

RT-HIS: UPDATE 2000:

**REGIONAL TRAVEL – HOUSEHOLD INTERVIEW
SURVEY:**

UPDATED WEIGHTING AND EXPANSION FACTORS

FINAL REPORT

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Prepared by

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For the

New York Metropolitan Transportation Council (NYMTC)

and

North Jersey Transportation Planning Authority (NJTPA)

TABLE of CONTENTS

PURPOSE OF RT-HIS UPDATE 2000..... 3
PROJECT OBJECTIVES 3
RT-HIS: OVERVIEW 4
OVERVIEW OF METHODS AND DATA 6
CENSUS DATA AVAILABILITY AND APPLICATION BY METHOD..... 8
STAGE 2 / FINAL WEIGHTING – UPDATED..... 21
REPORTING OF RT-HIS RESULTS WITH UPDATE 2000 28

Appendix A Weighting Procedures – Scripts: Stage 1

Appendix B: Weighting Procedures – Scripts: Stage 2 / Final

Appendix C: RT-HIS Reporting – Scripts: With Updated Stage 2 / Final Weights 2000

Appendix D: Selected Universe Files - 2000

PURPOSE OF RT-HIS UPDATE 2000

Project Objectives

The purpose of this study has been to obtain, process and apply Year 2000 U.S. Census data in order to weight (normalize) and expand the NYMTC/NJTPA Regional Travel - Household Interview Survey (RT-HIS) sample data collected in 1997 and 1998. This important regional survey was originally weighted with the best available data at the time – 1) 1996 estimates of the number of households at the Census tract and Minor Civil Division level, and 2) 1990 Census Public Use Micro-Sample (PUMS) data. With this project, the new and relatively more concurrent 2000 Census data, have been applied to re-weight and expand the RT-HIS in order to further extend the usefulness of this important dataset of detailed travel behavior for general transportation analysis, and travel demand modeling and forecasting in the region.

The two principal Metropolitan Planning Organizations (MPO's) in the region that sponsored the RT-HIS, have cooperated to have this update implemented -- The New York Metropolitan Transportation Council (NYMTC), and the North Jersey Transportation Planning Authority, Inc., (NJTPA). NYMTC has sponsored the update for the twelve (12) county downstate, New York City metropolitan area plus two Connecticut counties, while NJTPA has partnered with NYMTC to conduct the same work for the thirteen counties of the NJTPA region, plus Mercer County. The work has been based on the original weighting procedures used for the RT-HIS, in Task 12.2.5 of the NYMTC Transportation Models and Data Initiative project.

This project has results in an updated travel depiction from the 1997/98 survey data, which reflects year 2000 household population statistics. A product of the effort is also a set of computer software programs that can efficiently process the data and produce the optimum factoring process resulting in statistically valid year 2000 travel estimates.

The software developed in this project is capable of accepting other year's data or estimates (e.g. year 2002, etc.), as they become available and may be of interest to the planning agencies, in order to do minor updating from short-term population change characteristics. Finally, the study has produced as set of instructional materials used in training sessions conducted with the MPO staff to develop competency in operating the RT-HIS updating programs developed and delivered.

RT-HIS: Overview

The survey data collection began in February of 1997 and continued through May of 1998. The *RT-HIS* was diary type survey travel survey, in which detailed travel information for each member of participating households was collected during an entire travel day. This includes the specific time, location, and mode of travel for all household members during the travel day, as well as their activities at each place to which they traveled. In addition, basic demographic, employment and other data about each household and each person in the household was collected in the *RT-HIS*.

The selection, recruiting and collecting the *RT-HIS* data from each household was an eight staged process, involving a series of mailings and telephone interviews and follow-up contacts.

These procedures are summarized in the chart below:

Survey Step	Highlight / Feature
<ul style="list-style-type: none"> <input type="checkbox"/> Household selected <input type="checkbox"/> Letter of Introduction mailed <input type="checkbox"/> Recruitment interview conducted (by telephone) <input type="checkbox"/> Travel Diaries received for each person <input type="checkbox"/> Assigned Travel Day <input type="checkbox"/> Retrieval interview(s) conducted <input type="checkbox"/> Data checking and control <input type="checkbox"/> Geocoding of all locations 	<ul style="list-style-type: none"> <input type="checkbox"/> Random Digit Dialing (RDD)-based sample <input type="checkbox"/> From NYMTC/NJTPA with \$1 <input type="checkbox"/> CATI*: Household & Person profiles, work/school info, assign travel day <input type="checkbox"/> Diaries, with \$1 per person, Hot Line and instructions <input type="checkbox"/> Reminder call before / verify info. <input type="checkbox"/> PATI**: report diary info with probes <input type="checkbox"/> Edit Checks, geo-coding and call-backs <input type="checkbox"/> Point (Long/Lat) location of places visited (trip ends)

*Note: * CATI – Computer Assisted Telephone Interview procedure.*

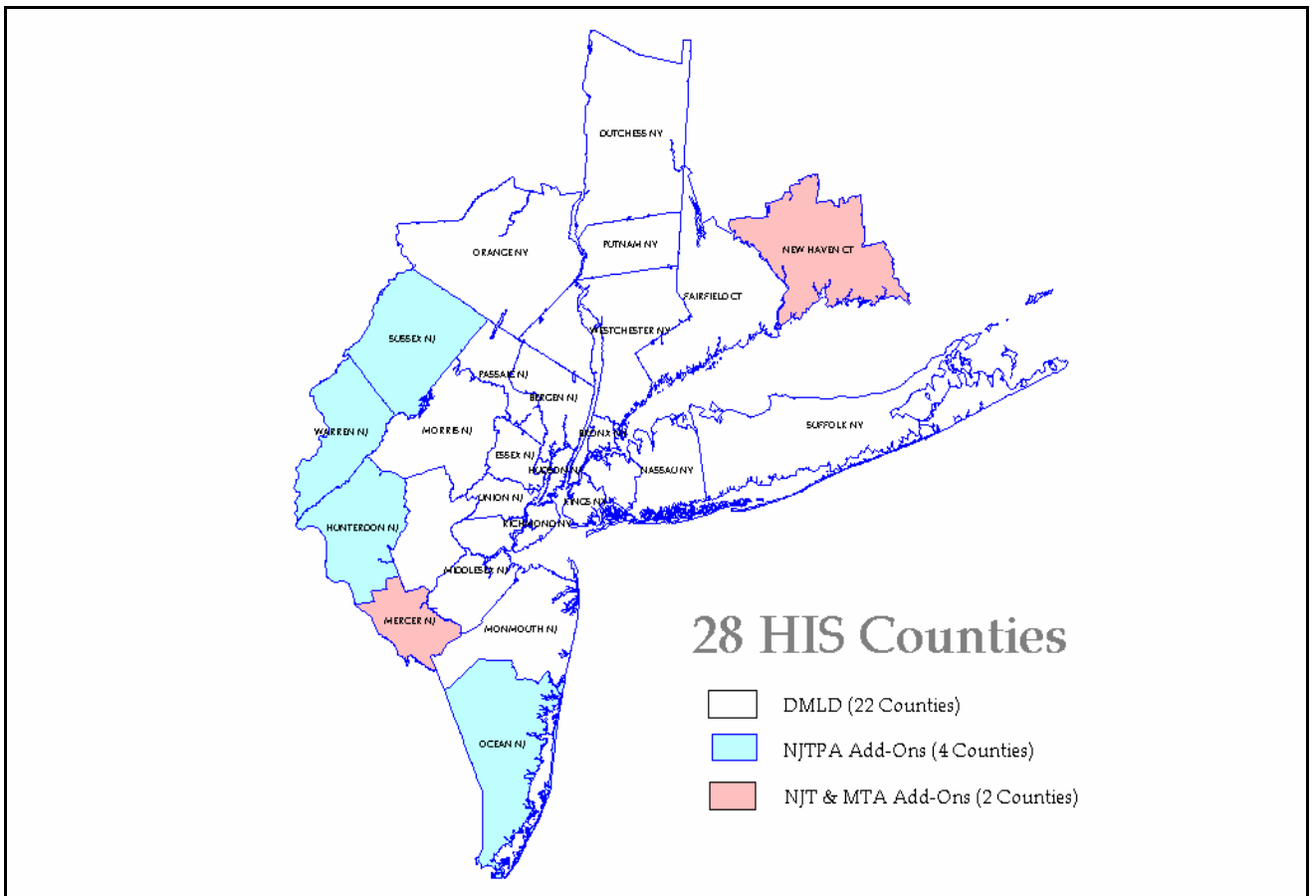
*** PATI - Paper Assisted Telephone Interview procedure.*

The *RT-HIS* data set consists of complete and usable travel information collected from a sample of 11,264 households. The sample for analysis of resident-based weekday travel is 10,971 for the entire 28 county Metro Area. The weekend sample, it is comprised of 275 households, restricted to the NJTPA counties.

All households within the 28 counties comprising the New York/New Jersey/Connecticut metropolitan area (see Figure 1) were eligible for inclusion in the study through a random sampling process. These counties included:

- 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

Figure 1 The RT-HIS Study Area



* *NOTE: DMLD – Density / Model Leadership District (for sampling), also referred to as "MLD's"*

OVERVIEW OF METHODS AND DATA

The approach taken in this project to the re-weighting of the RT-HIS data largely aimed to replicate the methods employed in the original survey weighting, but to take advantage of the more current and complete "universe" data available with now with Census 2000 data. A complete description of that process and its rationale, can be found in Regional Travel Household Interview Survey: *Task 12.2.5 data Weighting and Validation – Technical Memorandum (December 1999)*.

Like the original weighting of the RT-HIS data, the updating process involves two stages:

Stage 1: The primary purpose of Stage 1 sampling is to develop a set of factors that correct for a sample design that established quotas by Density / Model Leadership Districts (MLDs), and by Counties. These factors restore the sample to a representative, or pseudo-random sample, based on the calculated rate of sampling of all households in each of the distinct geographic subarea. In addition, Stage 1 weighting also includes a set of minor corrective factors related to the sampling probabilities and response rates associated with conducting surveys by telephone, given and estimates of telephone ownership patterns among households. The key data needed to implement Stage re-weighting are estimates of the total number of households (the "universe") in each County and MLD sub-area.

Stage 2: In Stage 2, the RT-HIS data are further evaluated and adjusted to account for possible non-response bias, associated with important household characteristics, such as household size, income, and vehicle ownership. Adjusting the survey to fit the distribution of the characteristics in the general population is done to reduce bias in the estimates of the behavior reported by the sample, by "balancing" the weights according to these household segmentation dimensions. For the original RT-HIS weighing, the only appropriate source of data for this aspect of the weighting process was from the 1990 Public Use Micro-Sample (PUMS) data, already about 8 years

Unlike the original weighting of the RT-HIS, initial consideration has been given in the project to exploring the potential utility of an additional stage of data adjustment, one that would adjust the data in order to reduce deviations in the home-to-work linkage found in the RT-HIS and those reported in the Census "journey-to-work" questions.

Stage 3: With the full set of household weights applied, the home-to-work linkage reported by workers in the RT-HIS could be compared with the data from the "journey-to-work" questions found in the Census Transportation Planning Package (CTPP), and be adjusted to improve the match with Census at possibly a county-of-residence to county-of-workplace basis. Unlike the Stage 1 and 2 weighting which are strictly household based, a Stage 3 weight would be primarily as person (worker) based factor. While worth further consideration, the implementation of this level of weighting in manner consistent with the standard re-weighting by households, raises additional complexities that are beyond the scope of this effort.

The overall process for the RT-HIS Update 2000, including the sequence of technical steps and the source and application of Census data, is depicted in **Figure 2**.

Figure 2: RT-HIS Weighting Update: Methods and Data Sources

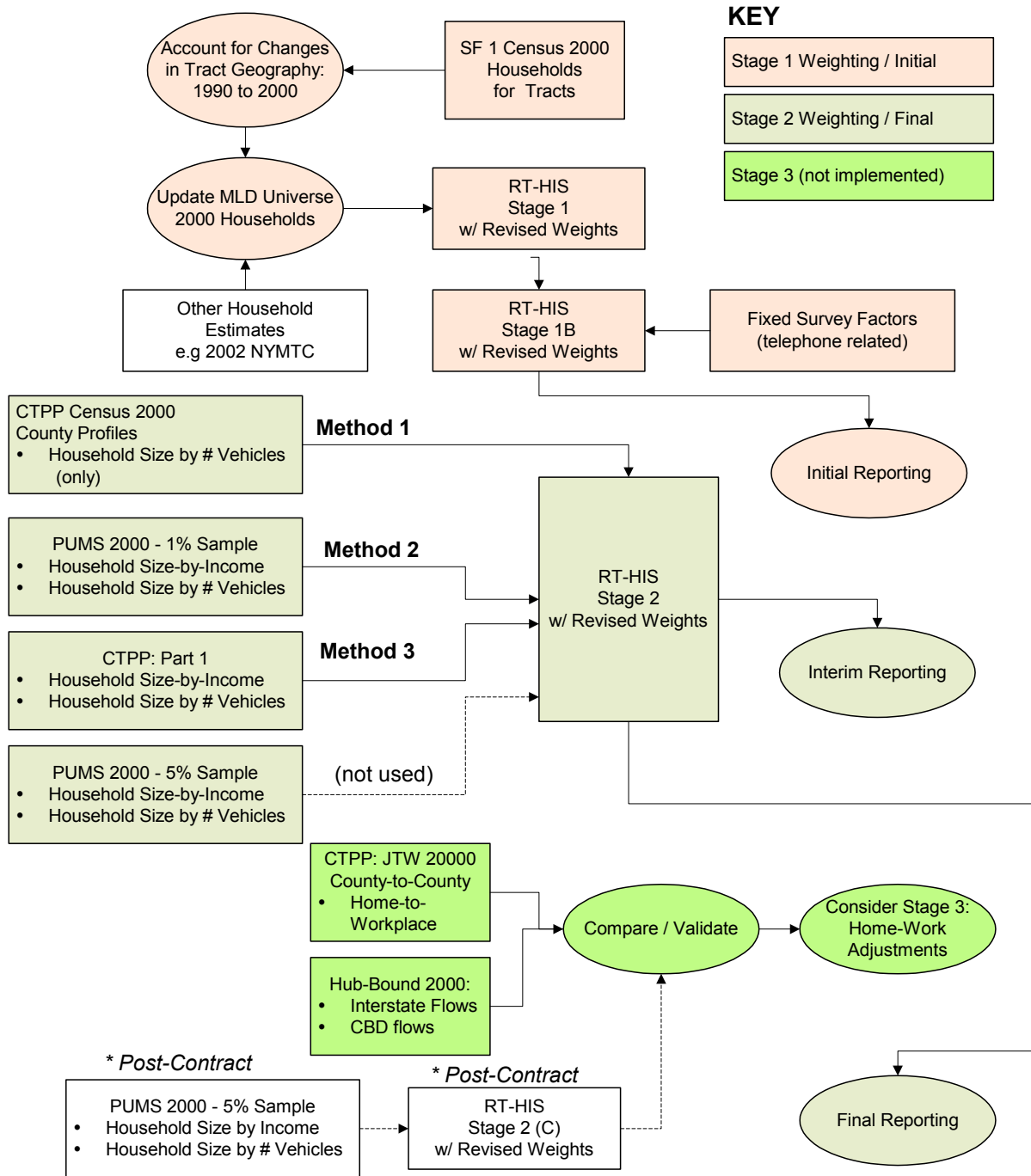


Figure : Summary of Methods and Data – Stage 1 Weighting – Original and Update 2000

Census Data Availability and Application by Method

The effort to re-weight the RT-HIS began late in 2002, when some but not all important Census 2000 data products for the region were available to support the required procedures, specifically the Stage 2 process. The following Figures document the Census data products considered and used, as well as tested in alternate methods pending delivery of products scheduled for release by the Bureau of the Census. Also shown are the source of data used in the original RT-HIS weighting done in 1999.

As shown **Figure 3-1** the Stage 1, the Summary File 1 (SF1) was available to be used for this step of correcting for sampling rates by County and Density / Model Leadership districts. For the Stage 2 work, a number of different Census products were considered and tested, along with variations in the original Stage 2 weighting procedure that was based on the 1990 Public Use Micro-Sample (PUMS) 5% dataset. The Census 2000 version of the 5 percent PUMS has not been available within the timeframe of this effort. Alternatives for Stage 2 re-weighting were tested with different Census data sets that have become available as shown in **Figure 3-2**. The data and method that was selected and has been applied in the project for Stage 2, have involved applying the same two critical household distributions — 1) household income by size and by sub-area, and 2)) number of vehicles by size and by sub-area – as in the original method, but with the CTPP Part 1 data instead of the PUMS 5 percent.

Figure 3-1: Summary of Methods and Data – Stage 1: Original and Update 2000

Weighting Objective	Method - Original	Update Method	Weighting Objective	Release Date (NY, NJ & CT)
Stage 1: Correcting for Sample Design with Geographic Quota / Variable Rates of Sampling			Base Year 1996 Estimates / Urbanomics <i>Data:</i> Household and Population items <i>Table for Update:</i> # of Households <i>Geography:</i> Tracts and MCD's. <i>Sampling Basis:</i> none / estimates	1998 for NYMTC Transportation Data & Models Project
			Summary File 1 (SF1) - Census 2000 <i>Data:</i> Short form basic items <i>Table for Update:</i> # of Households <i>Geography:</i> Blocks, Block-Groups, Tracts, MCD's, etc. <i>Sampling Basis:</i> Short-Form - 100%	Spring 1992

Figure 3-2: Summary of Methods and Data – Stage 2: Original and Update 2000

Weighting Objective	Method - Original	Update Method	Alternate Method 1	Alternate Method 2	Update Method 3	Weighting Objective	Release Date (NY, NJ & CT)
Stage 2: Balancing - Correction for Response Bias by Key Household Characteristics						Public Use Micro-Sample: PUMS - 5% - Census 1990 Data: Long form detail items <u>Tables for Update:</u> - Household Size by <u>Income</u> by Sub-Region - Household Size by <u># Vehicles</u> by Sub-Region <i>Geography:</i> PUMA's (min. 100,000 populations) <i>Sampling Basis:</i> Long-Form - 5 percent of households	1993
						Public Use Micro-Sample: PUMS - 1% - Census 2000 Data: Long form detail items <u>Tables for Update:</u> - Household Size by <u>Income</u> by Sub-Region - Household Size by <u># Vehicles</u> by Sub-Region <i>Geography:</i> Super-PUMA's (min. 400,000 populations) <i>Sampling Basis:</i> Long-Form - 1 percent of households	March 2003
						Public Use Micro-Sample: PUMS - 5% - Census 2000 Data: Long form detail items <u>Tables for Update:</u> - Household Size by <u>Income</u> by Sub-Region - Household Size by <u># Vehicles</u> by Sub-Region <i>Geography:</i> PUMA's (min. 100,000 populations) <i>Sampling Basis:</i> Long-Form - 5 percent of households	Summer 2003 (expected)
						Census Transportation Planning Package - CTPP: "County Profiles" Data: Selected transportation related long form detail items <u>Tables for Update:</u> - Household Size by <u># Vehicles</u> by Sub-Region <i>Geography:</i> County <i>Sampling Basis:</i> Long-Form (1/6) approx 15 percent of households	April 2003
						2000 Census Transportation Planning Package - CTPP: Part 1: Residence Based Data Data: Selected transportation related long form detail items <u>Tables for Update:</u> - Household Size by <u>Income</u> by Sub-Region <i>Geography:</i> Block-Group, Tract, MCD and County <i>Sampling Basis:</i> Long-Form (1/6) approx 15 percent of households	July 2003

Figure 3-3 shows the Census Transportation Planning Package (CTPP) data sources that could be used to further extend the RT-HIS weighting if determined useful.

Figure 3-3: Summary of Methods and Data – Stage 3 Weighting (Not-Implemented)

Weighting Objective	Method	Method - Original	Update Method	Weighting Objective	Release Date (NY, NJ & CT)
Stage 3: Adjustment for Home-to-Work / Commutation Pattern Bias in RT-HIS (<i>NOT IMPLEMENTED in THIS UPDATE</i>)		Not Implemented	Tested / Not-Implemented	2000 Census Transportation Planning Package - CTPP: "County-to-County Flows" Data: Primary Workplace County for each worker by County of Residence Tables for Update: - County-to-County Home-Work (Primary job) Linkage (<u>All modes</u>) Geography: Counties-to-Counties Sampling Basis: Long-Form (1/6) approx 15 percent of	May 2003
			Proposed to Consider	2000 Census Transportation Planning Package - CTPP: Part 3: "Workers Flow Data" Data: Primary Workplace County for each worker by County of Residence Tables for Update: - Home-Work (Primary job) Linkage- <u>By Mode</u> Geography: Tract-to-Tract detail, to use <u>Counties / Districts Level</u> Sampling Basis: Long-Form (1/6) approx 15 percent of households	Summer / Fall 2003 (expected)

stage 1 weighting – updated

County by Density / Mode Leadership districts (MLD): In this step, a first set of RT-HIS weighting factors were developed and applied using the Census 2000 number of households by census tract data (rather than formerly estimated base year 1996) to obtain a revised set of “Stage 1” weights and expansion factors. Using the SF1 Census, the component of the Stage 1 weighting procedures that addresses the probability of selection for each household were updated. As describe above, this element of the RT- HIS weights, stems from the non-random / stratified nature of the sampling plan, with specific targets for sample of households assigned by County by Density / Mode Leadership districts (MLD) categories. This step re-established he adjustments needed for the rate of sampling based on the updated tract level household counts.

In the RT-HIS sampling plan, each household sampled was classified as to the County and MLD (or quota) that it belong to, by determining which a Census tract, or in some areas Minor Civil Division (MCD), it was located, and the correspondence of these Census geographic units to the County and MLD definitions. This correspondence listing of Counties and MLD’s was updated in this project for Census 2000 tracts and MCD, so that SF 1 could be used to provide a count of the number of households in each of these sampling “cells”.

This correspondence between tract and MCD Census geography and the County / MLD sampling cells, as used in the updating process is illustrated in **Figure 4-1** and **Figure 4-2**.

Telephone Interview Related Factors: Consideration was given to updating of these factors that relate to telephone ownership patterns and sampling bias, rather that simply retaining the factors developed in the original HIS weighting. These factors account for:

- Multiple phone numbers for a household
- Multiple households sharing a phone number
- Episodic phone ownership

It was determined that these telephone related factors developed in 1998 for the original HIS weighting, used not the 1990 decennial Census data, but the Current Population Survey (CPS) also conducted by the Bureau of the Census, adjusted based on other information available to NuStats obtained from their telephone interviewing experience. Consequently, there was no compelling reason to update these specific telephone ownership related factors as part of this 2000 Update.

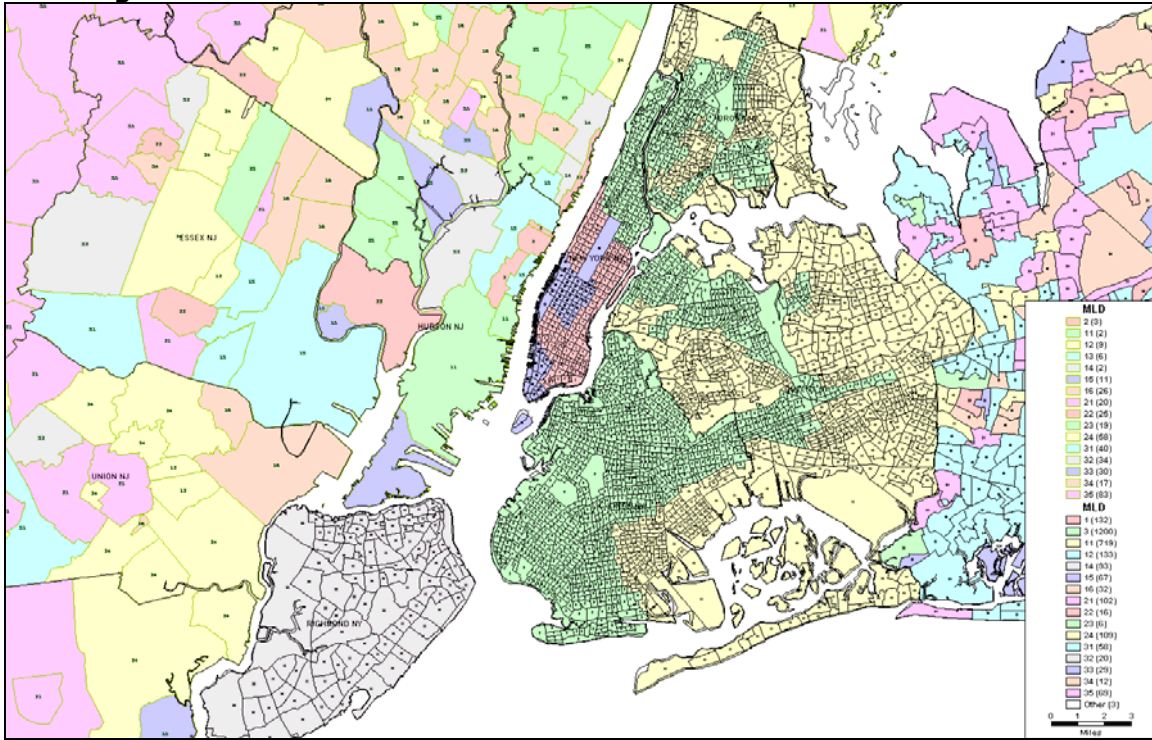
Stage 1 Weights Revised: The following tables illustrate the factor calculation process for county and Density Mode Leadership District strata: the number of completed weekday households, the number of households in the universe, and the weighting factor that accounts for probability of selection.

Table 1 displays the actual number of households that completed the *RT-HIS* survey for the weekday travel day, distributed by DMLD’s.

Table 2 contains the populations for each county and Density Mode Leadership District strata for the survey universe.

Table 3 contains the weighting factors that adjust for probability of selection.

**Figure 4-1: Mode Leadership Density Districts – Census 2000 Update
Core Region**



**Figure 4-2: Mode Leadership Density Districts – Census 2000 Update
Northern New Jersey**

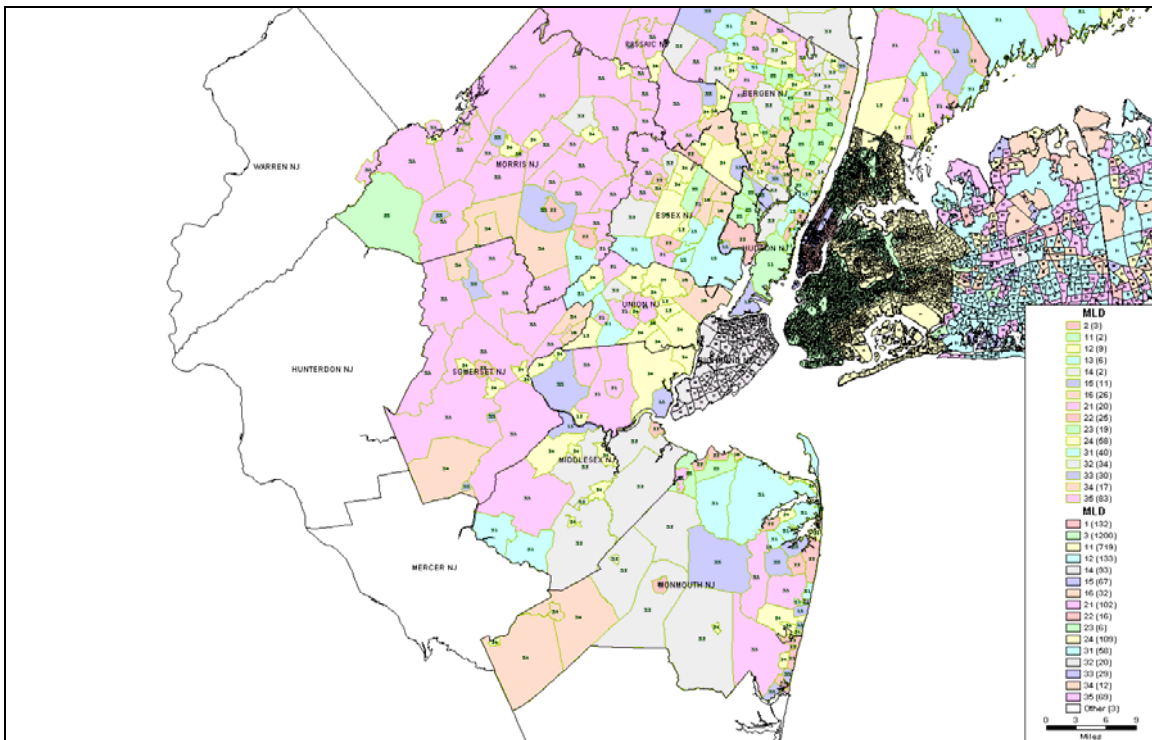


Table 2: Universe: Estimated 2000 Households (Source - Census 2000 / SF 1 Counts)

County	Mode Leadership Density																	No MLD Defined
	1	2	3	11	12	13	14	15	16	21	22	23	24	31	32	33	35	
1 New York	467,102		197,133					74,409										
2 Queens			349,329	433,335														
3 Bronx			292,151	171,061														
4 Kings			776,290	104,437														
5 Richmond							130,054								26,287			
6 Nassau				9,117	224,454			15,772	35,807	92,860	14,725	7,681	12,829	25,338	275	2,499	6,030	
7 Suffolk					11,946			1,058	19,833	59,388	10,791	1,242	147,154	57,139	1,785	38,386	120,577	
8 Westchester					126,269			8,394		98,016	24,085			80,378				-
9 Rockland															87,843			4,832
10 Putnam														9,783				22,920
11 Orange								9,144			12,999				22,944	18,009	51,692	
12 Dutchess											12,014		8,125			28,073	51,324	
13 Fairfield									50,307	45,399			52,609	88,194	6,481		81,242	
14 Bergen					3,024	4,861	26,571		99,159	12,580	3,836	87,235	24,343	8,856	32,817	14,099	13,436	
15 Passaic								19,458	46,532		4,687		48,670			2,626	41,883	
16 Hudson		44,084		108,050		27,211		31,448			13,539				6,214			-
17 Essex					11,885	139,438			43,632	10,910	8,833	15,020	26,468	7,015	11,370		9,165	
18 Union					27,794				48,337	29,490			65,241	12,828	2,434			-
19 Morris									564	3,159	12,772	5,755	15,029	3,920	1,476	11,053	115,983	
20 Somerset									7,202		4,743		11,918			821	84,300	
21 Middlesex					5,899			27,619		40,128	2,967		76,243	9,833	66,047	16,500	20,579	
22 Monmouth								9,572	3,872	285	38,181	13,665	26,185	34,894	49,779	14,216	33,587	
23 Ocean																		200,402
24 Hunterdon																		43,678
25 Warren																		38,660
26 Sussex																		50,831
27 New Haven																		319,040
28 Mercer																		125,807
Total: All Counties	467,102	44,084	1,614,903	826,000	411,271	171,510	156,625	196,874	355,245	392,215	164,172	130,598	514,814	338,178	315,752	146,282	657,550	778,418

NYC
LI
MH
CT
NJTPA
Mercer

Table 3: Weighting Factor 1 - Adjusting for Probability of Selection - Update for 2000

County	Mode Leadership Density																	No MLD Defined
	1	2	3	11	12	13	14	15	16	21	22	23	24	31	32	33	35	
1 New York	0.572	-	1.043	-	-	-	-	0.949	-	-	-	-	-	-	-	-	-	-
2 Queens	-	-	3.723	4.358	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Bronx	-	-	2.426	2.468	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Kings	-	-	2.590	2.445	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 Richmond	-	-	-	-	-	-	0.248	-	-	-	-	-	-	-	0.587	-	-	-
6 Nassau	-	-	-	3.255	2.004	-	-	0.939	1.763	1.868	0.568	1.097	2.290	1.508	0.393	0.510	0.957	-
7 Suffolk	-	-	-	-	2.437	-	-	1.511	1.416	1.571	1.186	-	1.491	1.632	1.275	1.661	1.551	-
8 Westchester	-	-	-	-	1.582	-	-	1.090	-	1.842	0.717	-	-	1.573	-	-	-	-
9 Rockland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.502	-	-	-
10 Putnam	-	-	-	-	-	-	-	-	-	-	-	-	-	0.184	-	-	-	0.177
11 Orange	-	-	-	-	-	-	-	0.421	-	-	0.580	-	-	-	0.565	0.322	1.070	-
12 Dutchess	-	-	-	-	-	-	-	-	-	-	0.373	-	0.645	-	-	0.301	0.940	-
13 Fairfield	-	-	-	-	-	-	-	-	1.633	1.965	-	-	1.927	1.223	0.841	-	2.901	-
14 Bergen	-	-	-	-	2.159	0.771	0.277	-	1.491	1.497	0.548	0.582	1.512	0.703	0.670	0.592	1.010	-
15 Passaic	-	-	-	-	-	-	-	0.618	0.923	-	0.335	-	1.037	-	-	0.375	0.981	-
16 Hudson	-	0.443	-	0.821	-	0.694	-	0.713	-	-	0.716	-	-	-	0.683	-	-	-
17 Essex	-	-	-	-	-	0.858	-	-	1.198	1.417	0.421	0.715	1.644	0.911	0.738	-	1.870	-
18 Union	-	-	-	-	1.103	-	-	-	0.908	0.979	-	-	1.165	1.018	0.497	-	-	-
19 Morris	-	-	-	-	-	-	-	-	-	1.504	0.405	0.433	0.767	1.120	1.054	0.385	1.142	-
20 Somerset	-	-	-	-	-	-	-	-	0.605	-	0.219	-	0.387	-	-	0.235	0.712	-
21 Middlesex	-	-	-	-	1.053	-	-	0.962	-	1.592	0.471	-	2.178	1.080	0.621	0.481	1.633	-
22 Monmouth	-	-	-	-	-	-	-	0.911	1.106	-	0.529	0.751	0.870	0.845	0.799	0.472	0.959	-
23 Ocean																		1.064
24 Hunterdon																		0.226
25 Warren																		0.204
26 Sussex																		0.262
27 New Haven																		2.848
28 Mercer																		0.439

Average Expansion Factor 700.2

In **Table 4**, the original and revised RT-HIS Update 2000 Stage 1 weights and expansion factors are shown, tabulated by the County and MLD quota cells.

Table 4:
Stage 1 / Initial - Comparison of Update 2000 with Original Weighting

RCO Regional County	MLD Mode Leadership Density Code	Original (96)	Update (00)	Difference	Original (96)	Update (00)	Difference	
		WHT_1OLD Stage 1 Weight - Normalized	WHT_1 Stage 1 Weight - Normalized		EXP_1 Stage 1 Weight - Expansion	EXP_1OLD Stage 1 Weight - Expansion		
1	New York	1	0.6028	0.5745	-0.0283	401.1	393.4	-7.7
		3	1.0551	1.0464	-0.0088	730.6	688.7	-41.9
		15	0.8708	0.9491	0.0783	662.7	568.4	-94.3
		Total	0.7011	0.6839	-0.0172	477.5	457.6	-19.9
2	Queens	3	3.6759	3.7361	0.0602	2,608.5	2,399.3	-209.2
		11	4.2733	4.3685	0.0952	3,050.0	2,789.2	-260.8
		Total	3.9832	4.0615	0.0782	2,835.7	2,599.9	-235.8
3	Bronx	3	2.3755	2.4366	0.0611	1,701.2	1,550.5	-150.7
		11	2.1647	2.4344	0.2697	1,699.7	1,413.0	-286.7
		Total	2.2985	2.4358	0.1373	1,700.7	1,500.3	-200.4
4	Kings	3	2.5687	2.6007	0.0320	1,815.8	1,676.6	-139.2
		11	2.2844	2.4381	0.1538	1,702.3	1,491.0	-211.2
		Total	2.5332	2.5805	0.0472	1,801.6	1,653.5	-148.2
5	Richmond	14	0.2332	0.2486	0.0155	173.6	152.2	-21.4
		32	0.4828	0.5906	0.1079	412.4	315.1	-97.3
		Total	0.2528	0.2756	0.0227	192.4	165.0	-27.4
6	Nassau	11	3.3755	3.2770	-0.0985	2,288.0	2,203.3	-84.8
		12	2.0840	2.0112	-0.0729	1,404.2	1,360.3	-43.9
		15	0.9653	0.9392	-0.0262	655.7	630.1	-25.6
		16	1.8671	1.7738	-0.0933	1,238.5	1,218.7	-19.8
		21	1.9036	1.8723	-0.0313	1,307.2	1,242.5	-64.7
		22	0.5645	0.5722	0.0077	399.5	368.4	-31.1
		23	1.1638	1.1040	-0.0598	770.8	759.6	-11.2
		24	2.3835	2.2981	-0.0854	1,604.5	1,555.8	-48.8
		31	1.6486	1.5135	-0.1351	1,056.7	1,076.1	19.4
		32	0.4167	0.4125	-0.0042	288.0	272.0	-16.0
		33	0.5032	0.5123	0.0092	357.7	328.4	-29.3
		35	0.9904	0.9612	-0.0292	671.1	646.4	-24.7
		Total	1.7277	1.6702	-0.0574	1,166.2	1,127.7	-38.5
		7	Suffolk	12	2.5728	2.4371	-0.1357	1,701.6
15	1.6362			1.4896	-0.1467	1,040.0	1,068.0	28.0
16	1.5066			1.4182	-0.0884	990.2	983.4	-6.8
21	1.7081			1.5773	-0.1308	1,101.2	1,114.9	13.6
22	1.2303			1.1893	-0.0409	830.4	803.0	-27.4
24	1.5343			1.4944	-0.0399	1,043.4	1,001.5	-41.9
31	1.6583			1.6348	-0.0235	1,141.4	1,082.4	-59.0
32	1.2057			1.2747	0.0690	890.0	787.0	-103.0
33	1.6112			1.6697	0.0585	1,165.8	1,051.7	-114.1
35	1.5002			1.5592	0.0590	1,088.6	979.2	-109.4
Total	1.5726			1.5226	-0.0500	1,084.0	1,026.5	-57.5
8	Westchester	12	1.6657	1.5864	-0.0792	1,107.6	1,087.2	-20.4
		15	1.0757	1.0930	0.0173	763.1	702.1	-61.0
		21	1.8909	1.8472	-0.0437	1,289.7	1,234.2	-55.5
		22	0.7160	0.7187	0.0027	501.8	467.4	-34.4
		31	1.5877	1.5770	-0.0107	1,101.1	1,036.3	-64.7
		Total	1.5394	1.4996	-0.0398	1,047.0	1,004.8	-42.2
9	Rockland	32	0.5167	0.5033	-0.0134	351.4	337.2	-14.1
		Total	0.5167	0.5033	-0.0134	351.4	337.2	-14.1
10	Putnam	31	0.1834	0.1844	0.0010	128.7	119.7	-9.0
		35	0.1706	0.1774	0.0069	123.9	111.3	-12.6
		Total	0.1743	0.1795	0.0052	125.3	113.8	-11.5
11	Orange	15	0.4612	0.4225	-0.0387	295.0	301.0	6.0
		22	0.6113	0.5818	-0.0295	406.2	399.0	-7.2
		32	0.5072	0.5666	0.0594	395.6	331.1	-64.5
		33	0.3211	0.3224	0.0013	225.1	209.6	-15.5
		35	1.0453	1.0730	0.0277	749.2	682.3	-66.9
		Total	0.5966	0.6089	0.0123	425.1	389.4	-35.7

Table 4: (continued)

Stage 1 / Initial - Comparison of Update 2000 with Original Weighting

RCO Regional County	MLD Mode Leadership Density Code	Original (96)	Update (00)	Difference	Original (96)	Update (00)	Difference	
		WHT_1OLD Stage 1 Weight - Normalized	WHT_1 Stage 1 Weight - Normalized		EXP_1 Stage 1 Weight - Expansion	EXP_1OLD Stage 1 Weight - Expansion		
12	Dutchess	22	0.4135	0.3741	-0.0394	261.2	269.9	8.7
		24	0.6422	0.6465	0.0043	451.4	419.2	-32.2
		33	0.3075	0.3023	-0.0052	211.1	200.7	-10.4
		35	0.9231	0.9424	0.0194	658.0	602.5	-55.5
		Total	0.5217	0.5184	-0.0033	361.9	340.5	-21.4
13	Fairfield, CT	16	1.8550	1.6376	-0.2174	1,143.3	1,210.8	67.4
		21	1.9825	1.9704	-0.0121	1,375.7	1,294.0	-81.7
		24	1.9945	1.9321	-0.0625	1,348.9	1,301.8	-47.1
		31	1.2580	1.2264	-0.0316	856.3	821.1	-35.1
		32	0.7694	0.8439	0.0745	589.2	502.2	-87.0
		35	2.8220	2.9090	0.0870	2,031.1	1,842.0	-189.1
		Total	1.7620	1.7200	-0.0421	1,200.9	1,150.1	-50.8
14	Bergen	12	2.2506	2.1656	-0.0850	1,512.0	1,469.0	-43.0
		13	0.7415	0.7736	0.0321	540.1	484.0	-56.1
		14	0.2734	0.2778	0.0044	193.9	178.4	-15.5
		16	1.5532	1.4950	-0.0583	1,043.8	1,013.8	-30.0
		21	1.5862	1.5015	-0.0847	1,048.3	1,035.3	-13.0
		22	0.3680	0.5494	0.1814	383.6	240.2	-143.4
		23	0.6080	0.5839	-0.0241	407.6	396.8	-10.8
		24	1.5798	1.5159	-0.0639	1,058.4	1,031.1	-27.3
		31	0.6835	0.7047	0.0212	492.0	446.1	-45.9
		32	0.6745	0.6715	-0.0030	468.8	440.3	-28.6
		33	0.5133	0.5939	0.0806	414.7	335.1	-79.6
		35	1.0212	1.0128	-0.0084	707.2	666.6	-40.6
		Total	0.7492	0.7369	-0.0123	514.5	489.0	-25.5
15	Passaic	15	0.6533	0.6193	-0.0340	432.4	426.4	-6.0
		16	0.9969	0.9256	-0.0713	646.3	650.7	4.4
		22	0.3325	0.3357	0.0031	234.4	217.1	-17.3
		24	1.0914	1.0404	-0.0510	726.4	712.4	-14.0
		33	0.3956	0.3761	-0.0195	262.6	258.2	-4.4
		35	0.9631	0.9834	0.0203	686.6	628.6	-58.0
		Total	0.8860	0.8534	-0.0326	595.8	578.3	-17.5
16	Hudson	2	0.4067	0.4446	0.0379	310.5	265.5	-45.0
		11	0.7763	0.8232	0.0468	574.7	506.7	-68.0
		13	0.6427	0.6960	0.0532	485.9	419.5	-66.4
		15	0.7345	0.7150	-0.0195	499.2	479.4	-19.8
		22	0.6920	0.7182	0.0262	501.4	451.7	-49.8
		32	0.6214	0.6846	0.0632	478.0	405.6	-72.4
		Total	0.6395	0.6753	0.0357	471.5	417.4	-54.0
17	Essex	13	0.8815	0.8608	-0.0207	601.0	575.4	-25.6
		16	1.1838	1.2018	0.0179	839.1	772.7	-66.4
		21	1.3649	1.4206	0.0556	991.8	890.9	-100.9
		22	0.4069	0.4217	0.0148	294.4	265.6	-28.9
		23	0.7022	0.7171	0.0148	500.7	458.4	-42.3
		24	1.5445	1.6482	0.1038	1,150.8	1,008.1	-142.7
		31	0.9114	0.9134	0.0020	637.7	594.9	-42.8
		32	0.7073	0.7402	0.0330	516.8	461.6	-55.2
		35	1.7459	1.8753	0.1294	1,309.3	1,139.6	-169.7
		Total	0.9275	0.9315	0.0040	650.4	605.4	-45.0
18	Union	12	1.1761	1.1058	-0.0703	772.1	767.6	-4.4
		16	0.9395	0.9109	-0.0286	636.0	613.2	-22.8
		21	1.0130	0.9823	-0.0307	685.8	661.2	-24.6
		24	1.1959	1.1680	-0.0279	815.5	780.6	-34.9
		31	0.9684	1.0207	0.0523	712.7	632.1	-80.6
		32	0.5205	0.4980	-0.0224	347.7	339.7	-8.0
Total	1.0540	1.0253	-0.0287	715.9	688.0	-27.9		

Table 4: (continued)

Stage 1 / Initial - Comparison of Update 2000 with Original Weighting

RCO Regional County	MLD Mode Leadership Density Code	Original (96)	Update (00)	Difference	Original (96)	Update (00)	Difference	
		WHT_1OLD Stage 1 Weight - Normalized	WHT_1 Stage 1 Weight - Normalized		EXP_1 Stage 1 Weight - Expansion	EXP_1OLD Stage 1 Weight - Expansion		
19	Morris	21	1.7047	1.5082	-0.1965	1,053.0	1,112.7	59.7
		22	0.4447	0.4065	-0.0382	283.8	290.2	6.4
		23	0.4268	0.4338	0.0070	302.9	278.6	-24.3
		24	0.8568	0.7688	-0.0880	536.8	559.3	22.5
		31	1.1800	1.1229	-0.0571	784.0	770.2	-13.8
		32	1.0250	1.0570	0.0321	738.0	669.0	-69.0
		33	0.3865	0.3861	-0.0004	269.6	252.3	-17.3
		35	1.1307	1.1456	0.0150	799.9	738.0	-61.9
		Total	0.8506	0.8412	-0.0094	587.3	555.2	-32.1
20	Somerset	16	0.7480	0.6068	-0.1412	423.6	488.2	64.6
		22	0.2540	0.2191	-0.0349	153.0	165.8	12.8
		24	0.4600	0.3880	-0.0720	270.9	300.2	29.4
		33	0.2411	0.2352	-0.0060	164.2	157.4	-6.8
		35	0.6568	0.7144	0.0577	498.8	428.7	-70.1
		Total	0.5753	0.5868	0.0115	409.7	375.5	-34.2
21	Middlesex	12	1.1556	1.0561	-0.0994	737.4	754.3	16.9
		15	1.0503	0.9648	-0.0855	673.6	685.5	11.9
		21	1.6311	1.5965	-0.0346	1,114.7	1,064.7	-50.0
		22	0.5223	0.4722	-0.0501	329.7	340.9	11.2
		24	2.2798	2.1840	-0.0958	1,524.9	1,488.1	-36.8
		31	0.9471	1.0833	0.1363	756.4	618.2	-138.2
		32	0.6040	0.6224	0.0183	434.5	394.3	-40.2
		33	0.4582	0.4823	0.0241	336.7	299.0	-37.7
		35	1.4321	1.6375	0.2054	1,143.3	934.7	-208.6
		Total	1.0161	1.0126	-0.0036	707.0	663.3	-43.7
22	Monmouth	15	1.0301	0.9140	-0.1161	638.1	672.3	34.2
		16	1.2499	1.1092	-0.1407	774.4	815.8	41.4
		22	0.5670	0.5309	-0.0361	370.7	370.1	-0.6
		23	0.8269	0.7528	-0.0741	525.6	539.7	14.2
		24	1.0881	0.8722	-0.2159	609.0	710.2	101.3
		31	0.9032	0.8471	-0.0562	591.4	589.6	-1.9
		32	0.7045	0.8011	0.0966	559.3	459.8	-99.5
		33	0.4858	0.4735	-0.0123	330.6	317.1	-13.5
		35	0.7933	0.9621	0.1688	671.7	517.8	-153.9
		Total	0.7504	0.7408	-0.0097	517.2	489.8	-27.4
23	Ocean	No MLDs	1.0702	1.0670	-0.0032	745.0	698.5	-46.5
		Total	1.0702	1.0670	-0.0032	745.0	698.5	-46.5
24	Hunterdon	No MLDs	0.2348	0.2267	-0.0081	158.3	153.2	-5.0
		Total	0.2348	0.2267	-0.0081	158.3	153.2	-5.0
25	Warren	No MLDs	0.2054	0.2043	-0.0011	142.7	134.1	-8.6
		Total	0.2054	0.2043	-0.0011	142.7	134.1	-8.6
26	Sussex	No MLDs	0.2698	0.2628	-0.0070	183.5	176.1	-7.4
		Total	0.2698	0.2628	-0.0070	183.5	176.1	-7.4
27	New Haven,CT	No MLDs	2.9651	2.8560	-0.1092	1,994.0	1,935.4	-58.6
		Total	2.9651	2.8560	-0.1092	1,994.0	1,935.4	-58.6
28	Mercer	No MLDs	0.4075	0.4408	0.0334	307.8	266.0	-41.8
		Total	0.4075	0.4408	0.0334	307.8	266.0	-41.8

Table 4: (continued)

Stage 1 / Initial - Comparison of Update 2000 with Original Weighting

RCO Regional County	MLD Mode Leadership Density Code	Original (96)	Update (00)	Difference	Original (96)	Update (00)	Difference
		WHT_1OLD Stage 1 Weight - Normalized	WHT_1 Stage 1 Weight - Normalized		EXP_1 Stage 1 Weight - Expansion	EXP_1OLD Stage 1 Weight - Expansion	
Total	1	0.6028	0.5745	-0.0283	401.1	393.4	-7.7
	2	0.4067	0.4446	0.0379	310.5	265.5	-45.0
	3	2.2763	2.3061	0.0298	1,610.1	1,485.8	-124.3
	11	2.2670	2.3845	0.1174	1,664.8	1,479.7	-185.1
	12	1.8270	1.7501	-0.0769	1,221.9	1,192.5	-29.4
	13	0.8323	0.8271	-0.0052	577.5	543.2	-34.3
	14	0.2394	0.2531	0.0138	176.7	156.2	-20.5
	15	0.8241	0.8211	-0.0030	573.3	537.9	-35.4
	16	1.3101	1.2393	-0.0708	865.3	855.2	-10.1
	21	1.7049	1.6560	-0.0489	1,156.2	1,112.8	-43.4
	22	0.5367	0.5216	-0.0151	364.2	350.3	-13.9
	23	0.6435	0.6198	-0.0238	432.7	420.0	-12.7
	24	1.3660	1.3073	-0.0587	912.7	891.6	-21.1
	31	1.0959	1.0762	-0.0197	751.4	715.3	-36.1
	32	0.5828	0.6105	0.0278	426.3	380.4	-45.9
	33	0.4715	0.4819	0.0105	336.5	307.7	-28.8
	35	0.9311	0.9732	0.0421	679.5	607.7	-71.8
	No MLDs	0.6764	0.6709	-0.0055	468.4	441.5	-26.9
	Total	1.0003	1.0003	0.0000	698.4	652.9	-45.5

STAGE 2 / FINAL WEIGHTING – UPDATED

In this step the full updated weighting of the RT-HIS survey has been completed, including the Stage 2 adjustments that account for non-response bias inherent in the final achieved sample, namely due to lower levels of participation found in the survey, and under-reporting, by households that are larger, with lower incomes, or with lower levels of car ownership.

This second set of RT-HIS weighting procedures, have made use of the Census 2000 distributions of households by size, income and auto ownership. As discussed in the first section of this report, alternative methods were tested. In the end, it was determined that replicating the original Stage 2 weighting procedures made the most sense, and could be accomplished within the project schedule even though the PUMS 2000 5-percent data were not available. Using the CTPP Part 1 data, both the two key joint distributions needed to further balance sample data are available. As an added benefit of use the CTPP data rather than the PUMS data as done for the original weighting, the CTPP data reflects a larger sample size from the Census, about 15 percent of the population of households (1 in 6 long form), rather than the 5 percent micro-sample. data from PUMS.

For households in the RT-HIS sample that provide reports of household income (8,360 or 76.2%), the Stage 2 weighting procedures further adjust the sample with respect to:

- Household Income by Household Size by Sub-regional county groupings.

For households in the RT-HIS sample that did not report household income (2,611 or 23.8%), the Stage 2 weighting procedures further adjust the sample with respect to:

- Number of Vehicles Owned by Household Size by Sub-regional county groupings.

The updated Stage 2 balancing factors have employed the same sub-regional geographic stratifications as used in the original weighting of the RT-HIS.

- New York City
- Long Island (Nassau and Suffolk)
- Mid-Hudson New York counties
- Connecticut (Fairfield and New Haven)
- Northern NJ (NJTPA counties)
- Mercer County

In **Table 5**, the original and revised RT-HIS Update 2000 Stage 2 and Final weights and expansion factors are shown, tabulated by the County and MLD quota cells.

Table 5:
Stage 2 / Final - Comparison of Update 2000 (Method 3) with Original Weighting

RCO Regional County	RCO Regional County ID	MLD Mode Leadership Density Code	Original (96)	Update (00)	Difference	Original (96)	Update (00)	Difference
			WHT_F Final RTHIS Weight - Normalized - Updated	WHT_F Final RTHIS Weight - Normalized - Updated		EXP_F Final RTHIS Weight - Expansion - Updated	EXP_F Final RTHIS Weight - Expansion - Updated	
1	1 Manhattan	1	0.6123	0.5783	-0.0340	401.1	404.9	3.9
		3	1.0235	1.0507	0.0272	670.4	735.7	65.3
		15	0.8146	0.8655	0.0509	533.6	606.0	72.4
		Total	0.6987	0.6815	-0.0172	457.6	477.2	19.5
2	2 Queens	3	3.5295	3.5939	0.0644	2,311.8	2,516.3	204.5
		11	4.3845	4.4805	0.0960	2,871.8	3,137.1	265.3
		Total	3.9694	4.0500	0.0807	2,599.9	2,835.7	235.8
3	3 Bronx	3	2.3379	2.4481	0.1102	1,531.3	1,714.1	182.7
		11	2.2082	2.4293	0.2211	1,446.4	1,701.0	254.6
		Total	2.2905	2.4412	0.1507	1,500.3	1,709.3	209.0
4	4 Brooklyn	3	2.5593	2.6031	0.0437	1,676.4	1,822.6	146.2
		11	2.2796	2.3565	0.0769	1,493.2	1,650.0	156.8
		Total	2.5244	2.5723	0.0479	1,653.5	1,801.1	147.6
5	5 Staten Island	14	0.2271	0.2421	0.0150	148.8	169.5	20.8
		32	0.5421	0.6557	0.1136	355.1	459.1	104.0
		Total	0.2519	0.2747	0.0228	165.0	192.3	27.3
6	6 Nassau	11	2.8350	2.5673	-0.2677	1,856.9	1,797.6	-59.3
		12	2.1184	2.0253	-0.0931	1,387.6	1,418.0	30.5
		15	0.9565	0.9132	-0.0433	626.5	639.4	12.9
		16	2.0966	1.9138	-0.1829	1,373.3	1,340.0	-33.3
		21	1.8139	1.8460	0.0321	1,188.1	1,292.5	104.4
		22	0.6252	0.5933	-0.0319	409.5	415.4	5.9
		23	1.0530	0.9779	-0.0751	689.7	684.7	-5.0
		24	1.8917	2.1609	0.2692	1,239.1	1,513.0	273.9
		31	1.6204	1.5357	-0.0847	1,061.3	1,075.2	13.9
		32	1.0461	0.7317	-0.3144	685.2	512.3	-172.9
		33	0.3918	0.3649	-0.0270	256.7	255.5	-1.2
		35	0.7527	0.7788	0.0261	493.0	545.3	52.3
7	7 Suffolk	Total	1.7216	1.6640	-0.0576	1,127.6	1,165.1	37.4
		12	2.9734	2.8160	-0.1574	1,947.6	1,971.7	24.1
		15	1.6500	1.4343	-0.2158	1,080.8	1,004.2	-76.5
		16	1.6820	1.5175	-0.1645	1,101.7	1,062.5	-39.2
		21	1.8340	1.7057	-0.1283	1,201.3	1,194.3	-7.0
		22	1.0171	0.9695	-0.0476	666.2	678.8	12.6
		24	1.5616	1.5119	-0.0496	1,022.8	1,058.6	35.8
		31	1.7141	1.7462	0.0320	1,122.8	1,222.6	99.9
		32	1.6124	1.8605	0.2482	1,056.1	1,302.7	246.6
		33	1.3303	1.4304	0.1001	871.3	1,001.5	130.2
8	8 Westchester	35	1.4176	1.4652	0.0476	928.6	1,025.9	97.4
		Total	1.5711	1.5515	-0.0196	1,029.1	1,086.3	57.2
		12	1.5959	1.5409	-0.0550	1,045.3	1,078.9	33.6
		15	1.3853	1.3275	-0.0577	907.3	929.5	22.2
		21	1.8548	1.7825	-0.0723	1,214.9	1,248.0	33.1
		22	0.7493	0.7668	0.0175	490.8	536.9	46.1
9	9 Rockland	31	1.6424	1.6298	-0.0126	1,075.8	1,141.1	65.3
		Total	1.5342	1.4954	-0.0388	1,004.9	1,047.0	42.2
		32	0.5429	0.5295	-0.0134	355.6	370.7	15.1
		Total	0.5429	0.5295	-0.0134	355.6	370.7	15.1
10	10 Putnam	31	0.1978	0.2017	0.0039	129.6	141.2	11.7
		35	0.1641	0.1696	0.0055	107.5	118.7	11.3
		Total	0.1739	0.1789	0.0050	113.9	125.3	11.4
11	11 Orange	15	0.4673	0.4277	-0.0397	306.1	299.4	-6.7
		22	0.6076	0.5668	-0.0408	398.0	396.9	-1.1
		32	0.5358	0.5864	0.0505	351.0	410.6	59.6
		33	0.2906	0.2888	-0.0018	190.4	202.2	11.8
		35	1.0470	1.0932	0.0462	685.8	765.4	79.7
Total	0.5944	0.6072	0.0127	389.4	425.1	35.8		

Table 5: (continued)

Stage 2 / Final - Comparison of Update 2000 (Method 3) with Original Weighting

RCO Regional County	RCO Regional County ID	MLD Mode Leadership Density Code	Original (96)	Update (00)	Difference	Original (96)	Update (00)	Difference
			WHT_F Final RTHIS Weight - Normalized - Updated	WHT_F Final RTHIS Weight - Normalized - Updated		EXP_F Final RTHIS Weight - Expansion - Updated	EXP_F Final RTHIS Weight - Expansion - Updated	
12	12 Dutchess	22	0.4190	0.3863	-0.0326	274.4	270.5	-3.9
		24	0.6414	0.6265	-0.0149	420.1	438.7	18.6
		33	0.3020	0.3047	0.0027	197.8	213.4	15.5
		35	0.9227	0.9305	0.0078	604.4	651.5	47.2
		Total	0.5199	0.5170	-0.0029	340.5	362.0	21.5
13	13 Fairfield	16	2.0537	1.4764	-0.5772	1,345.1	1,033.8	-311.4
		21	1.9149	2.3014	0.3864	1,254.3	1,611.3	357.1
		24	2.0510	1.9834	-0.0676	1,343.4	1,388.7	45.3
		31	1.2681	1.3286	0.0606	830.6	930.3	99.7
		32	0.6271	0.6378	0.0107	410.8	446.6	35.8
		35	2.5777	2.5237	-0.0540	1,688.4	1,767.0	78.6
	Total	1.7561	1.7151	-0.0410	1,150.3	1,200.9	50.6	
14	14 Bergen	12	2.2896	2.3920	0.1024	1,499.7	1,674.8	175.1
		13	0.6393	0.6150	-0.0243	418.8	430.6	11.8
		14	0.2550	0.2665	0.0115	167.0	186.6	19.6
		16	1.5316	1.4560	-0.0756	1,003.2	1,019.4	16.3
		21	1.5173	1.5588	0.0415	993.8	1,091.5	97.6
		22	0.3401	0.6275	0.2874	222.8	439.4	216.6
		23	0.6199	0.5877	-0.0322	406.0	411.5	5.5
		24	1.5084	1.4394	-0.0689	988.0	1,007.9	19.9
		31	0.6704	0.6903	0.0198	439.1	483.3	44.2
		32	0.6938	0.6804	-0.0134	454.4	476.4	22.0
		33	0.5490	0.6627	0.1136	359.6	464.0	104.4
		35	1.1078	1.0988	-0.0090	725.6	769.4	43.7
	Total	0.7466	0.7348	-0.0118	489.0	514.5	25.5	
15	15 Passaic	15	0.6346	0.6214	-0.0132	415.7	435.1	19.4
		16	1.0024	0.9408	-0.0616	656.6	658.8	2.2
		22	0.2977	0.3056	0.0080	195.0	214.0	19.0
		24	1.0856	1.0198	-0.0658	711.1	714.0	2.9
		33	0.3707	0.3597	-0.0111	242.8	251.8	9.0
		35	0.9788	0.9883	0.0095	641.1	692.0	50.8
	Total	0.8830	0.8510	-0.0320	578.4	595.8	17.5	
16	16 Hudson	2	0.4227	0.4705	0.0477	276.9	329.4	52.5
		11	0.7771	0.8300	0.0529	509.0	581.1	72.1
		13	0.6126	0.6676	0.0550	401.2	467.4	66.2
		15	0.7360	0.7011	-0.0349	482.1	490.9	8.8
		22	0.6389	0.6309	-0.0079	418.5	441.8	23.3
		32	0.5876	0.6030	0.0154	384.9	422.2	37.3
		Total	0.6374	0.6734	0.0360	417.5	471.5	54.0
17	17 Essex	13	0.9116	0.8908	-0.0208	597.1	623.7	26.6
		16	1.1891	1.1998	0.0107	778.9	840.1	61.2
		21	1.5344	1.6341	0.0997	1,005.1	1,144.2	139.1
		22	0.4182	0.4582	0.0400	273.9	320.8	46.9
		23	0.8098	0.8126	0.0027	530.4	568.9	38.5
		24	1.5152	1.6343	0.1191	992.5	1,144.3	151.8
		31	0.9607	0.9004	-0.0603	629.2	630.4	1.2
		32	0.7230	0.7648	0.0418	473.5	535.5	61.9
		35	2.1073	2.2517	0.1443	1,380.3	1,576.6	196.3
	Total	0.9644	0.9695	0.0051	631.7	678.8	47.1	
18	18 Union	12	1.1367	1.0562	-0.0805	744.5	739.5	-5.0
		16	0.8942	0.8754	-0.0188	585.7	612.9	27.2
		21	1.0714	1.0770	0.0056	701.8	754.1	52.3
		24	1.1976	1.1463	-0.0514	784.5	802.6	18.1
		31	1.0480	1.1186	0.0705	686.5	783.2	96.7
		32	0.4953	0.4470	-0.0483	324.4	313.0	-11.5
	Total	1.0504	1.0224	-0.0279	688.0	715.9	27.9	

Table 5: (continued)

Stage 2 / Final - Comparison of Update 2000 (Method 3) with Original Weighting

RCO Regional County	RCO Regional County ID	MLD Mode Leadership Density Code	Original (96)	Update (00)	Difference	Original (96)	Update (00)	Difference
			WHT_F Final RTHIS Weight - Normalized - Updated	WHT_F Final RTHIS Weight - Normalized - Updated		EXP_F Final RTHIS Weight - Expansion - Updated	EXP_F Final RTHIS Weight - Expansion - Updated	
19	19 Morris	21	1.4412	1.2327	-0.2085	944.0	863.1	-80.9
		22	0.4085	0.3867	-0.0218	267.6	270.8	3.2
		23	0.4448	0.4465	0.0016	291.4	312.6	21.2
		24	0.8338	0.7172	-0.1166	546.1	502.1	-44.0
		31	1.4825	1.4084	-0.0741	971.0	986.1	15.1
		32	1.1451	1.1004	-0.0447	750.0	770.5	20.4
		33	0.3520	0.3750	0.0230	230.5	262.5	32.0
		35	1.1468	1.1593	0.0126	751.1	811.7	60.6
		Total	0.8504	0.8416	-0.0088	557.0	589.3	32.3
20	20 Somerset	16	0.7417	0.5879	-0.1538	485.8	411.6	-74.2
		22	0.2675	0.2288	-0.0387	175.2	160.2	-15.0
		24	0.4251	0.3558	-0.0693	278.5	249.1	-29.3
		33	0.2257	0.2164	-0.0093	147.9	151.5	3.7
		35	0.6613	0.7209	0.0596	433.2	504.8	71.6
				Total	0.5733	0.5852	0.0119	375.5
21	21 Middlesex	12	1.2263	1.1426	-0.0837	803.3	800.0	-3.2
		15	1.0974	0.9871	-0.1102	718.8	691.2	-27.6
		21	1.7519	1.7248	-0.0271	1,147.5	1,207.6	60.1
		22	0.5031	0.4260	-0.0771	329.5	298.2	-31.3
		24	2.0982	2.0441	-0.0540	1,374.3	1,431.2	56.9
		31	0.9687	1.0936	0.1249	634.5	765.7	131.2
		32	0.6004	0.6011	0.0006	393.3	420.8	27.6
		33	0.4629	0.4901	0.0273	303.2	343.2	40.0
		35	1.4945	1.7944	0.2998	978.9	1,256.4	277.4
				Total	1.0126	1.0097	-0.0030	663.3
22	22 Monmouth	15	1.0552	0.9410	-0.1142	691.2	658.8	-32.3
		16	1.4291	1.2379	-0.1911	936.0	866.8	-69.3
		22	0.5298	0.4937	-0.0360	347.0	345.7	-1.3
		23	0.8679	0.7433	-0.1247	568.5	520.4	-48.1
		24	1.0283	0.8019	-0.2264	673.5	561.5	-112.1
		31	0.8855	0.8379	-0.0477	580.0	586.7	6.6
		32	0.7465	0.8605	0.1140	489.0	602.5	113.5
		33	0.4734	0.4529	-0.0204	310.0	317.1	7.1
		35	0.8186	0.9958	0.1773	536.2	697.3	161.1
				Total	0.7489	0.7396	-0.0093	490.6
23	23 Ocean	98 Blank in CSI	1.0666	1.0640	-0.0025	698.6	745.0	46.4
		Total	1.0666	1.0640	-0.0025	698.6	745.0	46.4
24	24 Hunterdon	98 Blank in CSI	0.2340	0.2260	-0.0079	153.2	158.3	5.0
		Total	0.2340	0.2260	-0.0079	153.2	158.3	5.0
25	25 Warren	98 Blank in CSI	0.2047	0.2038	-0.0009	134.1	142.7	8.6
		Total	0.2047	0.2038	-0.0009	134.1	142.7	8.6
26	26 Sussex	98 Blank in CSI	0.2687	0.2621	-0.0067	176.0	183.5	7.5
		Total	0.2687	0.2621	-0.0067	176.0	183.5	7.5
27	27 New Haven	98 Blank in CSI	2.9546	2.8479	-0.1067	1,935.2	1,994.0	58.7
		Total	2.9546	2.8479	-0.1067	1,935.2	1,994.0	58.7
28	28 Mercer	98 Blank in CSI	0.4061	0.4393	0.0332	266.0	307.6	41.6
		Total	0.4061	0.4393	0.0332	266.0	307.6	41.6

Table 5: (continued)

Stage 2 / Final - Comparison of Update 2000 (Method 3) with Original Weighting

RCO Regional County	RCO Regional County ID	MLD Mode Leadership Density Code	Original (96)	Update (00)	Difference	Original (96)	Update (00)	Difference
			WHT_F Final RTHIS Weight - Normalized - Updated	WHT_F Final RTHIS Weight - Normalized - Updated		EXP_F Final RTHIS Weight - Expansion - Updated	EXP_F Final RTHIS Weight - Expansion - Updated	
Total	Total	1	0.6123	0.5783	-0.0340	401.1	404.9	3.9
		2	0.4227	0.4705	0.0477	276.9	329.4	52.5
		3	2.2379	2.2913	0.0534	1,465.8	1,604.3	138.5
		11	2.3030	2.4024	0.0994	1,508.5	1,682.1	173.6
		12	1.8257	1.7473	-0.0784	1,195.8	1,223.4	27.6
		13	0.8470	0.8404	-0.0066	554.8	588.4	33.6
		14	0.2314	0.2459	0.0145	151.6	172.2	20.6
		15	0.8201	0.8014	-0.0188	537.2	561.1	23.9
		16	1.3464	1.2243	-0.1221	881.9	857.2	-24.6
		21	1.7125	1.7209	0.0084	1,121.7	1,204.9	83.2
		22	0.5232	0.5091	-0.0140	342.7	356.5	13.8
		23	0.6639	0.6279	-0.0360	434.9	439.6	4.8
		24	1.3406	1.2806	-0.0600	878.1	896.6	18.5
		31	1.1198	1.1299	0.0102	733.4	791.2	57.7
		32	0.6049	0.6280	0.0231	396.2	439.7	43.5
		33	0.4392	0.4585	0.0194	287.6	321.1	33.4
		35	0.9190	0.9562	0.0372	602.0	669.5	67.6
		98 Blank in CS	0.6740	0.6689	-0.0051	441.5	468.4	26.9
		Total	0.9993	1.0000	0.0007	654.5	700.2	45.6

A direct comparison of the Stage 2 and Final RT-HIS weighted data is shown in **Table 6-1** and **Table 6-2** with the Census 2000 distribution of the two distributions:

- Table 6-1: Household Income by Household Size by Sub-regional county groupings.
- Table 6-2: Number of Vehicles Owned by Household Size by Sub-regional county groupings.

Table 6-1

**Summary: Household Income by Household Size by Sub-Region - Compare Census 2000 and RT-HIS with Stage 2 / Final Weigh
for Households Reporting Income in RT-HIS**

Household Income	Household Size	New York City			Long Island			Mid-Hudson NY			CT: Fairfield and New Haven			NJTPA			Mercer			Total Region	
		CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS
1 Below \$25k	1	15.5%	15.4%	0.998	8.1%	8.0%	0.999	10.9%	10.8%	0.996	12.6%	12.9%	1.022	10.9%	12.5%	1.143	10.2%	10.2%	1.000	12.5%	12.5%
	2	8.0%	8.0%	0.997	4.0%	4.0%	1.002	4.5%	4.5%	0.999	4.7%	4.9%	1.043	5.3%	6.1%	1.158	4.3%	4.3%	1.000	6.1%	6.1%
	3	5.0%	5.1%	1.001	1.1%	1.1%	1.004	2.0%	2.0%	0.997	2.1%	2.1%	1.020	2.3%	3.2%	1.420	2.0%	2.0%	0.999	3.2%	3.2%
	4+	6.6%	6.6%	0.995	2.4%	2.4%	1.003	2.6%	2.6%	0.990	1.4%	1.3%	0.936	2.7%	4.1%	1.534	2.0%	2.0%	1.000	4.2%	4.1%
			35.2%	35.1%	0.998	15.6%	15.6%	1.001	19.9%	19.9%	0.996	20.8%	21.2%	1.021	21.1%	25.9%	1.226	18.5%	18.5%	1.000	26.0%
2 \$25-50k	1	8.7%	8.8%	1.005	5.8%	5.8%	1.000	6.9%	6.9%	1.000	8.0%	8.3%	1.027	7.7%	7.9%	1.018	7.7%	7.7%	1.000	7.8%	7.9%
	2	7.2%	7.3%	1.005	7.4%	7.4%	1.000	8.1%	8.1%	1.002	8.0%	8.0%	0.997	8.1%	7.7%	0.951	7.7%	7.7%	1.000	7.6%	7.7%
	3	3.9%	3.9%	0.998	2.8%	2.8%	1.000	3.3%	3.4%	1.007	3.9%	4.1%	1.063	3.7%	3.7%	1.004	3.5%	3.5%	1.000	3.6%	3.7%
	4+	7.1%	7.1%	0.995	5.6%	5.6%	0.999	5.2%	5.3%	1.011	4.8%	4.9%	1.011	5.5%	6.1%	1.113	4.2%	4.2%	1.000	6.1%	6.1%
			27.1%	27.1%	1.001	21.7%	21.7%	1.000	23.5%	23.6%	1.004	24.8%	25.3%	1.020	24.9%	25.3%	1.015	23.1%	23.2%	1.000	25.2%
3 \$50-75k	1	3.4%	3.4%	1.006	2.1%	2.1%	1.002	3.1%	3.1%	0.995	2.7%	2.7%	0.995	2.9%	3.0%	1.057	3.6%	3.6%	1.000	3.0%	3.0%
	2	4.6%	4.6%	1.001	6.7%	6.7%	1.000	5.8%	5.9%	1.014	8.1%	8.1%	1.008	6.2%	5.8%	0.925	8.0%	8.0%	1.000	5.7%	5.8%
	3	2.9%	2.9%	1.001	3.7%	3.8%	1.001	3.6%	3.6%	1.006	4.0%	4.0%	1.001	3.8%	3.4%	0.903	3.2%	3.2%	1.000	3.4%	3.4%
	4+	5.1%	5.1%	0.996	7.4%	7.4%	0.998	6.2%	6.2%	1.004	6.6%	6.3%	0.959	6.4%	6.0%	0.941	7.2%	7.2%	1.000	6.0%	6.0%
			16.1%	16.1%	1.000	20.0%	20.0%	1.000	18.6%	18.7%	1.006	21.4%	21.2%	0.990	19.2%	18.2%	0.946	22.0%	22.0%	1.000	18.1%
4 \$75-100k	1	1.4%	1.5%	1.009	0.9%	0.9%	1.000	1.2%	1.2%	0.998	0.6%	0.6%	0.943	1.2%	1.2%	1.024	1.0%	1.0%	1.001	1.2%	1.2%
	2	2.3%	2.3%	1.004	4.3%	4.3%	1.000	4.2%	4.2%	1.001	4.8%	4.9%	1.019	3.8%	3.4%	0.890	4.4%	4.4%	1.000	3.4%	3.4%
	3	1.8%	1.8%	0.995	3.7%	3.8%	1.000	2.9%	2.9%	0.997	3.1%	3.1%	1.017	3.0%	2.6%	0.875	3.6%	3.6%	1.000	2.6%	2.6%
	4+	2.8%	2.8%	1.001	7.3%	7.2%	0.998	5.4%	5.3%	0.998	4.5%	4.4%	0.979	5.0%	4.4%	0.881	4.9%	4.9%	1.000	4.4%	4.4%
			8.4%	8.4%	1.002	16.3%	16.3%	0.999	13.6%	13.6%	0.999	13.0%	13.0%	1.001	13.0%	11.6%	0.895	13.9%	13.9%	1.000	11.6%
5 \$100+k	1	2.3%	2.3%	1.007	1.3%	1.3%	1.004	1.4%	1.4%	1.000	0.8%	0.9%	1.103	1.5%	1.7%	1.186	1.2%	1.2%	1.000	1.7%	1.7%
	2	4.5%	4.5%	1.003	7.3%	7.4%	1.002	7.6%	7.5%	0.993	7.0%	6.6%	0.954	6.5%	5.9%	0.908	7.4%	7.4%	1.000	5.9%	5.9%
	3	2.5%	2.6%	1.004	5.7%	5.7%	1.000	4.9%	4.9%	1.000	4.3%	3.9%	0.923	4.8%	4.0%	0.830	5.0%	5.0%	1.000	4.0%	4.0%
	4+	4.0%	4.0%	0.998	12.1%	12.1%	1.000	10.4%	10.3%	0.995	8.1%	7.9%	0.982	9.0%	7.4%	0.821	8.9%	8.9%	1.000	7.4%	7.4%
			13.3%	13.3%	1.002	26.4%	26.4%	1.001	24.2%	24.1%	0.996	20.1%	19.4%	0.964	21.7%	19.0%	0.874	22.5%	22.5%	1.000	19.1%
All HH	1	31.4%	31.4%	1.002	18.3%	18.3%	1.000	23.5%	23.5%	0.997	24.8%	25.3%	1.021	24.2%	26.4%	1.089	23.8%	23.8%	1.000	26.3%	26.4%
	2	26.7%	26.7%	1.001	29.8%	29.8%	1.001	30.1%	30.1%	1.001	32.5%	32.5%	1.000	29.9%	28.8%	0.965	31.8%	31.8%	1.000	28.7%	28.8%
	3	16.2%	16.2%	1.000	17.2%	17.2%	1.001	16.7%	16.7%	1.002	17.3%	17.3%	1.001	17.4%	16.8%	0.967	17.4%	17.4%	1.000	16.8%	16.8%
	4+	25.8%	25.7%	0.996	34.7%	34.7%	0.999	29.7%	29.6%	1.000	25.4%	24.9%	0.978	28.5%	28.0%	0.981	27.1%	27.1%	1.000	28.2%	28.0%
			100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%

Note: Income Distribution taken from PUMS1%; will be replaced by CTPP Part 1 Data when available.

Table 6-2

Summary: Number of Vehicles by Household Size by Sub-Region - Compare Census 2000 and RT-HIS with Stage 2 / Final Weights for Households Not Reporting Income in RT-HIS

Number Vehicles	Household Size	New York City			Long Island			Mid-Hudson NY			CT: Fairfield and New Haven			NJTPA			Mercer			Total Region		
		CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio	CTPP	RT-THIS	Ratio
No Vehicles	1	23.0%	23.1%	1.003	3.5%	3.5%	1.000	5.8%	5.8%	0.994	5.6%	6.0%	1.058	6.4%	6.4%	1.003	6.1%	6.5%	1.059	12.5%	12.1%	0.972
	2	13.8%	13.9%	1.004	1.3%	1.3%	1.007	2.3%	2.3%	0.991	2.0%	0.0%	0.000	2.9%	2.9%	1.003	2.0%	2.2%	1.059	6.9%	6.3%	0.916
	3	7.5%	7.5%	0.997	0.6%	0.0%	0.000	1.4%	1.4%	1.060	1.1%	0.0%	0.000	1.6%	1.6%	0.995	1.3%	0.0%	0.000	3.7%	3.3%	0.888
	4+	10.8%	10.8%	0.995	1.1%	1.1%	1.014	2.2%	2.2%	1.004	1.5%	1.4%	0.949	2.4%	2.4%	1.005	2.1%	2.2%	1.058	5.4%	5.2%	0.950
		55.2%	55.2%	1.001	6.5%	5.9%	0.907	11.7%	11.8%	1.003	10.3%	7.4%	0.721	13.3%	13.3%	1.002	11.5%	10.8%	0.937	28.5%	26.9%	0.943
1 Vehicle	1	8.0%	8.1%	1.003	12.7%	12.8%	1.008	15.2%	15.1%	0.998	17.6%	18.5%	1.053	15.9%	16.0%	1.003	17.1%	18.1%	1.059	12.5%	13.0%	1.041
	2	9.5%	9.5%	0.999	8.3%	8.4%	1.009	8.9%	8.8%	0.992	8.5%	9.2%	1.084	9.7%	9.8%	1.003	9.0%	9.5%	1.059	9.3%	9.4%	1.008
	3	5.5%	5.5%	1.002	3.1%	3.1%	1.014	3.7%	3.6%	0.990	3.4%	3.8%	1.126	4.0%	4.0%	1.002	3.6%	3.9%	1.059	4.4%	4.4%	1.002
	4+	8.8%	8.7%	0.995	4.1%	4.2%	1.008	4.8%	4.9%	1.012	3.9%	3.7%	0.949	5.0%	5.0%	0.996	4.2%	0.0%	0.000	6.3%	6.0%	0.962
		31.8%	31.8%	1.000	28.2%	28.4%	1.009	32.5%	32.4%	0.998	33.3%	35.2%	1.056	34.7%	34.7%	1.002	33.9%	31.5%	0.927	32.5%	32.8%	1.011
2 Vehicle	1	0.6%	0.6%	1.016	1.9%	1.9%	0.999	2.0%	2.0%	0.990	2.3%	2.5%	1.062	1.7%	1.7%	0.996	2.1%	2.2%	1.059	1.4%	1.5%	1.061
	2	2.8%	2.8%	0.989	16.6%	16.8%	1.007	15.2%	15.2%	1.003	17.3%	17.7%	1.022	14.8%	14.8%	0.997	16.9%	17.8%	1.059	10.6%	11.1%	1.046
	3	2.4%	2.4%	0.996	8.7%	8.7%	1.005	7.6%	7.5%	0.995	7.5%	8.0%	1.068	7.5%	7.5%	1.004	7.8%	8.2%	1.059	5.6%	5.8%	1.035
	4+	4.5%	4.5%	0.994	17.5%	17.6%	1.004	14.4%	14.3%	0.999	12.8%	13.1%	1.021	13.3%	13.3%	0.996	13.2%	14.0%	1.059	10.4%	10.6%	1.016
		10.3%	10.3%	0.994	44.7%	44.9%	1.005	39.1%	39.1%	0.999	40.0%	41.3%	1.033	37.4%	37.3%	0.998	39.9%	42.3%	1.059	28.0%	29.0%	1.033
3+ Vehicle	1	0.2%	0.2%	1.008	0.5%	0.5%	1.015	0.5%	0.5%	1.004	0.5%	0.6%	1.208	0.4%	0.4%	0.980	0.3%	0.3%	1.052	0.3%	0.4%	1.089
	2	0.4%	0.4%	1.020	2.9%	2.9%	1.005	3.1%	3.1%	1.000	3.5%	3.5%	1.001	2.4%	2.4%	1.002	2.9%	3.1%	1.058	1.8%	1.9%	1.065
	3	0.6%	0.6%	0.986	5.6%	5.6%	1.005	4.4%	4.4%	1.004	4.7%	4.6%	0.991	4.2%	4.2%	0.998	4.3%	4.6%	1.059	3.0%	3.1%	1.032
	4+	1.5%	1.5%	1.016	11.7%	11.8%	1.005	8.6%	8.6%	1.005	7.7%	7.3%	0.949	7.7%	7.7%	0.997	7.0%	7.5%	1.059	5.8%	5.9%	1.012
		2.6%	2.7%	1.009	20.7%	20.8%	1.005	16.6%	16.7%	1.004	16.4%	16.1%	0.980	14.7%	14.7%	0.998	14.6%	15.4%	1.059	11.0%	11.3%	1.029
All HH	1	31.8%	31.9%	1.003	18.5%	18.6%	1.006	23.5%	23.4%	0.997	26.1%	27.6%	1.058	24.4%	24.5%	1.002	25.6%	27.1%	1.059	26.7%	27.0%	1.011
	2	26.5%	26.6%	1.001	29.1%	29.3%	1.008	29.5%	29.5%	0.999	31.3%	30.5%	0.972	29.9%	29.9%	1.000	30.8%	32.6%	1.059	28.6%	28.7%	1.004
	3	16.0%	16.0%	0.998	17.9%	17.4%	0.971	17.0%	17.0%	1.001	16.7%	16.4%	0.986	17.3%	17.3%	1.001	17.1%	16.7%	0.977	16.8%	16.7%	0.993
	4+	25.6%	25.5%	0.996	34.4%	34.6%	1.005	30.0%	30.1%	1.003	25.9%	25.5%	0.984	28.5%	28.4%	0.997	26.5%	23.6%	0.890	27.9%	27.7%	0.990
		100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000	100.0%	100.0%	1.000

REPORTING OF RT-HIS RESULTS WITH UPDATE 2000

Along with the SPSS-based procedures developed for this project to update the RT-HIS weights and expansion factors to reflect the 2000 Census data, a set of reporting SPS scripts have been developed that can be used to conduct an re-analysis of the RT-HIS data with the revised weights, replicating the contents and structure of the analysis done with the original data. The of re-weighting procedures are listed in:

- Appendix A: Stage 1 Updating scripts
- Appendix B: Stage 2 / Final Updating scripts
- Appendix C: Reporting Scripts:
 - General Final Report – All Tables
 - Compendium of Results – Selected Key Tables

It is anticipated that these re-tabulations reflecting the RT-HIS Update 2000 data will be prepared by NYMTC and NJTPA, and will be distributed for general use and review.

As shown in the following selected and illustrative tables here, in general, the updating of the RT-HIS weights to the 2000 Census data, results in relatively minor (mostly statistically insignificant) changes in the distribution of the results – tabulations by percentage. On the other hand, using the revised expansion weights -- reflecting both actual growth in the number of households in the region (from 1996 to 2000), and better quality estimates of the population of households – the revised factors show more noticeable differences in the magnitude of most measures of estimated travel.

The estimates of household trip rates by county, both original and updated, are shown in **Table 7**. In **Table 8**, total estimate of trips are shown using both the old and new sets of expansion factors. Sub-region to Sub-region home and work linkages are shown in **Table 9**, while more detail in mode of travel is analyzed with both sets of weights in **Table 10**.

Table 7

Household File (HH_4DR2.sav)

Stage 2 / Final - Comparison of Method 3 with Original Weighting

County	Original - Stage 2/Final Weighted			Updated - Stage 2 / Final (Method 3)			Difference		
	HRNP_TOT Total Trip Rate	HRNP_VEH Vehicle Trip Rates	HRNP_TRN Transit Trip Rate	HRNP_TOT Total Trip Rate	HRNP_VEH Vehicle Trip Rates	HRNP_TRN Transit Trip Rate	HRNP_TOT Total Trip Rate	HRNP_VEH Vehicle Trip Rates	HRNP_TRN Transit Trip Rate
RCO Regional County ID									
1 Manhattan	6.54	3.31	1.59	6.57	3.33	1.59	0.03	0.01	0.00
2 Queens	7.38	5.75	1.38	7.41	5.71	1.38	0.03	-0.04	0.00
3 Bronx	6.67	4.77	1.16	6.82	4.85	1.20	0.14	0.07	0.04
4 Brooklyn	6.78	4.65	1.44	6.88	4.67	1.45	0.09	0.02	0.00
5 Staten Island	8.39	7.47	0.80	8.38	7.42	0.80	-0.02	-0.05	0.00
6 Nassau	9.90	8.96	0.82	9.78	8.82	0.85	-0.12	-0.14	0.03
7 Suffolk	10.49	10.03	0.85	10.31	9.84	0.81	-0.17	-0.18	-0.03
8 Westchester	9.55	8.58	0.87	9.57	8.61	0.88	0.01	0.03	0.01
9 Rockland	9.50	9.04	0.90	9.43	8.96	0.91	-0.08	-0.08	0.00
10 Putnam	9.62	9.15	0.84	9.31	8.85	0.82	-0.31	-0.30	-0.02
11 Orange	9.11	8.59	0.73	9.04	8.52	0.73	-0.07	-0.07	0.00
12 Dutchess	9.13	8.73	0.57	9.04	8.63	0.55	-0.09	-0.10	-0.02
13 Fairfield	9.46	9.04	0.69	9.18	8.79	0.70	-0.28	-0.25	0.01
14 Bergen	9.93	9.12	0.28	9.81	9.00	0.28	-0.12	-0.12	0.00
15 Passaic	8.21	7.53	0.14	8.26	7.56	0.14	0.05	0.03	0.00
16 Hudson	7.00	5.09	0.72	7.00	5.05	0.71	0.00	-0.04	-0.01
17 Essex	7.97	6.89	0.46	8.13	7.03	0.45	0.17	0.14	-0.01
18 Union	9.22	8.59	0.43	9.20	8.59	0.45	-0.01	-0.01	0.02
19 Morris	10.37	9.90	0.64	10.20	9.72	0.63	-0.17	-0.18	-0.01
20 Somerset	10.02	9.64	0.63	10.09	9.72	0.67	0.07	0.08	0.05
21 Middlesex	8.30	7.76	0.58	8.26	7.74	0.56	-0.04	-0.02	-0.01
22 Monmouth	9.72	9.12	0.74	9.82	9.24	0.80	0.10	0.11	0.06
23 Ocean	7.36	6.90	0.67	7.34	6.87	0.67	-0.02	-0.03	0.00
24 Hunterdon	9.62	9.22	0.59	9.56	9.15	0.57	-0.06	-0.07	-0.02
25 Warren	8.89	8.38	0.55	8.91	8.40	0.57	0.02	0.02	0.02
26 Sussex	9.45	9.09	0.73	9.43	9.06	0.74	-0.03	-0.03	0.01
27 New Haven	7.86	7.40	0.32	7.17	6.73	0.27	-0.69	-0.67	-0.05
28 Mercer	9.14	8.54	0.49	9.55	8.89	0.53	0.40	0.35	0.03
Total	8.30	7.02	0.92	8.25	6.95	0.93	-0.05	-0.08	0.01

Table 8

**Estimated Total Number of Trips
Household File (TRIP_4DR2.sav)**

Stage 2 / Final - Comparison of Method 3 (CTPP Part 1)* with Original Weighting

County RCO Regional County ID	Original - Stage 2/Final Weighted			Updated - Stage 2 / Final (Method 3)			Difference - Number of Trips			Difference - Percent			Transit Shares		
	Total Trips	Highway Trips	Transit	Total Trips	Highway Trips	Transit	Total Trips	Highway Trips	Transit	Total Trips	Highway Trips	Transit	Original	Updated	Increase
1 Manhattan	4,632,808	2,347,024	1,127,723	4,855,802	2,456,571	1,176,745	222,994	109,548	49,022	4.8%	4.7%	4.3%	24.3%	24.2%	-0.1%
2 Queens	5,292,552	4,124,125	987,012	5,797,275	4,470,248	1,078,778	504,723	346,123	91,766	9.5%	8.4%	9.3%	18.6%	18.6%	0.0%
3 Bronx	2,712,506	1,940,958	471,860	3,157,248	2,244,773	554,629	444,742	303,815	82,769	16.4%	15.7%	17.5%	17.4%	17.6%	0.2%
4 Brooklyn	5,484,277	3,757,568	1,168,173	6,056,596	4,111,372	1,274,413	572,319	353,804	106,240	10.4%	9.4%	9.1%	21.3%	21.0%	-0.3%
5 Staten Island	1,125,965	1,001,830	107,697	1,309,779	1,160,061	125,175	183,814	158,231	17,478	16.3%	15.8%	16.2%	9.6%	9.6%	0.0%
6 Nassau	4,287,550	3,880,181	355,023	4,376,215	3,944,551	378,712	88,665	64,370	23,690	2.1%	1.7%	6.7%	8.3%	8.7%	0.4%
7 Suffolk	4,661,434	4,457,161	376,809	4,839,087	4,619,652	381,648	177,654	162,492	4,840	3.8%	3.6%	1.3%	8.1%	7.9%	-0.2%
8 Westchester	3,091,531	2,776,309	279,903	3,225,363	2,901,883	295,407	133,831	125,574	15,504	4.3%	4.5%	5.5%	9.1%	9.2%	0.1%
9 Rockland	844,969	803,458	80,331	873,671	830,425	84,208	28,702	26,968	3,877	3.4%	3.4%	4.8%	9.5%	9.6%	0.1%
10 Putnam	286,077	272,032	25,034	304,529	289,380	26,743	18,452	17,348	1,709	6.5%	6.4%	6.8%	8.8%	8.8%	0.0%
11 Orange	958,160	903,003	76,499	1,038,215	977,451	83,343	80,055	74,448	6,844	8.4%	8.2%	8.9%	8.0%	8.0%	0.0%
12 Dutchess	855,368	817,494	53,402	900,180	859,463	55,127	44,812	41,969	1,725	5.2%	5.1%	3.2%	6.2%	6.1%	-0.1%
13 Fairfield	2,937,012	2,807,820	214,049	2,974,962	2,849,358	227,261	37,950	41,537	13,212	1.3%	1.5%	6.2%	7.3%	7.6%	0.4%
14 Bergen	3,123,789	2,868,594	89,434	3,245,013	2,977,193	94,209	121,224	108,599	4,775	3.9%	3.8%	5.3%	2.9%	2.9%	0.0%
15 Passaic	1,306,108	1,196,953	22,561	1,353,733	1,238,671	23,206	47,625	41,718	645	3.6%	3.5%	2.9%	1.7%	1.7%	0.0%
16 Hudson	1,428,277	1,039,480	147,079	1,613,499	1,165,048	163,816	185,222	125,568	16,737	13.0%	12.1%	11.4%	10.3%	10.2%	-0.1%
17 Essex	2,104,233	1,819,414	120,350	2,308,073	1,994,585	126,630	203,841	175,171	6,280	9.7%	9.6%	5.2%	5.7%	5.5%	-0.2%
18 Union	1,648,602	1,536,610	77,427	1,712,662	1,597,905	83,970	64,060	61,295	6,543	3.9%	4.0%	8.5%	4.7%	4.9%	0.2%
19 Morris	1,664,043	1,588,045	102,706	1,731,024	1,649,445	107,275	66,981	61,400	4,568	4.0%	3.9%	4.4%	6.2%	6.2%	0.0%
20 Somerset	1,000,677	962,967	62,459	1,099,441	1,059,785	73,190	98,763	96,818	10,732	9.9%	10.1%	17.2%	6.2%	6.7%	0.4%
21 Middlesex	2,069,727	1,935,546	143,599	2,195,174	2,056,766	149,897	125,447	121,220	6,299	6.1%	6.3%	4.4%	6.9%	6.8%	-0.1%
22 Monmouth	2,064,422	1,938,243	156,765	2,200,860	2,071,309	179,566	136,368	133,066	22,801	6.6%	6.9%	14.5%	7.6%	8.2%	0.6%
23 Ocean	1,383,089	1,295,813	125,888	1,470,542	1,376,236	134,394	87,453	80,423	8,507	6.3%	6.2%	6.8%	9.1%	9.1%	0.0%
24 Hunterdon	406,734	389,854	24,768	417,576	399,715	24,729	10,842	9,861	-40	2.7%	2.5%	-0.2%	6.1%	5.9%	-0.2%
25 Warren	322,994	304,550	20,016	344,546	324,810	21,885	21,552	20,259	1,869	6.7%	6.7%	9.3%	6.2%	6.4%	0.2%
26 Sussex	460,983	443,186	35,677	479,210	460,701	37,570	18,226	17,515	1,894	4.0%	4.0%	5.3%	7.7%	7.8%	0.1%
27 New Haven	2,434,770	2,290,711	100,240	2,287,436	2,146,088	87,700	-147,335	-144,624	-12,540	-6.1%	-6.3%	-12.5%	4.1%	3.8%	-0.3%
28 Mercer	994,860	929,123	53,796	1,201,409	1,118,916	66,058	206,549	189,793	12,262	20.8%	20.4%	22.8%	5.4%	5.5%	0.1%
Total	59,583,587	50,428,054	6,606,279	63,369,121	53,352,362	7,116,284	3,785,534	2,924,309	510,005	6.4%	5.8%	7.7%	11.1%	11.2%	0.1%

Table 9

District to District Trip Flows - Total Weekday
 Trip File (TRIP_4DR2.sav)

Stage 2 / Final - Comparison of Method 3 with Original Weighting

Original / 1996 Based Stage 2 - Final Weighted

From / To:	1 NYC Total	2 Long Island	3 Mid-Hudson (all)	4 Connecticut	5 NJTPA	6 Mercer	7 Out of region	
1 NYC Total	31.0	1.2	0.6	0.1	1.0	0.0	0.1	33.9
2 Long Island	1.2	13.2	0.0	0.0	0.1	0.0	0.0	14.6
3 Mid-Hudson (all)	0.6	0.0	8.6	0.1	0.3	0.0	0.0	9.7
4 Connecticut	0.1	0.0	0.1	8.2	0.2	0.0	0.1	8.6
5 NJTPA	1.0	0.1	0.3	0.1	29.0	0.3	0.1	30.9
6 Mercer	0.0	0.0	0.0	0.0	0.3	1.4	0.0	1.8
7 Out of region	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.5
Total: All Destinations	33.9	14.6	9.6	8.6	30.9	1.8	0.7	100.0

Updated / 2000: Stage 2-Final (Method 3) Weighted

Total

From / To:	1 NYC Total	2 Long Island	3 Mid-Hudson (all)	4 Connecticut	5 NJTPA	6 Mercer	7 Out of region	
1 NYC Total	32.1	1.2	0.6	0.1	1.0	0.0	0.1	35.1
2 Long Island	1.2	12.8	0.0	0.0	0.1	0.0	0.0	14.1
3 Mid-Hudson (all)	0.6	0.0	8.5	0.1	0.3	0.0	0.0	9.6
4 Connecticut	0.1	0.0	0.1	7.5	0.1	0.0	0.1	8.0
5 NJTPA	1.0	0.1	0.3	0.1	28.8	0.3	0.1	30.8
6 Mercer	0.0	0.0	0.0	0.0	0.3	1.6	0.0	2.0
7 Out of region	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.5
Total: All Destinations	35.0	14.1	9.5	7.9	30.7	2.0	0.7	100.0

Original / 1996 Based Stage 2 /Final - Expanded

Total

From / To:	1 NYC Total	2 Long Island	3 Mid-Hudson (all)	4 Connecticut	5 NJTPA	6 Mercer	7 Out of region	
1 NYC Total	18,448,399	691,700	342,789	75,711	567,941	11,185	84,392	20,222,117
2 Long Island	697,256	7,878,376	25,802	10,199	58,304	2,874	17,204	8,690,015
3 Mid-Hudson (all)	346,293	24,419	5,112,690	71,447	168,998	567	27,651	5,752,065
4 Connecticut	61,015	10,902	72,292	4,869,944	89,666	1,434	48,001	5,153,254
5 NJTPA	578,661	62,843	170,514	80,871	17,267,611	175,998	64,628	18,401,126
6 Mercer	12,296	1,406	765	3,324	172,562	841,311	18,953	1,050,617
7 Out of region	37,070	9,558	25,734	26,364	61,841	21,754	135,421	317,742
Total: All Destinations	20,180,990	8,679,204	5,750,586	5,137,860	18,386,923	1,055,123	396,250	59,586,936

Updated / 2000: Stage 2-Final (Method 3) - Expanded

Total

From / To:	1 NYC Total	2 Long Island	3 Mid-Hudson (all)	4 Connecticut	5 NJTPA	6 Mercer	7 Out of region	
1 NYC Total	20,320,187	732,783	369,259	78,081	613,807	13,196	89,650	22,216,963
2 Long Island	738,690	8,092,018	28,955	12,630	59,588	3,423	17,503	8,952,807
3 Mid-Hudson (all)	370,943	27,011	5,375,006	71,506	176,741	738	29,860	6,051,805
4 Connecticut	66,149	13,213	71,980	4,761,597	79,953	789	55,223	5,048,904
5 NJTPA	623,306	64,729	176,476	75,491	18,282,211	208,993	69,367	19,500,573
6 Mercer	14,621	1,582	909	2,382	205,521	1,009,217	23,017	1,257,249
7 Out of region	41,731	8,875	27,796	28,865	65,402	26,278	144,947	343,894
Total: All Destinations	22,175,627	8,940,211	6,050,381	5,030,552	19,483,223	1,262,634	429,567	63,372,195

Table 10

Trip File (TRIP_4DR2.sav)

Stage 2 / Final - Comparison of Method 3 with Original Weighting

Original / 1996 Based Stage 2 - Final Weighted												
	1 Auto Drive	2 Auto Passenger	3 Commuter Rail	4 Ferry	5 Subway & Other Rail	6 Express Bus	7 Local Bus	8 School Bus	9 Taxi or Group Ride	10 Other	11 Walk (only)	Total All Modes
1 ManhAttan	6.14	4.24	0.54	0.21	21.90	0.17	9.25	1.64	6.42	1.15	48.35	100.00
2 Other NYC	29.28	15.67	0.36	0.31	16.05	0.62	8.16	1.70	1.87	0.48	25.50	100.00
3 Long Island	61.68	22.42	3.00	0.06	0.26		0.46	4.68	0.53	0.51	6.40	100.00
4 Mid-Hudson (NYMTC)	57.70	21.92	3.29		0.54	0.12	1.47	5.15	1.01	0.28	8.50	100.00
5 Mid-Hudson (Other)	63.48	22.54	0.65	0.04	0.11	0.29	0.65	6.29	0.54	0.54	4.88	100.00
6 Connecticut	65.30	22.54	1.33				0.85	4.56	0.32	0.23	4.87	100.00
7 Bergen-Passaic	61.61	24.94	0.56	0.06	0.22	1.49	0.93	1.63	0.33	0.25	7.97	100.00
8 Essex-Hudson-Union	51.21	21.49	1.61	0.09	3.45	0.88	3.86	1.54	0.66	0.19	15.02	100.00
9 Middlesex-Morris-Somerset	63.82	23.22	1.37		0.24	0.39	0.39	4.93	0.43	0.36	4.87	100.00
10 Monmouth-Ocean	61.81	21.70	0.51	0.02	0.36	0.49	0.87	7.52	0.51	0.40	5.80	100.00
11 Hunterdon-Sussex-Warren	66.30	21.99	0.16		0.16	0.16	0.11	6.49	0.16	0.22	4.23	100.00
12 Mercer	61.55	24.88	1.12		0.07		1.25	4.34	0.20	0.13	6.45	100.00
	48.87	19.49	1.30	0.12	6.08	0.43	3.50	3.50	1.31	0.43	14.98	100.00

Updated / 2000: Stage 2-Final (Method 3) Weighted												
	1 Auto Drive	2 Auto Passenger	3 Commuter Rail	4 Ferry	5 Subway & Other Rail	6 Express Bus	7 Local Bus	8 School Bus	9 Taxi or Group Ride	10 Other	11 Walk (only)	Total All Modes
1 ManhAttan	6.23	4.37	0.55	0.19	21.80	0.17	9.19	1.63	6.33	1.10	48.45	100.00
2 Other NYC	28.54	15.54	0.38	0.33	15.86	0.62	8.45	1.75	1.94	0.50	26.11	100.00
3 Long Island	61.54	22.27	3.09	0.06	0.26		0.45	4.65	0.55	0.58	6.56	100.00
4 Mid-Hudson (NYMTC)	57.53	22.18	3.34		0.56	0.11	1.38	5.20	1.02	0.29	8.40	100.00
5 Mid-Hudson (Other)	62.96	22.85	0.69	0.04	0.11	0.32	0.65	6.28	0.54	0.58	4.98	100.00
6 Connecticut	66.71	21.14	1.66				0.73	4.40	0.28	0.29	4.78	100.00
7 Bergen-Passaic	61.60	24.67	0.56	0.06	0.23	1.60	0.94	1.66	0.35	0.24	8.08	100.00
8 Essex-Hudson-Union	50.75	21.46	1.62	0.10	3.43	0.89	3.93	1.53	0.70	0.19	15.41	100.00
9 Middlesex-Morris-Somerset	63.84	23.17	1.31		0.22	0.39	0.36	5.06	0.47	0.33	4.83	100.00
10 Monmouth-Ocean	61.56	21.70	0.53	0.02	0.44	0.53	0.80	7.80	0.51	0.40	5.70	100.00
11 Hunterdon-Sussex-Warren	66.18	22.04	0.17		0.17	0.17	0.11	6.48	0.17	0.17	4.34	100.00
12 Mercer	61.40	24.96	1.11		0.06		1.05	4.43	0.17	0.12	6.71	100.00
	48.31	19.27	1.32	0.12	6.20	0.45	3.64	3.49	1.34	0.45	15.41	100.00

Original / 1996 Based Stage 2/Final - Expanded												
	1 Auto Drive	2 Auto Passenger	3 Commuter Rail	4 Ferry	5 Subway & Other Rail	6 Express Bus	7 Local Bus	8 School Bus	9 Taxi or Group Ride	10 Other	11 Walk (only)	Total All Modes
1 ManhAttan	284,493	196,771	24,747	9,561	1,014,830	8,080	428,295	75,686	297,696	52,902	2,239,747	4,632,808
2 Other NYC	4,278,876	2,289,566	53,217	46,107	2,345,021	90,600	1,192,161	248,528	273,972	71,029	3,726,223	14,615,300
3 Long Island	5,519,860	2,006,067	268,853	5,372	23,425		41,303	418,221	47,237	45,420	573,225	8,948,983
4 Mid-Hudson (NYMTC)	2,436,048	925,806	139,168		22,863	5,466	62,161	217,515	42,771	11,566	359,211	4,222,575
5 Mid-Hudson (Other)	1,150,930	408,494	12,046	473	2,126	5,548	11,573	114,159	9,791	9,948	88,439	1,813,527
6 Connecticut	3,507,761	1,210,616	71,701				46,113	245,100	17,239	12,215	261,036	5,371,781
7 Bergen-Passaic	2,729,361	1,104,906	24,798	2,744	9,677	65,979	41,468	72,300	14,313	11,271	353,080	4,429,897
8 Essex-Hudson-Union	2,653,455	1,113,641	83,220	4,880	178,524	45,852	199,942	79,713	33,928	10,012	777,945	5,181,112
9 Middlesex-Morris-Somerset	3,020,810	1,099,242	64,988		11,223	18,073	18,178	233,450	20,595	17,034	230,854	4,734,447
10 Monmouth-Ocean	2,130,664	748,209	17,527	588	12,756	17,013	30,126	259,421	17,752	13,802	199,724	3,447,582
11 Hunterdon-Sussex-Warren	790,209	261,764	2,145		1,749	1,863	1,046	77,012	1,802	2,380	50,741	1,190,711
12 Mercer	612,523	247,502	11,091		447		12,311	43,100	2,149	1,316	64,421	994,860
	29,114,990	11,612,584	773,501	69,725	3,622,641	258,474	2,084,677	2,084,205	779,245	258,895	8,924,646	59,583,583

Updated / 2000: Stage 2-Final (Method 3) - Expanded												
	1 Auto Drive	2 Auto Passenger	3 Commuter Rail	4 Ferry	5 Subway & Other Rail	6 Express Bus	7 Local Bus	8 School Bus	9 Taxi or Group Ride	10 Other	11 Walk (only)	Total All Modes
1 ManhAttan	302,228	211,994	26,930	9,206	1,058,767	8,401	445,958	78,795	307,377	53,529	2,352,619	4,855,804
2 Other NYC	4,658,080	2,536,066	61,331	53,397	2,587,711	100,528	1,379,127	284,940	316,559	81,274	4,261,884	16,320,897
3 Long Island	5,671,175	2,052,027	284,649	5,669	23,482		41,013	428,479	50,443	53,133	605,231	9,215,301
4 Mid-Hudson (NYMTC)	2,532,891	976,794	147,000		24,559	5,218	61,069	229,128	45,030	12,309	369,565	4,403,563
5 Mid-Hudson (Other)	1,221,111	442,939	13,063	493	2,308	6,236	12,333	121,631	10,286	11,238	96,758	1,938,396

APPENDIX A: WEIGHTING PROCEDURES - SCRIPTS

STAGE 1:

1_BLDWHTS1.SPS

2_COMPARE_S1.SPS

3_UpdateRepFiles2000_S1.SPS

1_BLDWHTS1.SPS

* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* STAGE 1 - CALCULATION OF WEIGHTS AND EXPANSION FACTOR.
* PROCEDURES MUST BE RUN BEFORE STAGE 2 PROCEDURES.

* NYMTC / NJTPA Regional Household Data Procedure .
* Weighting of RT-HIS Data - Weekdays .
* STAGE 1 - CORRECTS for VARIABLE SAMPLING RATES by QUOTA in SURVEY DESIGN.
* Mode Leadership / Density (MLD) and County Stratification .
* Prepared by R. Donnelly 9/8/99 .
* Revised 11-30-99 .
* Update 2000 / R. Donnelly 3/17/03.

* STEP 1 .

* THIS PROCEDURE WILL CREATE HH_WHT1sav .
* c:\RTHIS\1_WKDAY\2_WHT\S1\Update\Output\HH_WHT1.sav
* A HOUSEHOLD LEVEL FILE WITH UPDATED STAGE 1 WEIGHTS AND ALL FACDTORS. .

* RT-HIS INPUT FILES.
* WEEKDAY HOUSEHOLD SURVEY FILE 'c:\RTHIS\1_WKDAY\1_BLD\HH_WKD.sav'.

* OTHER INPUTS REQUIRED - CENSUS 2000 Input Files.
* BASIC FACTORS RELATED TO TELEPHONE OWNERSHIP and SAMPLING PROBILITIY .
* C:\RTHIS\1_wkday\2_wht\S1\Update\InputData\hh_FACTs.sav
* Census 2000 Households by MLD and County distribution .
* C:\RTHIS\1_wkday\2_wht\S1\Update\InputData\UNIV_HH.sav.
* SOURCE: (SF1 in Census 2000 tract and mcd level household estimates).

* START STAGE 1 PROCEDURES .

GET
FILE='c:\RTHIS\1_WKDAY\1_BLD\HH_WKD.sav'.
EXECUTE .

* Define NYMTC Regional County ID .

If FIPSCODE= 36061 RCO= 1 .
If FIPSCODE= 36081 RCO= 2 .
If FIPSCODE= 36005 RCO= 3 .

```

If FIPSCODE= 36047 RCO= 4 .
If FIPSCODE= 36085 RCO= 5 .
If FIPSCODE= 36059 RCO= 6 .
If FIPSCODE= 36103 RCO= 7 .
If FIPSCODE= 36119 RCO= 8 .
If FIPSCODE= 36087 RCO= 9 .
If FIPSCODE= 36079 RCO= 10 .
If FIPSCODE= 36071 RCO= 11 .
If FIPSCODE= 36027 RCO= 12 .
If FIPSCODE= 9001 RCO= 13 .
If FIPSCODE= 34003 RCO= 14 .
If FIPSCODE= 34031 RCO= 15 .
If FIPSCODE= 34017 RCO= 16 .
If FIPSCODE= 34013 RCO= 17 .
If FIPSCODE= 34039 RCO= 18 .
If FIPSCODE= 34027 RCO= 19 .
If FIPSCODE= 34035 RCO= 20 .
If FIPSCODE= 34023 RCO= 21 .
If FIPSCODE= 34025 RCO= 22 .
If FIPSCODE= 34029 RCO= 23 .
If FIPSCODE= 34019 RCO= 24 .
If FIPSCODE= 34041 RCO= 25 .
If FIPSCODE= 34037 RCO= 26 .
If FIPSCODE= 9009 RCO= 27 .
If FIPSCODE= 34021 RCO= 28 .

```

* Define CO_MDL .

```

COMPUTE co_mdl = rco*100 + mdl .
EXECUTE .

```

```

FORMATS rco (F2).
FORMATS co_mdl (F4).

```

* Append Weighting Factor2 Factor3 and Factor4 (UNCHANGED from ORIGINAL WEIGHTING).

```

SORT CASES BY
  sampno (A) .

```

```

MATCH FILES /FILE=*
  /FILE='C:\RTHIS\1_wkday\2_wht\S1\Update\InputData\hh_FACTs.sav'
  /BY sampno.
EXECUTE.

```

```

SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\Output\HH_WHT1.sav'
  /COMPRESSED.

```

```

COMPUTE WHT_0 = FACTOR2*FACTOR3*FACTOR4 .

```

WEIGHT BY WHT_0 .

* Tabulate Current (post Filtered) Sample Households by CO_MLD.

AGGREGATE
/OUTFILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\AGG_HH1.sav'
/BREAK=co_md1
/s_comdl = N(sampno).

* Append Universe Number of Households by CO_MLD.

GET
FILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\AGG_HH1.sav' .

***** .
* UPDATE 2000 .
* UNIV_HH updated with Census 2000 Households: Summary File 1 (SF1) 2/24/03 .

***** .

MATCH FILES /FILE=*
/TABLE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\InputData\UNIV_HH.sav'
/BY co_MDL.

EXECUTE .

* Tabulate Current (post Filtered) Sample - Total .

EXECUTE.
AGGREGATE
/OUTFILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\HHNUM.sav'
/BREAK=d_r
/s_total = SUM(s_comdl).
COMPUTE match = 1 .
EXECUTE .

SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\AGG_HH1.sav'
/COMPRESSED.

GET
FILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\HHNUM.sav'.
EXECUTE .

COMPUTE match = 1 .
EXECUTE .

```
SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\HHNUM.sav'  
/COMPRESSED.
```

```
GET
```

```
FILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\AGG_HH1.sav'.  
EXECUTE .
```

```
MATCH FILES /FILE=*
```

```
/TABLE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\HHNUM.sav'
```

```
/RENAME (d_r = d0)
```

```
/BY match
```

```
/DROP= d0.
```

```
EXECUTE.
```

```
* Define Revised Factor0 - Expansion of Current Sample HHs to Universe HHs by CO_MLD.
```

```
COMPUTE Factor0 = uninumhh / s_comdl .
```

```
EXECUTE .
```

```
* Re-Scale Aggregate Normalization Weight .
```

```
***** .
```

```
* UPDATE 2000 .
```

```
* Estimated 1996 Total Households - 28 Co Region 7,180,538 .
```

```
* UPDATE: Census 2000 Total Households - 28 Co Region 7,681,593 .
```

```
***** .
```

```
COMPUTE avgexp = (7681593/s_total) .
```

```
EXECUTE .
```

```
SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\AGG_HH1.sav' /COMPRESSED.
```

```
GET
```

```
FILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\Output\HH_WHT1.sav'.
```

```
EXECUTE .
```

```
SORT CASES BY
```

```
co_mdl (A) .
```

```
MATCH FILES /FILE=*
```

```
/TABLE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\BIN\AGG_HH1.sav'
```

```
/BY co_mdl .
```

```
EXECUTE.
```

```
SORT CASES BY
```

```
sampno (A) .
```

```

* CALCULATE INITIAL STAGE 1 NORMALIZED WEIGHT.

COMPUTE factor1 = factor0 /avgexp.

*RUN PROCEDURE FIRST WITH FACTOR5 SET TO 1.0.
*COMPUTE factor5 = 1.0 .
*COMPARE SUM OF WHT_1 with N.

*CALCULATE CORRECTION FACTOR AS RATIO AND RESET FACTOR5 TO THIS .
*RUN PROCEDURE ONCE WITH FACTOR5 SET TO 1.0.
COMPUTE factor5 = .9817 .

COMPUTE wht_1 = factor1 * factor2 * factor3 * factor4 * factor5 .
EXECUTE.

SAVE OUTFILE='C:\RTHIS\1_WKDAY\2_Wht\S1\Update\BIN\HH_BIN.sav'
/COMPRESSED.

*****
* Average Expansion - Updated 2000 .
*****

WEIGHT BY WHT_1 .

* SUM OF SAMPLE with WHT_1 .

COMPUTE AGG = 1.
EXECUTE.

AGGREGATE
/OUTFILE='C:\RTHIS\1_wkday\2_wht\S1\Update\BIN\REG_1EX.sav'
/BREAK=agg
/HHEXP_1 = N(sampno).

* SUM OF UNIVERSE HOUSEHOLDS (from SF1) .

GET FILE =
'C:\RTHIS\1_wkday\2_wht\S1\Update\InputData\UNIV_HH.sav'.

COMPUTE AGG = 1.
EXECUTE.

AGGREGATE
/OUTFILE='C:\RTHIS\1_wkday\2_wht\S1\Update\BIN\REG_UEX.sav'
/BREAK=agg
/HHEXP_U = SUM(uninumhh).

GET FILE
='C:\RTHIS\1_wkday\2_wht\S1\Update\BIN\REG_1EX.sav'.

```

```
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S1\Update\BIN\REG_UEX.sav'
/BY agg.
EXECUTE.
```

```
* COMPUTE SINGLE REGIONAL FINAL EXPANSION FACTOR .
```

```
COMPUTE AVG_EXP = hhexp_u /hhexp_1 .
EXECUTE.
```

```
SAVE OUTFILE='C:\RTHIS\1_WKDAY\2_Wht\S1\Update\BIN\REG_EXP.sav'
/KEEP agg avg_exp
/COMPRESSED.
```

```
***** .
```

```
GET FILE =
'C:\RTHIS\1_WKDAY\2_Wht\S1\Update\BIN\HH_BIN.sav'.
```

```
COMPUTE AGG =1 .
EXECUTE.
```

```
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S1\Update\BIN\REG_EXP.sav'
/BY agg.
EXECUTE.
```

```
* CALCUALTE STAGE 1 EXPANSION WEIGHTS .
```

```
COMPUTE EXP_1 = WHT_1 * AVG_EXP .
EXECUTE .
```

```
FORMATS S_TOTAL (F8.0) .
```

```
VARIABLE LABELS
```

```
RCO "Regional County "
MDL "Model Leadership Density"
S_COMDL "Total Sample HH's in County-MDL"
S_TOTAL "Total Sample HH's - Weekday"
FACTOR0 "Expansion - No Adjustment "
FACTOR1 " Normarized - No Adjustment "
FACTOR2 "Multiple Phones - One HH Factor "
FACTOR3 "Multiple HH Share Phone Facator "
FACTOR4 " Episodic Phone Ownership Factor "
FACTOR5 "Scaler Adjustment "
WHT_1 "Stage 1 Weight - Normalized"
EXP_1 "Stage 1 Weight - Expansion"
```

DESCRIPTIVES

VARIABLES=wht_1 exp_1

/STATISTICS=MEAN STDDEV MIN MAX SUM.

SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_WHT\S1\Update\Output\HH_WHT1.sav'

/KEEP sampno weekday day_end rco mdl s_comdl avgexp factor0 factor1 factor2 factor3

factor4 factor5 wht_1 exp_1

/COMPRESSED.

2_COMPARE_S1.SPS

* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* STAGE 1 - CALCULATION OF WEIGHTS AND EXPANSION FACTOR.
* PROCEDURES MUST BE RUN BEFORE STAGE 2 PROCEDURES.

* STEP 2 .

* COMPARE ORIGINAL AND UPDATED STAGE 1 WEIGHTS.
* and PRODUCE A FILE WITH ORIGINAL and UPDATED WEIGHTS and
* EXPANSION FACTORS .

* THIS PROCEDURE WILL CREATE HH_1S.sav .
* A HOUSEHOLD LEVEL FILE WITH ORIGINAL AND UPDATED STAGE 1 WEIGHTS.
* USED IN STEP 3 .

* RT-HIS OUTPUT FILES.
* C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_S1s.sav

* RT-HIS INPUT FILES.
* UPDATED STAGE 1 WEIGHT FILE FROM STEP 1 OF UPDATE:
* 'C:\RTHIS\1_wkday\2_wht\S1\HH_WHT1.sav'.
* WEEKDAY HOUSEHOLD REPORTING FILE WITH ORIGINAL WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\HH_4DR.SAV'.
* WEEKDAY HOUSEHOLD REPORTING FILE WITH ORIGINAL WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\TRIP_4DR.SAV'.

* START PROCEDURES .

* ORIGINAL WEIGHTS.

GET
FILE='C:\RTHIS\1_wkday\2_wht\S1\HH_WHT1.sav'.

RENAME VARIABLES (WHT_1=WHT_1OLD) (EXP_1=EXP_1OLD).
EXECUTE.

SORT CASES BY SAMPNO .

SAVE OUTFILE='C:\RTHIS\1_wkday\2_wht\S1\HH_S1old.sav'
/KEEP Sampno WHT_1OLD EXP_1OLD
/COMPRESSED.

* UPDATED WEIGHTS .

```
GET
FILE='C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_WHT1.sav'.

MATCH FILES /FILE=*
/FILE='C:\RTHIS\1_wkday\2_wht\S1\HH_S1old.sav'
/BY sampno.

MEANS
TABLES=wht_1 wht_1old exp_1 exp_1old BY rco BY mdl
/CELLS MEAN .

EXECUTE.

RENAME VARIABLES (WHT_1=WHT_1NEW) (EXP_1=EXP_1NEW).
EXECUTE.

SAVE OUTFILE='C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_S1s.sav'
/KEEP Sampno WHT_1NEW EXP_1NEW WHT_1OLD EXP_1OLD
/COMPRESSED.
```

```
* * * * * .
* HOUSEHOLD REPORTING FILE .
* * * * * .
```

```
GET
FILE='C:\RTHIS\1_wkday\4_Rpt\HH_4DR.SAV'.

Sort Cases by SAMPNO .
Execute.

MATCH FILES /FILE=*
/FILE='C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_S1s.sav'
/BY sampno.
EXECUTE.
```

```
* * * * * ORIGINAL STAGE 1 WEIGHTS .

WEIGHT BY WHT_1OLD.

MEANS
TABLES=hrnp_tot hrnp_veh hrnp_trn BY rco
/CELLS MEAN .

* * * * * UPDATED STAGE 1 WEIGHTS .

WEIGHT BY WHT_1NEW.
```

MEANS
TABLES=hrnp_tot hrnp_veh hrnp_trn BY rco
/CELLS MEAN .

***** ORIGINAL STAGE 1 EXPANSION .

WEIGHT BY EXP_1OLD.

MEANS
TABLES=hrnp_tot hrnp_veh hrnp_trn BY rco
/CELLS SUM .

***** UPDATED STAGE 1 EXPANSION .

WEIGHT BY EXP_1NEW.

MEANS
TABLES=hrnp_tot hrnp_veh hrnp_trn BY rco
/CELLS SUM .

***** .
* TRIP REPORTING FILE .
***** .

GET
FILE='C:\RTHIS\1_wkday\4_Rpt\TRIP_4DR.SAV'.

Sort Cases by SAMPNO .
Execute.
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_S1s.sav'
/BY sampno.
EXECUTE.

***** ORIGINAL STAGE 1 WEIGHTS .

WEIGHT BY WHT_1OLD.

CROSSTABS
/TABLES=reg_o2 BY reg_d2
/FORMAT= AVALUE TABLES
/CELLS= TOTAL .

***** UPDATED STAGE 1 WEIGHTS .

WEIGHT BY WHT_1NEW.

CROSSTABS
/TABLES=reg_o2 BY reg_d2
/FORMAT= AVALUE TABLES
/CELLS= TOTAL .

***** ORIGINAL STAGE 1 EXPANSION .

WEIGHT BY EXP_1OLD.

CROSSTABS
/TABLES=reg_o2 BY reg_d2
/FORMAT= AVALUE TABLES
/CELLS= COUNT .

***** UPDATED STAGE 1 EXPANSION .

WEIGHT BY EXP_1NEW.

CROSSTABS
/TABLES=reg_o2 BY reg_d2
/FORMAT= AVALUE TABLES
/CELLS= COUNT .

***** .
* MODE SHARES ANALYSIS .
***** .

***** ORIGINAL STAGE 1 WEIGHTS .

WEIGHT BY WHT_1OLD.

CROSSTABS
/TABLES=rco reg1 BY modegrp1
/FORMAT= AVALUE TABLES
/CELLS= ROW.

***** UPDATED STAGE 1 WEIGHTS .

WEIGHT BY WHT_1NEW.

CROSSTABS
/TABLES=rco reg1 BY modegrp1
/FORMAT= AVALUE TABLES
/CELLS= ROW .

***** ORIGINAL STAGE 1 EXPANSION .

WEIGHT BY EXP_1OLD.

CROSSTABS

/TABLES=rco reg1 BY modegrp1

/FORMAT= AVALUE TABLES

/CELLS= COUNT .

* * * * * UPDATED STAGE 1 EXPANSION .

WEIGHT BY EXP_1NEW.

CROSSTABS

/TABLES=rco reg1 BY modegrp1

/FORMAT= AVALUE TABLES

/CELLS= COUNT .

3_UpdateRepFiles2000_S1.SPS

```
* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* STAGE 1 - UPDATES RT-HIS REPORTING FILES with STAGE 1 WEIGHTS.
* PROCEDURES MUST BE RUN BEFORE STAGE 2 PROCEDURES.

* STEP 3 .

* APPEND Update STAGE 1 WEGHTS TO RT-HIS REPORTING FILES .

* THIS PROCEDURE WILL CREATE UPDATED REPORTING FILES.

* RT-HIS OUTPUT FILES.
* UPDATED STAGE 1 WEIGHT FILE FROM STEP 2 OF UPDATE:
* C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_S1s.sav

* WEEKDAY HOUSEHOLD REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR1.SAV'.
* WEEKDAY PERSON REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\PER_3DR1.SAV'.
* WEEKDAY TRIP REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\TRIP4DR1.SAV'.

* RT-HIS INPUT FILES.
* WEEKDAY HOUSEHOLD REPORTING FILE WITH ORIGINAL WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\HH_4DR.SAV'.
* WEEKDAY PERSON REPORTING FILE WITH ORIGINAL WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\PER_3DR.SAV'.
* WEEKDAY TRIP REPORTING FILE WITH ORIGINAL WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\TRIP4DR.SAV'.

*****
* 1. HOUSEHOLD FILE .
*****

GET
  FILE='C:\RTHIS\1_wkday\4_Rpt\HH_4DR.SAV'.

MATCH FILES /FILE=*
  /TABLE='C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_S1s.sav'
  /BY sampno.
EXECUTE.
```

```
***** .
* RESET WHT_1 AND EXP_1 TO Update 2000 .
***** .
```

```
COMPUTE WHT_1 = WHT_1new .
COMPUTE EXP_1 = EXP_1new .
execute .
```

WEIGHT OFF.

```
SAVE OUTFILE='C:\RTHIS\1_wkday\4_Rpt\HH_4DR1.SAV'
/COMPRESSED.
```

```
***** .
* 2. PERSON FILE .
***** .
```

```
GET
FILE='C:\RTHIS\1_wkday\4_Rpt\PER_3DR.SAV'.
```

```
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_S1s.sav'
/BY sampno.
EXECUTE.
```

```
***** .
* RESET WHT_1 AND EXP_1 TO Update 2000 .
***** .
```

```
COMPUTE WHT_1 = WHT_1new .
COMPUTE EXP_1 = EXP_1new .
execute .
```

WEIGHT OFF.

```
SAVE OUTFILE='C:\RTHIS\1_wkday\4_Rpt\Update\PER_3DR1.SAV'
/COMPRESSED.
```

```
***** .
* 3. TRIP FILE .
***** .
```

```
GET
FILE='C:\RTHIS\1_wkday\4_Rpt\TRIP_4DR.SAV'.
```

```
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_S1s.sav'
/BY sampno.
EXECUTE.
```

```
*****.  
* RESET WHT_1 AND EXP_1 TO Update 2000 .  
*****.
```

```
COMPUTE WHT_1 = WHT_1new .  
COMPUTE EXP_1 = EXP_1new .  
execute .
```

```
WEIGHT OFF.
```

```
SAVE OUTFILE='C:\RTHIS\1_wkday\4_Rpt\Update\TRIP4DR1.SAV'  
/COMPRESSED.
```

APPENDIX B: WEIGHTING PROCEDURES - SCRIPTS

STAGE 2 / FINAL :

1_S2HIS_IV.sps

2_BLDWHT2.SPS

3_UpdateRepFiles2000_S2.SPS

4_CHECK_HH_DIST.SPS

5_COMPARE_S2.SPS

1_S2HIS_IV.sps

- * UPDATE 2000 / METHOD 3 - LIKE ORIGINAL METHOD .
- * PRIMARY BALANCING by HOUSEHOLD INCOME, SECONDARY BY VEHICLES OWNED .
- * STAGE 2 WEIGHTS CALCULATED
- * HIS HOUSEHOLD FILE DISTRIBUTIONS WITH STAGE 1 WEIGHTS ONLY
- * S2HIS_IV.

- * STAGE 2 - UPDATES RT-HIS REPORTING FILES with STAGE 2 WEIGHTS.
- * STAGE 1 PROCEDURES MUST BE RUN BEFORE STAGE 2 PROCEDURES.

- * METHOD 3 - SIMILAR TO ORIGINAL RT-HIS WEIGHTING PROCEDURE
- * Ratio of Census to RT-HIS for
- * 1. HH Size by Household Income (Primary)Distribution, and
- * 2. HH Size by Vehicle (Secondary) Distribution.

- * STEP 1.

- * THIS PROCEDURE WILL CREATE TEMPORARY FILES WITH STAGE 1 WEIGHTED (ONLY) DISTRIBUTIONS

- * RT-HIS OUTPUT FILES.*

- * 1. HH Size by Household Income (Primary)Distribution
- * c:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\AG2Y_HIS.sav
- * 2. HH Size by Vehicle (Secondary) Distribution.
- * c:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\AG2V_HIS.sav.

- * RT-HIS INPUT FILES.

- * C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR1.SAV.

- * START PROCEDURES.

- * Household Reporting File .

GET FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\HH_4DR1.sav'.

EXECUTE .

- * PART 1 - RECODES

*Recode Key HH Variables .
REC_HH1

COMPUTE INCOME_R = INCOME .
COMPUTE HHSIZE_R = HHSIZE .
COMPUTE TOTVEH_R = TOTVEH .

RECODE
HHSIZE_R
(1=1) (2=2) (3=3) (4 thru highest =4)
/
INCOME_R
(1 thru 3 = 1) (4 thru 5 = 2) (6=3) (7=4) (8 thru 10 = 5) (98 99 = 6)
/
TOTVEH_R
(0=0) (1=1) (2=2) (3 thru highest =3)
.

formats HHSIZE_R TOTVEH_R INCOME_R(F4) .

VALUE LABELS
HHSIZE_R
1 "1 Person HH"
2 "2 Person"
3 "3 Person"
4 "4 +Person"
/
INCOME_R
1 "Below \$25K"
2 " \$25 - 49K"
3 " \$50 - 74K"
4 " \$75 - 99K"
5 " \$100 +"
6 "Not Given"
/
TOTVEH_R
0 "Zero Vehicle HH"
1 "1 Vehicle"
2 "2 Vehicles"
3 "3+ Vehicles"
.

EXECUTE .

* PART 2 - MEANS .

* HIS HOUSEHOLDS - STAGE 2 WEIGHTING DISTRIBUTIONS .

* NOVEMBER 19, 1999 - RM DONNELLY .

* HOUSEHOLDS REPORTING INCOME .

WEIGHT
BY wht_1 .

USE ALL.
COMPUTE filter_\$=(income_r<>6).
VARIABLE LABEL filter_\$ 'income_r<>6 (FILTER)'.
VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_\$ (f1.0).
FILTER BY filter_\$.
EXECUTE .

* SUBREGION by INCOME by HHSIZE .

MEANS
TABLES=sampno BY reg2 BY income_r BY HHSIZE_R
/CELLS NPCT .

* HOUSEHOLDS NOT REPORTING INCOME .

USE ALL.
COMPUTE filter_\$=(income_r=6).
VARIABLE LABEL filter_\$ 'income_r=6 (FILTER)'.
VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_\$ (f1.0).
FILTER BY filter_\$.
EXECUTE .

* SUBREGION by HHSIZE .

MEANS
TABLES=sampno BY reg2 BY HHSIZE_R
/CELLS NPCT .

* SUBREGION by VEHICLES by HHSIZE .

MEANS
TABLES=sampno BY reg2 BY totveh_r BY HHSIZE_R
/CELLS NPCT .

MEANS
TABLES=sampno BY reg2 BY totveh_r BY HHSIZE_R
/CELLS COUNT .

FILTER OFF.
USE ALL.
EXECUTE .

*PART 3 - AGGREGATE FILES .

COMPUTE SEG_IDY = 100*REG2 + 10*INCOME_R + HHSIZE_R.
execute .

COMPUTE SEG_IDV = 100*REG2 + 10*TOTVEH_R + HHSIZE_R.
execute .

FORMATS SEG_IDY SEG_IDV (F4).

SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_Wh\S2\Update\BIN\hh_TEMP.sav'
/COMPRESSED.

SELECT IF INCOME_R <> 6 .
EXECUTE .

AGGREGATE
/OUTFILE='c:\RTHIS\1_WKDAY\2_Wh\S2\Update\BIN\AG2Y_HIS.sav'
/BREAK=seg_idy
/sampno_1 = N(sampno).

GET
FILE='c:\RTHIS\1_WKDAY\2_Wh\S2\Update\BIN\AG2Y_HIS.SAV'.
EXECUTE .
DESCRIPTIVES
VARIABLES=sampno_1
/STATISTICS=MEAN SUM STDDEV MIN MAX .

GET
FILE='c:\RTHIS\1_WKDAY\2_Wh\S2\Update\BIN\HH_TEMP.SAV'.

SELECT IF INCOME_R = 6 .
EXECUTE .

AGGREGATE
/OUTFILE='c:\RTHIS\1_WKDAY\2_Wh\S2\Update\BIN\AG2V_HIS.sav'
/BREAK=seg_idV
/sampno_1 = N(sampno).

GET
FILE='c:\RTHIS\1_WKDAY\2_Wh\S2\Update\BIN\AG2V_HIS.SAV'.
EXECUTE .
DESCRIPTIVES
VARIABLES=sampno_1
/STATISTICS=MEAN SUM STDDEV MIN MAX .

* PART 3 - B .

COMPUTE ag_id = 1 .
EXECUTE .

AGGREGATE
/OUTFILE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\AGGR.SAV'
/BREAK=ag_id
/SAMPNO_2 = SUM(SAMPNO_1).

MATCH FILES /FILE=*
/TABLE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\Aggr.sav'
/BY ag_id.
EXECUTE.
COMPUTE HIS_Vpct = SAMPNO_1 / SAMPNO_2 .
EXECUTE .

FORMATs HIS_Vpct (f8.4).

SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\AG2V_HIS.sav'
/DROP AG_ID SAMPNO_2
/COMPRESSED.

GET
FILE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\AG2Y_HIS.sav'.
EXECUTE .

COMPUTE ag_id = 1 .
EXECUTE .

AGGREGATE
/OUTFILE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\AGGR.SAV'
/BREAK=ag_id
/SAMPNO_2 = SUM(SAMPNO_1).

MATCH FILES /FILE=*
/TABLE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\Aggr.sav'
/BY ag_id.
EXECUTE.
COMPUTE HIS_Ypct = SAMPNO_1 / SAMPNO_2 .
EXECUTE .

FORMATs HIS_Ypct (f8.4).

SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\AG2Y_HIS.sav'
/DROP AG_ID SAMPNO_2
/COMPRESSED.

2_BLDWHT2.SPS

- * RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
- * PREPARED BY PB CONSULT, INC.
- * JUNE 2003 .

- * STAGE 2 WEIGHTING / BALANCING.
- * STEP 2 - CALCULATION OF WEIGHTS AND EXPANSION FACTOR.

- * METHOD 3 - SIMILAR TO ORIGINAL RT-HIS WEIGHTING PROCEDURE
- * Ratio of Census to RT-HIS for
- * 1. HH Size by Household Income (Primary) Distribution, and
- * 2. HH Size by Vehicle (Secondary) Distribution.

- * PRIOR PROCESSING REQUIRED: ALL STAGE 1 PROCEDURES NEED TO HAVE BEEN RUN FIRST .
- * THAT HAVE CREATED ='C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR1.SAV'.
- * A HOUSEHOLD FILE WITH THE UPDATED STAGE 1 WEIGHTS ATTACHED.

- * STAGE 2 / STEP 1 PROCEDURE IS ALSO REQUIRED TO HAVE BEEN RUN BEFORE THIS PROCEDURE.
- * To produce two files with RT-HIS distributions used as Inputs:

- * RT-HIS INPUT FILES
- * AGY_HIS.sav - Household Size by Income (Y) by Sub-Regional Area.
- * c:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\AG2Y_HIS.sav
- * AGV_HIS.sav - Household Size by Vehicles Owned (V) by Sub-Regional Area.
- * c:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\AG2V_HIS.sav
- * UPDATED REPORTIG file from STAGE 1 PROCEDURES .
- * C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR1.SAV'.

- * OTHER INPUTS REQUIRED - CENSUS 2000 Input Files.
- * U_RCO_HH.sav - County list of total households .
- * C:\RTHIS\1_wkday\2_wht\S2\Update\InputData\U_RCO_HH.sav .
- * SOURCE: (SF1 in Census 2000).
- *
- * AGV_CTPP.sav - Joint HH Size and Vehicles Distribution by Sub-Regions
- * C:\RTHIS\1_wkday\2_wht\S2\Update\InputData\AGV_CTPP.sav .
- * SOURCE: CTPP County Profiles - released March 2003 by Census Bureau
- *
- * AGY_CTPP.sav - Joint HH Size and Income Distribution by Sub-Regions
- * C:\RTHIS\1_wkday\2_wht\S2\Update\InputData\AGY_CTPP.sav .
- * SOURCE: CTPP Part 1 - Residence Data - released July 2003 by Census Bureau

- * NOTE: AGY_CTPP is temporarily created from the CENSUS 2000 PUMS 1% file .
- * FINAL PROJECT WEIGHTS will BE CREATED WITH THIS SCRIPT, WHEN

* AGY_CTPP CAN BE UPDATED WITH THE CTPP Part 1 distribution .

***** .
* START PROCESSING OF STAGE 2 WEIGHTING .
***** .

***** .
* PRIMARY - HOUSEHOLD INCOME (for HOUSEHOLDS WITH REPORTED INCOME .
* Create File with both HIS and Census Distribution.

GET
FILE='C:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\AG2Y_HIS.sav'.
EXECUTE .

* USE 2000 CTPP AGGREGATED HOUSEHOLD SIZE BY VEHICLES BY REGION .

MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_WKDAY\2_Wht\S2\Update\InputData\AGY_CTPP.sav'
/BY seg_idy.
EXECUTE.

COMPUTE wht_2Y = pct_ctpp / his_ypct .
EXECUTE .

SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\S2_Y.sav'
/COMPRESSED.

***** .
* SECONDARY - VEHICLES OWNED (for INCOME MISSING in RT-HIS .
* Create File with both HIS and Census Distribution.
***** .

GET
FILE='C:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\AG2V_HIS.sav'.
EXECUTE .

* USE 2000 CTPP AGGREGATED HOUSEHOLD SIZE BY VEHICLES BY REGION .

MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_WKDAY\2_Wht\S2\Update\InputData\AGV_CTPP.sav'
/BY seg_idv.
EXECUTE.

COMPUTE wht_2v = pct_ctpp / his_vpct .
EXECUTE .

SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\S2_V.sav'

/COMPRESSED.

*****.
* CALUCLATE STAGE 2 WEIGHT AS RATIO OF CENSUS 2000 CTPP to RT-HIS .
*****.

* HOUSEHOLD REPORTING FILE - WITH OLD AND NEW STAGE 1 WEIGHTS .

GET

FILE='C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR1.SAV'.

* SET CURRENT STAGE 2 WEIGHTS to OLD .

RENAME VARIABLES (WHT_2 = WHT_2old)(EXP_F = EXP_Fold).
EXECUTE .

* PART 1 - RECODES

*Recode Key HH Variables .

REC_HH1

COMPUTE INCOME_R = INCOME .
COMPUTE HHSIZE_R = HHSIZE .
COMPUTE TOTVEH_R = TOTVEH .

RECODE

HHSIZE_R

(1=1) (2=2) (3=3) (4 thru highest =4)

/

INCOME_R

(1 thru 3 = 1) (4 thru 5 = 2) (6=3) (7=4) (8 thru 10 = 5) (98 99 = 6)

/

TOTVEH_R

(0=0) (1=1) (2=2) (3 thru highest =3)

.

formats HHSIZE_R TOTVEH_R INCOME_R(F4) .

VALUE LABELS

HHSIZE_R

1 "1 Person HH"

2 "2 Person"

3 "3 Person"

4 "4 +Person"

/

INCOME_R

1 "Below \$25K"

2 " \$25 - 49K"

```
3 " $50 - 74K"
4 " $75 - 99K"
5 " $100 +"
6 "Not Given"

/
TOTVEH_R
0 "Zero Vehicle HH"
1 "1 Vehicle"
2 "2 Vehicles"
3 "3+ Vehicles"
```

EXECUTE.

```
*****
* APPEND INTIAL STAGE 2 BALANCING FACTOR
*****
```

* INCOME FACTORS FIRST .

```
COMPUTE SEG_IDY = 100*REG2 + 10*INCOME_R + HHSIZE_R.
EXECUTE.
IF INCOME_R =6 SEG_IDV = 100*REG2 + 10*TOTVEH_R + HHSIZE_R.
execute .
```

FORMATS SEG_IDY SEG_IDV (F4).

```
SORT CASES BY
  seg_idy (A) .
```

```
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\S2_Y.sav'
/BY seg_idy.
EXECUTE.
```

* VEHICLES OWNED FACTORS SECOND .

```
SORT CASES BY
  seg_idv (A) .
```

```
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\S2_V.sav'
/BY seg_idv.
EXECUTE.
```

```
SORT CASES BY
  sampno (A) .
```

* CALCULATE STAGE 2 WEIGHT AS RATIO OF CENSUS TO RTHIS .

```
COMPUTE WHT_2=WHT_2Y .
IF SYSMIS(WHT_2Y) WHT_2 = WHT_2V .
IF SYSMIS (WHT_2) WHT_2 = 1.
```

```
COMPUTE WHT_0 = WHT_1new * WHT_2 .
EXECUTE.
```

```
* SAVE HOUSEHOLD LEVEL FILE with INTIAL STAGE 2 WEIGHTS (WHT_0) .
```

```
SAVE OUTFILE='c:\RTHIS\1_WKDAY\2_Wh\S2\Update\Output\HH_WHT2.sav'
  /KEEP sampno rco seg_idv wht_1old exp_1old wht_2old exp_Fold wht_1new exp_1new
wht_2v wht_2 wht_0
  /COMPRESSED.
```

```
***** .
```

```
* CREATE OUTPUT SAMPLE SIZE TOTAL for GLOBAL SCALING of NORMALIZED STAGE 2
WEIGHTS.
```

```
GET
FILE='C:\RTHIS\1_wkday\2_wht\S2\Update\Output\HH_WHT2.sav'.
```

```
WEIGHT OFF.
```

```
* Tabulate Sample Households by RCO.
```

```
COMPUTE AGG = 1.
EXECUTE.
```

```
AGGREGATE
  /OUTFILE='C:\RTHIS\1_WKDAY\2_WHT\S2\Update\BIN\REG_HHN.sav'
  /BREAK=AGG
  /SUM_N = N(sampno).
```

```
* OUTPUT INTIAL STAGE 2 WEIGHTS (NOT YET CONTROLLED TO COUNTY TOTALS).
```

```
WEIGHT BY WHT_0 .
```

```
* Tabulate Current Sample Households by RCO.
```

```
AGGREGATE
  /OUTFILE='C:\RTHIS\1_WKDAY\2_WHT\S2\Update\BIN\RCO_HH0.sav'
  /BREAK=rco
  /s0_rco = N(sampno).
```

```
***** .
```

```
* RE-SCALE TO RAW (UNWEIGHTED) HOUSEHOLD SAMPLE SIZE .
```

```
***** .
```

* Append Universe Number of Households by RCO .

GET
FILE='C:\RTHIS\1_WKDAY\2_WHT\S2\Update\BIN\RCO_HH0.sav' .

COMPUTE AGG = 1.
EXECUTE.

AGGREGATE
/OUTFILE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\REG_HH0.sav'
/BREAK=agg
/SUM0_REG = SUM(s0_rco).

GET
FILE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\REG_HHN.sav'.
EXECUTE .

MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\REG_HH0.sav'
/BY AGG.
EXECUTE.

COMPUTE GLOBAL = SUM_N / SUM0_REG.
EXECUTE.

FORMAT GLOBAL (F8.6).

SAVE OUTFILE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\GLOBAL.sav'
/COMPRESSED.

***** .
* ADJUST TO MATCH COUNTY DISTRIBUTION .
***** .

GET
FILE='C:\RTHIS\1_WKDAY\2_WHT\S2\Update\BIN\RCO_HH0.sav' .

* APPEND COUNTY HOUSEHOLD CONTROL NUMBERS (FROM SF1) .

MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\InputData\U_RCO_HH.sav'
/BY rco.
EXECUTE.

* APPEND GLOBAL RE-SCALER .

MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\GLOBAL.sav'

/BY AGG.
EXECUTE.

COMPUTE SHH_DIST = s0_rco/sum0_reg .
EXECUTE .

* RATIO OF CENSUS COUNTY HOUSEHOLD DISTRIBUTION to INTIAL STAGE 2 HIS
DISTRIBUTION .
* AND
* APPLY GLOBAL SCALER .

COMPUTE CO_RATIO = PCT_HH/SHH_DIST * GLOBAL .
EXECUTE .

FORMATS GLOBAL CO_RATIO SHH_DIST (F8.5).

SAVE OUTFILE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\RCO_HH2.sav'
/COMPRESSED.

***** .

* CALCULATE NORMALIZED FINAL STAGE 2 WEIGHT (WHT_F).

GET
FILE='C:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\HH_WHT2.sav'.
EXECUTE .

SORT CASES BY
rco (A) .

MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\RCO_HH2.sav'
/BY rco.

SORT CASES BY
sampno (A) .

COMPUTE WHT_F = WHT_0 * CO_RATIO .
EXECUTE .

SAVE OUTFILE='C:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\HH_TEMP.sav'
/COMPRESSED.

***** .

* Average Expansion - Updated 2000 .

***** .

WEIGHT BY WHT_F .

* SUM OF SAMPLE with WHT_F .

AGGREGATE

/OUTFILE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\REG_2EX.sav'
/BREAK=agg
/HHEXP_2 = N(sampno).

* SUM OF UNIVERSE HOUSEHOLDS (from SF1) .

GET FILE =

'C:\RTHIS\1_wkday\2_wht\S2\Update\InputData\U_RCO_HH.sav'.

AGGREGATE

/OUTFILE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\REG_UEX.sav'
/BREAK=agg
/HHEXP_U = SUM(hh).

GET FILE

= 'C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\REG_2EX.sav'.

MATCH FILES /FILE=*

/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\REG_UEX.sav'
/BY agg.
EXECUTE.

* COMPUTE SINGLE REGIONAL FINAL EXPANSION FACTOR .

COMPUTE AVG_EXP = hhexp_u / hhexp_2 .
EXECUTE.

SAVE OUTFILE='C:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\REG_EXP.sav'
/KEEP agg avg_exp
/COMPRESSED.

***** .

GET FILE =

'C:\RTHIS\1_WKDAY\2_Wht\S2\Update\BIN\HH_TEMP.sav'.

MATCH FILES /FILE=*

/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\BIN\REG_EXP.sav'
/BY agg.
EXECUTE.

* CALCUALTE FINAL STAGE 2 EXPANSION WEIGHTS .

COMPUTE EXP_F = WHT_F * AVG_EXP .
execute .

* RE-SET NEW WEIGHTS TO GENERIC VARIABLE NAMES .

RENAME VARIABLES (wht_1new = wht_1)(exp_1new=exp_1).
execute.

VARIABLE LABELS

WHT_1 "Stage 1 Weight - Normalized - Updated"
EXP_1 "Stage 1 Weight - Expansion - Updated"
WHT_2 "Stage 2 Weight(Balancing) - Updated"
WHT_F "Final RTHIS Weight - Normalized - Updated"
EXP_F "Final RTHIS Weight - Expansion - Updated"

SAVE OUTFILE='C:\RTHIS\1_WKDAY\2_Wht\S2\Update\Output\HH_WHT2.sav'
/KEEP sampno seg_idv wht_1old exp_1old wht_2old exp_Fold wht_1 exp_1 wht_2 wht_f
exp_f
/COMPRESSED.

***** .
* Test Weighting .
* County Distribution of Households .
***** .

WEIGHT
OFF.

FREQUENCIES
VARIABLES=rco
/ORDER ANALYSIS .

WEIGHT
BY wht_1 .

FREQUENCIES
VARIABLES=rco
/ORDER ANALYSIS .

WEIGHT
BY wht_f .

FREQUENCIES
VARIABLES=rco
/ORDER ANALYSIS .

WEIGHT
BY EXP_F .

FREQUENCIES
VARIABLES=rco
/ORDER ANALYSIS .

```
***** .  
* UPDATE MASTER FILE with STAGE 2 FINAL WEIGHTS
```

```
***** .
```

```
GET  
FILE='C:\RTHIS\1_wkday\2_wht\S1\Update\Output\HH_WHT1.sav'.
```

```
VARIABLE LABELS  
    WHT_1 "Stage 1 Weight - Normalized - Updated"  
    EXP_1 "Stage 1 Weight - Expansion - Updated"
```

```
MATCH FILES /FILE=*  
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\Output\HH_WHT2.sav'  
/BY sampno.  
EXECUTE.
```

```
* CREATE FINAL MASTER WEIGHTING FILE (HH_WHTUP) .
```

```
SAVE OUTFILE='C:\RTHIS\1_wkday\2_wht\S2\Update\Output\HH_WHTUP.sav'  
/KEEP  
sampno  
weekday  
day_end  
rco  
mdl  
s_comdl  
factor0  
factor1  
factor2  
factor3  
factor4  
factor5  
wht_1old  
exp_1old  
wht_2old  
exp_fold  
wht_1  
exp_1  
wht_2  
wht_f  
exp_f  
/COMPRESSED.
```

3_UpdateRepFiles2000_S2.SPS

- * RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
- * PREPARED BY PB CONSULT, INC.
- * JUNE 2003 .

- * STAGE 2 - CALCULATION OF WEIGHTS AND EXPANSION FACTOR.

- * STEP 3 .

- * APPEND Update STAGE 2 / FINAL WEIGHTS TO RT-HIS REPORTING FILES .

- * NEW WEIGHTS ADDED
- * WHT_F - UPDATED FINAL NORMALIZED WEIGHT.
- * EXP_F - UPDATE FINAL EXPANSION WEIGHT .

- * ORIGINAL WEIGHTS RETAINED ON FILES
- * WHT_FOLD - ORIGINAL FINAL NORMALIZED WEIGHT.
- * EXP_FOLD - ORIGINAL FINAL EXPANSION WEIGHT .

- * STAGE 2 / STEP 2 PROCEDURE IS ALSO REQUIRED TO HAVE BEEN RUN BEFORE THIS PROCEDURE.
- * To produce RT-HIS Updated Weights files.

- * RT-HIS OUTPUT FILES.
- * WEEKDAY HOUSEHOLD REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR2.SAV'.
- * WEEKDAY PERSON REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\PER_3DR2.SAV'.
- * WEEKDAY TRIP REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\TRIP4DR2.SAV'.

- * RT-HIS INPUT FILES
- * 'C:\RTHIS\1_wkday\2_wht\S2\Update\HH_WHTUP.sav

- * OTHER RT-HIS INPUT FILES
- * WEEKDAY HOUSEHOLD REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR1.SAV'.
- * WEEKDAY PERSON REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\PER_3DR1.SAV'.
- * WEEKDAY TRIP REPORTING FILE WITH UPDATED WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\TRIP4DR1.SAV'.

- ***** .
- * 1. HOUSEHOLD REPORTING WITH UPDATED STAGE 1 WEIGHTS .
- ***** .

```
GET
FILE='C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR1.SAV'.
```

```
rename variables
(wht_2=wht_2old)
(wht_f=wht_Fold)
(exp_f=exp_Fold)
```

```
.
execute.
```

```
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\Output\HH_WHTUP.sav'
/BY sampno.
EXECUTE.
```

```
SAVE OUTFILE='C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR2.SAV'
/COMPRESSED.
```

```
*****
* 2. PERSON FILE WITH UPDATED STAGE 1 WEIGHTS .
*****
```

```
GET
FILE='C:\RTHIS\1_wkday\4_Rpt\Update\PER_3DR1.SAV'.
```

```
rename variables
(wht_f=wht_Fold)
(exp_f=exp_Fold)
```

```
.
execute.
```

```
MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\Output\HH_WHTUP.sav'
/BY sampno.
EXECUTE.
```

```
SAVE OUTFILE='C:\RTHIS\1_wkday\4_Rpt\Update\PER_3DR2.SAV'
/COMPRESSED.
```

```
*****
* 3. TRIP REPORTING FILE WITH UPDATED STAGE 1 WEIGHTS .
*****
```

```
GET
FILE='C:\RTHIS\1_wkday\4_Rpt\Update\TRIP4DR1.SAV'.
```

```
rename variables
(wht_2=wht_2old)
(wht_f=wht_Fold)
(exp_f=exp_Fold)
```

.

execute.

MATCH FILES /FILE=*
/TABLE='C:\RTHIS\1_wkday\2_wht\S2\Update\Output\HH_WHTUP.sav'
/BY sampno.
EXECUTE.

SAVE OUTFILE='C:\RTHIS\1_wkday\4_Rpt\Update\TRIP4DR2.SAV'
/COMPRESSED.

4_CHECK_HH_DIST.SPS

* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* STAGE 2 WEIGHTING / BALANCING.

* STEP 4 - CHECK HOUSEHOLD DISTRIBUTIONS OF FINAL WEIHTED SURVEY DATA .

* * * * * .
* HOUSEHOLD REPORTING FILE .
* * * * * .

GET
FILE='C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR2.SAV'.

* PART 1 - RECODES

*Recode Key HH Variables .
REC_HH1

COMPUTE INCOME_R = INCOME .
COMPUTE HHSIZE_R = HHSIZE .
COMPUTE TOTVEH_R = TOTVEH .

RECODE
HHSIZE_R
(1=1) (2=2) (3=3) (4 thru highest =4)
/
INCOME_R
(1 thru 3 = 1) (4 thru 5 = 2) (6=3) (7=4) (8 thru 10 = 5) (98 99 = 6)
/
TOTVEH_R
(0=0) (1=1) (2=2) (3 thru highest =3)
.

formats HHSIZE_R TOTVEH_R INCOME_R(F4) .

VALUE LABELS
HHSIZE_R
1 "1 Person HH"
2 "2 Person"
3 "3 Person"

```

      4 "4 +Person"
/
      INCOME_R
      1 "Below $25K"
      2 "$25 - 49K"
      3 "$50 - 74K"
      4 "$75 - 99K"
      5 "$100 +"
      6 "Not Given"
/
      TOTVEH_R
      0 "Zero Vehicle HH"
      1 "1 Vehicle"
      2 "2 Vehicles"
      3 "3+ Vehicles"

```

```
EXECUTE .
```

```

*****
* CHECK JOINT HH SIZE / INCOME BY SUB-REGION DISTRIBUTION (
* FOR HOUSEHOLDS REPORTING INCOME.
*****

```

```

USE ALL.
COMPUTE filter_$=(income_r<>6).
VARIABLE LABEL filter_$ 'income_r<>6 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .

```

```
***** UPDATED NORMALIZED STAGE2 / FINAL WEIGHT .
```

```

WEIGHT
  BY wht_f .

```

```
* SUBREGION by HHSIZE .
```

```

MEANS
  TABLES=sampno BY reg2 BY HHSIZE_R
  /CELLS NPCT .

```

```
* SUBREGION by INCOME by HHSIZE .
```

```

MEANS
  TABLES=sampno BY reg2 BY income_r BY HHSIZE_R
  /CELLS NPCT .

```

```
MEANS
```

TABLES=sampno BY reg2 BY income_r BY HHSIZE_R
/CELLS COUNT .

***** UPDATED EXPANSION STAGE2 / FINAL WEIGHT .

WEIGHT
BY EXP_f .

* SUBREGION by HHSIZE .

MEANS
TABLES=sampno BY reg2 BY HHSIZE_R
/CELLS NPCT .

* SUBREGION by INCOME by HHSIZE .

MEANS
TABLES=sampno BY reg2 BY income_r BY HHSIZE_R
/CELLS NPCT .

MEANS
TABLES=sampno BY reg2 BY income_r BY HHSIZE_R
/CELLS COUNT .

* CHECK JOINT HH SIZE / VEHICLES BY SUB-REGION DISTRIBUTION
* FOR HOUSEHOLDS NOT REPORTING INCOME.

***** UPDATED NORMALIZED STAGE2 / FINAL WEIGHT .

USE ALL.
COMPUTE filter_\$=(income_r=6).
VARIABLE LABEL filter_\$ 'income_r=6 (FILTER)'.
VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_\$ (f1.0).
FILTER BY filter_\$.
EXECUTE .

WEIGHT
BY wht_f .

* SUBREGION by HHSIZE .

MEANS
TABLES=sampno BY reg2 BY HHSIZE_R
/CELLS NPCT .

* SUBREGION by VEHICLES by HHSIZE .

MEANS

TABLES=sampno BY reg2 BY totveh_r BY HHSIZE_R
/CELLS NPCT .

MEANS

TABLES=sampno BY reg2 BY totveh_r BY HHSIZE_R
/CELLS COUNT .

* * * * * UPDATED EXPANSION STAGE2 / FINAL WEIGHT .

WEIGHT

BY EXP_f .

* SUBREGION by HHSIZE .

MEANS

TABLES=sampno BY reg2 BY HHSIZE_R
/CELLS NPCT .

* SUBREGION by VEHICLES by HHSIZE .

MEANS

TABLES=sampno BY reg2 BY totveh_r BY HHSIZE_R
/CELLS NPCT .

MEANS

TABLES=sampno BY reg2 BY totveh_r BY HHSIZE_R
/CELLS COUNT .

5_COMPARE_S2.SPS

```
* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* STAGE 2 - CALCULATION OF WEIGHTS AND EXPANSION FACTOR.
* PROCEDURES MUST BE RUN BEFORE STAGE 2 PROCEDURES.

* STEP 5 .

* COMPARE ORIGINAL AND UPDATED STAGE 2 / FINAL WEIGHTS.

* BOTH UPDATED AND ORIGINAL WEIGHTS ARE FOUND ON THE UPDATED RT-HIS
REPORTING FILES .

*     NEW WEIGHTS ADDED
*     WHT_F - UPDATED FINAL NORMALIZED WEIGHT.
*     EXP_F - UPDATE FINAL EXPANSION WEIGHT .

*     ORIGINAL WEIGHTS RETAINED ON FILES
*     WHT_FOLD - ORIGINAL FINAL NORMALIZED WEIGHT.
*     EXP_FOLD - ORIGINAL FINAL EXPANSION WEIGHT .

* RT-HIS OUTPUT FILES.
* NONE - TABULATIONS ONLY .

* RT-HIS INPUT FILES.
* UPDATED STAGE 2 / FINAL WEIGHTED REPORTING FILES:
* WEEKDAY HOUSEHOLD REPORTING FILE WITH ORIGINAL WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR.SAV'.
* WEEKDAY HOUSEHOLD REPORTING FILE WITH ORIGINAL WEIGHTS
'C:\RTHIS\1_wkday\4_Rpt\Update\TRIP_4DR.SAV'.

* START PROCEDURES .

* * * * * .
* HOUSEHOLD REPORTING FILE .
* * * * * .

GET
FILE='C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR2.SAV'.

* * * * * ORIGINAL STAGE 2 WEIGHTS .
```

WEIGHT BY WHT_FOLD.

MEANS

TABLES=hrnp_tot hrnp_veh hrnp_trn BY rco
/CELLS MEAN .

***** UPDATED STAGE 2 WEIGHTS .

WEIGHT BY WHT_F.

MEANS

TABLES=hrnp_tot hrnp_veh hrnp_trn BY rco
/CELLS MEAN .

***** ORIGINAL STAGE 2 EXPANSION .

WEIGHT BY EXP_FOLD.

MEANS

TABLES=hrnp_tot hrnp_veh hrnp_trn BY rco
/CELLS SUM .

***** UPDATED STAGE 2 EXPANSION .

WEIGHT BY EXP_F.

MEANS

TABLES=hrnp_tot hrnp_veh hrnp_trn BY rco
/CELLS SUM .

***** .
* TRIP REPORTING FILE .
***** .

GET

FILE='C:\RTHIS\1_wkday\4_Rpt\Update\TRIP4DR2.SAV'.

***** ORIGINAL STAGE 2 WEIGHTS .

WEIGHT BY WHT_FOLD.

CROSSTABS

/TABLES=reg_o2 BY reg_d2
/FORMAT= AVALUE TABLES
/CELLS= TOTAL .

***** UPDATED STAGE 2 WEIGHTS .

WEIGHT BY WHT_F.

CROSSTABS
/TABLES=reg_o2 BY reg_d2
/FORMAT= AVALUE TABLES
/CELLS= TOTAL .

***** ORIGINAL STAGE 2 EXPANSION .

WEIGHT BY EXP_FOLD.

CROSSTABS
/TABLES=reg_o2 BY reg_d2
/FORMAT= AVALUE TABLES
/CELLS= COUNT .

***** UPDATED STAGE 2 EXPANSION .

WEIGHT BY EXP_F.

CROSSTABS
/TABLES=reg_o2 BY reg_d2
/FORMAT= AVALUE TABLES
/CELLS= COUNT .

***** .
* MODE SHARES ANALYSIS .
***** .

***** ORIGINAL STAGE 2 WEIGHTS .

WEIGHT BY WHT_FOLD.

CROSSTABS
/TABLES=rco reg1 BY modegrp1
/FORMAT= AVALUE TABLES
/CELLS= ROW.

***** UPDATED STAGE 2 WEIGHTS .

WEIGHT BY WHT_F.

CROSSTABS
/TABLES=rco reg1 BY modegrp1
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* * * * * ORIGINAL STAGE 2 EXPANSION .

WEIGHT BY EXP_FOLD.

CROSSTABS

/TABLES=rco reg1 BY modegrp1

/FORMAT= AVALUE TABLES

/CELLS= COUNT .

* * * * * UPDATED STAGE 2 EXPANSION .

WEIGHT BY EXP_F.

CROSSTABS

/TABLES=rco reg1 BY modegrp1

/FORMAT= AVALUE TABLES

/CELLS= COUNT .

APPENDIX C: RT-HIS REPORTING – SCRIPTS: WITH UPDATED STAGE 2 / FINAL WEIGHTS 2000

RT-HIS FINAL REPORT – ALL TABLES

FR_REPORTING_Tables_12-24.SPS

FR_REPORTING_Tables_12-24.SPS

FR_REPORTING_Tables_25-43.SPS

FR_REPORTING_Tables_44-68.SPS

FR_REPORTING_Tables_69-88.SPS

FR_REPORTING_Tables_89-146.SPS

FR_REPORTING_Tables_12-24.SPS

FR_REPORTING_Tables_12-24.SPS

* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* REPORTING PROCEDURES
* WITH
* FINAL UPDATED WEIGHTS .
* TO REPLICATE TABLES IN
* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).
* SECTION 4.2.1 and 4.2.2.
*
* TABLES 16 - 24 .
* WEEKDAY .

GET
FILE='C:\RTHIS\1_WKDAY\4_Rpt\Update\TRIP4DR2.sav'.
EXECUTE .

WEIGHT
BY WHT_f .

*Table 16.
FREQUENCIES
VARIABLES=rco rco_o rco_d
/ORDER ANALYSIS .

*Table 17.
FREQUENCIES
VARIABLES=reg1 reg_o1 reg_d1
/ORDER ANALYSIS .

*Table 18.
*Figure 4 .
FREQUENCIES
VARIABLES=reg3 reg_o3 reg_d3
/ORDER ANALYSIS .

*Table 19.
GET
FILE='C:\RTHIS\1_WKDAY\4_Rpt\Update\HH_4DR2.sav'.
EXECUTE .
WEIGHT
BY WHT_f .
MEANS

```
TABLES=hrat_tot BY reg1
/CELLS MEAN .
```

```
MEANS
TABLES=hrat_tot BY reg1
/CELLS MEAN .
```

```
GET
FILE='C:\RTHIS\1_WKDAY\4_Rpt\Update\PER_3DR2.sav'.
EXECUTE .
WEIGHT
BY WHT_f .
MEANS
TABLES=prat_tot BY reg1
/CELLS MEAN .
```

* Table 20 .

```
GET
FILE='C:\RTHIS\1_WKDAY\4_Rpt\Update\TRIP4DR2.sav'.
EXECUTE .
```

```
WEIGHT
BY WHT_f .
```

```
CROSSTABS
/TABLES=reg_o1 BY odmkt3o
/FORMAT= AVALUE TABLES
/CELLS= ROW .
```

*Table 21.
* Worktrip only .

```
USE ALL.
COMPUTE filter_$=(tripwork=1).
VARIABLE LABEL filter_$ 'tripwork=1 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f3.0).
FILTER BY filter_$.
EXECUTE .
```

```
CROSSTABS
/TABLES=reg_o1 BY odmkt3o
/FORMAT= AVALUE TABLES
/CELLS= ROW .
```

*Table 22.
* Non-Worktrip only .

```
USE ALL.  
COMPUTE filter_$(tripwork=2).  
VARIABLE LABEL filter_$ 'tripwork=2 (FILTER)'.  
VALUE LABELS filter_$ 0 'Not Selected' 3 'Selected'.  
FORMAT filter_$ (f3.0).  
FILTER BY filter_$.  
EXECUTE .
```

```
CROSSTABS  
  /TABLES=reg_o1 BY odmkt3o  
  /FORMAT= AVALUE TABLES  
  /CELLS= ROW .
```

```
FILTER OFF.  
USE ALL.  
EXECUTE .
```

```
*Table 23.  
*O/D Flows - Subregions .
```

```
CROSSTABS  
  /TABLES=reg_o2 BY reg_d2  
  /FORMAT= AVALUE TABLES  
  /CELLS= ROW COLUMN TOTAL .
```

```
*Table 24 .  
* Worktrip only .  
USE ALL.  
COMPUTE filter_$(tripwork=1).  
VARIABLE LABEL filter_$ 'tripwork=1 (FILTER)'.  
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.  
FORMAT filter_$ (f3.0).  
FILTER BY filter_$.  
EXECUTE .
```

```
CROSSTABS  
  /TABLES=reg_o2 BY reg_d2  
  /FORMAT= AVALUE TABLES  
  /CELLS= ROW COLUMN TOTAL .
```

FR_REPORTING_Tables_25-43.SPS

* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* REPORTING PROCEDURES
* WITH
* FINAL UPDATED WEIGHTS .
* TO REPLICATE TABLES IN
* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).
* SECTION 4.2.3 - 4.2.9.
* TABLES 25 - 43 .
* WEEKDAY .

* DSEC4_2b .

GET
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.
EXECUTE .
WEIGHT
BY WHT_f .

*Table 25 .
CROSSTABS
/TABLES=modegrp1 BY reg3
/FORMAT= AVALUE TABLES
/CELLS= COL .

*Table 26 .
GET
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\HH_4DR2.sav'.
EXECUTE .
WEIGHT
BY WHT_f .

MEANS
TABLES=hrat_tot hrat_veh nvw20 hrat_trn nvw26 BY reg1
/CELLS MEAN .

*Table 27 .
GET
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\PER_3DR2.sav'.
EXECUTE .
WEIGHT
BY WHT_f .
MEANS
TABLES=prat_tot prat_veh nvw20 prat_trn nvw26 BY reg1

/CELLS MEAN .

*Table 28 .

* Rates by County of Work.

MEANS

TABLES=prat_tot prat_veh nvv20 prat_trn nvv26 BY w1_rco

/CELLS MEAN .

* Table 29 .

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.

EXECUTE .

WEIGHT

BY WHT_f .

CROSSTABS

/TABLES=modegrp1 BY odmkt3o

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

*Table 30 .

CROSSTABS

/TABLES=rco BY modegrp2

/FORMAT= AVALUE TABLES

/CELLS= ROW .

*Table 31.

CROSSTABS

/TABLES=tripurp1 BY modegrp2

/FORMAT= AVALUE TABLES

/CELLS= ROW .

*Table 32 .

CROSSTABS

/TABLES=modegrp1 by triper1

/FORRMAT= AVALUE TABLES

/CELLS= COLUMN .

*Table 33 .

* Residence by Mode Group.

CROSSTABS

/TABLES=reg1 by modegrp1

/FORRMAT= AVALUE TABLES

/CELLS= ROW .

*Table 34.

*Destination Subregion by Mode Group.

```
CROSSTABS
  /TABLES=reg_d1 by modegrp1
  /FORRMAT= AVALUE TABLES
  /CELLS= ROW .
```

*Table 35 .

```
CROSSTABS
  /TABLES=tripurp1 by reg2
  /FORRMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

*Table 36.

```
CROSSTABS
  /TABLES=tripurp1 by odmkt3o
  /FORRMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

*Table 37.

```
CROSSTABS
  /TABLES=tripurp2 by reg3
  /FORRMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

*Table 38.

```
CROSSTABS
  /TABLES=tripurp2 by odmkt3o
  /FORRMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

*Table 39 .

```
GET
  FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\PER_3DR2.sav'.
EXECUTE .
WEIGHT
  BY WHT_f .
```

MEANS

```
  TABLES=tw1 tw2 BY age_r
  /CELLS MEAN .
```

*Table 40 .

```
GET
  FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.
EXECUTE .
WEIGHT
  BY WHT_f .
```

* With Network Distance .

MEANS

```
TABLES=tt_min tripdist trip_spd BY tripwork BY reg1
/CELLS MEAN .
```

* Sums in order to calculate System Speed as VMT/VHT.

```
MEANS
TABLES=tt_min tripdist BY tripwork BY reg1
/CELLS SUM .
```

* WithOut Network Distance .

```
MEANS
TABLES=tt_min tt_dist tt_speed BY tripwork BY reg1
/CELLS MEAN .
```

*Table 41.

```
GET
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\PER_3DR2.sav'.
EXECUTE .
WEIGHT
BY WHT_f .
```

```
MEANS
TABLES=tw1 tw2 BY weekday
/CELLS MEAN .
```

*Table 42 .

```
GET
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.
EXECUTE .
WEIGHT
BY WHT_f .
CROSSTABS
/TABLES=triper1 by reg3
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .
```

*Table 43 .

```
CROSSTABS
/TABLES=triper1 by odmkt3o
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .
```

* Figure 15 .

* Diurnal Distribution .

```
CROSSTABS
/TABLES=trpdphr BY premode
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .
```


FR_REPORTING_Tables_44-68.SPS

* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* REPORTING PROCEDURES
* WITH
* FINAL UPDATED WEIGHTS .
* TO REPLICATE TABLES IN
* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).
* SECTION 4.3.
* TABLES 44-68.
* WEEKDAY .

* DSEC4_3a .

*Table 44 .

GET
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\HH_4DR2.sav'.
EXECUTE .
WEIGHT
BY WHT_F .

CROSSTABS

/TABLES=reg1 BY hhsiz_R
/FORMAT= AVALUE TABLES
/CELLS= ROW .

MEANS

TABLES= hhsiz BY reg1
/CELLS MEAN COUNT STDDEV .

*Table 45 .

MEANS
TABLES= hrat_tot by hhsiz_R BY reg1
/CELLS MEAN COUNT STDDEV .

*Table 46 .

MEANS
TABLES= tw1 tw2 hrat_veh hrat_trn hrat_tot BY hhsiz_R
/CELLS MEAN .

*Table 47 .

CROSSTABS

/TABLES=reg1 BY income_R

/FORMAT= AVALUE TABLES

/CELLS= ROW .

*Table 48 .

MEANS

TABLES= hrat_tot BY income_r

/CELLS MEAN COUNT STDDEV .

*Table 49 .

MEANS

TABLES= hrat_tot hrat_veh nvv20 hrat_trn nvv26 BY income_R

/CELLS MEAN .

*Table 50 .

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.

EXECUTE .

WEIGHT

BY WHT_F .

* with non-reporting households, not used in report.

CROSSTABS

/TABLES=MAINMODE BY income_R

/FORMAT= AVALUE TABLES

/CELLS= ROW .

MISSING VALUES income_r ("7.") .

CROSSTABS

/TABLES=MAINMODE BY income_R

/FORMAT= AVALUE TABLES

/CELLS= ROW .

*Vehcile Ownership .

*Table 51.

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\HH_4DR2.sav'.

EXECUTE .

WEIGHT

BY WHT_F .

CROSSTABS

/TABLES=reg1 BY totveh_r

/FORMAT= AVALUE TABLES

/CELLS= ROW .

MEANS

```
TABLES= numveh BY reg1  
/CELLS MEAN .
```

*Table 52.

```
MEANS  
TABLES= numveh BY hhsiz_e_R by income_r  
/CELLS MEAN .
```

*Table 53.

```
MEANS  
TABLES= numveh BY hhsiz_e_R by reg1  
/CELLS MEAN .
```

*Table 54.

```
MEANS  
TABLES= numveh BY hhsiz_e_R by yrmov  
/CELLS MEAN .
```

*Table 55.

```
MEANS  
TABLES= hrat_tot BY hhsiz_e_R by totveh_r  
/CELLS MEAN .
```

*Table 56.

```
MEANS  
TABLES= hrat_tot hrat_veh nvv20 hrat_trn nvv26 BY totveh_R  
/CELLS MEAN .
```

*Table 57 .

```
GET  
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.  
EXECUTE .  
WEIGHT  
BY WHT_F .  
CROSSTABS  
/TABLES=MAINMODE BY totveh_R  
/FORMAT= AVALUE TABLES  
/CELLS= ROW .
```

*Table 58.

```
GET  
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\HH_4DR2.sav'.  
EXECUTE .  
WEIGHT  
BY WHT_F .  
CROSSTABS  
/TABLES=reg1 BY hh_stru3  
/FORMAT= AVALUE TABLES  
/CELLS= ROW .
```

*Table 59 .
CROSSTABS
/TABLES=reg1 BY hh_stru1
/FORMAT= AVALUE TABLES
/CELLS= ROW .

*Table 60 .
CROSSTABS
/TABLES=reg1 BY hh_struc
/FORMAT= AVALUE TABLES
/CELLS= ROW .

*Table 61 .
CROSSTABS
/TABLES=income_R BY hh_struc
/FORMAT= AVALUE TABLES
/CELLS= total .

*Table 62 .
MEANS
TABLES= twn1 twn2 BY HH_Stru3
/CELLS MEAN .

*Table 63 .
MEANS
TABLES= twn1 twn2 BY HH_Stru1
/CELLS MEAN .

*Table 64 .
MEANS
TABLES= twn1 twn2 BY HH_Struc
/CELLS MEAN .

*Table 65 .
MEANS
TABLES= hrat_tot hrat_veh nvv20 hrat_trn nvv26 BY HH_Stru3
/CELLS MEAN .

*Table 66 .
MEANS
TABLES= hrat_tot hrat_veh nvv20 hrat_trn nvv26 BY HH_Stru1
/CELLS MEAN .

*Table 67 .
MEANS

```
TABLES= hrat_tot hrat_veh nvv20 hrat_trn nvv26 BY HH_Struc  
/CELLS MEAN .
```

*Table 68 .

MEANS

```
TABLES= hrat_tot hrat_veh nvv20 hrat_trn nvv26 BY yrmov  
/CELLS MEAN .
```

FR_REPORTING_Tables_69-88.SPS

* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

* REPORTING PROCEDURES
* WITH
* FINAL UPDATED WEIGHTS .
* TO REPLICATE TABLES IN
* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).
* SECTION 4.4.
* TABLES 69 - 88 .
* WEEKDAY .

* DSEC4_4a .

*Table 69 .

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\PER_3DR2.sav'.

EXECUTE .

WEIGHT

BY wht_F .

MEANS

TABLES= twn1 twn2 BY Age_R

/CELLS MEAN .

*Table 70 .

MEANS

TABLES= prat_tot prat_veh nvv20 prat_trn nvv26 BY Age_R

/CELLS MEAN .

*Table 71 .

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.

EXECUTE .

WEIGHT

BY wht_F .

CROSSTABS

/TABLES=triper1 BY Age_R1

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

*Table 72 .

```
CROSSTABS
  /TABLES=tripurp2 BY Age_R1
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

*Table 73.

```
CROSSTABS
  /TABLES=modegrp1 BY Age_R1
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

```
* GENDER .
MISSING VALUES gender ("8", "9") .
```

* Table 74 .

```
CROSSTABS
  /TABLES=mainmode BY gender
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* Table 75 .

```
CROSSTABS
  /TABLES=triper1 BY Gender
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

* Table 76 .

```
* ETHNICITY .
MISSING VALUES ethnic ("98", "99") .
```

```
GET
  FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\HH_4DR2.sav'.
EXECUTE .
WEIGHT
  BY wht_F .
```

```
MEANS
  TABLES= hrat_tot hrat_veh nvv20 hrat_trn nvv26 BY Ethnic
  /CELLS MEAN .
```

*Table 77 .

```
GET
  FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.
EXECUTE .
WEIGHT
  BY wht_F .
```

MISSING VALUES ethnic ("98", "99") .

CROSSTABS

/TABLES=mainmode BY Ethnic

/FORMAT= AVALUE TABLES

/CELLS= ROW .

* WORK and LIFE CYCLE STATUS .

* Table 78 .

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\PER_3DR2.sav'.

EXECUTE .

WEIGHT

BY wht_F .

MEANS

TABLES= tw1 tw2 BY P_Stat_2

/CELLS MEAN .

* Table 79 .

MEANS

TABLES= prat_tot prat_veh nvv20 prat_trn nvv26 BY P_Stat_2

/CELLS MEAN .

* Table 80 .

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.

EXECUTE .

WEIGHT

BY wht_F .

CROSSTABS

/TABLES=tripurp1 BY P_Stat_2

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* Table 81.

CROSSTABS

/TABLES=tripurp2 BY P_Stat_2

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* Table 82 .

CROSSTABS

/TABLES=triper1 BY P_Stat_2

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* Table 83 .

CROSSTABS

/TABLES=modegrp1 BY P_Stat_2

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* Table 84 .

CROSSTABS

/TABLES=mainmode BY P_Stat_2

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* OTHER PERSON CHARACTERISTICS .

* Table 85.

CROSSTABS

/TABLES=modegrp1 BY lic

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* Table 86 .

CROSSTABS

/TABLES=triper1 BY lic

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* DISABILITIES .

* Table 87 .

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\PER_3DR2.sav'.

EXECUTE .

WEIGHT

BY wht_F .

FREQUENCIES

VARIABLES=dabl1

/ORDER ANALYSIS .

* Table 88 .

GET

FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.

EXECUTE .

WEIGHT

BY wht_F .

CROSSTABS

/TABLES=modegrp1 BY dabl1

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

FR_REPORTING_Tables_89-146.SPS

* RT-HIS UPDATE 2000 - for NYMTC AND NJTPA .
* PREPARED BY PB CONSULT, INC.
* JUNE 2003 .

***** .
* REPORTING PROCEDURES
* WITH
* FINAL UPDATED WEIGHTS .
* TO REPLICATE TABLES IN
* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).
* SECTION 4.5 - 4.8 .
*
* TABLES 89 - 146 .
* WEEKDAY .
* REVISED 12-17-99 .
***** .

* DSEC_458.sps .

GET
FILE='C:\RTHIS\1_wkDAY\4_Rpt\Update\TRIP4DR2.sav'.
EXECUTE .

WEIGHT BY WHT_F .

***** .
* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).
* SECTION 4.5 .
***** .

* Focus on Auto Trips .

USE ALL.
COMPUTE filter_\$(=mainmode=20).
VARIABLE LABEL filter_\$ 'mainmode=20=1 (FILTER)'.
VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_\$ (f1.0).
FILTER BY filter_\$.
EXECUTE .

* Table 89 .

```
CROSSTABS
  /TABLES=reg_o1 BY odmkt3o
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* Table 90 .

```
CROSSTABS
  /TABLES=trpdphr by reg2
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

* Table 91 .

```
CROSSTABS
  /TABLES=triper1 by reg2
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

* Table 92 .

```
CROSSTABS
  /TABLES=tripurp1 BY reg2
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

* Table 93 .

```
MEANS
  TABLES=tt_min tripdist trip_spd BY reg_o2
  /CELLS MEAN .
```

* Table 94 .

```
CROSSTABS
  /TABLES=Fdist_r1 BY reg3
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

*Vehicle Miles of Travel (VMT) Estimation .

*Sample VMT Distribution .

* TABLE 95 .

```
MEANS
  TABLES=tripdist BY fdist_r2 BY reg_o1
  /CELLS SPCT .
```

* TABLE 96 .

MEANS
TABLES=tripdist BY TRIPWORK BY reg_o1
/CELLS SPCT .

* TABLE 97 .

MEANS
TABLES=tripdist BY TRIPER3 BY reg_o1
/CELLS SPCT .

*Vehicle Hours of Travel (VHT) Estimation .

*Sample VMT Distribution .

* TABLE 98 .

MEANS
TABLES=TT_MIN BY fdist_r2 BY reg_o1
/CELLS SPCT .

* TABLE 99 .

MEANS
TABLES= TT_MIN BY TRIPWORK BY reg_o1
/CELLS SPCT .

* TABLE 100 .

MEANS
TABLES=TT_MIN BY TRIPER3 BY reg_o1
/CELLS SPCT .

*Vehicle Occupancy .

* TABLE 101 .

MEANS
TABLES=npervch BY tdist_r2 BY reg_o1
/CELLS mean .

* TABLE 102 .

MEANS
TABLES=npervch BY TRIPWORK BY reg_o1
/CELLS mean .

* TABLE 103 .

MEANS
TABLES=npervch BY TRIPER3 BY reg_o1
/CELLS mean .

* TABLE 104 .

CROSSTABS
/TABLES= reg_o1 by perveh_r
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* TABLE 105 .

CROSSTABS
/TABLES= Fdist_r2 by perveh_r
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* TABLE 106 .

CROSSTABS
/TABLES= TRIPWORK by perveh_r
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* TABLE 107 .

CROSSTABS
/TABLES= tripurp2 by perveh_r
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* TABLE 108 .

CROSSTABS
/TABLES= Triper1 by perveh_r
/FORMAT= AVALUE TABLES
/CELLS= ROW .

***** .
* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).
* SECTION 4.6 .
***** .

* Focus on TransitTrips .

USE ALL.
COMPUTE filter_\$=(modegrp2=2 or modegrp2=3).
VARIABLE LABEL filter_\$ 'modegrp2=2 or modegrp2=3 (FILTER)'.
VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_\$ (f1.0).
FILTER BY filter_\$.
EXECUTE .

* Table 109 .

CROSSTABS
/TABLES=reg_o1 BY odmkt3o
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* Table 110 .

CROSSTABS
/TABLES=trpdphr by reg3
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .

* TABLE 111 .

CROSSTABS
/TABLES=triper1 by reg3
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .

* TABLE 112.

CROSSTABS
/TABLES= MAINMODE BY TRIPER2
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* TABLE 113.

CROSSTABS
/TABLES=tripurp1 by reg_o2
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .

* TABLE 114.

CROSSTABS
/TABLES= MAINMODE BY tripwork
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .

* TABLE 115.

CROSSTABS

```
/TABLES= MAINMODE BY tripurp2  
/FORMAT= AVALUE TABLES  
/CELLS= COLUMN .
```

* TRIP TIME, LENGTH and SPEED .

* TABLE 116.

```
MEANS  
TABLES= tt_min tripdist trip_spd BY reg_o1  
/CELLS MEANS .
```

* TABLE 117.

```
MEANS  
TABLES= tt_min tripdist trip_spd BY MODEGRP1  
/CELLS MEANS .
```

* TABLE 118 .

```
CROSSTABS  
/TABLES= Fdist_r1 BY REG_o2  
/FORMAT= AVALUE TABLES  
/CELLS= COLUMN .
```

* TABLE 119 .

```
CROSSTABS  
/TABLES= Fdist_r1 BY mainmode  
/FORMAT= AVALUE TABLES  
/CELLS= COLUMN .
```

* TABLE 120 .

```
CROSSTABS  
/TABLES= ttime_r1 BY REG_o2  
/FORMAT= AVALUE TABLES  
/CELLS= COLUMN .
```

* TABLE 121.

```
CROSSTABS  
/TABLES= ttime_r1 BY mainmode  
/FORMAT= AVALUE TABLES  
/CELLS= COLUMN .
```

* SECTION 4.6.5 .

* TABLE 122 .

MEANS
TABLES=TT_MIN BY TRIPWORK BY REG_O1
/CELLS SPCT .

* TABLE 123 .

MEANS
TABLES=TT_MIN BY TRIPER2 BY REG_O1
/CELLS SPCT .

* SECTION 4.6.6 .
* ACCESS and EGRESS from TRANSIT .

* TABLE 124 .

CROSSTABS
/TABLES=Rco_o BY accmode
/FORMAT= AVALUE TABLES
/CELLS= row .

* TABLE 125 .

CROSSTABS
/TABLES=Reg_o2 BY accmode
/FORMAT= AVALUE TABLES
/CELLS= row .

* TABLE 126 .

CROSSTABS
/TABLES=Rco_o BY distribm
/FORMAT= AVALUE TABLES
/CELLS= row .

* TABLE 127 .

CROSSTABS
/TABLES=Reg_o2 BY distribm
/FORMAT= AVALUE TABLES
/CELLS= row .

***** .
* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).

* SECTION 4.7 .

* Focus on Taxi and Shared Ride.

USE ALL.

COMPUTE filter_\$=(modegrp2=4).

VARIABLE LABEL filter_\$ 'modegrp2=4 (FILTER)'.
VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_\$ (f1.0).
FILTER BY filter_\$.

EXECUTE .

* Table 128 .

CROSSTABS

/TABLES=reg_o1 BY odmkt3o

/FORMAT= AVALUE TABLES

/CELLS= ROW .

* Table 129 .

CROSSTABS

/TABLES=trpdphr by reg3

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* Table 130 .

CROSSTABS

/TABLES=triper1 by reg2

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* Table 131 .

CROSSTABS

/TABLES=tripurp1 BY reg2

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* Table 132 .

MEANS

TABLES=tt_min tripdist trip_spd BY mainmode

/CELLS MEAN .

* Table 133 .

MEANS

TABLES=tt_min tripdist trip_spd BY reg_o2
/CELLS MEAN .

* Table 134 .

CROSSTABS

/TABLES=Fdist_r1 BY reg3
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .

* Table 135 .

CROSSTABS

/TABLES=Fdist_r1 BY mainmode
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .

* TABLE 136 .

CROSSTABS

/TABLES= ttime_r1 BY reg_o2
/FORMAT= AVALUE TABLES
/CELLS= COLUMN .

* RT-HIS GENERAL FINAL REPORT (DRAFT 11-15-99).
* SECTION 4.8 .

* Focus on Non-Motorized Trips .

USE ALL.

COMPUTE filter_\$=(modegrp2=5).
VARIABLE LABEL filter_\$ 'modegrp2=5 (FILTER)'.
VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_\$ (f1.0).
FILTER BY filter_\$.
EXECUTE .

* Table 137 .

```
CROSSTABS
  /TABLES=reg_o1  BY odmkt3o
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* Table 138 .

```
CROSSTABS
  /TABLES=trpdphr by reg3
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

* Table 139 .

```
CROSSTABS
  /TABLES=triper1 by reg3
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

* Table 140.

```
CROSSTABS
  /TABLES=tripurp1 BY reg3
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

* Table 141 .

```
MEANS
  TABLES=tt_min tripdist trip_spd BY mainmode
  /CELLS MEAN .
```

* Table 142 .

```
MEANS
  TABLES=tt_min tripdist trip_spd BY reg_o2
  /CELLS MEAN .
```

* Table 143 .

```
CROSSTABS
  /TABLES=Fdist_r1 BY reg3
  /FORMAT= AVALUE TABLES
  /CELLS= COLUMN .
```

* Table 144 .

CROSSTABS

/TABLES=Fdist_r1 BY mainmode

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* TABLE 145 .

CROSSTABS

/TABLES=ttime_r1 BY reg_o2

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

* TABLE 146 .

CROSSTABS

/TABLES=ttime_r1 BY mainmode

/FORMAT= AVALUE TABLES

/CELLS= COLUMN .

RT-COMPNEIDIUM – SELECTED / MAJOR TABLES

HOUSEHOLD FILE: DESCRTIVIE STATISTICS - COMPENDIUM_H_TABLES.SPS

TRIP FILE: DESRIPTIIVE STATISTISTIS - COMPENDIUM_T_TABLES.SPS

HOUSEHOLD FILE: DESCRTIVIE STATISTICS - COMPENDIUM_H_TABLES.SPS

* REPLICATE COMPENDIUM - BASIC TABLES .

GET

FILE='C:\RTHIS\1_wkday\4_Rpt\Update\HH_4DR2.SAV'.

Value Labels FIPSCODE

9001 "Fairfield"
9009 "New Haven"
34003 "Bergen"
34013 "Essex"
34017 "Hudson"
34019 "Hunterdon"
34021 "Mercer"
34023 "Middlesex"
34025 "Monmouth"
34027 "Morris"
34029 "Ocean"
34031 "Passaic"
34035 "Somerset"
34037 "Sussex"
34039 "Union"
34041 "Warren"
36005 "Bronx"
36027 "Dutchess"
36047 "Brooklyn"
36059 "Nassau"
36071 "Orange"
36079 "Putnam"
36081 "Queens"
36085 "Staten Island"
36087 "Rockland"
36103 "Suffolk"
36119 "Westchester"

.

WEIGHT BY WHT_FOLD.

* H-1 .

CROSSTABS

/TABLES=fipscode reg1 reg2 reg3 BY hhsiz_r
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* H-2 .

```
CROSSTABS
  /TABLES=fipscode reg1 reg2 reg3 BY totveh_r
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

```
MEANS
  TABLES=totveh BY fipscode reg1 reg2 reg3
  /CELLS MEAN .
```

* H-3.

```
USE ALL.
COMPUTE filter_$(totveh_r=0).
VARIABLE LABEL filter_$ 'totveh_r=0 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .
```

```
MISSING VALUES INCOME_R ("7") .
CROSSTABS
  /TABLES=fipscode reg1 reg2 reg3 BY INCOME_r
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* H-4.

```
MISSING VALUES ethnic ("98", "99") .
CROSSTABS
  /TABLES=fipscode reg1 reg2 reg3 BY ETHNIC
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

```
FILTER OFF.
USE ALL.
EXECUTE .
```

```
RECODE DWELL (1,2 =1)(3=2)(4 thru 7=3).
VALUE LABELS DWELL
1 "Single Family"
2 "Apartment"
3 "Other"
.
```

* H-5.

```
MISSING VALUES dwell ("98", "99") .
CROSSTABS
  /TABLES=fipscode reg1 reg2 reg3 BY DWELL
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* H-6.
MISSING VALUES RENT ("98", "99") .
CROSSTABS
/TABLES=fipscode reg1 reg2 reg3 BY rent
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* H-7.
MISSING VALUES ethnic ("98", "99") .
CROSSTABS
/TABLES=fipscode reg1 reg2 reg3 BY ETHNIC
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* H-8.
MISSING VALUES INCOME_R ("7") .
CROSSTABS
/TABLES=fipscode reg1 reg2 reg3 BY INCOME_r
/FORMAT= AVALUE TABLES
/CELLS= ROW .

* H-11 .
MEANS
TABLES=HRAT_TOT BY HHSIZE_R BY fipscode reg1 reg2 reg3
/CELLS MEAN .

* H-12 .
MEANS
TABLES=HRAT_TOT BY TOTVEH_R BY fipscode reg1 reg2 reg3
/CELLS MEAN .

* H-13 .
MISSING VALUES dwell ("98", "99") .
MEANS
TABLES=HRAT_TOT BY DWELL BY fipscode reg1 reg2 reg3
/CELLS MEAN .

* H-14 .
MISSING VALUES ethnic ("98", "99") .
MEANS
TABLES=HRAT_TOT BY ETHNIC BY fipscode reg1 reg2 reg3
/CELLS MEAN .

* H-15 .

```
MISSING VALUES income_r ("7") .
MEANS
  TABLES=HRAT_TOT BY INCOME_R BY fipscode reg1 reg2 reg3
  /CELLS MEAN .

* H-16 .
RECODE NWORKERS (2 THRU HIGHEST = 2).
MEANS
  TABLES=HRAT_TOT BY NWORKERS BY fipscode reg1 reg2 reg3
  /CELLS MEAN .
```

TRIP FILE: DESRIPTIIVE STATISTIS - COMPENDIUM_T_TABLES.SPS

* REPLICATE COMPENDIUM - BASIC TABLES .

* "T" TRIP FILE TABLES

GET

FILE='C:\RTHIS\1_wkday\4_Rpt\Update\TRIP4DR2.SAV'.

Value Labels FIPS_HH

9001 "Fairfield"

9009 "New Haven"

34003 "Bergen"

34013 "Essex"

34017 "Hudson"

34019 "Hunterdon"

34021 "Mercer"

34023 "Middlesex"

34025 "Monmouth"

34027 "Morris"

34029 "Ocean"

34031 "Passaic"

34035 "Somerset"

34037 "Sussex"

34039 "Union"

34041 "Warren"

36005 "Bronx"

36027 "Dutchess" "

36047 "Brooklyn"

36059 "Nassau"

36071 "Orange"

36079 "Putnam"

36081 "Queens"

36085 "Staten Island"

36087 "Rockland" "

36103 "Suffolk"

36119 "Westchester"

.

WEIGHT BY WHT_FOLD.

* T-1 .

CROSSTABS

/TABLES=fips_hh BY triper1 triper2 triper3

/FORMAT= AVALUE TABLES

/CELLS= ROW .

* T-2 .

```
CROSSTABS
  /TABLES=fips_hh reg1 reg2 reg 3 BY triper1
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* T-3.

```
CROSSTABS
  /TABLES=fips_hh reg1 reg2 reg3 BY triper2 triper3
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* T-9.

```
CROSSTABS
  /TABLES=fips_hh reg1 reg2 reg3 BY modegrp2
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* T-10 .

```
COMPUTE CAT_MODE = MODEGRP2 .
EXECUTE.
RECODE CAT_MODE (2,3 = 2)(4,5=3).
VALUE LABELS CAT_MODE
1 "AUTO"
2 "TRANSIT"
3 "OTHER"
.
```

```
format cat_mode (f2.0).
```

```
CROSSTABS
  /TABLES=fips_hh reg1 reg2 reg3 BY cat_mode
  /FORMAT= AVALUE TABLES
  /CELLS= ROW .
```

* T-11 .

```
COMPUTE AGE_R = AGE .
EXECUTE.
RECODE AGE_R (1 THRU 17 =1)(18 THRU 45=2)(46 THRU 64 = 3)(65 THRU 97= 4).
VALUE LABELS
AGE_R
1 "Under 18"
2 "18 to 45"
3 "46 to 64"
```

4 "65+"
.

format AGE_R (f2.0).

MISSING VALUES AGE ("98","99").

CROSSTABS

/TABLES=fips_hh reg1 reg2 reg3 BY age_r BY cat_mode

/FORMAT= AVALUE TABLES

/CELLS= COUNT.

* T-12 .

MISSING VALUES GENDER ("8","9").

CROSSTABS

/TABLES=fips_hh reg1 reg2 reg3 BY GENDER BY cat_mode

/FORMAT= AVALUE TABLES

/CELLS= COUNT.

* T-14 .

RECODE INCOME_R (4,5,6 = 4).

VALUE LABELS INCOME_R

1 "LT \$25K"

2 "\$25 - 50K"

3 "\$50 - 75K"

4 "75+"
.

MISSING VALUES INCOME_R ("7").

CROSSTABS

/TABLES=fips_hh reg1 reg2 reg3 BY INCOME_R BY cat_mode

/FORMAT= AVALUE TABLES

/CELLS= COUNT.

* T-15 .

MEANS

TABLES=tt_time tt_dist BY FIPS_HH REG1 REG2 REG3

/CELLS MEAN .

APPENDIX D: SELECTED UNIVERSE FILES

Stage 1: UNIV_HH.SAV

CO	MDL	UNINUMHH	UNIPCTHH	CO_MDL	Differecne 2000 minus 1996	Percent Difference
1	1	467,102	0.0608	101	8,353	1.8%
1	3	197,133	0.0257	103	11,186	6.0%
1	15	74,409	0.0097	115	10,748	16.9%
2	3	349,329	0.0455	203	27,824	8.7%
2	11	433,335	0.0564	211	37,267	9.4%
3	3	292,151	0.0380	303	25,458	9.5%
3	11	171,061	0.0223	311	31,178	22.3%
4	3	776,290	0.1011	403	58,694	8.2%
4	11	104,437	0.0136	411	13,483	14.8%
5	14	130,054	0.0169	514	16,066	14.1%
5	32	26,287	0.0034	532	6,120	30.3%
6	11	9,117	0.0012	611	304	3.4%
6	12	224,454	0.0292	612	6,812	3.1%
6	15	15,772	0.0021	615	650	4.3%
6	16	35,807	0.0047	616	465	1.3%
6	21	92,860	0.0121	621	4,642	5.3%
6	22	14,725	0.0019	622	1,093	8.0%
6	23	7,681	0.0010	623	85	1.1%
6	24	12,829	0.0017	624	383	3.1%
6	31	25,338	0.0033	631	(488)	-1.9%
6	32	275	0.0000	632	3	1.1%
6	33	2,499	0.0003	633	200	8.7%
6	35	6,030	0.0008	635	212	3.6%
7	12	11,946	0.0016	712	191	1.6%
7	15	1,058	0.0001	715	(10)	-0.9%
7	16	19,833	0.0026	716	165	0.8%
7	21	59,388	0.0077	721	(816)	-1.4%
7	22	10,791	0.0014	722	352	3.4%
7	23	1,242	0.0002	723	139	12.6%
7	24	147,154	0.0192	724	5,945	4.2%
7	31	57,139	0.0074	731	3,019	5.6%
7	32	1,785	0.0002	732	211	13.4%
7	33	38,386	0.0050	733	3,681	10.6%
7	35	120,577	0.0157	735	11,884	10.9%
8	12	126,269	0.0164	812	2,328	1.9%
8	15	8,394	0.0011	815	671	8.7%
8	21	98,016	0.0128	821	4,216	4.5%
8	22	24,085	0.0031	822	1,652	7.4%
8	31	80,378	0.0105	831	4,726	6.2%
9	32	87,843	0.0114	932	3,531	4.2%
9	35	4,832	0.0006	935	258	5.6%
10	31	9,783	0.0013	1031	686	7.5%
10	35	22,920	0.0030	1035	2,324	11.3%
11	15	9,144	0.0012	1115	(187)	-2.0%
11	22	12,999	0.0017	1122	231	1.8%
11	32	22,944	0.0030	1132	3,742	19.5%
11	33	18,009	0.0023	1133	1,240	7.4%
11	35	51,692	0.0067	1135	4,615	9.8%

CO	MDL	UNINUMHH	UNIPCTHH	CO_MDL	Differene 2000 minus 1996	Percent Difference
12	22	12,014	0.0016	1222	(401)	-3.2%
12	24	8,125	0.0011	1224	580	7.7%
12	33	28,073	0.0037	1233	1,378	5.2%
12	35	51,324	0.0067	1235	4,329	9.2%
13	16	50,307	0.0065	1316	(2,967)	-5.6%
13	21	45,399	0.0059	1321	2,696	6.3%
13	24	52,609	0.0068	1324	1,837	3.6%
13	31	88,194	0.0115	1331	3,620	4.3%
13	32	6,481	0.0008	1332	957	17.3%
13	35	81,242	0.0106	1335	7,563	10.3%
14	12	3,024	0.0004	1412	86	2.9%
14	13	4,861	0.0006	1413	505	11.6%
14	14	26,571	0.0035	1414	2,125	8.7%
14	16	99,159	0.0129	1416	2,847	3.0%
14	21	12,580	0.0016	1421	156	1.3%
14	22	3,836	0.0005	1422	1,434	59.7%
14	23	87,235	0.0114	1423	2,314	2.7%
14	24	24,343	0.0032	1424	627	2.6%
14	31	8,856	0.0012	1431	826	10.3%
14	32	32,817	0.0043	1432	1,999	6.5%
14	33	14,099	0.0018	1433	2,707	23.8%
14	35	13,436	0.0017	1435	771	6.1%
15	15	19,458	0.0025	1515	268	1.4%
15	16	46,532	0.0061	1516	(319)	-0.7%
15	22	4,687	0.0006	1522	346	8.0%
15	24	48,670	0.0063	1524	940	2.0%
15	33	2,626	0.0003	1533	44	1.7%
15	35	41,883	0.0055	1535	3,538	9.2%
16	2	44,084	0.0057	1602	6,387	16.9%
16	11	108,050	0.0141	1611	12,786	13.4%
16	13	27,211	0.0035	1613	3,718	15.8%
16	15	31,448	0.0041	1615	1,245	4.1%
16	22	13,539	0.0018	1622	1,344	11.0%
16	32	6,214	0.0008	1632	941	17.8%
17	12	11,885	0.0015	1712	917	8.4%
17	13	139,438	0.0182	1713	5,950	4.5%
17	16	43,632	0.0057	1716	3,451	8.6%
17	21	10,910	0.0014	1721	1,110	11.3%
17	22	8,833	0.0011	1722	866	10.9%
17	23	15,020	0.0020	1723	1,269	9.2%
17	24	26,468	0.0034	1724	3,282	14.2%
17	31	7,015	0.0009	1731	471	7.2%
17	32	11,370	0.0015	1732	1,214	12.0%
17	35	9,165	0.0012	1735	1,188	14.9%

CO	MDL	UNINUMHH	UNIPCTHH	CO_MDL	Difference 2000 minus 1996	Percent Difference
18	12	27,794	0.0036	1812	159	0.6%
18	16	48,337	0.0063	1816	1,732	3.7%
18	21	29,490	0.0038	1821	1,058	3.7%
18	24	65,241	0.0085	1824	2,795	4.5%
18	31	12,828	0.0017	1831	1,450	12.7%
18	32	2,434	0.0003	1832	56	2.4%
19	16	564	0.0001	1916	50	9.7%
19	21	3,159	0.0004	1921	(179)	-5.4%
19	22	12,772	0.0017	1922	(289)	-2.2%
19	23	5,755	0.0007	1923	462	8.7%
19	24	15,029	0.0020	1924	(630)	-4.0%
19	31	3,920	0.0005	1931	69	1.8%
19	32	1,476	0.0002	1932	138	10.3%
19	33	11,053	0.0014	1933	709	6.9%
19	35	115,983	0.0151	1935	8,970	8.4%
20	16	7,202	0.0009	2016	(1,098)	-13.2%
20	22	4,743	0.0006	2022	(397)	-7.7%
20	24	11,918	0.0016	2024	(1,292)	-9.8%
20	33	821	0.0001	2033	34	4.3%
20	35	84,300	0.0110	2035	11,852	16.4%
21	12	5,899	0.0008	2112	(135)	-2.2%
21	15	27,619	0.0036	2115	(488)	-1.7%
21	21	40,128	0.0052	2121	1,800	4.7%
21	22	2,967	0.0004	2122	(101)	-3.3%
21	24	76,243	0.0099	2124	1,840	2.5%
21	31	9,833	0.0013	2131	1,797	22.4%
21	32	66,047	0.0086	2132	6,118	10.2%
21	33	16,500	0.0021	2133	1,847	12.6%
21	35	20,579	0.0027	2135	3,754	22.3%
22	15	9,572	0.0012	2215	(513)	-5.1%
22	16	3,872	0.0005	2216	(207)	-5.1%
22	21	285	0.0000	2221	(34)	-10.7%
22	22	38,181	0.0050	2222	61	0.2%
22	23	13,665	0.0018	2223	(368)	-2.6%
22	24	26,185	0.0034	2224	(4,354)	-14.3%
22	31	34,894	0.0045	2231	110	0.3%
22	32	49,779	0.0065	2232	8,854	21.6%
22	33	14,216	0.0019	2233	580	4.3%
22	35	33,587	0.0044	2235	7,697	29.7%
23	98	200,402	0.0261	2398	12,500	6.7%
24	98	43,678	0.0057	2498	1,386	3.3%
25	98	38,660	0.0050	2598	2,322	6.4%
26	98	50,831	0.0066	2698	2,045	4.2%
27	98	319,040	0.0415	2798	9,381	3.0%
28	98	125,807	0.0164	2898	17,024	15.6%
		7,681,593	1.0000		501,042	7.0%

Stage 2: U_RCO_HH.sav

RCO	HH	PCT_HH
1	738,644	0.096158
2	782,664	0.101888
3	463,212	0.060302
4	880,727	0.114654
5	156,341	0.020353
6	447,387	0.058241
7	469,299	0.061094
8	337,142	0.043890
9	92,675	0.012065
10	32,703	0.004257
11	114,788	0.014943
12	99,536	0.012958
13	324,232	0.042209
14	330,817	0.043066
15	163,856	0.021331
16	230,546	0.030013
17	283,736	0.036937
18	186,124	0.024230
19	169,711	0.022093
20	108,984	0.014188
21	265,815	0.034604
22	224,236	0.029191
23	200,402	0.026089
24	43,678	0.005686
25	38,660	0.005033
26	50,831	0.006617
27	319,040	0.041533
28	125,807	0.016378
	7,681,593	1.000000