codebook, such as source of the data, variable type, variable length, a label describing the contents, and a indication of which file or files the variable is found on.

The attached is Courier font, 8 point, left justified.

NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
F	16	N	ALWYSDRV	C	2	2	Always the driver?	N	Y	N	N	N	N
B	7	S	ANNMILES	N	4	6	Self-reported annualized vmt	N	N	Y	N	N	N
OAKR	*	*	ANNUALZD	N	5	6	Odometer-based annualized vmt	N	N	Y	N	N	N
OAKR	*	*	ANN_EDIT	C	2	2	Flag any edits/adjustments to ANNUALZD	N	N	Y	N	N	N
OAKR	*	*	ANN_FLG	C	2	2	Reasons for missing ANNUALZD value	N	N	Y	N	N	N
OAKR	*	*	ANN_OUT	C	2	2	Flag identifying ANNUALZD outlier values	N	N	Y	N	N	N
OAKR	*	*	ANULZDSE	N	8	9.2	Standard error of ANNUALZD estimate	N	N	Y	N	N	N
G	18	N	AWAYHOME	C	2	2	Reason started day away from home	N	N	N	N	Y	N
C	2.2	N	BUSBLOCK	N	3	3	Reported dist. to bus (blocks)	Y	N	N	N	N	N
C	2.2	N	BUSMILE	N	3	3	Reported dist. to bus (miles)	Y	N	N	N	N	N
C	1	N	BUS_AVL	C	2	2	Bus service available	Y	N	N	N	N	N
C	2.1	N	BUS_DIST	N	8	5.1	Distance to bus (miles)	Y	N	N	N	N	N
*	*	*	CALCDIST	N	4	5	Calculated distance home to destination	N	N	N	N	N	Y
*	*	S	CENSUS_D	C	2	2	Census division	Y	Y	Y	Y	Y	Y
*	*	S	CENSUS_R	C	2	2	Census region	Y	Y	Y	Y	Y	Y
G	*	N	CHAIN	N	3	2	Trip chain number for this person	N	N	N	N	Y	N
G	*	N	CHAINTRP	N	3	2	# of trip within chain	N	N	N	N	Y	N
H	2	S	COUNTRY	C	3	3	Destination country code	N	N	N	N	N	Y
G	*	N	DATEFLG	C	2	1	Intrv date imputed from trav date plus o	N	N	N	N	Y	N
G	17.04	S	DAYNIGHT	C	2	2	Trip started AM or PM G17A	N	N	N	N	Y	N
H	2	S	DESTSTAT	C	2	2	Destination state of travel period trip	N	N	N	N	N	Y
G	9	N	DIARYCMP	C	2	2	Who completed diary	N	Y	N	N	N	N
G	11	N	DIARYGET	C	2	2	Can get diary now	N	Y	N	N	N	N
G	10	N	DIARYHAV	C	2	2	Have the diary now	N	Y	N	N	N	N
G	*	S	DIFFDATE	N	3	3	Days between travel & interview dates	N	N	N	N	Y	N
F	5.1	N	DISTTOWK	N	8	6.2	One-way distance to work	N	Y	N	N	N	N
D	9	LIC_DRVR	DRIVER	C	2	2	Person is a driver D9	N	Y	N	Y	Y	Y
D	*	S	DRVRCNT	N	3	2	Number of drivers in HH	Y	Y	Y	Y	Y	Y
G	21&38	S	DRVR_FLG	C	2	2	1= person drove on trip	N	N	N	N	Y	N
*	*	*	DRVR_TPT	C	2	2	Person was the main driver on trip	N	N	N	N	N	Y
E	1.D	N	DTACDT	C	2	2	Worry about traffic accident	N	Y	N	N	N	N
E	1.AFK	N	DTCONJ	C	2	2	Highway congestion	N	Y	N	N	N	N
E	1.J	N	DTCRIME	C	2	2	Worry about crimes against motorists	N	Y	N	N	N	N
E	1.C	N	DTNTFMLR	C	2	2	Unfamiliar local areas or neighborhood	N	Y	N	N	N	N
E	1.BL	N	DTPAVE	C	2	2	Rough pavement on highways	N	Y	N	N	N	N
E	1.GN	N	DTPOLLTN	C	2	2	Air pollution by cars, trucks, and buses	N	Y	N	N	N	N
E	1.IM	N	DTSTRTS	C	2	2	Rough pavement on neighborhood streets	N	Y	N	N	N	N

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
E	1.HO	N	DTTIEUP	C	2	2	Traffic tie-ups or road construction	N	Y	N	N	N	N
E	1.E	N	DTWALK	C	2	2	Poor walkways or sidewalks	N	Y	N	N	N	N
G	17	N	DWELTIME	N	4	4	Time spent at destination of prev trip	N	N	N	N	Y	N
G	22	S	EDITMILE	C	2	2	1= trip miles were edited	N	N	N	N	Y	N
G	25	S	EDITMODE	C	2	2	1= transportation mode was edited	N	N	N	N	Y	N
G	40	N	EDITNONH	C	2	2	1= variable NONHHCNT was edited	N	N	N	N	Y	N
G	27	S	EDIT_MIN	C	2	2	1= trip duration was edited	N	N	N	N	Y	N
F	1	S	EDUC	C	2	2	Highest grade or yr of school completed	N	Y	N	N	N	N
E	4	N	FQSTBELT	C	2	2	How often wear seat belt when driving	N	Y	N	N	N	N
G	16	N	FROM_A	C	1	1	Where trip chain started (H,W,S)	N	N	N	N	Y	N
G	19	N	FRSTHM	C	2	2	1=persons 1st trip began at home	N	N	N	N	Y	N
GEOH	*	*	GHMXIN	N	8	2	Basis for geocoding - household	Y	N	N	N	N	N
F	3	N	GT1JBLWK	C	2	2	Have more than one job last week	N	Y	N	N	N	N
GEOW	*	*	GWKXIN	N	8	2	Basis for geocoding - workplace location	N	Y	N	N	N	N
CLAR	*	*	HBHHSMLT	N	4	3	Percent multiple unit housing, BG	Y	N	N	N	N	N
CLAR	*	*	HBHHSOTH	N	4	3	Percent other housing, BG	Y	N	N	N	N	N
CLAR	*	*	HBHHSSNG	N	4	3	Percent single family housing, BG	Y	N	N	N	N	N
CLAR	*	*	HBHINCH	N	4	3	Percent HHs, income $60000 and up, BG	Y	N	N	N	N	N
CLAR	*	*	HBHINCL	N	4	3	Percent HHs, income < $15000, BG	Y	N	N	N	N	N
CLAR	*	*	HBHINCM1	N	4	3	Percent HHs, income $15000-$39999, BG	Y	N	N	N	N	N
CLAR	*	*	HBHINCM2	N	4	3	Percent HHs, income $40000-$59999, BG	Y	N	N	N	N	N
CLAR	*	*	HBHINMED	N	6	6	Median household income, BG	Y	Y	Y	N	Y	Y
CLAR	*	*	HBHMEDHS	N	6	6	Median housing unit value, BG	Y	N	N	N	N	N
CLAR	*	*	HBHRECNT	N	4	3	Percent units built last 10 years, BG	Y	N	N	N	N	N
CLAR	*	*	HBHRESDN	N	6	6	HU density (units/square mile), BG	Y	Y	Y	N	Y	Y
CLAR	*	*	HBHTNOWN	N	4	3	Percent owner-occupied housing, BG	Y	N	N	N	N	N
CLAR	*	*	HBHTNRNT	N	4	3	Percent renter-occupied housing, BG	Y	N	N	N	N	N
CLAR	*	*	HBHUR	C	1	1	Urban/rural code, block group	Y	Y	Y	N	Y	Y
CLAR	*	*	HBP65P	N	4	3	Percent 65 & older, block group	Y	N	N	N	N	N
CLAR	*	*	HBPCOLGD	N	4	3	Pcnt Colg Grads(over 25), block group	Y	N	N	N	N	N
CLAR	*	*	HBPFORBN	N	4	3	Percent foreign born 1990, block group	Y	N	N	N	N	N
CLAR	*	*	HBPHISP	N	4	3	Percent Hispanic, block group	Y	N	N	N	N	N
CLAR	*	*	HBPHSGD	N	4	3	Pcnt HS grads (over 25), block group	Y	N	N	N	N	N
CLAR	*	*	HBPLTPOV	N	4	3	Percent families below poverty, blk grp	Y	N	N	N	N	N
CLAR	*	*	HBPPOPDN	N	6	6	Population density, block group	Y	Y	Y	N	Y	Y
CLAR	*	*	HBPPOPNO	N	6	6	Current population, block group	Y	N	N	N	N	N
CLAR	*	*	HBPRCAA	N	4	3	Percent African-Am., block group	Y	N	N	N	N	N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
CLAR	*	*	HBPRCASN	N	4	3	Percent Asian- Am., block group	Y	N	N	N	N	N
CLAR	*	*	HBPRCCAU	N	4	3	Percent White, block group	Y	N	N	N	N	N
CLAR	*	*	HBPRCOTH	N	4	3	Percent Other races, block group	Y	N	N	N	N	N
*	*	SMSA	HHCMSA	C	4	4	CMSA identification code	Y	Y	Y	Y	Y	Y
D	3	S	HHELGCNT	N	3	2	# of eligible persons in HH	Y	N	Y	N	N	N
K	1 & 2	S	HHFAMINC	C	2	2	HH family income category	Y	Y	Y	Y	Y	Y
G	37	S	HHMEMDRV	C	2	2	1= household member drove G37	N	N	N	N	Y	N
*	*	S	HHMSA	C	4	4	MSA identification code	Y	Y	Y	Y	Y	Y
D	13	N	HHRESP	C	2	2	HH respondent	Y	Y	N	N	N	N
D	1	S	HHSIZE	N	3	2	Total number of persons in HH	Y	Y	Y	Y	Y	Y
*	*	S	HHSTATE	C	2	2	State postal code	Y	N	N	N	N	N
*	*	S	HHSTFIPS	N	3	2	State FIPS code	Y	N	N	N	N	N
*	*	N	HHTRIPID	N	3	3	Trip number for household travel day	N	N	N	N	Y	N
*	*	N	HHTRPID	N	3	3	Trip number for household travel period	N	N	N	N	N	Y
B	*	S	HHVEHCNT	N	3	2	No. of vehicles in household (derived)	Y	Y	Y	Y	Y	Y
C	3	S	HH_0TO4	N	3	2	Number of persons in HH age 0-4	Y	N	N	N	N	N
D	5	S	HH_HISP	C	2	2	Hispanic status of ref. person	Y	Y	Y	Y	Y	Y
G	36	S	HH_ONTRP	N	3	2	# of HH members on the trip (derived)	N	N	N	N	Y	N
D	6	S	HH_RACE	C	2	2	Race of reference person	Y	Y	Y	Y	Y	Y
C	8	N	HOMEOWN	C	2	2	Tenure of housing unit	Y	N	N	N	N	N
C	6	N	HOMETYPE	C	2	2	Type of housing unit	Y	N	N	N	N	N
*	*	S	HOUSEID	N	5	8	Household identification number	Y	Y	Y	Y	Y	Y
G	22.02	N	HOWFARU	C	2	2	Units of reported dist: B)locks, M)iles	N	N	N	Y	Y	N
C	7	N	HSTORIES	C	2	2	Stories in apt. building	Y	N	N	N	N	N
CLAR	*	*	HTEEMPDN	N	6	6	Jobs per square mile, census tract	Y	N	N	N	N	N
CLAR	*	*	HTHHSMLT	N	4	3	Percent multiple unit housing, CT	Y	N	N	N	N	N
CLAR	*	*	HTHHSOTH	N	4	3	Percent other housing, CT	Y	N	N	N	N	N
CLAR	*	*	HTHHSSNG	N	4	3	Percent single family housing, CT	Y	N	N	N	N	N
CLAR	*	*	HTHINCH	N	4	3	Percent HHs, income $60000 and up, CT	Y	N	N	N	N	N
CLAR	*	*	HTHINCL	N	4	3	Percent HHs, income < $15000, CT	Y	N	N	N	N	N
CLAR	*	*	HTHINCM1	N	4	3	Percent HHs, income $15000-$39999, CT	Y	N	N	N	N	N
CLAR	*	*	HTHINCM2	N	4	3	Percent HHs, income $40000-$59999, CT	Y	N	N	N	N	N
CLAR	*	*	HTHINMED	N	6	6	Median household income, CT	Y	N	N	N	N	N
CLAR	*	*	HTHMEDHS	N	6	6	Median housing unit value, CT	Y	N	N	N	N	N
CLAR	*	*	HTHRECNT	N	4	3	Percent units built last 10 years, CT	Y	N	N	N	N	N
CLAR	*	*	HTHRESDN	N	6	6	HU density (units/square mile), CT	Y	N	N	N	N	N
CLAR	*	*	HTHTNOWN	N	4	3	Percent owner-occupied housing, CT	Y	N	N	N	N	N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
CLAR	*	*	HTHTNRNT	N	4	3	Percent renter-occupied housing, CT	Y	N	N	N	N	N
CLAR	*	*	HTHUR	C	1	1	Urban/rural code, census tract	Y	N	N	N	N	N
CLAR	*	*	HTINDRET	N	4	3	Pct 16+ workplace pop, retl trd ind, CT	Y	N	N	N	N	N
CLAR	*	*	HTP65P	N	4	3	Percent 65 & older, census tract	Y	N	N	N	N	N
CLAR	*	*	HTPCOLGD	N	4	3	Pcnt Colg Grads(over 25), census tract	Y	N	N	N	N	N
CLAR	*	*	HTPFORBN	N	4	3	Percent foreign born 1990, census tract	Y	N	N	N	N	N
CLAR	*	*	HTPHISP	N	4	3	Percent Hispanic, census tract	Y	N	N	N	N	N
CLAR	*	*	HTPHSGD	N	4	3	Pcnt HS grads (over 25), census tract	Y	N	N	N	N	N
CLAR	*	*	HTPLTPOV	N	4	3	Percent families below poverty, cen. tr.	Y	N	N	N	N	N
CLAR	*	*	HTPPOPDN	N	6	6	Population density, census tract	Y	N	N	N	N	N
CLAR	*	*	HTPPOPNO	N	6	6	Current population, census tract	Y	N	N	N	N	N
CLAR	*	*	HTPRCAA	N	4	3	Percent African-Am., census tract	Y	N	N	N	N	N
CLAR	*	*	HTPRCASN	N	4	3	Percent Asian- Am., census tract	Y	N	N	N	N	N
CLAR	*	*	HTPRCCAU	N	4	3	Percent White, census tract	Y	N	N	N	N	N
CLAR	*	*	HTPRCOTH	N	4	3	Percent Other races, census tract	Y	N	N	N	N	N
C	3	S	INELGCNT	N	3	2	# of ineligible persons in HH	Y	N	N	N	N	N
*	*	S	INTRVMON	N	3	2	Person interview date - month	N	Y	N	N	Y	N
*	*	S	INTRVYR	N	3	2	Person interview date - year	N	Y	N	N	Y	N
F	2	N	JOBLSTWK	C	2	2	Have full, part time job last wk or not	N	Y	N	N	N	N
D	3	S	LIF_CYC	C	2	2	Family life cycle	Y	Y	Y	Y	Y	Y
D	14	S	MAINDRVR	C	2	2	Does one HH mem. usually drive this veh	N	N	Y	N	N	N
B	1	S	MAKECODE	C	2	2	First 2 char of NASS code	N	N	Y	N	N	N
G	17.05	N	MATCH	N	3	3	ID of matching prev. reported trip	N	N	N	N	Y	N
B	7	S	MILELIMT	C	2	2	=1 if annmiles capped at 115K	N	N	Y	N	N	N
B	1	S	MODLCODE	C	3	3	Last 3 char of NASS code	N	N	Y	N	N	N
*	*	S	MSASIZE	C	2	2	Size of MSA of household	Y	Y	Y	Y	Y	Y
*	*	S	MSTR_MON	N	3	2	Date of master interview - month	Y	Y	Y	N	Y	Y
*	*	S	MSTR_YR	N	3	2	Date of master interview - year	Y	Y	Y	N	Y	Y
F	17.11	N	NCCOMCR	C	2	2	Not carpool-have company car	N	Y	N	N	N	N
F	17.03	N	NCINCVNT	C	2	2	Not carpool-it's inconvenient	N	Y	N	N	N	N
F	17.01	N	NCIRRHR	C	2	2	Not carpool-irregular/unusual hours	N	Y	N	N	N	N
F	17.1	N	NCLVFAR	C	2	2	Not carpool-live far from work	N	Y	N	N	N	N
F	17.04	N	NCNEEDCR	C	2	2	Not carpool-need car at/bfr/aft work	N	Y	N	N	N	N
F	17.08	N	NCNEVER	C	2	2	Not carpool-never thought of it	N	Y	N	N	N	N
F	17.09	N	NCNLIKE	C	2	2	Not carpool-don't like to do it	N	Y	N	N	N	N
F	17.02	N	NCNOONE	C	2	2	Not carpool-no one to carpool with	N	Y	N	N	N	N
F	17.07	N	NCONLY	C	2	2	Not carpool-only one works there	N	Y	N	N	N	N

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
F	17.06	N	NCOTHRES	C	2	2	Not carpool-other reasons	N	Y	N	N	N	N
F	17.05	N	NCSHRTDI	C	2	2	Not carpool-short distance/unnecessary	N	Y	N	N	N	N
K	10	S	NONFMFLG	C	2	2	Non-family income reported for HH	Y	N	N	N	N	N
I	1 & 2	S	NONFMINC	C	2	2	Individual income category	N	Y	N	N	N	N
G	39	S	NONHHACC	C	2	2	1= non-HH members on trip	N	N	N	N	Y	N
G	40	S	NONHHCNT	N	3	3	# of non-HH members on trip	N	N	N	N	Y	N
J	5	N	NOTELWKS	C	2	2	No. of weeks w/o telephone service	Y	N	N	N	N	N
J	4	N	NOTELYR	C	2	2	Without telephone service in past year?	Y	N	N	N	N	N
F	18.03	N	NPT2EXPV	C	2	2	Public transp. too expensive	N	Y	N	N	N	N
F	18.01	N	NPT2FRWK	C	2	2	Public trans. not available at work	N	Y	N	N	N	N
F	18.02	N	NPT2MCTM	C	2	2	Public trans. takes too much time	N	Y	N	N	N	N
F	18.11	N	NPTCOMCR	C	2	2	Not used public trans. have com car	N	Y	N	N	N	N
F	18.09	N	NPTDLPT	C	2	2	Not used public trans. dont like to	N	Y	N	N	N	N
F	18.06	N	NPTFMHM	C	2	2	Public trans. stops too far from home	N	Y	N	N	N	N
F	18.1	N	NPTHVCAR	C	2	2	Not used public trans. have onw car	N	Y	N	N	N	N
F	18.08	N	NPTLVCLS	C	2	2	Not used public trans. short distance	N	Y	N	N	N	N
F	18.05	N	NPTNTCNV	C	2	2	Public trans. schedule not convenient	N	Y	N	N	N	N
F	18.07	N	NPTOTHER	C	2	2	Not used public trans. for other reasons	N	Y	N	N	N	N
F	18.04	N	NPTOTHTG	C	2	2	Need own vehicle to do other things	N	Y	N	N	N	N
E	5.05	N	NSBBACK	C	2	2	Not wear seat belt when in back seat	N	Y	N	N	N	N
E	5.02	N	NSBBROKE	C	2	2	Not wear seat belt when broken/unavail	N	Y	N	N	N	N
E	5.07	N	NSBDRVR	C	2	2	Not wear seat belt when driver	N	Y	N	N	N	N
E	5.01	N	NSBFGET	C	2	2	Not wear seat belt when forget	N	Y	N	N	N	N
E	5.12	N	NSBHURRY	C	2	2	Not wear seat belt when in a hurry	N	Y	N	N	N	N
E	5.04	N	NSBLONG	C	2	2	Not wear seat belt when taking long trip	N	Y	N	N	N	N
E	5.15	N	NSBMED	C	2	2	Not wear seat belt: medical reasons	N	Y	N	N	N	N
E	5.16	N	NSBNLIKE	C	2	2	Not wear seat belt: don't like to	N	Y	N	N	N	N
E	5.14	N	NSBNOASK	C	2	2	Not wear seat belt when not asked	N	Y	N	N	N	N
E	5.11	N	NSBOTHER	C	2	2	Not wear seat belt: other specify	N	Y	N	N	N	N
E	5.18	N	NSBPOLIC	C	2	2	Not wear seat belt when police not aroun	N	Y	N	N	N	N
E	5.06	N	NSBPSNG	C	2	2	Not wear seat belt when passenger	N	Y	N	N	N	N
E	5.03	N	NSBSHORT	C	2	2	Not wear seat belt when short trips	N	Y	N	N	N	N
E	5.13	N	NSBSPCLH	C	2	2	Not wear seat belt w/ certain clothes	N	Y	N	N	N	N
E	5.1	N	NSBSPPER	C	2	2	Not wear seat belt w/ a certain person	N	Y	N	N	N	N
E	5.08	N	NSBSPVEH	C	2	2	Not wear seat belt when in a certain veh	N	Y	N	N	N	N
E	5.09	N	NSBTOWN	C	2	2	Not wear seat belt when in town/city	N	Y	N	N	N	N
E	5.17	N	NSBTOWRK	C	2	2	Not wear seat belt when going to work	N	Y	N	N	N	N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
E	5.19	N	NSBWTHR	C	2	2	Not wear seat belt when good weather	N	Y	N	N	N	N
D	3	S	NUMADLT	N	3	2	# of adults in HH	Y	N	N	N	N	N
G	36&40	S	NUMONTRP	N	3	3	Total # of persons on trip (derived)	N	N	N	N	Y	N
*	*	N	OD_DAY1	N	3	2	Date of first odometer reading - day	N	N	Y	N	N	N
*	*	N	OD_DAY2	N	3	2	Date of second odomete reading - day	N	N	Y	N	N	N
*	*	N	OD_MON1	N	3	2	Date of first odometer reading - month	N	N	Y	N	N	N
*	*	N	OD_MON2	N	3	2	Date of second odomete reading - month	N	N	Y	N	N	N
*	*	N	OD_READ1	N	4	6	First odometer reading	N	N	Y	N	N	N
*	*	N	OD_READ2	N	4	6	Second odometer reading	N	N	Y	N	N	N
*	*	N	OD_YR1	N	3	2	Date of first odometer reading - year	N	N	Y	N	N	N
*	*	N	OD_YR2	N	3	2	Date of second odomete reading - year	N	N	Y	N	N	N
C	3	N	OTHERPTR	C	2	2	Other public transit available	Y	N	N	N	N	N
G	14	N	OUTCNTRY	C	2	2	Out of country	N	Y	N	N	N	N
H	5	S	OVERLAP	C	1	2	=1 if trip part of travel period trip	N	N	N	N	Y	N
D	3	N	P10_AGE	N	3	3	Age of person 10	Y	N	N	N	N	N
D	9	N	P10_DRVR	C	2	2	Driver status of person 10	Y	N	N	N	N	N
D	7	N	P10_REL	C	2	2	Person 10 relation to ref. person	Y	N	N	N	N	N
D	4	N	P10_SEX	C	2	2	Sex of person 10	Y	N	N	N	N	N
*	*	N	P10_STAT	C	2	2	Response status of person 10	Y	N	N	N	N	N
D	12	N	P10_WKR	C	2	2	Worker status of person 10	Y	N	N	N	N	N
D	3	N	P1_AGE	N	3	3	Age of person 1	Y	N	N	N	N	N
D	9	N	P1_DRVR	C	2	2	Driver status of person 1	Y	N	N	N	N	N
D	7	N	P1_REL	C	2	2	Person 1 relation to ref. person	Y	N	N	N	N	N
D	4	N	P1_SEX	C	2	2	Sex of person 1	Y	N	N	N	N	N
*	*	N	P1_STAT	C	2	2	Response status of person 1	Y	N	N	N	N	N
D	12	N	P1_WKR	C	2	2	Worker status of person1	Y	N	N	N	N	N
D	3	N	P2_AGE	N	3	3	Age of person 2	Y	N	N	N	N	N
D	9	N	P2_DRVR	C	2	2	Driver status of person 2	Y	N	N	N	N	N
D	7	N	P2_REL	C	2	2	Person 2 relation to ref. person	Y	N	N	N	N	N
D	4	N	P2_SEX	C	2	2	Sex of person 2	Y	N	N	N	N	N
*	*	N	P2_STAT	C	2	2	Response status of person 2	Y	N	N	N	N	N
D	12	N	P2_WKR	C	2	2	Worker status of person 2	Y	N	N	N	N	N
D	3	N	P3_AGE	N	3	3	Age of person 3	Y	N	N	N	N	N
D	9	N	P3_DRVR	C	2	2	Driver status of person 3	Y	N	N	N	N	N
D	7	N	P3_REL	C	2	2	Person 3 relation to ref. person	Y	N	N	N	N	N
D	4	N	P3_SEX	C	2	2	Sex of person 3	Y	N	N	N	N	N
*	*	N	P3_STAT	C	2	2	Response status of person 3	Y	N	N	N	N	N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
D	12	N	P3_WKR	C	2	2	Worker status of person 3	Y	N	N	N	N	N
D	3	N	P4_AGE	N	3	3	Age of person 4	Y	N	N	N	N	N
D	9	N	P4_DRVR	C	2	2	Driver status of person 4	Y	N	N	N	N	N
D	7	N	P4_REL	C	2	2	Person 4 relation to ref. person	Y	N	N	N	N	N
D	4	N	P4_SEX	C	2	2	Sex of person 4	Y	N	N	N	N	N
*	*	N	P4_STAT	C	2	2	Response status of person 4	Y	N	N	N	N	N
D	12	N	P4_WKR	C	2	2	Worker status of person 4	Y	N	N	N	N	N
D	3	N	P5_AGE	N	3	3	Age of person 5	Y	N	N	N	N	N
D	9	N	P5_DRVR	C	2	2	Driver status of person 5	Y	N	N	N	N	N
D	7	N	P5_REL	C	2	2	Person 5 relation to ref. person	Y	N	N	N	N	N
D	4	N	P5_SEX	C	2	2	Sex of person 5	Y	N	N	N	N	N
*	*	N	P5_STAT	C	2	2	Response status of person 5	Y	N	N	N	N	N
D	12	N	P5_WKR	C	2	2	Worker status of person 5	Y	N	N	N	N	N
D	3	N	P6_AGE	N	3	3	Age of person 6	Y	N	N	N	N	N
D	9	N	P6_DRVR	C	2	2	Driver status of person 6	Y	N	N	N	N	N
D	7	N	P6_REL	C	2	2	Person 6 relation to ref. person	Y	N	N	N	N	N
D	4	N	P6_SEX	C	2	2	Sex of person 6	Y	N	N	N	N	N
*	*	N	P6_STAT	C	2	2	Response status of person 6	Y	N	N	N	N	N
*	*	N	P6_WKR	C	2	2	Worker status of person 6	Y	N	N	N	N	N
D	3	N	P7_AGE	N	3	3	Age of person 7	Y	N	N	N	N	N
D	9	N	P7_DRVR	C	2	2	Driver status of person 7	Y	N	N	N	N	N
D	7	N	P7_REL	C	2	2	Person 7 relation to ref. person	Y	N	N	N	N	N
D	4	N	P7_SEX	C	2	2	Sex of person 7	Y	N	N	N	N	N
*	*	N	P7_STAT	C	2	2	Response status of person 7	Y	N	N	N	N	N
D	12	N	P7_WKR	C	2	2	Worker status of person 7	Y	N	N	N	N	N
D	3	N	P8_AGE	N	3	3	Age of person 8	Y	N	N	N	N	N
D	9	N	P8_DRVR	C	2	2	Driver status of person 8	Y	N	N	N	N	N
D	7	N	P8_REL	C	2	2	Person 8 relation to ref. person	Y	N	N	N	N	N
D	4	N	P8_SEX	C	2	2	Sex of person 8	Y	N	N	N	N	N
*	*	N	P8_STAT	C	2	2	Response status of person 8	Y	N	N	N	N	N
*	*	N	P8_WKR	C	2	2	Worker status of person 8	Y	N	N	N	N	N
D	3	N	P9_AGE	N	3	3	Age of person 9	Y	N	N	N	N	N
D	9	N	P9_DRVR	C	2	2	Driver status of person 9	Y	N	N	N	N	N
D	7	N	P9_REL	C	2	2	Person 9 relation to ref. person	Y	N	N	N	N	N
D	4	N	P9_SEX	C	2	2	Sex of person 9	Y	N	N	N	N	N
*	*	N	P9_STAT	C	2	2	Response status of person 9	Y	N	N	N	N	N
D	12	N	P9_WKR	C	2	2	Worker status of person 9	Y	N	N	N	N	N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

```
NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

         Item   1990    Target  Var  Var    Var                                          HH   Per  Veh  Seg  Tday Tper
Section  ID     Var     Var     Type Length Width  Labels                                 Var  Var  Var  Var  Var  Var

F        14.1   S       PARKAMNT N    8     7.2    Parking fee to pay at work             N    Y    N    N    N    N
F        14.2   S       PARKCODE C    2     2      Unit of amount paid for parking at work N   Y    N    N    N    N
G        21     S       PASSPURP C    2     2      Trip purpose for passenger             N    N    N    N    Y    N
F        13     S       PAYTOPRK C    2     2      Pay parking at work?                   N    Y    N    N    N    N
*        *      S       PERSONID N    3     2      Person ID number                       N    Y    N    Y    Y    Y
G        17     N       PREVREP  C    2     2      This trip also reported by other HH mem N   N    N    N    Y    N
*        *      H_PROXY PROXY    C    2     2      Proxy respondent for person data       N    Y    N    Y    Y    Y
E        3.I    N       PTCARND  C    2     2      Having access to a car when you need it N   Y    N    N    N    N
E        3.G    N       PTCOST   C    2     2      Cost of travel by public transportation N   Y    N    N    N    N
E        3.C    N       PTCRIME  C    2     2      Worry w/ crime on public transportation N   Y    N    N    N    N
E        3.AF   N       PTCROWD  C    2     2      Difficulty w/ crowding or getting a seat N  Y    N    N    N    N
E        3.D    N       PTNTCLN  C    2     2      Transit stations/vehicles not clean    N    Y    N    N    N    N
E        3.BJ   N       PTTIMEON C    2     2      Time spent on public transportation    N    Y    N    N    N    N
E        3.H    N       PTTMND   C    2     2      Public transp avail time of day needed N    Y    N    N    N    N
E        3.E    N       PTTRANSF C    2     2      Time and aggrevation with transferes   N    Y    N    N    N    N
E        2      N       PTUSED   C    2     2      How often used public transportation   N    Y    N    N    N    N
G        25.CK  S       PUBTRANS C    2     2      Used public transit (8<trptrans<14)    N    N    N    N    Y    N
B        5      N       PURCHMON N    3     2      Month of purchase                      N    N    Y    N    N    N
B        5      N       PURCHYR  N    4     4      Year vehicle was purchas (yyyy)        N    N    Y    N    N    N
*        *      N       RAIL     C    2     2      Presence/absence of rail               Y    Y    Y    Y    Y    Y
D        3      S       REF_AGE  N    3     3      Age of reference person (yr)           Y    Y    N    N    Y    N
D        9      N       REF_DRVR C    2     2      Driver status of reference person      Y    N    N    N    N    N
F        1      S       REF_EDUC C    2     2      Education of HH reference person       Y    Y    N    N    Y    N
A        2      N       REF_ROST N    3     2      Reference roster number                N    Y    N    N    N    N
D        4      S       REF_SEX  C    2     2      Sex of ref person                      Y    Y    N    N    Y    N
*        *      N       REF_STAT C    2     2      Response status of reference person    Y    N    N    N    N    N
D        10     N       REF_WKR  C    2     2      Worker status of reference person      Y    N    N    N    N    N
*        *      S       RESP_CNT N    3     2      # of respondents in HH                 Y    N    N    N    N    N
H        3      S       RET_MON  C    2     2      Return month of travel period trip     N    N    N    N    N    Y
H        3      S       RET_YR   C    2     2      Return year of travel period trip      N    N    N    N    N    Y
D        3      S       R_AGE    N    3     3      Age of sample person                   N    Y    N    Y    Y    Y
*        *      N       R_AGEFLG C    2     2      Age imputed                            N    Y    N    N    N    N
D        7      S       R_RELAT  C    2     2      Relationship to ref person             N    Y    N    N    N    N
D        4      S       R_SEX    C    2     2      Sex of sample person                   N    Y    N    Y    Y    Y
G        13     N       SAMEPLC  C    2     2      Same place all day                     N    Y    N    N    N    N
G        29.01  S       SEG1TIME N    4     4      Start time for segment 1               N    N    N    Y    N    N
G        28.01  S       SEG1TRAN C    2     2      Mode code for segment 1                N    N    N    Y    N    N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97


1990 Variable Names:  N = No Comparable 1990 Variable
                      S = Same Name in 1990
```

```
NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

         Item  1990  Target   Var  Var    Var                                        HH   Per  Veh  Seg  Tday Tper
Section  ID    Var   Var      Type Length Width  Labels                               Var  Var  Var  Var  Var  Var

G        30.01 S     SEG1_MIN  N    4      4     Duration of segment 1 (min)          N    N    N    Y    N    N
G        29.02 S     SEG2TIME  N    4      4     Start time for segment 2             N    N    N    Y    N    N
G        28.02 S     SEG2TRAN  C    2      2     Mode code for segment 2              N    N    N    Y    N    N
G        30.02 S     SEG2_MIN  N    4      4     Duration of segment 2 (min)          N    N    N    Y    N    N
G        29.03 S     SEG3TIME  N    4      4     Start time for segment 3             N    N    N    Y    N    N
G        28.03 S     SEG3TRAN  C    2      2     Mode code for segment 3              N    N    N    Y    N    N
G        30.03 S     SEG3_MIN  N    4      4     Duration of segment 3 (min)          N    N    N    Y    N    N
G        29.04 S     SEG4TIME  N    4      4     Start time for segment 4             N    N    N    Y    N    N
G        28.04 S     SEG4TRAN  C    2      2     Mode code for segment 4              N    N    N    Y    N    N
G        30.04 S     SEG4_MIN  N    4      4     Duration of segment 4 (min)          N    N    N    Y    N    N
G        *     S     SEGMENTD  C    2      2     1= if trip is segmented              N    N    N    N    Y    N
*        *     N     SEGNUM    C    1      1     Number of segments (derived)         N    N    N    Y    N    N
F        12.1  N     SIT2AMTR  C    2      2     Usually sit or stand most on AMTRAK  N    Y    N    N    N    N
F        12.2  N     SIT2BUS   C    2      2     Usually sit or stand most on bus     N    Y    N    N    N    N
F        12.3  N     SIT2SBWY  C    2      2     Usually sit or stand most on subway  N    Y    N    N    N    N
F        12.4  N     SIT2STCR  C    2      2     Usually sit/stand most on strcr/trolley N Y    N    N    N    N
F        12.5  N     SIT2TRAN  C    2      2     Usually sit or stand most on comm train N Y    N    N    N    N
F        11.1  N     SITAMTR   C    2      2     Usually sit, stand or both on AMTRAK N    Y    N    N    N    N
F        11.2  N     SITBUS    C    2      2     Usually sit, stand or both on bus    N    Y    N    N    N    N
G        33    S     SITMOST   C    2      2     Sit or stand most on trip            N    N    N    N    Y    N
F        11.3  N     SITSBWY   C    2      2     Usually sit/stand/both on rail/subway N   Y    N    N    N    N
F        11.4  N     SITSTCR   C    2      2     Usually sit/stand/both on strtcr/trolley N Y   N    N    N    N
F        11.5  N     SITTRAN   C    2      2     Usually sit/stand/both on commuter train N Y   N    N    N    N
G        32    S     STANDSIT  C    2      2     1=sat, 2=stood, 3=both on trip       N    N    N    N    Y    N
C        5     N     STCBLOCK  N    3      3     Reported dist to streetcar (blocks)  Y    N    N    N    N    N
C        5     N     STCMILE   N    3      3     Reported dist to streetcar (miles)   Y    N    N    N    N    N
C        4     N     STC_AVL   C    2      2     Streetcar service available          Y    N    N    N    N    N
C        5     N     STC_DIST  N    8      5.1   Distance to streetcar (miles)        Y    N    N    N    N    N
G        15&17 S     STRTTIME  N    4      4     Start time of trip                   N    N    N    Y    Y    N
C        5     N     SUBBLOCK  N    3      3     Reported dist to subway (blocks)     Y    N    N    N    N    N
C        5     N     SUBMILE   N    3      3     Reported dist to subway (miles)      Y    N    N    N    N    N
*        *     *     SUBSTRAT  N    3      1     Substratum within VARSTRAT           Y    Y    Y    Y    Y    Y
C        4     N     SUB_AVL   C    2      2     01= if subway service is available   Y    N    N    N    N    N
C        5     N     SUB_DIST  N    8      5.1   Distance to subway                   Y    N    N    N    N    N
*        *     N     SUM_STAT  C    3      3     Summary status code for household    Y    N    Y    N    N    Y
*        *     S     TDAY_MON  N    3      2     Travel day date (MM)                 Y    Y    Y    Y    Y    Y
*        *     S     TDAY_YR   N    3      2     Travel day date (YY)                 Y    Y    Y    Y    Y    Y

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names:  N = No Comparable 1990 Variable
                      S = Same Name in 1990
```

```
NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

         Item   1990   Target    Var   Var    Var                                            HH   Per  Veh  Seg  Tday Tper
Section   ID    Var    Var       Type  Length Width  Labels                                   Var  Var  Var  Var  Var  Var

J         3     N      TELNUMCT  C     2      2      No. of phone numbers in HH               Y    N    N    N    N    N
A         7     N      TEL_HHS   C     2      2      No. of HHs this phone number serves      Y    N    N    N    N    N
F         6     N      TIMELEAV  N     3      4      Time usually leave for work              N    Y    N    N    N    N
F         7     N      TIMETOWK  N     3      3      Minutes it took from home to work        N    Y    N    N    N    N
H         7     N      TOWHYPAS  C     2      2      Trip purpose for passenger               N    N    N    N    N    Y
H         6     S      TOWHYTRP  C     2      2      Trip purpose travel period trip          N    N    N    N    N    Y
G         16    N      TO_B      C     1      1      Where trip chain ended                   N    N    N    N    Y    N
H         8     N      TO_TRANS  C     2      2      Main transporation means - period trip   N    N    N    N    N    Y
*         *     S      TPER_BMO  N     3      2      Travel period beginning date (MM)        Y    N    N    N    N    Y
*         *     S      TPER_BYR  N     3      2      Travel period beginning date (YY)        Y    N    N    N    N    Y
*         *     S      TPER_EMO  N     3      2      Travel period ending date (MM)           Y    N    N    N    N    Y
*         *     S      TPER_EYR  N     3      2      Travel period ending date (YY)           Y    N    N    N    N    Y
G         26    S      TRANSFER  C     2      2      =01 if changed mode from/to pub trans    N    N    N    Y    Y    N
*         *     S      TRAVDAY   N     3      2      Travel day - day of week                 N    N    N    N    Y    N
*         *     S      TRAVWKND  C     2      2      Travel day on weekend (1=Y, 2=N)         N    N    N    N    Y    N
H         *     S      TRIPNUM   N     3      2      Persons travel period trip number        N    N    N    N    N    Y
C         5     N      TRNBLOCK  N     3      3      Reported dist to train (blocks)          Y    N    N    N    N    N
C         5     N      TRNMILE   N     3      3      Reported dist to train (miles)           Y    N    N    N    N    N
C         4     N      TRN_AVL   C     2      2      01= if commuter train service available  Y    N    N    N    N    N
C         5     N      TRN_DIST  N     8      5.1    Distance to commuter train               Y    N    N    N    N    N
G         35    S      TRPHHACC  C     2      2      Other HH mem were also on trip?          N    N    N    N    Y    N
G         23    S      TRPHHVEH  C     2      2      Was HH vehicle used on trip?             N    N    N    N    Y    N
G         22.03 S      TRPMILES  N     8      6.1    Distance (miles)                         N    N    N    Y    Y    N
G         *     S      TRPNUM    N     3      2      Travel day trip number for sample person N    N    N    Y    Y    N
*         *     N      TRPNUM_A  N     3      2      Person trip # of first trip in chain     N    N    N    N    Y    N
*         *     N      TRPNUM_B  N     3      2      Person trip # of last trip in chain      N    N    N    N    Y    N
G         25    S      TRPTRANS  C     2      2      Mode of transportation code              N    N    N    Y    Y    N
G         27    S      TRVL_MIN  N     4      4      Travel time (min)                        N    N    N    Y    Y    N
F         5.2   N      UNITDIST  C     2      2      Unit of distance to work                 N    Y    N    N    N    N
*         *     *      URBAN     C     2      2      Urbanized area code                      Y    N    N    N    N    N
F         15    N      USULDRV   C     2      2      Usually drive to work alone or carpool   N    Y    N    N    N    N
*         *     S      VARSTRAT  N     3      2      Sample stratum                           Y    Y    Y    Y    Y    Y
*         *     S      VEH12MNT  C     2      2      Vehicle received in last 12 mo           N    N    Y    N    N    N
G         24    S      VEHID     N     3      2      HH vehicle number                        N    N    Y    N    Y    N
B         7     S      VEHMILES  N     4      6      Reported mileage for last 12 mo          N    N    Y    N    N    N
B         6     S      VEHNEW    C     2      2      Purchased new (=1) or used (=2)          N    N    Y    N    N    N
B         3     S      VEHTYPE   C     2      2      Vehicle type                             N    N    Y    N    N    N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names:  N = No Comparable 1990 Variable
                      S = Same Name in 1990
```

NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
B	2.3	S	VEHYEAR	N	3	4	Model year of veh (yyyy)	N	N	Y	N	N	N
*	*	*	VTR_FLG	C	2	2	1=POV trip, respondent drove	N	N	N	N	Y	N
F	10.1	N	WAITAMTR	N	3	3	Minutes wait for AMTRAK	N	Y	N	N	N	N
F	10.2	N	WAITBUS	N	3	3	Minutes wait for bus	N	Y	N	N	N	N
F	10.3	N	WAITSBWY	N	3	3	Minutes wait for elevated rail/subway	N	Y	N	N	N	N
F	10.4	N	WAITSTCR	N	3	3	Minutes wait for streetcar/trolley	N	Y	N	N	N	N
F	10.5	N	WAITTRAN	N	3	3	Minutes wait for commuter train	N	Y	N	N	N	N
G	31	S	WAIT_MIN	N	4	4	Time waited for transportation (min)	N	N	N	N	Y	N
G	16.01	N	WHERE	C	1	1	H=home, W=work, S=other-specify	N	N	N	N	Y	N
G	36.01	S	WHOACC_A	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.02	S	WHOACC_B	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.03	S	WHOACC_C	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.04	S	WHOACC_D	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.05	S	WHOACC_E	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.06	S	WHOACC_F	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.07	S	WHOACC_G	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.08	S	WHOACC_H	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.09	S	WHOACC_I	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	36.1	S	WHOACC_J	N	3	2	Roster # of other HH mem on trip G36	N	N	N	N	Y	N
G	38	S	WHODROVE	N	3	2	ID of HH mem who drove on trip G38	N	N	N	N	Y	N
D	15	N	WHOMAIN	C	2	2	Who drives veh most of time	N	N	Y	N	N	N
G	20	N	WHYFROM	C	2	2	1995 purpose - from	N	N	N	N	Y	N
G	20	N	WHYTO	C	2	2	1995 purpose - to	N	N	N	N	Y	N
G	20	WHYTRP	WHYTRP90	C	2	2	Purpose of trip (1990 definition)	N	N	N	N	Y	N
G	20	N	WHYTRP95	C	2	2	Purpose of trip (1995 definition)	N	N	N	Y	Y	N
F	8.14	N	WKBYAIR	C	2	2	Get to work usually by airplane	N	Y	N	N	N	N
F	8.1	N	WKBYAMTR	C	2	2	Get to work usually by AMTRAK	N	Y	N	N	N	N
F	8.01	N	WKBYAUTO	C	2	2	Get to work usually by auto	N	Y	N	N	N	N
F	8.16	N	WKBYBIKE	C	2	2	Get to work usually by bicycle	N	Y	N	N	N	N
F	8.09	N	WKBYBUS	C	2	2	Get to work usually by bus	N	Y	N	N	N	N
F	8.19	N	WKBYHOME	C	2	2	Worked from home	N	Y	N	N	N	N
F	8.07	N	WKBYMCYC	C	2	2	Get to work usually by motorcycle	N	Y	N	N	N	N
F	8.08	N	WKBYOPOV	C	2	2	Get to work usually by other POV	N	Y	N	N	N	N
F	8.2	N	WKBYOTHR	C	2	2	Get to work by other means	N	Y	N	N	N	N
F	8.05	N	WKBYOTTK	C	2	2	Get to work usually by other truck	N	Y	N	N	N	N
F	8.06	N	WKBYRV	C	2	2	Get to work usually by RV	N	Y	N	N	N	N
F	8.13	N	WKBYSBWY	C	2	2	Get to work usually by elev. rail/subway	N	Y	N	N	N	N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

NPTS
Listing of All NPTS Variables By Alphabetical Order
Public Use File

Section	Item ID	1990 Var	Target Var	Var Type	Var Length	Var Width	Labels	HH Var	Per Var	Veh Var	Seg Var	Tday Var	Tper Var
F	8.18	N	WKBYSCBS	C	2	2	Get to work usually by school bus	N	Y	N	N	N	N
F	8.12	N	WKBYSTCR	C	2	2	Get to work usually by strtcar/trolley	N	Y	N	N	N	N
F	8.15	N	WKBYTAXI	C	2	2	Get to work usually by taxi	N	Y	N	N	N	N
F	8.11	N	WKBYTRAN	C	2	2	Get to work usually by commuter train	N	Y	N	N	N	N
F	8.04	N	WKBYTRUK	C	2	2	Get to work usually by pickup truck	N	Y	N	N	N	N
F	8.03	N	WKBYUV	C	2	2	Get to work usually by UV	N	Y	N	N	N	N
F	8.02	N	WKBYVAN	C	2	2	Get to work usually by van	N	Y	N	N	N	N
F	8.17	N	WKBYWALK	C	2	2	Get to work usually by walking	N	Y	N	N	N	N
F	20	N	WKFMHM2M	C	2	2	Worked from home any day last two month?	N	Y	N	N	N	N
F	19	N	WKFMHMLW	C	2	2	Worked from home any day last week?	N	Y	N	N	N	N
F	21	N	WKFMHMXX	C	2	2	How often worked from home last 2 months	N	Y	N	N	N	N
G	8	S	WORKDAYS	N	3	2	Days per week on job	N	Y	N	N	N	N
D	12	S	WORKER	C	2	2	Respondent is a worker	N	Y	N	Y	Y	Y
*	*	*	WORKLOC	N	4	2	Work location	N	Y	N	N	N	N
F	4.2	N	WORKSTAT	C	2	2	State of workplace	N	Y	N	N	N	N
*	*	WRKRCNT	WRKCOUNT	N	3	2	No. of workers in HH	Y	Y	Y	Y	Y	Y
G	3	S	WRKDRIVE	C	2	2	Drive lisensed vehicle in work	N	Y	N	N	N	N
G	6	N	WRKMILES	N	3	3	Travel day miles driven on job	N	Y	N	N	N	N
F	9	S	WRKTRANS	C	2	2	Main means of transportation to work	N	Y	N	N	N	N
G	5	N	WRKTRPS	C	2	2	10 or more trips on job during day	N	Y	N	N	N	N
G	7	S	WRKVTYPE	C	2	2	Type vehicle driven on job	N	Y	N	N	N	N
CLAR	*	*	WTEMPLDN	N	4	6	Jobs per square mile, census tract	N	Y	N	N	N	N
*	*	S	WTHHFIN	N	8	11.5	Final household weight	Y	N	Y	N	N	N
CLAR	*	*	WTINDAGR	N	4	3	Pct 16+ workers, agr/mining/const, CT	N	Y	N	N	N	N
CLAR	*	*	WTINDFIN	N	4	3	Pct 16+ workers, fin/ins/rl est ind, CT	N	Y	N	N	N	N
CLAR	*	*	WTINDMAN	N	4	3	Pct 16+ workers, manuf. industries, CT	N	Y	N	N	N	N
CLAR	*	*	WTINDRET	N	4	3	Pct 16+ workplace pop, retl trd ind, CT	N	Y	N	N	N	N
CLAR	*	*	WTINDSVC	N	4	3	Pct 16+ workers, service industries, CT	N	Y	N	N	N	N
CLAR	*	*	WTINDTRN	N	4	3	Pct 16+ workers, tran/comm/ util ind, CT	N	Y	N	N	N	N
CLAR	*	*	WTINDWHL	N	4	3	Pct 16+ workers, wholesale trade ind, CT	N	Y	N	N	N	N
*	*	S	WTPERFIN	N	8	11.5	Final person wt person-nonresp adjusted	N	Y	N	N	N	N
*	*	S	WTTRDFIN	N	8	11.2	Final travel day trip weight	N	N	N	Y	Y	N
*	*	S	WTTRPFIN	N	8	11.3	Final travel period trip weight	N	N	N	N	N	Y
E	8	S	YEARMILE	N	5	6	How many miles did you drive per year	N	Y	N	N	N	N
E	8	*	YMILEFLG	C	2	2	Yearmile mileage was capped at 200,000	N	Y	N	N	N	N

Progid: disk2:[nsnpts.share]report.sas Date: 26SEP97

1990 Variable Names: N = No Comparable 1990 Variable
                      S = Same Name in 1990

APPENDIX I

VARIABLE LISTS

This Appendix contains:

    ASCII FILE LAYOUT are presented in the following order:

        HHOLD95
        PERSON95
        VEHICL95
        DAYTRP95
        SEGTRP95
        PERTRP95

    SAS PROC CONTENTS are presented in the following order:

        DAYTRP95
        HHOLD95
        PERSON95
        PERTRP95
        SEGTRP95
        VEHICL95

NOTE that the Proc Contents header was removed from all but the
first page of each file to reduce the amount of printing.

ASCII FILE LAYOUT

FILE LAYOUT FOR HHOLD95.ASC

Number of data records: 42033
Date of last update: 08/29/97

Field	Field Name	Type	Width	Dec	Nulls	Column Position
1	CENSUS_D	Character	2		No	1-2
2	CENSUS_R	Character	2		No	3-4
3	HHVEHCNT	Numeric	4		No	5-8
4	MSASIZE	Character	2		No	9-10
5	VARSTRAT	Numeric	4		No	11-14
6	BUSBLOCK	Numeric	4		No	15-18
7	BUSMILE	Numeric	4		No	19-22
8	BUS_AVL	Character	2		No	23-24
9	BUS_DIST	Numeric	14	2	No	25-38
10	HOUSEID	Numeric	8		No	39-46
11	DRVRCNT	Numeric	4		No	47-50
12	HHELGCNT	Numeric	4		No	51-54
13	HHFAMINC	Character	2		No	55-56
14	HHRESP	Character	2		No	57-58
15	HHSIZE	Numeric	4		No	59-62
16	HHSTATE	Character	2		No	63-64
17	HHSTFIPS	Numeric	4		No	65-68
18	HH_HISP	Character	2		No	69-70
19	HH_RACE	Character	2		No	71-72
20	HOMEOWN	Character	2		No	73-74
21	HOMETYPE	Character	2		No	75-76
22	HSTORIES	Character	2		No	77-78
23	HH_0TO4	Numeric	4		No	79-82
24	LIF_CYC	Character	2		No	83-84
25	NUMADLT	Numeric	4		No	85-88
26	INELGCNT	Numeric	4		No	89-92
27	HHMSA	Character	4		No	93-96
28	MSTR_MON	Numeric	4		No	97-100
29	MSTR_YR	Numeric	4		No	101-104
30	NONFMFLG	Character	2		No	105-106
31	NOTELWKS	Character	2		No	107-108
32	NOTELYR	Character	2		No	109-110
33	OTHERPTR	Character	2		No	111-112
34	P10_AGE	Numeric	4		No	113-116
35	P10_DRVR	Character	2		No	117-118
36	P10_REL	Character	2		No	119-120
37	P10_SEX	Character	2		No	121-122
38	P10_STAT	Character	2		No	123-124
39	P10_WKR	Character	2		No	125-126
40	P1_AGE	Numeric	4		No	127-130
41	P1_DRVR	Character	2		No	131-132
42	P1_REL	Character	2		No	133-134
43	P1_SEX	Character	2		No	135-136
44	P1_STAT	Character	2		No	137-138
45	P1_WKR	Character	2		No	139-140
46	P2_AGE	Numeric	4		No	141-144
47	P2_DRVR	Character	2		No	145-146

48	P2_REL	Character	2	No	147-148
49	P2_SEX	Character	2	No	149-150
50	P2_STAT	Character	2	No	151-152
51	P2_WKR	Character	2	No	153-154
52	P3_AGE	Numeric	4	No	155-158
53	P3_DRVR	Character	2	No	159-160
54	P3_REL	Character	2	No	161-162
55	P3_SEX	Character	2	No	163-164
56	P3_STAT	Character	2	No	165-166
57	P3_WKR	Character	2	No	167-168
58	P4_AGE	Numeric	4	No	169-172
59	P4_DRVR	Character	2	No	173-174
60	REF_EDUC	Character	2	No	175-176
61	P4_REL	Character	2	No	177-178
62	P4_SEX	Character	2	No	179-180
63	P4_STAT	Character	2	No	181-182
64	P4_WKR	Character	2	No	183-184
65	P5_AGE	Numeric	4	No	185-188
66	P5_DRVR	Character	2	No	189-190
67	P5_REL	Character	2	No	191-192
68	P5_SEX	Character	2	No	193-194
69	P5_STAT	Character	2	No	195-196
70	P5_WKR	Character	2	No	197-198
71	P6_AGE	Numeric	4	No	199-202
72	P6_DRVR	Character	2	No	203-204
73	P6_REL	Character	2	No	205-206
74	P6_SEX	Character	2	No	207-208
75	P6_STAT	Character	2	No	209-210
76	P6_WKR	Character	2	No	211-212
77	P7_AGE	Numeric	4	No	213-216
78	P7_DRVR	Character	2	No	217-218
79	P7_REL	Character	2	No	219-220
80	P7_SEX	Character	2	No	221-222
81	P7_STAT	Character	2	No	223-224
82	P7_WKR	Character	2	No	225-226
83	P8_AGE	Numeric	4	No	227-230
84	P8_DRVR	Character	2	No	231-232
85	P8_REL	Character	2	No	233-234
86	P8_SEX	Character	2	No	235-236
87	P8_STAT	Character	2	No	237-238
88	P8_WKR	Character	2	No	239-240
89	P9_AGE	Numeric	4	No	241-244
90	P9_DRVR	Character	2	No	245-246
91	P9_REL	Character	2	No	247-248
92	P9_SEX	Character	2	No	249-250
93	P9_STAT	Character	2	No	251-252
94	P9_WKR	Character	2	No	253-254
95	RAIL	Character	2	No	255-256
96	REF_AGE	Numeric	4	No	257-260
97	REF_DRVR	Character	2	No	261-262
98	REF_SEX	Character	2	No	263-264
99	REF_STAT	Character	2	No	265-266
100	REF_WKR	Character	2	No	267-268
101	RESP_CNT	Numeric	4	No	269-272
102	STCBLOCK	Numeric	4	No	273-276
103	STCMILE	Numeric	4	No	277-280
104	STC_AVL	Character	2	No	281-282

HHOLD95.ASC

105	STC_DIST	Numeric	14	2	No	283–296
106	SUBBLOCK	Numeric	4		No	297–300
107	SUBMILE	Numeric	4		No	301–304
108	SUB_AVL	Character	2		No	305–306
109	SUB_DIST	Numeric	14	2	No	307–320
110	SUM_STAT	Character	3		No	321–323
111	TDAY_MON	Numeric	4		No	324–327
112	TDAY_YR	Numeric	4		No	328–331
113	TELNUMCT	Character	2		No	323–333
114	TEL_HHS	Character	2		No	334–335
115	TPER_BMO	Numeric	4		No	336–339
116	TPER_BYR	Numeric	4		No	340–343
117	TPER_EMO	Numeric	4		No	344–347
118	TPER_EYR	Numeric	4		No	348–351
119	TRNBLOCK	Numeric	4		No	352–355
120	TRNMILE	Numeric	4		No	356–359
121	TRN_AVL	Character	2		No	360–361
122	TRN_DIST	Numeric	14	2	No	362–375
123	WRKCOUNT	Numeric	4		No	376–379
124	WTHHFIN	Numeric	14	2	No	380–393
125	HHCMSA	Character	4		No	394–397
126	URBAN	Character	2		No	398–399
127	SUBSTRAT	Numeric	4		No	400–403
128	GHMXIN	Numeric	8		No	404–411
129	HBPPOPDN	Numeric	7		No	412–418
130	HBPPOPNO	Numeric	7		No	419–425
131	HBPLTPOV	Numeric	5		No	426–430
132	HBPHSGD	Numeric	5		No	431–435
133	HBPCOLGD	Numeric	5		No	436–440
134	HBP65P	Numeric	5		No	441–445
135	HBPFORBN	Numeric	5		No	446–450
136	HBPHISP	Numeric	5		No	451–455
137	HBPRCCAU	Numeric	5		No	456–460
138	HBPRCAA	Numeric	5		No	461–465
139	HBPRCASN	Numeric	5		No	466–470
140	HBPRCOTH	Numeric	5		No	471–475
141	HTPPOPDN	Numeric	7		No	476–482
142	HTPPOPNO	Numeric	7		No	483–489
143	HTPLTPOV	Numeric	5		No	490–494
144	HTPHSGD	Numeric	5		No	495–499
145	HTPCOLGD	Numeric	5		No	500–504
146	HTP65P	Numeric	5		No	505–509
147	HTPFORBN	Numeric	5		No	510–514
148	HTPHISP	Numeric	5		No	515–519
149	HTPRCCAU	Numeric	5		No	520–524
150	HTPRCAA	Numeric	5		No	525–529
151	HTPRCASN	Numeric	5		No	530–534
152	HTPRCOTH	Numeric	5		No	535–539
153	HBHUR	Character	1		No	540
154	HBHRESDN	Numeric	7		No	541–547
155	HBHHSSNG	Numeric	5		No	548–552
156	HBHHSMLT	Numeric	5		No	553–557
157	HBHHSOTH	Numeric	5		No	558–562
158	HBHTNOWN	Numeric	5		No	563–567
159	HBHTNRNT	Numeric	5		No	568–572
160	HBHRECNT	Numeric	5		No	573–577
161	HBHMEDHS	Numeric	7		No	578–584

HHOLD95.ASC

162	HBHINMED	Numeric	7	No	585-591
163	HBHINCL	Numeric	5	No	592-596
164	HBHINCM1	Numeric	5	No	597-601
165	HBHINCM2	Numeric	5	No	602-606
166	HBHINCH	Numeric	5	No	607-611
167	HTHUR	Character	1	No	612
168	HTHRESDN	Numeric	7	No	613-619
169	HTHHSSNG	Numeric	5	No	620-624
170	HTHHSMLT	Numeric	5	No	625-629
171	HTHHSOTH	Numeric	5	No	630-634
172	HTHTNOWN	Numeric	5	No	635-639
173	HTHTNRNT	Numeric	5	No	640-644
174	HTHRECNT	Numeric	5	No	645-649
175	HTHMEDHS	Numeric	7	No	650-656
176	HTHINMED	Numeric	7	No	657-663
177	HTHINCL	Numeric	5	No	664-668
178	HTHINCM1	Numeric	5	No	669-673
179	HTHINCM2	Numeric	5	No	674-678
180	HTHINCH	Numeric	5	No	679-683
181	HTEEMPDN	Numeric	7	No	684-690
182	HTINDRET	Numeric	5	No	691-695

FILE LAYOUT FOR PERSON95.ASC

Number of data records: 95360
Date of last update: 08/29/97

Field	Field Name	Type	Width	Dec	Nulls	Column Position
1	HOUSEID	Numeric	8		No	1-8
2	PERSONID	Numeric	4		No	9-12
3	PROXY	Character	2		No	13-14
4	R_AGEFLG	Character	2		No	15-16
5	REF_ROST	Numeric	4		No	17-20
6	R_AGE	Numeric	4		No	21-24
7	R_SEX	Character	2		No	25-26
8	R_RELAT	Character	2		No	27-28
9	DRIVER	Character	2		No	29-30
10	DTCONJ	Character	2		No	31-32
11	DTPAVE	Character	2		No	33-34
12	DTNTFMLR	Character	2		No	35-36
13	DTACDT	Character	2		No	37-38
14	DTWALK	Character	2		No	39-40
15	DTPOLLTN	Character	2		No	41-42
16	DTTIEUP	Character	2		No	43-44
17	DTSTRTS	Character	2		No	45-46
18	DTCRIME	Character	2		No	47-48
19	PTUSED	Character	2		No	49-50
20	PTCROWD	Character	2		No	51-52
21	PTTIMEON	Character	2		No	53-54
22	PTNTCLN	Character	2		No	55-56
23	PTCRIME	Character	2		No	57-58
24	PTTRANSF	Character	2		No	59-60
25	PTCOST	Character	2		No	61-62
26	PTTMND	Character	2		No	63-64
27	PTCARND	Character	2		No	65-66
28	FQSTBELT	Character	2		No	67-68
29	NSBFGET	Character	2		No	69-70
30	NSBBROKE	Character	2		No	71-72
31	NSBSHORT	Character	2		No	73-74
32	NSBLONG	Character	2		No	75-76
33	NSBBACK	Character	2		No	77-78
34	NSBPSNG	Character	2		No	79-80
35	NSBDRVR	Character	2		No	81-82
36	NSBSPVEH	Character	2		No	83-84
37	NSBTOWN	Character	2		No	85-86
38	NSBSPPER	Character	2		No	87-88
39	NSBOTHER	Character	2		No	89-80
40	NSBHURRY	Character	2		No	91-92
41	NSBSPCLH	Character	2		No	93-94
42	NSBNOASK	Character	2		No	95-96
43	NSBMED	Character	2		No	97-98
44	NSBNLIKE	Character	2		No	99-100
45	NSBTOWRK	Character	2		No	101-102
46	NSBPOLIC	Character	2		No	103-104
47	NSBWTHR	Character	2		No	105-106
48	YEARMILE	Numeric	6		No	107-112
49	YMILEFLG	Character	2		No	113-114
50	EDUC	Character	2		No	115-116
51	JOBLSTWK	Character	2		No	117-118

I- 6

52	GT1JBLWK	Character	2		No	119-120
53	WORKSTAT	Character	2		No	121-122
54	DISTTOWK	Numeric	14	2	No	123-136
55	UNITDIST	Character	2		No	137-138
56	TIMELEAV	Numeric	4		No	139-142
57	TIMETOWK	Numeric	4		No	143-146
58	WKBYAUTO	Character	2		No	147-148
59	WKBYVAN	Character	2		No	149-150
60	WKBYUV	Character	2		No	151-152
61	WKBYTRUK	Character	2		No	153-154
62	WKBYOTTK	Character	2		No	155-156
63	WKBYRV	Character	2		No	157-158
64	WKBYMCYC	Character	2		No	159-160
65	WKBYOPOV	Character	2		No	161-162
66	WKBYBUS	Character	2		No	163-164
67	WKBYAMTR	Character	2		No	165-166
68	WKBYTRAN	Character	2		No	167-168
69	WKBYSTCR	Character	2		No	169-170
70	WKBYSBWY	Character	2		No	171-172
71	WKBYAIR	Character	2		No	173-174
72	WKBYTAXI	Character	2		No	175-176
73	WKBYBIKE	Character	2		No	177-178
74	WKBYWALK	Character	2		No	179-180
75	WKBYSCBS	Character	2		No	181-182
76	WKBYHOME	Character	2		No	183-184
77	WKBYOTHR	Character	2		No	185-186
78	WRKTRANS	Character	2		No	187-188
79	WAITAMTR	Numeric	4		No	189-192
80	WAITBUS	Numeric	4		No	193-196
81	WAITSBWY	Numeric	4		No	197-200
82	WAITSTCR	Numeric	4		No	201-204
83	WAITTRAN	Numeric	4		No	205-208
84	SITAMTR	Character	2		No	209-210
85	SITBUS	Character	2		No	211-212
86	SITSBWY	Character	2		No	213-214
87	SITSTCR	Character	2		No	215-216
88	SITTRAN	Character	2		No	217-218
89	SIT2AMTR	Character	2		No	219-220
90	SIT2BUS	Character	2		No	221-222
91	SIT2SBWY	Character	2		No	223-224
92	SIT2STCR	Character	2		No	225-226
93	SIT2TRAN	Character	2		No	227-228
94	PAYTOPRK	Character	2		No	229-230
95	PARKAMNT	Numeric	14	2	No	231-244
96	PARKCODE	Character	2		No	245-246
97	USULDRV	Character	2		No	247-248
98	ALWYSDRV	Character	2		No	249-250
99	NCIRRHR	Character	2		No	251-252
100	NCNOONE	Character	2		No	253-254
101	NCINCVNT	Character	2		No	255-256
102	NCNEEDCR	Character	2		No	257-258
103	NCSHRTDI	Character	2		No	259-260
104	NCOTHRES	Character	2		No	261-262
105	NCONLY	Character	2		No	263-264
106	NCNEVER	Character	2		No	265-266
107	NCNLIKE	Character	2		No	267-268
108	NCLVFAR	Character	2		No	269-270

PERSON95.ASC

109	NCCOMCR	Character	2		No	271–272
110	NPT2FRWK	Character	2		No	273–274
111	NPT2MCTM	Character	2		No	275–276
112	NPT2EXPV	Character	2		No	277–278
113	NPTOTHTG	Character	2		No	279–280
114	NPTNTCNV	Character	2		No	281–282
115	NPTFMHM	Character	2		No	283–284
116	NPTOTHER	Character	2		No	285–286
117	NPTLVCLS	Character	2		No	287–288
118	NPTDLPT	Character	2		No	289–290
119	NPTHVCAR	Character	2		No	291–292
120	NPTCOMCR	Character	2		No	293–294
121	WKFMHMLW	Character	2		No	295–296
122	WKFMHM2M	Character	2		No	297–298
123	WKFMHMXX	Character	2		No	299–300
124	WRKDRIVE	Character	2		No	301–302
125	WRKTRPS	Character	2		No	303–304
126	WRKMILES	Numeric	4		No	305–308
127	WRKVTYPE	Character	2		No	309–310
128	WORKDAYS	Numeric	4		No	311–314
129	DIARYCMP	Character	2		No	315–316
130	DIARYHAV	Character	2		No	317–318
131	DIARYGET	Character	2		No	319–320
132	NONFMINC	Character	2		No	321–322
133	CENSUS_D	Character	2		No	323–324
134	CENSUS_R	Character	2		No	325–326
135	WTPERFIN	Numeric	14	2	No	327–340
136	REF_EDUC	Character	2		No	341–342
137	OUTCNTRY	Character	2		No	343–344
138	SAMEPLC	Character	2		No	345–346
139	INTRVMON	Numeric	4		No	347–350
140	INTRVYR	Numeric	4		No	351–354
141	WORKER	Character	2		No	355–356
142	HHVEHCNT	Numeric	4		No	357–360
143	MSASIZE	Character	2		No	361–362
144	VARSTRAT	Numeric	4		No	363–366
145	DRVRCNT	Numeric	4		No	367–370
146	HHFAMINC	Character	2		No	371–372
147	HHRESP	Character	2		No	373–374
148	HHSIZE	Numeric	4		No	375–378
149	HH_HISP	Character	2		No	379–380
150	HH_RACE	Character	2		No	381–382
151	LIF_CYC	Character	2		No	383–384
152	HHMSA	Character	4		No	385–388
153	MSTR_MON	Numeric	4		No	389–392
154	MSTR_YR	Numeric	4		No	393–396
155	RAIL	Character	2		No	397–398
156	REF_AGE	Numeric	4		No	399–402
157	REF_SEX	Character	2		No	403–404
158	TDAY_MON	Numeric	4		No	405–408
159	TDAY_YR	Numeric	4		No	409–412
160	WRKCOUNT	Numeric	4		No	413–416
161	HHCMSA	Character	4		No	417–420
162	SUBSTRAT	Numeric	4		No	421–424
163	GWKXIN	Numeric	8		No	425–432
164	HBPPOPDN	Numeric	7		No	433–439
165	HBHUR	Character	1		No	440

PERSON95.ASC

166	HBHRESDN	Numeric	7	No	441-447
167	HBHINMED	Numeric	7	No	448-454
168	WTEMPLDN	Numeric	8	No	455-262
169	WTINDAGR	Numeric	5	No	463-467
170	WTINDMAN	Numeric	5	No	468-472
171	WTINDTRN	Numeric	5	No	473-477
172	WTINDWHL	Numeric	5	No	478-482
173	WTINDRET	Numeric	5	No	483-487
174	WTINDFIN	Numeric	5	No	488-492
175	WTINDSVC	Numeric	5	No	493-497
176	WORKLOC	Numeric	5	No	498-502

FILE LAYOUT FOR VEHICL95.ASC

Number of data records: 75217
Date of last update: 09/05/97

Field	Field Name	Type	Width	Dec	Nulls	Column Position
1	HOUSEID	Numeric	8		No	1-8
2	VEHID	Numeric	4		No	9-12
3	ANNUALZD	Numeric	14	5	No	13-26
4	ANN_FLG	Character	2		No	27-28
5	ANN_EDIT	Character	2		No	29-30
6	ANN_OUT	Character	2		No	31-32
7	CENSUS_D	Character	2		No	33-34
8	CENSUS_R	Character	2		No	35-36
9	MSASIZE	Character	2		No	37-38
10	ANNMILES	Numeric	14	2	No	39-52
11	HHVEHCNT	Numeric	4		No	53-56
12	MAINDRVR	Character	2		No	57-58
13	MAKECODE	Character	2		No	59-60
14	MILELIMT	Character	2		No	61-62
15	MODLCODE	Character	3		No	63-65
16	PURCHMON	Numeric	4		No	66-69
17	VEH12MNT	Character	2		No	70-71
18	VEHMILES	Numeric	6		No	72-77
19	VEHNEW	Character	2		No	78-79
20	VEHTYPE	Character	2		No	80-81
21	VEHYEAR	Numeric	4		No	82-85
22	WHOMAIN	Character	2		No	86-87
23	PURCHYR	Numeric	5		No	88-92
24	VARSTRAT	Numeric	4		No	93-96
25	DRVRCNT	Numeric	4		No	97-100
26	HHELGCNT	Numeric	4		No	101-104
27	HHFAMINC	Character	2		No	105-106
28	HHSIZE	Numeric	4		No	107-110
29	HH_HISP	Character	2		No	111-112
30	HH_RACE	Character	2		No	113-114
31	LIF_CYC	Character	2		No	115-116
32	HHMSA	Character	4		No	117-120
33	MSTR_MON	Numeric	4		No	121-124
34	MSTR_YR	Numeric	4		No	125-128
35	RAIL	Character	2		No	129-130
36	SUM_STAT	Character	3		No	131-133
37	TDAY_MON	Numeric	4		No	134-137
38	TDAY_YR	Numeric	4		No	138-141
39	WRKCOUNT	Numeric	4		No	142-145
40	WTHHFIN	Numeric	14	2	No	146-159
41	HHCMSA	Character	4		No	160-163
42	OD_DAY1	Numeric	4		No	164-167
43	OD_MON1	Numeric	4		No	168-171
44	OD_YR1	Numeric	4		No	172-175
45	OD_DAY2	Numeric	4		No	176-179
46	OD_MON2	Numeric	4		No	180-183
47	OD_YR2	Numeric	4		No	184-187
48	OD_READ1	Numeric	6		No	188-193
49	OD_READ2	Numeric	6		No	194-199
50	SUBSTRAT	Numeric	4		No	200-203
51	HBPPOPDN	Numeric	7		No	204-210

VEHICL95.ASC

52	HBHUR	Character	1		No	211
53	HBHRESDN	Numeric	7		No	212-218
54	HBHINMED	Numeric	7		No	219-225
55	ANULZDSE	Numeric	14	2	No	226-239

FILE LAYOUT FOR DAYTRP95.ASC

Number of data reco rds: 409025
Date of last update: 08/29/97

Field	Field Name	Type	Column Width	Dec	Nulls	Position
1	HOUSEID	Numeric	8		No	1-8
2	TRAVDAY	Numeric	4		No	9-12
3	PROXY	Character	2		No	13-14
4	R_AGE	Numeric	4		No	15-18
5	R_SEX	Character	2		No	19-20
6	CENSUS_D	Character	2		No	21-22
7	CENSUS_R	Character	2		No	23-24
8	REF_EDUC	Character	2		No	25-26
9	INTRVMON	Numeric	4		No	27-30
10	INTRVYR	Numeric	4		No	31-34
11	WORKER	Character	2		No	35-36
12	AWAYHOME	Character	2		No	37-38
13	CHAIN	Numeric	4		No	39-42
14	CHAINTRP	Numeric	4		No	43-46
15	DATEFLG	Character	2		No	47-48
16	DAYNIGHT	Character	2		No	49-50
17	DIFFDATE	Numeric	4		No	51-54
18	DRIVER	Character	2		No	55-56
19	DRVR_FLG	Character	2		No	57-58
20	EDITMILE	Character	2		No	59-60
21	EDITMODE	Character	2		No	61-62
22	EDIT_MIN	Character	2		No	63-64
23	FROM_A	Character	1		No	65
24	FRSTHM	Character	2		No	66-67
25	HHMEMDRV	Character	2		No	68-69
26	HHSIZE	Numeric	4		No	70-73
27	VEHID	Numeric	4		No	74-77
28	HHVEHCNT	Numeric	4		No	78-81
29	HH_ONTRP	Numeric	4		No	82-85
30	HOWFARU	Character	2		No	86-87
31	DWELTIME	Numeric	5		No	88-92
32	MATCH	Numeric	4		No	93-96
33	MSASIZE	Character	2		No	97-98
34	NONHHACC	Character	2		No	99-100
35	NONHHCNT	Numeric	4		No	101-104
36	EDITNONH	Character	2		No	105-106
37	NUMONTRP	Numeric	4		No	107-110
38	PASSPURP	Character	2		No	111-112
39	PREVREP	Character	2		No	113-114
40	TRPNUM	Numeric	4		No	115-118
41	PUBTRANS	Character	2		No	119-120
42	SEGMENTD	Character	2		No	121-122
43	SITMOST	Character	2		No	123-124
44	STANDSIT	Character	2		No	125-126
45	TO_B	Character	1		No	127
46	TRAVWKND	Character	2		No	128-129
47	TRPHHACC	Character	2		No	130-131
48	TRPHHVEH	Character	2		No	132-133
49	TRPNUM_A	Numeric	4		No	134-137
50	TRPNUM_B	Numeric	4		No	138-141
51	WAIT_MIN	Numeric	5		No	142-146

DAYTRP95.ASC

52	WHERE	Character	1		No	147
53	WHOACC_A	Numeric	4		No	148-151
54	WHOACC_B	Numeric	4		No	152-155
55	WHOACC_C	Numeric	4		No	156-159
56	WHOACC_D	Numeric	4		No	160-163
57	WHOACC_E	Numeric	4		No	164-167
58	WHOACC_F	Numeric	4		No	168-171
59	WHOACC_G	Numeric	4		No	172-175
60	WHOACC_H	Numeric	4		No	176-179
61	WHOACC_I	Numeric	4		No	180-183
62	WHOACC_J	Numeric	4		No	184-187
63	WHODROVE	Numeric	4		No	188-191
64	WHYFROM	Character	2		No	192-193
65	WHYTO	Character	2		No	194-195
66	WHYTRP90	Character	2		No	196-197
67	OVERLAP	Character	1		No	198
68	HHTRIPID	Numeric	4		No	199-202
69	PERSONID	Numeric	4		No	203-206
70	STRTTIME	Numeric	5		No	207-211
71	TRANSFER	Character	2		No	212-213
72	TRPMILES	Numeric	14	2	No	214-227
73	TRPTRANS	Character	2		No	228-229
74	TRVL_MIN	Numeric	5		No	230-234
75	VARSTRAT	Numeric	4		No	235-238
76	WHYTRP95	Character	2		No	239-240
77	WTTRDFIN	Numeric	14	2	No	241-254
78	DRVRCNT	Numeric	4		No	255-258
79	HHFAMINC	Character	2		No	259-260
80	HH_HISP	Character	2		No	261-262
81	HH_RACE	Character	2		No	263-264
82	LIF_CYC	Character	2		No	265-266
83	HHMSA	Character	4		No	267-270
84	MSTR_MON	Numeric	4		No	271-274
85	MSTR_YR	Numeric	4		No	275-278
86	RAIL	Character	2		No	279-280
87	REF_AGE	Numeric	4		No	281-284
88	REF_SEX	Character	2		No	285-286
89	TDAY_MON	Numeric	4		No	287-290
90	TDAY_YR	Numeric	4		No	291-294
91	WRKCOUNT	Numeric	4		No	295-298
92	HHCMSA	Character	4		No	299-302
93	VTR_FLG	Character	2		No	303-304
94	SUBSTRAT	Numeric	4		No	305-308
95	HBPPOPDN	Numeric	7		No	309-315
96	HBHUR	Character	1		No	316
97	HBHRESDN	Numeric	7		No	317-323
98	HBHINMED	Numeric	7		No	324-330

FILE LAYOUT FOR SEGTRP95.ASC

Number of data records: 3779
Date of last update: 08/29/97

Field	Field Name	Type	Width	Dec	Nulls	Column Position
1	HOUSEID	Numeric	8		No	1-8
2	PROXY	Character	2		No	9-10
3	R_AGE	Numeric	4		No	11-14
4	R_SEX	Character	2		No	15-16
5	CENSUS_D	Character	2		No	17-18
6	CENSUS_R	Character	2		No	19-20
7	WORKER	Character	2		No	21-22
8	DRIVER	Character	2		No	23-24
9	HHVEHCNT	Numeric	4		No	25-28
10	HOWFARU	Character	2		No	29-30
11	MSASIZE	Character	2		No	31-32
12	TRPNUM	Numeric	4		No	33-36
13	HHTRIPID	Numeric	4		No	37-40
14	PERSONID	Numeric	4		No	41-44
15	SEG1TIME	Numeric	5		No	45-49
16	SEG1TRAN	Character	2		No	50-51
17	SEG1_MIN	Numeric	5		No	52-56
18	SEG2TIME	Numeric	5		No	57-61
19	SEG2TRAN	Character	2		No	62-63
20	SEG2_MIN	Numeric	5		No	64-68
21	SEG3TIME	Numeric	5		No	69-73
22	SEG3TRAN	Character	2		No	74-75
23	SEG3_MIN	Numeric	5		No	76-80
24	SEG4TIME	Numeric	5		No	81-85
25	SEG4TRAN	Character	2		No	86-87
26	SEG4_MIN	Numeric	5		No	88-92
27	SEGNUM	Character	1		No	93
28	STRTTIME	Numeric	5		No	94-98
29	TRANSFER	Character	2		No	99-100
30	TRPMILES	Numeric	14	2	No	101-114
31	TRPTRANS	Character	2		No	115-116
32	TRVL_MIN	Numeric	5		No	117-121
33	VARSTRAT	Numeric	4		No	122-125
34	WHYTRP95	Character	2		No	126-127
35	WTTRDFIN	Numeric	14	2	No	128-141
36	DRVRCNT	Numeric	4		No	142-145
37	HHFAMINC	Character	2		No	146-147
38	HHSIZE	Numeric	4		No	148-151
39	HH_HISP	Character	2		No	152-153
40	HH_RACE	Character	2		No	154-155
41	LIF_CYC	Character	2		No	156-157
42	HHMSA	Character	4		No	158-161
43	RAIL	Character	2		No	162-163
44	TDAY_MON	Numeric	4		No	164-167
45	TDAY_YR	Numeric	4		No	168-171
46	WRKCOUNT	Numeric	4		No	172-175
47	HHCMSA	Character	4		No	176-179
48	SUBSTRAT	Numeric	4		No	180-183

FILE LAYOUT FOR PERTRP95.ASC

Number of data records: 29647
Date of last update: 08/29/97

Field	Field Name	Type	Width	Dec	Nulls	Column Position
1	PROXY	Character	2		No	1-2
2	R_AGE	Numeric	4		No	3-6
3	R_SEX	Character	2		No	7-8
4	DRIVER	Character	2		No	9-10
5	CENSUS_D	Character	2		No	11-12
6	CENSUS_R	Character	2		No	13-14
7	WORKER	Character	2		No	15-16
8	HHVEHCNT	Numeric	4		No	17-20
9	MSASIZE	Character	2		No	21-22
10	TRIPNUM	Numeric	4		No	23-26
11	VARSTRAT	Numeric	4		No	27-30
12	HOUSEID	Numeric	8		No	31-38
13	DRVRCNT	Numeric	4		No	39-42
14	HHFAMINC	Character	2		No	43-44
15	HHSIZE	Numeric	4		No	45-48
16	HH_HISP	Character	2		No	49-50
17	HH_RACE	Character	2		No	51-52
18	LIF_CYC	Character	2		No	53-54
19	HHMSA	Character	4		No	55-58
20	MSTR_MON	Numeric	4		No	59-62
21	MSTR_YR	Numeric	4		No	63-66
22	RAIL	Character	2		No	67-68
23	SUM_STAT	Character	3		No	69-71
24	TDAY_MON	Numeric	4		No	72-75
25	TDAY_YR	Numeric	4		No	76-79
26	TPER_BMO	Numeric	4		No	80-83
27	TPER_BYR	Numeric	4		No	84-87
28	TPER_EMO	Numeric	4		No	88-91
29	TPER_EYR	Numeric	4		No	92-95
30	TOWHYPAS	Character	2		No	96-97
31	WRKCOUNT	Numeric	4		No	98-101
32	HHCMSA	Character	4		No	102-105
33	COUNTRY	Character	3		No	106-108
34	DESTSTAT	Character	2		No	109-110
35	HHTRPID	Numeric	4		No	111-114
36	PERSONID	Numeric	4		No	115-118
37	RET_MON	Character	2		No	119-120
38	RET_YR	Character	2		No	121-122
39	TOWHYTRP	Character	2		No	123-124
40	TO_TRANS	Character	2		No	125-126
41	WTTRPFIN	Numeric	14	2	No	127-140
42	CALCDIST	Numeric	14	2	No	141-154
43	DRVR_TPT	Character	2		No	155-156
44	SUBSTRAT	Numeric	4		No	157-160
45	HBPPOPDN	Numeric	7		No	161-167
46	HBHUR	Character	1		No	168
47	HBHRESDN	Numeric	7		No	169-175
48	HBHINMED	Numeric	7		No	176-182

I- 15

CONTENTS PROCEDURE

-----Directory-----

Libref: DOT_PUBU

Engine: V611

Physical Name: C:\SASSTUFF\NPTS95PU\SSDFLS

            # Name   Memtype Indexes

            ----

            1 DAYTRP95   DATA

            2 HHOLD95   DATA

            4 PERSON95   DATA

            5 PERTRP95   DATA

            6 SEGTRP95   DATA

            7 VEHICL95   DATA

```
                           CONTENTS PROCEDURE


Data Set Name: DOT_PUBU. DAYTRP95              Observations:        409025
Member Type:   DATA                            Variables:           98
Engine:        V611                            Indexes:             0
Created:       15:22 Wednesday, August 27, 1997  Observation Length: 316
Last Modified: 15:25 Wednesday, August 27, 1997  Deleted Observations: 0
Protection:                                    Compressed:          NO
Data Set Type:                                 Sorted:              NO
Label:


                -----Engine/Host Dependent Information-----

                    Data Set Page Size:       9728
                    Number of Data Set Pages: 13636
                    File Format:              607
                    First Data Page:          2
                    Max Obs per Page:         30
                    Obs in First Data Page:   21


                -----Alphabetic List of Variables and Attributes-----


   #   Variable  Type  Len  Pos  Format  Label
---------------------------------------------------------------------------
  12   AWAYHOME  Char   2   34           Reason started day away from home
   6   CENSUS_D  Char   2   18           Census division
   7   CENSUS_R  Char   2   20           Census region
  13   CHAIN     Num    4   36           Trip chain number for this person
  14   CHAINTRP  Num    4   40           # of trip within chain
  15   DATEFLG   Char   2   44           Intrv date imputed as trav day plus 1
  16   DAYNIGHT  Char   2   46           Trip started AM or PM G17A
  17   DIFFDATE  Num    4   48           Days between travel & interview dates
  18   DRIVER    Char   2   52           Person is a driver D9
  78   DRVRCNT   Num    4  240           Number of drivers in HH
  19   DRVR_FLG  Char   2   54           1= person drove on trip
  31   DWELTIME  Num    5   85           Time spent at destination of prev trip
  20   EDITMILE  Char   2   56           1= trip miles were edited
  21   EDITMODE  Char   2   58           1= transportation mode was edited
  36   EDITNONH  Char   2  102           1= variable NONHHCNT was edited
  22   EDIT_MIN  Char   2   60           1= trip duration was edited
  23   FROM_A    Char   1   62           Where trip chain started (H,W,S)
  24   FRSTHM    Char   2   63           1=persons 1st trip began at home
  98   HBHINMED  Num    7  309           Median household income, BG
  97   HBHRESDN  Num    7  302           HU density (units/square mile), BG
  96   HBHUR     Char   1  301           Urban/rural code, block group
  95   HBPPOPDN  Num    7  294           Population density, block group
  92   HHCMSA    Char   4  284           CMSA identification code
  79   HHFAMINC  Char   2  244           HH family income category
  25   HHMEMDRV  Char   2   65           1= household member drove G37
  83   HHMSA     Char   4  252           MSA identification code
  26   HHSIZE    Num    4   67           Total number of persons in HH
  68   HHTRIPID  Num    4  196           Trip number for household travel day
```

I- 17

```
 #  Variable  Type  Len  Pos  Format  Label
---------------------------------------------------------------------------
28  HHVEHCNT  Num    4   75           No. of vehicles in household (derived)
80  HH_HISP   Char   2  246           Hispanic status of ref. person
29  HH_ONTRP  Num    4   79           # of HH members on the trip (derived)
81  HH_RACE   Char   2  248           Race of reference person
 1  HOUSEID   Num    6    0           Household identification number
30  HOWFARU   Char   2   83           Units of reported dist: B)locks, M)iles
 9  INTRVMON  Num    4   24           Person interview date - month
10  INTRVYR   Num    4   28           Person interview date - year
82  LIF_CYC   Char   2  250           Family life cycle
32  MATCH     Num    4   90           ID of matching prev. reported trip
33  MSASIZE   Char   2   94           Size of MSA of household
84  MSTR_MON  Num    4  256           Date of master interview - month
85  MSTR_YR   Num    4  260           Date of master interview - year
34  NONHHACC  Char   2   96           1= non-HH members on trip
35  NONHHCNT  Num    4   98           # of non-HH members on trip
37  NUMONTRP  Num    4  104           Total # of persons on trip (derived)
67  OVERLAP   Char   1  195           =1 if trip part of travel period trip
38  PASSPURP  Char   2  108           Trip purpose for passenger
69  PERSONID  Num    4  200           Person ID number
39  PREVREP   Char   2  110           This trip also reported by other HH mem
 3  PROXY     Char   2   10           Proxy respondent for person data
41  PUBTRANS  Char   2  116           Used public transit (8<trptrans<14)
86  RAIL      Char   2  264           Presence/absence of rail
87  REF_AGE   Num    4  266           Age of reference person (yr)
 8  REF_EDUC  Char   2   22           Education of HH reference person
88  REF_SEX   Char   2  270           Sex of ref person
 4  R_AGE     Num    4   12           Age of sample person
 5  R_SEX     Char   2   16           Sex of sample person
42  SEGMENTD  Char   2  118           1= if trip is segmented
43  SITMOST   Char   2  120           Sit or stand most on trip
44  STANDSIT  Char   2  122           1=sat, 2=stood, 3=both on trip
70  STRTTIME  Num    5  204           Start time of trip
94  SUBSTRAT  Num    4  290           Substratum within VARSTRAT
89  TDAY_MON  Num    4  272           Travel day date (MM)
90  TDAY_YR   Num    4  276           Travel day date (YY)
45  TO_B      Char   1  124           Where trip chain ended
71  TRANSFER  Char   2  209           =01 if changed mode from/to pub trans
 2  TRAVDAY   Num    4    6           Travel day - day of week
46  TRAVWKND  Char   2  125           Travel day on weekend (1=Y, 2=N)
47  TRPHHACC  Char   2  127           Other HH mem were also on trip?
48  TRPHHVEH  Char   2  129           Was HH vehicle used on trip?
72  TRPMILES  Num    8  211   6.1     Distance (miles)
40  TRPNUM    Num    4  112           Travel day trip number for sample person
49  TRPNUM_A  Num    4  131           Person trip # of first trip in chain
50  TRPNUM_B  Num    4  135           Person trip # of last trip in chain
73  TRPTRANS  Char   2  219           Mode of transportation code
74  TRVL_MIN  Num    5  221           Travel time (min)
75  VARSTRAT  Num    4  226           Sample stratum
27  VEHID     Num    4   71           HH vehicle number
93  VTR_FLG   Char   2  288           1=POV trip, respondent drove
51  WAIT_MIN  Num    5  139           Time waited for transportation (min)
52  WHERE     Char   1  144           H=home, W=work, S=other-specify
53  WHOACC_A  Num    4  145           Roster # of other HH mem on trip G36
54  WHOACC_B  Num    4  149           Roster # of other HH mem on trip G36
55  WHOACC_C  Num    4  153           Roster # of other HH mem on trip G36
56  WHOACC_D  Num    4  157           Roster # of other HH mem on trip G36
57  WHOACC_E  Num    4  161           Roster # of other HH mem on trip G36
58  WHOACC_F  Num    4  165           Roster # of other HH mem on trip G36
59  WHOACC_G  Num    4  169           Roster # of other HH mem on trip G36
60  WHOACC_H  Num    4  173           Roster # of other HH mem on trip G36
```

```
 #   Variable   Type   Len   Pos   Format   Label
------------------------------------------------------------------------
61   WHOACC_I   Num     4    177            Roster # of other HH mem on trip G36
62   WHOACC_J   Num     4    181            Roster # of other HH mem on trip G36
63   WHODROVE   Num     4    185            ID of  HH mem who drove on trip G38
64   WHYFROM    Char    2    189            1995 purpose - from
65   WHYTO      Char    2    191            1995 purpose - to
66   WHYTRP90   Char    2    193            Purpose of trip (1990 definition)
76   WHYTRP95   Char    2    230            Purpose of trip (1995 definition)
11   WORKER     Char    2     32            Respondent is a worker
91   WRKCOUNT   Num     4    280            No. of workers in HH
77   WTTRDFIN   Num     8    232            Final travel day trip weight
```

CONTENTS PROCEDURE

```
Data Set Name: DOT_PUBU. HHOLD95             Observations:          42033
Member Type:   DATA                          Variables:             182
Engine:        V611                          Indexes:               0
Created:       10:58 Wednesday, August 20, 1997   Observation Length:   663
Last Modified: 10:59 Wednesday, August 20, 1997   Deleted Observations: 0
Protection:                                  Compressed:            NO
Data Set Type:                               Sorted:                NO
Label:
```

-----Engine/Host Dependent Information-----

```
Data Set Page Size:        16384
Number of Data Set Pages:  1753
File Format:               607
First Data Page:           2
Max Obs per Page:          24
Obs in First Data Page:    14
```

-----Alphabetic List of Variables and Attributes-----

```
  #  Variable  Type  Len  Pos  Format  Label
-------------------------------------------------------------------------------
  6  BUSBLOCK  Num    4    14          Reported dist. to bus (blocks)
  7  BUSMILE   Num    4    18          Reported dist. to bus (miles)
  8  BUS_AVL   Char   2    22          Bus service available
  9  BUS_DIST  Num    8    24   6.1    Distance to bus (miles)
  1  CENSUS_D  Char   2     0          Census division
  2  CENSUS_R  Char   2     2          Census region
 11  DRVRCNT   Num    4    38          Number of drivers in HH
128  GHMXIN    Num    8   371          Basis for geocoding - household
156  HBHHSMLT  Num    5   520          Percent multiple unit housing, BG
157  HBHHSOTH  Num    5   525          Percent other housing, BG
155  HBHHSSNG  Num    5   515          Percent single family housing, BG
166  HBHINCH   Num    5   574          Percent HHs, income $60000 and up, BG
163  HBHINCL   Num    5   559          Percent HHs, income < $15000, BG
164  HBHINCM1  Num    5   564          Percent HHs, income $15000-$39999, BG
165  HBHINCM2  Num    5   569          Percent HHs, income $40000-$59999, BG
162  HBHINMED  Num    7   552          Median household income, BG
161  HBHMEDHS  Num    7   545          Median housing unit value, BG
160  HBHRECNT  Num    5   540          Percent units built last 10 years, BG
154  HBHRESDN  Num    7   508          HU density (units/square mile), BG
158  HBHTNOWN  Num    5   530          Percent owner-occupied housing, BG
159  HBHTNRNT  Num    5   535          Percent renter-occupied housing, BG
153  HBHUR     Char   1   507          Urban/rural code, block group
134  HBP65P    Num    5   408          Percent 65 & older, block group
133  HBPCOLGD  Num    5   403          Pcnt Colg Grads(over 25), block group
135  HBPFORBN  Num    5   413          Percent foreign born 1990, block group
136  HBPHISP   Num    5   418          Percent Hispanic, block group
132  HBPHSGD   Num    5   398          Pcnt HS grads (over 25), block group
131  HBPLTPOV  Num    5   393          Percent families below poverty, blk grp
129  HBPPOPDN  Num    7   379          Population density, block group
130  HBPPOPNO  Num    7   386          Current population, block group
138  HBPRCAA   Num    5   428          Percent African-Am., block group
```

I- 20

```
139   HBPRCASN  Num   5   433        Percent Asian- Am., block group
137   HBPRCCAU  Num   5   423        Percent White, block group
140   HBPRCOTH  Num   5   438        Percent Other races, block group
125   HHCMSA    Char  4   361        CMSA identification code
 12   HHELGCNT  Num   4    42        # of eligible persons in HH
 13   HHFAMINC  Char  2    46        HH family income category
 27   HHMSA     Char  4    84        MSA identification code
 14   HHRESP    Char  2    48        HH respondent
 15   HHSIZE    Num   4    50        Total number of persons in HH
 16   HHSTATE   Char  2    54        State postal code
 17   HHSTFIPS  Num   4    56        State FIPS code
  3   HHVEHCNT  Num   4     4        No. of vehicles in household (derived)
 23   HH_0TO4   Num   4    70        Number of persons in HH age 0-4
 18   HH_HISP   Char  2    60        Hispanic status of ref. person
 19   HH_RACE   Char  2    62        Race of reference person
 20   HOMEOWN   Char  2    64        Tenure of housing unit
 21   HOMETYPE  Char  2    66        Type of housing unit
 10   HOUSEID   Num   6    32        Household identification number
 22   HSTORIES  Char  2    68        Stories in apt. building
181   HTEEMPDN  Num   7   651        Jobs per square mile, census tract
170   HTHHSMLT  Num   5   592        Percent multiple unit housing, CT
171   HTHHSOTH  Num   5   597        Percent other housing, CT
169   HTHHSSNG  Num   5   587        Percent single family housing, CT
180   HTHINCH   Num   5   646        Percent HHs, income $60000 and up, CT
177   HTHINCL   Num   5   631        Percent HHs, income < $15000, CT
178   HTHINCM1  Num   5   636        Percent HHs, income $15000-$39999, CT
179   HTHINCM2  Num   5   641        Percent HHs, income $40000-$59999, CT
176   HTHINMED  Num   7   624        Median household income, CT
175   HTHMEDHS  Num   7   617        Median housing unit value, CT
174   HTHRECNT  Num   5   612        Percent units built last 10 years, CT
168   HTHRESDN  Num   7   580        HU density (units/square mile), CT
172   HTHTNOWN  Num   5   602        Percent owner-occupied housing, CT
173   HTHTNRNT  Num   5   607        Percent renter-occupied housing, CT
167   HTHUR     Char  1   579        Urban/rural code, census tract
182   HTINDRET  Num   5   658        Pct 16+ workplace pop, retl trd ind, CT
146   HTP65P    Num   5   472        Percent 65 & older, census tract
145   HTPCOLGD  Num   5   467        Pcnt Colg Grads(over 25), census tract
147   HTPFORBN  Num   5   477        Percent foreign born 1990, census tract
148   HTPHISP   Num   5   482        Percent Hispanic, census tract
144   HTPHSGD   Num   5   462        Pcnt HS grads (over 25), census tract
143   HTPLTPOV  Num   5   457        Percent families below poverty, cen. r.
141   HTPPOPDN  Num   7   443        Population density, census tract
142   HTPPOPNO  Num   7   450        Current population, census tract
150   HTPRCAA   Num   5   492        Percent African-Am., census tract
151   HTPRCASN  Num   5   497        Percent Asian- Am., census tract
149   HTPRCCAU  Num   5   487        Percent White, census tract
152   HTPRCOTH  Num   5   502        Percent Other races, census tract
 26   INELGCNT  Num   4    80        # of ineligible persons in HH
 24   LIF_CYC   Char  2    74        Family life cycle
 04   MSASIZE   Char  2     8        Size of MSA of household
 08   MSTR_MON  Num   4    88        Date of master interview - month
 29   MSTR_YR   Num   4    92        Date of master interview - year
 30   NONFMFLG  Char  2    96        Non-family income reported for HH
 31   NOTELWKS  Char  2    98        No. of weeks w/o telephone service
 32   NOTELYR   Char  2   100        Without phone service in past yer?
 25   NUMADLT   Num   4    76        # of adults in HH
 33   OTHERPTR  Char  2   102        Other public transit available
 34   P10_AGE   Num   4   104        Age of person 10
 35   P10_DRVR  Char  2   108        Driver status of person 10
 36   P10_REL   Char  2   110        Person 10 relation to ref. person
 37   P10_SEX   Char  2   112        Sex of person 10
 38   P10_STAT  Char  2   114        Response status of person 10
```

```
 #  Variable  Type  Len  Pos  Format  Label
-------------------------------------------------------------------------
39  P10_WKR    Char   2   116          Worker status of person 10
40  P1_AGE     Num    4   118          Age of person 1
41  P1_DRVR    Char   2   122          Driver status of person 1
42  P1_REL     Char   2   124          Person 1 relation to ref. person
43  P1_SEX     Char   2   126          Sex of person 1
44  P1_STAT    Char   2   128          Response status of person 1
45  P1_WKR     Char   2   130          Worker status of person1
46  P2_AGE     Num    4   132          Age of person 2
47  P2_DRVR    Char   2   136          Driver status of person 2
48  P2_REL     Char   2   138          Person 2 relation to ref. person
49  P2_SEX     Char   2   140          Sex of person 2
50  P2_STAT    Char   2   142          Response status of person 2
51  P2_WKR     Char   2   144          Worker status of person 2
52  P3_AGE     Num    4   146          Age of person 3
53  P3_DRVR    Char   2   150          Driver status of person 3
54  P3_REL     Char   2   152          Person 3 relation to ref. person
55  P3_SEX     Char   2   154          Sex of person 3
56  P3_STAT    Char   2   156          Response status of person 3
57  P3_WKR     Char   2   158          Worker status of person 3
58  P4_AGE     Num    4   160          Age of person 4
59  P4_DRVR    Char   2   164          Driver status of person 4
61  P4_REL     Char   2   168          Person 4 relation to ref. person
62  P4_SEX     Char   2   170          Sex of person 4
63  P4_STAT    Char   2   172          Response status of person 4
64  P4_WKR     Char   2   174          Worker status of person 4
65  P5_AGE     Num    4   176          Age of person 5
66  P5_DRVR    Char   2   180          Driver status of person 5
67  P5_REL     Char   2   182          Person 5 relation to ref. person
68  P5_SEX     Char   2   184          Sex of person 5
69  P5_STAT    Char   2   186          Response status of person 5
70  P5_WKR     Char   2   188          Worker status of person 5
71  P6_AGE     Num    4   190          Age of person 6
72  P6_DRVR    Char   2   194          Driver status of person 6
73  P6_REL     Char   2   196          Person 6 relation to ref. person
74  P6_SEX     Char   2   198          Sex of person 6
75  P6_STAT    Char   2   200          Response status of person 6
76  P6_WKR     Char   2   202          Worker status of person 6
77  P7_AGE     Num    4   204          Age of person 7
78  P7_DRVR    Char   2   208          Driver status of person 7
79  P7_REL     Char   2   210          Person 7 relation to ref. person
80  P7_SEX     Char   2   212          Sex of person 7
81  P7_STAT    Char   2   214          Response status of person 7
82  P7_WKR     Char   2   216          Worker status of person 7
83  P8_AGE     Num    4   218          Age of person 8
84  P8_DRVR    Char   2   222          Driver status of person 8
85  P8_REL     Char   2   224          Person 8 relation to ref. person
86  P8_SEX     Char   2   226          Sex of person 8
87  P8_STAT    Char   2   228          Response status of person 8
88  P8_WKR     Char   2   230          Worker status of person 8
89  P9_AGE     Num    4   232          Age of person 9
90  P9_DRVR    Char   2   236          Driver status of person 9
91  P9_REL     Char   2   238          Person 9 relation to ref. person
92  P9_SEX     Char   2   240          Sex of person 9
93  P9_STAT    Char   2   242          Response status of person 9
94  P9_WKR     Char   2   244          Worker status of person 9
95  RAIL       Char   2   246          Presence/absence of rail
96  REF_AGE    Num    4   248          Age of reference person (yr)
97  REF_DRVR   Char   2   252          Driver status of reference person
60  REF_EDUC   Char   2   166          Education of HH reference person
98  REF_SEX    Char   2   254          Sex of ref person
```

```
 #  Variable Type Len Pos  Format  Label
------------------------------------------------------------------------
 99  REF_STAT  Char  2  256          Response status of reference person
100  REF_WKR   Char  2  258          Worker status of reference person
101  RESP_CNT  Num   4  260          # of respondents in HH
102  STCBLOCK  Num   4  264          Reported dist to streetcar (blocks)
103  STCMILE   Num   4  268          Reported dist to streetcar (miles)
104  STC_AVL   Char  2  272          Streetcar service available
105  STC_DIST  Num   8  274  6.1     Distance to streetcar (miles)
106  SUBBLOCK  Num   4  282          Reported dist to subway (blocks)
107  SUBMILE   Num   4  286          Reported dist to subway (miles)
127  SUBSTRAT  Num   4  367          Substratum within VARSTRAT
108  SUB_AVL   Char  2  290          01= if subway service is available
109  SUB_DIST  Num   8  292  6.1     Distance to subway
110  SUM_STAT  Char  3  300          Summary status code for household
111  TDAY_MON  Num   4  303          Travel day date (MM)
112  TDAY_YR   Num   4  307          Travel day date (YY)
113  TELNUMCT  Char  2  311          No. of phone numbers in HH
114  TEL_HHS   Char  2  313          No. of HHs this phone number serves
115  TPER_BMO  Num   4  315          Travel period beginning date (MM)
116  TPER_BYR  Num   4  319          Travel period beginning date (YY)
117  TPER_EMO  Num   4  323          Travel period ending date (MM)
118  TPER_EYR  Num   4  327          Travel period ending date (YY)
119  TRNBLOCK  Num   4  331          Reported dist to train (blocks)
120  TRNMILE   Num   4  335          Reported dist to train (miles)
121  TRN_AVL   Char  2  339          01= if commuter train service available
122  TRN_DIST  Num   8  341  6.1     Distance to commuter train
126  URBAN     Char  2  365          Urbanized area code
  5  VARSTRAT  Num   4   10          Sample stratum
123  WRKCOUNT  Num   4  349          No. of workers in HH
124  WTHHFIN   Num   8  353          Final household weight
```

CONTENTS PROCEDURE

Data Set Name: DOT_PUBU. **PERSON95**   Observations: 95360
Member Type: DATA   Variables: 176
Engine: V611   Indexes: 0
Created: 10:59 Wednesday, August 20, 1997 Observation Length: 479
Last Modified: 11:00 Wednesday, August 20, 1997 Deleted Observations: 0
Protection: Compressed: NO
Data Set Type: Sorted: NO
Label:

              -----Engine/Host Dependent Information-----

                  Data Set Page Size: 14848
                  Number of Data Set Pages: 3181
                  File Format: 607
                  First Data Page: 2
                  Max Obs per Page: 30
                  Obs in First Data Page: 15

            -----Alphabetic List of Variables and Attributes-----

   #   Variable Type Len Pos Format Label
----
  98   ALWYSDRV Char   2   234   Always the driver?
 133   CENSUS_D Char   2   308   Census division
 134   CENSUS_R Char   2   310   Census region
 129   DIARYCMP Char   2   300   Who completed diary
 131   DIARYGET Char   2   304   Can get diary now
 130   DIARYHAV Char   2   302   Have the diary now
  54   DISTTOWK Num   8   120 6.2   One-way distance to work
   9   DRIVER   Char   2   26   Person is a driver D9
 145   DRVRCNT   Num   4   346   Number of drivers in HH
  13   DTACDT   Char   2   34   Worry about traffic accident
  10   DTCONJ   Char   2   28   Highway congestion
  18   DTCRIME   Char   2   44   Worry about crimes against motorists
  12   DTNTFMLR Char   2   32   Unfamiliar local areas or neighborhood
  11   DTPAVE   Char   2   30   Rough pavement on highways
  15   DTPOLLTN Char   2   38   Air pollution by cars, trucks, and uses
  17   DTSTRTS   Char   2   42   Rough pavement on neighborhood strets
  16   DTTIEUP   Char   2   40   Traffic tie-ups or road constructio
  14   DTWALK   Char   2   36   Poor walkways or sidewalks
  50   EDUC   Char   2   112   Highest grade or yr of school complted
  28   FQSTBELT Char   2   64   How often wear seat belt when drivig
  52   GT1JBLWK Char   2   116   Have more than one job last week
 163   GWKXIN   Num   8   404   Basis for geocoding - workplacelocation
 167   HBHINMED Num   7   427   Median household income, BG
 166   HBHRESDN Num   7   420   HU density (units/square mile), BG
 165   HBHUR   Char   1   419   Urban/rural code, block group
 164   HBPPOPDN Num   7   412   Population density, block group
 161   HHCMSA   Char   4   396   CMSA identification code
 146   HHFAMINC Char   2   350   HH family income category
 152   HHMSA   Char   4   364   MSA identification code
 147   HHRESP   Char   2   352   HH respondent
 148   HHSIZE   Num   4   354   Total number of persons in HH
 142   HHVEHCNT Num   4   336   No. of vehicles in household (derived)

I- 24

```
   #  Variable  Type  Len  Pos  Format  Label
---------------------------------------------------------------------------

149  HH_HISP   Char    2  358          Hispanic status of ref. person
150  HH_RACE   Char    2  360          Race of reference person
  1  HOUSEID   Num     6    0          Household identification number
139  INTRVMON  Num     4  326          Person interview date - month
140  INTRVYR   Num     4  330          Person interview date - year
 51  JOBLSTWK  Char    2  114          Have full, part time job last wk or not
151  LIF_CYC   Char    2  362          Family life cycle
143  MSASIZE   Char    2  340          Size of MSA of household
153  MSTR_MON  Num     4  368          Date of master interview - month
154  MSTR_YR   Num     4  372          Date of master interview - year
109  NCCOMCR   Char    2  256          Not carpool-have company car
101  NCINCVNT  Char    2  240          Not carpool-it's inconvenient
 99  NCIRRHR   Char    2  236          Not carpool-irregular/unusual hours
108  NCLVFAR   Char    2  254          Not carpool-live far from work
102  NCNEEDCR  Char    2  242          Not carpool-need car at/bfr/aft work
106  NCNEVER   Char    2  250          Not carpool-never thought of it
107  NCNLIKE   Char    2  252          Not carpool-don't like to do it
100  NCNOONE   Char    2  238          Not carpool-no one to carpool with
105  NCONLY    Char    2  248          Not carpool-only one works there
104  NCOTHRES  Char    2  246          Not carpool-other reasons
103  NCSHRTDI  Char    2  244          Not carpool-short distance/unnecessary
132  NONFMINC  Char    2  306          Individual income category
112  NPT2EXPV  Char    2  262          Public transp. too expensive
110  NPT2FRWK  Char    2  258          Public trans. not available at work
111  NPT2MCTM  Char    2  260          Public trans. takes too much time
120  NPTCOMCR  Char    2  278          Not used public trans. have com car
118  NPTDLPT   Char    2  274          Not used public trans. dont like to
115  NPTFMHM   Char    2  268          Public trans. stops too far from home
119  NPTHVCAR  Char    2  276          Not used public trans. have own car
117  NPTLVCLS  Char    2  272          Not used public trans. short distance
114  NPTNTCNV  Char    2  266          Public trans. schedule not convenient
116  NPTOTHER  Char    2  270          Not used public trans. for other easons
113  NPTOTHTG  Char    2  264          Need own vehicle to do other thins
 33  NSBBACK   Char    2   74          Not wear seat belt when in back sat
 30  NSBBROKE  Char    2   68          Not wear seat belt when broken/unavail
 35  NSBDRVR   Char    2   78          Not wear seat belt when driver
 29  NSBFGET   Char    2   66          Not wear seat belt when forget
 40  NSBHURRY  Char    2   88          Not wear seat belt when in a hurry
 32  NSBLONG   Char    2   72          Not wear seat belt when take long trip
 43  NSBMED    Char    2   94          Not wear seat belt: medical reasons
 44  NSBNLIKE  Char    2   96          Not wear seat belt: don't like to
 42  NSBNOASK  Char    2   92          Not wear seat belt when not asked
 39  NSBOTHER  Char    2   86          Not wear seat belt: other specify
 46  NSBPOLIC  Char    2  100          Not wear seat belt:police not around
 34  NSBPSNG   Char    2   76          Not wear seat belt when passenger
 31  NSBSHORT  Char    2   70          Not wear seat belt when short trips
 41  NSBSPCLH  Char    2   90          Not wear seat belt w/ certain clothes
 38  NSBSPPER  Char    2   84          Not wear seat belt w/ a certain person
 36  NSBSPVEH  Char    2   80          Not wear seat belt when in certain veh
 37  NSBTOWN   Char    2   82          Not wear seat belt when in town/city
 45  NSBTOWRK  Char    2   98          Not wear seat belt when going to work
 47  NSBWTHR   Char    2  102          Not wear seat belt when good weather
137  OUTCNTRY  Char    2  322          Out of country
 95  PARKAMNT  Num     8  222   7.2    Parking fee to pay at work
 96  PARKCODE  Char    2  230          Unit of amount paid for parking at work
 94  PAYTOPRK  Char    2  220          Pay parking at work?
```

```
  #  Variable  Type  Len  Pos  Format  Label
-----------------------------------------------------------------------
  2  PERSONID  Num    4    6            Person ID number
  3  PROXY     Char   2   10            Proxy respondent for person data
 27  PTCARND   Char   2   62            Having access to a car when you need it
 25  PTCOST    Char   2   58            Cost of travel by public transportation
 23  PTNTCLN   Char   2   54            Transit stations/vehicles not clean
 20  PTCROWD   Char   2   48            Difficulty w/ crowding or getting a seat
 22  PTCRIME   Char   2   52            Worry w/ crime on public transportaton
 21  PTTIMEON  Char   2   50            Time spent on public transportation
 26  PTTMND    Char   2   60            Public transp avail time of day needed
 24  PTTRANSF  Char   2   56            Time and aggrevation with transferes
 19  PTUSED    Char   2   46            How often used public transportation
155  RAIL      Char   2  376            Presence/absence of rail
156  REF_AGE   Num    4  378            Age of reference person (yr)
136  REF_EDUC  Char   2  320            Education of HH reference person
  5  REF_ROST  Num    4   14            Reference roster number
157  REF_SEX   Char   2  382            Sex of ref person
  6  R_AGE     Num    4   18            Age of sample person
  4  R_AGEFLG  Char   2   12            Age imputed
  8  R_RELAT   Char   2   24            Relationship to ref person
  7  R_SEX     Char   2   22            Sex of sample person
138  SAMEPLC   Char   2  324            Same place all day
 89  SIT2AMTR  Char   2  210            Usually sit or stand most on AMTRAK
 90  SIT2BUS   Char   2  212            Usually sit or stand most on bus
 91  SIT2SBWY  Char   2  214            Usually sit or stand most on subway
 92  SIT2STCR  Char   2  216            Usually sit/stand most on strcr/trolley
 93  SIT2TRAN  Char   2  218            Usually sit or stand most on comm train
 84  SITAMTR   Char   2  200            Usually sit, stand or both on AMTRAK
 85  SITBUS    Char   2  202            Usually sit, stand or both on bus
 86  SITSBWY   Char   2  204            Usually sit/stand/both on rail/subway
 87  SITSTCR   Char   2  206            Usually sit/stand/both on trtcr/trolley
 88  SITTRAN   Char   2  208            Usually sit/stand/both oncommuter train
162  SUBSTRAT  Num    4  400            Substratum within VARSTRAT
158  TDAY_MON  Num    4  384            Travel day date (MM)
159  TDAY_YR   Num    4  388            Travel day date (YY)
 56  TIMELEAV  Num    4  130            Time usually leave for work
 57  TIMETOWK  Num    4  134            Minutes it took from home to work
 55  UNITDIST  Char   2  128            Unit of distance to work
 97  USULDRV   Char   2  232            Usually drive to work alone or carpool
144  VARSTRAT  Num    4  342            Sample stratum
 79  WAITAMTR  Num    4  180            Minutes wait for AMTRAK
 80  WAITBUS   Num    4  184            Minutes wait for bus
 81  WAITSBWY  Num    4  188            Minutes wait for elevated rail/subway
 82  WAITSTCR  Num    4  192            Minutes wait for streetcar/trolley
 83  WAITTRAN  Num    4  196            Minutes wait for commuter train
 71  WKBYAIR   Char   2  164            Get to work usually by airplane
 67  WKBYAMTR  Char   2  156            Get to work usually by AMTRAK
 58  WKBYAUTO  Char   2  138            Get to work usually by auto
 73  WKBYBIKE  Char   2  168            Get to work usually by bicycle
 66  WKBYBUS   Char   2  154            Get to work usually by bus
 76  WKBYHOME  Char   2  174            Worked from home
 64  WKBYMCYC  Char   2  150            Get to work usually by motorcycle
 65  WKBYOPOV  Char   2  152            Get to work usually by other POV
 77  WKBYOTHR  Char   2  176            Get to work by other means
 62  WKBYOTTK  Char   2  146            Get to work usually by other truck
 63  WKBYRV    Char   2  148            Get to work usually by RV
 70  WKBYSBWY  Char   2  162            Get to work usually by elev. ail/subway
 75  WKBYSCBS  Char   2  172            Get to work usually by schoolbus
 69  WKBYSTCR  Char   2  160            Get to work usually by strtcar/trolley
 72  WKBYTAXI  Char   2  166            Get to work usually by taxi
 68  WKBYTRAN  Char   2  158            Get to work usually by commuter train
```

```
 #  Variable Type Len Pos Format Label
--------------------------------------------------------------------------
 61  WKBYTRUK  Char   2  144         Get to work usually by pickup truck
 60  WKBYUV    Char   2  142         Get to work usually by UV
 59  WKBYVAN   Char   2  140         Get to work usually by van
 74  WKBYWALK  Char   2  170         Get to work usually by walking
122  WKFMHM2M  Char   2  282         Worked from home any last two month?
121  WKFMHMLW  Char   2  280         Worked from home any last week?
123  WKFMHMXX  Char   2  284         How often worked from home-2 months
128  WORKDAYS  Num    4  296         Days per week on job
141  WORKER    Char   2  334         Respondent is a worker
176  WORKLOC   Num    5  474         Work location
 53  WORKSTAT  Char   2  118         State of workplace
160  WRKCOUNT  Num    4  392         No. of workers in HH
124  WRKDRIVE  Char   2  286         Drive lisensed vehicle in work
126  WRKMILES  Num    4  290         Travel day miles driven on job
 78  WRKTRANS  Char   2  178         Main means of transportation to work
125  WRKTRPS   Char   2  288         10 or more trips on job during day
127  WRKVTYPE  Char   2  294         Type vehicle driven on job
168  WTEMPLDN  Num    5  434         Jobs per square mile, census tract
169  WTINDAGR  Num    5  439         Pct 16+ workers, agr/mining/const, CT
174  WTINDFIN  Num    5  464         Pct 16+ workers, fin/ins/rl est ind, CT
170  WTINDMAN  Num    5  444         Pct 16+ workers, manuf. industries, CT
173  WTINDRET  Num    5  459         Pct 16+ workplace pop, retl trd ind, CT
175  WTINDSVC  Num    5  469         Pct 16+ workers, service industries, CT
171  WTINDTRN  Num    5  449         Pct 16+ workers, tran/comm/ util ind, T
172  WTINDWHL  Num    5  454     Pct 16+ workers, wholesale trade ind, CT
135  WTPERFIN  Num    8  312         Final person wt person-nonresp adjusted
 48  YEARMILE  Num    6  104         How many miles did you drive per year
 49  YMILEFLG  Char   2  110         Yearmile mileage was capped at 200,000
```

```
                      CONTENTS PROCEDURE


Data Set Name: DOT_PUBU. PERTRP95            Observations:        29647
Member Type:   DATA                          Variables:           48
Engine:        V611                          Indexes:             0
Created:       11:06 Wednesday, August 20, 1997   Observation Length: 165
Last Modified: 11:06 Wednesday, August 20, 1997   Deleted Observations: 0
Protection:                                  Compressed:          NO
Data Set Type:                               Sorted:              NO
Label:


            -----Engine/Host Dependent Information-----

                Data Set Page Size:        8192
                Number of Data Set Pages: 606
                File Format:              607
                First Data Page:          1
                Max Obs per Page:         49
                Obs in First Data Page:   11


       -----Alphabetic List of Variables and Attributes-----


   #    Variable   Type   Len   Pos   Label
  --------------------------------------------------------------------------
   42   CALCDIST   Num    5    132   Calc distance home to destination
    5   CENSUS_D   Char   2     10   Census division
    6   CENSUS_R   Char   2     12   Census region
   33   COUNTRY    Char   3    103   Destination country code
   34   DESTSTAT   Char   2    106   Destination state
    4   DRIVER     Char   2      8   Person is a driver D9
   13   DRVRCNT    Num    4     36   Number of drivers in HH
   43   DRVR_TPT   Char   2    137   Person was the main driver on trip
   48   HBHINMED   Num    7    158   Median household income, BG
   47   HBHRESDN   Num    7    151   HU density (units/square mile), BG
   46   HBHUR      Char   1    150   Urban/rural code, block group
   45   HBPPOPDN   Num    7    143   Population density, block group
   32   HHCMSA     Char   4     99   CMSA identification code
   14   HHFAMINC   Char   2     40   HH family income category
   19   HHMSA      Char   4     52   MSA identification code
   15   HHSIZE     Num    4     42   Total number of persons in HH
   35   HHTRPID    Num    4    108   Trip number for household travel eriod
    8   HHVEHCNT   Num    4     16   No. of vehicles in household (derived)
   16   HH_HISP    Char   2     46   Hispanic status of ref. person
   17   HH_RACE    Char   2     48   Race of reference person
   12   HOUSEID    Num    6     30   Household identification number
   18   LIF_CYC    Char   2     50   Family life cycle
    9   MSASIZE    Char   2     20   Size of MSA of household
   20   MSTR_MON   Num    4     56   Date of master interview - month
   21   MSTR_YR    Num    4     60   Date of master interview - year
   36   PERSONID   Num    4    112   Person ID number
    1   PROXY      Char   2      0   Proxy respondent for person data
   22   RAIL       Char   2     64   Presence/absence of rail
   37   RET_MON    Char   2    116   Return month of travel period trip
   38   RET_YR     Char   2    118   Return year of travel period trip
    2   R_AGE      Num    4      2   Age of sample person
```

I- 28

```
   #   Variable   Type   Len   Pos   Format   Label
------------------------------------------------------------------------------

   3   R_SEX      Char    2     6             Sex of sample person
  44   SUBSTRAT   Num     4    139            Substratum within VARSTRAT
  23   SUM_STAT   Char    3    66             Summary status code for household
  24   TDAY_MON   Num     4    69             Travel day date (MM)
  25   TDAY_YR    Num     4    73             Travel day date (YY)
  30   TOWHYPAS   Char    2    93             Trip purpose for passenger
  39   TOWHYTRP   Char    2    120            Trip purpose travel period trip
  40   TO_TRANS   Char    2    122            Main transporation means - period trip
  26   TPER_BMO   Num     4    77             Travel period beginning date (MM)
  27   TPER_BYR   Num     4    81             Travel period beginning date (YY)
  28   TPER_EMO   Num     4    85             Travel period ending date (MM)
  29   TPER_EYR   Num     4    89             Travel period ending date (YY)
  10   TRIPNUM    Num     4    22             Persons travel period trip number
  11   VARSTRAT   Num     4    26             Sample stratum
   7   WORKER     Char    2    14             Respondent is a worker
  31   WRKCOUNT   Num     4    95             No. of workers in HH
  41   WTTRPFIN   Num     8    124            Final travel period trip weight
```

```
                        CONTENTS PROCEDURE


Data Set Name: DOT_PUBU .SEGTRP95           Observations:      3779
Member Type:   DATA                         Variables:         48
Engine:        V611                         Indexes:           0
Created:       11:00 Wednesday, August 20, 1997  Observation Length: 169
Last Modified: 11:00 Wednesday, August 20, 1997  Deleted Observations: 0

Protection:                                 Compressed:        NO
Data Set Type:                              Sorted:            NO
Label:


            -----Engine/Host Dependent Information-----

                Data Set Page Size:        8192
                Number of Data Set Pages:  80
                File Format:               607
                First Data Page:           1
                Max Obs per Page:          48
                Obs in First Data Page:    11

          -----Alphabetic List of Variables and Attributes-----


  #  Variable  Type  Len  Pos  Format  Label
---------------------------------------------------------------------------
  5  CENSUS_D  Char   2   14           Census division
  6  CENSUS_R  Char   2   16           Census region
  8  DRIVER    Char   2   20           Person is a driver D9
 36  DRVRCNT   Num    4  127           Number of drivers in HH
 47  HHCMSA    Char   4  161           CMSA identification code
 37  HHFAMINC  Char   2  131           HH family income category
 42  HHMSA     Char   4  143           MSA identification code
 38  HHSIZE    Num    4  133           Total number of persons in HH
 13  HHTRIPID  Num    4   34           Trip number for household travel day
  9  HHVEHCNT  Num    4   22           No. of vehicles in household (derived)
 39  HH_HISP   Char   2  137           Hispanic status of ref. person
 40  HH_RACE   Char   2  139           Race of reference person
  1  HOUSEID   Num    6    0           Household identification number
 10  HOWFARU   Char   2   26           Units of reported dist: B)locks, M)iles
 41  LIF_CYC   Char   2  141           Family life cycle
 11  MSASIZE   Char   2   28           Size of MSA of household
 14  PERSONID  Num    4   38           Person ID number
  2  PROXY     Char   2    6           Proxy respondent for person data
 43  RAIL      Char   2  147           Presence/absence of rail
  3  R_AGE     Num    4    8           Age of sample person
  4  R_SEX     Char   2   12           Sex of sample person
 15  SEG1TIME  Num    5   42           Start time for segment 1
 16  SEG1TRAN  Char   2   47           Mode code for segment 1
 17  SEG1_MIN  Num    5   49           Duration of segment 1 (min)
 18  SEG2TIME  Num    5   54           Start time for segment 2
 19  SEG2TRAN  Char   2   59           Mode code for segment 2
 20  SEG2_MIN  Num    5   61           Duration of segment 2 (min)
 21  SEG3TIME  Num    5   66           Start time for segment 3
 22  SEG3TRAN  Char   2   71           Mode code for segment 3
 23  SEG3_MIN  Num    5   73           Duration of segment 3 (min)
```

I- 30

```
    #  Variable  Type  Len  Pos  Format  Label
----------------------------------------------------------------------------

   24  SEG4TIME  Num     5   78          Start time for segment 4
   25  SEG4TRAN  Char    2   83          Mode code for segment 4
   26  SEG4_MIN  Num     5   85          Duration of segment 4 (min)
   27  SEGNUM    Char    1   90          Number of segments (derived)
   28  STRTTIME  Num     5   91          Start time of trip
   48  SUBSTRAT  Num     4  165          Substratum within VARSTRAT
   44  TDAY_MON  Num     4  149          Travel day date (MM)
   45  TDAY_YR   Num     4  153          Travel day date (YY)
   29  TRANSFER  Char    2   96          =01 if changed mode from/to pub trans
   30  TRPMILES  Num     8   98  6.1     Distance (miles)
   12  TRPNUM    Num     4   30          Travel day trip number for respondent
   31  TRPTRANS  Char    2  106          Mode of transportation code
   32  TRVL_MIN  Num     5  108          Travel time (min)
   33  VARSTRAT  Num     4  113          Sample stratum
   34  WHYTRP95  Char    2  117          Purpose of trip (1995 definition)
    7  WORKER    Char    2   18          Respondent is a worker
   46  WRKCOUNT  Num     4  157          No. of workers in HH
   35  WTTRDFIN  Num     8  119          Final travel day trip weight
```

```
                    CONTENTS PROCEDURE


Data Set Name: DOT_PUBU. VEHICL95        Observations:        75217
Member Type:   DATA                      Variables:           55
Engine:        V611                      Indexes:             0
Created:       9:42 Friday, September 5, 1997  Observation Length:  211
Last Modified: 9:42 Friday, September 5, 1997  Deleted Observations: 0
Protection:                              Compressed:          NO
Data Set Type:                           Sorted:              NO
Label:



             -----Engine/Host Dependent Information-----

                 Data Set Page Size:       8192
                 Number of Data Set Pages: 1981
                 File Format:              607
                 First Data Page:          1
                 Max Obs per Page:         38
                 Obs in First Data Page:   4

          -----Alphabetic List of Variables and Attributes-----


  #   Variable  Type  Len  Pos  Format  Label
-----------------------------------------------------------------------
 10   ANNMILES  Num    5   34   6.      Self-Reported annualized vmt
  3   ANNUALZD  Num    8   14           Odometer based annualized vmt
  5   ANN_EDIT  Char   2   24           Flag any edits/adjustments to ANNUALZD
  4   ANN_FLG   Char   2   22           Reasons for missing ANNUALZD
  6   ANN_OUT   Char   2   26           Flag identifying ANNUALZD outlier alues
 55   ANULZDSE  Num    8  203           Standard error of ANNUALZD estimate
  7   CENSUS_D  Char   2   28           Census division
  8   CENSUS_R  Char   2   30           Census region
 25   DRVRCNT   Num    4   82           Number of drivers in HH
 54   HBHINMED  Num    7  196           Median household income, BG
 53   HBHRESDN  Num    7  189           HU density (units/square mile), BG
 52   HBHUR     Char   1  188           Urban/rural code, block group
 51   HBPPOPDN  Num    7  181           Population density, block group
 41   HHCMSA    Char   4  139           CMSA identification code
 26   HHELGCNT  Num    4   86           # of eligible persons in HH
 27   HHFAMINC  Char   2   90           HH family income category
 32   HHMSA     Char   4  102           MSA identification code
 28   HHSIZE    Num    4   92           Total number of persons in HH
 11   HHVEHCNT  Num    4   39           No. of vehicles in household (derived)
 29   HH_HISP   Char   2   96           Hispanic status of ref. person
 30   HH_RACE   Char   2   98           Race of reference person
  1   HOUSEID   Num    8    0           Household identification number
 31   LIF_CYC   Char   2  100           Family life cycle
 12   MAINDRVR  Char   2   43           Does one HH mem. usually drive this veh
 13   MAKECODE  Char   2   45           First 2 char of NASS code
 14   MILELIMT  Char   2   47           =1 if annmiles capped at 115K
 15   MODLCODE  Char   3   49           Last 3 char of NASS code
  9   MSASIZE   Char   2   32           Size of MSA of household
 33   MSTR_MON  Num    4  106           Date of master interview - month
 34   MSTR_YR   Num    4  110           Date of master interview - year
 42   OD_DAY1   Num    4  143           Date of first odometer reading - day
 45   OD_DAY2   Num    4  155           Date of second odomete reading - day
```

I- 32

```
 #   Variable   Type   Len   Pos   Format   Label
--------------------------------------------------------------------------
43   OD_MON1    Num     4    147            Date of first odometer reading - month
46   OD_MON2    Num     4    159            Date of second odomete reading - month
48   OD_READ1   Num     5    167            First odometer reading
49   OD_READ2   Num     5    172            Second odometer reading
44   OD_YR1     Num     4    151            Date of first odometer reading - year
47   OD_YR2     Num     4    163            Date of second odomete reading - year
16   PURCHMON   Num     4     52            Month of purchase
23   PURCHYR    Num     5     73            Year vehicle was purchas (yyyy)
35   RAIL       Char    2    114            Presence/absence of rail
50   SUBSTRAT   Num     4    177            Substratum within VARSTRAT
36   SUM_STAT   Char    3    116            Summary status code for household
37   TDAY_MON   Num     4    119            Travel day date (MM)
38   TDAY_YR    Num     4    123            Travel day date (YY)
24   VARSTRAT   Num     4     78            Sample stratum
17   VEH12MNT   Char    2     56            Vehicle received in last 12 mo
 2   VEHID      Num     6      8            HH vehicle number
18   VEHMILES   Num     5     58            Reported mileage for last 12 mo
19   VEHNEW     Char    2     63            Purchased new (=1) or used (=2)
20   VEHTYPE    Char    2     65            Vehicle type
21   VEHYEAR    Num     4     67            Model year of veh (yyyy)
22   WHOMAIN    Char    2     71            Who drives veh most of time
39   WRKCOUNT   Num     4    127            No. of workers in HH
40   WTHHFIN    Num     8    131            Final household weight
```

APPENDIX J
DOCUMENTATION NOTES

NOTES ON THE DATA FILES
Conventions followed include the following:

Yes/No questions- coded as 01 = yes and 02 = no.

Calendar Dates- separate variables were constructed for the month, day and year of reported dates. An exception is the variable TDAY_ALL, in which the household's travel day date is formated (YYMMDD).

Times - all reported time variables are in military time from 0000 to 2359.

Legitimate skip codes- questions intentionally skipped in the instrument were generally denoted by a field filled with 9's with a 4 in the last digit.

Dont know - responses of dont know or not ascertained were generally denoted by a field filled with 9's with an 8 in the last digit.

Refused - responses of refused were generally denoted by a field completedly filled with 9's

Survey weights- there is one only one weight variable on each file. It is the weight that is appropriate for use in preparing tabulations of data from that file.

NOTES ON SPECIFIC VARIABLES

ANNUALZD Estimate of annual mileage for the vehicle, computed by Oak Ridge National Laboratory based upon two reported odometer readings and other data.

ANULZDSE Estimated standard error of the ANNUALZD value, computed by Oak Ridge National Laboratory.

BUS_DIST Responses in blocks have been converted to miles, using 9 blocks per mile (less than one block converted to 0.1 mile).

CALCDIST Straight-line (curve of the earth) distance between the geocoded

household location and the reported destination city for the travel period trip.

CHAIN **NOTE: The chains described here were created to recode trip purposes to those used in the 1990 NPTS. They do NOT necessarily represent chains that would be created in a traditional trip chaining analysis.**
Each trip reported for a respondent was assigned to a "chain", after ordering the person's travel day trips by STRTTIME from 4:00am to 3:59am.. Trips with missing STRTTIME values were sorted to the beginning of the list. All trips within a chain are sequentially numbered in the variable CHAINTRP. Variables TRPNUM_A and TRPNUM_B identify the first and last trips in each chain. The variables FROM_A and TO_B identify the origin and destination of the chains in terms of home, work or other location (H, W, S). Some of these chains do not begin or end at either home or work, as some respondents did not take such trips. Also, some persons reported only a single trip on travel day, such as returning home from vacation. It is possible to select a subset of chains that are anchored by home and work using FROM_A and TO_B. Note that some "chains" involve only one or two trips and would be excluded from most trip chaining analyses.

DAYNGHT2 New variable to revised DAYNIGHT. *The original DAYNIGHT was mis-coded on some records.*

DISTTOWK Questionnaire responses of 996 = less than one block and 997 = one-half mile have been converted to miles using 9 blocks per mile. This travel day trip file variable has special codes of 9993.0= no fixed workplace; 9994.0=legitimate skip; 9995.0=works at or out of home; 9998.0=not ascertained; and 9999.0=refused.

DRVR_FLG This variable was re-coded from "01" meaning yes to "02" on some records. "01" indicates that the sample person drove on the trip, from the originally released data. (*Changed August 1999*)

DRVR_FLG was inaccurately coded "01" for trips other than personally operated vehicles (TRPTRANS modes "01" through "08"). For records where the TRPTRANS variable was not "01" through "08" but show the DRVR_FLG as being "01", that DRVR_FLG variable was changed to "02".

DRVR_TPT Imputed variable indicating that the respondent was the driver on the (personally-owned vehicle) travel period trip. The variable was imputed by Oak Ridge National Laboratory staff based on analysis of the travel

period trips reported by all members of the household.

DWELSEC2 This new variable corresponds to DWELTIM2, but in seconds. *It is Anticipated that most people using this data set will be using the SAS software package. As SAS internal uses time variable in seconds, this was provided for ease in use to generate time calculations.*

DWELTIME The time spent at the destination of the previous trip, as calculated from the variables STRTTIME and TRVL_MIN for travel day trips. Not computed for each person's first trip nor for trips where these variables were not known or refused. The DWELTIME values were used in defining trip chains and the 1990 NPTS trip purpose variables. Note that some of the reported trip start times and durations resulted in negative values of the variable DWELTIME; editing of trips for persons with negative values led to correction of some duplicate trip reporting and AM/PM reporting problems.

DWELTIM2 This is a new variable comparable to DWELTIME except that DWELTIM2 is the time spent at the destination of the current record and is calculated using the revised STRTTIM2 variable. This correctly coincides with the trip purpose of the destination, so if dwell times were estimated by purpose, the analysis would straightforward. Negative dwell times were set to missing.

The dwell times were calculated for the minutes spent at the destination of the previous trip, before the starting the current trip (the record on which the public use data set posted dwell time). This variable is missing for each person's first trip of the day, and when the start time of the trip (STRTTIME) or the minutes in travel (TRVL_MIN) were not known.

The negative dwell time occurred because of the respondent's mistakes in relaying information about the start time of the previous trip, and the total minutes the trip took, in relation to the start time of the next trip. Of the 321,024 records with calculated dwell times 11,246 were negative. If these were included in an analysis, the average dwell time would be 117 minutes, if they are excluded, the average is 122 minutes.

DWEL2_HM This new variable corresponds to DWELTIME2, and in easy to read HH:MM format.

FROM_A See CHAIN

HHFAMINC The categories of household income were determined from responses to the questions in Section K and are coded as follows:
01 = less than $5,000
02 = $5,000 to $9,999
03 = $10,000 to $14,999
04 = $15,000 to $19,999
05 = $20,000 to $24,999
06 = $25,000 to $29,999
07 = $30,000 to $34,999
08 = $35,000 to $39,999
09 = $40,000 to $44,999
10 = $45,000 to $49,999
11 = $50,000 to $54,999
12 = $55,000 to $59,999
13 = $60,000 to $64,999
14 = $65,000 to $69,999
15 = $70,000 to $74,999
16 = $75,000 to $79,999
17 = $80,000 to $99,999
18 = $100,000 and over

HHTRIPID A sequential numbering of the travel day trips reported by all members of the household. These numbers run from 1 to 72 and from 101 to 119; the latter are trips recorded in supplemental files. Missing trip number indicate that some reported trips have been deleted or combined with other trips.

HHZIP Note that 00098 = not ascertained and 00099 = refused.

LIF_CYC The life cycle variable was derived from the household's reported number of adults, number and age of children, and whether or not any persons were reported to be retired. Households were classified as follows:

No. Adults	Any retired?	Youngest Child	LIF_CYC
1	no	none present	1
2 or more	no	none present	2
1	N/A	0 - 5	3
2 or more	N/A	0 - 5	4

1	N/A	6 -15	5
2 or more	N/A	6 - 15	6
1	N/A	16 - 21	7
2 or more	N/A	16 - 21	8
1	yes	none present	9
2 or more	yes	none present	10

MATCH   A variable whose value is the HHTRIPID for a previously reported trip.

MSASIZE   Classification of the households by MSA population:
  1 = Less than 250,000
  2 = 250,000 - 499,999
  3 = 500,000 - 999,999
  4 = 1,000,000 - 2,999,999
  5 = 3,000,000 or more
  94 = not in an MSA or legitimate skip

Pi_STAT   The Pi_STAT variables indicate the response status of each household member (i = 1, 2, ...) in the variables P1_STAT, P2_STAT, etc. The codes for these variables are the following:

Code	Description
1	Ineligible - too young
2	Other ineligible
3	Complete - self interview
4	Complete - proxy interview
5	No contact made
6	Refused
7	Contact made - time expired
8	Other non-interview

Pi_REL   One of the household members is identified as the household's reference person; that is, the person or one of the persons who owns or rents the home. The reference person may or may not be the household respondent. The Pi_REL variables show the relationship of each household member (all ages included) to the reference person, as reported in question D-7.

PREVREP   A variable that indicates the trip had been reported previously, by another respondent from the same household, prior to the current person's interview. When several family members were present on a trip, several travel questions were asked only of the first person who reported the trip.

PTCRIME   "Worry with crime on public transportation". *Data labels were reversed in the public use data set, with PTNTCLN. This variable is correction to the original release.*

PTNTCLN   "Transit stations/vehicle not clean" *Data labels were reversed in the Public use data set, with PTCRIME. This variable is correction to the original release.*

PUBTRANS   Variable indicating public transit was the main means of transportation for the trip. For the 1995 NPTS, public transit includes travel by bus, Amtrak, commuter train, streetcar/trolley, and subway/elevated rail.

R_AGE   The variable R_AGE is reported by individual year of age from ages 5-75. For confidentiality reasons, ages 76-102 are consolidated in groups as follows:
                77 = Ages 76-79
                82 = Ages 80-84
                88 = Ages 85-102
The consolidated numbers above reflect the arithmetic mean of the ages for each group, thus they can be used in computing average age.

RAIL   Primary stratification variable defined in order to over-sample large (at least 1,250,000 population) urban areas with subway/elevated rail systems. Due to special sample allocations needed to implement the add-on samples in New York and Massachusetts, the variable did not apply for the New York City and Boston areas.

RET_YR   The value 98 indicates that the date was not determined.

STC_DIST   Responses in blocks have been converted to miles, using 9 blocks per mile (less than one   block converted to 0.1 mile).

STRTTIM2   New variable revising STRTTIME. There were some inconsistencies in The original STRTTIME.

               STRTTIME was mis-coded as '1099'. When examine the trip records

before and after is was found that the actual time should have been coded as '1059', '1200', '159' or '9998'. The STRTTIME and STRTTIM2 variables are the trip begin times in military time format.

SUB_DIST Responses in blocks have been converted to miles, using 9 blocks per mile (less than one block converted to 0.1 mile).

SUBSTRAT Sub-stratum within each VARSTRAT major stratum. SUBSTRAT = 1 indicates the household telephone number was selected from blocks of 100 telephone numbers containing zero listed numbers; SUBSTRAT = 2 indicates selection from sub-stratum of blocks containing one or more listed numbers per 100-block.

TO_B See CHAIN

TRPMILES This variable gives the distance in miles of the recorded trip. Actual distance was coded from 0-1200 miles. Less than a mile is re-coded on the TRPMILES variable in the original release.

9,338 records coded as one block or less (9996) are re-coded as .1
22,265 records coded as less than half a mile (9997) are re-coded as .5

Trip of less than a mile were supposed to be coded as either 9996 (less than one block) or 9997 (half mile). In the original Public Use Dataset, some trips were coded as .5 for half a mile or less, and some as 9997. The changes were made to consistently code these variable and to eliminate unnecessary code for estimating miles.

TRPNUM The identification of the travel day trips reported by a household member. The CATI program allowed up to 15 trips in the trip roster; additional trips were recorded in supplemental files and numbered from 21 to 39. Missing trip numbers indicate that some reported trips were deleted or combined with other trips.

TRIPNUM2 This new variable compares to TRPNUM. This variable TRIPNUM2 is used to be used to chronologically reorder the trips within each person's records. Resorting the file by HOUSEID, PERSONID and TRIPNUM2 enables a user to more accurately examine trip chaining.

TRPNUM_A See CHAIN.

TRPNUM_B See CHAIN

TRN_DIST   Responses in blocks have been converted to miles, using 9 blocks per mile (less than one block converted to 0.1 mile).

TRVL_MIN   Note the special codes of 9998 = not ascertained and 9999 = refused.

URBAN   Defined for the 1995 NPTS based upon the population density of the Census block containing the household. Urban (01) = at least 1,000 persons per square mile; not urban (02) = less than 1,000 persons per square mile; and not ascertained (98) = the household location was not geocoded.

VARSTRAT   This variable identifies the geographic strata used in sample selection. To protect respondent confidentiality, particularly in the add-on areas, the definition of the specific codes for this variable are not published.

VEHTYPE   The vehicle type, sport utility vehicle, was added in the 1995 survey. In the 1990 NPTS, most of the sport utility vehicles were classified as automobiles.

VTR_FLG   Variable used to count vehicle trips. Value of 01 indicates the trip was a privately-owned vehicle trip and the respondent was the driver; 02 = either not a privately-owned vehicle trip, or the respondent was not the driver.

WHYTRP95   Question G-20 determined the purpose of each trip in the 1995 NPTS. There were 17 possible purpose codes, including to return home. Interviewers used purpose 15, to change means of transportation, only when they couldn't determine another purpose for the trip; these trips were recoded or combined with adjacent trips during editing. Each travel day trip was also assigned a FROM and TO purpose, WHYFROM and WHYTO, based on the responses to questions G-12 through G-21. These two variables may be used to describe trips in another way, for example, a trip from home to school.

WHY FROM   See WHYTRP95

WHYTRP90   The 1995 NPTS travel day trips were also recoded to mimic the 1990 NPTS trip purpose definitions. The 1990 trip purpose codes differed in several ways from the 1995 purpose codes. Returning home was not a 1990 NPTS trip purpose; rather, the trip purpose was assigned to the activity that was the main reason the person was away from home. If one of the reasons was work, the return trip home was assigned work as its purpose. If there were multiple purposes for being away from home and

work was not one of them, then the activity the person spent the most time at before leaving that activity was assigned as the main purpose for the return trip home.

WHYTO   See WHYTRP95

WKFMHMLW   This variable includes a yes=01 value for those persons who said they worked at home in response to questions F-4 or F-5.

WKFMHM2M   The variable includes a yes=01 value for those persons who said they worked at home in response to questions F-4, F-5, or F-19.

WKFMHMXX   This variables includes a value of 01 = two or more days a week for each person who said they worked at home in response to questions F-4 or F-5.

WORKER   Response to question D-12 of the household interview, verified or corrected by the person interview response to question F-2.

WTHHFIN   Final household weight, adjusted for non-response and non-coverage. Used to weight all household- and vehicle-level data.

WTPERFIN   Final adjusted person weight, adjusted for non-response and non-coverage. Used to weight all person-level data.

WTTRDFIN   Final travel day weight, used to weight data from the travel day trip file and the segmented travel day trip file. Calculated as 365 times each person's WTPERFIN, to adjust trip-level data to annual estimates.

YEARMIL2   A new variable comparable to YEARMILE. This variable was corrected based on findings since the original release of the data.

Numerous data users had questioned the earlier annual average miles driven because there were declines in per driver VMT between 1990 and 1995 in virtually all age/gender categories other than me 65 or older.

This seemed incongruous, given the overall strong increase in travel during this time. Upon checking, we found that in 1990 only 2 percent of the drivers reported driving no miles during the year, while 9 percent of drivers reported driving no miles in 1995. Of the 9 percent, a significant number indicated that they actually did drive, either on their assigned Travel Day or as the primary driver of one of the household vehicles.

Because we believe that the report of "no miles" is an error for these drivers, these zero-values were changed to "miles not reported". After this edit, only about one and a half percent of all drivers remained in the "no miles category." The new estimates of vehicle miles of travel in each age group for 1995 shown in the following table.

VMT per Driver by Age and Sex
Revised October 1998, Office of Highway Information Management, FHWA

Age	Male			Female		
	1990	1995	% change	1990	1995	% change
16-19	9,543	8,203	-14.0%	7,387	6,870	-7.0%
20-34	18,310	17,980	-1.8%	11,174	12,001	+7.4%
35-54	18,871	18,859	0.0%	10,539	11,463	+8.8%
55-64	15,224	15,844	+4.1%	7,211	7,795	+8.1%
65+	9,162	10,320	+12.6%	4,750	4,788	+0.1%
ALL (1)	16,536	16,553	0.0%	9,528	10,143	+6.45

The revised data show modest increases of generally less than 10% for most age/gender groups. The big exception is the 16-19 year-old group, where miles declined between 1990 and 1995. This is probably the result of changes in the survey weighting process between 1990 and 1995, which resulted in a large increase in the number of persons age 16-19. Of course, with more individuals in this teenage group in 1995, the average miles per driver would decline. Other factors at work may also include delayed licensing laws and/or higher auto insurance premiums for young drivers.

For men, the most dramatic increases in travel were for those 65 and older. Younger men, namely those 20-54 may finally be reaching saturation in their travel. Women's travel shows a very different pattern, with declines in the youngest group (16-19), consistent increases of 7 to 8 percent for those 20 through 64, and no change in average travel for those 65 and older.

WTTRPFIN Final travel period weight, used to weight data from the travel period trip file. Calculated as WTTRDFIN divided by 14, to adjust trip-level data to annual estimates.

APPENDIX K
CALCULATION OF ANNUALIZED MILEAGE ESTIMATES
BASED ON ODOMETER READINGS

Odometer readings for NPTS vehicles were recorded for different time intervals (Table K-1). Mileage differences between odometer readings recorded for individual vehicles reflect driver and household characteristics, as well as seasonal effects on driving.

Table K-1
Time Interval between Two Odometer Readings Recorded for NPTS Vehicles

Percent of NPTS vehicles*	Time interval between two readings
1%	$\leq$ 1½ months
24%	1½ - 2 month
25%	2 - 3¾ months
25%	3¾ - 6 months
20%	6 - 10½ months
5%	10½ - 18⅞ months

* Applied to 42,319 vehicles that have two valid recording dates.

In this appendix, we discuss a method used to "annualize" the number of miles driven between two odometer readings to an estimate of annual driving. In essence, this method adjusts individual vehicle's mileage rates for seasonality. In Section K.1, we discuss data screening necessary before fitting an annualization model and computing annualized estimates. This was an important step, unfortunately, because more than half of the NPTS vehicles were not suitable for this annualization procedure. In Section K.2, the choice of statistical model—a linear model—for the seasonality adjustments is discussed. In Section K.3, we describe the mechanics of computing the annualized estimates as well as standard errors for the estimates. Though brief, part of Section K.3

is technical. Technical background may be found in most any text on linear models, for example, Searle (1971). In Section K.4, we discuss: (1) some adjustments to the annualized driving estimates, and (2) outlier screening and data quality flags based on the annualized estimates. Finally, we outline data-quality limitations in Section K.5.

K.1 Preliminary Data Screening

There were 75,217 vehicles sampled in the 1995 NPTS. Data on many (44%) of them were incomplete, however, in the sense that one or more of the starting and ending odometer readings or one or both of the recording dates were missing. Some of the remaining 56% "complete" observations were anomalous: negative amount of driving between two recording dates, or the difference between odometer readings implying more than 1,440 miles ($= 24$ hour $\times$ 60 miles/hour) of driving per day. About 0.6% of the 75,217 vehicles had a recording period shorter than six weeks, and were excluded from the annualization process since we believe that such short periods would tend to lead to anomalous annualized estimates. Since driver characteristics influence the amount of driving done in the driver's designated vehicle, 5.5 percent of the vehicles were excluded from the annualization calculations because they did not have a designated "primary" driver. Also, motorcycles and vehicles with "other" and "don't know" vehicle types were excluded. As summarized in Table K.2 , this screening procedure reduced the original 75,217 vehicles to 36,109 vehicles for which annualized mileage estimates were made.

The NPTS data on odometer mileages and days-of-recording exhibit a lot of variability. This makes annualization difficult, and impacts the quality of the annualized estimates. Among the 36,109 vehicles remaining after the preliminary data screening, 378 (about 1%) had a difference between two odometer readings exceeding 160,000 miles per year and 580 of them had their differences more than 115,000 miles per year. The 115,000 mile figure was considered to be a reasonable upper limit for the annual miles driven in a vehicle, and was used as a cap for the self-reported annual mileage estimates. Users of the annualized estimates should understand the limits imposed by outliers and data variability.

K- 2

Table K.2 Preliminary Data Screening of the 1995 NPTS Vehicles

Data Problem	Number of Vehicles	Percent
Incomplete data — odometer readings and/or recording dates missing	32,811	43.60
Negative differences between 2 odometer readings	1,040	1.40
Differences between 2 odometer readings too large (more than 1,440 miles per day)	53	0.07
Odometer readings recorded less than six weeks apart	419	0.56
Incomplete data and negative odometer	33	0.04
Negative miles and less than six weeks of data	16	0.02
Mileage too large and less than six weeks of data	5	0.00
No primary driver associated with the vehicle	4,099	5.50
Motorcycles, "other," "don't know" vehicle types	632	0.84
Vehicles with usable data (none of the above)	36,109	48.00
Total 1995 NPTS Vehicles	**75,217**	**100.00**

K.2 Choice of Model

The choice of a predictive statistical model should depend on: (1) knowledge of the modeled process; (2) properties of the input data with respect to the number of observations, tendency to have outliers, goodness of model fit, etc.; and (3) mathematical tractability. Mathematical tractability refers to ease of doing computations. Linear models tend to be tractable; nonlinear models can be intractable, for example, because of starting-value or convergence problems. Mathematical tractability is especially important in our application because of the large number of observations and the large number of potential

predictors: education level of the primary driver, MSA size, vehicle age and type, and so on. Because the NPTS data are noisy with respect to the goal of estimating the annual miles of driving based on odometer readings, data variability and the tendency to have outliers are an important consideration. The coefficient of variation of our final prediction model is 1.83, and the (36,109) regression residuals are right skewed, typical of high noise scenarios. While the average of the residuals was of course zero, their 1 and 99 percentiles, for example, were -74.6 and 391.2 miles per year, indicating a wide range of the residuals.

A natural model for the total miles observed for an individual vehicle is

$$\text{total miles} \propto (\sum_{\text{day } i} \theta_i) \times (\text{factor for class}) \times \text{error}, \tag{1}$$

where "day i" refers to the days in an interval of recording, θ_i is the contribution for day-of-the-year i or perhaps "month-day-of-week" (e.g., January Sunday, November Wednesday); and "factor for class" is a multiplier determined by the class. A class is defined as a particular combination of demographics, vehicle age and type, and other variables. These variables are called *class* variables. The "factor for class" should be greater than one for classes of vehicles in which their primary drivers drive a lot, and less than one for classes of vehicles in which their primary drivers do not drive much. Because a mileage total is modeled here, both the class and error adjustments enter multiplicatively. Because mileages in the NPTS survey were recorded for intervals of varying starting dates and lengths, the summation is needed in (1), rather than a single θ-term, representing an individual month or day. The variable-length intervals thus make annualization more difficult.

Unfortunately, the model (1) is not as tractable as we would like. It is nonlinear. Although appropriate for right-skewed data, a logarithmic transformation does not make the model linear because of the summation. Logarithms may, in any case, be

inappropriate for annualization because they introduce bias. To see this, consider a simple example. Suppose we have just 12 vehicles, each observed for exactly one month, January through December, and suppose there is just one class of vehicles (i.e., these 12 vehicles have identical independent variables). Also suppose there are no day-of-the-week effects, and for simplicity, assume a year is twelve months with exactly thirty days each. Then the annualized mileage per day (mpd) estimate for each vehicle should be the arithmetic mean of the mpd's for all vehicles. On the other hand, if we transform to the log scale, the annualized log mpd estimate for each vehicle would be the arithmetic mean of the log-mpd's for all vehicles. Then the question becomes how we compute the annualized mpd from the annualized log-mpd. If we just take the anti-log of the annualized log-mpd, we get the geometric mean of the mpd's. (The geometric mean is the anti-log of the arithmetic mean of the logs.) It is well-known that the geometric mean is always less than or equal to the arithmetic mean, and that inequality is strict unless all observations are the same. Thus the anti-log of the annualized log-mpd is biased.

If the mpd's were known to be log-normal, we could mathematically correct for the bias. Unfortunately, there is no good basis for assuming log-normality here. In general, there is no way to correct for the bias induced by the log transformation without making some kind of parametric distribution assumption. Thus, although the model (1) is sensible, it has the disadvantage of being nonlinear, not amenable to the log transformation, which would not linearize it anyway, and not very tractable.

To overcome the aforementioned problems, we considered the model

$$\text{rate} = \frac{\text{total miles between 2 readings}}{\text{number of days}} =$$

$$\text{intercept} + \frac{1}{\text{number of days}} \left(\sum_{\text{month-day } i} \theta_i \right) + (\text{term for class}) + \text{error.} \tag{2}$$

This model **is** linear, and is thus more tractable than model (1). It is similar to (1), but,

because the dependent variable is a rate rather than a total, the additive (rather than multiplicative) adjustments for class and error are reasonable. For the sake of simplicity, we also took θ_i to represent month-day (i.e., month-day-of-week) here rather than day of the year. Thus, for example, if there are two January Sundays in a period of recording, then the θ term for January Sundays would be added in twice. The "number of days" denominator is necessary because the θ's represent contributions to the total—the more days, the more θ's—whereas the overall expression is a rate (miles per day).

Here is a simplified example. (A complete example, involving all of the levels of all of the class variables used to fit the model, would be less clear than a simplified one.) Suppose there are just two class variables, say, vehicle age class and vehicle type. Then the class term in our model might be of the form

$$\alpha_i + \beta_j + \gamma_{ij}$$

where α_i is the contribution above the intercept for the ith vehicle age class (main effect of age), β_j is the contribution above the intercept for the jth vehicle type (main effect of vehicle type), and γ_{ij} is the contribution above and beyond the $\alpha_i + \beta_j$ for the ith vehicle age class and the jth vehicle type jointly (two-way interaction of vehicle age and type). Suppose a vehicle's mileage is recorded for January 1-8, 1995 (an overly short interval taken for simplicity). Since 1995 began with a Sunday, this interval represents two January Sundays, and one-each for the other January weekdays. If the vehicle age class is "1" (less than one year old) and the vehicle type is "2" (= van), then the model (2) is

$$\text{rate} = \text{intercept} + \frac{1}{8}\ (2\theta_1 + \theta_2 + \theta_3 + \ldots + \theta_7) + \alpha_1 + \beta_2 + \gamma_{12} + \text{error,}$$

where $\theta_1, \ldots, \theta_7$ are the terms for January days of the week, Sunday through Saturday. Because the model is linear, estimates of the α, β, γ, and θ terms can be computed using software such as the SAS GLM (general linear model) procedure. Then, by revising the

expression involving the θ's, an annualized rate can be estimated. In the revision, the expression involving the θ's in the model (2) is changed to

$$\frac{1}{365.25} \sum_{month-day\ i} \frac{Days\ in\ month\ of\ month-day\ i}{7}\ \theta_i,$$

where the sum now extends over all 7×12=84 month-days in a year. These calculations are discussed further in the next subsection.

A model similar to model (2) was derived by Kunert, Hu, and Young (1995) in their analysis of the 1990 NPTS data. Odometer readings were not recorded in the 1990 NPTS. Rather, the amount of driving was recorded for a single designated travel day. Thus, their model had terms to adjust the driving for the particular "travel day." The adjustments in our case are for intervals of, in most cases, many travel days. The class terms in our model were taken from the Kunert et al model, with the following two exceptions: (1) We added terms for the number of drivers in the household. (2) We included all two-way interaction terms. The household driver terms were added on the basis of engineering judgement. Assessing the importance of any of these model terms is difficult. This is because with sample sizes as large as the NPTS data's and with numerous terms for each class variable (because of the interactions) nearly every variable had some statistically significant terms. Fortunately, our primary task here is prediction—annualizing mileage estimates; assessing the importance of the various factors is secondary.

K.3 Computation of the Annualized Estimates

This section contains technical material that may be beyond the interest of the casual reader. The GLM procedure in SAS was used to fit the annualization model. Class variables were education level and age of the primary driver (SAS variable name *educ* and *r_age*, respectively), household composition (*lif_cyc*), vehicle age (created from variable *vehyear*), vehicle type class (*vehtype*), size of MSA (*msasize*), census division (*census_d*),

and household number of drivers per vehicle (created from variables *hhvehcnt* and *drvrcnt*). There are 3,175,000 possible combinations of these classes; obviously not all are represented in the NPTS data. In theory, the two-way interaction model provides some smoothing to adjust out anomalies in low-frequency (i.e., small sample-size) classes.

The multipliers (independent variables) of the terms for "month-day" (the θ-terms) were computed in a preliminary SAS data step. These multipliers were entered into a linear model with all main effects and two-way interactions for the class variables. As an intercept term was included in the model, the last (84th) θ was dropped. (See, for example, Searle, 1971. This reduction to full rank results in no loss of generality; the other independent variables and corresponding parameters are similarly reduced in the GLM algorithm.) The resulting model had 994 degrees of freedom. After data screening (see below), 36,109 observations were used to fit the model, or about 36 observations per degree of freedom (i.e., model parameter).

After fitting the model with SAS' proc GLM, annualized estimates could be computed with it. According to the model,

$$Y = X\hat{\beta} + R,$$

where Y is the vector of observed average daily mileages (based on odometer readings), X is the matrix of independent variables (reduced to full rank), $\hat{\beta}$ is the (reduced) vector of model parameter estimates, and R is the vector of residuals. To "annualize" the observed mileage rates, we simply revise X so that it reflects, for each vehicle, travel for a year rather than for the recording time period for that vehicle. Thus each month-day term is set to

$$\frac{number\ days\ in\ month}{7 \times 365.25}. \tag{3}$$

With the number of days in February taken to be 28.25, the sum of these terms over days-of-the-week and months (for one year) is 1. Call this modification of X, X^*. With X^* and the same $\hat{\beta}$ (and $X^*\hat{\beta}$ the seasonally adjusted mean) and the residual vector R, a vector of seasonally-adjusted annualized estimates is

$$Y^* = X^*\hat{\beta} + R.$$

To compute the standard errors of these annualized estimates, notice that

$$Y^* = X^*\hat{\beta} + R = X^*(X'X)^{-1}X'Y + (I-P)e$$

$$= X^*\beta + X^*(X'X)^{-1}X'e + (I-P)e = X^*\beta + (P^*+I-P)e,$$

where $P = X(X'X)^{-1}X'$, $P^* = X^*(X'X)^{-1}X'$, β is the "true" parameter vector, and e is the vector of errors ($Y = X\beta + e$). Here " ' " denotes matrix transpose. We have also used here the fact that $R = (I-P)e$. Therefore (using a property of the variance of linear functions), where V denotes the variance of an individual y-value (daily mileage rate),

$$Cov(Y^*) = V(P^*+I-P)(P^*+I-P)' = V(P^*P^{*\prime} + P^*(I-P) + (I-P)P^{*\prime} + I-P).$$

It is straightforward to verify that $P^*(I-P) = 0$. It follows that

$$Cov(Y^*) = VP^*P^{*\prime} + V(I-P),$$

and that for y^* an element of Y^* and x^* and r, the corresponding elements of X^* and R,

$$stderr(y^*) = [(stderr(x^*\hat{\beta}))^2 + (stderr(r))^2]^{1/2}.$$

The standard error of y^* is straightforward to compute in SAS, because $stderr(x^*\hat{\beta})$ is the standard error of a predicted mean value, and $stderr(r)$ is the standard error of a residual, both of which can be output directly with proc GLM.

The above seasonally-adjusted daily mileage rates and their standard errors were converted to annual rates (miles driven per year) and standard errors by multiplying them by 365.25. In addition to these annualized estimates (SAS variable *annualzd*) and standard errors (*stderr*), alternative "crude" estimates (*mtd365*) were computed by multiplying 365.25 by each crude daily rate (i.e., the difference between odometer readings for a vehicle divided by the number of days in the recording period of that vehicle.) Standard errors (*std365*) for these estimates were also computed, as above, except no month-day terms were included in the linear model. Crude mileage estimates and standard errors can likewise be computed for any time period, in particular, the periods for which the odometer readings were taken.

K.4 Outlier Screening

Despite the extensive preliminary data screening, the remaining data and annualized estimates are noisy. Certain common-sense restrictions are violated. For example, some of the annualized estimates are less than the difference between odometer readings (for periods of less than one year). Some of the annualized estimates are negative. To understand how this can happen, remember that the dependent variable of the model is a daily **rate** (odometer mileage per day of recording). The annualized daily rate can easily be less than the crude daily rate of the dependent variable, and, especially when the corresponding residual is negative and large, the annualized rate can be less than the difference between two odometer readings itself. The model has no constraint to automatically prevent this.

Estimates that violated common-sense restrictions were adjusted as follows. For vehicles whose recording period was less than one year, if the annualized estimate was

less than the difference between two odometer mileage (this includes negative estimates), the annualized estimate was set to be the difference between two odometer readings itself. For any annualized estimate whose recording period was more than 365 days, a negative annualized estimate was set to the crude estimate (*mtd365*), and an annualized estimate greater than the corresponding difference between two odometer readings was set to be the difference between two odometer readings. Also, annualized estimates greater than 115,000 were set to be 115,000. This cap was set to be consistent with the cap used on the self-reported estimates of annual driving (*annmiles*). These changes were made with the following frequencies.

Table K-3. Codes for Adjustments to Annualized Estimates of Driving

Code	Frequenc	Percent	Meaning
(no code)	32,289	89.4	No adjustment was made
1	3,800	10.5	Number of days between two readings less than 366, and annualized estimate less than difference between odometer readings; annualized set to difference between odometer readings.
2	16	.0	Number of days between two readings greater than 365, and annualized estimate greater than difference between odometer readings; annualized set to difference between odometer readings.
3	4	.0	Number of days between two readings greater than 365, and annualized estimate negative; annualized set to crude estimate*.
Total	36,109	100.0	(All)

*The crude estimate is 365.25 times the odometer difference divided by days in observation period.

Although adjustments of Code 1 had to be made for 3,800 household vehicles, the adjustments were minor in nearly all cases, amounting to less than 2,000 miles for all but 799 household vehicles, and less than 5,000 miles for all but 111 vehicles (.3% of 36,109). (A SAS variable *ann_edit* flags these adjustments, though per a modification discussed in the next section.)

After making these adjustments, each adjusted annualized estimate was compared to its "crude" analog (*mtd365*) and to a corresponding self-reported estimate (annual miles driven reckoned by driver). Outlier codes were then assigned on the basis of these comparisons and subjectively determined thresholds (Table K-4). Because the self-reported estimates were considered less reliable than the crude estimates, the thresholds are tighter for the crude-vs-annualized comparisons. Codes based on comparisons of the

annualized and the crude estimates were only assigned if the difference exceeded 5,000 miles. Codes based on comparisons of the annualized and the self-reported estimates were only assigned if the difference exceeded 10,000 miles. The outlier codes are recorded as numeric codes (SAS variable *ann_out*) as indicated in Table K-4. Out of the 36,109 vehicles whose annual miles driven were estimated based on their odometer readings, 32,153 (89%) are considered to have reasonable annualized estimates (i.e., not outliers).

Table K-4. Outliers Codes of Annualized Estimates of Driving

Code	Numeric Code (for SAS output)	Frequency	Percent	Criteria
(no code)	(no code)	32,153	89.0	Not an outlier
a	2	1,164	3.2	Annualized[a] < Reported[b] / 4 and |Annualized – Reported | > 10,000
b	5	2,293	6.3	Annualized > 4 × Reported and |Annualized – Reported | > 10,000
A	1	336	0.9	Annualized < Crude[c] / 2 and |Annualized – Crude | > 5,000
Aa	3	83	0.2	(A and a)
B	4	75	0.2	Annualized > 2 × Crude and |Annualized – Crude | > 5,000
Bb	6	5	0.0	(B and b)
Total		36,109	100.0	(all)

[a] Estimates of annual driving based on two odometer readings (*annualzd*).
[b] Driver self-reported annual mileage estimate (*annmiles*).
[c] 365.25 times the difference between odometer readings divided by days in observation time interval (*mtd365*).

K-.5 Limitations

The outlier flags in Table K-4 could indicate either data quality problems or issues pertinent to the annualization model. Data quality problems are those embedded in the information collected from the survey respondents. Issues pertinent to the model are those resulting from the annualization process. As previously mentioned, there **are** data quality problems. Most of the time the flags indicate such problems. To illustrate more generally the magnitude of these data problems, we calculated the correlation between the annualized and crude estimates to be 0.998. Thus there is very good agreement between the annualized estimates and the actual data (i.e., differences between two odometer readings). However, the correlation between either the annualized or crude estimates and the self-reported estimates is only 0.11, indicating that the self-reported miles driven in a year bear little relationship to the annual miles driven esti ated based on the odometer readings. Now, if we restrict attention to the 32,153 observations that were not assigned any of the outlier flags in Table K-4, then the correlation between the annualized and the self-reported estimates increases considerably to 0.62. This implies that if we remove the problematic data, then the self-reported miles driven in a year relate significantly more to the annual miles driven estimated based on the odometer readings than if problematic data were included in the calculation (0.62 vs. 0.11, respectively). This illustrates that the magnitude of the data quality problems is substantial compared to the issues related to the annualization process.

For another example of data quality problems, we compare the average annual miles driven per vehicle (i.e., VMT) by age of the vehicle (Figure K.1). The first set of averages are for all 36,109 annualized estimates with a mileage cap of 115,000, while the second set are for the

Figure K.1. Annual VMT by Vehicle Age

Based on 36,109 vehicles
Based on 32,153 vehicles
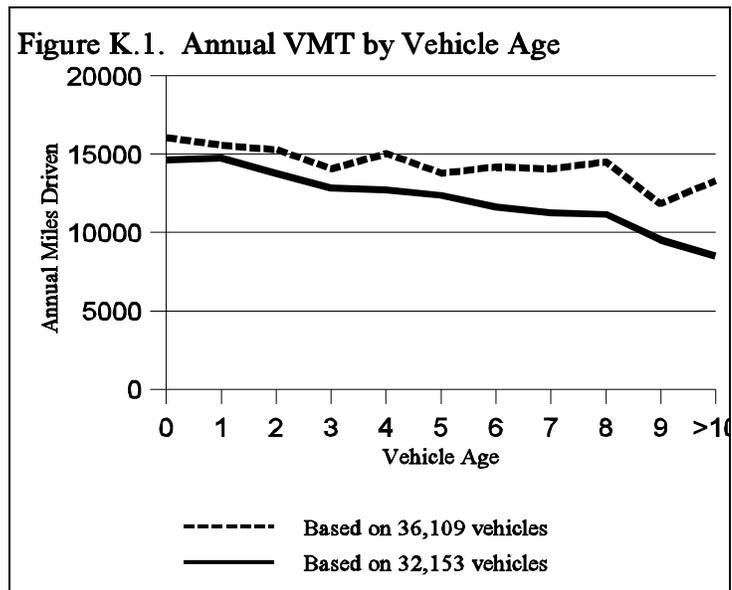
32,153 unflagged annualized estimates.

For the 32,153 unflagged estimates, the steadily decreasing trend of annual miles driven with vehicle age seems much more consistent with those observed in other data sources than the corresponding, much less even, results for the 36,109 vehicles. In these data, the cap was used to deal with anomalous, high mileages. Without the mileage-cap, the comparison becomes even more polar. For this reason, annualized estimates that exceeded 115,000 miles were capped at 115,000 in the final NPTS data set. Quality flags (*ann_edit*) in the final NPTS data set are summarized in Table K-5. To maintain reasonable analysis results, users are urged not to overlook these data quality flags.

Table K-5 Final Codes for Adjustments to the Final Annualized Estimates

Code	Frequenc	Percent	Criteria
(no code)	31,721	87.8	No adjustment
1	3,799	10.5	Number of days less than 366, and annualized estimate less than difference between odometer readings; annualized set to odometer difference.
2	16	.0	Number of days greater than 365, and annualized estimate greater than difference between odometer readings; annualized set to odometer difference.
3	4	.0	Number of days greater than 365, and annualized estimate negative; annualized set to crude estimate*.
4	568	1.6	None of above, but mileage exceeds 115,000; capped at 115,000 miles.
5	1	.0	As in 1 above, and capped at 115,000
Total	36,109	100.0	(All)

*   The crude estimate is 365.25 times the odometer difference divided by the number of days in the reporting period.

References: Kunert, U., Hu, P., and Young, J. (1995). "Framework for the Expansion and the Analysis of the 1995 Nationwide Personal Transportation Survey Odometer Reading Data," (unpublished report).

Searle, S. R. (1971). *Linear Models*, John Wiley & Sons, New York.

APPENDIX L
TRACT AND BLOCK GROUP VARIABLES

WHY ADD THESE VARIABLES
These variables were added to describe the characteristics of the areas where the NPTS survey respondents live and work. This allows the data analyst to look for patterns in travel behavior, not only by individual characteristics, but by neighborhood characteristics. The data user can examine how characteristics such as population density, mix of housing type and housing value, and characteristics of the population in the neighborhood such as age, income, and race/ethnicity may affect individual travel behavior.

TYPICAL NPTS HOUSEHOLD
For example, the respondents from our typical NPTS household, Keith and Terry, live in a townhouse and have a combined annual household income of $35,000-$40,000. The neighborhood that they live in (at the tract level) is a mix of single family homes and townhouses and apartments. Single family homes make up only 20% of the housing units in this census tract. Keith and Terry's income is above the median household income in that tract, which is $ 27,000.   Is their travel more like people who live in townhouses in other neighborhoods, or is their travel more like other people who live in single family detached houses in their neighborhood or other neighborhoods like it ? The tract and block group variables allow an examination of these similarities and differences.

SOURCE OF TRACT AND BLOCK GROUP DATA
The data contained in these variables was derived from 1990 Census data and estimated forward to 1995 by Claritas, Inc. An annual demographic update is developed by this company to serve as a source of estimates of population, household, and housing unit characteristics. These estimates are made at relatively small units of geography, such as census tracts and block groups, which make this update effective for use in supplementing the NPTS data. The update is a comprehensive process that relies on a number of data sources, including regional and city planning agencies, federal agencies (e.g., Bureau of Labor Statistics, Bureau of Census, Bureau of Economic Analysis) U.S. Postal Service, the direct mail industry, the real estate industry, and experts in the fields of geographic information systems and mapmaking.

WORKPLACE CHARACTER-ISTICS   In addition to the characteristics of the residential neighborhood, characteristics of the workplace location were also appended to the file. Because these workplace variables are only present if the respondent is a worker, they are found on the Person file along with the other personal characteristics.

WHY WORKPLACE   Previous studies have shown that mode choice is a function not just of residential density, but also of employment density, (Reference: work by Larry Frank and Gary Pivo), characteristics of the workplace are as important and residential characteristics. Different types of jobs and industries offer different opportunities and impedances in travel choices.

VARIABLE NAMING SCHEME   The variable names were designed so that:
- many of these variables would fall together in an alphabetic listing, and
- the variable name would help in describing the contents.

The naming scheme is:

| First letter - | H for household descriptor |
| | W for workplace descriptor |

| Second letter - | B for block group level data |
| | T for tract level data |

| Third letter of Household variables - | H for housing characteristic |
| | P for population characteristic. |

For example, HTHRESDN is a household descriptor, at the tract level, describing a housing characteristic, specifically, residential density (RESDN) .

The last 5 letters of the variable describe the data in the variable, e.g. LTPOV = below poverty. Note that letters 4 -5 or 4-6 may serve a grouping function as well. For example, the three variables listed below describe the type of housing, and HS is used as letters 4-5 in all three variables:

HBHHSMLT - percent multiple unit housing, block group

HBHHSOTH - percent other housing, block group
HBHHSSNG -percent single family housing, block group.

The variables, which can be identified in the codebook by the designation "CLAR" in the Section column, are:

HOUSEHOLD
DESCRIPTOR,
BLOCK
GROUP LEVEL

HBHHSMLT - percent multiple unit housing
HBHHSOTH - percent other housing
HBHHSSNG - percent single family housing
HBHINCH   - percent households, income $60,000 or more
HBHINCL   - percent households, income less than $15,000
HBHINCM1 - percent households, income $15,000-$39,999
HBMINCM2 - percent households, income $40,000-$59,999
HBHINMED - median household income
HBHMEDHS - median housing unit value
HBHRECNT - percent housing units built in last 10 years
HBHRESDN - housing units per square mile
HBHTNOWN - percent owner-occupied housing
HBHTNRNT - percent renter-occupied housing
HBHUR   - urban/rural code (see below)
HBP65P   - percent of population 65 and older
HBPCOLGD   - percent of population college grads
HBPFORBN   - percent of population foreign born
HBPHISP   - percent of population Hispanic
HBPHSGD   - percent high school grads of 25+ population
HBPLTPOV   - percent families below poverty
HBPPOPDN   - population density (persons per square mile)
HBPOPNO   - current population
HBPRCAA   - percent African-American
HBPRCASN   - percent Asian-American
HBPRCCAU   - percent white
HBPRCOTH   - percent other race

HOUSEHOLD
DESCRIPTOR,
TRACT LEVEL

These are the same as the Block Group variables, but a "T" (tract) replaces the "B" (block group) in the second letter of the variable name.   There are 2 additional household descriptor variables at the tract level that are related to the amount of employment in the residence census tract:

HTEEMPDN   - jobs per square mile
HTINDRET   - percent of the workplace population in retail trade.

L- 3

Both of these were added to give a picture of the degree of business activity at the residence end. The second variable, retail trade employment, provides a measure of the accessibility to goods and services. This is useful in determining if there is a chance for mode substitution, such as walking instead of driving.

WORKPLACE DESCRIPTOR

All of the workplace descriptors are at the census tract level.

WTEMPLDN - jobs per square mile
WTINDAG - percent of workers in agriculture, mining, or construction
WTINDFIN - percent of workers in finance, insurance or real estate
WTINDMAN - percent of workers in manufacturing industries
WTINDRET - percent of workers in retail trade industries
WTINDSVC - percent of workers in service industries
WTINDTRN - percent of workers in transportation, communication or public utilities
WTINDWHL - percent of workers in wholesale trade industries.

URBAN-RURAL CONTINUUM

The remainder of the Appendix describes the urban/rural continuum developed by Claritas, Inc. These variables:
    HTHUR: Urban/rural code, census tract
    HTBUR: Urban/rural code, block group
should not be confused with the variable URBAN, which is the urbanized area status of the sample household. The categories of the Urban/Rural Continuum, and the distribution of NPTS households within these categories, are:

	Households in NPTS **block group level**	Percent of households **block**	Households in NPTS **tract level**	Percent of households **tract level**
Urban	5,960	14.18	6,006	14.29
Second City	8,811	20.96	8,549	20.34
Suburb	10,017	23.83	10,179	24.22
Town	10,243	24.37	10,139	24.12
Rural	6,669	15.87	6,827	16.24

Subtotal	41,700	99.21	41,700	99.21
Not Ascertained	333	0.79	333	0.79
Total	42,033	100.0%	42,033	100.0%

BACK-GROUND OF URBAN-RURAL

Claritas, Inc. developed an urban-rural dimension to incorporate into their lifestyle cluster system, which is used primarily for research and marketing applications. The goal was to establish objective classifications that were less boundary-dependent than previous topologies.

URBAN-RURAL VARIABLE

The classification that is reflected in the Urban/Rural variable is based on population density, but not just the density of a specific geography, but the density in context of its surrounding area, or "contextual density". To establish this classification, the United States was divided into a grid to reduce the impact of variation in size (land area) of census tracts and block groups. Density was converted into centiles, that is, the raw numbers (persons per square mile) were translated into a scale from 0 to 99.

"Rural" (centiles 19 and less) and "small town" (centiles 20 to 39) definitions are based solely on the density. Population centers were defined if a route through the 8 neighboring cells could be constructed in which the density of successive cells was decreasing or equal. Population centers with centiles greater than 79 were designated "urban." Other centers were classified as "second cities." Finally, "suburban" areas of the population centers were defined, using both the cell density and the cell's density relative to the population center's density.

Reference: David R. Miller and Ken Hodges, "A Population Density Approach to Incorporating an Urban-Rural Dimension into Small Area Lifestyle Clusters." Paper presented at the Annual Meeting of the Population Association of America, Miami, Florida, May 1994.

APPENDIX M
TRIP PURPOSE CODING AND TRIP PURPOSE VARIABLES

PURPOSE OF   The NPTS is the only source of national data on the purposes of
APPENDIX   daily travel by members of U. S. households. As such, it is widely
used to describe and analyze the reasons associated with trips
and travel. This Appendix is included to provide information on
how trip purposes are coded in the 1995 NPTS, and to describe
the substantial changes made in trip purpose coding between the
1990 and 1995 NPTSs.

OVERVIEW   The trip purposes used in the 1995 NPTS are:

        Work
        Work-related
        Return to work (for work-based trips)

        Family and Personal Business
            Shopping
            Medical or dental
            Take someone somewhere (dropoff)
            Pick up someone
            Other family & personal business

        School
        Religious activity

        Social & Recreational
            Vacation
            Visit friends and relatives
            Out to eat
            Other social and recreational

        Return Home
        Other

Each trip purpose is defined in the Glossary (Appendix D). The
individual purposes are listed on the travel day and travel period
files. Depending on the application, the user may want to
aggregate the appropriate purposes into the major categories,
Family and Personal Business and Social and Recreational.

The 1995 NPTS trip purpose, WHYTRP95, was determined by

question G.20 for each reported travel day trip. Question G.20 reads "What was the main purpose of the trip to (destination)?" There were 17 possible purpose codes, including to return home. Interviewers used purpose #15, change means of transportation, only when they couldn't determine another purpose for the trip. These change means trips were recoded or combined with adjacent trips during editing.

Each travel day trip was also assigned a FROM and TO purpose, WHYFROM and WHYTO, based on the responses to questions G.12 through G.21, the inventory of the day's trips and the purpose of each. These two variables, WHYFROM and WHYTO may be used to describe trips in another way. For example, a trip "from home to school", rather than a trip "to school".

PURPOSE CHANGES IN 1995

The 1995 trip purposes represent a fairly significant departure from the purposes used in earlier NPTSs. For the typical user, the trip purpose changes were probably the most significant questionnaire content change in 1995.

The 1995 NPTS uses a FROM and TO concept of trip purposes of trip purposes, so if you went :

FROM	TO	1995 TRIP PURPOSE
home	drop off child at school	Drop off
child's school	work	Work
work	lunch	Eat out
lunch	work	Return to work
work	grocery store	Shopping
grocery store	home	Return home

Notice that the 1995 trip purpose is descriptive of why you made the one-way trip. The reasons for this coding scheme are primarily:

   - to obtain better data on trip chaining, i.e., stopping someplace on the way to or from your primary destination,

like stopping to drop off a child at school or stopping at the store on the way home from work

- to have a coding scheme that was more direct than the purpose coding used in the earlier NPTSs

- to have a coding scheme that did NOT require the interviewer to memorize and apply a page full of rules for when to code a trip to what category.

To get a better idea of the differences between the 1995 NPTS and the 1990 (and earlier) NPTSs, the table above is repeated, showing how these trips would have been coded in 1990.

FROM	TO	1995 PURPOSE	1990 PURPOSE
home	drop off child at school	Dropoff	Other fam and pers
child's school	work	Work	Work
work	lunch	Out to eat	Other fam and pers
lunch	work	Return to work	Other fam and pers
work	grocery store	Shopping	Shopping
grocery store	home	Return home	Work

In looking at this table there are four items of note:

- the 1995 trip purposes are more direct

- the purpose "other family and personal business" has been split into:
	-other family and personal business,
	- take someone somewhere, and
	-pickup someone.

- "eating out" has been made a separate own purpose. (In 1990 it was included in "other family and personal business" if you went out to eat from work or school. All

M-3

other trips to eat out were coded as "other social and recreational").

- the 1990 trip purpose coding used a round-trip scheme, so that the trip to work and from work were both coded as "work". This was mainly done to assign both parts of the trip to the reason the travel was made, thus avoiding the use of "return home"or "return to work". If the return trips are still problematic for the user, the 1995 datafile contains several variable that allow a recode of the return trips.

COMPARISON 1995-1990   The following comparison shows each of the trip purposes collected in 1995 and the corresponding purpose, if applicable, in 1990:

1995	1990
Work	Work
Work-related	Work-related
Return to work	* used reason for outgoing trip
Shopping	Shopping
School	School/church
Religious activity	School/church
Medical/dental	Medical/dental
Other family & personal	Other family & personal
Take someone somewhere	Other family & personal
Pick up someone	Other family & personal
Vacation	Vacation
Visit friends or relatives	Visit friends or relatives
Went out to eat	* if from work, Other family & personal * not from work, Other social/rec
Other social/rec	Other social/rec
Change means	* not collected
Other, specify	Other, specify
Return home	* used reason for outgoing trip

Note that Pleasure Driving was a trip purpose in 1990, but in 1995

trips for this reason are simply included in Other social and recreational.

NEW PURPOSES

The new purposes added in 1995 are:
- Return to work
- Take someone somewhere
- Pick up someone
- Went out to eat
- Return home.

RECODING PROCESS

The process of showing the 1990 trip purpose on the file, in addition to the 1995 purpose, required a considerable number of intermediate steps.

In the 1990 trip purpose scheme, if there was more than one trip before the return home trip, the main reason for the travel was the reason used for the return trip. Thus, one of the steps in the recoding process was to determine the main reason by creating trip chains and measuring the time spent at each destination. The chains were defined by travel ending at home, at work, or someplace else. The following variables on the NPTS Travel Day file were developed for this process:

CHAIN - trip chain number for this person - See Appendix J - Notes on Specific Variables for a more complete description of the chaining process.

NOTE THAT THE TRIP CHAINS ON THE 1995 NPTS FILE WERE CREATED FOR THE PURPOSE OF RECODING 1995 TRIP PURPOSES TO 1990 PURPOSES. GIVEN THIS, THERE ARE CHAINING CONVENTIONS THAT MAY NOT BE USED IN A TYPICAL TRIP CHAINING ANALYSIS.

CHAINTRP - sequential number of the trip within the chain

DWELTIME- time spent at the destination of the previous trip

FROM_A and TO_B - the origin or destination of the chain, in terms of home, work or someplace else

STRTTIME - starting time of the trip, which was used to put the trips in order before creating the chains

TRPNUM_A and TRPNUM_B - these are the trip numbers of the first and last trips in each chain

The data user should note that these trip chains were created to recode the 1995 trip purpose to the 1990 purpose scheme, and they include "chains" that would be excluded from most trip chaining analyses. There are an abundance of variables on the 1995 NPTS Travel Day file that can be applied to a user-defined trip chaining scheme.

APPENDIX N
GEOGRAPHIC CODES

NOTE on Geographic Codes - If the respondent's household is located in a state that is not specifically identified on the data files, then the frequency for that state in the Codebook will show as zero. NPTS interviews were conducted in all 50 states, but if the state is not being identified, the numberin that state will not be disclosed.

CONSOLIDATED STATISTICAL METROPOLITAN AREA CODES

CMSA The codes for the variable HHCMSA are as follows:

1602 Chicago-Gary-Kenosha, IL-IN-WI CMSA
1642 Cincinnati-Hamilton, OH-KY-IN CMSA
1692 Cleveland-Akron, OH CMSA
1922 Dallas-Fort Worth, TX CMSA
2082 Denver-Boulder-Greeley, CO CMSA
2162 Detroit-Ann Arbor-Flint, MI CMSA
3362 Houston-Galveston-Brazoria, TX CMSA
4472 Los Angeles-Riverside-Orange County, CA CMSA
4992 Miami-Fort Lauderdale, FL CMSA
5082 Milwaukee-Racine, WI CMSA
5602 New York-No. New Jersey-Long Island, NY-NJ-CT-PA CMSA
6162 Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD CMSA
6442 Portland-Salem, OR-WA CMSA
6922 Sacramento-Yolo, CA CMSA
7362 San Francisco-Oakland-San Jose, CA CMSA
7602 Seattle-Tacoma-Bremerton, WA CMSA
8872 Washington-Baltimore, DC-MD-VA-WV CMSA

MSA's with 1 Million or more Population
Alphabetic Order

Code MSA Name	7/95 pop
520 Atlanta, GA MSA	3,431,983
720 Baltimore, MD PMSA	2,469,985
875 Bergen-Passaic, NJ PMSA	1,308,655
1123 Boston-Worcester-Lawrence-Lowell-Brockton,MA-NH NECMA	5,768,968
1280 Buffalo-Niagara Falls, NY MSA	1,184,052
1520 Charlotte-Gastonia-Rock Hill, NC-SC MSA	1,289,177
1600 Chicago, IL PMSA	7,724,770
1640 Cincinnati, OH-KY-IN PMSA	1,591,837
1680 Cleveland-Lorain-Elyria, OH PMSA	2,224,974
1840 Columbus, OH MSA	1,437,512
1920 Dallas, TX PMSA	2,957,910
2080 Denver, CO PMSA	1,831,308
2160 Detroit, MI PMSA	4,320,203
2680 Fort Lauderdale, FL PMSA	1,412,165
2800 Fort Worth-Arlington, TX PMSA	1,491,965
3120 Greensboro--Winston-Salem--High Point, NC MSA	1,123,840
3283 Hartford, CT NECMA	1,115,223
3360 Houston, TX PMSA	3,710,844
3480 Indianapolis, IN MSA	1,476,865
3760 Kansas City, MO-KS MSA	1,663,453
4120 Las Vegas, NV-AZ MSA	1,138,758
4480 Los Angeles-Long Beach, CA PMSA	9,138,789
4920 Memphis, TN-AR-MS MSA	1,068,891
5000 Miami, FL PMSA	2,031,336
5015 Middlesex-Somerset-Hunterdon, NJ PMSA	1,080,450
5080 Milwaukee-Waukesha, WI PMSA	1,457,939
5120 Minneapolis-St. Paul, MN-WI MSA	2,723,137
5190 Monmouth-Ocean, NJ PMSA	1,050,052
5360 Nashville, TN MSA	1,093,836
5380 Nassau-Suffolk, NY PMSA	2,659,476
5483 New Haven-Bridgeport-Stamford-Waterbury-Danbury,CT NECMA	1,625,513
5560 New Orleans, LA MSA	1,315,294
5600 New York, NY PMSA	8,570,212
5640 Newark, NJ PMSA	1,936,096
5720 Norfolk-Virginia Beach-Newport News, VA-NC MSA	1,540,446
5775 Oakland, CA PMSA	2,195,411
5880 Oklahoma City, OK MSA	1,015,174
5945 Orange County, CA PMSA	2,563,971
5960 Orlando, FL MSA	1,390,574
6160 Philadelphia, PA-NJ PMSA	4,950,866
6200 Phoenix-Mesa, AZ MSA	2,563,582
6280 Pittsburgh, PA MSA	2,394,702
6440 Portland-Vancouver, OR-WA PMSA	1,710,260
6780 Riverside-San Bernardino, CA PMSA	2,949,387
6840 Rochester, NY MSA	1,088,516
6920 Sacramento, CA PMSA	1,456,955
7040 St. Louis, MO-IL MSA	2,547,686
7160 Salt Lake City-Ogden, UT MSA	1,199,323

```
7240 San Antonio, TX MSA                                   1,460,809
7320 San Diego, CA MSA                                     2,644,132
7360 San Francisco, CA PMSA                                1,645,815
7400 San Jose, CA PMSA                                     1,565,253
7600 Seattle-Bellevue-Everett, WA PMSA                     2,197,451
8280 Tampa-St. Petersburg-Clearwater, FL MSA              2,180,484
8840 Washington, DC-MD-VA-WV PMSA                          4,509,932
```

MSA's with 1 Million or more Population
Population Order- Ascending

Code	MSA Name	7/95 pop
5880	Oklahoma City, OK MSA	1,015,174
5190	Monmouth-Ocean, NJ PMSA	1,050,052
4920	Memphis, TN-AR-MS MSA	1,068,891
5015	Middlesex-Somerset-Hunterdon, NJ PMSA	1,080,450
6840	Rochester, NY MSA	1,088,516
5360	Nashville, TN MSA	1,093,836
3283	Hartford, CT NECMA	1,115,223
3120	Greensboro--Winston-Salem--High Point, NC MSA	1,123,840
4120	Las Vegas, NV-AZ MSA	1,138,758
1280	Buffalo-Niagara Falls, NY MSA	1,184,052
7160	Salt Lake City-Ogden, UT MSA	1,199,323
1520	Charlotte-Gastonia-Rock Hill, NC-SC MSA	1,289,177
875	Bergen-Passaic, NJ PMSA	1,308,655
5560	New Orleans, LA MSA	1,315,294
5960	Orlando, FL MSA	1,390,574
2680	Fort Lauderdale, FL PMSA	1,412,165
1840	Columbus, OH MSA	1,437,512
6920	Sacramento, CA PMSA	1,456,955
5080	Milwaukee-Waukesha, WI PMSA	1,457,939
7240	San Antonio, TX MSA	1,460,809
3480	Indianapolis, IN MSA	1,476,865
2800	Fort Worth-Arlington, TX PMSA	1,491,965
5720	Norfolk-Virginia Beach-Newport News, VA-NC MSA	1,540,446
7400	San Jose, CA PMSA	1,565,253
1640	Cincinnati, OH-KY-IN PMSA	1,591,837
5483	New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT NECMA	1,625,513
7360	San Francisco, CA PMSA	1,645,815
3760	Kansas City, MO-KS MSA	1,663,453
6440	Portland-Vancouver, OR-WA PMSA	1,710,260
2080	Denver, CO PMSA	1,831,308
5640	Newark, NJ PMSA	1,936,096
5000	Miami, FL PMSA	2,031,336
8280	Tampa-St. Petersburg-Clearwater, FL MSA	2,180,484
5775	Oakland, CA PMSA	2,195,411
7600	Seattle-Bellevue-Everett, WA PMSA	2,197,451
1680	Cleveland-Lorain-Elyria, OH PMSA	2,224,974
6280	Pittsburgh, PA MSA	2,394,702
720	Baltimore, MD PMSA	2,469,985
7040	St. Louis, MO-IL MSA	2,547,686
6200	Phoenix-Mesa, AZ MSA	2,563,582
5945	Orange County, CA PMSA	2,563,971
7320	San Diego, CA MSA	2,644,132
5380	Nassau-Suffolk, NY PMSA	2,659,476
5120	Minneapolis-St. Paul, MN-WI MSA	2,723,137
6780	Riverside-San Bernardino, CA PMSA	2,949,387
1920	Dallas, TX PMSA	2,957,910
520	Atlanta, GA MSA	3,431,983
3360	Houston, TX PMSA	3,710,844

```
2160 Detroit, MI PMSA                                      4,320,203
8840 Washington, DC-MD-VA-WV PMSA                          4,509,932
6160 Philadelphia, PA-NJ PMSA                              4,950,866
1123 Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH
     NECMA                                                 5,768,968
1600 Chicago, IL PMSA                                      7,724,770
5600 New York, NY PMSA                                     8,570,212
4480 Los Angeles-Long Beach, CA PMSA                       9,138,789
```

State Postal Code
(For referencing HHSTATE)

State Postal Code	State
AL	Alabama
AK	Alaska
AZ	Arizona
AR	Arkansas
CA	California
CO	Colorado
CT	Connecticut
DE	Delaware
DC	District of Columbia
FL	Florida
GA	Georgia
HI	Hawaii
ID	Idaho
IL	Illinois
IN	Indiana
IA	Iowa
KS	Kansas
KY	Kentucky
LA	Louisiana
ME	Maine
MD	Maryland
MA	Massachusetts
MI	Michigan
MN	Minnesota
MS	Mississippi
MO	Missouri
MT	Montana
NE	Nebraska
NV	Nevada
NH	New Hampshire
NJ	New Jersey
NM	New Mexico
NY	New York
NC	North Carolina
ND	North Dakota
OH	Ohio

State Postal Code
(For referencing HHSTATE)

State Postal Code	State
OK	Oklahoma
OR	Oregon
PA	Pennsylvania
PR	Puerto Rico
RI	Rhode Island
SC	South Carolina
SD	South Dakota
TN	Tennessee
TX	Texas
UT	Utah
VT	Vermont
VA	Virginia
WA	Washington
WV	West Virginia
WI	Wisconsin
WY	Wyoming

APPENDIX O - MAKE AND MODEL CODES FOR NPTS VEHICLE FILE

The codes used for vehicle make and model are from the National Accident Sampling
Sytem (NASS), a major database of the National Highway Traffic Safety Administration
(NHTSA).

This Appendix contains the portion of the NASS documentation identifying the codes.
Within the Appendix, the codes in are in numerical order by vehicle make. A listing in
alphabetic order is provided below.

	Page No.	Make		Page No.	Make
			Lancia	O-44	40
Acura	O-60	54	Land Rover	O-68	62
Alfa Romeo	O-33	31	Lexus	O-65	59
American Motors	O-4	01	Lincoln	O-17	13
AM General	O-6	03	Mazda	O-45	41
Audi	O-34	32	Mercedes Benz	O-46	42
Austin/			Mercury	O-18	14
Austin Healy	O-35	33	Merkur	O-62	56
Avanti	O-31	29	MG	O-48	43
BMW	O-36	34	Mitsubishi	O-58	52
Buick	O-20	18	Nissan	O-38	35
Cadillac	O-21	19	Oldsmobile	O-26	21
Checker	O-31	29	Other domestic	O-31	29
Chevrolet	O-22	20	Other foreign	O-70	69
Chrysler	O-7	06	Peugeot	O-49	44
Daihatsu	O-66	60	Plymouth	O-12	09
Datsun	O-38	35	Pontiac	O-27	22
Dodge	O-8	07	Porsche	O-50	45
Eagle	O-14	10	Renault	O-51	46
Fiat	O-40	36	Saab	O-53	47
Ford	O-15	12	Saturn	O-29	24
GMC	O-28	23	Sterling	O-67	61
Grumman	O-30	25	Studebaker	O-31	29
Honda	O-41	37	Subaru	O-54	48
Hyundai	O-61	61	Suzuki	O-59	53
Imperial	O-11	08	Toyota	O-55	49
Infiniti	O-64	58	Triumph	O-56	50
Isuzu	O-42	38	Volkswagen	O-32	30
Jaguar	O-43	39	Volvo	O-57	51
Jeep	O-5	02	Yugo	O-63	57
Kaiser Jeep	O-5	02			
KIA	O-69	63			

Page No.   Make

GV05

Variable Name: Vehicle Make (specify):

Element Values:

Passenger Vehicles/Light Trucks (01-69)

Description   Page

GV06

Variable Name: Vehicle Model (specify):

Element Values:

MAKE "01"   **AMERICAN MOTORS***

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Rambler/American	Rogue, Scrambler, 220, 440	all	3	3
002	Rebel/Matador	Barcelona, Classic Brougham, 550, 660, 770Matador (-78), Marlin	all	114" WB = 4	4 118" WB = 5
	5				
003	Ambassador	Brougham, DPL, SST, DL, Limited, 880, 990	all	5	5
004	Pacer	Limited, DL	75-80	2	2
005	AMX	(2 seater only)	68-70	2	2
006	Javelin	SST, AMX (71-74)	all	2	2
007	Hornet/Concord	Sportabout, Limited, DL, SC-360, SST, AMX (75-78)	all	2	2
008	Spirit/Gremlin	Limited, DL, Custom, X, GT (83-on) AMX (79-on)	all	2	2
009	Eagle	Concord based	80-87	3	3
010	Eagle SX-4	Spirit/Gremlin based	81-84	2	2
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

   * Alliance, Encore, Premier--See Renault - Make "46"

GV06
(2)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "02"   JEEP (Includes KAISER-JEEP)

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
401	CJ-2/CJ-3/CJ-4	Military	-66	81" WB = 1 101" WB = 2	7** 7**
402	CJ-5/CJ-6/CJ-7/CJ8	Scrambler, Golden Eagle, Renegade, Laredo, Wrangler	67-on	84" WB = 1 104" WB = 3	7**
403	YJ-series	Wrangler	86-on	1	7**
404	Cherokee	Limited, Loredo, Pioneer, Briarwood Grand	84-on 92-on	2 2	7** 7**
421	Cherokee	Wide Track, Chief, Commando, Jeepster	-83	2	7**
431	Grand Wagoneer	Custom, Brougham Limited, Wagoneer	71-91	2 3	7** 7**
481	Pickup	J-10, J-20, Honcho	all	per WB	7**
482	Comanche	Chief	86-92	111" WB = 3 119" WB = 4	7** 7**
498	Other light truck		-	-	-
499	Unknown light truck		-	-	-
999	Unknown vehicle		-	-	-

** Applies to front and rear impacts. Use size value for side impacts.

MAKE "03"   AM GENERAL

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
401	Dispatcher	Post Office (Jeep)	all	1	1
421	Hummer		93-on	N/A	N/A
466	Dispatcher	DJ-series-Post Office Van	all	N/A	N/A
498	Other light truck		-	-	-
499	Unknown light truck		-	-	-
884	Medium/heavy truck	Military off-road	-	-	-
898	Other medium/heavy truck		-	-	-
899	Unknown medium/heavy truck		-	-	-
983	Bus-flat front, rear engine	Transit	all	N/A	N/A
988	Other bus		all	N/A	N/A
989	Unknown bus type		-	-	-
999	Unknown vehicle		-	-	-

GV06
(3)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "06"   **CHRYSLER**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
009	Cordoba	Crown, 300, LS	75-83	4	4
010	New Yorker/Newport/ 5th Avenue/Imperial (excludes all FWD)	Custom, Royal, Brougham, Town and Country, 300 (-71)	-78 79-81 82-89	6 5 4	6 5 4
014	New Yorker/E Class/ Imperial (90-93)/5th Avenue	FWD vehicles, Turbo	83-93	3	9***
015	Laser	Turbo, XE, XT	84-86	2	9***
016	LeBaron	Medallion, Salon (RWD), Landau, LX FWD except GTS or GTC Sport Coupe	77-81 82-on	4 2	4 9***
017	LeBaron GTS/GTC	GTS-Turbo GTC-Sport Coupe	85-on 87-on	3 2	9*** 9***
031	TC (Maserati Sport)	Turbo Convertible	88-91	1	1
035	Conquest	TSI, Turbo	87-89	2	2
041	Concorde		93-on	4	4
042	LHS	New Yorker (94-on)	94-on	4	9***
043	Sebring		95-on	3	3
044	Cirrus		95-on	3	9***
398	Other automobile		-	-	-
399	Unknown automobile				
441	Town and Country	Minivan	90-on	5	7**
498	Other light truck				
499	Unknown light truck				
999	Unknown vehicle		-	-	-

** Code 7 applies to front and rear impacts. Use size code for stiffness for side impacts.
*** Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(4)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "07"   **DODGE**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Dart	Custom, Swinger, Sport, GT, Demon, Special, Special Edition, 170, 270, 340, 360	62-70 71-76	111" WB = 4 108" WB = 3	4 3
002	Coronet/Charger (-78)/ Magnum	Brougham, Custom, Superbee, Crestwood, Deluxe, XE, R/T, SE, 440, 500, Police	-79	4	4
003	Polara/Monaco Royal Monaco	Custom, Special, Crestwood, Brougham, Police, Taxi	-76 77-78	5 4	5 4
004	Viper	RT/10, GTS	92-on	2	2
005	Challenger	R/T, T/A, Rallye	70-74	3	3
006	Aspen	Custom, Special Edition, Police, R/T, Sport	76-80	113" WB = 4 109" WB = 3	3 3
007	Diplomat	Medallion, Salon, S	77-89	4	4
008	Omni/Charger (83 on)	024, DeTomaso, Miser, GLH, GLHS, Shelby, Charger 2.2, America, Expo	78-90	2	2
009	Mirada		80-83	4	4
010	St. Regis	Police, Taxi	79-81	5	5
011	Aries (K)	Custom, SE, LE	81-89	2	9***
012	400	LS	82-83	2	9***
013	Rampage (car based pickup)	2.2, GT, Sport	82-84	2	2
014	600	ES, Turbo	83-88	2	9***
015	Daytona	Turbo Z, Shelby Z, Pacifica, C/S Competition, IROC R/T	84-94	2	9***
016	Lancer	Pacifica, Turbo, ES, Shelby	85-89	3	9***
017	Shadow	ES, Turbo	87-on	2	9***
018	Dynasty		88-on	3	9***
019	Spirit	ES, Shelby, R/T	89-94	3	9***
020	Neon	Expresso	94-on	3	9***
033	Challenger all imported		78-83	2	2
034	Colt (excludes Vista)	RS, Turbo, Custom, GTS, DL, E, Premier, Deluxe, Carousel, GT	74-76 77-80 80-94	2 <93" WB = 1 1	2 1
035	Conquest	Turbo	84-86	2	2

***   Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(5)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "07"   **DODGE (Continued)**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
039	Stealth		91-on	2	2
040	Monaco		90-92	3	3
041	Intrepid		93-on	4	4
042	Avenger	95-on	3	3	
043	Stratus		95-on	3	9***
398	Other automobile		-	-	-
399	Unknown automobile				
401	Raider	Sport	86-on	1	8**
421	Ramcharger		all	3	8**
441	Vista	4 x 4	84-91	3	7**
442	Caravan	Mini-Ram, 112 and 119 WB, SE, ES	84-on	112" WB = 4 119" WB = 5	7** 7**
461	B-series vans	Sportsman, Royal, Maxiwagon, Ram B150-B350, Tradesman	all	7	7**
470	Van derivative	Kary Van	all	7	7**
471	D50, Colt P/U Ram 50/Ram 100		-82 83-on	per WB per WB	8** 8**
472	Dakota		87-on	112" WB = 3 124" WB = 6	8**
481	D, W-series pickup W100-W350	Ram, Custom, Royal, Miser, D100-D350,	all	per WB	8**
482	Ram	1500/2500/3500 P/U	94-on	per WB	8**
498	Other light truck		-	-	-
499	Unknown light truck				

** Applies to front and rear impacts. Use size value for side impacts.
*** Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(6)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "07"   **DODGE (Continued)**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
881	Medium/Heavy: CBE		all	N/A	N/A
882	Medium/Heavy: COE low entry		all	N/A	N/A
883	Medium/Heavy: COE high entry		all	N/A	N/A
884	Medium/Heavy: Unknown engine location		all	N/A	N/A
890	Medium/Heavy: COE entry position unknown		all	N/A	N/A
898	Other medium/heavy truck		all	N/A	N/A
899	Unknown medium/heavy truck		all	N/A	N/A
981	Medium bus (not van based)		all	N/A	N/A
988	Other bus		all	N/A	N/A
989	Uknown bus type				
998	Other vehicle				
999	Unknown vehicle		-	-	-

MAKE "08"   IMPERIAL

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
010	Imperial	Lebaron	-76	6	6
		Mark Cross, Frank Sinatra editions	81-83	4	4
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

GV06
(7)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "09"   **PLYMOUTH**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Valiant/Duster (-76)/ Scamp	100, 200, Brougham, Signet Custom, Special 340/360, 340, 360, Twister	-76	108" WB = 3 111" WB = 4	3 4
002	Satellite/Belvedere	Belvedere I/II, GTX, Roadrunner (-74), Sebring, Sebring Plus, Superbird, Brougham	-74	4	4
003	Fury	I, II, III, Roadrunner (75),	-74	5	5
		Salon, VIP, Sport, Suburban	75-78	4	4
004	Gran Fury	Sedan, Brougham, Custom Sport, Suburban	75-81 82-89	5 4	5 4
005	Barracuda	Formula, S, 340, AAR, 'Cuda Gran Coupe	65-73	3	3
006	Volare	Custom, Premier, Roadrunner (76-on), Police	76-80	109" WB = 3 113" WB = 4	3 4
007	Caravelle	Turbo, SE	85-89	3	9***
008	Horizon	TC-3, Miser, Turismo 2.2,	78-90	2	2
		Custom, SE, Duster (85-on) America, Expo			
011	Reliant (K)	SE, LE	81-89	2	9***
013	Scamp (car based pickup)	GT, 2.2	82-84	2	2
017	Sundance	Turbo	87-on	2	9***
019	Acclaim	LX, LE	89-on	3	9***
020	Neon	Expresso	94-on	3	9***
031	Cricket		71-72	2	2
032	Arrow	Fire Arrow, GS, GT	76-80	1	1
033	Sapparo	all imported	78-83	2	2
034	Champ/Colt (excludes Vista)	Turbo, Custom - Station Wagon (84-on)	79-94 84-94	1 103" WB = 3	1 2
035	Conquest	TSI	84-89	2	2
036	CHANGED TO CODE 037 IN 1990				
037	Laser	RS, Turbo	89-on	2	2
038	Breeze		96-on	3	9***
039	Prowler		96-on	TBD	TBD
398	Other automobile		-	-	-
399	Unknown automobile				

*** Code 9 applies only to frontal impacts. Use size code for stiffness for side or impacts.

GV06
(8)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "09"   **PLYMOUTH (Continued)**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
421	Trailduster		all	3	8**
441	Vista	4 x 4	87-on	3	7**
442	Voyager (minivan)	SE, LX	84-on	112" WB = 4 119" WB = 5	7** 7**
461	Van-fullsize (B-series)	Voyager, Sport, Premier	all	7	7**
471	Arrow pickup (foreign)		all	per WB	8**
498	Other light truck		-	-	-
499	Unknown light truck		-	-	-
999	Unknown vehicle		-	-	-

MAKE "10"   **EAGLE**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
034	Summit	DL, LX, ES	89-on	3	3
037	Talon	TSI	90-on	2	2
040	Premier	LX, ES	88-92	3	3
041	Vision		93-on	4	4
044	Medallion	DL, LX	88-90	3	3
398	Other automobile		88-on	-	-
399	Unknown automobile				
441	Summit Wagon		92-on	99.2" WB = 2	7**
498	Other light truck				
499	Unknown light truck				
999	Unknown vehicle		-	-	-

** Applies to front and rear impacts. Use size for side impacts.

GV06
(9)
Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "12"   FORD

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Falcon	Sprint, GT, Futura	thru-70	4	3
002	Fairlane	Torino	thru 1970 thru-70	 4	 4
003	Mustang/Mustang II	Mach, Boss, Grande, Cobra Ghia, SVO, GT, LX, Shelby	65-73 74-on	3 2	3 2
004	Thunderbird (all sizes)	Landau, Heritage, Turbo coupe, Elan, Fila SC, Sport, LX	72-76 58-71 77-79 55-57 80-88 89-on	5 4 4 3 3 4	6 4 4 3 3 4
005	LTD II	S, Squire, Brougham	77-79	4	4
006	LTD/Custom/Galaxie (all sizes)	XL, Landau, Ranch Wagon, Country Squire, S, 500, Brougham, XL, GT	thru-77 78-82 83-86	5 4 3	5 4 3
007	Ranchero	Falcon/Fairlane based Torino/LTD II based	thru-71 72-79	3 4	3 4
008	Maverick Grabber		70-77	3	3
009	Pinto	Pony, MPG, ESS	71-80	1	1-Front 2-Rear
010	Torino/Gran Torino/Elite	GT, Cobra, Sport, Squire, Brougham	71-76	4	4
011	Granada	ESS, Ghia	75-82	3	3
012	Fairmont	Futura, Sport Coupe	78-83	3	3
013	Escort/EXP	L, GL, GLX, SS, GT, LX	81-on	1	9***
015	Tempo	L, GL, GLX, Sport, 4 x 4	84-94	2	9***
016	Crown Victoria		81-on	4	4
017	Taurus	MT-5, L, GL, LX, SHO	86-on	3	3
018	Probe GL, LX, GT		88-on	2	2
031	English Ford	Cortina		per WB	per WB
032	Fiesta	Sport, Ghia	78-80	1	1
033	Festiva		88-93	1	1
034	Laser		all	per WB	per WB
035	Contour		94-on	3	9***
036	Aspire		94-on	1	1
398	Other automobile		-	-	-
399	Unknown automobile		-	-	-

***   Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(10)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "12"   FORD (Continued)

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
401 7**	Bronco II/Bronco (-77)/	Eddie Bauer, XL, XLT, Limited, Eddie Bauer	83-89	1	
	Explorer		90-on		
421	Bronco-fullsize	Eddie Bauer, Custom, XL, XLT	78-on	3	8**
422	Expedition		97-on	TBD	TBD
441	Aerostar	XLT, Cargo Van	85-on	7	7**
442 7**	Windstar		94-on	5	
461	E-series vans	Econoline, Clubwagon, Chateau, E150-E350	all	7	7**
470	Van derivative	Parcel van	all	7	7**
471 8**	Ranger	Supercab, 4 x 4, STX, Splash	82-on	108" WB = 3	
				114" WB = 4	8**
472	Courier	Imported pickup	all	7	7**
481	F-series pickup	F100-F350	all	per WB	8**
498	Other light truck		-	-	-
499	Unknown light truck				
881	Medium/Heavy CBE	F-5 through F-8, L-series, FT-series	all	N/A	N/A
882	Medium/Heavy COE low entry	C/CT series	all	N/A	N/A
883	Medium/Heavy COE high entry	C/CLT series	all	N/A	N/A
884	Medium/Heavy: Unknown engine location		all	N/A	N/A
890	Medium/Heavy: COE entry position unknown		all	N/A	N/A
898	Other medium/heavy truck		-	-	-
899	Unknown medium/heavy truck		-	-	-
981	Medium bus	B-series (not van based)	all	N/A	N/A
988	Other bus		all	N/A	N/A
989	Unknown bus type				
998	Other vehicle		-	-	-
999	Unknown vehicle		-	-	-

** Applies to front and rear impacts. Use size value for side impacts.

GV06
(11)
Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "13"   **LINCOLN**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Continental/Town Car	Continental (-81), Town Car (82-on)	thru-79	6	6
			80-on	4	5
002	Mark	I, II, III, IV, V	-70	4	4
		LSC, all Signature/Designer Series	71-80	5	5
		VI	80-83	4	4
		VII	84-on	3	3
		VIII	93-on	4	4
005	Continental (82-on)	All Signature/Designer Series	82-87	4	5
			88-on	3	3
011	Versailles		77-80	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
421	Navigator		97-on	TBD	TBD
498	Other light truck				
499	Unknown light truck				
999	Unknown vehicle		-	-	-

GV06
(12)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "14"   **MERCURY (MERKUR: See "56")**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
002	Cyclone	GT, CJ, Spoiler	thru-71	4	4
003	Capri-domestic	RS, Turbo, GS, Black Magic	79-86	2	2
004	Cougar/XR7	XR-7, RS, LS, GS, Eliminator, Bougham, Villager, (includes all body styles)	67-76 77-79 80-88 89-on	4 114" WB = 4 118" WB = 5 3 4	4 4 5 3 4
006	Marquis/Monterey	Marauder, X-100, Parklane, S-55, Custom, Brougham, Montclair, Grand Marquis	thru-78 79-82 82-on	121" WB = 5 124" WB = 6 4 106" WB = 3 114" WB = 4	5 6 4 3 4
008	Comet	Caliente, GT, Voyager, 202, Capri (66-67)	62-67 71-77	4 3	4 3
009	Bobcat	Runabout, Villager	75-80	1	1-Front 2-Rear
010	Montego	Comet (68-70), GT, MX, Villager, Brougham	68-73 72-76	3 114" WB = 3 118" WB = 4	3 3 4
011	Monarch	Ghia	75-80	3	3
012	Zephyr	GS, Z-7	78-83	3	3
013	Lynx/LN-7 (82-83)	L, LS, GS, RS, XR-3	81-87	1	9***
015	Topaz	L, LS, GS, 4 x 4	84-on	2	9***
017	Sable	LS, GS	86-on	3	3
031	Capri - foreign	Capri II 2 + 2	70-77 89-94	2 1	2 1
033	Pantera	deTomaso	72-74	2	2
036	Tracer	L, GL	88-on	1	1
037	Mystique		94-on	3	9***
398	Other automobile		-	-	-
399	Unknown automobile				
401	Mountaineer		96-on	3	7**
443	Villager	LS, GS	93-on	4	7**
498	Other light truck				
499	Unknown light truck				

GV06
(13)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "14"   **MERCURY (MERKUR: See "56")**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
999	Unknown vehicle		-	-	-

**   Applies to front and rear impacts. Use size value for side impacts.
***   Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(14)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "18"   **BUICK**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Special/Skylark	GS, GS-350, GS-400, GS-455, GS California, Sport wagon, Custom	thru 72	4	4
002	LeSabre/Centurion/ Wildcat	Wagon, Luxus, Invicta, Custom, Limited T-Type	-76 77-85 86-on	6 4 4	6 4 9***
003	Electra/Electra 225/ Park Avenue (91-on)	Limited, Park Avenue, Ultra	-76 77-84 85-on	6 5 4	6 5 9***
004	Roadmaster	Estate Wagon, Limited	91-96	4	4
005	Riviera	S-Type, T-Type	63-65 66-76 77-85 86-93 94-on	4 5 4 3 4	4 5 4 9*** 9***
007	Century	Luxus, T-Type, FWD (82-on) Custom, Regal (72-77)	thru 77 78-81 82-on	4 3 3	4 3 9***
008	Apollo/Skylark*	Skylark (75)*, S/R	73-76	4	4
010	Regal	Turbo, Luxus, Grand National, GNX, T-Type	78-88	3	3
012	Skyhawk	S-Type, Roadhawk, T-Type, GT	75-81 82-on	2 2	2 9***
015	Skylark (76-85)	(except 75), S/R, S, Limited, Sport, T-Type	76-79 80-85	4 3	4 9***
018	Somerset/Skylark**	Skylark (86-on)**, Somerset, GS Regal, Custom, Limited, T-Type	85-on	3	9***
020	Regal (FWD)	Limited	88-on	3	9***
021	Reatta		88-91	2	2
031	Opel Kadett		-75	2	2
032	Opel Manta	1900, Luxus, Rallye, Sports Coupe	-75	2	2
033	Opel GT		-75	2	2
034	Opel Isuzu	Deluxe, Sport	76-79	1	1
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

*** Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(15)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "19"   **CADILLAC**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
003	Deville/Fleetwood (except Limousine)	Coupe de Ville, Sedan de Ville, Fleetwood Bougham, Fleetwood 60 Special, d'Elegance	-76 RWD 77-96 FWD 85-on	6 5 4	6 5 9***
	Deville	Concourse	94-on	4	9***
004	Limousine	Fleetwood 75, Formal DeVille-based	all	6	6
005	Eldorado	Biarritz, El-doro, Touring Coupe	-78 79-85 86-on	6 4 3	6 4 9***
006	Commercial Series	Ambulance/Hearse	all	6	6
009	Allante'		87-on	2	2
014	Seville	Elegante STS	76-85 86-on	4 3	4 9***
016	Cimarron	D'oro	82-88	2	9***
017	Catera	RWD	97-on	TBD	TBD
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

***   Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(16)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "20"　　　　　**CHEVROLET**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Chevelle/Malibu	Classic, Concours, S-3, Laguna, Nomad, 300, Greenbriar, Estate, Deluxe, SS 396/454	64-77 78-83	4 3	4 3
002	Impala/Caprice	Biscayne, Belair, Super Sport, Classic, Classic Brougham, Townsman Brookwood, Kingswood	-76 77-on	5 St. Wgn.=6 4	5 6 4
004	Corvette	Stingray	53-62 63-on	3 2	3 2
006	Corvair	Monza, Corsa, 500, Yenko	60-69	N/A	N/A
007	El Camino	Royal Knight, SS	59-60 64-77 78-on	5 4 3	8** 8** 8**
008	Nova (-79)	Chevy II, LN, LE, Concours SS-350/396, Rally	62-79	4	4
009	Camaro	SS, RS, LT, Berlinetta, IROC-Z, Z28	67-on	3	3
010	Monte Carlo (RWD only)	LS, SS, Aerocoupe, Landau	70-77 78-88	4 3	4 3
011	Vega	GT, Cosworth	71-77	2	2
012	Monza	Spyder, 2 + 2, Towne Coupe	75-80	2	2
013	Chevette	S, Scooter, CS	76-87	2dr-1 4dr-2	1 2
015	Citation	X-11, Citation II	80-85	3	9***
016	Cavalier	CS, RS, Z24, LS	82-on	2	9***
017	Celebrity	CS, Eurosport, VR	82-on	3	9***
019	Beretta/Corsica	GT	88-on	3	9***
020	Lumina	Z-34, Euro	90-on	3	9***
031	Spectrum		85-on	1	1
032	Nova/Geo Prizm	CL, NUMMI-built vehicle	85-on	2	9***
033	Sprint/Geo Sprint		85-on	1	1
034	Geo Metro	LSi, Xfi	89-on	1	1
035	Geo Storm	Gsi	85-on	1	1
036	Monte Carlo (FWD only)	Z34	95-on	3	9***
037	Malibu		97-on	TBD	TBD
398	Other automobile				

GV06
(17)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "20"   **CHEVROLET**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
399	Unknown automobile				

**   Applies to front and rear impacts. Use size value for side impacts.
***   Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(18)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "20" **CHEVROLET (Continued)**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
401	S-10 Blazer Blazer	S-10 p/u based (100.5" WB)	83-94 95-on	2	7**
402	Geo Tracker	Lsi	89-on	2	8**
421	Fullsize Blazer	K-series, fullsized p/u based Tahoe	69-94 95-on	3	8**
431	Suburban	All models	all	6	8**
441	Astro Van	Minivan	85-on	7	7**
442	Lumina APV		90-on	3	7**
443	Ventura		97-on	TBD	TBD
461	G-series van	Beauville, Chevy Van, Sport Van, G10-G30, Express	all	7	7**
466	P-series van		all	7	7**
470	Van derivative	Hi-cube, Parcel Van	all	7	7**
471	S-10/T-10	4 X 4	82-on	per WB	8**
472	LUV	Imported pickup	all	7	7**
481	C, K, R, V-series pickup	C10-C30, K10-K30, R10-R30, V10-V30, Silverado, C-K 1500, 2500, 3500	all	per WB	8**
498	Other light truck		-	-	-
499	Unknown light truck				
881	Medium/Heavy CBE	C50/60/65; M60/65; H70/80/90; J70/80/90; Bison 90; all other CBE	all	N/A	N/A
882	Medium/Heavy COE low entry	T60/65 - all other COE low entry	all	N/A	N/A
883	Medium/Heavy COE high entry	Titan 90, all other COE high entry	all	N/A	N/A
884	Medium/Heavy: Unknown engine location		all	N/A	N/A
890	Medium/Heavy: COE entry position unknown		all	N/A	N/A
898	Other medium/heavy truck		all	N/A	N/A
899	Unknown medium/heavy truck				
981	Bus	S-60 series	all	N/A	N/A
988	Other bus		all	N/A	N/A
989	Unknown bus type				
998	Other vehicle				

GV06
(19)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "20"   **CHEVROLET (Continued)**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
999	Unknown vehicle		- -	-	

**   Applies to front and rear impacts. Use size value for side impacts.

GV06
(20)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "21"   **OLDSMOBILE**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Cutlass (RWD-only)	Supreme, S, LS, Salon Brougham, Vista Cruiser, F85 (thru 72) Rallye 350, Hurst Olds, 442, Calais, Classic (88)	-77 78-88	4 3	4 3
002	Delta 88	Royale, Custom, Delta, Jetstar 88, Delmont 88, Starfire (thru 66), Custom Cruiser	-76 77-85 86-on	6 4 4	6 4 9***
003	Ninety-Eight	Regency, Luxury	-76 77-84 85-on	6 5 4	6 5 4
005	Toronado	XSR, Trofeo, Brougham Custom	66-78 79-85 86-92	5 4 3	5 4 3
006	Commercial Series	Ambulance/Hearse	all	6	6
012	Starfire	SX, GT	75-80	2	2
015	Omega	 X-body type	RWD 75-79 FWD 80-85	4 3	4 9
016	Firenza	S, LS, SX, Cruiser, GT	82-88	2	9***
017	Ciera	Cutlass Ciera, Brougham, ES	82-on	3	9***
018	Calais	GT, ES, 500	85-91	3	9***
020	Cutlass (FWD)	Supreme	88-on	3	9***
021	Achieva	SC	92-on	3	9***
022	Aurora		94-on	4	9***
398	Other automobile		-	-	-
399	Unknown automobile				
401	Bravada		91-on	2	7**
441	Silhouette		90-on	3	7**
498	Other light truck				
499	Unknown light truck				
998	Other vehicle				
999	Unknown vehicle		-	-	-

** Applies to front and rear impacts. Use size value for side impacts.
*** Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(21)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "22"   **PONTIAC**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Lemans/Tempest (thru 79)	Safari, T-37, Luxury, Grand Sport, GTO (-73), GT-37, Sprint, Judge Grand AM (73-75) Grand Lemans	thru 77 78-79	4 3	4 3
002	Bonneville/Catalina/	Brougham, Grand Safari, Safari, Grandville, 2+2 Executive, Starchief	-68 69-76 77-81 82-84	5 6 4 3	5 6 4 3
		SE, SSE, SSEi	87-on	4	4
	Parisienne		83-84	4	4
005	Fiero	2M4, 2M6, GT, SE	84-88	1	1
008	Ventura	II, SJ, Sprint, GTO (74-on) Custom	71-77	4	4
009	Firebird/Trans AM	Esprit, Formula, GTA, Redbird, Yellowbird, Skybird, SE	67-81 82-on	3 2	3 2
010	Grand Prix (RWD)	J, LJ, SJ, Brougham, 2+2	63-72 73-77 78-87	5 4 3	5 4 3
011	Astre	Safari, SJ, Custom	75-77	2	2
012	Sunbird (thru 80)	Safari, Sport, Formula	76-80	2	2
013	T-1000/1000		81-87	2dr-1 4dr-2	1 2
015	Phoenix	LJ, SJ	77-79 80-84	4 3	4 9***
016	J2000/Sunbird Sunfire	Sunbird(84-on), LE, SE, GT, Convertible GT/SE	82-94 95-on	2	9***
017	6000	STE, SE, LE	82-on	3	9***
018	Grand AM	SE, LE	80 85-on	3 3	3 9***
020	Grand Prix (FWD)	SE, McLaren Turbo, GTP	88-on	3	9***
031	Lemans (88-on)	SE, Tempest (Canadian)	88-on	2	2
398	Other automobile		-	-	-
399	Unknown automobile				
441	Trans Sport		90-on	3	7**
498	Other light truck		-	-	-
499	Unknown light truck				
999	Unknown vehicle		-	-	-

**   Applies to front and rear impacts. Use size value for side impacts.
***   Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(22)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "23"   **GMC**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
007	Caballero/Sprint	Sierra Madre del Sur, SP	-77 78-on	4 3	8** 8**
398	Other automobile		-	-	-
399	Unknown automobile				
401	Jimmy/Typhoon	S15 based (100.5" WB)	83-on	2	7**
421	Fullsize Jimmy/Yukon	fullsize pickup based	all	3	8**
431	Suburban	all models	all	6	8**
441	Safari (Minivan)		86-on	7	7**
461	G-series van	Rally Van, Vandura, G15-G35	all	7	7**
466	P-series van				
470	Van derivative	Hicube, parcel van, Value Van, Magna Van	all	7	7**
471	S15/T15/Sonoma	4 X 4, Cyclone	82-on	per WB	8**
481	C, K, R, V-series pickup	C15-C35, K15-K35, R15-R35, V15-V35, Sierra	all	per WB	8**
498	Other light truck		-	-	-
499	Unknown light truck				
881	Medium/Heavy CBE	W5000/6000/7000 series, Brigadier/General models	all	N/A	N/A
882	Medium/Heavy COE low entry	W6000/W7000, all other COE, low entry	all	N/A	N/A
883	Medium/Heavy COE high entry	Astro 95, all other COE, high entry	all	N/A	N/A
884	Medium/Heavy: Unknown engine location		all	N/A	N/A
890	Medium/Heavy: COE entry position unknown		all	N/A	N/A
898	Other medium/heavy truck		all	N/A	N/A
899	Unknown medium/heavy truck				
981	Bus	B6000	all	N/A	N/A
988	Other bus		all	N/A	N/A
989	Unknown bus type				
999	Unknown vehicle		-	-	-

** Applies to front and rear impacts. Use size value for side impacts.

GV06
(23)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "24"   **SATURN**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	SL	SL1, SL2, SL3	91-on	3	3
002	SC	SC1, SC2	91-on	2	2
003	SW	SW1, SW2	93-on	3	3
004	EV	EV1 (electric vehicle)	97-on	TBD	TBD
398	Other automobile		-	-	-
399	Other automobile				
999	Unknown		-	-	-

MAKE "25"   **GRUMMAN**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
441	LLV	Postal vehicle (See NATB Chevrolet for VIN)	all	N/A	N/A
442	Step-in van	Multi-stop, step van	all	N/A	N/A
498	Other light truck		-	-	-
499	Unknown light truck		-	-	-
881	Medium/heavy truck - CBE		-	-	-
882	Medium/heavy truck - COE low entry		-	-	-
883	Medium/heavy truck - COE high entry		-	-	-
884	Medium/heavy truck unknown engine location		-	-	-
890	Medium/heavy truck entry position unknown		-	-	-
898	Other medium/heavy - other		-	-	-
899	Unknown medium/heavy truck		-	-	-
983	Bus-flat front, rear engine	Transit	all	N/A	N/A
988	Other bus		all	N/A	N/A
989	Unknown type bus				
999	Unknown vehicle		-	-	-

GV06
(24)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "29"   **OTHER DOMESTIC MANUFACTURERS**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
001	Studebaker	Lark, Gran Turismo, Hawk, Cruiser, all associated subseries	thru-66	per WB	= size
	Avanti		all	per WB	= size
002	Checker	Marathon, Superba, Taxi, Aerobus	thru-82	per WB	= size
398	Other make	Desoto, Excaliber, Stutz, Hudson, Packard, Consulier	all	per WB	= size
399	Unknown make				

GV06
(25)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "30"   **VOLKSWAGEN**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Karmann Ghia		-74	1	1
032	Beetle 1300/1500	flat windshield, 94.5" WB	-77	1	1
033	Super Beetle	distinguished by curved windshield, 95.3" WB	71-80	2	1
034	411/412	Squareback/Fastback	71-74	2	1
035	Squareback/Fastback	Type 3, 1600	-74	1	1
036	Rabbit	L, GTI, Sport, LS, Custom, DL, Deluxe	75-84	1	1
037	Dasher		74-81	2	2
038	Scirocco	16V	75-88	1	1
040	Jetta	GL, GLI	81-92	2	2
041	Quantum	Synco	82-88	2	2
042	Golf	Synco, GTI, Cabriolet, GT, GL	85-92	2	1
043	Rabbit pickup	car/based pickup	80-83	1	1
044	Fox	GL	87-on	1	1
045	Corrado		89-on	2	2
046	Passat		90-on	2	2
047	Jetta III		93-on	2	2
048	Golf III		93-on	2	2
398	Other automobile		-	-	-
399	Unknown automobile		-	-	-
401	The Thing (181)		73-75	1	1
441	Vanagon/Camper	Bus, Kombi, Van	-89	1	7**
442	Eurovan		92-on	7	7**
498	Other light truck		-	-	-
499	Unknown light truck				
998	Other vehicle				
999	Unknown vehicle		-	-	-

**   Applies to front and rear impacts. Use size value for side impacts.

GV06
(26)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "31"   **ALFA ROMEO**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Spider	All roadsters, Veloce, 1750/2000 roadsters	all	1	1
032	Sports Sedan	All 4 door sedans; Milano (86), Giulia, Super, Berlina, Alfetta, 1750/2000 sedans	all	per WB	= size
033	Sprint Veloce	All 2-door coupes; Alfetta GT, 1750/2000 GTV, Sprint GT	all	per WB	= size
034	GTV-6		81-on	1	1
035	164		89-on	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

MAKE "32"   **AUDI**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Super 90		70-72	2	2
032	100	S, LS, GL	70-77	3	3
		Quattro (89-on)	89-94	3	3
	A6		95-on		
033	Fox		74-79	2	2
034	4000	Quattro, Coupe GT, CS, S	80-88	2	2
035	5000	Quattro, CS, S, Turbo	78-88	3	3
036	80	Quattro	88-92	2	2
	90	Quattro	88-95	2	2
037	200	Quattro	89-92	3	3
038	V-8 Quattro		90-94	3	3
039	Coupe Quattro		90-93	2	2
040	S4		93-94	3	3
	S6		95-on		
041	Cabriolet		94-on	2	2
042	A4		96-on	TBD	TBD
043	A3		96-on	2	2
044	A8		96-on	TBD	TBD
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

GV06
(27)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "33" **AUSTIN/AUSTIN HEALEY**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Marina	GT	all	2	2
032	America		all	1	1
033	Healey Sprite		all	1	1
034	Healy 3000	Healy 100	all	1	1
035	Mini		all	1	1
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

MAKE "34"   **BMW**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	1600, 2002	Tii, 1800, 2000CS	-76	2	2
032	Coupe	2800CS, 3.0CS	69-76	3	3
033	Bavaria Sedan	2500, 2800	69-74	3	3
034	3-series	318i, 318ti, 320i, 325e, 325es, 325i, 328, M3	77-on	2	2
035	5-series	524i, 528i, 530i, 533i, 535i, TD	75-on	3	3
		525i (wagon), M5, 540iA, 540i	93-on	3	3
036	6-series	630, 633, 635, csi, M6	77-on	3	3
037	7-series	733i, 735i, L7, 740i, 750iL	78-on	3	3
038	8-series	850, 840ci	90-on	per WB	per WB
039	Z3		96-on	TBD	TBD
398	Other automobile		-	-	-
399	Unknown automobile				

Motorcycles

701	0-50cc
702	51-124cc
703	125-349cc
704	350-449cc
705	450-749cc

GV06
(28)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "34"   BMW

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS

Motorcycles

706   750cc-over
709   Unknown cc
799   Unknown motored cycle
999   Unknown vehicle

GV06
(29)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "35"   **NISSAN/DATSUN**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	F10		77-78	1	1
032	200/240 SX		78-83	1	1
			84-on	2	2
033	1200/210/B210	Honeybee	71-82	1	1
034	Z-car, ZX	240/260/280Z, 300 ZX, Turbo	70-on	1	1
		2 + 2	75-78	3	3
		2 + 2	79-on	2	2
035	310		79-82	1	1
036	510	PL	68-73	2	2
			78-81	1	1
037	610	PL	73-76	2	2
038	710	PL	74-77	2	2
039	810/Maxima		77-on	3	3
040	Roadster	SPL 311, SRL 311, 1600, 2000, convertible	-70	1	1
041	PL411, RL411		-67	1	1
042	Stanza	XE	82-92	2	2
043	Sentra		83-on	1	1
044	Pulsar	NX, EXA (86-on	83-90	2	2
045	Micra		87-on	1	1
046	NX 1600/2000		92-on	2	2
047	Altima		93-on	2	2
398	Other automobile		-	-	-
399	Unknown automobile				
401	Pathfinder	MPV, 4 x 4	86-on	3	8**
441 7**	Van	XE, GXE	88-on		1
442	Axxess		89-90	3	7**
443	Quest		93-on	4	7
471	Datsun/Nissan Pickup	PL620, King Cab, Hardbody	73-on	per WB	8**
498	Other light truck	Patrol (1960)	-	-	-
499	Unknown light truck				

**   Applies to front and rear impacts. Use size values for side impacts.

GV06
(30)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "35"   **NISSAN/DATSUN (Continued)**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
883	Medium/Heavy COE high entry		all	N/A	N/A
898	Other medium/heavy truck		all	N/A	N/A
899	Unknown medium/heavy truck				
999	Unknown vehicle		-	-	-

MAKE "36"   **FIAT**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	124 (Coupe/Sedan)	Sport	67-75	1	1
032	124 Spider/Racer	Spider 2000/1500	68-83	1	1
033	Brava - 131		75-82	2	2
034	850 (Coupe/Spyder)		67-73	1	1
035	128		72-79	2	2
036	X-1/9		75-83	1	1
037	Strada		79-83	2	2
398	Other automobile	600, 1100	-	-	-
399	Unknown automobile				
882	Medium/Heavy COE low entry		all	N/A	N/A
883	Medium/Heavy COE high entry		all	N/A	N/A
890	Medium/heavy COE entry position unknown		all	N/A	N/A
898	Other medium/heavy truck		all	N/A	N/A
899	Unknown medium/heavy truck				
999	Unknown vehicle		-	-	-

GV06
(31)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "37" **HONDA (ACURA: See "54")**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Civic/CRX	1300, 1500, CVCC, DX, EX, VX CRX, S, Si, HF, 4WD Wagon	all	1	1
	del Sol		93-on	1	1
032	Accord	LX, CVCC, SE-i, LX-i, EX, EX wagon 6-cylinder LX/EX	-81 82-86 87-on	1 2 3	1 9*** 9***
033	Prelude	Si	80-83 84-on	1 2	1 9***
034	600	Coupe, Sedan	all	1	1
398	Other automobile				
399	Unknown automobile				
401	Passport		94-on	3	8**
441	Odyssey		95-on	per wb	per wb
498	Other light truck		-	-	-
499	Unknown light truck				

Motorcycle

701	0-50cc	
702	51-124cc	
703	125-349cc	
704	350-449cc	
705	450-749cc	
706	750cc or greater	
709	Unknown cc	

All Terrain Cycles/Vehicles

731	0-50cc	includes all ATCs/ATVs
732	51-124cc	designed solely for
733	125-249cc	off-road use.
734	350cc or greater	
739	Unknown cc	

799	Unknown motored cycle				
999	Unknown vehicle		-	-	-

 ** Applies to front and rear impacts. Use size values for side impacts.
 *** Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impacts.

GV06
(32)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "38"   **ISUZU**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	I-Mark	S, RS, Turbo	85-89	1	1
032	Impulse	Turbo, RS	84-on	2	2
033	Stylus		90-on	2	2
398	Other automobile		-	-	-
399	Unknown automobile				
401	Trooper/Trooper II	Deluxe, LS	84-on	2	7**
402	Rodeo		91-on	3	8**
403	Amigo		89-94	2	8**
441	Oasis		96-on	TBD	TBD
471	P'up (pickup) Hombre	4 x 4	Thru 95 96-on	3	8**
498	Other light truck		-	-	-
499	Unknown light truck				
881	Medium/Heavy - CBE		all	N/A	N/A
882	Medium/Heavy COE low entry		all	N/A	N/A
883	Medium/Heavy COE high entry		all	N/A	N/A
884	Medium/Heavy unknown engine location		all	N/A	N/A
890	Medium/Heavy COE entry position unknown		all	N/A	N/A
898	Other medium/heavy truck		all	N/A	N/A
899	Unknown medium/heavy truck				
981	Conventional front engine				
982	Front engine/flat front				
983	Rear engine/flat front				
988	Other bus				
989	Unknown bus type				
999	Unknown vehicle		-	-	-

** Applies to front and rear impacts. Use size value for side impacts.

GV06
(33)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "39"   **JAGUAR**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	XJ-S Coupe		76-on	3	3
032	XJ6/12 Sedan/Coupe	L, XJ, C, 340/420 Sedan	all	3	3
033	XKE	V12, Roadster, 120	all	2	3
		2 + 2		3	3
034	X100		97-on	TBD	TBD
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

MAKE "40"   **LANCIA**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Beta Sedan - HPE		-80	2	2
032	Beta Coupe - Zagato		-82	1	1
033	Scorpion		-78	1	1
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

GV06
(34)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "41"   **MAZDA**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	RX2		72-74	2	2
032	RX3		72-78	1	1
033	RX4		74-78	2	2
034	RX7	S, GS, GSL, SE	79-on	2	2
035	GLC/Protege 323	DX, Protege (90-on)	77-on -94	1	1
036	Cosmo		76-78	2	2
037	626	GT, GS, GSL, SE	79-on	2	2
038	808		72-77	1	1
039	Mizer		76	1	1
040	R-100		-72	1	1
041	616/618		-72	2	2
042	1800		-72	2	2
043	929		88-96	3	3
044	MX-6	Turbo	88-on	2	2
045	Miata		90-on	1	1
046	MX-3	GS	92-on	1	1
047	Millenia		95-on	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
401	Navajo		91-on	3	8**
441	MPV		89-on	3	7**
471	Mazda pickup	B-2000, B-2200, B-2600, SE-5, LX, Cab Plus, B-4000	all 94-on	per WB per WB	8** 8**
498	Other light truck		-	-	-
499	Unknown light truck				
999	Unknown vehicle		-	-	-

** Applies to front and rear impacts. Use size value for side impacts.

GV06
(35)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "42"   **MERCEDES BENZ**

(Check "INCLUDES" comments carefully to determine proper code.)

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	200/220/230/240/250/260/ 280/300/320	Sedan and 5 passenger "C" only, SE, CD, D, SD, TD, TE, CE, E. *DOES NOT* include *280 SE* (75 on), *300 SD* - see code 037	all	3	3
032	230/280 SL	2 seater only	all	1	1
033	300/350/380/450/500 SL/ 560 SL	2 seater only, 300/500 SL (90-on)	all	2	2
034	350/380/420/450/560 SLC		all	4	4
035	280/300 SEL		all	4	4
036	380/420/450/500/560 SEL and 500/560 SEC/350 SDL/ 300 SDL		all	4	4
037	300 SE/380/450 SE	280 S, 280 SE (75 on), 300 SD Sedan/350 SD	all	4	4
038	600, 6.9 Sedan	Pullman	all	6	6
039	190	D, E, 2.3, 2.5	all	3	3
040	300	CE Cabriolet	93-on	3	3
041	400/500 E	SE	92-on	3	3
042	220/280 C		94-on	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
401	AAV		97-on	TBD	TBD
470	Van derivative	Kurbstar	82-on	N/A	N/A
498	Other light truck		-	-	-
499	Unknown light truck				
881	Medium/Heavy - CBE		all	N/A	N/A
882	Medium/Heavy - COE low entry		all	N/A	N/A
883	Medium/Heavy - COE high entry		all	N/A	N/A
884	Medium/Heavy: Unknown engine location		all	N/A	N/A
890	Medium/Heavy: COE entry position unknown		all	N/A	N/A
898	Other medium/heavy		all	N/A	N/A
899	Unknown medium/heavy		-	-	-
981	Medium bus		all	N/A	N/A
988	Other bus		-	-	-

GV06
(36)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "42" **MERCEDES BENZ**

(Check "INCLUDES" comments carefully to determine proper code.)

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
989	Unknown type bus				
999	Unknown vehicle		-	-	-

GV06
(37)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "43"   **MG**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Midget	MKIII, 1500	-79	1	1
032	MGB		76-79	1	1
033	MGB	GT	67-75	1	1
034	MGA		all	1	1
035	TA/TC/TD/TF		all	1	1
036	MGC	GT	-69	1	1
398	Other automobile	Sport Sedan	-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

MAKE "44" **PEUGEOT**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	304		71-73	3	3
032	403		-67	3	3
033	404		-70	3	3
		Station Wagon		4	4
034	504/505	STI, STX, Turbo, S, GL, GLS, Liberte	70-91	3	3
		Station Wagon		4	4
035	604	SL, D	77-84	3	3
036	405	Mi-16	89-91	3	9***
398	Other automobile		-	-	-
399	Unknown automobile				

Motorcycle

701	0- 50cc				
702	51-124cc				
709	Unknown cc				
799	Unknown motored cycle				
999	Unknown vehicle		-	-	-

***   Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impact.

GV06
(38)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "45"   **PORSCHE**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	911	L, S, E, T, SC, Carrera, Slopenose, Speedster all Panorama	96-on	1	1
032	912	E, T	-69	1	1
033	914	S, 1.8, 2.0, 914/6	70-76	2	2
034	924	Turbo, S	77-88	1	1
035	928	S	78-on	2	2
036	930	Turbo	79	1	1
037	944	Turbo, S	83-91	1	1
038	959		89-94	1	1
039			92-95	1	1
040	986		96-on	1	1
398	Other automobile	Spyder, Speedster, 356	-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

MAKE "46" RENAULT

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	LeCar	5	76-83	2	2
032	Dauphine/10/R-8/Caravelle	all models	thru-71	1	1
033	12	R12L, R12TL	72-77	2	2
034	15	R15TL	73-76	2	2
035	16	R16	69-72	3	3
036	17	R17, Gordini Coupe, R17TL	73-80	2	2
037	R18i	Sportwagon	81-on	2	2
038	Fuego	TL, TS, GTL, GTS, Turbo	82-85	2	2
039	Alliance/Encore GTA, Convertible	L, DL, Limited, X-37	83-on	2	2
041	Alpine	GT	87-on	per WB	per WB
044	Medallion	DL, LX	87-only	3	3
045	Premier		87-only	3	3
398	Other automobile		-	-	-

O-53

GV06
(39)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "46"   RENAULT

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
399	Unknown automobile				
999	Unknown vehicle		-	-	-

GV06
(40)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "47"   **SAAB**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	99/99E/900	S, Turbo, Cabriolet	all	2	2
032	Sonnett	II, III, V-4	68-74	1	1
033	95/96/97		-73	2	2
034	9000 CS	S, Turbo	85-on 93-on	3	3
398	Other automobile	Monte Carlo 850	-	-	-
399	Unknown auotmobile				
999	Unknown vehicle		-	-	-

MAKE "48"　　　　　　**SUBARU**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	DL/FE/G/GF/GL/GLF/STD/ Loyale	4 wheel drive, Turbo	72-89 90-94	per WB	= size
032	Star		70-71	2	2
033	360		69-70	1	1
034	Legacy	Brighton, Outback, Outback II	89-on	2	2
035	XT/XT6	4WD Turbo, convertible, DL	86-on	2	2
036	Justy	DL, GL	87-94	1	1
037	SVX		92-on	3	3
038	Impreza	Outback, Outback II	93-on	2	2
043	Brat	DL, GL	78-on	2	2
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

GV06
(41)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "49"   **TOYOTA**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Corona	Mark II, Custom, 1900, 2000, Deluxe	-82	2	2
032	Corolla	1100, 1200, 1600, SR-5, LE, Deluxe, Custom, FX16	69-85 FWD 86-on	1 2	1 9***
033	Celica	1900, 2000, GT, ST, GTS (-93)	72-on	2	2
034	Supra	Celica Supra, Soarer	79-on	3	3
035	Cressida		78-92	3	3
036	Crown	2300, 2600	-71	3	3
037	Carina	2000	72-73	2	2
038	Tercel	Corolla Tercel, 4WD Wagon	80-on	2	2
039	Starlet		81-84	1	1
040	Camry	LE, Deluxe, XLE, Coupe	83-on	3	3
041	MR-2		85-95	1	1
042	Paseo		92-on	1	1
043	Avalon		95-on	3	3
398	Other automobile	2000 GT Coupe (1960s)	-	-	-
399	Unknown automobile				
401	4-Runner		85-on	3	8**
402	RAV-4		96-on	TBD	TBD
421	Landcruiser		76-on	3	8**
441	Minivan Previa	LE, Cargo	84-90 91-on	1 4	7** 7**
471	Pickup	SR-5, Extra Cab, Sport, LN44, Chinook, Wonder Wagon	74-on	per WB	8**
472	Tacoma		95-on	TBD	TBD
481	T-100		93-on	per WB	8**
498	Other light truck		-	-	-
499	Unknown light truck				
999	Unknown vehicle		-	-	-

  **   Applies to front and rear impacts. Use size value for side impacts.
 *** Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impact.

GENERAL VEHICLE FORM

GV06
(42)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "50"   **TRIUMPH**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Spitfire	I, II, III, IV, 1500	-81	1	1
032	GT-6	MK3	67-73	1	1
033	TR4	TR2, TR3, TR4A	-68	1	1
034	TR6		69-76	1	1
035	TR7/8		75-81	1	1
036	Herald	Vitesse	-	-	-
037	Stag		71-73	2	2
398	Other automobile	2000, 1200 series	-	-	-
399	Unknown automobile				

Motorcycles

701	0- 50cc				
702	51-124cc				
703	125-349cc				
704	350-449cc				
705	450-749cc				
706	750cc or greater				
709	Unknown cc				
799	Unknown motored cycle				
999	Unknown vehicle		-	-	-

GV06
(43)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "51"   **VOLVO** (Includes Volvo/White and Volvo/GM Heavy Trucks)

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	122	S	-68	3	3
032	142/144/145	S, E, GL, GLS, Deluxe	-74	3	3
033	164	S, E	69-75	3	3
034	240/242/244/245	DL, GL, GLE, GLT, Deluxe	75-on	3	3
035	262/264/265	GL	76-82	3	3
036	1800	E, S, ES	-73	2	2
038	760	GLE, Turbo	83-90	3	3
	780		87-92	3	3
039	740	GLE, GT, Turbo, GL	86-92	3	3
040	940	GLE, Turbo, SE	91-on	3	3
041	960		92-on	3	3
042	850	GLT, Wagon	93-on	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
881	Medium/Heavy CBE		all	N/A	N/A
882	Medium/Heavy COE low entry		all	N/A	N/A
883	Medium/Heavy COE high entry		all	N/A	N/A
884	Medium/Heavy: Unknown engine location		all	N/A	N/A
890	Medium/Heavy: COE entry position unknown		all	N/A	N/A
898	Other medium/heavy truck		all	N/A	N/A
899	Unknown medium/heavy truck		-	-	-
981	Medium bus		all	N/A	N/A
988	Other bus		all	N/A	N/A
989	Unknown type bus				
999	Unknown vehicle		-	-	-

GV06
(44)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "52"   **MITSUBISHI**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Starion	2 + 2, LE, Turbo	83-90	2	2
032	Tredia	L, LS, Turbo	83-88	2	2
033	Cordia	L, Turbo	83-88	2	2
034	Galant	ECS, Sigma (thru 88)	85-on	3	3
035	Mirage	L, Turbo	85-on	1	1
036	Precis		88-on	1	1
037	Eclipse		90-on	2	2
038	Sigma		89-90	3	3
039	3000GT	Spyder, VR-4	91-on	2	2
040	Diamante		92-on	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
401	Montero	Sport	85-on	1	8**
441	Minivan	LS	87-on	1	7**
442	Expo Wagon	LRV, Sport	92-95	99.2" WB = 2 107.1 WB = 3	7** 7**
471	Pickup	Mighty Max, SPX, 4 x 4	all	3	8**
498	Other light truck		-	-	-
499	Unknown light truck				
882	Medium/Heavy - COE low entry	FUSO FE	all	N/A	N/A
898	Other medium/heavy truck		-	-	-
899	Unknown medium/heavy truck				
981	Conventional front engine				
982	Front engine/flat front				
983	Rear engine/flat front				
988	Other bus				
989	Unknown type bus				
999	Unknown vehicle		-	-	-

**   Applies to front and rear impacts. Use size value for side impacts.

GV06
(45)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "53"   **SUZUKI**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	SA310	GLX	86-on	1	1
034	Swift	GTi, GTX	89-on	1	1
035	Esteem		95-on	TBD	TBD
398	Other automobile		-	-	-
399	Unknown automobile				
401	Samurai	Standard, Deluxe	85-95	1	8**
402	Sidekick	Sidekick Sport	89-on	2	8**
403	X-90		96-on	TBD	TBD
498	Other light truck		-	-	-
499	Unknown light truck				

Motorcycles

701	0- 50cc	
702	51-124cc	
703	125-349cc	
704	350-449cc	
705	450-749cc	
706	750cc-over	
709	Unknown cc	

All Terrain Cycles/Vehicles

731	0- 50cc	includes all ATCs/ATVs
732	51-124cc	designed solely for
733	125-349cc	off-road use.
734	350cc or greater	
739	Unknown cc	

799	Unknown motored cycle				

999	Unknown vehicle		-	-	-

**   Applies to front and rear impacts. Use size value for side impacts.

GV06
(46)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "54"   **ACURA**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Integra	RS, LS, GS	86-on	2	9***
032	Legend RL		86-95 96-on	3	9***
033	NSX TL	NSX-T 2.5, 3.2	91-95 96-on	per WB	per WB
034	Vigor		92-94	3	9***
035	CL	Coupe	96-on	TBD	TBD
398	Other automobile		-	-	-
399	Unknown automobile				
401	SLX		96-on	TBD	TBD
498	Other light truck				
499	Unknown type light truck				
999	Unknown vehicle		-	-	-

*** Code 9 applies only to frontal impacts. Use size code for stiffness for side or rear impact.

MAKE "55"   **HYUNDAI**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Pony		84-88	2	2
032	Excel	GL, GLS	84-94	1	1
033	Sonata		89-on	3	3
034	Scoupe		91-95	1	1
035	Elantra		92-on	2	2
036	Accent		95-on	1	1
037	Tiburon		97-on	TBD	TBD
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

GV06
(47)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "56"   MERKUR

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	XR4Ti	Turbo	85-89	3	3
032	Scorpio	Turbo	87-90	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
999	Unknown vehicle		-	-	-

GV06
(48)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "57"   **YUGO**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	GV	GVX, Cabriolet	86-92	1	1
398	Other automobile		-	-	-
399	Unknown automabile				
999	Unknown vehicle		-	-	-

MAKE "58" **INFINITI**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	M30		90-92	3	3
032	Q45		90-on	4	4
033	G20		91-on	2	2
034	J30		93-on	3	3
035	I30		96-on	per WB	per WB
398	Other automobile		-	-	-
401 TBD	T30		97-on	TBD	
498	Other light truck				
499	Unknown light truck				
399	Unknown automobile				
999	Unknown vehicle		-	-	-

MAKE "59" **LEXUS**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	ES-250/ES-300		90-on	3	3
032	LS-400		90-on	4	4
033	SC-300/SC-400	2-door Coupe	92-on	3	3
034	GS-300		94-on	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
421	LX 450		96-on	3	8**
498	Other light truck				
499	Unknown light truck				
999	Unknown vehicle		-	-	-

**8   Applies to front and rear impacts. Use size value for side impacts.

O-66

GV06
(50)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "60"   **DAIHATSU**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Charade		90-92	3	3
398	Other automobile		-	-	-
399	Unknown automobile				
401	Rocky		90-92		
498	Other light truck		-	-	-
499	Unknown light truck				
999	Unknown vehicle		-	-	-

MAKE "61"   **STERLING**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	827S	Li	86-91	3	3
398	Other automobile		-	-	-
399	Unknown automobile		-	-	-
999	Unknown vehicle		-	-	-

MAKE "62" **LAND ROVER**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
401	Discovery (LR)		94-on	2	7**
422	Defender 90 (LR)		94-on	1	7**
421	County LWB (RR)		-94	3	7**
	Count Classic (RR)		94-on	2	7**
422	4.0 SE (RR)		95-on	3	7**
498	Other light truck				
499	Unknown light truck				
999	Unknown vehicle		-	-	-

GV06
(51)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "63"   **KIA**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Sephia		all	per WB	= size
398	Other automobile		-	-	-
399	Unknown automobile		-	-	-
401	Sportage		96-on	-	-
498	Other light truck				
499	Unknown light truck				
999	Unknown vehicle		-	-	-

GV06
(52)

Variable Name: Vehicle Model (specify): [cont'd.]

MAKE "69"   **OTHER FOREIGN**

CODE	MODEL	INCLUDES	YEAR	SIZE	STIFFNESS
031	Aston Martin	Lagonda, Vantage, Volante, Saloon	all	per WB	= size
032	Bricklin		all	per WB	= size
033	Citreon		all	per WB	= size
034	Delorean		all	per WB	= size
035	Ferrari		all	per WB	= size
036	Hillman		all	per WB	= size
037	Jensen	Healy	all	per WB	= size
038	Lamborghini	Countach 5000S, Jalpa	all	per WB	= size
039	Lotus	Europe, Esprit	all	per WB	= size
040	Maserati	Biturbo	all	per WB	= size
041	Morris	Minor	all	per WB	= size
042	Rolls Royce/Bentley	Cloud/shadow series	all	per WB	= size
044	Simca		all	per WB	= size
045	Sunbeam		all	per WB	= size
046	TVR		all	per WB	= size
048	Desta		all	per WB	= size
049	Reliant		all	per WB	= size
052	Bertone		all	per WB	= size
053	Lada		all	per WB	= size
398	Other make		all	per WB	= size
399	Unknown make				

APPENDIX P
NPTS AND CENSUS JOURNEY TO WORK

USING NPTS AND CENSUS JOURNEY TO WORK

SUPPLEMENT EACH OTHER

The Census journey-to-work data provide a wealth of data on commuting, particularly data that is valid for small geographic areas, such as a city, town, place or census tract. NPTS provides coverage on travel for all purposes, not just commuting, and NPTS provides greater detail on travel characteristics than Census. However, NPTS data may not be valid for individual states or metro areas.

HOW TO USE NPTS DATA AT A STATEWIDE OR REGIONAL LEVEL

There are two ways NPTS may be used.   First, NPTS can provide default values for data such as trip rates from areas of similar size in your region of the county.

Second, the 1995 NPTS data **may** allow for the construction of synthetic datasets for states or metro areas. This is a researchable concept that must be tested. With the 1990 NPTS, there were limited variables which could be used to select a "similar population" to reflect one's own region. These were variables such as MSA size categories and residential zipcode population densities. In the 1995 NPTS, many variables have been added to describe the residential area and the workplace location of respondents, without disclosing the actual geography. Among the many variables are:
- population density at the tract and block group,
- median household income and median housing value at the tract and block group,
- employment density at the tract level,
- housing tenure (own/rent) at the tract and block group level, and
- types of industries at the workplace location.

For a complete description of these variables, see **Appendix L.**

TO USE NPTS WITH CENSUS JOURNEY TO WORK

These two datasets may be used to supplement each other, but the user needs to be aware of the differences in the two sources, as described below.

COMPARISON OF NPTS AND CENSUS JOURNEY TO WORK

POPULATION COVERAGE

- Census journey-to-work data covers the entire country with a sampling rate of approximately 1 in 12 households and a simple random-sampling procedure, meaning that all households throughout the country had an equal probability of being included

- NPTS covers the entire country, but uses a stratified sampling procedure. The overall sampling rate is approximately 1 in 4800 households, but the sampling strategy means that households in some areas have a greater probability of being selected than households in other areas

- With the addition to the data release of the add-on samples, the overall sampling rate changes to about 1 in 2400 households, but the differences in probabilities of households in add-on areas become much greater than households in other areas.

- The census samples from a sampling frame that purportedly includes all mailing addresses in the U.S.

- The NPTS samples from a sampling frame that effectively includes all residential telephone numbers in the U.S., so that households without telephones are excluded from the sample. In addition, households in which persons are out of the home so much of the time that the telephone was never answered, or an answering machine was the only response received will not have participated in the survey.

- See summary of differences in Table P-1.

DIFFERENCES IN TRAVEL COVERAGE BETWEEN NPTS AND CENSUS

- Census requests details only about the journey to work

- NPTS requests details about all travel made by persons in the household, whether employed or not, and including travel for all purposes

- Census requests data about the "usual" journey to work, at least in reference to the week preceding the census, or the last full week the person worked

- NPTS requests travel data for a specific day for eavh household.

P-2

- Census collects limited data on the journey to work, including collecting only the main mode of travel (defined as the mode used for the longest time)

- NPTS collects data on both the usual or typical journey to work as well as the actual work trip, if a work trip was made on the household's travel day. For travel day trips, extensive data is collected on each trip, including data about all modes of travel used on any trip in which transit or Amtrak was used for a part of the trip.

DIFFERENCES IN SAMPLE SIZE AND GEOGRAPHY

- On the average, the Census journey-to-work data will contain data on about 40,000 households in an urban area of 1 million population.

- On the average, the NPTS will contain data on only about 80 households in an urban area of 1 million population.

- Similar contrasts will exist at other levels of jurisdiction, except for add-on areas.

- The most important implication of this is that journey-to-work data can be used for individual urban areas , even relatively small ones, while NPTS cannot provide reliable results for individual urban areas, except for add-on areas.

Table P-1
COMPARISON OF NPTS AND CENSUS JOURNEY TO WORK

ITEM	NPTS	CENSUS JTW
Sampling Frame	all residential telephone numbers in U.S.	all household mailing addresses in U.S.
Sampling Rate	approximately 1 in 2400 households	1 in 12 households
Sample Size	about 80 households in a metro area of 1 million people, except add-ons	about 40,000 households in a metro area of 1 million people
Sampling Procedure	list-assisted sample	simple random sample
Survey Instrument	one-day travel diary and telephone interview	mail-out self-administered survey form (long form of the decennial census)
Travel Coverage	all travel for one day	typical journey to work in previous week
Persons Reporting	Everyone 5 years and older	Workers
Period Coverage	full year	week prior to April 1 of decennial Census year
Travel Details	Usual trip - all modes, main mode, time trip started, travel time, trip distance Travel day - mode, time, vehicle occupancy, etc.	Usual trip - main mode, time trip started, travel time
Frequency	currently every 5 to 7 years, possibly a continuous survey in the future	every 10 years

Reference: Stopher, Peter and Metcalf, Helen M. A., PlanTrans, Draft of Training Modules for NPTS Data Releases, Summer, 1997

APPENDIX Q
LINKED & UNLINKED TRIPS

DEFINITIONS

Understanding the difference between linked and unlinked trips is critical primarily for understanding transit trips. One problem pertains to how transit trips are reported. If you take a bus, then transfer to another bus, this is counted as 2 trips for the FTA National Transit Database (Section 15). However, this is considered one trip in regional transportation planning models.

Origin	Destination	Mode	Purpose
Home	Bus transfer station	Bus	change to another bus
Bus transfer station	Work	Bus	to work

Another transit trip linking issue relates to access and egress to the transit service. Transit trips may begin with a walk trip, a passenger ride in a car ("kiss and ride"), driving to a park & ride lot, or may involve both bus and rail. These access and egress choices may occur at both ends of the trip.

For the individual travelling, they view the entire sequence of home to work as one trip. For the transportation planner, this same travel may be considered as one linked trip composed of three unlinked trips.

Origin	Destination	Mode
HOME	Park & Ride Lot	Drive alone in private veh
Park & Ride Lot	14th St and 7th Ave	Bus
14th St & 7th Ave	WORK: 18th St and 8th Ave	Walk

The purpose of all three links is to reach the WORK destination. In the NPTS file, these are considered "segmented trips" and are only collected for trips in which at least one link or segment is on public transportation or Amtrak.

Note that during the NPTS telephone interview, the respondent could select a purpose of "changing travel mode," but these trips were subsequently edited into the segmented

trips during the data cleaning phase.

TRIP CHAINING

Linked and unlinked trips differs from the concept of trip chaining. Trip chains typically either begin or end at HOME or WORK and may include stops for different activities, but most likely have the same travel mode.

Origin	Destination	Activity/Purpose	Travel Mode
HOME	School	Drop off child	Drive w/passenger
School	Grocery Store	Buy doughnuts for office	Drive Alone
Grocery Store	WORK	Work	Drive Alone

One travel demand model for an MPO (Boise, Idaho) has incorporated trip chaining into a regional model using a tour-based approach. A tour was defined as a sequence of trip segments that start at home and end at home, with home-based WORK tours and home-based OTHER tours. (Citation: Yoran Shiftan and Stephen Decker, "A Practical Method to Estimate Trip Chaining" 1995 ITE Compendium of Technical Papers.) Cambridge Systematics (Thomas Rossi and Yoran Shiftan) are conducting additional work on tour-based models for Portland, Oregon metropolitan area as part of the U.S. DOT Travel Model Improvement Program (TMIP).

APPENDIX R
RELATED DATA SOURCES

PURPOSE

Many of the questions posed for the NPTS data require additional analysis of related data sources. **Appendix P** contains a comparison of NPTS and Census Journey to Work data. There are several other datasets that are often used in conjuction with NPTS. Summaries of these datasets are contained in this Appendix and were provided by the Bureau of Transportation Statistics, *Directory of Transportation Data Sources*. The related data sources, listed in subject order are:

Commuting:
> Census of Transportation Planning Package (CTPP)
> Census Journey to Work

Demographics:
> Public-Use Microdata Sample (PUMS)

Energy Use:
> Residential Energy Consumption Survey (RECS)
> Residential Transportation Energy Consumption Survey (RTECS)

Long-Distance Travel:
> American Travel Survey (ATS)
> National Travel Survey (NTS)

Motor Vehicle Accidents:
> Fatal Accident Reporting System (FARS)
> National Accident Sampling System (NASS)
> > Crashworthiness Data System
> > General Estimates System

Transit Use:
> National Transit Database

Transportation Costs:
> Consumer Expenditure Survey

Census of Population and Housing, 1990:

Census Transportation Planning Package (CTPP)

Mode

> Highway, Transit

Abstract

> The CTPP is a set of cost reimbursable special tabulations, produced for the Department of Transportation in each state. The detailed cross-tabulations have been designed to meet the needs of state and local transportation planners, and are provided for counties, places of 2,500 or more inhabitants and custom-defined Traffic Analysis Zones (TAZs). The CTPP is a continuation of the 1970 and 1980 Urban Transportation Planning Package programs. Geographic Coverage: The CTPP statewide tabulations will provide data for persons who live or work in the state. Data will be tabulated for the state, each county, county subdivision (only available for 9 states for workplace data), and place of 2,500 or more persons. Totals for state parts of MSAs, CMSAs, and PMSAs will also be provided, as will urbanized area totals (place of residence data only). The statewide tabulations will consist of six parts: Part A, tabulations by place of residence; Part B, tabulations by place of work; Part C tabulations by place of residence by place of work; Part D, tabulations by place of residence for areas of 75,000 or more persons; Part E, tabulations by place of work for areas of 75,000 or more persons; Part F, tabulations of place of residence by place of work for areas of 75,000 or more persons. Urban tabulations are produced for the Metropolitan Planning Organizations (MPOs) in each area where the Census TIGER/Line files contain address ranges. Data will be tabulated for either standard census geography like census tracts of block groups, or for locally- defined, custom geographic areas like TAZs. Subtotals for study area, CTPP Region, MSA, CMSA, PMSA, and urbanized area (place of residence data only) will also be provided. The urban tabulation will consist of seven parts: Part 1, tabulations by small area of residence; Part 2 tabulations by small area of work; Part 3, tabulations of small area of residence by small area of work; Part 4, tabulations of large area of residence; Part 6, tabulations of super district of residence by super district of work for regions with 1 million more persons; Part 7, tabulations by census tract of work; and Part 8, tabulations of small area of residence by small area of work for regions with one million or more persons. There is no Part 5 in the urban element 1990 CTPP.

Source of Data

> 1990 Census of Population and Housing. Approximately 17.7 million housing units were sampled nationwide.
>
> Attributes:
> Geographic Coverage of Data: See Abstract
> Time Span of Data Source: 1990
> Update Frequency: Decennial
> File Format: ASCII, EBCDIC
> Media: 9-track Tape, 6250/1600 bpi; Tape Cartridge, IBM 3480 Compatible; CD- ROM (parts A, B, C)

Significant Features/Limitations

> 1990 Census data are base on a sample, and subject to sampling and nonsampling errors.

Sponsoring Organization

> Department of Commerce, Bureau of the Census, Journey-to-Work and Migration Statistics Branch

Availability

> CD-ROM: DOT/Bureau of Transportation Statistics, 400 7th Street, SW, Room 3430, Washington, DC 20590; telephone, (202) 366-DATA; fax, (202) 366-3640. CD-ROM

currently available for Parts A, B, and C only. Urban data available in Spring 1996. Tapes: Contact state transportation agency or local metropolitan planning organization.
Contact for Additional Information:

Ms. Celia Boertlein
Subject-Matter Specialist
DOC/Bureau of the Census, Journey-to-Work and Migration Statistics Branch
(301) 457-2454, FAX: (301) 457-2481
EMAIL: psalopek@census.gov

Ms. Gloria Swieczkowski
Subject-Matter Specialist
DOC/Bureau of the Census, Journey-to-Work and Migration Statistics Branch
(301) 457-2454, FAX: (301) 457-2481
EMAIL: psalopek@census.gov

Ms. Carol Faber
Subject-Matter Specialist
DOC/Bureau of the Census, Journey-to-Work and Migration Statistics Branch
(301) 457-2454, FAX: (301) 457-2481
EMAIL: psalopek@census.gov

Census of Population and Housing, 1990: Subject Summary Tape File 20 (SSTF 20) - Journey-to-Work in the United States [D]

Mode
> Highway, Transit

Abstract
> This data base includes summary characteristics of economic, social, and housing data from the 1990 census. Characteristics related to journey-to-work include place of work, means of transportation to work, travel time to work, time leaving home to go to work, and private vehicle occupancy for workers 16 years old and over.

Source of Data
> 1990 Census of Population and Housing. Approximately 17.7 million housing units were sampled nationwide.

Attributes

Geographic Coverage of Data: SSTF 20 provides residence data for the United States, metropolitan areas, central cities, and balance of metropolitan areas in the aggregate, non-metropolitan areas in the aggregate, individual metropolitan areas, and central cities within each metropolitan area.
> Time Span of Data Source: 1990
> Update Frequency: Decennial
> File Format: ASCII, EBCDIC
> Media: 9-track Tape, 6250/1600 bpi; Tape Cartridge, IBM 3480 Compatible; CD-ROM; CD-ROM with extract capability forthcoming

Significant Features/Limitations
> 1990 Census data are based on a sample, and subject to sampling and nonsampling errors.

Sponsoring Organization
> Department of Commerce, Bureau of the Census, Journey-to-Work and Migration Statistics Branch

Availability
> DOC/Bureau of the Census, Customer Services, Washington, DC 20233; telephone, (301) 457-4100. Price determined by media selected. CD-ROM with extract software should be available in Winter 1996.

Contact for Additional Information
> Mr. Phillip A. Salopek
>> Subject-Matter Specialist
>> DOC/Bureau of the Census, Journey-to-Work and Migration Statistics Branch
>> (301) 457-2454, FAX: (301) 457-2481
>> EMAIL: psalopek@census.gov
> Ms. Celia Boertlein
>> Subject-Matter Specialist
>> DOC/Bureau of the Census, Journey-to-Work and Migration Statistics Branch
>> (301) 457-2454, FAX: (301) 457-2481
>> EMAIL: psalopek@census.gov

Census of Population and Housing, 1990 :
Public Use Microdata Sample (PUMS)

Mode

    Highway, Transit

    Abstract:

    PUMS are computerized files containing most population and housing characteristics for a sample of individual long-form census records. Characteristics related to journey-to-work include place of work, means of transportation to work, travel time to work, time leaving home to go to work, and private vehicle occupancy for workers 16 years old and over.

Source of Data

    1990 Census of Population and Housing. Approximately 17.7 million housing units were sampled nationwide.

Attributes

    Geographic Coverage of Data: U.S. totals, state, District of Columbia., The 5% PUMS files present most population and housing characteristics on the sample questionnaire for a 5-percent sample of housing units. It shows data for all states and various subdivisions within them including most counties with 100,000 or more inhabitants individually, and groups of counties elsewhere. The 1% PUMS files present most population and housing characteristics on the sample questionnaire for a 1-percent sample of housing units. It shows data for all metropolitan territory and most MAs with 100,000 or more inhabitants individually, and groups of MAs elsewhere. The 3% Elderly PUMS files present most population and housing characteristics on the sample questionnaire for a 3-percent sample of all housing units which have one or more persons who are 60 years old or older. It shows data for all metropolitan area territory and most MAs with 100,000 or more inhabitants individually, and groups of MAs elsewhere.

    Time Span of Data Source: 1990

    Update Frequency: Decennial

    File Format: ASCII, EBCDIC

    Media: 9-track Tape, 6250/1600 bpi; Tape Cartridge, IBM 3480 Compatible; CD-ROM

Significant Features/Limitations

    These records contain no names or addresses, and geographic identification is sufficiently broad to protect confidentiality. 1990 Census data are based on a sample, and subject to sampling and nonsampling errors.

Sponsoring Organization

    Department of Commerce, Bureau of the Census, Journey-to-Work and Migration Statistics Branch

Availability

    Tape, CD-ROM: DOC/Bureau of the Census, Customer Services, Washington, DC 20233; telephone, (301) 457-4100. Price determined by file size.

Contact for Additional Information

    Mr. Phillip A. Salopek
        Subject-Matter Specialist
        DOC/Bureau of the Census, Journey-to-Work and Migration Statistics Branch
        (301) 457-2454, FAX: (301) 457-2481
        EMAIL: psalopek@census.gov
    Ms. Celia Boertlein
        Subject-Matter Specialist
        DOC/Bureau of the Census, Journey-to-Work and Migration Statistics Branch

(301) 457-2454, FAX: (301) 457-2481
EMAIL: psalopek@census.gov
Ms. Gloria Swieczkowski
Subject-Matter Specialist
DOC/Bureau of the Census, Journey-to-Work and Migration Statistics Branch
(301) 457-2454, FAX: (301) 457-2481
EMAIL: psalopek@census.gov

Residential Energy Consumption Survey (RECS), 1990:
Residential Transportation Energy Consumption Survey (RTECS), 1991

Mode

    Multimodal

Abstract

    This database contains 1990 RECS basic data on housing unit characteristics, annualized 1990 fuel consumption and expenditures and end-use estimates for space heating, air conditioning, water heating and appliances. The 1991 RTECS contains basic data on motor vehicle stock, vehicle miles traveled, Vehicle Identification Number (VIN) data and motor fuel consumption and expenditures. It also includes complete documentation for the survey data files. The 1990 RECS data file on 9 track tape include a SAS file description that can be used to create SAS datasets.

Source of Data

    Interviews with households.

Attributes

    Geographic Coverage of Data: U.S. totals, Census divisions

    Time Span of Data Source: 1990/RECS; 1991/RTECS

    First Developed: 1980/RECS; 1983/RTECS

    Update Frequency: Triennial

    Last Update: 1990/RECS; 1991/RTECS

    Number of Records: ~5-6,000/RECS; 3,000/RTECS

    File Size: 3MB, uncompressed

    File Format: ASCII, dBase

    Media: 9-track Tape, 1600/6250 bpi; Diskette, Printed source

Significant Features/Limitations

    The smallest unit of analysis is the household and household vehicle. However, the finest geographic identification available is the Census division.

Corresponding Print Source

Residential Energy Consumption Survey, 1980, 1981, 1982, 1984, 1987, 1990

Residential Transportation Energy Consumption Survey, 1983, 1985, 1988, 1991

Sponsoring Organization

    Department of Energy, Energy Information Administration, Office of Energy Markets and End Use

Availability

    National Energy Information Center, Washington, DC, 20585; telephone, (202) 586-1119 or Office of Scientific and Technical Information (OSTI); telephone, (615) 576-8401; Internet: http://www.eia.doe.gov or National Technical Information Service, Springfield, VA 22161; telephone, (703) 487-4650. The 1993 RECS data are now available but contain only three variables relating to transportation: DRIVEMON - number of drivers in household, DRIVECAR - have regular use of vehicle, VEHICLES - number of vehicles. The 1994 RTECS data should be available in 1996.

Contact for Additional Information

    Mr. Robert Latta (RECS)

        Data Manager

        DOE/EIA, EI-631

        (202) 586-1385, FAX: (202) 586-0018

        EMAIL: rlatta@eia.doe.gov

    Mr. Ron Lambrecht (RTECS)

        Data Manager

        DOE/EIA, EI-632

(202) 586-4962, FAX: (202) 586-0018
EMAIL: rlambrec@eia.doe.gov

American Travel Survey 1995

Mode

Multimodal

Abstract

The American Travel Survey 1995 measures interstate and intermetropolitan passenger travel nationwide by trip and traveler characteristics for all modes and for intermodal combinations.

Source of Data

Survey of ~80,000 households in the United States.

Attributes

Geographic Coverage of Data: United States
Time Span of Data Source: 1995
First Developed: 1994
Update Frequency: Quinquennial
Last Update: 1977
Number of Records: TBD
File Size: TBD
File Format: TBD
Media: Electronic, Printed Sources

Sponsoring Organization

Department of Transportation, Bureau of Transportation Statistics

Availability

DOT/Bureau of Transportation Statistics, 400 7th Street, SW, Room 3430, Washington, DC 20590; telephone, (202) 366-3282; fax, (202) 366-3640.

Contact for Additional Information

Ms. Susan Lapham
Survey Manager
DOT/BTS, K-20
(202) 366-9913, FAX: (202) 366-3640
EMAIL: susan.lapham@bts.gov

National Travel Survey

Mode
> Multimodal

Abstract
> This survey measures the travel activity of U.S. adult residents. The survey, conducted continuously since 1979, is based on telephone interviews with a national probability sample of 1,500 U.S. adults each month. Results from all client questions are proprietary and may be tabulated against all other trip and demographic data collected through the survey at no additional cost. For the National Travel Survey, a trip is defined as traveling away from home in one direction of 100 miles or more, with and without overnight stay.

Source of Data
> Survey of 1,500 U.S. Adults.

Attributes
> Geographic Coverage of Data: United States
> Time Span of Data Source: Current year
> First Developed: Ongoing
> Update Frequency: 1994

Sponsoring Organization
> Travel Industry Association of America

Availability
> TIAA, Attn Publication Department, 1100 New York Avenue, NW, Suite 450, Washington, DC 20078-2188, telephone, (202) 408-1832; fax, (202) 408-1255.

Contact for Additional Information
> Staff
>> TIAA, Publication Department
>> (202) 408-1832, FAX: (202) 408-1255

Fatal Accident Reporting System (FARS)

Mode
> Highway

Abstract
> This system provides a census of all fatal traffic crashes in the U.S. It was developed to assist NHTSA in identifying traffic safety problems, developing and implementing vehicle and driver countermeasures, and evaluating motor vehicle safety standards and highway safety initiatives.

Source of Data
> Under cooperative agreements with NHTSA, state employees extract data from medical examiners, coroners, emergency medical, and police accident reports. Data are also extracted from driver, vehicle and roadway classification records.

Attributes
> Geographic Coverage of Data: 50 states, District of Columbia, Puerto Rico
> Time Span of Data Source: 1975-1993
> First Developed: 1975
> Update Frequency: Semiannual
> Last Update: 05/93
> Number of Records: ~300,000/year
> File Size: 30MB
> File Format: SAS, Sequential, TPL
> Media: CD-ROM, Tape, Printed source

Significant Features/Limitations
> Fatal crash data only. Detailed information on crash, vehicle, driver and occupant characteristics. Thirty day fatalities, no nonfatal crash data. CD-ROM contains data for 1988-1993.

Corresponding Print Source

Fatal Accident Reporting System: A Review of Information on Fatal Traffic Crashes in the United States annual reports, 1975-1993

Sponsoring Organization
> Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis

Availability
> CD-ROM: DOT/Bureau of Transportation Statistics, 400 7th Street, SW, Room 3430, Washington, DC 20590, telephone, (202) 366-3282; fax, (202) 366-3640. Tape: DOT/RSPA, Volpe National Transportation Systems Center, DTS-44, 55 Broadway, Cambridge, MA 02142; telephone (617) 494-2640; fax, (617) 494-3633. Price, $170/year - user manual provided with tape purchase. Printed Source: DOT/NHTSA, National Center for Statistics and Analysis, NRD-30, 400 7th Street, SW, Washington, DC 20590; telephone, (202) 366-4709; fax, (202) 366-7078.

Contact for Additional Information
> Mr. Chuck Venturi
>> Data Collection
>> DOT/NHTSA, NRD-30
>> (202) 366-4709, FAX: (202) 366-7078
> Ms. Delmas Johnson
>> Data Analysis
>> DOT/NHTSA, NRD-30
>> (202) 366-5373, FAX: (202) 366-7078

National Accident Sampling System Crashworthiness Data System (NASS/CDS)

Mode
> Highway

Abstract
> This system provides information on a nationally representative sample of police-reported crashes involving at least one towed passenger car, light truck, van or utility vehicle in the U.S. The NASS CDS was derived from the NASS CSS (Continuous Sampling System) when the focus on traffic crashes was shifted to a passenger vehicle crashworthiness system. This change was made to identify traffic safety problems, develop and implement vehicle and driver countermeasures, and evaluate motor vehicle safety standards.

Source of Data
> Data are extracted, by contracted researchers, from police accident reports, vehicle and scene inspections, medical examinersÕ and coronersÕ reports, emergency room, and hospital records, driver and occupant interviews, and witnesses in 24 sites across the United States.

Attributes
> Geographic Coverage of Data: National sample (24 sites) of police-reported crashes
> Time Span of Data Source: 1988-present
> First Developed: 1988
> Update Frequency: Annual
> Last Update: 09/95
> Number of Records: 5,000 crashes/year
> File Size: 9.5MB
> File Format: SAS, Sequential
> Media: Tape, CD-ROM

Significant Features/Limitations
> Nationally representative sample of towed passenger vehicle crashes; detailed injury information on those individuals who were injured or killed; detailed vehicle inspection for damage information on towed vehicles involved in the crash; availability of injury and vehicle damage information dictated by the level of cooperation with hospitals, tow yards, drivers, etc.

Sponsoring Organization
> Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis

Availability
> DOT/RSPA, Volpe National Transportation Systems Center, DTS-44, 55 Broadway, Cambridge, MA 02142; telephone, (617) 494-2640; fax, (617) 494-3633. Price, $150 per tape/year. User manual provided with tape purchase.

Contact for Additional Information
> Mr. Lee Franklin
> > Data Collection
> > DOT/NHTSA, NRD-30
> > (202) 366-5390, FAX: (202) 366-5374
> > EMAIL: lfranklin@nhtsa.dot.gov
> Mr. Terry Klein
> > Data Analysis
> > DOT/NHTSA, NRD-30
> > (202) 366-0328, FAX: (202) 366-7078
> > EMAIL: tklein@nhtsa.dot.gov

National Accident Sampling System General Estimates System (NASS/GES)

Mode

> Highway

Abstract

> This system provides information on a probability sample of all severities of police-reported traffic crashes in the U.S. GES was created to identify highway safety problem areas, provide a basis for regulatory and consumer initiatives, and form the basis for cost and benefit analyses of highway safety initiatives.

Source of Data

> NHTSA-contracted coders enter the GES data directly from sampled police accident reports. Data are from 60 geographic sites across the U.S. Data collectors make weekly, biweekly, or monthly visits to approximately 400 police agencies within 60 sites where they select a random sample of Police Accident Reports (PARS).

Attributes

> Geographic Coverage of Data: National sample (60 sites) of police-reported crashes
> Time Span of Data Source: 1988-present
> First Developed: 1988
> Update Frequency: Annual
> Last Update: 1994 data year
> Number of Records: ~245,696/year
> File Size: 38.6MB
> File Format: SAS, Flat File
> Media: CD-ROM, Tape, Printed source

Significant Features/Limitations

> National estimates with measurable errors. Information on all severities of crashes and vehicle types. Data from police accident reports only. CD-ROM contains data for 1988-1994.

Corresponding Print Source

General Estimates System: A Review of Information on Police-Reported Traffic Crashes in the United States annual reports, 1988-1991

1992-1994 Traffic Safety Facts annual reports

Sponsoring Organization

> Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis

Availability

> CD-ROM: DOT/Bureau of Transportation Statistics, 400 7th Street, SW, Room 3430, Washington, DC 20590; telephone, (202) 366-3282; fax, (202) 366-3640. Tape: DOT/RSPA, Volpe National Transportation Systems Center, DTS-44, 55 Broadway, Cambridge, MA 02142, telephone, (617) 494-2640; fax, (617) 494-3633. Printed Source: DOT/NHTSA, National Center for Statistics and Analysis, NRD-30, 400 7th Street, SW, Washington, DC 20590; telephone, (202) 366-5362/5378; fax, (202) 366-7078.

Contact for Additional Information

> Mr. Gary Toth
>> Data Collection
>> DOT/NHTSA, NRD-30
>> (202) 366-5378, FAX: (202) 366-7078
>> EMAIL: gtoth@nhtsa.dot.gov

National Transit Database [D]

Mode

Multimodal

Abstract

The National Transit Database contains detailed financial and operating data for over 500 transit agencies, including information on capital expenditures, revenues, expenses, vehicle inventories, employees, maintenance, energy, and safety and modal data on transit service supplied and consumed for over 13 report years. These data are required under Section 15 of the Federal Transit Act (FT Act) which provides for the establishment of a uniform system of accounts and records plus a reporting system for the collection and dissemination of data on public mass transit. Data are provided for over 500 transit agencies, including systems operated by transit authorities, states, city departments, and private operators under contract to public agencies.

Source of Data

The database contains annual financial and operating data filed directly by transit agencies.

Attributes

Geographic Coverage of Data: U.S. totals
Time Span of Data Source: Calendar year
First Developed: 1978
Update Frequency: Annual
Number of Records: Not available
File Size: 15MB
File Format: Various formats
Media: ASCII files, 9-Track Tape, Diskette, special data subsets, Lotus spreadsheets, Printed source

Corresponding Print Source

National Transit Database Ñ Data Tables

Transit Profiles: Agencies in Areas Exceeding 200,000

Transit Profiles: Agencies in Areas with less than 200,000

Transit Profiles: Thirty Largest Transit Agencies

Sponsoring Organization

Department of Transportation, Federal Transit Administration, Office of Program Guidance and Support

Performing Organization

Department of Transportation, Research and Special Programs Administration, Volpe National Transportation Systems Center, Service Assessment Division

Availability

DOT/RSPA/Volpe Center, Service Assessment Division, DTS-49, 55 Broadway, Cambridge, MA 02142; telephone, (617) 494-3459, fax, (617) 494-3260.

Contact for Additional Information

Mr. Doug Kerr
    Technical Manager
    DOT/FTA, TPM-20
    (202) 366-1656, FAX: (202) 366-7951
    EMAIL: kerrd@tgm.dot.gov
Ms. Linda Barnes
    Technical Manager
    DOT/FTA, TPM-20

(202) 366-6471, FAX: (202) 366-7951
EMAIL: barnesl@tgm.dot.gov
Mr. William Lyons
Program Manager
DOT/RSPA, Volpe Center - DTS-49
(617) 494-2579, FAX: (617) 494-3260
EMAIL: lyonsw@volpe1.dot.gov
Ms. Dorothy Nicholas
Data ManagerDOT/RSPA, Volpe Center - DTS-49
(617) 494-3459, FAX: (617) 494-3260
EMAIL: nicholas@volpe1.dot.gov

Consumer Expenditure Survey

Mode
>Multimodal

Abstract
>The Consumer Expenditure Survey collects information from American households on their expenditures, income, and family characteristics. The data include household expenditures on all expenditure categories including transportation items such as vehicle purchase, vehicle maintenance, gasoline and motor oil, public transportation, and airline travel. The data are shown by classes of households, such as by income, age, family size, and region.

Source of Data
>There are two Consumer Expenditure Survey components: a quarterly interview survey in which approximately 5,000 consumer units are interviewed per quarter; and a weekly diary survey in which approximately 5,000 consumer units per year keep diaries.

Attributes
>Geographic Coverage of Data: U.S. totals. Data are also published by the 4 Census regions and for 26 selected metropolitan areas
>Time Span of Data Source: 1980-1993
>First Developed: 1980
>Update Frequency: Annual/integrated interview & diary surveys; Quarterly/interview survey
>Media: Tape, Diskette, Printed source

Significant Features/Limitations
>Integrated data are published in an annual report. Interview data are published in a quarterly report. Micro-level data from each survey are available annually on public-use tapes. Summary level integrated data are available on diskette.

Sponsoring Organization
>Department of Labor, Bureau of Labor Statistics, Division of Consumer Expenditure Surveys

Availability
>DOL/BLS, Division of Consumer Expenditure Surveys, 2 Massachusetts Avenue, NE, Washington, DC 20212-0001; telephone, (202) 606-6900; fax, (202) 606-7006. Historical reports: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone, (202) 783-3238.

Contact for Additional Information
>Ms. Stephanie Shipp
>>General Information
>>DOL/BLS, Division of Consumer Expenditure Surveys
>>(202) 606-6900, FAX: (202) 606-7006
>>EMAIL: shipp_s@bls.gov
>
>Ms. Maureen Gray
>>Public-Use Tapes Information
>>DOL/BLS, Division of Consumer Expenditure Surveys
>>(202) 606-6900, FAX: (202) 606-7006
>>EMAIL: gray_m@bls.gov
>
>Mr. John Rogers
>>Diskettes Information
>>DOL/BLS, Division of Consumer Expenditure Surveys
>>(202) 606-6900, FAX: (202) 606-7006
>>EMAIL: rogers_j@bls.gov