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*RT-HIS*  
**Regional Travel -  
Household Interview Survey**

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**DATA USER'S MANUAL**

*Prepared for the New York Metropolitan Transportation Council (NYMTC)  
and the North Jersey Transportation Planning Authority (NJTPA)*

*prepared by:  
NuStats International  
in association with  
Parsons Brinckerhoff Quade & Douglas, Inc.*

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**RT-HIS: REGIONAL TRAVEL -  
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New York Metropolitan Transportation Council  
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*February 2000*

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NJTPA Regional Household Interview Survey: NJTPA Component

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## INTRODUCTION

The 1997/98 Regional Transportation Household Interview Survey (RT-HIS) was sponsored by the New York Metropolitan Transportation Council (NYMTC) and the North Jersey Transportation Planning Authority (NJTPA), two of the federally sanctioned Metropolitan Planning Organizations (MPOs) in the New York-New Jersey-Connecticut metropolitan area. The survey was conducted from February 1997 through May 1998 by NuStats International of Austin, Texas, under subcontract to Parsons Brinckerhoff. NuStats was assisted at various stages of the data collection effort by Macro International, Ebony Marketing, and DBM Marketing.

The purpose of the RT-HIS was to provide a rich source of primary data for use in the construction of a state-of-the-art transportation planning model for the New York / New Jersey / Connecticut metropolitan region, also known as the Transportation Models and Data Initiative Project. The data will be incorporated into travel forecasting models, computer programs, databases, and other elements necessary to perform a regional analysis of transportation and land-use interactions as well as air quality issues within the study area.

The survey is an essential element in the Transportation Models and Data Initiative Project. The initiative will result in travel forecasting models, computer programs, databases, and users' guides for use in the regional analysis of transportation and its interaction with land use development and air quality issues in the New York / New Jersey metropolitan area.

The 1997/98 HIS survey, like all recent household travel surveys, relied on the willingness of area residents to complete diary records of their daily travel over a 24-hour period. Random recruitment of households was conducted by telephone through a "recruitment interview" in which respondents were informed of the survey, its purpose and the respondent's obligation to complete diaries. Data on households and household members were also collected during the recruitment interview.

Participating households were assigned specific "travel days" to record their travel, which typically occurred 10 days after recruitment. Each household member was asked to record travel information in a diary for the specified 24 hour period. Immediately after the assigned date, households were contacted by telephone to retrieve the diary information. In total, 14,441 households were recruited to participate in the study. Of these, 11,264 households completed travel diaries. The information was retrieved from all household members regardless of age.

The survey used a scientifically formulated sample design, industry-appropriate instruments for data collection, a package of written materials to communicate with survey respondents, a toll-free survey hotline, and data collection, processing and reporting procedures that comported to standards of the Council of American Survey Research Organizations (CASRO).

This report is one in a series of reports designed to disseminate the project results. Other reports include:

- **RT-HIS General Final Report** - comprehensive document that recaps the essential information provided in the above noted reports and focuses on measures of travel activity patterns estimated for the geographic regions included in the study.
- **RT-HIS Methods and Implementation** – documentation of survey methods, interviewing outcomes, response rates, weighting, and survey instruments and materials.

- **RT-HIS Compendium of Results** – tabular presentation of results by geographic regions of the study area.
- **RT-HIS Presentation Material** – brief, pictorial presentation of the data with highlights of data collection and a focus on the resultant data set and its capabilities.
- **RT-HIS Comparative Analysis: Weekday and Weekend Travel** – comparative analysis of weekday and weekend travel in the region, using the small sample of households in New Jersey who recorded weekend travel, supplemented by the 1995 National Personal Transportation Survey (NPTS) data obtained by NYMTC through the supplemental sample add-on program.
- **Special Topics: Analysis Plans for Future RT-HIS Research and Reporting** – report is the development of outlines and a brief analysis plan for a series of special topic reports that may be referenced in doing special research with this data set in the future.

All households within the 28-counties comprising the New York / New Jersey / Connecticut metropolitan area were eligible for inclusion in the study through a random sampling process. Non-telephone households were included by using households reporting episodic telephone ownership as proxies (a technique described in more detail in the weighting section of this report). The study area was comprised of the following counties:

New York: Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

New Jersey: Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, Warren

Connecticut: Fairfield, New Haven

The definition of a household was one in which all members resided at the same location and shared the same phone number. As a result, members of the central family unit that were students away at school or military personnel on active duty were not considered as part of the household. The definition of a “completed household” was one in which 100% of household members provided complete and usable travel and activity information for a specified 24-hour period. The resultant data set is comprised of 11,264 completed households.

The contract allowed for the inclusion of up to 600 “partial” households. The definition of a partial household was one in which person information was obtained for all (n) household members who were employed, in school or day care, and who provided complete travel and activity data for (n-1) members. The purpose of this definition was to provide a mechanism for retaining data from larger households in which a single person may not have reported travel/activity data. No partial households were included in the final data set, as most were removed to allow for more efficient use of project resources during the data cleaning and processing tasks.

The data set includes the following types of data:

Household File: Demographic information about the household, including household size, household vehicles, housing type, home ownership status, tenure, dominant language, telephone ownership, ethnicity and income. In addition, the data set includes summaries of the travel day (number of places visited, number of overnight guests, and number of visits by commercial vehicles) as well as the county of residence.

Person File: Demographic information about the household members, including age, gender, relationship, employment status, student status, disability status, and licensed driver status. Student level information includes mode to school, number of days attending school, and parking cost information. Employment data are provided for up to two jobs and includes industry and occupation codes, mode to work, parking and transit cost data, number of days worked and where, and compressed work week information.

Vehicle File: Information about the household vehicles, including year, vehicle type, and vehicle ownership status.

Trip File: Information about all places visited during the specified 24-hour diary period by all members of completed households, including location type, activities, mode usage, and travel of other household members. Proxy reporting information is also included in this file.

Location File: Information about each location visited by household members during 24-hour diary period, as well as habitual work and school locations (even if not visited). Detailed information includes place name, address, city, and geocoding information for each location reported. The public use data set contains only location numbers, location types, census tracts and geocoding status data.

Audit File: Documentation of interim data cleaning steps.

The sampling plan resulted in the collection of data that supports analysis at the county level with 90% confidence. Any data user performing analysis at a geographic unit lower than the county level must use extreme caution and should, to the extent possible, avoid the use of this data set for that level of geographic specific analysis. A small weekend sample (323 households) was collected in New Jersey only. This sample can be used to describe travel in the New Jersey area included in the survey, but should not be reported on the county level. Weekend travel information for the entire RT-HIS area can be integrated with NPTS data as described in Appendix G.



## DESCRIPTION OF DATA FILES

The HIS data are contained in file data files: household, person, vehicle, trip, and location. A sixth file contains the audit documentation of interim cleaning effort. The household, person, vehicle, and trip files are arranged hierarchically, with key field indicators to link the files together. The location file contains all trip locations, all household locations, and all reported habitual (work and school) locations. It is linked to the household, person, and trip files through unique location numbers. A complete listing of all variables and associated codes are contained in the Appendices.

### Relationship Among the Files

Table 1 shows the key data fields that link the data files. There are two identifying relationships among the data sets. One links the non-address data while the other links the address information for the destination. As stated above, the sample number is the key link between the household, person, vehicle, and trip files, as well as the audit documentation file. The location number serves to reference the household location, reported work and school locations, and trip destinations visited with the appropriate geocoding information.

Table 1  
Relationships Among the Data Sets

Data File	Description	# Records	Key Record Reference Fields	Location Reference Fields
Household	One record for each household that provided complete and usable activity and travel information	11,264	SAMPNO	HH_ADDR
Person	One record for each member of a completed household	27,369	SAMPNO and PERSNO	S_LOC, W1_LOC, W2_LOC
Vehicle File	One record for each household vehicle (no records for zero vehicle households)	17,517	SAMPNO and VEHNO	
Trip File	One record for each place visited by household members on travel day. Non-traveling household members have one record.	118,134 places (90,764 trips*)	SAMPNO, PERSNO, and PLACENO	PL_LOC**
Location File	One record for each unique location visited on travel day or reported as a home, work, or school location. More than one household can reference the same location.	55,349		LOCNO
Audit File	One record for each trip record that was adjusted during interim cleaning efforts	20,427	SAMPNO, PERSNO, and PLACENO	

\*Place 1 (for all respondents) is an anchor indicating where the person began his or her travel day. A travel day began and ended at 3 a.m. Most respondents reported Place 1 to be home.

\*\*PL\_LOC identifies the DESTINATION of the trip described in the trip record

The information in Table 1 is depicted graphically below.

Figure 1  
Reference Fields: Data Records

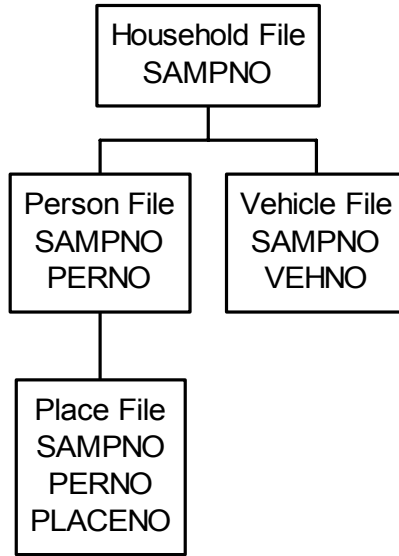
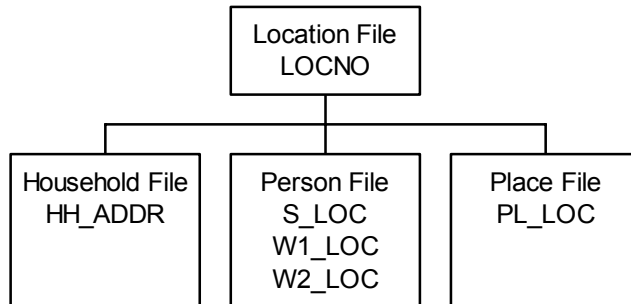


Figure 2  
Key Reference Fields: Location Data



## Computed Variables

Most of the data contained in the data sets were provided directly by respondents during the advance call, recruitment interview, or retrieval interview. There were, however, some computed variables added to the data set for analysis purposes. These include the following:

### Household File:

ASSIGN	indicates specific 24-hour period in which household tracked travel (commonly referred to as a “travel day”).
NUMPLACE	sum of all places visited by all household members on the travel day. Calculated as the total number of records in the trip file for this household. To calculate trips, the computation is (NUMPLACE-HHSIZE) to remove the Place 1 (anchor) records for each household member.
PARTIAL	indicates whether all household members have completely and accurately provided activity and travel information.
MLD	mode leadership density code assigned to household based on household location using the geocoded coordinates. MLDs were used in the survey design to capture variations in mode usage based on area residential densities.
FIPSCODE	County code assigned to household based on household location using the geocoded coordinates.

### Person File:

PNUMPL	sum of all places visited by household member on the travel day. Calculated as the total number of records in the trip file for this person. To calculate trips, the computation is (PNUMPL-1) to remove each person Place 1 (anchor) record.
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### Trip File:

NNONTRAV	number of non-household members in travel party. Calculates the difference between the total number in travel party and the total number of household members in travel party.
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### Location File:

TRACT	census tract in which place is located. Derived from the latitude and longitude coordinates output from the geocoding process.
FIPSCODE	county in which place is located. Derived from the latitude and longitude coordinates output from the geocoding process.
LONGI	longitudinal coordinate output from the geocoding process.
LATI	latitudinal coordinate output from the geocoding process.
GISCOUNT	counter to indicate the number of times a particular location was reviewed during the geocoding process.
AV_STATU	code to indicate the final geocoding outcome.
AV_ZONE	data to indicate zone used in the geocoding process.
AV_ADDRE	data to indicate the point to which the location was geocoded.

## Flag Variables

The data underwent extensive quality control processes, starting with the in-field edits, continuing with the highly detailed electronic edit check, and concluding with physical research to document or correct data inconsistencies. A series of flag variables were developed to guide data users in the conduct of various analyses.

The electronic edit check program developed by Parsons Brinckerhoff output a series of warning messages as part of the edit check process. These warning flags ranged from “person reported driving but had no driver’s license” to “person did not return home at end of travel day” to “vehicle age older than 1960.” By themselves, there typically were no problems with the data – these are all valid examples of human behavior or facts. However, the edit check program was just that – a computer program designed to find potential data issues. As a result, several “warning” messages appeared in the edit check output that required a flag to let data users know that the particular issue had been resolved in some manner or still existed and might affect data usage.

There are two series of flags in the data. Each of these is detailed below.

**Audit Flags.** The first are historical and are maintained in an audit file separate from the data. These flags document the history of the editing process. The audit file that contains this historical documentation also contains the key fields for linking the audit codes back into the place / trip file (sample number, person number, trip number) as well as the historical variable flags themselves, should they be of use to data users.

1. Activity Code Corrected (ACTCODE - 12,925 records flagged.)
  - **Problem type:** A number of Place 1 records had “drop off / pick up” listed as an activity. Since the Place 1 record serves as an anchor point for the start of the travel day, this was an illogical response. In researching this issue, it was determined that the “1” was actually part of another code (ranging from 10 – 19) that was incorrectly entered into two activity fields, rather than one. No action is required on the part of the data user. There were no associated edit check messages.
  - **Quality Review Phase:** This was addressed in October 1998.
  - **Method:** All Place 1 records with illogical values were reviewed for appropriateness of response.
  - **Disposition:** These were all corrected. However, the flag remains attached to the record as a reminder that a change was made in the data.
2. Extraneous data found in activity 6 field (ACT6XTRA). 306 records flagged.
  - **Problem type:** There were 6 activity variables included in the data set, to allow for recording up to 6 activities at each place visited by respondents. The activities should have been entered in the fields in order, but in 300 cases, a field was skipped during entry and data were not entered in adjacent fields. There was no edit check message associated with this flag. No action is required on the part of the data user.
  - **Quality Review Phase:** This was addressed in October 1998.
  - **Method:** A program was written to flag all cases where an activity field was skipped. Each of the 300 cases was addressed manually.
  - **Disposition:** These were all corrected. This flag was added to note that data had moved to adjacent fields or was found to be extraneous and deleted..

3. Inconsistent toll payment data (TOLLFIX). 40 records flagged.
  - **Problem type:** In 40 records, the data indicated that a toll was not paid, but that the cost of the toll was \$2. The edit check output indicated that a toll amount was given but not needed. No action is required on the part of the data user
  - **Quality Review Phase:** This was addressed in October 1998.
  - **Method:** Using the edit check output, each of the 40 cases was addressed manually.
  - **Disposition:** These were all corrected.
4. Travel modes mis-entered (MODEFIX). 110 records flagged.
  - **Problem type:** In 110 records, the same mode appeared twice in the same record. No edit check messages apply. No action is required on the part of the data user
  - **Quality Review Phase:** This was addressed in October 1998.
  - **Method:** A program was written to flag records in which the same mode appeared more than once.
  - **Disposition:** This flag was created to indicate either that the data were updated by deleting the extraneous mode or that the two modes were indeed reported in tandem by the respondent.
5. Transit data updated by client (PASS1UPD AND PASS2UPD). 5065 records flagged through PASS1UPD and 6005 records flagged through PASS2UPD, with PASS1UPD and PASS2UPD having 5087 records in common.

NYMTC and NJTPA staff spent considerable time reviewing the transit sequencing in the 118,000 record trip file. As a result, they communicated to NuStats changes to the transit data. This flag is a reminder to all data users that the transit information in the data record has been changed from what the respondent reported during the actual interview.

- **Problem type:** Modes were mis-reported or mis-recorded during the data retrieval process. For proper mode sequencing, a review of data took place.
- **Quality Review Phase:** The first update was provided in November 1998. Subsequent updates were made in May 1999, June 1999, and September 1999.
- **Method:** Data were reviewed visually and in context of other travel to confirm the appropriate mode assignment.
- **Disposition:** Any record flagged as being updated will vary considerably from the hard copy survey. In these cases, the data should never revert to the hard copy survey information.

**Data Usage Flags.** The second flag variable set is provided to guide data usage. These fall into one of four categories: geocoding flags, transit flags, general use flags, and current variables provided strictly to guide data usage. A total of 31,239 records out of the 118,132 in the trip / place file (26%) have data usage flags associated with them affecting 67% of the households. Most records (74%) have no flags associated with them. The flags appear where a speed violation occurred, some corrective action was taken, or the respondent-reported data are inconsistent with modeling expectations of what the data set should contain. The data usage flags include the following:

- 1) **Geocoding Flags.** These flags are in the place / trip file.
  - a) **Speed Violations** (SPDVIOL – 21,823 records flagged) with the following codes:
    - 1= acceptable outlier (6,439 records)
    - 2= violation likely caused by time rounding (10,953 records)
    - 3= cause unknown (4,431 records).

Code 3 is perhaps the most important one, as it indicates that the trip had an unacceptable calculated speed. This could be the result of a variety of problems, such as improper geocoding, wrong mode, illogical trip sequence, etc. These trips have been reviewed but there was not enough information available to make logical corrections. A complete record of attempts made to correct them is located in the audit file.

- b) **Speed Violations with a code of “2” (violations likely caused by rounding):** (SPDROUND – 10,953 records flagged). The code set for this flag indicates the rounding parameters (plus and minus five minutes, for example) at which level the speed violation went away. Codes include:
- |                      |      |     |
|----------------------|------|-----|
| 1=5 minute rounding  | 5314 | 49% |
| 2=10 minute rounding | 2971 | 27% |
| 3=15 minute rounding | 1473 | 13% |
| 4=30 minute rounding | 1195 | 11% |
- c) **Imputed locations** (IMPUTED – 4,401 records involved). Code indicates location geocodes were imputed.

2) **Transit Flags.** These flags are in the place / trip file.

- a) **Missing Transit information.** (MISSTRAN – 567 records involved) Codes:

- 1= transit trip missing boarding station or line information
- 2= transit trip missing transfer station or line information
- 3= transit trip missing exit station or line information
- 4= Multiple transit information fields missing information (combines 1, 2, and 3 above)
- 5= Mode missing
- 6= Mode Unclear (to be designated by NYMTC)

- b) **Further breakdown of Code “6” (Mode Unclear) errors.** (MODEUNCL – *This variable is for future use only and contains no data.*) The purpose of this variable is to provide the user with a place holder variable to use in future research / clarification such as narrowing any level of uncertainty regarding the reported mode. It is anticipated that this flag will enable data users to include records with “any transit mode”, even though the particular transit mode is unclear, in an analysis of transit versus auto trips.

- 1=Any Fixed Rail Mode
- 2=Any Bus or Jitney Mode (Rubber Tire Transit)
- 3=Any Transit Mode (cannot distinguish whether it is Code 2 or Code 3, below)
- 4=Auto Trip (SOV, HOV, passenger)
- 5=Mode cannot be defined

3) **General Usage Flags.**

**Place / Trip File Flags.** These flags are in the place / trip file.

- a) **Record adjusted.** (RECADJ – 6900 records flagged). Code indicates record was updated.
- 1= Record updated based on transit check efforts.
  - 2= Record updated due to research efforts (other data quality checking efforts).
- b) **Incomplete tour.** (INCTOUR – 1,464 records flagged). Code indicates that person did not return home at the end of the travel day, with verification against interview hard copy records.

**Household Flags.** These flags are in the household file. The purpose of these flags is to indicate if any trip of any household member had flags associated with it.

- a) **Trip Flag:** (TRIPFLAG – 7520 records flagged) indicates whether or not there is a flag for this household in the trip file.
  - b) **Audit Flag:** (AUDITFLG – 6616 records flagged) indicates whether or not there is a flag for this household in the audit file.
- 4) **Current Variables that can be used as flags.** These “flags” are variables currently in the data set that can also be used to guide data usage.
- a) **Day of week.** (1=weekday, 2=weekend (Household file))
  - b) **Partial complete.** (code to indicate if household was a partial complete (household file))
  - c) **No travel.** (Person file variable to indicate that person made no trips on travel day).
  - d) **No work/school.** (Person file variable that indicates person did not go to work/school on travel day).
  - e) **Proxy reporting.** (Place/trip file variable to indicate proxy reported data).
  - f) **Diary use.** (Place/trip file variable to indicate whether diary was used.)

Using a combination of these flags, it is possible to include or exclude records with flexibility. Below are a few examples of how these flags could be used in specific types of analyses.

Table 2  
Examples of Analyses Using Data Usage Flag Variables

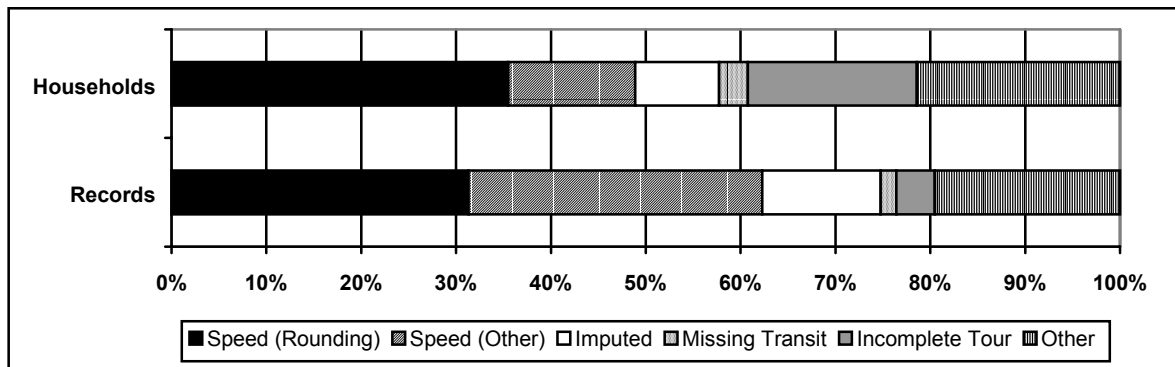
Flag	O/D (Region to Region) Work Trips	Trip Rates	Mode Split	Average Travel Time to Work
<b>Geocoding</b> speed violations Speed Code 2 (time) Imputed	Exclude code 3  Exclude imputed			Exclude code 3 Explore parameters
<b>Transit</b> Missing Transit info Mode Unclear (code 6)			Exclude code 4 Exclude code 5	
<b>General Usage</b> Record adjusted Incomplete tour		Possibly exclude		
<b>Other variables</b> Day of week Partial No travel No work/school Proxy Diary	Weekday only   Exclude		Possibly exclude Possibly exclude	Exclude Exclude Possibly exclude Possibly exclude

The data user flags are summarized in the table below. Specifically, the number of place file records and the number of households associated with each flag are displayed in the table.

Table 3  
Summary of Data User Flags

Data User Flag	# Records	% Records	# Households	%Households
Speed Violation	21,823	18.5%	5,990	53.2%
Speed Violation due to Rounding	10,953	9.3%	4,345	38.6%
Imputed Locations	4,401	3.7%	1,082	9.6%
Missing Transit Information	567	0.5%	372	3.3%
Record Adjusted	6,900	5.8%	2,619	23.3%
Incomplete Tour	1,464	1.2%	2,192	19.4%
Total (some w/ multiple flags)	31,239	26.4%	7,520	66.8%

Figure 3  
Summary of Data User Flags



Base: All households and records with data usage flags.



## Geocoding Variables

The location file is comprised of two types of data: respondent reported location information and output from the geocoding process. Each of these is detailed below.

**Respondent Reported Location Information.** During the interview process, respondents were asked for the place name, address, city, and zip code for all places visited. In addition, this information was collected for home, work, and school addresses. Typically, the home addresses were most accurate. Habitual addresses (work and school) also tended to have a higher degree of accuracy, as respondents visited these locations almost daily.

The non-home, non-work, and non-school locations, or “other trip locations” were not as accurate. Respondents typically were unable to report correct zip codes for commonly visited locations such as the mall or grocery store. In addition, these types of addresses were mostly comprised of cross streets, as compared to the exact addresses reported in the first type of addresses. In the daily conduct of life, exact addresses and zip codes were simply not important to respondents. Every effort was made to obtain as much information about each location as possible, to aid in the geocoding process. This included probing for mid-block locations as well as nearby landmarks.

Respondents were not always accurate in their reporting of location information. In addition, local names were often provided while the street coverage files contained only “official” geographic references. In anticipation of this, interviewers received local knowledge training and were provided quick reference sheets for commonly reported locations in the study area. In addition, a subconsultant from New York City assisted in data retrieval. Geocoding technicians worked diligently to ensure that all addresses were properly geocoded, despite the conflict between respondent perception and official designations.

**Geocoding Output.** Upon completion of the geocoding process, each location received unique latitude / longitude coordinates (LATI and LONGI) based on the zone used during the geocoding process (AV\_ZONE). The AV\_ADDRE field was filled in with the address to which the coordinates point, and a geocoding outcome code was assigned (AV\_STATU). During a second stage of processing, the census tract (TRACT) and county code (FIPSCODE) were derived using the coordinates.

## USING THE DATA

The purpose of this section is to review basic concepts associated with the analysis of the HIS data. SPSS commands and menu options will be referred to, although the data can be analyzed using any number of software packages.

### Tabulating the Data

The most common methods for analyzing the data are frequencies, cross tabulations, and means. Instructions for performing each of these steps are detailed below. Sample tables and associated programming code are included in Appendix A.

#### To produce data frequencies using SPSS:

1. Go to "STATISTICS" in the main menu.
2. Select "SUMMARIZE".
3. Select "FREQUENCIES".
4. Using the mouse, highlight the desired variables in the list of variables to the left.
5. Click the right-pointing arrow to move the desired variables to the Variable box.
6. To tailor the statistical output, click the "STATISTICS" button on the bottom of the screen.
7. To produce charts, click the "CHARTS" button.
8. To format the output, click the "FORMAT" button.

#### To produce data cross tabulations using SPSS:

1. Go to "STATISTICS" in the main menu.
2. Select "SUMMARIZE".
3. Select "CROSSTABS".
4. Using the mouse, highlight the desired variable(s) in the list of variables to the left.
5. Click the right-pointing arrow to move the desired variables to the Row and Column variable boxes.
6. To tailor the statistical output, click the "STATISTICS" button on the bottom of the screen.
7. To tailor the output by choosing counts, row percent, column percent, or total percent, click the "CELLS" button.
8. To format the order of the output (ascending versus descending), click the "FORMAT" button.

#### To produce data means using SPSS:

1. Go to "STATISTICS" in the main menu.
2. Select "SUMMARIZE".
3. Select "DESCRIPTIVES".
4. Using the mouse, highlight the desired variable(s) in the list of variables to the left.
5. Click the right-pointing arrow to move the desired variables to the variable box.
6. To format the output, click the "OPTIONS" button.

## Control Numbers

- The household file contains data for 11,264 households. Of these, 10,971 are weekday households and 323 weekend households. Any use of the file weights will adjust weekday households for probability of selection, household telephone lines (multiple or shared) and episodic telephone ownership (as detailed in the weighting section). When weighted, the data provides 10,971 responses.
- The person file contains data for 27,369 persons. Of these, 14,193 persons reported being employed and 6,518 reported being students, with some respondents reporting both.
- The vehicle file contains 17,517 vehicle records.
- The trip file contains 118,132 place records and 90,764 trip records. Place 1 for each person is an anchor point only to pinpoint a starting point for the travel day. There is no travel information associated with Place 1. All trip statistics must exclude Place 1 to avoid over-reporting of trip rates.
- The location file contains 55,349 locations, of which 11,264 are home addresses, 16,093 are work or school addresses, and 27,992 are other locations visited during the respondents' travel. All locations are either used during the travel day (and therefore appear in the trip file) or are referred to as a habitual location in the person file. There was some overlap in location types. For example, teachers and students may both list the same school, but it is work from one group and a school location for the other.

## Weighting the Data

The only file in the data set with a weight is the household file. The final weight variable (wht\_f) should be used when analyzing weekday households only. No weights were developed for the weekend sample. An expansion weight is also provided (exp\_f) but should be used with caution, as expansion of small sample sizes for particular table cells can produce distorted results. The following steps can be used to weight the household data using SPSS:

1. Go to "DATA" in the main menu.
2. Select "WEIGHT CASES".
3. A user's box will appear on the screen. Select the "Weight Cases by" option.
4. Select the weight variable (wht\_f) by highlighting it in the list of variables to the left.
5. Click the right-pointing arrow to move it into the "Frequency Variable" box.
6. Click "OK".

It is also possible to weight the data through the use of an SPSS program. The following program was used to produce the data for Table 4.

```
FREQUENCIES
  VARIABLES=income          *Note – produces unweighted frequency
  /ORDER ANALYSIS .
WEIGHT
  BY wht_f .                *Note – weights data by final weight
FREQUENCIES
  VARIABLES=income          *Note – produces weighted frequency
  /ORDER ANALYSIS .
```

If properly done, the "Weight On" message will appear in the lower right hand corner of the data window. Once the data are weighted, proper application of the weight can be confirmed by running a frequency on any variable in the data set and confirming the total number of observations against the control numbers listed above. The following table is provided as an example of effects of weighting the variables.

Table 4  
Household Income: Unweighted and Weighted

Household Income	Unweighted	Weighted
Less than \$10k	385	583
\$10k but less than \$15k	391	523
\$15k but less than \$25k	688	942
\$25k but less than \$35k	911	859
\$35k but less than \$50k	1508	1303
\$50k but less than \$75k	2065	1719
\$75k but less than \$100k	1140	1060
\$100k but less than \$125k	528	631
\$125k but less than \$150k	234	283
\$150k or more	432	467
Income unknown or refused	2689	2595
Total	10,971	10,963

## Sampling Errors

Whenever sampling is used (as opposed to a census), it is necessary to consider the sampling error. Sampling error reflects the probability that by chance alone, a sample will not perfectly reflect the universe or population from which it was drawn. The most common statistic used to describe sampling error is the standard error of the estimate. The formula to calculate this value is found in most statistical textbooks. The formula for the calculation of standard error is<sup>1</sup>:

$$E = \text{square root of } (p) \times (1-p) / n$$

Where E = standard error of the estimate

P = the incidence or response frequency

N = sample size.

For example, 48 % of the respondents in the data set are male. The standard error of the estimate is calculated as:

The square root of  $(.48)(.52) / 27369$  or 0.3%.

Where E = 0.3%

P = .48

N = 27369

This means that the true population figure of males in the 28-county study area is somewhere between 47.7% and 48.3% (48%  $\pm$  0.3%), assuming a normal distribution.

To determine the standard error of the estimate for any frequencies using SPSS, click the "STATISTICS" button in the frequency window and choose the "S. E. mean" option. For means, click the "OPTIONS" button in the descriptives window and chose the "S. E. Mean" option.

The sampling error for key variables were calculated using SPSS and are displayed below:

- Household size greater than 4 persons: 1.18%
- Zero vehicle households: 1.13%
- Persons making more than 5 trips per day: 1.21%

For more detail on sampling errors, standard errors of the mean, or other tests for statistical significance and their associated formulas, consult the SPSS user manual or other statistical texts.

---

<sup>1</sup> Babbie, Earl. The Practice of Social Research. Wadsworth Publishing: Belmont, California, 1995. p.431.

# Appendix A – Sample Tables and Programming Code

## Creation of Regional Code

Several tables included in the RT-HIS Results report summarize the data first at the county level, then at the county group level, and finally at the state level. The 28 counties and their associated regions and states are as follows:

<u>New York</u>	<u>New Jersey</u>	<u>Connecticut</u>
New York City	NJTPA Region	Fairfield
New York	Bergen	New Haven
Queens	Passaic	
Bronx	Hudson	
Kings	Essex	
Richmond	Union	
	Morris	
Long Island	Somerset	
Nassau	Middlesex	
Suffolk	Monmouth	
	Ocean	
Mid-Hudson	Hunterdon	
Westchester	Warren	
Rockland	Sussex	
Putnam		
	Other New Jersey	
Other New York	Mercer	
Orange		
Dutchess		

The following SPSS code assists the data user in creating the classifications necessary to classify the data in similar groupings:

To summarize the data by **geographic region** (where 1=NYC, 2=Long Island, 3=Mid-Hudson, 4=Other NY, 5=NJTPA Region, 6=Other New Jersey, and 7=Connecticut), use the following syntax:

```
RECODE
  fipscode
  (36061=1) (36081=1) (36005=1) (36047=1) (36085=1) (36059=2) (36103=2)
  (36119=3) (36087=3) (36079=3) (36071=4) (36027=4) (34003=5) (34031=5)
  (34017=5) (34013=5) (34039=5) (34027=5) (34035=5) (34023=5) (34025=5)
  (34029=5) (34019=5) (34041=5) (34037=5) (34021=6) (9001=7) (9009=7) INTO
  region .
EXECUTE .
```

To summarize the data by **political regions** (where 1=NYMTC region, 2=NY – not NYMTC, 3=NJTPA region, 4=NJ – not NJTPA, and 5=Connecticut), use the following syntax:

```
RECODE
  region
  (4=2) (5=3) (6=4) (7=5) (1 thru 3=1) INTO polreg .
EXECUTE .
```

To summarize the data by **state**, use the following syntax:

```
RECODE
  fipscode
  (34000 thru 34999=34) (36000 thru 36999=36) (9000 thru 9999=9) INTO
  state .
EXECUTE .
```

Having computed the classifications, these variables can be used to produce most of the tables in the RT-HIS Compendium of Results report. Sample household, person, and trip tables and the specific SPSS code used to produce those tables are included in this appendix.

The first table is a frequency of household size by county, geographic region, political region, and state. To produce this table, the first step is to collapse all household sizes greater than 3 into one value (4) by using the following syntax:

```
RECODE
  hhsize
  (4 thru Highest=4) (ELSE=Copy) INTO rhhsiz .
VARIABLE LABELS rhhsiz 'HH size (recoded)'.
EXECUTE .
```

Next, the recoded variable is used to create the table:

```
* General Tables.
TABLES
  /FORMAT BLANK MISSING(' ')
  /GBASE=CASES
  /FTOTAL= $t000001 "Total" $t000005 "Total"
  /TABLE=fipscode + region + polreg + state + $t000001 BY rhhsiz + $t000005
  /STATISTICS
  cpct( fipscode( PCT5.1 ) 'Row %':fipscode region polreg state )
  cpct( region( PCT5.1 ) 'Row %':fipscode region polreg state )
  cpct( polreg( PCT5.1 ) 'Row %':fipscode region polreg state )
  cpct( state( PCT5.1 ) 'Row %':fipscode region polreg state ).
```

Table 1: Frequency of Household Size by County, Geographic Region, Political Region and State, weighted

			HH size (recoded)				
			1	2	3	4+	Total
County code	Fairfield	Row %	25.2%	37.0%	16.6%	21.2%	100.0%
	New Haven	Row %	34.6%	36.1%	15.9%	13.5%	100.0%
	Bergen	Row %	25.2%	33.6%	16.0%	25.1%	100.0%
	Essex	Row %	32.9%	27.9%	14.9%	24.3%	100.0%
	Hudson	Row %	34.6%	29.6%	16.2%	19.6%	100.0%
	Hunterdon	Row %	12.6%	44.2%	16.4%	26.7%	100.0%
	Mercer	Row %	26.5%	36.9%	15.9%	20.7%	100.0%
	Middlesex	Row %	30.2%	29.9%	15.5%	24.4%	100.0%
	Monmouth	Row %	31.2%	32.6%	9.9%	26.3%	100.0%
	Morris	Row %	24.1%	32.1%	14.4%	29.4%	100.0%
	Ocean	Row %	31.4%	34.8%	12.7%	21.1%	100.0%
	Passaic	Row %	26.7%	38.5%	16.1%	18.6%	100.0%
	Somerset	Row %	23.0%	41.8%	11.6%	23.7%	100.0%
	Sussex	Row %	16.9%	37.1%	20.1%	25.9%	100.0%
	Union	Row %	26.0%	33.7%	18.2%	22.2%	100.0%
	Warren	Row %	21.6%	37.3%	13.5%	27.6%	100.0%
	Bronx	Row %	31.7%	28.3%	18.8%	21.2%	100.0%
	Dutchess	Row %	21.2%	35.3%	17.2%	26.4%	100.0%
	Kings	Row %	30.5%	24.9%	18.1%	26.6%	100.0%
	Nassau	Row %	23.2%	39.1%	16.3%	21.4%	100.0%
New York	Row %	51.9%	27.7%	10.2%	10.2%	100.0%	
Orange	Row %	24.3%	31.6%	16.4%	27.8%	100.0%	
Putnam	Row %	21.4%	34.2%	16.9%	27.5%	100.0%	
Queens	Row %	28.4%	30.1%	19.9%	21.6%	100.0%	
Richmond	Row %	25.6%	31.8%	18.1%	24.5%	100.0%	
Rockland	Row %	17.5%	37.6%	16.8%	28.2%	100.0%	
Suffolk	Row %	21.7%	33.1%	14.8%	30.5%	100.0%	
Westchester	Row %	27.8%	33.2%	14.5%	24.5%	100.0%	
Geographic Region	New York City	Row %	35.2%	27.8%	16.7%	20.3%	100.0%
	Long Island	Row %	22.4%	36.0%	15.5%	26.0%	100.0%
	Mid-Hudson	Row %	25.4%	34.1%	15.1%	25.4%	100.0%
	Other NY	Row %	22.9%	33.2%	16.7%	27.2%	100.0%
	NJTPA region	Row %	27.8%	33.5%	14.8%	23.8%	100.0%
	Other NJ	Row %	26.5%	36.9%	15.9%	20.7%	100.0%
Political Region	Connecticut	Row %	29.9%	36.5%	16.3%	17.3%	100.0%
	NYMTC	Row %	31.6%	30.1%	16.3%	22.0%	100.0%
	NY - non-NYMTC	Row %	22.9%	33.2%	16.7%	27.2%	100.0%
	NJTPA	Row %	27.8%	33.5%	14.8%	23.8%	100.0%
	NJ - non-NJTPA	Row %	26.5%	36.9%	15.9%	20.7%	100.0%
State	CT	Row %	29.9%	36.5%	16.3%	17.3%	100.0%
	Connecticut	Row %	29.9%	36.5%	16.3%	17.3%	100.0%
	New Jersey	Row %	27.7%	33.7%	14.9%	23.7%	100.0%
	New York	Row %	31.2%	30.2%	16.3%	22.3%	100.0%
Total	Row %	30.1%	31.8%	15.9%	22.3%	100.0%	



The newly created geographic variables can be used to summarize person level data as well. To merge the new variables into the person file, open the person file and use the following syntax:

```
MATCH FILES /FILE=*
/TABLE='C:\nymtc\report\Hhrpt.sav'
/RENAME (assign day_end hhsz income mdl numplace s1bwgt totveh =
d0 d1 d2 d3 d4 d5 d6 d7)
/BY sampno
/DROP= d0 d1 d2 d3 d4 d5 d6 d7.
EXECUTE.
```

Then use the following syntax to create Table 2

```
* Basic Tables.
TABLES
/FORMAT BLANK MISSING('.')
/OBSERVATION trips
/TABLES (fipscode + region + polreg + state) > trips
BY (STATISTICS)
/STATISTICS
mean( ( NEQUAL7.2 )) /TITLE 'Table 2: Trip Rates by County, Regions, and'+
' State'.
```

**Table 2: Trip Rates by County, Regions, and State**

		Mean	
County code	Fairfield	N=3.54	
	New Haven	N=3.42	
	Bergen	N=3.55	
	Essex	N=2.94	
	Hudson	N=2.85	
	Hunterdon	N=3.31	
	Mercer	N=3.50	
	Middlesex	N=3.38	
	Monmouth	N=3.62	
	Morris	N=3.61	
	Ocean	N=2.96	
	Passaic	N=3.21	
	Somerset	N=3.67	
	Sussex	N=3.44	
	Union	N=3.52	
	Warren	N=3.29	
	Bronx	N=2.72	
	Dutchess	N=3.61	
	Kings	N=2.67	
	Nassau	N=3.47	
	New York	N=3.44	
	Orange	N=3.49	
	Putnam	N=3.51	
	Queens	N=2.91	
	Richmond	N=3.07	
	Rockland	N=3.32	
	Suffolk	N=3.52	
	Westchester	N=3.61	
	Geographic Region	New York City	N=3.09
		Long Island	N=3.50
		Mid-Hudson	N=3.49
		Other NY	N=3.55
		NJTPA region	N=3.33
Other NJ		N=3.50	
Connecticut		N=3.50	
Political Region	NYMTC	N=3.24	
	NY -	N=3.55	
	NJTPA	N=3.33	
	NJ - non-NJTPA	N=3.50	
	CT	N=3.50	
State	Connecticut	N=3.50	
	New Jersey	N=3.35	
	New York	N=3.27	

## **Data User Flags**

The data user flags can be used to restrict cases from analyses as well. The following syntax excludes trips with unresolved speed violations from the calculation of average travel time to work.

Select cases where speed violation = unresolved.

# Appendix B – Data Code Book

---

Household File  
N of Cases: 11264

Total # of Defined Variable Elements: 57  
# of Named Variables: 46

## Variable Information:

Name	Position
SAMPNO Household Identifier Format: F7 Column Width: Unknown Alignment: Right	1
PHONE Household Phone Number Format: A12 Column Width: Unknown Alignment: Left	2
HH_ADDR Locator code for HH address Format: F8 Column Width: Unknown Alignment: Right	4
QUEST Locator code for CATI record Format: A5 Column Width: Unknown Alignment: Left	5
ADVLT Did you receive the advance letter? Format: F1 Column Width: Unknown Alignment: Right	6
Value Label	
1 Yes	
2 No	
8 Don't Know	
9 Refused	
ATHOME Respondent reached at home Format: F1 Column Width: Unknown Alignment: Right	7
Value Label	
1 yes	
2 no	
3 not a residence	
TOTVEH # of HH vehicles Format: F2 Column Width: Unknown Alignment: Right	8
Value Label	
98 Don't Know	
99 Refused	
DWELL Dwelling type Format: F2 Column Width: Unknown Alignment: Right	9
Value Label	
1 Single family - detached	
2 Single family - attached	
3 Apt building	
4 Hotel / motel	
5 mobile home/trailer	
6 dorm / group quarters	
7 other	
98 don't know	
99 refused	
DWELO If dwelling type=other, specify Format: A25 Column Width: Unknown Alignment: Left	10

DWELN	If apt bldg, # of units	14
Format:	F4 Column Width: Unknown Alignment: Right	
	Value Label	
	9999 dk/refused	
YRMOV	Year moved in	15
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 within past year	
	2 1 to 5 yrs ago	
	3 more than 5 yrs ago	
	8 don't know	
	9 rf	
RENT	Own or rent?	16
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 rent	
	2 own	
	3 other	
	8 don't know	
	9 refused	
RENTO	If ownership status=other, specify	17
Format:	A25 Column Width: Unknown Alignment: Left	
DIARY	Is your home address your mailing address?	21
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 yes	
	2 no	
	8 don't know	
	9 refused	
ENGL	other language spoken	22
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 yes	
	2 no	
	8 don't know	
	9 refused	
HELP	if non-english, have help filling out diary?	23
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 yes	
	2 no	
	8 don't know	
	9 refused	
LANG	specific language	24
Format:	F2 Column Width: Unknown Alignment: Right	
	Value Label	
	1 spanish	
	2 french	
	3 german	
	4 chinese	
	5 italian	
	6 tagalog	
	7 polish	
	8 korean	
	9 indic	
	10 vietnamese	
	11 other	
	98 don't know	
	99 refused	

NHELP	have help w/ diaries from friend or neighbor?	25
Format:	F1 Column Width: Unknown Alignment: Right	
Value	Label	
1	yes	
2	no	
8	don't know	
9	refused	
HHSIZE	hh size	26
Format:	F2 Column Width: Unknown Alignment: Right	
Value	Label	
98	Don't Know	
99	Refused	
PHONLINE	# of phone lines	27
Format:	F2 Column Width: Unknown Alignment: Right	
Value	Label	
98	Don't Know	
99	Refused	
FAX	# of fax/modem lines	28
Format:	F2 Column Width: Unknown Alignment: Right	
Value	Label	
98	Don't Know	
99	Refused	
NOPHONE	Days without a phone	29
Format:	F1 Column Width: Unknown Alignment: Right	
Value	Label	
1	yes	
2	no	
8	don't know	
9	refused	
NPTIME	How long without a phone?	30
Format:	F1 Column Width: Unknown Alignment: Right	
Value	Label	
1	< 2 weeks	
2	2 weeks but less than 1 month	
3	1 mth but less than 3 mths	
4	3 mths but less than 6 mths	
5	6 mths but less than 1 yr	
8	don't know	
9	refused	
SHPHONE	Shared phone lines	31
Format:	F2 Column Width: Unknown Alignment: Right	
Value	Label	
1	yes	
2	no	
98	Don't Know	
99	Refused	
SHNUM	# of hh sharing phone line	32
Format:	F2 Column Width: Unknown Alignment: Right	
Value	Label	
98	Don't Know	
99	Refused	

ETHNIC hh ethnicity 33  
Format: F2 Column Width: Unknown Alignment: Right

Value	Label
1	Black, Non-Hispanic
2	White, Non-Hispanic
3	Asian/Pacific Islander
4	American Indian
5	Hispanic
6	Other
98	Don't know
99	Refused

ETHNICO If ethnic=other, specify 34  
Format: A25 Column Width: Unknown Alignment: Left

INCLEV Income Level 38  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
1	Below \$50,000
2	Above \$50,000
8	Don't Know
9	Refused

INCOME hh income 39  
Format: F2 Column Width: Unknown Alignment: Right

Value	Label
1	< \$10k
2	\$10k - < \$15k
3	\$15k - < \$25k
4	\$25k - < \$35k
5	\$35k - < \$50k
6	\$50k - < \$75k
7	\$75k - < \$100k
8	\$100k - < \$125k
9	\$125k - < \$150k
10	\$150k +
98	don't know
99	refused

ASSIGN Travel day 40  
Format: F3 Column Width: Unknown Alignment: Right

EXPOT expected out of town visitors on travel day 41  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
1	yes
2	no
8	don't know
9	refused

APPT Best time to call for retrieval 42  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
1	morning
2	afternoon
3	evening
4	no best time
9	don't know/refused

DIFFPHON call at different phone # 43  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
1	yes
2	no
8	don't know
9	refused

TEL02 what is that phone number 44  
Format: A12 Column Width: Unknown Alignment: Left

COMMVEH # of commercial vehicles 46  
Format: F2 Column Width: Unknown Alignment: Right

Value	Label
97	97+
98	Don't Know
99	Refused

OUTTOWN # out of town visitors at residence on travel day 47  
Format: F2 Column Width: Unknown Alignment: Right

Value	Label
97	97+
98	don't know
99	refused

NUMPLACE # PLACES VISITED BY HH MEMBERS 48  
Format: F3 Column Width: Unknown Alignment: Right

PARTIAL partial activity data 49  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
1	yes
2	no

MDL Mode Density Leadership Code 50  
Format: F2 Column Width: Unknown Alignment: Right

Value	Label
97	"N" in CSI source file
98	Blank in CSI source file
99	Not yet determined/not in CSI source file

FIPSCODE County code 51  
Format: F5 Column Width: Unknown Alignment: Right

S1BWGT Stage 1 Weight 57  
Format: F8.4 Column Width: Unknown Alignment: Right

TRIPFLAG Trip File Flag Status 52  
Measurement Level: Ordinal  
Column Width: Unknown Alignment: Right  
Print Format: F1  
Write Format: F1

Value	Label
1	Trip file contains a data user flag

AUDITFLG Audit File Flag 53  
Measurement Level: Ordinal  
Column Width: Unknown Alignment: Right  
Print Format: F1  
Write Format: F1

Value	Label
-------	-------



Person File  
 N of Cases: 27369

Total # of Defined Variable Elements: 155  
 # of Named Variables: 83

Variable Information:			Position
Name			
SAMPNO	Household sample number		1
	Format: F7	Column Width: Unknown Alignment: Right	
PERSNO	Person number		2
	Format: F2	Column Width: Unknown Alignment: Right	
GENDER	Gender		3
	Format: F1	Column Width: Unknown Alignment: Right	
	Value	Label	
	1	Male	
	2	Female	
	3	Head of Household Male	
	4	Head of Household Female	
	8	Don't know	
	9	Refused	
AGE	Age		4
	Format: F2	Column Width: Unknown Alignment: Right	
	Value	Label	
	98	Don't Know	
	99	Refused	
LIC	licensed driver		5
	Format: F1	Column Width: Unknown Alignment: Right	
	Value	Label	
	1	yes	
	2	no	
	8	don't know	
	9	refused	
RELATE	relationship		6
	Format: F2	Column Width: Unknown Alignment: Right	
	Value	Label	
	1	self (head of household)	
	2	spouse	
	3	son/daughter	
	4	father/mother	
	5	brother/sister	
	6	grandparent	
	7	grandchild	
	8	live-in help	
	9	room mate/non-related	
	10	other related	
	11	tenant/boarder/renter	
	99	don't know/refused	
DISA1	disability		7
	Format: F1	Column Width: Unknown Alignment: Right	
	Value	Label	
	1	yes	
	2	no	
	8	don't know	
	9	refused	

DABL1	Type of disability	8
Format:	F2 Column Width: Unknown Alignment: Right	
	Value Label	
	1 visual or blind	
	2 hearing impaired	
	3 cane or walker	
	4 wheelchair, non-transferrable	
	5 wheelchair, transferrable	
	6 cognitively challenged	
	7 other	
	98 don't know	
	99 refused	
DABLO	If disability=other, specify	9
Format:	A20 Column Width: Unknown Alignment: Left	
EDUC	Enrolled in school	12
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 yes	
	2 no	
	8 don't know	
	9 refused	
LEVEL	Level of school attending	13
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 daycare	
	2 pre-school	
	3 K-6	
	4 7-12	
	5 vo tech	
	6 college/univ	
	7 adult school	
	8 don't know	
	9 refused	
SNAME	School name	14
Format:	A30 Column Width: Unknown Alignment: Left	
S_LOC	Locator code for school address	18
Format:	F8 Column Width: Unknown Alignment: Right	
SDAY	# days attend school	19
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	8 Don't Know	
	9 Refused	

SMODE mode used to go to school 20  
Format: F10 Column Width: Unknown Alignment: Right

Value	Label
11	walk
12	wheelchair
13	skates
14	bicycle
21	auto driver
22	auto passenger
23	motorcycle/moped
31	group ride
41	standard local bus
42	school bus
43	commuter van from employer/grp contract
44	commuter van/jit/dab - pay fare
45	express bus
46	charter bus
47	airport line
51	amtrak/greyhound/airline/helo
61	subway
62	path
63	newark city subway
71	ferry
81	commuter rail
91	yellow/medallion cab
92	for hire van/jitney
93	car service / black car
94	gypsy cab
97	other
98	don't know
99	refused

SCOST Cost to park at school 21  
Format: A6 Column Width: Unknown Alignment: Left

Value	Label
999998	don't know
999999	refused

SPUNIT cost to park at school - unit 22  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
0	free
1	per hour
2	per day
3	per week
4	per month
5	per quarter
6	per semester
7	per school year
8	don't know
9	refused

EMPL Employment status 23  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
1	yes -employed ft
2	yes - employed pt
3	no -not employed
8	don't know
9	refused

NOJOB unemployed 24  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
1	retired
2	homemaker
3	unemployed - seeking
4	unemployed - not seeking
5	student
8	don't know
9	refused

JOBCNT Have more than 1 job 25  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 yes  
2 no  
8 don't know  
9 refused

E1JOB employer 26  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
1 private co  
2 government  
3 self-employed  
4 other  
98 don't know  
99 refused

E1JOB0 if employer=other, specify 27  
Format: A40 Column Width: Unknown Alignment: Left

W1IND industry 32  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
1 Agriculture, forestry, fisheries  
2 Mining  
3 Construction  
4 Manufacturing-Nondurable goods  
5 Manufacturing-Durable goods  
6 Transportation  
7 Communications, other public utilities  
8 Wholesale trade  
9 Retail trade  
10 Finance, Insurance or Real Estate  
11 Business and Repair Services  
12 Personal Services  
13 Entertainment or Recreation Services  
14 Health Services  
15 Educational Services  
16 Other professional and related services  
17 Public administration  
97 Other (Specify)  
98 Don't Know  
99 Refused

W1IND0 Industry (Other) 33  
Format: A60 Column Width: Unknown Alignment: Left

W1OCC occupation 41  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
1 executive, administrative or managerial  
2 professional specialty  
3 technician and related support  
4 sales  
5 administrative support, clerical  
6 private household  
7 protective service  
8 service, except protective and household  
9 farming, forestry, or fishing  
10 precision, production, craft, or repair  
11 machine operator, assembler, or inspector  
12 transportation, or material moving  
13 handler, equipment cleaner, helper or laborer  
97 Other (Specify)  
98 Don't Know  
99 Refused

W1OCC0 occupation (other) 42  
Format: A30 Column Width: Unknown Alignment: Left

W1TIM Length of time at main job 46  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 less than 1 yr  
2 1 to 5 yrs  
3 more than 5 yrs  
8 Don't Know  
9 Refused

W1DAY Weekdays per week at job 47  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
0 0  
1 1  
2 2  
3 3  
4 4  
5 5  
8 Don't Know  
9 Refused

W1HOM Telecommuting days 48  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
0 0  
1 1  
2 2  
3 3  
4 4  
5 5  
6 6  
7 7  
97 Other(specify) - This includes once per month  
98 Don't Know  
99 Refused

W1HOMO Telecommuting days (other) 49  
Format: A60 Column Width: Unknown Alignment: Left

W1CPR compressed work week 57  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 yes  
2 no  
8 don't know  
9 refused

W1CPRTYP type of compressed work week 58  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 9/80  
2 4/40  
3 Other (Specify)  
8 Don't Know  
9 Refused

W1CPRTO type of compressed work week - other 59  
Format: A30 Column Width: Unknown Alignment: Left

W1WKE weekend work 63  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
0 0  
1 1  
2 2  
8 Don't Know  
9 Refused

W1WKD weekend work detail 64  
Format: F5 Column Width: Unknown Alignment: Right  
Value Label  
1 Saturday AM  
2 Saturday PM  
3 Sunday AM  
4 Sunday PM  
5 Other (Specify)  
8 Don't Know  
9 Refused

W1NAM code to show if resp knows employer name 65  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
1 knows main job name  
98 don't know  
99 refused

W1NAMF main job name (text) 66  
Format: A60 Column Width: Unknown Alignment: Left

W1ADDTYP main job address flag 74  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 home  
2 complete street address known/given  
3 cross streets know/given  
8 don't know  
9 refused

W1\_LOC Locator code for work addr 75  
Format: F8 Column Width: Unknown Alignment: Right

W1MODE mode to work 76  
Format: F10 Column Width: Unknown Alignment: Right  
Value Label  
11 walk  
12 wheelchair  
13 In-line skates, roller skates  
14 bicycle  
21 auto driver  
22 auto passenger  
23 motorcycle/moped  
31 group ride (carpool, vanpool etc.)  
41 standard local bus  
42 school bus  
43 commuter van/shuttle bus: from employer or grp contract  
44 commuter van or jitney, dial-a-bus (pay fare)  
45 express bus  
46 charter bus  
47 airport line  
51 AMTRAK, greyhound, airline, helicopter  
61 subway (includes NYCTA, SIRT)  
62 Path  
63 Newark City Subway  
71 ferry (including Roosevelt Island Tram)  
81 commuter railroad (LIRR, Metro North, NJ Transit)  
91 yellow/medallion cab  
92 for hire van/jitney  
93 car service(black car)  
94 gypsy cab  
97 other  
98 Don't Know  
99 Refused

W1MODEO mode to work (other) 77  
Format: A25 Column Width: Unknown Alignment: Left

W1NEEDV need a vehicle at work for business purposes 81  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 yes  
2 no  
8 don't know  
9 refused

W1CPARK cost to park vehicle at work 82  
Format: A6 Column Width: Unknown Alignment: Left  
Value Label  
999998 don't know  
999999 refused

W1CPUNIT Unit - for cost to park veh at work 83  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
0 Free/Employer provided  
1 per hour  
2 per day  
3 per week  
4 per month  
5 per quarter  
6 per semester  
7 per year  
8 don't know  
9 refused

W1EMPARK employer subsidize parking 84  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
1 yes  
2 no  
8 don't know  
9 refused

W1PERCP personal cost to park veh at work 85  
Format: A6 Column Width: Unknown Alignment: Left  
Value Label  
999998 don't know  
999999 refused

W1PERCPU Unit - for personal cost to park veh at work 86  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
0 Free/Employer provided  
1 per hour  
2 per day  
3 per week  
4 per month  
5 per quarter  
6 per semester  
7 per year  
8 don't know  
9 refused

W1WHPRK where park at work 87  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
1 In a parking lot or garage at work  
2 In a parking lot or garage off-site  
3 On the street  
4 Garage or Parking lot at home  
8 Don't Know  
9 Refused

W1WLKTIM how long to walk from parking area to work? 88  
Format: F4 Column Width: Unknown Alignment: Right  
Value Label  
98 Refused  
99 Don't Know

TRNST	employer subsidize transit	89
Format:	F2 Column Width: Unknown Alignment: Right	
	Value Label	
	1 Yes, all or part	
	2 No	
	8 Don't Know	
	9 Refused	
VTRAN	Use transit subsidy	90
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 Yes	
	2 No	
	8 Don't Know	
	9 Refused	
TRANCOST	cost of using transit (dollar figure)	91
Format:	A6 Column Width: Unknown Alignment: Left	
	Value Label	
	999998 don't know	
	999999 refused	
TRNCSTU	Unit - for cost of using transit	92
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	0 free	
	1 per day	
	2 per week	
	3 per month	
	4 per year	
	8 don't know	
	9 refused	
SCHED	constant schedule	93
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 yes	
	2 no	
	8 don't know	
	9 refused	
WSTIM	work start time	94
Format:	A8 Column Width: Unknown Alignment: Left	
	Value Label	
	9998 don't know	
	9999 refused	
WETIM	work end time	95
Format:	A8 Column Width: Unknown Alignment: Left	
	Value Label	
	9998 don't know	
	9999 refused	
SETIME	hours the same every day?	96
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 yes	
	2 no	
	8 Don't Know	
	9 Refused	



VSTIME variation in work start time 97  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 start time cannot vary  
2 within 15 minutes or less  
3 16-30 minutes  
4 31-60 minutes  
5 more than 1 hour to 2 hours  
6 or something else (specify)  
8 don't know  
9 refused

VETIME variation in work end time 98  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 end time cannot vary  
2 within 15 minutes or less  
3 16-30 minutes  
4 31-60 minutes  
5 more than 1 hour to 2 hours  
6 Or something else (specify)  
8 Don't Know  
9 Refused

W2NMF second job name flag 99  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
1 second job name  
98 Don't Know  
99 Refused

W2NAME second job name (text) 100  
Format: A30 Column Width: Unknown Alignment: Left

W2TYP company type 104  
Format: F2 Column Width: Unknown Alignment: Right  
Value Label  
1 a private company  
2 government  
3 self-employed  
4 Something else (Specify)  
98 Don't Know  
99 Refused

W2TYPO second job type (other) 105  
Format: A30 Column Width: Unknown Alignment: Left

W2ADTYP second job address type 109  
Format: F1 Column Width: Unknown Alignment: Right  
Value Label  
1 home  
2 complete street address known/given  
3 Cross streets known/given  
8 Don't Know  
9 Refused

W2\_LOC locator code for work two addr 110  
Format: F8 Column Width: Unknown Alignment: Right

W2IND industry for second job 111  
Format: F2 Column Width: Unknown Alignment: Right

Value	Label
1	Agriculture, forestry, fisheries
2	Mining
3	Construction
4	Manufacturing-Nondurable goods
5	Manufacturing-Durable goods
6	Transportation
7	Communication, other public utilities
8	Wholesale trade
9	Retail trade
10	Finance, Insurance or Real Estate
11	Business and Repair Services
12	Personal Services
13	Entertainment or Recreation services
14	Health Services
15	Educational Services
16	Other Professional and related services
17	Public administration
97	Other (Specify)
98	Don't Know
99	Refused

W2INDO 2nd job industry (other) 112  
Format: A30 Column Width: Unknown Alignment: Left

W2OCC second job occupation 116  
Format: F2 Column Width: Unknown Alignment: Right

Value	Label
1	executive, admin, or managerial
2	professional specialty
3	technician and related support
4	sales
5	administrative support, clerical
6	private household
7	protective service
8	service, except protective and household
9	farming, forestry, or fishing
10	precision, production, craft, or repair
11	machine operator, assembler, or inspector
12	transportation, or material moving
13	handler, equipment cleaner, helper, or laborer
97	other (specify)
98	Don't Know
99	Refused

W2OCCO 2nd job occupation (other) 117  
Format: A30 Column Width: Unknown Alignment: Left

W2DAY weekdays worked per week - second job 121  
Format: F1 Column Width: Unknown Alignment: Right

Value	Label
0	0
1	1
2	2
3	3
4	4
5	5
8	don't know
9	refused

W2HOME	days worked from home - second job	122
Format:	F2 Column Width: Unknown Alignment: Right	
	Value Label	
	0 0	
	1 1	
	2 2	
	3 3	
	4 4	
	5 5	
	6 6	
	7 7	
	97 Other (Specify)	
	98 Don't Know	
	99 Refused	
W2HOMEO	days worked at home for second job (Other)	123
Format:	A30 Column Width: Unknown Alignment: Left	
W2STIME	time start 2nd job	127
Format:	A8 Column Width: Unknown Alignment: Left	
	Value Label	
	9998 don't know	
	9999 refused	
W2ETIME	work end time - second job	128
Format:	A8 Column Width: Unknown Alignment: Left	
	Value Label	
	9998 don't know	
	9999 refused	
VERWORK	Verify Work Trip	129
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	0 no	
	1 yes	
VERWORKC	If no work trip, why not?	130
Format:	A40 Column Width: Unknown Alignment: Left	
VERSCHL	Verify School trip	135
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	0 no	
	1 yes	
VERSCHLC	If no school trip, why not?	136
Format:	A40 Column Width: Unknown Alignment: Left	
HMALLDAY	Was respondent home all day?	141
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 Yes	
	2 No	
HMALLDAC	Home all day - Explanation	142
Format:	A50 Column Width: Unknown Alignment: Left	
FNAME	First name	149
Format:	A20 Column Width: Unknown Alignment: Left	
LNAME	Last name	152
Format:	A20 Column Width: Unknown Alignment: Left	
PNUMPL	# places visited	155
Format:	F3 Column Width: Unknown Alignment: Right	

Vehicle File  
 N of Cases: 17517

Total # of Defined Variable Elements: 9  
 # of Named Variables: 6

Variable Information:

Name		Position
SAMPNO	Sample Number	1
Format:	F7 Column Width: Unknown Alignment: Right	
VEHNUM	Vehicle Number	2
Format:	F2 Column Width: Unknown Alignment: Right	
YEAR	Year of Vehicle	3
Format:	F2 Column Width: Unknown Alignment: Right	
	Value Label	
	99 Don't Know/Refused	
TYPE	Type of Vehicle	4
Format:	F2 Column Width: Unknown Alignment: Right	
	Value Label	
	1 auto	
	2 auto 2-seat	
	3 van	
	4 rec veh	
	5 util veh	
	6 station wagon	
	7 pick-up truck	
	8 motorcycle	
	9 moped	
	10 other	
	98 don't know	
	99 refused	
TYPE_OT	Text for Other Types	5
Format:	A25 Column Width: Unknown Alignment: Left	
VHOWN	Vehicle Owned/Leased	9
Format:	F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 hh owned/leased	
	2 emp provided	
	3 rental	
	4 borrowed	
	5 other	
	8 don't know	
	9 refused	

Trip File  
 N of Cases: 118134  
 # of Named Variables: 89

Name		Position
SAMPNO	Sample Number Measurement level: Scale Format: F7 Column Width: Unknown Alignment: Right	1
PERSNO	Person Number Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	2
PLACENO	Place Number Measurement level: Ordinal Format: F3 Column Width: Unknown Alignment: Right	3
NOSTOP	Stops along the way? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	4
	Value Label	
	1 yes	
	2 no	
INTP	Interviewed in person? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	5
	Value Label	
	1 Yes	
	2 No	
PDIARY	Did person use diary? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	6
	Value Label	
	1 Yes	
	2 No	
PREP	If proxy, person reporting Measurement level: Nominal Format: A30 Column Width: 6 Alignment: Left	7
PNOPREP	If proxy, persno who reported Measurement level: Ordinal Format: F3 Column Width: Unknown Alignment: Right	11
	Value Label	
	98 mail-in	
	99 non-hh member	
CTRLTRIP	How many places did you visit? Measurement level: Scale Format: F3 Column Width: Unknown Alignment: Right	12
TIMEARRI	arrival time Measurement level: Nominal Format: A20 Column Width: 7 Alignment: Left	13
TIMEDEPA	departure time Measurement level: Nominal Format: A20 Column Width: 6 Alignment: Left	16
PLACTYP	Location identifier	19

	Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	
	Value Label	
	1 home	
	2 work	
	3 school	
	4 address already given	
	5 new place	
PL_LOC	place code in location table Measurement level: Scale Format: F8 Column Width: Unknown Alignment: Right	20
ACT1	Activity at place Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	21
	Value Label	
	1 drop off/pick up	
	2 visit	
	3 eat	
	4 social/rec	
	5 shop	
	6 dr/dentist	
	7 other family/pers bus	
	8 religious/civic	
	9 work at home	
	10 work at regular location	
	11 work at other place	
	12 school	
	13 school activity at other place	
	14 sleep	
	15 other in-home activities	
	16 other	
ACT10	Activity 1 Other Measurement level: Nominal Format: A20 Column Width: Unknown Alignment: Left	22
ACT2	2nd activity at same place Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	25
ACT20	Activity 2 Other Measurement level: Nominal Format: A20 Column Width: Unknown Alignment: Left	26
ACT3	3rd activity at same place Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	29
ACT30	Activity 3 Other Measurement level: Nominal Format: A20 Column Width: Unknown Alignment: Left	30
ACT4	4th activity at same place Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	33
ACT40	Activity 4 Other Measurement level: Nominal Format: A20 Column Width: Unknown Alignment: Left	34
ACT5	5th activity at same place Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	37

ACT50	Activity 5 Other Measurement level: Nominal Format: A20 Column Width: Unknown Alignment: Left	38
ACT6	6th activity at same place Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	41
ACT60	Activity 6 Other Measurement level: Nominal Format: A20 Column Width: Unknown Alignment: Left	42
TRAN1	1st mode of travel used Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	45
	Value      Label	
	11      walk	
	12      wheelchair	
	13      skates	
	14      bicycle	
	21      auto driver	
	22      auto passenger	
	23      motorcycle/moped	
	31      group ride	
	41      std local bus	
	42      school bus	
	43      comm van/shut bus:emp or grp contract	
	44      comm van or jitney:pay fare	
	45      express bus	
	46      charter bus	
	47      airport line	
	51      amtrak, greyhound, airline, helo	
	61      subway	
	62      path	
	63      newark city subway	
	71      ferry	
	81      comm rail	
	91      yellow/medallion cab	
	92      for hire van/jitney	
	93      car service/black car	
	94      gypsy cab	
	97      other	
	98      don't know	
	99      refused	
TRAN2	2nd mode of travel used Measurement level: Scale Format: F2 Column Width: Unknown Alignment: Right	46
TRAN3	3rd mode of travel used Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	47
TRAN4	4th mode of travel used Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	48
TRAN5	5th mode of travel used Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	49
TRAN6	6th mode of travel used Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	50

HHVU	HH vehicle used? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	51
	Value Label	
	1 Yes	
	2 No	
HHVEHNO	HH veh no used Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	52
	Value Label	
	0 does not apply	
ADP	Driver or Passenger? Measurement level: Nominal Format: A1 Column Width: Unknown Alignment: Left	53
	Value Label	
	1 driver	
	2 passenger	
NPERVEH	# in vehicle Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	54
	Value Label	
	0 does not apply	
NHHTRAV	# hh members traveling with you Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	55
	Value Label	
	0 does not apply	
THHMEMN	Who traveled with you (persno)? Measurement level: Nominal Format: A20 Column Width: Unknown Alignment: Left	56
NNONTRAV	# non hh members traveling with you Measurement level: Ordinal Format: F2 Column Width: Unknown Alignment: Right	59
	Value Label	
	0 does not apply	
PARK	parking location Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	60
	Value Label	
	0 does not apply	
	1 street	
	2 garage	
	3 parking lot	
	4 driveway	
	5 drop off	
	6 other	
PARKO	If parking location=other, specify Measurement level: Nominal Format: A50 Column Width: Unknown Alignment: Left	61



PARKC	Cost to park Measurement level: Scale Format: F6.2 Column Width: Unknown Alignment: Right	68
PARKCU	parking cost unit Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	69
	Value      Label	
	0      does not apply	
	1      hour	
	2      day	
	3      week	
	4      month	
	5      other	
PARKCUO	if other, specify Measurement level: Nominal Format: A50 Column Width: Unknown Alignment: Left	70
TOLL	Did you pay a toll? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	77
	Value      Label	
	1      Yes	
	2      No	
	9      Don't know	
TOLLAMT	if paid toll, how much? Measurement level: Scale Format: F6.2 Column Width: Unknown Alignment: Right	78
ADDP	Auto driver dropped off or picked up Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	79
	Value      Label	
	1      Yes	
	2      No	
	9      Don't know	
ADDPHH	If yes, was person hh member? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	80
	Value      Label	
	1      Yes	
	2      No	
	9      Don't know	
ADDPHPN	If yes, who? Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	81
APDP	If passenger, were you dropped off or picked up? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	85
	Value      Label	
	1      Yes	
	2      No	
	9      Don't know	

APDPHH	If yes, was it by a hh member? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	86
	Value      Label	
	1      Yes	
	2      No	
	9      Don't know	
APDPHHPN	If yes, who? Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	87
SUBTR	where did you board Measurement level: Nominal Format: A50 Column Width: Unknown Alignment: Left	91
LINE	what line? Measurement level: Nominal Format: A50 Column Width: Unknown Alignment: Left	98
TRFR	How many times did you transfer Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	105
TRFR1ST	1st transfer station Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	106
LINE1ST	Line # for 1st transfer Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	110
TRFR2ND	2nd transfer station Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	114
LINE2ND	Line # for 2nd transfer Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	118
TRFR3RD	3rd transfer station Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	122
LINE3RD	Line # for 3rd transfer Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	126
TRFR4TH	4th transfer station Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	130
LINE4TH	Line # for 4th transfer Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	134
EXITST	exit station Measurement level: Nominal Format: A50 Column Width: Unknown Alignment: Left	138

PAY1	1st fare payment method Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	145
	Value    Label	
	1    cash	
	2    token	
	3    weekly pass	
	4    monthly pass	
	5    metrocard	
	6    free transfer	
	7    other	
PAY10	if other, specify Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	146
PAY2	2nd fare payment method Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	150
PAY20	if other, specify Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	151
PAY3	3rd fare payment method Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	155
PAY30	3rd transit payment - other Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	156
PAY4	4th fare payment method Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	160
PAY40	4th transit payment - other Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	161
PAY5	5th fare payment method Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	165
PAY50	5th transit payment - other Measurement level: Nominal Format: A30 Column Width: Unknown Alignment: Left	166
PLCITY	Out of town - city Measurement level: Nominal Format: A24 Column Width: Unknown Alignment: Left	170
PLSTATE	Out of town - state Measurement level: Nominal Format: A2 Column Width: Unknown Alignment: Left	173
OUTOFTWN	out of town? Measurement level: Nominal Format: A1 Column Width: Unknown Alignment: Left	174
	Value    Label	
	1    yes	
	2    no	

OTSTAY	if out of town, did you stay at? Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	175
	Value    Label	
	0    does not apply	
	1    residence	
	2    hotel/motel	
	3    school	
	4    other (specify)	
OTSTAYOT	Out of town - stay other Measurement level: Nominal Format: A50 Column Width: Unknown Alignment: Left	176
SPDVIOL	Speed violation (edit check warning message) Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	183
	Value    Label	
	1    acceptable outlier	
	2    violation likely caused by time rounding	
	3    cause unknown	
SPDROUND	Rounding parameters for spdviol=2 Measurement level: Nominal Format: F1 Column Width: Unknown Alignment: Right	184
	Value    Label	
	1    5 min rounding	
	2    10 min rounding	
	3    15 min rounding	
	4    30 min rounding	
INCTOUR	Incomplete tour (didn't return home) Measurement level: Scale Format: F1 Column Width: Unknown Alignment: Right	185
	Value    Label	
	1    record confirmed	
MISSTRAN	Transit information missing Measurement level: Nominal Format: F1 Column Width: Unknown Alignment: Right	186
	Value    Label	
	1    transit trip missing boarding station or line info	
	2    transit trip missing transfer station or line info	
	3    transit trip missing exit station or line info	
	4    mode missing	
	5    mode unclear (per NYMTC)	
	6    transit trip missing boarding and transfer info	
MODEUNCL	Mode unclear (to be provided by NYMTC) Measurement level: Scale Format: F1 Column Width: Unknown Alignment: Right	187
	Value    Label	
	1    any fixed rail mode	
	2    any bus or jitney mode (rubber tire transit)	
	3    any transit mode	
	4    auto trip (SOV, HOV, passenger)	
	5    mode cannot be defined	

RECADJ Documentation of record updates 188  
Measurement level: Ordinal  
Format: F1 Column Width: Unknown Alignment: Right

Value Label

- 1 Record updated by NYMTC during transit check efforts
- 2 Record updated as part of final work program

IMPUTED Imputed Location 189  
Measurement level: Nominal  
Format: A2 Column Width: 7 Alignment: Left

Value Label

- I Imputed location

## Location File

List of variables on the working file

Name		Position
LOCNO	location number	1
Print Format:	F8	
Write Format:	F8	
LOCTYPE	location type	2
Print Format:	F1	
Write Format:	F1	
Value	Label	
1	home	
2	school	
3	work1	
4	work2	
5	other place	
NAME	location name	3
Print Format:	A60	
Write Format:	A60	
ADDRESS	address	11
Print Format:	A90	
Write Format:	A90	
CITY	city	23
Print Format:	A24	
Write Format:	A24	
COUNTY	Respondent reported county	26
Print Format:	A30	
Write Format:	A30	
STATE	state	30
Print Format:	A2	
Write Format:	A2	
ZIP1	zipcode 1	31
Print Format:	F5	
Write Format:	F5	
ZIP2	zipcode (last 4 digits)	32
Print Format:	F4	
Write Format:	F4	
TRACT	census tract	33
Print Format:	F20	
Write Format:	F20	
FIPSCODE	FIPS Code (state+county)	34
Print Format:	F5	
Write Format:	F5	
LONGI	Longitude	35
Print Format:	F20.5	
Write Format:	F20.5	
LATI	Latitude	36
Print Format:	F20.5	
Write Format:	F20.5	
GISCOUNT	GIS count	37
Print Format:	F2	
Write Format:	F2	

AV_STATU	Geocoding status	38
Print Format:	A1	
Write Format:	A1	
Value	Label	
C	On-screen match	
I	Imputed	
M	Matched	
O	Out Of Area	
U	Unmatched	
V	Addressed updated, regeocode	
AV_ZONE	Arcview Zone	39
Print Format:	A32	
Write Format:	A32	
AV_ADDRE	Arcview Address	43
Print Format:	A90	
Write Format:	A90	
SPDCHK	Address Verified as part of Speed Check Process	55
Print Format:	F2	
Write Format:	F2	
Value	Label	
0	ok	
2	acceptable outlier	
4	multi-mode walk trip	
5	no prob found	
6	no prob found (time?)	
9	no longer assoc w/ spdchk warning	
MCDCHK	Geocode verified at City/MCD levels	56
Print Format:	F2	
Write Format:	F2	
Value	Label	
1	Correct - city provided matched geocoded city	
2	Correct - zip provided matched geocoded zip	
3	Correct - city or zip provided matched geocoded city or zip	
4	Correct - manually verified geocode	
5	Correct - regeocoded	
AV_CITY		57
Print Format:	A50	
Write Format:	A50	

# Audit File

# of Named Variables: 20

Name		Position
SAMPNO	Sample Number Measurement level: Scale Format: F7 Column Width: 11 Alignment: Right	1
PERSNO	Person Number Measurement level: Ordinal Format: F2 Column Width: 7 Alignment: Right	2
PLACENO	Place Number Measurement level: Ordinal Format: F3 Column Width: 7 Alignment: Right	3
ACTCODE	Activity code correction Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	4
	Value    Label	
	1    corrective action taken	
	2    no corrective action taken	
ACT6XTRA	Extraneous data found in act6 field Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	5
	Value    Label	
	1    corrective action taken	
	2    no corrective action taken	
TOLLFIX	Inconsistent toll payment data Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	6
	Value    Label	
	1    corrective action taken	
	2    no corrective action taken	
MODEFIX	Travel modes possibly mis-entered Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	7
	Value    Label	
	1    corrective action taken	
	2    no corrective action taken	
CONFHOME	Warning - confirm home all day code with trip data Measurement level: Scale Format: F1 Column Width: Unknown Alignment: Right	8
	Value    Label	
	1    corrective action taken	
	2    no corrective action taken	
CONFHABT	Warning - confirm work/school travel Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	9
	Value    Label	
	1    corrective action taken	
	2    no corrective action taken	



PASS1UPD	Warning- transit data updated from Pass 1 Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	10
	Value      Label	
	1      record was updated	
P1QUAL	Pass 1 Quality field (code labels unknown) Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	11
P1PROB	Pass 1 Problem Field (code labels unknown) Measurement level: Ordinal Format: F1 Column Width: Unknown Alignment: Right	12
P1CMNT	Pass 1 comment field Measurement level: Nominal Format: A254 Column Width: Unknown Alignment: Left	13
PASS2UPD	Warning - transit data updated from Pass 2 Measurement level: Scale Format: F1 Column Width: 7 Alignment: Right	45
	Value      Label	
	1      record was updated	
P2QUAL	Pass 2 Quality Field (code labels unknown) Measurement level: Ordinal Format: F1 Column Width: 8 Alignment: Right	46
P2PROB	Pass 2 Problem Field (code labels unknown) Measurement level: Ordinal Format: F1 Column Width: 8 Alignment: Right	47
P2CMNT	Pass 2 Comment field Measurement level: Nominal Format: A254 Column Width: Unknown Alignment: Left	48
FWPUPD	Warning - record updated as part of final work program Measurement level: Scale Format: F1 Column Width: Unknown Alignment: Right	80
	Value      Label	
	1      record was updated	
FWPRRES	Results of Final Work Program research Measurement level: Scale Format: F1 Column Width: Unknown Alignment: Right	81
	Value      Label	
	1      record corrected	
	2      record researched but no problem found	
	3      research resulted in addition of trip	
	4      research resulted in deletion of trip	
	5      research resulted in identification/correction of other prob	
FWPRCMNT	Final Work Program field update documentation Measurement level: Nominal Format: A50 Column Width: Unknown Alignment: Left	82

# Appendix C – Recruitment Interview

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## Section 1: Introductory Script

Household will have received an advance letter.

- A "Hello, my name is [NAME] with the Transportation Futures Project. A few days ago we sent a letter to your home to tell you about this very important project. It is sponsored by the New York Metropolitan Transportation Council. NYMTC is the agency responsible for planning and improving transportation in the region. Did you receive the letter?
- 1 YES
  - 2 NO
  - 8 DON'T KNOW
  - 9 REFUSED
- B As the letter (would have - *if answer to Q.A is anything other than 1*) indicated, we are doing a survey about people's travel patterns and needs. This type of study is done only once every 15 or 20 years; many agencies will use the information I am gathering to make decisions about how to improve the highway and transit systems over the next 20 years.  
May I please speak with an adult?
- 1 HAVE RESPONDENT ⇒ **SKIP TO D**
  - 2 RESPONDENT NOT AVAILABLE
- C When would be a better time to call her/him?
- 1 YES, ARRANGE CALLBACK ⇒ **FILL OUT CALLBACK CARD**
  - 2 NO, RESPONDENT NOT AVAILABLE ⇒ **TERMINATE, AUTOMATIC CALLBACK SCHEDULED**
- D RESPONDENT ON LINE. I'd like to ask you a few questions. Your answers will remain completely confidential. This will take about 10 minutes. All households that participate in this study have an opportunity to win a pair of airline tickets to any continental U.S. destination. These tickets contributed by a private company, are offered as a token of our appreciation for your time.
- 1 OK, CONTINUE ⇒ **SKIP TO E**
- REFUSAL:
- 2 HARD REFUSAL ⇒ **THANK AND TERMINATE**
  - 3 SOFT REFUSAL ⇒ **TERMINATE, AUTOMATIC CALLBACK SCHEDULED**
  - 4 SPECIFIC CALLBACK TIME ARRANGED ⇒ **FILL OUT CALLBACK CARD**
  - 5 LANGUAGE BARRIER ⇒ **CALLED BACK BY SPECIFIC INTERVIEWER**
  - 6 LANGUAGE BARRIER-OTHER ⇒ **CALLED BACK BY SPECIFIC INTERVIEWER**
- E Have I reached you at your home?
- 1 YES ⇒ **SKIP TO G**
  - 2 NO, I DON'T LIVE HERE
  - 3 NO, THIS IS NOT A RESIDENCE ⇒ **THANK AND TERMINATE**
- F Can I speak to someone who lives there?
- 1 YES: QUALIFIED PERSON AVAILABLE ⇒ **GO BACK TO A**
  - 2 YES: QUALIFIED PERSON NOT AVAILABLE ⇒ **GO BACK TO B**
  - 3 NO SUCH PERSON ⇒ **THANK AND TERMINATE**
  - 4 REFUSAL ⇒ **THANK AND TERMINATE**
- G Are you 18 or older?
- 1 YES ⇒ **SKIP TO Q1**
  - 2 NO

- H May I speak with someone in your household who is 18 or older?
- 1 ADULT AVAILABLE ⇒ **GO BACK TO A**
  - 2 ADULT NOT HOME ⇒ **GO BACK TO B**
  - 3 REFUSED ⇒ **THANK AND TERMINATE**

*Initial questions will introduce project, promote participation, and confirm that respondent is an adult and that residence is in an eligible location.*

- Q1 Including all cars, trucks, vans, motorcycles and recreational vehicles, whether owned or leased or provided by an employer, how many vehicles are presently available to the members of your household?
- 00 ZERO ⇒ **SKIP TO Q6**
  - 01 ONE
  - 02 TWO
  - 03 THREE
  - 04 FOUR
  - 05 FIVE
  - 06 SIX
  - 07 SEVEN
  - 08 EIGHT
  - 09 MORE THAN EIGHT (ENTER EXACT NUMBER \_\_\_\_\_)
  - 98 DON'T KNOW ⇒ **THANK AND TERMINATE**
  - 99 REFUSED ⇒ **THANK AND TERMINATE**

Now I need to get some information about your vehicle(s).

- Q2 What's the year of your vehicle? IF TWO OR MORE: "What's the year of vehicle number one, that is, the one used the most", "vehicle number two" and so on.  
ENTER LAST 2 DIGITS OF YEAR OF VEHICLE: 19 \_\_\_\_\_
- 98 DON'T KNOW
  - 99 REFUSED

- Q3 What's the body type? IF TWO OR MORE: "What's the body type of vehicle number one, that is, the one used the most", "vehicle number two" and so on.
- 01 AUTO SEDAN
  - 02 AUTO 2-SEAT
  - 03 VAN
  - 04 RECREATIONAL VEHICLE
  - 05 UTILITY VEHICLE
  - 06 STATION WAGON
  - 07 PICK-UP TRUCK
  - 08 MOTORCYCLE
  - 09 MOPED
  - 10 OTHER (SPECIFY \_\_\_\_\_)
  - 98 DON'T KNOW
  - 99 REFUSED

- Q4 Is it owned or leased by a household member, an employer, or is it a rental car?
- 1 HOUSEHOLD OWNED/LEASED
  - 2 EMPLOYER PROVIDED
  - 3 RENTAL CAR
  - 4 BORROWED FROM FRIEND OR RELATIVE
  - 5 OTHER
  - 8 DON'T KNOW
  - 9 REFUSED

*Q2 to Q4 to be repeated for each vehicle, up to eight vehicles*

- Q5 Do you live in a ...
- 1 SINGLE-FAMILY HOUSE DETACHED FROM ANY OTHER HOUSE
  - 2 SINGLE-FAMILY HOUSE ATTACHED TO ONE OR MORE HOUSES (TOWNHOUSE)
  - 3 BUILDING WITH AT LEAST 2 APARTMENTS (SPECIFY # OF UNITS\_\_\_\_\_)
  - 4 HOTEL/MOTEL
  - 5 MOBILE HOME OR TRAILER
  - 6 DORMITORY/GROUP QUARTERS/BARRACKS
  - 7 OTHER (SPECIFY) \_\_\_\_\_
  - 98 DON'T KNOW
  - 99 REFUSED
- Q6 What year did you move into this home?  
ENTER TWO DIGITS FOR THE YEAR: 19\_\_\_\_\_
- 98 DON'T KNOW
  - 99 REFUSED
- Q7 Do you own or rent your home?
- 1 RENT
  - 2 OWN/BUYING (PAYING OFF MORTGAGE)
  - 3 OTHER (SPECIFY) \_\_\_\_\_
  - 8 DON'T KNOW
  - 9 REFUSED

***Section 4: Confirm Participation and Home Address verification Questions 8A to 8F are asked after completing Question 8.***

- 8A For this Transportation Futures Study, we need everyone in your household to write down what they do and where they go for a 24-hour period. We'll send a diary for each person. After the assigned recording time, we'll call again to collect the information.
- 1 WILLING TO PARTICIPATE
- REFUSAL:
- 1 NOT INTERESTED ⇒ **THANK AND TERMINATE**
  - 2 NEED TO CHECK WITH OTHER MEMBERS ⇒ **FILL OUT CALLBACK CARD**
  - 3 INTRUSION OF PRIVACY ⇒ **THANK AND TERMINATE**
  - 4 GOING OUT OF TOWN ⇒ **THANK AND TERMINATE**
  - 5 DID NOT RECEIVE LETTER ⇒ **FILL OUT CALLBACK CARD**
  - 6 TOO BUSY/ NO TIME ⇒ **THANK AND TERMINATE**
  - 7 ILLNESS IN THE FAMILY ⇒ **THANK AND TERMINATE**
  - 8 DON'T KNOW / REFUSED ⇒ **THANK AND TERMINATE**
  - 9 OTHER\_\_\_\_\_
- 8B To send the diaries, I need to verify your address {*Computer shows the address*}. I have it as:
- {St. Number}  
 {St. Direction}  
 {St. Name}  
 {St. Type}  
 {Apt. Number}  
 {City}  
 {State}  
 {Zip}
- 8C Is this correct?
- 1 YES
  - 2 NO ⇒ **GO BACK TO 8B**

- 8D Where would you like to receive your diaries?
- 1 AT HOME ⇒ **SKIP TO Q9**
  - 2 P.O. BOX
  - 3 ANOTHER ADDRESS ⇒ **SKIP TO 8F**
  - 8 DON'T KNOW ⇒ **THANK AND TERMINATE**
  - 9 REFUSED ⇒ **THANK AND TERMINATE**
- 8E P.O. Box Number \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
Zip \_\_\_\_\_ ⇒ **SKIP TO Q9**
- 8F ST. NUMBER \_\_\_\_\_  
ST. DIRECTION \_\_\_\_\_  
ST. NAME \_\_\_\_\_  
ST. SUFFIX \_\_\_\_\_  
APT. NUMBER \_\_\_\_\_  
CITY \_\_\_\_\_  
STATE \_\_\_\_\_  
ZIP \_\_\_\_\_
- Q9 Is there anyone in your household who does not understand English?
- 1 YES
  - 2 NO ⇒ **SKIP TO Q14**
  - 8 DON'T KNOW ⇒ **SKIP TO Q14**
  - 9 REFUSED ⇒ **SKIP TO Q14**
- Q10 Will you or anyone else in your household be able to help them fill out the diaries?
- 1 YES ⇒ **SKIP TO Q14**
  - 2 NO
  - 8 DON'T KNOW
  - 9 REFUSED
- Q11 What is the language<sup>1</sup> they understand?
- 01 SPANISH
  - 02 FRENCH ⇒ **SKIP TO Q13**
  - 03 GERMAN ⇒ **SKIP TO Q13**
  - 04 CHINESE
  - 05 ITALIAN ⇒ **SKIP TO Q13**
  - 06 TAGALOG ⇒ **SKIP TO Q13**
  - 07 POLISH ⇒ **SKIP TO Q13**
  - 08 KOREAN ⇒ **SKIP TO Q13**
  - 09 INDIC ⇒ **SKIP TO Q13**
  - 10 VIETNAMESE ⇒ **SKIP TO Q13**
  - 11 OTHER (SPECIFY \_\_\_\_\_) ⇒ **SKIP TO Q13**
  - 98 DON'T KNOW ⇒ **SKIP TO Q13**
  - 99 REFUSED
- Q12 We have instructions for completing the survey in English and *{if response to Q11 is 1, "Spanish", if it is 4 "Chinese Mandarin or Cantonese"}*. In what language would you like the instructions?
- 1 ENGLISH
  - 2 CHINESE - MANDARIN
  - 3 CHINESE - CANTONESE
  - 4 SPANISH

<sup>1</sup> Source: U.S. Department of Commerce, Bureau of Census, Ethnic and Hispanic Branch, 1990 Census Special Tabulations

- Q13 Is there anyone else, a friend or a neighbor, who can help this person fill out the diary?  
 1 YES  
 2 NO ⇒ **THANK AND TERMINATE**  
 8 DON'T KNOW ⇒ **THANK AND TERMINATE**  
 9 REFUSED ⇒ **THANK AND TERMINATE**
- Q14 How many household members, including yourself, all infants and live-in domestic help live in your household?  
 ENTER THE NUMBER OF MEMBERS: \_\_\_\_\_  
 98 DON'T KNOW ⇒ **THANK AND TERMINATE**  
 99 REFUSED ⇒ **THANK AND TERMINATE**
- Q15 We need some information about each person in your household, so we can prepare individual diaries. Again, I want to assure you that this information is for research purposes only and will be kept strictly confidential. Earlier, you indicated there were { # } persons in your household.
- IF 3 OR MORE PERSONS IN HOUSEHOLD, ASK:  
 Excluding yourself what is the first name of youngest person in the household?  
 THEN ASK:  
 What's the first name of the next youngest person in the household? REPEAT THIS QUESTION UNTIL YOU HAVE NAMES FOR ALL THE OTHER HOUSEHOLD MEMBERS.  
 FOR THE RESPONDENT ASK:  
 What is your first name?
- IF ONLY 2 PERSONS IN THE HOUSEHOLD, ASK: What is the other person's first name? THEN ASK:  
 What is your first name?
- Q15A. What is your last name?  
 ENTER THE LAST NAME: \_\_\_\_\_
- Q16 to Q70 are asked for each household member. Respondent's information is retrieved last.*
- Q16 And what is { NAME }'s gender? ASK THIS QUESTION ONLY FOR OTHER HOUSEHOLD MEMBERS  
 1 MALE  
 2 FEMALE  
 8 DON'T KNOW  
 9 REFUSED
- Q17 What is {his/her/your} age in years?  
 ENTER AGE: \_\_\_\_\_  
 98 DON'T KNOW  
 99 REFUSED
- Q18 {Does/Do} {he/she/you} have a valid driver's license? ASK ONLY IF Q17>15  
 1 YES  
 2 NO  
 8 DON'T KNOW  
 9 REFUSED

- Q19 What is {his/her} relationship to you? SKIP FOR PERSON ANSWERING THE TELEPHONE
- 01 SELF
  - 02 SPOUSE
  - 03 SON/DAUGHTER
  - 04 FATHER/MOTHER
  - 05 BROTHER/SISTER
  - 06 GRANDPARENT
  - 07 GRANDCHILD
  - 08 LIVE-IN HELP
  - 09 ROOM MATE/OTHER NON-RELATED
  - 10 OTHER RELATED
  - 99 DON'T KNOW/ REFUSED
- Q20 {Does/Do} {he/she/you} have a disability that limits the type of transportation {he/she/you} can use?
- 1 YES
  - 2 NO ⇒ **SKIP TO Q22**
  - 8 DON'T KNOW ⇒ **SKIP TO Q22**
  - 9 REFUSED ⇒ **SKIP TO Q22**
- Q21 What type of disability? MAXIMUM OF THREE RESPONSES ALLOWED
- 1 VISUAL OR BLIND
  - 2 HEARING IMPAIRED OR DEAF
  - 3 CANE OR WALKER
  - 4 WHEELCHAIR NON-TRANSFERABLE
  - 5 WHEELCHAIR TRANSFERABLE
  - 6 COGNITIVELY CHALLENGED
  - 7 OTHER
  - 98 DON'T KNOW
  - 99 REFUSED
- Q22 {Is/Are} {he/she/you} enrolled in any level of school {or daycare}? ASK "OR DAYCARE" ONLY IF AGE<6.
- 1 YES
  - 2 NO ⇒ **SKIP TO Q29 IF AGE >15 ELSE TO Q16**
  - 8 DON'T KNOW ⇒ **SKIP TO Q29 IF AGE >15 ELSE TO Q16**
  - 9 REFUSED ⇒ **SKIP TO Q29 IF AGE >15 ELSE TO Q16**
- Q23 What type of school {is/are} {he/she/you} enrolled in?
- 1 DAYCARE
  - 2 PRE-SCHOOL
  - 3 KINDERGARTEN TO ELEMENTARY (GRADES K-6)
  - 4 SECONDARY SCHOOL (GRADES 7-12)
  - 5 VOCATIONAL/TECHNICAL SCHOOL
  - 6 COLLEGE OR UNIVERSITY
  - 7 ADULT SCHOOL
  - 8 DON'T KNOW
  - 9 REFUSED
- Q24 What is the name of the school {he/she/you} {is/are} enrolled in?
- 1 NAME GIVEN: \_\_\_\_\_
  - 98 DON'T KNOW
  - 99 REFUSED

- Q25 What is the address?
- 1 COMPLETE STREET ADDRESS KNOWN/GIVEN
  - 2 CROSS STREETS KNOWN/GIVEN
  - 98 DON'T KNOW
  - 99 REFUSED

*If complete address:*

- ST NUMBER
- ST DIRECTION
- ST NAME
- ST TYPE
- APT/STE
- CITY
- STATE
- ZIP

*If cross streets*

- ST#1 DIRECTION
- ST#1 NAME
- ST#1 TYPE
- ST#2 DIRECTION
- ST#2 NAME
- ST#2 TYPE
- CITY
- STATE
- ZIP

- Q26 How many days a week {does/do} {he/she/you} go to school?
- 1 1
  - 2 2
  - 3 3
  - 4 4
  - 5 5
  - 6 6
  - 7 7
  - 8 DON'T KNOW
  - 9 REFUSED

- Q27 On one typical day how {does/do} {he/she/you} get to school? MULTIPLE RESPONSES ALLOWED BUT NOT EXPLICITLY REQUESTED

- 11 WALK
- 12 WHEELCHAIR
- 13 IN-LINE SKATES, ROLLER-SKATES
- 14 BICYCLE
- 21 AUTO DRIVER
- 22 AUTO PASSENGER
- 23 MOTORCYCLE/MOPED
- 31 GROUP RIDE (CARPOOL, VANPOOL, ETC.)
- 41 STANDARD LOCAL BUS
- 42 SCHOOL BUS
- 43 COMMUTER VAN/SHUTTLE BUS: FROM EMPLOYER OR GRP CONTRACT
- 44 COMMUTER VAN OR JITNEY, DIAL-A-BUS (PAY FARE)
- 45 EXPRESS BUS
- 46 CHARTER BUS
- 47 AIRPORT LINE
- 51 AMTRAK, GREYHOUND, AIRLINE, HELICOPTER
- 61 SUBWAY (INCLUDES NYCMTA)
- 62 PATH
- 63 NEWARK CITY SUBWAY
- 71 FERRY (INCLUDING ROOSEVELT ISLAND TRAM)
- 81 COMMUTER RAILROAD (LIRR, METRO NORTH, NJTRANSIT)
- 91 YELLOW/MEDALLION CAB
- 92 FOR HIRE VAN/JITNEY
- 93 CAR SERVICE (BLACK CAR)
- 94 GYPSY CAB
- 97 OTHER
- 98 DON'T KNOW
- 99 REFUSED



Q28 How much does it cost to park at or near the school?  
 ENTER THE AMOUNT AND THEN THE UNIT OF PAYMENT. ENTER \$0.00 IF FREE  
 AMOUNT:  
 \$ \_\_\_\_\_ . \_\_\_\_\_  
 999998 Don't know  
 999999 Refused

SELECT UNIT OF PAYMENT:

- 0 FREE
- 1 PER HOUR
- 2 PER DAY
- 3 PER WEEK
- 4 PER MONTH
- 5 PER QUARTER
- 6 PER SEMESTER
- 7 PER SCHOOL YEAR
- 8 DON'T KNOW
- 9 REFUSED

*If age is 15 or under skip to Q16 for the next household member*

Q29 {Is/Are} {he/she/you} employed?  
 1 YES ⇒ **SKIP TO Q31**  
 2 NO  
 8 DON'T KNOW  
 9 REFUSED

Q30 {Is/Are} {he/she/you} ...  
 1 RETIRED ⇒ **SKIP TO Q16 FOR NEXT HOUSEHOLD MEMBER**  
 2 HOMEMAKER ⇒ **SKIP TO Q16 FOR NEXT HOUSEHOLD MEMBER**  
 3 UNEMPLOYED BUT LOOKING FOR WORK ⇒ **SKIP TO Q16 FOR NEXT HOUSEHOLD MEMBER**  
 4 UNEMPLOYED AND NOT SEEKING EMPLOYMENT ⇒ **SKIP TO Q16 FOR NEXT HOUSEHOLD MEMBER**  
 5 STUDENT (PART TIME OR FULL TIME) ⇒ **SKIP TO Q16 FOR NEXT HOUSEHOLD MEMBER**  
 8 DON'T KNOW ⇒ **SKIP TO Q16 FOR NEXT HOUSEHOLD MEMBER**  
 9 REFUSED ⇒ **SKIP TO Q16 FOR NEXT HOUSEHOLD MEMBER**

Q31 {Does/Do} {he/she/you} have more than one job?  
 1 YES  
 2 NO  
 8 DON'T KNOW  
 9 REFUSED

I am going to ask some questions about {his/her/your} {main, *only if Q31 is 1*} job.

Q32 Is {his/her/your} employer ...  
 1 A PRIVATE COMPANY,  
 2 GOVERNMENT,  
 3 SELF-EMPLOYED  
 4 OR, SOMETHING ELSE (SPECIFY \_\_\_\_\_)  
 98 DON'T KNOW  
 99 REFUSED

- Q33 What activity best describes {his/her/your} job?
- 01 AGRICULTURE, FORESTRY, FISHERIES
  - 02 MINING
  - 03 CONSTRUCTION
  - 04 MANUFACTURING - NONDURABLE GOODS
  - 05 MANUFACTURING - DURABLE GOODS
  - 06 TRANSPORTATION
  - 07 COMMUNICATIONS, OTHER PUBLIC UTILITIES
  - 08 WHOLESALE TRADE
  - 09 RETAIL TRADE
  - 10 FINANCE, INSURANCE, OR REAL ESTATE
  - 11 BUSINESS AND REPAIR SERVICES
  - 12 PERSONAL SERVICES
  - 13 ENTERTAINMENT, OR RECREATION SERVICES
  - 14 HEALTH SERVICES
  - 15 EDUCATIONAL SERVICES
  - 16 OTHER PROFESSIONAL AND RELATED SERVICES
  - 17 PUBLIC ADMINISTRATION
  - 97 OTHER (SPECIFY \_\_\_\_\_)
  - 98 DON'T KNOW
  - 99 REFUSED
- Q34 How would you describe {his/her/your} occupation?
- 01 EXECUTIVE, ADMINISTRATIVE, OR MANAGERIAL
  - 02 PROFESSIONAL SPECIALTY
  - 03 TECHNICIAN AND RELATED SUPPORT
  - 04 SALES
  - 05 ADMINISTRATIVE SUPPORT, CLERICAL
  - 06 PRIVATE HOUSEHOLD
  - 07 PROTECTIVE SERVICE
  - 08 SERVICE, EXCEPT PROTECTIVE AND HOUSEHOLD
  - 09 FARMING, FORESTRY, OR FISHING
  - 10 PRECISION, PRODUCTION, CRAFT, OR REPAIR
  - 11 MACHINE OPERATOR, ASSEMBLER, OR INSPECTOR
  - 12 TRANSPORTATION, OR MATERIAL MOVING
  - 13 HANDLER, EQUIPMENT CLEANER, HELPER, OR LABORER
  - 97 OTHER (SPECIFY \_\_\_\_\_)
  - 98 DON'T KNOW
  - 99 REFUSED
- Q35 How long {has/have} {he/she/you} been working at this job?  
ENTER THE NUMBER OF YEARS: \_\_\_\_\_ (00=LESS THAN 1 YEAR)
- 98 DON'T KNOW
  - 99 REFUSED
- Q36 On average, how many days per week {does/do} {he/she/you} work at {his,her,your} job regardless of location?
- 1 1
  - 2 2
  - 3 3
  - 4 4
  - 5 5
  - 6 6
  - 7 7
  - 8 DON'T KNOW
  - 9 REFUSED

Q37 On average, how many days per week {does/do} {he/she/you} work at home for {his,her,your} job instead of going to {his/her/your} workplace? Sometimes this is called telecommuting.

- 00 NONE/NEVER
- 01 1
- 02 2
- 03 3
- 04 4
- 05 5
- 06 6
- 07 7
- 97 OTHER (SPECIFY \_\_\_\_\_) (THIS INCLUDES ONCE A MONTH)
- 98 DON'T KNOW
- 99 REFUSED

Q38 {Does/Do} {he/she/you} work a compressed work week, such as 80 hours in 9 days, or 40 hours in 4 days?

- 1 YES
- 2 NO ⇒ **SKIP TO Q40**
- 8 DON'T KNOW ⇒ **SKIP TO Q40**
- 9 REFUSED ⇒ **SKIP TO Q40**

Q39 {Does/Do} {he/she/you} work four days per week (4/40) or nine days per two weeks (9/80)?

- 1 9/80
- 2 4/40
- 3 OTHER (SPECIFY \_\_\_\_\_)
- 8 DON'T KNOW
- 9 REFUSED

Q40 {Does/Do} {he/she/you} regularly work weekends?

- 1 YES
- 2 NO ⇒ **SKIP TO Q42**
- 8 DON'T KNOW ⇒ **SKIP TO Q42**
- 9 REFUSED ⇒ **SKIP TO Q42**

Q41 When in the weekend {does/do} {he/she/you} work? MULTIPLE RESPONSES ALLOWED

- 1 SATURDAY AM
- 2 SATURDAY PM
- 3 SUNDAY AM
- 4 SUNDAY PM
- 5 OTHER (SPECIFY \_\_\_\_\_)
- 8 DON'T KNOW
- 9 REFUSED

Q42 What is the name of {his/her/your} employer?

- 1 MAIN JOB NAME: \_\_\_\_\_
- 98 DON'T KNOW
- 99 REFUSED

Q43 What is the address of this workplace?

- 1 HOME ⇒ **SKIP TO Q46**
- 2 COMPLETE STREET ADDRESS KNOWN/GIVEN
- 3 CROSS STREETS KNOWN/GIVEN
- 8 DON'T KNOW
- 9 REFUSED

*If complete address:*

- ST NUMBER
- ST DIRECTION
- ST NAME
- ST TYPE
- APT/STE
- CITY
- STATE
- ZIP

*If cross streets:*

- ST#1 DIRECTION
- ST#1 NAME
- ST#1 TYPE
- ST#2 DIRECTION
- ST#2 NAME
- ST#2 TYPE
- CITY
- STATE
- ZIP

Q44 What {does/do} {he/she/you} use most often to get to work? MULTIPLE RESPONSES ALLOWED BUT NOT EXPLICITLY REQUESTED

- 1 WALK
- 2 WHEELCHAIR
- 3 IN-LINE SKATES, ROLLER-SKATES
- 4 BICYCLE
- 5 AUTO DRIVER
- 6 AUTO PASSENGER
- 7 MOTORCYCLE/MOPED
- 8 GROUP RIDE (CARPOOL, VANPOOL, ETC.)
- 9 STANDARD LOCAL BUS
- 10 SCHOOL BUS
- 11 COMMUTER VAN/SHUTTLE BUS: FROM EMPLOYER OR GRP CONTRACT
- 12 COMMUTER VAN OR JITNEY, DIAL-A-BUS (PAY FARE)
- 13 EXPRESS BUS
- 14 CHARTER BUS
- 15 AIRPORT LINE
- 16 AMTRAK, GREYHOUND, AIRLINE, HELICOPTER
- 17 SUBWAY (INCLUDES NYCMTA)
- 18 PATH
- 19 NEWARK CITY SUBWAY
- 20 FERRY (INCLUDING ROOSEVELT ISLAND TRAM)
- 21 COMMUTER RAILROAD (LIRR, METRO NORTH, NJTRANSIT)
- 22 YELLOW/MEDALLION CAB
- 23 FOR HIRE VAN/JITNEY
- 24 CAR SERVICE (BLACK CAR)
- 25 GYPSY CAB
- 97 OTHER
- 98 DON'T KNOW
- 99 REFUSED

- Q45 [IF Q44=21,22 OR 31] How many other people travel with {him/her/you} to work, excluding himself/herself/yourself?  
 00 NONE  
 01 1  
 02 2  
 03 3  
 04 4  
 05 5  
 06 6  
 07 7  
 08 8  
 10 OTHER (SPECIFY \_\_\_\_\_)  
 98 DON'T KNOW  
 99 REFUSED
- Q46 {Does/Do} {he/she/you} usually need a vehicle at work for business purposes? (For example, sales calls or client meetings)  
 1 YES  
 2 NO  
 8 DON'T KNOW  
 9 REFUSED
- Q47 How much does it cost to park at work (home)? If {he/she/you} {doesn't/don't} drive, please estimate how much parking would cost.  
 ENTER THE AMOUNT AND THEN THE UNIT OF PAYMENT. ENTER \$0.00 IF FREE  
 ENTER AMOUNT:  
 \$ \_\_\_\_\_ . \_\_\_\_\_  
 999998 DON'T KNOW  
 999999 REFUSED
- SELECT UNIT OF PAYMENT:  
 0 FREE  
 1 PER HOUR  
 2 PER DAY  
 3 PER WEEK  
 4 PER MONTH  
 5 PER QUARTER  
 6 PER SEMESTER  
 7 PER SCHOOL YEAR  
 8 DON'T KNOW  
 9 REFUSED
- Q48 Does {his/her/your} employer offer to pay for all or part of the cost of parking at work? [SKIP IF Q32 = 3]  
 1 YES  
 2 NO  
 8 DON'T KNOW  
 9 REFUSED
- Q49 [IF Q44=21, 31] How much {does/do} it cost {him/her/you} personally to park at work? If {he/she/you} {doesn't/don't} drive, please estimate how much parking would cost.  
 [SKIP IF Q32 = 3]  
 ENTER THE AMOUNT AND THEN THE UNIT OF PAYMENT. ENTER \$0.00 IF FREE  
 ENTER AMOUNT:  
 \$ \_\_\_\_\_ . \_\_\_\_\_  
 999998 DON'T KNOW  
 999999 REFUSED

SELECT UNIT OF PAYMENT:

- 0 FREE
- 1 PER HOUR
- 2 PER DAY
- 3 PER WEEK
- 4 PER MONTH
- 5 PER QUARTER
- 6 PER SEMESTER
- 7 PER SCHOOL YEAR
- 8 DON'T KNOW
- 9 REFUSED

Q50 What kind of parking is available at or close to work/home?

- 1 IN A PARKING LOT OR GARAGE AT WORK
- 2 IN A PARKING LOT OR GARAGE OFF-SITE
- 3 ON THE STREET
- 4 IN A PARKING LOT OR GARAGE AT HOME ⇒ **SKIP TO Q52**
- 8 DON'T KNOW
- 9 REFUSED

Q51 How long in minutes does {he/she/you} or would {he/she/you} walk from this parking area to work?

- ENTER THE MINUTES: \_\_\_\_\_
- 98 REFUSED
  - 99 DON'T KNOW

Q52 Does {his/her/your} employer offer TransitChek or some other way to pay for all or part of the cost of using transit? [SKIP IF Q44 = 21 22 23]

- 1 YES, ALL OR PART
- 2 NO ⇒ **SKIP TO Q54**
- 8 DON'T KNOW ⇒ **SKIP TO Q54**
- 9 REFUSED ⇒ **SKIP TO Q54**

Q53 {Does/Do} {he/she/you} take advantage of it? [SKIP IF Q44 = 21 22 23]

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

Q54 What does it personally cost {him/her/you} to buy a bus/rail pass? [SKIP IF Q44 = 21 22 23]. ENTER THE AMOUNT AND THEN SELECT THE UNIT. [ENTER \$0.00 IF FREE]

- ENTER THE AMOUNT:  
\$ \_\_\_\_\_ . \_\_\_\_\_  
999998 DON'T KNOW  
999999 REFUSED

SELECT THE UNIT OF PAYMENT:

- 0 FREE
- 1 PER DAY
- 2 PER WEEK
- 3 PER MONTH
- 4 PER YEAR
- 5 \_\_\_\_\_
- 8 DON'T KNOW
- 9 REFUSED

- Q55 At {his/her/your} regular job, does {he/she/you} work a schedule or shift that changes on a regular basis?
- 1 YES
  - 2 NO ⇒ **SKIP TO Q57**
  - 8 DON'T KNOW ⇒ **SKIP TO Q57**
  - 9 REFUSED ⇒ **SKIP TO Q57**
- Q56 How often does the shift change?
- 1 EVERY DAY
  - 2 EVERY WEEK
  - 3 EVERY MONTH
  - 4 EVERY QUARTER
  - 5 OR SOMETHING ELSE (SPECIFY \_\_\_\_\_)
  - 98 DON'T KNOW
  - 99 REFUSED
- Q57 What time does {he/she/you} typically start work at {his/her/your} job?
- \_\_\_ \_\_\_ : \_\_\_ \_\_\_ [ENTER THE TIME]
- Is this A.M. or P.M.?
- 1 A.M.
  - 2 P.M.
  - 98 DON'T KNOW
  - 99 REFUSED
- Q58 What time does {he/she/you} typically end work at {his/her/your} job?
- \_\_\_ \_\_\_ : \_\_\_ \_\_\_ [ENTER THE TIME]
- Is this A.M. or P.M.?
- 1 A.M.
  - 2 P.M.
  - 98 DON'T KNOW
  - 99 REFUSED
- Q59 Are {his/her/your} start and end times at this job about the same every day?
- 1 YES ⇒ **SKIP TO Q62**
  - 2 NO
  - 8 DON'T KNOW ⇒ **SKIP TO Q62**
  - 9 REFUSED ⇒ **SKIP TO Q62**
- Q60 How much can {his/her/your} job's start times vary from the usual start time?
- 1 START TIME CANNOT VARY
  - 2 WITHIN 15 MINUTES OR LESS
  - 3 16 TO 30 MINUTES
  - 4 31 TO 60 MINUTES
  - 5 MORE THAN 1 HOUR TO 2 HOURS
  - 6 OR, SOMETHING ELSE (SPECIFY \_\_\_\_\_)
  - 8 DON'T KNOW
  - 9 REFUSED
- Q61 How much can {his/her/your} job's end times vary from the usual end time?
- 1 END TIME CANNOT VARY
  - 2 WITHIN 15 MINUTES OR LESS
  - 3 16 TO 30 MINUTES
  - 4 31 TO 60 MINUTES
  - 5 MORE THAN 1 HOUR TO 2 HOURS
  - 6 OR, SOMETHING ELSE (SPECIFY \_\_\_\_\_)
  - 8 DON'T KNOW
  - 9 REFUSED

The following questions are asked only if response to Q31 is 1. Otherwise go to next household member.

Q62 What is the name of {his/her/your} second employer?

- 1 SECOND JOB NAME: \_\_\_\_\_
- 98 DON'T KNOW
- 99 REFUSED

Q63 Is {his/her/your} second employer ...

- 1 A PRIVATE COMPANY
- 2 GOVERNMENT
- 3 HIMSELF/HERSELF (SELF-EMPLOYED)
- 7 OR, SOMETHING ELSE (SPECIFY \_\_\_\_\_)
- 98 DON'T KNOW
- 99 REFUSED

Q64 What is the address of {his/her/your} second workplace?

- 1 COMPLETE STREET ADDRESS KNOWN/GIVEN
- 2 CROSS STREETS KNOWN/GIVEN
- 8 DON'T KNOW
- 9 REFUSED

*IF COMPLETE ADDRESS:*

- ST NUMBER
- ST DIRECTION
- ST NAME
- ST TYPE
- APT/STE
- CITY
- STATE
- ZIP

*IF CROSS STREETS:*

- ST#1 DIRECTION
- ST#1 NAME
- ST#1 TYPE
- ST#2 DIRECTION
- ST#2 NAME
- ST#2 TYPE
- CITY
- STATE
- ZIP

Q65 What activity best describes {his/her/your} second job?

- 01 AGRICULTURE, FORESTRY, FISHERIES
- 02 MINING
- 03 CONSTRUCTION
- 04 MANUFACTURING - NONDURABLE GOODS
- 05 MANUFACTURING - DURABLE GOODS
- 06 TRANSPORTATION
- 07 COMMUNICATIONS, OTHER PUBLIC UTILITIES
- 08 WHOLESALE TRADE
- 09 RETAIL TRADE
- 10 FINANCE, INSURANCE, OR REAL ESTATE
- 11 BUSINESS AND REPAIR SERVICES
- 12 PERSONAL SERVICES
- 13 ENTERTAINMENT, OR RECREATION SERVICES
- 14 HEALTH SERVICES
- 15 EDUCATIONAL SERVICES
- 16 OTHER PROFESSIONAL AND RELATED SERVICES
- 17 PUBLIC ADMINISTRATION
- 97 OTHER (SPECIFY \_\_\_\_\_)
- 98 DON'T KNOW
- 99 REFUSED



Q66 How would you describe {his/her/your} occupation at {his/her/your} second job?

- 01 EXECUTIVE, ADMINISTRATIVE, OR MANAGERIAL
- 02 PROFESSIONAL SPECIALTY
- 03 TECHNICIAN AND RELATED SUPPORT
- 04 SALES
- 05 ADMINISTRATIVE SUPPORT, CLERICAL
- 06 PRIVATE HOUSEHOLD
- 07 PROTECTIVE SERVICE
- 08 SERVICE, EXCEPT PROTECTIVE AND HOUSEHOLD
- 09 FARMING, FORESTRY, OR FISHING
- 10 PRECISION, PRODUCTION, CRAFT, OR REPAIR
- 11 MACHINE OPERATOR, ASSEMBLER, OR INSPECTOR
- 12 TRANSPORTATION, OR MATERIAL MOVING
- 13 HANDLER, EQUIPMENT CLEANER, HELPER, OR LABORER
- 14 OTHER (SPECIFY \_\_\_\_\_)
- 98 DON'T KNOW
- 99 REFUSED

Q67 On average, how many days per week does {he/she/you} work at {his/her/your} second job?

- 1 1
- 2 2
- 3 3
- 4 4
- 5 5
- 6 6
- 7 7
- 8 DON'T KNOW
- 9 REFUSED

Q68 On average, how many days per week does {he/she/you} work at home for {his/her/your} second job instead of going to {his/her/your} workplace? Sometimes this is called telecommuting.

- 00 NONE/NEVER
- 01 1
- 02 2
- 03 3
- 04 4
- 05 5
- 06 6
- 07 7
- 97 OTHER (SPECIFY \_\_\_\_\_) (THIS INCLUDES ONCE A MONTH)
- 98 DON'T KNOW
- 99 REFUSED

Q69 What time does {he/she/you} typically start work at {his/her/your} second job?

\_\_\_ \_\_\_ : \_\_\_ \_\_\_ [ENTER THE TIME]

Is this a.m. or p.m.?

- 1 A.M.
- 2 P.M.
- 8 DON'T KNOW
- 9 REFUSED

Q70 What time does {he/she/you} typically end work at {his/her/your} second job?  
\_\_\_ \_\_\_ : \_\_\_ \_\_\_ [ENTER THE TIME]

Is this a.m. or p.m.?

- 1 A.M.
- 2 P.M.
- 8 DON'T KNOW
- 9 REFUSED

*Q16 to Q70 are repeated for each of the other household members in ascending age order; the sequence is then asked (in the second person) for the Household Informant that is being interviewed.*

Q71 As I said earlier, we'll send you a diary for each household member to complete. Now I just have a few more questions about your household.

Q72 How many separate telephone numbers are there to your current home?  
\_\_\_\_\_ (IF 1 ⇒ **SKIP TO Q74**)

- 98 DON'T KNOW
- 99 REFUSED

Q73 How many of these telephone numbers, if any, are dedicated to a FAX machine or modem?

- \_\_\_\_\_
- 98 DON'T KNOW
  - 99 REFUSED

Q74 In the past 12 months, have there been times, even for a few days, when you did not have phone service at your home?

- 1 YES
- 2 NO ⇒ **SKIP TO Q76**
- 8 DON'T KNOW ⇒ **SKIP TO Q76**
- 9 REFUSED ⇒ **SKIP TO Q76**

Q75 How long were you without a phone service?

- 1 LESS THAN 2 WEEKS
- 2 2 WEEKS TO LESS THAN 1 MONTH
- 3 1 MONTH TO LESS THAN 3 MONTHS
- 4 3 MONTHS TO LESS THAN 6 MONTHS
- 5 6 MONTHS TO LESS THAN 1 YEAR
- 8 DON'T KNOW
- 9 REFUSED

Q76 Does your household share a phone line with another household?

- 1 YES
- 2 NO ⇒ **SKIP TO Q78**
- 98 DON'T KNOW ⇒ **SKIP TO Q78**
- 99 REFUSED ⇒ **SKIP TO Q78**

Q77 How many households share a phone line with your household?

- ENTER THE NUMBER OF HOUSEHOLDS: \_\_\_\_\_
- 98 DON'T KNOW
  - 99 REFUSED

- Q78 Which of the following best describes your ethnicity?
- 01 BLACK/AFRICAN AMERICAN, NON-HISPANIC
  - 02 WHITE, NON-HISPANIC
  - 03 ASIAN/PACIFIC ISLANDER
  - 04 AMERICAN INDIAN
  - 05 HISPANIC
  - 06 OTHER (SPECIFY \_\_\_\_\_)
  - 98 DON'T KNOW
  - 99 REFUSED
- Q79 What was your total annual household income last year from all sources before taxes, for all members of your household? I will read you a series of income ranges. Please stop me when I read the range that is closest to your household's.
- 01 less than \$10,000
  - 02 \$10,000 to \$14,999
  - 03 \$15,000 to \$24,999
  - 04 \$25,000 to \$34,999
  - 05 \$35,000 to \$49,999
  - 06 \$50,000 to \$74,999
  - 07 \$75,000 to \$99,999
  - 08 \$100,000 to \$124,999
  - 09 \$125,000 to \$149,999
  - 10 \$150,000 or more
  - 98 DON'T KNOW
  - 99 REFUSED

**Section 9: Travel Day determination**

*These questions are asked at the end of the interview, after the respondent has answered question 79.*

- 79A Now let me give you the day on which we would like for everyone in your household to keep track of their activities.  
The day is "[DAY OF THE WEEK AND DATE]." Is this day OK?
- 1 YES
  - 2 NO ⇒ **FILL OUT CALLBACK CARD**  
Enter Assignment Number \_\_\_\_\_
- 79B Are you expecting any out-of-town guests on that date?
- 1 YES ⇒ **REASSIGN TO DATE WHEN NO VISITORS**
  - 2 NO
  - 8 DON'T KNOW
  - 9 REFUSED
- 79C I'd like to verify that I reached you at {PHONE NUMBER}. Is this correct?
- 1 NUMBER IS CORRECT
  - 2 NUMBER IS INCORRECT (TYPE CORRECT NUMBER \_\_\_\_\_)
- 79D I'll call to collect your activity information the day following your travel day, which is next [day]. When I call, would you prefer to be called in the morning between 9:00 and noon., in the afternoon between noon and 5:00 p.m., or in the evening between 5:00 and 9:00 p.m.?"
- 1 MORNING (9:00 - noon.)
  - 2 AFTERNOON (noon - 5:00 P.M.)
  - 3 EVENING (5:00 - 9:00 P.M.)
  - 4 NO BEST TIME TO CALL
  - 9 DON'T KNOW/REFUSE

- 79E Is there a different phone number where you or another member of your household would prefer to be called when we collect your information?
- 1 YES
  - 2 NONE ⇒ **SKIP TO 79F**
  - 8 DON'T KNOW ⇒ **SKIP TO 79F**
  - 9 REFUSED ⇒ **SKIP TO 79F**

79F What is that phone number?  
ENTER THE PHONE NUMBER: \_\_\_\_\_

79G Thank you very much for helping us. We'll call you on the evening of [DAY] to make sure you received your diaries and to answer any questions. We also want you to know that by writing down complete and accurate answers in the diaries -- including full addresses for each place you visit during the diary day -- you'll help to make the transportation system better. If you have any questions or comments about the study, you can call the Transportation Futures Study at 1-800-619-3601. Thank you and have a nice evening/day.  
Thank you for taking the time to talk to us today.  
That completes the survey. On behalf ..... I'd like to thank you for your time and participation.

# **Appendix D – Retrieval Interview**

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**Interview Completion Form for Project # 962011**

This form must be completed and attached to the front of each completed survey. For a retrieval survey to be considered complete, you are required to verify each of the following items carefully. By initialing each item, you are certifying that you did the indicated task and that it is correct.

- 1. Does the # of people in the household equal the # you have data for? \_\_\_\_\_
  
- 2. Is the income level of the household indicated on the label or Q5 of the retrieval form? If not, did you ask for it? \_\_\_\_\_
  
- 3. Did you verify the demographic data? \_\_\_\_\_
  
- 4. Did you verify the vehicle information? \_\_\_\_\_
  
- 5. If the household members did not travel anywhere on their assigned travel day, please explain why on the lines below. \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_
  
- 6. If a person did not have any work or school trips, please explain. \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_
  
- 7a. If there are any shared/linked trips (for example: husband and wife going to the same location), are the complete addresses recorded in each trip's address blocks? \_\_\_\_\_
- 7b. Did both or all household members report each shared trip? \_\_\_\_\_
  
- 8. Does every trip for each household member have the best possible place name and address that you could obtain from the respondent? \_\_\_\_\_
  
- 9. Did each person return home on the last trip? If not, why not? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_  
Person# \_\_\_\_\_ Why? \_\_\_\_\_
  
- 10. Is your writing throughout the survey legible enough that our data entry staff will be able to enter all of the information on your survey? \_\_\_\_\_
  
- 11. Does it appear that you have appropriately circled responses, on each of the items that you were required to retrieve, for each respondent \_\_\_\_\_

For verification purposes, retrieval surveys must be "spot-checked" by a supervisor and at least 3 of the items above randomly selected for verification. Supervisors must place their initials next to the items verified. Supervisors must also sign this form to certify that they verified the items above and consider this survey to be a valid complete.

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Quest.#: «QUEST» Sample Number: «SAMPN» Telephone #: «S\_TEL» Preferred time: «Q131»

**Section A**

Hello, my name is [ YOUR NAME] and I'm calling on behalf of the Transportation Futures Project sponsored by New York Metropolitan Transportation Council about the survey your household recently completed. May I please speak with «RESPFNAME» «RESPLNAME» ?

«Respname» «RESPLNAME»

«ADDRESS»

«CITY», «STATE» «ZIP1»

Travel Day: «tday» Assignment #: «ASSIN»

[IF RESPONDENT NOT AVAILABLE, FILL UP CALL BACK INFO]

[IF RESPONDENT IS AVAILABLE ASK THE FOLLOWING QUESTIONS]

First I need to verify some information about your household, then I will begin collecting the activity information from the diaries we sent for each household member.

**HOUSEHOLD MEMBER VERIFICATION**

\*Q1. When we interviewed your household last week, we were told that there were «MLIVE» persons in your household and that their names and ages were:

«FNAME1» «AGE1»	«GENDER1»	«FNAME4» «AGE4»	«GENDER4»
«FNAME2» «AGE2»	«GENDER2»	«FNAME5» «AGE5»	«GENDER5»
«FNAME3» «AGE3»	«GENDER3»	«FNAME6» «AGE6»	«GENDER6»

Is this information correct? Yes [skip to Q2] No [ask: What corrections should I make?] [MAKE CORRECTIONS]

\*Q2. How many commercial vehicles arrived at your home to deliver packages, perform repairs, or provide other services during your assigned travel day (Exclude mailman)? \_\_\_\_\_

\*Q3. How many out-of-town visitors stayed at this residence during the travel day? \_\_\_\_\_

**HOUSEHOLD VEHICLE INFORMATION**

\*Q4. I show that your household has \_\_\_\_\_ vehicles available for use including the following makes and models [READ/VERIFY THE YEAR, MAKE AND BODY TYPES ON THE LABEL -IF DK/RF OR OTHER IS SHOWN TRY TO OBTAIN IT]

«VHYR1» «VHTYP1»

«VHYR2» «VHTYP2»

«VHYR3» «VHTYP3»

«VHYR4» «VHTYP4»

«VHYR5» «VHTYP5»

Is this information correct? Yes [skip to Q5] No [ask: What corrections should I make?] [MAKE CORRECTIONS]

**INCOME REFUSAL CONVERSION/VERIFICATION**

\*Q5 «ASKINC» And the last piece of information I need to get is the total annual household income for last year, including all sources of combined income for the household. What would be the household income level?

[IF THEY ARE RELUCTANT TO SAY, READ:] Was it above or below \$50,000? Above Below

Which range would it fall into? [Read the following categories]

[IF LESS THAN \$50,000]

- 1 Less than \$10,000
- 2 \$10,000 to less than \$15,000
- 3 \$15,000 to less than \$25,000
- 4 \$25,000 to less than \$35,000
- 5 \$35,000 to less than \$50,000

[IF MORE THAN \$50,000]

- 6 \$50,000 to less than \$75,000
- 7 \$75,000 to less than \$100,000
- 8 \$100,000 to less than \$125,000
- 9 \$125,000 to less than \$150,000
- 10 \$150,000 or more
- 98 [DON'T READ] Don't Know
- 99 [DON'T READ] Refused

\*Q6 Great, now I would like to collect the trip/activity information that your household recorded for \_\_\_\_\_. Let's begin with your information. Do you have your travel diaries handy?

[NEXT, BEGIN WITH THE FOLLOWING RETRIEVAL FORM AND COLLECT EACH ACTIVITY FOR EACH PERSON]

RESULT CODES

Eligibility Unknown

- 1- No Answer
- 2- Busy
- 3- Answering Machine
- 4- Call Back -respondent not reached
- 5- Call Back - specific
- 6- First Refusal

Eligible

- 20- Completed
- 13- Partial Complete
- 12- 2nd Refusal

Ineligible

- 7- Disconnected
- 8- Deaf/Language
- 9- Business/Govt
- 10- Computer/Fax

HOUSEHOLD CONTACT RECORD					
Attempt	Date	Time	Int#/Initial	Result	Contact Notes
1	_____	_____	_____	_____	_____
2	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____
4	_____	_____	_____	_____	_____
5	_____	_____	_____	_____	_____
6	_____	_____	_____	_____	_____

Sample No: \_\_\_\_\_

Person No: \_\_\_\_\_

Person Name: \_\_\_\_\_

Interviewed in Person 1.Yes 2.No ==> Complete PROXY ==>

PROXY Reporting

Did Person Use the Diary? 1.Yes 2.No

Who reported the data? Name

How many places did you visit during your diary day?

\_\_\_\_\_ Person No. \_\_\_\_\_

[INTERVIEWER NOTE: DO NOT END INTERVIEW UNTIL ALL PLACES HAVE BEEN ACCOUNTED FOR]

**Place 1**

<p><b>1. Where were you at 3:00 AM?</b></p> <p>1 My Home  2 My Regular Workplace  3 My School  4 Another Place (Specify Below)</p> <p>IF RESPONSE IS NOT HOME, CONFIRM LOCATION:  At 3:00 AM, you were at:  Place Name: _____</p> <p>Address: _____</p> <p>Nearest Cross-Street: _____</p> <p>City: _____</p> <p>County: _____</p> <p>Zipcode: _____</p>	<p><b>2. What did you do here?</b> (check all that apply)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1 Drop off/pick up someone</td> <td style="width: 50%;">9 Work at home (job related)</td> </tr> <tr> <td>2 Visit friends/relatives</td> <td>10 Work at regular jobsite</td> </tr> <tr> <td>3 Eat meals</td> <td>11 Work activity at other place</td> </tr> <tr> <td>4 Social/recreation/entertainment</td> <td>12 School at regular place</td> </tr> <tr> <td>5 Shop</td> <td>13 School activity at other place</td> </tr> <tr> <td>6 Doctor/dentist/other professional</td> <td>14 Sleep</td> </tr> <tr> <td>7 Other family or personal business</td> <td>15 Other activities at home</td> </tr> </table> <p>8 Religious or civic</p> <p>16 Other activities not-at-home (Specify): _____</p> <p style="text-align: center;">(Double Check For Inconsistent Activities)</p>	1 Drop off/pick up someone	9 Work at home (job related)	2 Visit friends/relatives	10 Work at regular jobsite	3 Eat meals	11 Work activity at other place	4 Social/recreation/entertainment	12 School at regular place	5 Shop	13 School activity at other place	6 Doctor/dentist/other professional	14 Sleep	7 Other family or personal business	15 Other activities at home
1 Drop off/pick up someone	9 Work at home (job related)														
2 Visit friends/relatives	10 Work at regular jobsite														
3 Eat meals	11 Work activity at other place														
4 Social/recreation/entertainment	12 School at regular place														
5 Shop	13 School activity at other place														
6 Doctor/dentist/other professional	14 Sleep														
7 Other family or personal business	15 Other activities at home														

At what time did you leave place #1?: \_\_\_\_\_ am/pm

If did not leave home all day, ask  
"This means you were home all day. Is that correct?"  
Yes: ASK            No: Continue unto new page  
Did you go to work/school? If NO, explain

If OUT OF TOWN:  
Where (City, State)  
Did you stay at a (circle one)  
Residence    Hotel/Motel    School    Other \_\_\_\_\_



At what time did you leave this place?: \_\_\_\_\_ am/pm

Place #: \_\_\_\_\_

Time of Arrival: \_\_\_\_\_ am/pm

Did you make any stops along the way 1.Yes 2.No If YES: Insert new place

<p><b>1 What type of place did you go to next?</b>                  1 My Home                  2 My Regular Workplace                  3 My School                  4 Other Place - Already provided address                  Habitual Address Code?                  5 A New Place (Specify Below)</p>	<p><b>2. What did you do here?</b>                  1 Drop off/pick up someone                  2 Visit friends/relatives                  3 Eat meals                  4 Social/recreation/entertainment                  5 Shop                  6 Doctor/dentist/other professional</p>	<p><b>3. How did you get here?</b>                  Please tell me in the order of methods of travel used.                  1)                  2)                  3)                  4)                  5)                  6)</p>	<p><b>AUTO</b>                  4 Did you use any of your HH vehicles to get here?                  1. Yes 2. No                  IF YES: Veh No.                  5 Were you the 1. driver or 2. passenger</p>	<p><b>If Auto Driver:</b>                  8 If drove to destination, where did you park?                  1.Street 2.Garage 3.Parking Lot 4.Other _____ per                  COST: \$ _____ per                  1.hour 2.day 3.week 4.month                  5.Other (specify)                  9 Did you pay any toll?                  1. Yes 2. No                  If yes, how much?                  \$ _____                  # Did you drop off or pick up anyone? 1.Yes 2. No                  Was it a HH member?                  1.Yes 2.No                  If yes: which HH member(s)?</p>	<p><b>If TRANSIT (ANY):</b>                  Is TRAIN = 1. Subway 2. Commuter Rail                  Is BUS = 3. Local 4. Express                  12. Where did you board?                  Station name: _____                  Line #/ Service: _____                  13. How many times did you transfer?                  0 1 2 3 4 5 &gt; 5                  #/Service/Route Line Station                  1st transfer: _____                  2nd transfer: _____                  3rd transfer: _____                  4th transfer: _____                  5th transfer: _____</p>	<p><b>If TRANSIT (ANY):</b>  <b>15. Payment Information:</b>                  A.1st Payment:How did you pay your fare?                  1.Cash 2.Token 3.Weekly Pass 4. Monthly Pass                  .Metrocard 6.Other                  B.2nd Payment:How did you pay your fare?                  1.Cash 2.Token 3.Weekly Pass 4. Monthly Pass                  .Metrocard 6.Other                  C.3rd Payment:How did you pay your fare?                  1.Cash 2.Token 3.Weekly Pass 4. Monthly Pass                  .Metrocard 6.Other                  D.4th Payment:How did you pay your fare?                  1.Cash 2.Token 3.Weekly Pass 4. Monthly Pass                  .Metrocard 6.Other                  E.5th Payment:How did you pay your fare?                  1.Cash 2.Token 3.Weekly Pass 4. Monthly Pass                  .Metrocard 6.Other</p>
<p>(If other):What is name &amp; address of the place?                  Place Name: _____                  Address: _____                  Nearest Cross-Street: _____                  City: _____                  County/Borough: _____                  State: _____                  Zipcode: _____</p>	<p>7 Other family/personal business                  8 Religious or civic                  9 Work at home (job related)                  1 Work at regular jobsite                  0                  1 Work activity at other place                  1 School at regular place                  2                  1 School activity at other place                  3                  1 Sleep                  4                  1 Other activities at home                  5                  1 Other (Specify):                  6</p>	<p><b>FOR ALL TRIPS</b>                  6 How many people were traveling together, including yourself? _____                  7 Of those, # HH: _____                  Who? (Person #): _____                  # non-HH: _____                  NOTE: If CAB is used, you must indicate GYPSY, BLACK, OR YELLOW</p>	<p><b>If Auto Passenger:</b>                  # Were you dropped off or picked up? 1.Yes 2.No                  By a HH member?                  1.Yes 2.No                  If yes, who?</p>	<p>14. At which station did you exit?                  Station name: _____</p>	<p>14. At which station did you exit?                  Station name: _____</p>	<p>E.5th Payment:How did you pay your fare?                  1.Cash 2.Token 3.Weekly Pass 4. Monthly Pass                  .Metrocard 6.Other</p>

(Double Check For Inconsistent Activities)

At what time did you leave this place?: \_\_\_\_\_ am/pm

# Appendix E – Variable List

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## Household File

Field	Field Name	Type	Width	Dec	Column Position
1	SAMPNO	Numeric	7		1-7
2	PHONE	Character	12		8-19
3	HH_ADDR	Numeric	8		20-27
4	QUEST	Character	5		28-32
5	ADVLT	Numeric	1		33-33
6	ATHOME	Numeric	1		34-34
7	TOTVEH	Numeric	2		35-36
8	DWELL	Numeric	2		37-38
9	DWEL0	Character	5		39-43
10	DWELN	Numeric	4		44-47
11	YRMOV	Numeric	1		48-48
12	RENT	Numeric	1		49-49
13	RENT0	Character	25		50-74
14	DIARY	Numeric	1		75-75
15	ENGL	Numeric	1		76-76
16	HELP	Numeric	1		77-77
17	LANG	Numeric	2		78-79
18	NHELP	Numeric	1		80-80
19	HHSIZE	Numeric	2		81-82
20	PHONLINE	Numeric	2		83-84
21	FAX	Numeric	2		85-86
22	NOPHONE	Numeric	1		87-87
23	NPTIME	Numeric	1		88-88
24	SHPHONE	Numeric	2		89-90
25	SHNUM	Numeric	2		91-92
26	ETHNIC	Numeric	2		93-94
27	ETHNICO	Character	25		95-119
28	INCLEV	Numeric	1		120-120
29	INCOME	Numeric	2		121-122
30	ASSIGN	Numeric	3		123-124
31	EXPOT	Numeric	1		125-125
32	APPT	Numeric	1		126-126
33	DIFFPHON	Numeric	1		127-127
34	TEL02	Character	12		128-139
35	COMMVEH	Numeric	2		140-141
36	OUTTOWN	Numeric	2		142-143
37	NUMPLACE	Numeric	3		144-146
38	PARTIAL	Numeric	1		147-147
39	MDL	Numeric	2		148-149
40	FIPSCODE	Numeric	5		150-154
41	S1BWGT	Numeric	13	4	155-167

## Person File

Field	Field Name	Type	Width	Dec	Column Position
1	SAMPNO	Numeric	7		1-7
2	PERSNO	Numeric	2		8-9
3	GENDER	Numeric	1		10-10
4	AGE	Numeric	2		11-12
5	LIC	Numeric	1		13-13
6	RELATE	Numeric	2		14-15
7	DISA1	Numeric	1		16-16
8	DABL1	Numeric	2		17-18
9	DABLO	Character	20		19-38
10	EDUC	Numeric	1		39-39
11	LEVEL	Numeric	1		40-40
12	SNAME	Character	30		41-70
13	S_LOC	Numeric	8		71-78
14	SDAY	Numeric	1		79-79
15	SMODE	Numeric	10		80-89
16	SCOST	Character	6		90-95
17	SPUNIT	Numeric	1		96-96
18	EMPL	Numeric	1		97-97
19	NOJOB	Numeric	1		98-98
20	JOBCNT	Numeric	1		99-99
21	E1JOB	Numeric	2		100-101
22	E1JOBO	Character	40		102-141
22	W1IND	Numeric	2		142-143
23	W1INDO	Character	60		144-203
24	W1OCC	Numeric	2		204-205
25	W1OCCO	Character	30		206-235
26	W1TIM	Numeric	1		236-237
27	W1DAY	Numeric	1		238-238
28	W1HOM	Numeric	2		239-240
29	W1HOMO	Character	60		241-300
30	W1CPR	Numeric	1		301-301
31	W1CPRTYP	Numeric	1		302-302
32	W1CPRTO	Character	30		303-332
33	W1WKE	Numeric	1		333-333
34	W1WKD	Numeric	5		334-338
35	W1NAM	Numeric	2		339-340
36	W1NAMF	Character	60		341-400
37	W1ADDTYP	Numeric	1		401-401
38	W1_LOC	Numeric	8		402-409
39	W1MODE	Numeric	10		410-419
40	W1MODEO	Character	25		420-444
41	W1NEEDV	Numeric	1		445-445
42	W1CPARK	Character	6		446-451
43	W1CPUNIT	Numeric	2		452-453
44	W1EMPARK	Numeric	2		454-455
45	W1PERCP	Character	6		456-461
46	W1PERCPU	Numeric	2		462-463
47	W1WHPRK	Numeric	2		464-465
48	W1WLKTIM	Numeric	4		466-469
49	TRNST	Numeric	2		470-471
50	VTRAN	Numeric	1		472-472
51	TRANCOST	Character	6		473-478
52	TRNCSTU	Numeric	1		479-479
53	SCHED	Numeric	1		480-480
54	WSTIM	Character	8		481-488
55	WETIM	Character	8		489-496
56	SETIME	Numeric	1		497-497
57	VSTIME	Numeric	1		498-498
58	VETIME	Numeric	1		499-499
59	W2NMF	Numeric	2		500-501
60	W2NAME	Character	30		502-531
61	W2TYP	Numeric	2		532-533
62	W2TYPO	Character	30		534-563
63	W2ADTYP	Numeric	1		564-564
64	W2_LOC	Numeric	8		565-572
65	W2IND	Numeric	2		573-574
66	W2INDO	Character	30		575-604
67	W2OCC	Numeric	2		605-606

Field	Field Name	Type	Width	Dec	Column Position
68	W2OCCO	Character	30		607-636
69	W2DAY	Numeric	1		637-637
70	W2HOME	Numeric	2		638-639
71	W2HOME0	Character	30		640-669
72	W2STIME	Character	8		670-677
73	W2ETIME	Character	8		678-685
74	VERWORK	Numeric	1		686-686
75	VERWORKC	Character	40		687-736
76	VERSCHL	Numeric	1		737-737
77	VERSCHLC	Character	40		738-777
78	HMALLDAY	Numeric	1		778-778
79	HMALLDAC	Character	50		779-828
80	FNAME	Character	20		829-848
81	LNAME	Character	20		849-868
82	PNUMPL	Numeric	3		869-871

### Vehicle File

Field	Field Name	Type	Width	Dec	Column Position
1	SAMPNO	Numeric	7		1-7
2	VEHNUM	Numeric	2		8-9
3	YEAR	Numeric	2		10-11
4	TYPE	Numeric	2		12-13
5	TYPE_OT	Character	25		14-33
6	HOWN	Numeric	1		34-34

### Trip File

Field	Field Name	Type	Width	Dec	Column Position
1	SAMPNO	Numeric	7		1-7
2	PERSNO	Numeric	2		8-9
3	PLACENO	Numeric	3		10-12
4	NOSTOP	Numeric	1		13-13
5	INTP	Numeric	1		14-14
6	PDIARY	Numeric	1		15-15
7	PREP	Character	30		16-45
8	PNOPREP	Numeric	3		46-48
9	CTRLTRIP	Numeric	3		49-51
10	TIMEARRI	Character	20		52-71
11	TIMEDEPA	Character	20		72-91
12	PLACTYP	Numeric	1		92-92
13	PL_LOC	Numeric	8		93-100
14	ACT1	Numeric	2		101-102
15	ACT10	Character	20		103-122
16	ACT2	Numeric	2		123-124
17	ACT20	Character	20		125-144
18	ACT3	Numeric	2		145-146
19	ACT30	Character	20		147-166
20	ACT4	Numeric	2		167-168
21	ACT40	Character	20		169-188
22	ACT5	Numeric	2		189-190
23	ACT50	Character	20		191-210
24	ACT6	Numeric	2		211-212
25	ACT60	Character	20		213-232
26	TRAN1	Numeric	2		233-234
27	TRAN2	Numeric	2		235-236
28	TRAN3	Numeric	2		237-238
29	TRAN4	Numeric	2		239-240
30	TRAN5	Numeric	2		241-242
31	TRAN6	Numeric	2		243-244
32	HHVU	Numeric	1		245-245
33	HHVEHNO	Numeric	2		246-247
34	ADP	Numeric	1		248-248
35	NPERVEH	Numeric	2		249-250
36	NHHTRAV	Numeric	2		251-252
37	THHMEMN	Character	20		253-272
38	NNONTRAV	Numeric	2		273-274
39	PARK	Numeric	1		275-275
40	PARKO	Character	50		276-325
41	PARKC	Numeric	9	2	326-334

Field	Field Name	Type	Width	Dec	Column Position
42	PARKCU	Numeric	1		335-335
43	PARKCUO	Character	50		336-385
44	TOLL	Numeric	1		386-386
45	TOLLAMT	Numeric	9	2	387-385
46	ADDP	Numeric	1		386-386
47	ADDPHH	Numeric	1		387-387
48	ADDPHHPN	Character	30		388-417
49	APDP	Numeric	1		418-418
50	APDPHH	Numeric	1		419-419
51	APDPHHPN	Character	30		420-449
52	SUBTR	Character	50		450-499
53	LINE	Character	50		500-549
54	TRFR	Numeric	1		550-550
55	TRFR1ST	Character	30		551-580
56	LINE1ST	Character	30		581-610
57	TRFR2ND	Character	30		611-640
58	LINE2ND	Character	30		641-670
59	TRFR3RD	Character	30		671-700
60	LINE3RD	Character	30		701-730
61	TRFR4TH	Character	30		731-760
62	LINE4TH	Character	30		761-790
63	EXITST	Character	50		791-840
64	PAY1	Numeric	1		841-841
65	PAY1O	Character	30		842-871
66	PAY2	Numeric	1		872-872
67	PAY2O	Character	30		873-902
68	PAY3	Numeric	1		903-903
69	PAY3O	Character	30		904-933
70	PAY4	Numeric	1		934-934
71	PAY4O	Character	30		935-964
72	PAY5	Numeric	1		965-965
73	PAY5O	Character	30		966-995
74	PLCITY	Character	24		996-1019
75	PLSTATE	Character	2		1020-1021
76	OUTOFTWN	Character	1		1022-1022
77	OTSTAY	Numeric	1		1023-1023
78	OTSTAYOT	Character	50		1024-1074
79	FLAG1	Numeric	2		1075-1076
80	FLAG2	Numeric	2		1077-1078
81	FLAG3	Numeric	2		1079-1080
82	FLAG4	Numeric	2		1081-1082
83	FLAG5	Numeric	2		1083-1084
84	FLAG6	Numeric	9		1085-1093
85	FLAG9	Numeric	8		1094-1101
86	FLAG10	Character	5		1102-1106
87	FLAG8	Numeric	1		1107-1107
88	FLAG7	Numeric	1		1108-1108
89	FLAG11	Numeric	1		1109-1109

### Location File

Field	Field Name	Type	Width	Dec	Column Position
1	LOCNO	Numeric	8		1-8
2	LOCTYPE	Numeric	1		9-9
3	NAME	Character	60		10-69
4	ADDRESS	Character	90		70-159
5	CITY	Character	24		160-183
6	COUNTY	Character	30		184-213
7	STATE	Character	2		214-215
8	ZIP1	Numeric	5		216-220
9	ZIP2	Numeric	4		221-224
10	TRACT	Numeric	20		225-244
11	FIPSCODE	Numeric	5		245-249
12	LONGI	Numeric	26	5	250-275
13	LATI	Numeric	26	5	276-301
14	GISCOUNT	Numeric	2		302-303
15	AV_STATU	Character	1		304-304
16	AV_ZONE	Character	32		305-336
17	AV_ADDRE	Character	90		337-426
18	SPDCHK	Numeric	2		427-428
19	MCDCHK	Numeric	2		429-430
20	AV_CITY	Character	50		431-480

# Appendix F – Data Distribution Policy

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During the conduct of the study, NuStats International assured respondents that all information they provided would be kept strictly confidential and that all of their responses would only be used in combination with those provided by other households in the study.

In order to maintain this assurance of confidentiality, as well as the integrity of our standing in the survey research industry, the following steps must be taken regarding data distribution:

1. The **final data set** should be kept on CD-ROM and locked in a secure location. This data set should serve as a back-up, in the event that the working and public use data sets become corrupted and require recreation.
2. The **working data set** should be released only as necessary to consultants assisting with the modeling process or to NYMTC / NJTPA staff. All staff and consultants working with this data must sign confidentiality agreement.
3. The **public use data set** should be released only as necessary. However, the level of identification does permit this data set to serve as a public domain.

The final data set contains all variables as outlined in the original study documentation. To create the working data set from this file, the following actions must be taken:

- Delete PHONE and TEL02 variables from the household file.
- Delete SNAME, W1NAMF, W2NAME, FNAME, LNAME variables from the person file.
- Delete PREP from the trip file.
- Modify the location file such that all location types of 1 (home addresses) have blank name and address fields.

To create the public use data set, the location file must be modified to include only the LOCNO, LOCTYPE, TRACT, and AV\_STATU variables.

In addition, the confidentiality agreement must be signed by all staff and consultants assisting with the analysis of the working data set. This confidentiality agreement meets the CASRO requirements of confidentiality and is very similar to that in use by FHWA with the 1995 Nationwide Personal Transportation Survey data sets.

## CONFIDENTIALITY AGREEMENT FOR THE USE OF THE 1997/98 HIS WORKING DATA SET

I accept a copy of the 1997/98 HIS Working Data Set. I recognize that this version of the data set contains additional detail on individual records that could potentially compromise the confidentiality of the HIS respondents. I agree that I will use the working data set for statistical purposes only and will not attempt to identify any specific respondent. I agree that I will insure that no other data users in my organization will compromise the confidentiality of the HIS respondents, and that I will not share this version of the data with others outside the organization. I further agree that upon completion of my contractual agreement, I will return this data base to NYMTC / NJTPA and delete any copies on computers or networks within my organization.

Signed:

Printed Name:

Date:

Name:

Firm Name:

Address:

Phone:

Fax:

E-mail:

## Appendix G – Comparability of Data with Census and NPTS

The RT-HIS data set is a rich source of information about the travel patterns of residents in the 28-county study area. The purpose of this appendix is to provide information about how the contents of the RT-HIS data set compare with those of the 1990 Census and the 1995 NPTS. The comparisons are arranged by RT-HIS data file and include three elements: RT-HIS variable, an indication of comparability with the 1990 Census (✓ indicates comparability), and the 1995 NPTS variable name (if a comparable variable exists). In addition, the comparability to NPTS data elements remains the same, regardless of whether the analysis is on weekday or weekend data.

### Household File Comparison

HIS Variable	1990 Census	1995 NPTS
Size	✓	HHSIZE
Vehicles	✓	TOTVEH
Dwelling Type	✓	HOMETYPE*
# Units in Apt Bldg	✓*	
Year Moved in	✓*	
Owner Status	✓	HOMEOWN
Ethnicity	✓*	HH_RACE* & HH_HISP*
Income	✓*	HHFAMINC*
Language	✓*	
# Phone Lines		TELNUMCT
# Shared Lines		TEL_HHS
Service Interruptions		NOTELYR
Length without phone service		NOTELWKS*

✓=comparable

\*some recoding required to allow comparison

### Person File Comparison

HIS Variable	1990 Census	1995 NPTS
Gender	✓	R_SEX
Age	✓*	R_AGE
Relationship	✓*	R_RELAT*
Disability	✓*	
Student Status	✓ (age 3+)	
Level Attending	✓ (age 3+)*	(level completed)
Employment Status	✓*	WORKER
# Jobs		GT1JBLWK
Employer Type	✓*	
Industry	✓	
Occupation	✓	
# Days Telecommute		WKFMHMLW*
Mode to Work	✓*	WRKTRANS
Work Parking Cost		PARKAMT
Parking Cost Unit		PARKCODE

✓=comparable

\*some recoding required to allow comparison



## Vehicle File Comparison

<u>HIS Variable</u>	<u>1990 Census</u>	<u>1995 NPTS</u>
Vehicle year		VEHYEAR*
Vehicle type		VEHTYPE

✓=comparable

\*some recoding required to allow comparison

## Place / Trip File Comparison

<u>HIS Variable</u>	<u>1990 Census</u>	<u>1995 NPTS</u>
Proxy Reporting		PROXY
Diary Use		DIARYCMP*
Trip Departure Time		STRTTIME
Destination Place Type		TO_B
Activity		WHYTO*
Mode		TRPTRANS*
HH Vehicle Used		VEHID
Auto driver / passenger		DRIVER
# in Vehicle		NUMONTRP
# HH on Trip		HH_ONTRP
# non-HH on Trip		NONHHCNT

✓=comparable

\*some recoding required to allow comparison