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Subject: Report on the Error Due to Estimating Outmovers Using Inmovers in the PES-C

This document contains the report on the error due to estimating outmovers using inmovers in the PES-C.

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A.C.E. Revision II
December 31, 2002

Error Due to Estimating Outmovers Using Inmovers in the PES-C

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EXECUTIVE SUMMARY

The Accuracy and Coverage Evaluation Revision II applies the PES-C form of the dual system estimates (DSE). The PES-C uses inmover counts to estimate the number of outmovers in the DSE equation. The data that the Accuracy and Coverage Evaluation interviewers collect on inmovers is generally more reliable than the data they collect on outmovers - this is because the interviewers can talk to inmovers in person while responses for outmovers must be by proxy. Hence, the use of inmover counts in the DSE equation.

However, DSEs are first calculated at the post-stratum level, then summed to a national DSE. Within a post-stratum, the number of inmovers may not equal the number of outmovers. This may cause a bias in the post-stratum DSEs and, hence, in the national DSE.

We may be better able to describe the distribution of outmovers by raking the outmover counts to match the distribution of counts for inmovers. In turn, the DSEs that we would compute using the raked outmover counts would be less biased than the DSEs using inmover counts.

Our analysis focused on comparing DSEs using the inmover counts versus DSEs using the raked outmover counts by full P-Sample post-stratum, state, and region. At the post-stratum level, our results showed a limited, if not negligible, impact on the DSEs by using the raked outmover counts - there was no impact on the DSEs at the state and region levels.

I. BACKGROUND

The original Accuracy and Coverage Evaluation (A.C.E.) and the A.C.E. Revision II used estimates of P-Sample outmovers in calculating dual system estimates (DSE). Both the A.C.E. and A.C.E. Revision II used two models for estimating the number of outmovers - the PES-A and PES-C models. In the PES-A model, the count of outmovers themselves comprised the outmover estimate; the PES-C model, however, used inmover counts to estimate the number of outmovers. The A.C.E. and A.C.E. Revision II used the PES-C model because of the potential bias of the outmover counts.

A.C.E. interviewers gathered information on outmovers from persons that were living at an address on A.C.E. interview day, i.e., they conducted proxy interviews for gathering outmover information. It's very possible that these proxy interviews over- or understated the number of persons who moved out of the residence after census day (e.g., there are completely different households at a residence on census day and A.C.E. interview day). On the other hand, it's less likely that an A.C.E.-interview respondent would have given erroneous information as to the size of the A.C.E.-interview day household. This was the motivation for using the PES-C model.

Both the A.C.E. and A.C.E. Revision II calculated DSEs at the post-stratum level. If there were 10 or fewer outmovers in a poststratum, then the A.C.E. and A.C.E. Revision II used the PES-A model in calculating the DSE - otherwise, they used the PES-C model.

Theoretically, the number of inmovers in the whole country should equal the number of outmovers. However, DSEs are first calculated at the post-stratum level, then summed to a national DSE - the number of inmovers may not equal the number of outmovers in a post-stratum.

In an attempt to determine whether this potential inequality of inmovers and outmovers at the post-stratum level has an effect on the DSEs, we're raking the number of outmovers to total inmovers. The distribution of the raked outmovers may better describe the outmovers than the distribution of inmovers. After the raking, we'll compare the A.C.E. Revision II DSEs that were calculated by using the number of inmovers ($DSE_{Inmover}$) versus the A.C.E. Revision II DSEs that were calculated using the raked outmover values (DSE_{Raked}). These comparisons will tell us:

- if there are any significant differences between the $DSE_{Inmover}$ and DSE_{Raked} values and, if yes:
- where and how many significant differences exist.

II. METHODS

A. Raking

The DSE in the A.C.E. Revision II contains three sets of outmover and inmover counts. These are for:

1. A.C.E. production, accounting for post-stratum changes
2. Same as 1., except using A.C.E. Revision II sample weights and post-stratum definitions
3. Same as 2., except using A.C.E. Revision II sample coding

We originally wanted to rake all three sets of outmover counts. The A.C.E. Revision II DSE post-stratified the outmover counts in the second and third sets on tenure, only (owner, non-owner), however. So, we decided to rake the outmovers only in the first set (A.C.E. production).

We decided to rake the outmovers on the following two groups of marginals (see Attachment A for the groups):

- 8 age-sex $\otimes$ 7 domain groups (56 groups)
- 2 tenure $\otimes$ 4 MSA/TEA $\otimes$ 3 return rate groups (24 groups)

This gave us 56 x 24 = 1,344 individual cells.

See Keathley (2002) for the raking procedure details.

B. DSE Estimation

We computed DSEs using both the raked outmover counts (DSE_{raked}) and the inmover counts ($DSE_{inmover}$) for three variables: full P-Sample post-stratum, FIPS state code, and region. Note that the inmover counts and the raked outmover counts are the values we used for the variable P_{im} in both the $DSE_{inmover}$ and DSE_{raked} equations, respectively - see Kostanich (2003) for the equation.

1. Full P-Sample post-stratum

   a. DSE_{raked}

      The marginals above did not exactly match the full P-Sample post-stratum definitions. This meant we had to distribute the raked outmover counts, by raking cell, to the post-strata. See Keathley (2002) for details. We could then compute DSE_{raked} for each post-

stratum. See Attachment B for the DSE equation. P_{im} in Attachment B = raked outmover counts in DSE_{raked}

b. $DSE_{inmover}$

These DSEs use the equation in Attachment B for their calculation as well. The only difference between these DSEs and DSE_{raked} is that P_{im} = the actual inmover counts in $DSE_{inmover}$.

2. FIPS state code and region

We used the following equation to compute DSEs for states and regions:

$$DSE_{m,g} = \sum_{ps=1}^{7,584} \left[Census_{g,ps} \times CCF_{m,g} \right]$$

where m = method (using either inmover counts or raked outmover counts for P_{im})
g = geographic value (state, region)
ps = post-stratum (crossed E-Sample/P-Sample)
Census = census count for geograhphic value g, post-stratum ps
CCF = coverage correction factor for method m, geographic value g, post-stratum ps

C. DSE Variance Estimation

The variances used were calculated using a stratified jackknife estimate as described in the forthcoming memorandum ACE Revision II: Overview of Variance Estimation. To estimate variances from raking, each replicate's mover totals were raked using an identical procedure to that used to rake the overall mover counts.

D. Comparisons ($DSE_{Inmover}$ vs DSE_{Raked})

Our goal was to determine if using raked outmover counts for the P_{im} term in Attachment B, instead of the inmover counts, would produce any significant changes in DSEs at the full P-Sample post-stratum, FIPS state code, and region levels. We accomplished this by using the following procedure:

1. Differences

We computed the differences of the DSEs for each post-stratum, state, and region using the following equation:

$$DSE_{difference,\ i} = DSE_{inmover,\ i} - DSE_{raked,\ i}$$

where $i \in$ (P-Sample post stratum, FIPS state code, region)

2. Variances of the differences

Then we computed the t-statistics for the $DSE_{difference,\ i}$ values:

$$SE(DSE_{difference,\ i}) = [\ Var(DSE_{difference,\ i})\ ]^{½},$$

where $i \in$ (P-Sample post stratum, FIPS state code, region)

$Var(DSE_{difference,\ i})$ = variance of the difference in the DSEs

$= Var(DSE_{raked,\ i}) + Var(DSE_{inmover,\ i}) - [\ 2 \cdot \rho \cdot SE(DSE_{raked,\ i}) \cdot SE(DSE_{inmover,\ i})]$

and

$Var(DSE_{raked,\ i})$ = variance of the raked DSE

$Var(DSE_{inmover,\ i})$ = variance of the non-raked DSE

ρ = correlation coefficient

$SE(DSE_{raked,\ i})$ = standard error of the raked DSE

$SE(DSE_{inmover,\ i})$ = standard error of the non-raked DSE

There was a lot of correlation between the raked and non-raked DSEs in a given P-Sample poststratum, FIPS state code, and region. If we had time, we could develop a more sophisticated estimate of rho. Instead, we decided to use correlation coefficients of 0.9 and 0.99

3. T-statistics for each difference

Next, we computed the t-statistics for each difference.

$$t_i = DSE_{difference,\ i} \ / \ SE(DSE_{difference,\ i})$$

4. Determine if a difference is significant

Using a signficance level of 0.10 in a two-tailed test (α=0.10, $\alpha/2$=0.05), we determined if the differences of the DSEs were signficant.

III. LIMITS

We're assuming that the DSE_{Raked} values more closely reflect the true DSEs than the $DSE_{Inmover}$ values.

IV. RESULTS

Attachments C, D, and E show the results of the testing for the post-strata, states, and regions, respectively. Attachment B shows the post-stratum code definitions for the post-stratum codes in Attachment C.

Attachment C contains all 480 full P-Sample post-strata (both PES-A and PES-C). There are 93 PES-A post-strata - they have [$DSE_{inmover}$ - DSE_{raked}] values of 0.00. The remaining 387 post-strata are PES-C.

All results in Attachments C, D, and E are for using a correlation coefficient of 0.99. All t-tests using a correlation coefficient of 0.90 for all three variables resulted in no significant differences.

Sections A., B., and C. summarize the pertinent results for the post-strata, states, and regions, respectively.

A. Post-strata tests with ρ=0.99

Only 37 of the 387 PES-C post-strata in Attachment C show significant differences in DSEs from using the raked outmover counts for the P_{im} value in the DSE equation. Table 1. shows these 37 post-strata:

Table 1. Post-Strata with Significant Differences between $DSE_{inmover}$ vs. DSE_{raked}

Post-Stratum Code	Domain[1]	Tenure	MSA/TEA[1]	Region	Return Rate	Age	Sex	Difference	t-value
1052	7	owner	medium	midwest	high	50+	female	1,751.32	1.88
1151	7	owner	medium	south	high	50+	male	-6,893.20	-4.25
1152	7	owner	medium	south	high	50+	female	-5,774.13	-3.63
1232	7	owner	medium	west	high	18-29	female	-1,253.97	-1.84
1251	7	owner	medium	west	high	50+	male	-1,899.32	-1.87
1252	7	owner	medium	west	high	50+	female	-2,623.05	-2.17

Post-Stratum Code	Domain[1]	Tenure	MSA/TEA[1]	Region	Return Rate	Age	Sex	Difference	t-value
1532	7	owner	medium	south	low	18-29	female	-913.03	-1.77
1951	7	owner	small	south	high	50+	male	-4,361.73	-2.95
1952	7	owner	small	south	high	50+	female	-2,646.05	-2.04
2431	7	owner	small	west	low	18-29	male	-1,400.75	-2.86
2432	7	owner	small	west	low	18-29	female	-1,518.76	-2.32
2442	7	owner	small	west	low	30-49	female	1,712.55	1.95
2552	7	owner	other TEA	northeast	high	50+	female	3,161.58	2.29
3251	7	owner	other TEA	west	low	50+	male	2,753.69	1.86
3252	7	owner	other TEA	west	low	50+	female	3,969.22	2.27
3320	7	non-owner	large	-	high	10-17	-	-3,672.02	-2.46
3332	7	non-owner	large	-	high	18-29	female	3,681.99	1.98
3441	7	non-owner	large	-	low	30-49	male	-3,238.70	-1.88
3442	7	non-owner	large	-	low	30-49	female	-3,567.91	-3.14
3532	7	non-owner	medium	-	high	18-29	female	7,037.82	2.82
3542	7	non-owner	medium	-	high	30-49	female	-9,341.50	-3.04
3610	7	non-owner	medium	-	low	0-9	-	3,601.58	2.81
3652	7	non-owner	medium	-	low	50+	female	-3,102.44	-2.98
3731	7	non-owner	small	-	high	18-29	male	-5,248.28	-2.18
3732	7	non-owner	small	-	high	18-29	female	-9,956.53	-4.84
3751	7	non-owner	small	-	high	50+	male	2,420.07	2.18
3831	7	non-owner	small	-	low	18-29	male	-2,909.15	-1.72
3841	7	non-owner	small	-	low	30-49	male	2,844.60	2.73
3951	7	non-owner	other TEA	-	high	50+	male	2,561.64	2.01
3952	7	non-owner	other TEA	-	high	50+	female	2,356.31	2
4052	7	non-owner	other TEA	-	low	50+	female	-2,433.23	-1.88
4310	4	owner	small / other TEA	-	high	0-9	-	-4,808.88	-2.96

Post-Stratum Code	Domain[1]	Tenure	MSA/TEA[1]	Region	Return Rate	Age	Sex	Difference	t-value
4532	4	non-owner	large / medium	-	high	18-29	female	7,083.75	2.76
5320	3	non-owner	large / medium	-	high	10-17	-	-4,275.16	-1.93
5410	3	non-owner	large / medium	-	low	0-9	-	3,480.89	1.73
6210	1	non-owner	-	-	-	0-9	-	-351.28	-1.77
6310	2	owner	-	-	-	0-9	-	-1,200.05	-1.88

[1] See Attachment B for precise domain and MSA/TEA definitions.
[2] These were the only two post-strata with significantly different DSEs when we used a Bonferroni-adjusted significance level. This new alpha = 0.000258 with a t-statistic = 3.654 - see section D.2. below.

B. State tests with ρ=0.99

From Attachment D, only one of the differences in the DSEs was significant at the state-level - Florida: the DSE_{raked} value was 9,701 persons larger than the $DSE_{inmover}$ value None of the other state-level differences were significant.

C. Region tests with ρ=0.99

From Attachment E, none of the differences at the region level were significant.

D. Additional Post-Stratum Results

Due to time constraints, we were not able to pursue as thorough an analysis of the post-stratum results as we would have liked. The following is a summarization of what we did examine.

1. Proportions of PES-C poststrata with significantly different DSEs

a. Domain × Tenure

Most of the significant differences in DSEs, or 31 of the total 37, occured in domain 7 (Non-Hispanic White -or- "some other race"). Of these 31 significant difference, 15 were in the owner strata while 16 were in the non-owner strata. While this may seem evenly balanced, a larger proportion of PES-C domain 7 non-owner post-strata exhibited significant differences in the DSEs than for PES-C domain 7 owners.

Table 2. Proportion of PES-C Poststrata with Significantly Different DSEs, for Domain × Tenure

Domain	Tenure	PES-C Post-Strata (PS)	PES-C PS w/ Significantly Different DSEs	Proportion of All PES-C PS
7	Owner	177	15	0.085
7	Non-Owner	64	16	0.250
4	Owner	23	1	0.043
4	Non-Owner	28	1	0.036
3	Owner	32	0	0.000
3	Non-Owner	27	2	0.074
5	Owner	0	0	0.000
5	Non-Owner	2	0	0.000
6	Owner	8	0	0.000
6	Non-Owner	8	0	0.000
1	Owner	8	0	0.000
1	Non-Owner	7	1	0.143
2	Owner	1	1	1.000
2	Non-Owner	6	0	0.000

Table 2. shows that, except for domain 2 (American Indian -or- Alaska Native, not on a reservation) owners, where there was only one PES-C poststratum, domain 7 non-owner PES-C poststrata had the largest proportion of significantly different DSEs. The remaining proportions, except for domain 1, non-owners, were all below 0.10.

b. Age, Sex, Age × Sex

On a similar note, Tables 3., 4., and 5. show the same proportions for age, sex, and age × sex PES-C post-strata:

Table 3. Proportion of PES-C Poststrata with Significantly Different DSEs, for Age

Age	PES-C Post-Strata (PS)	PES-C PS w/ Significantly Different DSEs	Proportion of All PES-C PS
0-9	50	5	0.100
10-17	43	2	0.047
18-29	97	10	0.103
30-49	99	5	0.051
50+	87	15	0.172
18+	11	0	0.000

Table 4. Proportion of PES-C Poststrata with Significantly Different DSEs, for Sex

Sex	PES-C Post-Strata (PS)	PES-C PS w/ Significantly Different DSEs	Proportion of All PES-C PS
-	93	7	0.076
Male	146	11	0.075
Female	148	19	0.128

Table 5. Proportion of PES-C Poststrata with Significantly Different DSEs, for Age × Sex

Age	Sex	PES-C Post-Strata (PS)	PES-C PS w/ Significantly Different DSEs	Proportion of All PES-C PS
0-9	-	50	5	0.100
10-17	-	43	2	0.047
18-29	Male	49	3	0.061
18-29	Female	48	7	0.146
30-49	Male	50	2	0.040
30-49	Female	49	3	0.061
50+	Male	42	6	0.143
50+	Female	45	9	0.200
18+	Male	5	0	0.000
18+	Female	6	0	0.000

Tables 3., 4., and 5. show that PES-C poststrata for age=50+, sex=female, and age × sex=50+ females have larger proportions of post-strata with significantly different DSEs than the other post-strata.

Based on the forgoing, we might conclude that using raked outmovers instead of inmovers had the largest impact on DSEs in PES-C post-strata with domain 7 non-owners, 50+ persons, females, and 50+ females.

2. Bonferroni-adjusted t-statistics

If we adjusted the significance level to account for multiple comparisons, using a bonferroni adjustment, our new alpha would be 0.000258, with an associated t-value = ± 3.654. In this case, only two post-strata would have significantly different DSEs:

- 1151 - domain 7 50+ male owners in medium MSAs in the south in high return rate areas
- 3732 - domain 7 18-29 female non-owners in small MSAs in high return rate areas

Using this analysis, we might conclude that, overall, using the raked outmover counts had no significant effect on the level of DSEs at the post-stratum level.

E. Additional State and Region Results

Using the raked outmovers instead of the inmover counts for P_{im} in the DSE equations did not significantly affect the DSEs at the region level.

At the state level, only Florida showed a significant change (increase) in DSEs. If we applied a Bonferroni adjustment to the states, our new alpha = 0.0137 with an associated t-value = ± 2.884. In this scenario, Florida, with a t-statistic = -1.9971, would cease to have significantly different DSEs.

Based on the foregoing, we could conclude that using raked outmover counts in the DSE equations, instead of inmover counts, did not significantly impact the DSEs at the region and state levels.

V. CONCLUSIONS

Our analysis focused on comparing DSEs using the inmover counts versus DSEs using the raked outmover counts by full P-Sample post-stratum, state, and region. At the post-stratum level, our results showed a limited, if not negligible, impact on the DSEs by using the raked outmover counts - there was no impact on the DSEs at the state and region levels.

VI. REFERENCES

Keathley, Don (2002), *"Procedure for Raking Outmovers to Inmovers in the A.C.E. Revision II for the Evaluation of using Inmovers to Estimate the Number of Census Outmovers,"* DSSD A.C.E. Revision II Memorandum Series # PP-13, dated December 31, 2002

Kostanich, Donna (2003) *"A.C.E. Revision II Design and Methodology,"*, DSSD A.C.E. Revision II Memorandum Series # PP-30, dated January, 2003

Raking Marginals

A. 8 age-sex ⊗ 7 domain groups (56 cells), where we defined the individual groups on:

1. Age-sex groups

   a. age 0-9, both sexes
   b. age 10-17, both sexes
   c. age 18-29, male
   d. age 18-29, female
   e. age 30-49, male
   f. age 30-49, female
   g. age 50+, male
   h. age 50+, female

2. Domain groups

   a. American Indian or Alaska Native on a reservation
   b. American Indian or Alaska Native not on a reservation
   c. Hispanic
   d. Non-Hispanic Black
   e. Native Hawaiian or Pacific Islander
   f. Non-Hispanic Asian
   g. Non-Hispanic White or 'some other race'

B. 2 tenure ⊗ 4 MSA/TEA ⊗ 3 return rate groups (24 cells), where we defined the individual groups on:

1. Tenure

   a. Owner
   b. Non-owner

2. MSA/TEA

   a. Large MSA MO/MB
   b. Medium MSA MO/MB
   c. Small MSA & Non-MSA MO/MB
   d. All other TEAs

Raking Marginals

3. Return Rate

   a. Domains 3, 4, and 7, from section B.1.b. above

      (1) High - tracts with the top quarter of census form return rates
      (2) Low - all other tracts

   b. Domains 1, 2, 5, and 6 - no return rate stratification

Post-Stratum Codes for the Table in Attachment C

The post-stratum codes in Attachment E are the A.C.E. Revision II P-Sample post-stratum short codes, where:

- digits 1-2 are the post-stratum group number in section 1 below (64 categories)
- digit 3 is the age category in section 2 below (10 categories)
- digit 4 is the sex category in section 3 below (3 categories)

See section 4 below for an example.

1. Post-stratum Group Number

   Table 1. on the next page shows the post-stratum group numbers.

Post-Stratum Codes for the Table in Attachment C

Table 1. Full P-Sample Post-Stratum Group Numbers (1st two digits)

Race/Hispanic Origin Domain Number	Tenure	MSA/TEA	High Return Rate				Low Return Rate			
			NE	MW	S	W	NE	MW	S	W
Domain 7 Non-Hispanic White or "Some other race"	Owner	Large MSA MO/MB	1	2	3	4	5	6	7	8
		Medium MSA MO/MB	9	10	11	12	13	14	15	16
		Small MSA & Non-MSA MO/MB	17	18	19	20	21	22	23	24
		All Other TEAs	25	26	27	28	29	30	31	32
	Non-Owner	Large MSA MO/MB	33				34			
		Medium MSA MO/MB	35				36			
		Small MSA & Non-MSA MO/MB	37				38			
		All Other TEAs	39				40			
Domain 4 Non-Hispanic Black	Owner	Large MSA MO/MB Medium MSA MO/MB	41				42			
		Small MSA & Non-MSA MO/MB All Other TEAs	43				44			
	Non-Owner	Large MSA MO/MB Medium MSA MO/MB	45				46			
		Small MSA & Non-MSA MO/MB All Other TEAs	47				48			
Domain 3 Hispanic	Owner	Large MSA MO/MB Medium MSA MO/MB	49				50			
		Small MSA & Non-MSA MO/MB All Other TEAs	51				52			
	Non-Owner	Large MSA MO/MB Medium MSA MO/MB	53				54			
		Small MSA & Non-MSA MO/MB All Other TEAs	55				56			
Domain 5 Native Hawaiian or Pacific Islander	Owner		57							
	Non-Owner		58							
Domain 6 Non-Hispanic Asian	Owner		59							
	Non-Owner		60							
Domain 1 American Indian or Alaska Native, on a reservation		Owner	61							
		Non-Owner	62							
Domain 2 American Indian or Alaska Native, not on a reservation		Owner	63							
		Non-Owner	64							

Post-Stratum Codes for the Table in Attachment C

2. Age Categories

Table 2. Age Categories

3rd digit	Category Description	P Sample Variable Definition	Census Variable Definition
1	37264	0 ≤ NEWAGE ≤ 9	000 ≤ QAGE ≤ 009
2	37545	10 ≤ NEWAGE≤ 17	010 ≤ QAGE ≤ 017
5	18-29	18 ≤ NEWAGE≤ 29	018 ≤ QAGE ≤ 029
4	30-49	30 ≤ NEWAGE≤ 49	030 ≤ QAGE ≤ 049
5	50+	NEWAGE ≥ 50	QAGE ≥ 050
6	Collapse: 0-9 10-17	0 ≤ NEWAGE ≤ 17	000 ≤ QAGE ≤ 017
7	Collapse: 18-29 30-49 50+	NEWAGE ≥ 18	QAGE ≥ 018
8	Collapse: 0-9 10-17 18-29	0 ≤ NEWAGE ≤ 29	000 ≤ QAGE ≤ 029
9	Collapse: 30-49 50+	NEWAGE ≥ 30	QAGE ≥ 030
0	Collapse: 0-9 10-17 18-29 30-49 50+	NEWAGE ≥ 0	QAGE ≥ 000

Post-Stratum Codes for the Table in Attachment C

3. Sex Categories

Table 3. Sex Categories

4th digit	Category Description	P Sample Variable Definition	Census Variable Definition
1	Male	SEX = 1	QSEX = 1
2	Female	SEX = 2	QSEX = 2
0	Collapse: Male Female		

4. Example

In the table in Attachment E, in the Post-stratum column, the codes 0151 and 4872 refer to:

- 0151
  - -- 01, from Table 1. above, represents domain 7 owners in large MSA MO/MB areas in the northeast in high return-rate areas
  - -- 5, from Table 2. above, represents persons aged 18-29
  - -- 1, from Table 3, represents males

- 4872
  - -- 48 represents domain 4 non-owners in small MSA/non-MSA or "other" TEA areas with low return rates
  - -- 7 represents persons aged 18+
  - -- 2 represents females

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover} - DSE_{raked}$	S.E.($DSE_{inmover} - DSE_{raked}$)	t-value	Significant?
110	1,563,680.96	13,885.89	1,563,386.48	13,702.08	294.48	1,959.36	0.1503	-
120	1,255,769.97	7,630.70	1,255,526.85	7,514.61	243.11	1,077.18	0.2257	-
131	516,439.38	8,398.80	516,210.49	8,341.34	228.89	1,185.09	0.1931	-
132	487,725.78	4,642.08	487,691.21	4,607.10	34.57	654.95	0.0528	-
141	1,808,150.04	11,558.00	1,807,250.07	11,409.60	899.97	1,630.79	0.5519	-
142	1,893,474.21	9,163.37	1,892,831.18	9,075.39	643.03	1,292.66	0.4974	-
151	1,752,887.35	10,723.59	1,752,367.20	10,653.54	520.15	1,513.21	0.3437	-
152	2,040,342.25	11,075.72	2,039,335.68	10,951.39	1,006.57	1,562.48	0.6442	-
210	910,090.05	8,052.07	910,136.25	8,043.07	-46.20	1,138.13	-0.0406	-
220	785,229.95	5,061.55	785,381.04	5,057.17	-151.09	715.51	-0.2112	-
231	348,047.42	4,761.83	348,272.26	4,778.49	-224.84	674.81	-0.3332	-
232	343,075.69	4,607.02	343,224.59	4,608.32	-148.90	651.62	-0.2285	-
241	1,090,671.63	5,800.02	1,090,782.78	5,722.83	-111.15	818.42	-0.1358	-
242	1,125,547.29	6,727.18	1,125,443.31	6,675.74	103.98	949.12	0.1096	-
251	937,413.96	4,355.79	937,469.06	4,349.87	-55.10	615.61	-0.0895	-
252	1,081,224.94	5,436.41	1,082,260.86	5,885.77	-1,035.91	917.54	-1.1290	-
310	721,502.35	7,536.89	722,066.75	7,935.37	-564.40	1,164.02	-0.4849	-
320	629,667.25	4,708.97	629,667.25	4,708.97	0.00	665.95	0.0000	-
331	230,409.25	5,590.08	230,309.90	5,451.84	99.35	792.86	0.1253	-
332	235,779.96	6,151.88	235,633.24	6,110.99	146.72	868.07	0.1690	-
341	894,144.68	7,461.48	894,527.49	7,487.46	-382.81	1,057.37	-0.3620	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
342	930,235.69	6,065.97	929,726.45	5,829.23	509.25	873.64	0.5829	-
351	779,301.39	7,419.26	779,509.06	7,440.30	-207.67	1,050.94	-0.1976	-
352	847,706.78	6,357.60	847,870.07	6,171.64	-163.28	905.16	-0.1804	-
410	672,837.33	6,597.80	673,379.40	6,723.35	-542.07	950.24	-0.5705	-
420	598,756.47	5,627.14	598,835.37	5,722.00	-78.90	808.06	-0.0976	-
431	231,306.47	4,087.51	231,352.39	4,091.39	-45.91	578.35	-0.0794	-
432	224,809.90	3,708.02	225,007.40	3,673.78	-197.50	523.09	-0.3776	-
441	899,926.38	5,799.49	900,115.66	5,681.04	-189.27	820.35	-0.2307	-
442	909,246.10	6,208.76	909,708.85	6,318.11	-462.75	892.47	-0.5185	-
451	1,033,659.31	5,717.81	1,033,804.57	5,742.29	-145.27	810.72	-0.1792	-
452	1,166,777.18	5,966.52	1,166,925.48	6,004.74	-148.31	847.35	-0.1750	-
510	324,388.79	7,655.20	324,388.79	7,655.20	0.00	1,082.61	0.0000	-
520	272,050.66	4,559.36	272,050.66	4,559.36	0.00	644.79	0.0000	-
531	166,151.53	4,893.49	166,151.53	4,893.49	0.00	692.04	0.0000	-
532	150,730.50	3,547.59	150,631.82	3,249.77	98.68	565.04	0.1746	-
541	445,288.47	4,892.48	445,625.47	5,067.57	-337.00	725.61	-0.4644	-
542	444,415.03	3,971.44	443,906.75	3,800.16	508.28	575.48	0.8832	-
551	513,111.71	6,859.72	512,091.22	6,779.13	1,020.48	967.76	1.0545	-
552	616,575.66	6,503.50	616,518.89	6,505.40	56.77	919.87	0.0617	-
610	70,814.24	2,748.39	70,814.24	2,748.39	0.00	388.68	0.0000	-
620	55,665.54	2,080.57	55,665.54	2,080.57	0.00	294.24	0.0000	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
671	264,510.23	4,169.60	264,595.67	4,156.19	-85.45	588.87	-0.1451	-
672	282,360.84	3,676.15	282,566.26	3,885.89	-205.42	574.19	-0.3578	-
710	177,565.67	4,600.95	177,565.67	4,600.95	0.00	650.67	0.0000	-
720	153,054.74	3,122.27	153,054.74	3,122.27	0.00	441.56	0.0000	-
731	85,709.46	4,330.13	85,709.46	4,330.13	0.00	612.37	0.0000	-
732	82,443.83	4,015.99	82,443.83	4,015.99	0.00	567.95	0.0000	-
741	260,181.15	4,572.02	260,169.15	4,545.04	12.01	645.24	0.0186	-
742	254,864.25	5,492.75	254,865.40	5,548.57	-1.16	782.72	-0.0015	-
751	239,921.04	3,360.18	239,921.04	3,360.18	0.00	475.20	0.0000	-
752	279,247.57	5,237.84	279,270.99	5,230.91	-23.42	740.28	-0.0316	-
810	89,106.84	3,074.85	89,106.84	3,074.85	0.00	434.85	0.0000	-
820	73,492.31	1,336.30	73,492.31	1,336.30	0.00	188.98	0.0000	-
871	349,532.59	8,104.26	349,500.14	8,051.32	32.45	1,143.59	0.0284	-
872	352,307.84	7,075.11	351,601.54	7,113.14	706.30	1,003.98	0.7035	-
910	653,067.11	6,586.18	653,067.11	6,586.18	0.00	931.43	0.0000	-
920	623,878.09	5,572.32	623,878.09	5,572.32	0.00	788.05	0.0000	-
931	243,684.81	3,404.09	243,649.98	3,425.90	34.83	483.44	0.0720	-
932	235,855.64	3,315.73	235,518.00	3,254.18	337.64	468.60	0.7205	-
941	862,012.27	8,317.70	861,873.60	8,170.67	138.67	1,175.09	0.1180	-
942	901,242.83	6,920.10	901,327.38	6,951.11	-84.55	981.33	-0.0862	-
951	898,285.52	6,873.02	897,695.52	6,664.22	590.00	979.62	0.6023	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
952	1,052,629.80	7,048.58	1,052,834.58	7,055.62	-204.77	997.34	-0.2053	-
1010	1,551,105.44	7,777.49	1,551,938.37	7,857.17	-832.93	1,108.39	-0.7515	-
1020	1,413,243.41	8,654.82	1,413,058.09	8,613.41	185.32	1,221.75	0.1517	-
1031	585,767.90	7,178.72	585,486.02	7,138.66	281.88	1,013.18	0.2782	-
1032	566,690.85	4,765.75	566,669.29	4,756.28	21.56	673.38	0.0320	-
1041	1,879,298.39	7,841.52	1,878,887.59	7,802.67	410.80	1,106.89	0.3711	-
1042	1,938,823.68	6,463.66	1,938,916.39	6,452.42	-92.71	913.37	-0.1015	-
1051	1,635,039.02	6,481.59	1,634,300.35	6,381.76	738.67	915.01	0.8073	-
1052	1,865,891.30	6,533.01	1,864,139.98	6,329.26	1,751.32	931.93	1.8792	Yes
1110	1,455,986.38	11,070.67	1,456,327.41	11,080.97	-341.03	1,566.39	-0.2177	-
1120	1,269,056.34	10,418.38	1,268,885.92	10,375.56	170.42	1,470.97	0.1159	-
1131	529,978.64	8,548.97	529,607.29	8,415.67	371.35	1,206.93	0.3077	-
1132	530,587.30	5,374.64	531,136.64	5,454.05	-549.34	769.79	-0.7136	-
1141	1,839,265.01	10,522.02	1,839,077.60	10,471.09	187.40	1,485.31	0.1262	-
1142	1,945,903.82	10,725.51	1,945,242.82	10,652.62	661.01	1,513.41	0.4368	-
1151	1,949,308.43	11,184.78	1,956,201.63	11,442.03	-6,893.20	1,620.40	-4.2540	Yes
1152	2,238,587.26	10,814.17	2,244,361.39	11,163.16	-5,774.13	1,592.55	-3.6257	Yes
1210	1,007,502.17	8,472.20	1,007,395.52	8,459.18	106.65	1,197.30	0.0891	-
1220	954,916.86	7,202.39	954,140.47	7,173.37	776.39	1,016.93	0.7635	-
1231	379,799.20	5,856.93	379,931.06	5,840.13	-131.86	827.28	-0.1594	-
1232	371,084.63	4,266.72	372,338.60	4,539.96	-1,253.97	679.76	-1.8447	Yes

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
1241	1,308,581.01	7,655.48	1,308,704.89	7,687.34	-123.88	1,085.37	-0.1141	-
1242	1,350,170.04	6,985.75	1,350,074.27	6,954.63	95.77	986.22	0.0971	-
1251	1,290,071.17	7,022.33	1,291,970.49	7,187.80	-1,899.32	1,018.27	-1.8652	Yes
1252	1,426,874.62	6,268.33	1,429,497.66	7,026.55	-2,623.05	1,206.56	-2.1740	Yes
1310	41,473.24	426.81	41,473.24	426.81	0.00	60.36	0.0000	-
1320	41,124.08	193.43	41,124.08	193.43	0.00	27.36	0.0000	-
1371	166,817.94	2,259.50	166,798.35	2,285.60	19.59	322.44	0.0608	-
1372	183,158.70	2,356.68	183,408.28	2,530.02	-249.58	386.39	-0.6459	-
1410	138,108.70	3,186.23	138,108.70	3,186.23	0.00	450.60	0.0000	-
1420	123,590.70	3,174.20	123,590.70	3,174.20	0.00	448.90	0.0000	-
1431	72,940.46	2,503.79	72,939.83	2,500.71	0.63	353.88	0.0018	-
1432	67,864.30	1,786.63	67,864.30	1,786.63	0.00	252.67	0.0000	-
1441	196,047.73	2,633.65	196,100.30	2,659.42	-52.57	375.16	-0.1401	-
1442	182,449.52	2,131.79	182,449.52	2,131.79	0.00	301.48	0.0000	-
1451	165,734.41	2,216.09	165,734.41	2,216.09	0.00	313.40	0.0000	-
1452	197,047.51	1,919.95	197,047.51	1,919.95	0.00	271.52	0.0000	-
1510	391,843.05	6,431.47	392,674.09	6,587.36	-831.04	933.61	-0.8901	-
1520	335,745.34	5,158.19	335,745.34	5,158.19	0.00	729.48	0.0000	-
1531	194,588.04	4,047.24	194,533.20	4,035.17	54.84	571.64	0.0959	-
1532	193,455.46	3,365.04	194,368.49	3,530.20	-913.03	514.65	-1.7741	Yes
1541	580,603.63	7,438.70	579,802.62	7,228.77	801.01	1,058.08	0.7570	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
1542	565,530.66	6,775.92	564,809.73	6,615.39	720.93	960.35	0.7507	-
1551	588,699.39	7,816.14	589,447.98	7,850.94	-748.59	1,108.37	-0.6754	-
1552	693,519.83	6,543.47	694,261.16	6,559.82	-741.33	926.69	-0.8000	-
1610	264,168.01	7,733.07	264,296.88	7,643.59	-128.87	1,090.95	-0.1181	-
1620	252,434.07	13,629.18	252,434.07	13,629.18	0.00	1,927.46	0.0000	-
1631	129,675.29	3,294.49	130,077.07	3,308.29	-401.78	467.09	-0.8602	-
1632	121,057.26	1,766.74	121,075.74	1,844.86	-18.48	267.00	-0.0692	-
1641	398,166.39	22,461.40	398,133.65	22,482.15	32.73	3,178.06	0.0103	-
1642	377,228.89	15,473.12	377,204.41	15,597.77	24.47	2,200.56	0.0111	-
1651	367,873.80	7,457.98	367,592.98	7,336.82	280.82	1,053.11	0.2667	-
1652	406,698.04	6,387.75	406,709.75	6,369.04	-11.70	902.23	-0.0130	-
1710	325,462.46	4,932.60	325,462.46	4,932.60	0.00	697.58	0.0000	-
1720	331,401.28	3,866.51	331,759.15	3,914.76	-357.87	552.32	-0.6479	-
1731	131,341.07	3,254.67	131,341.07	3,254.67	0.00	460.28	0.0000	-
1732	123,187.36	1,600.07	123,187.36	1,600.07	0.00	226.28	0.0000	-
1741	434,722.80	5,223.14	434,255.04	5,116.18	467.76	738.84	0.6331	-
1742	450,689.79	5,273.08	449,840.04	5,077.78	849.75	757.40	1.1219	-
1751	473,366.79	3,561.32	473,366.79	3,561.32	0.00	503.65	0.0000	-
1752	552,723.75	4,617.23	553,390.25	4,707.19	-666.50	665.41	-1.0016	-
1810	1,391,434.12	11,392.55	1,391,775.78	11,448.90	-341.65	1,616.11	-0.2114	-
1820	1,383,077.24	8,126.76	1,382,881.95	7,990.26	195.29	1,147.75	0.1702	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
1831	583,364.06	7,640.63	583,173.79	7,605.90	190.27	1,078.65	0.1764	-
1832	556,289.85	5,049.93	556,010.99	4,962.31	278.86	713.35	0.3909	-
1841	1,726,255.22	8,906.38	1,726,085.44	8,878.04	169.78	1,257.87	0.1350	-
1842	1,766,705.91	7,529.72	1,766,639.83	7,498.72	66.08	1,063.12	0.0622	-
1851	1,754,166.23	8,662.71	1,754,497.79	8,684.80	-331.56	1,226.85	-0.2703	-
1852	2,016,753.20	10,364.00	2,016,630.45	10,330.94	122.75	1,463.72	0.0839	-
1910	818,238.60	6,224.85	819,378.19	6,463.48	-1,139.59	928.24	-1.2277	-
1920	812,016.50	6,661.57	811,985.04	6,653.00	31.46	941.52	0.0334	-
1931	360,931.00	5,956.62	360,863.45	5,906.59	67.55	840.34	0.0804	-
1932	355,964.21	3,821.95	355,879.95	3,732.75	84.26	541.56	0.1556	-
1941	1,098,908.61	9,348.13	1,099,147.09	9,364.65	-238.49	1,323.30	-0.1802	-
1942	1,158,206.90	8,630.93	1,157,774.92	8,639.87	431.98	1,221.26	0.3537	-
1951	1,456,614.66	9,936.07	1,460,976.39	10,301.21	-4,361.73	1,476.62	-2.9539	Yes
1952	1,704,627.21	9,070.54	1,707,273.27	9,181.37	-2,646.05	1,295.33	-2.0428	Yes
2010	424,251.09	5,014.10	424,198.44	4,956.72	52.64	707.36	0.0744	-
2020	443,208.39	4,888.47	444,386.65	5,067.30	-1,178.26	726.23	-1.6224	-
2031	171,478.45	3,375.96	171,379.41	3,346.68	99.04	476.26	0.2080	-
2032	162,661.96	2,193.16	162,660.91	2,177.49	1.05	309.45	0.0034	-
2041	513,326.06	4,754.39	513,317.65	4,701.07	8.42	670.71	0.0126	-
2042	534,718.27	3,430.42	535,009.05	3,486.26	-290.78	492.24	-0.5907	-
2051	591,422.03	4,191.55	591,334.02	4,194.61	88.00	593.00	0.1484	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
2052	663,895.30	4,493.61	663,852.08	4,496.02	43.22	635.67	0.0680	-
2110	44,736.27	4,454.12	44,736.27	4,454.12	0.00	629.91	0.0000	-
2120	41,519.09	453.30	41,519.09	453.30	0.00	64.11	0.0000	-
2171	144,601.39	3,698.44	144,601.39	3,698.44	0.00	523.04	0.0000	-
2172	156,831.24	8,388.32	156,831.24	8,388.32	0.00	1,186.29	0.0000	-
2210	112,843.01	4,527.21	112,843.01	4,527.21	0.00	640.24	0.0000	-
2220	111,848.81	5,046.62	111,848.81	5,046.62	0.00	713.70	0.0000	-
2231	55,996.14	1,846.23	55,996.14	1,846.23	0.00	261.10	0.0000	-
2232	53,169.79	1,627.48	53,169.79	1,627.48	0.00	230.16	0.0000	-
2241	150,024.50	5,480.97	150,024.50	5,480.97	0.00	775.13	0.0000	-
2242	144,501.65	4,135.32	144,501.65	4,135.32	0.00	584.82	0.0000	-
2251	143,840.81	2,871.72	143,840.81	2,871.72	0.00	406.12	0.0000	-
2252	172,267.94	5,434.71	172,267.94	5,434.71	0.00	768.58	0.0000	-
2310	379,058.65	8,061.99	379,237.06	7,967.12	-178.40	1,137.37	-0.1569	-
2320	359,780.99	7,312.81	359,780.99	7,312.81	0.00	1,034.19	0.0000	-
2331	195,366.86	4,988.20	195,375.89	4,944.99	-9.03	703.70	-0.0128	-
2332	192,080.66	3,713.73	192,604.20	3,912.84	-523.54	574.69	-0.9110	-
2341	503,211.75	7,055.85	504,335.49	7,220.88	-1,123.74	1,022.85	-1.0986	-
2342	506,215.79	8,049.12	506,652.93	8,239.52	-437.14	1,167.33	-0.3745	-
2351	586,710.60	6,004.10	588,019.73	6,357.48	-1,309.13	942.49	-1.3890	-
2352	708,588.33	5,897.40	708,559.04	5,893.31	29.29	833.74	0.0351	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
2410	161,188.25	4,345.05	161,188.25	4,345.05	0.00	614.48	0.0000	-
2420	179,394.64	4,017.15	179,394.64	4,017.15	0.00	568.11	0.0000	-
2431	68,571.03	2,463.17	69,971.78	2,783.21	-1,400.75	489.42	-2.8620	Yes
2432	68,227.70	2,012.19	69,746.45	2,580.64	-1,518.76	653.44	-2.3242	Yes
2441	221,632.41	5,378.91	221,632.41	5,378.91	0.00	760.69	0.0000	-
2442	231,331.51	5,639.49	229,618.96	5,207.96	1,712.55	879.56	1.9471	Yes
2451	262,402.45	3,749.70	262,402.45	3,749.70	0.00	530.29	0.0000	-
2452	283,029.87	5,466.63	282,821.05	5,310.63	208.82	777.79	0.2685	-
2510	493,626.54	5,568.26	493,290.18	5,528.39	336.36	785.66	0.4281	-
2520	528,213.57	13,873.78	533,557.13	19,667.34	-5,343.56	6,246.80	-0.8554	-
2531	191,060.18	4,049.17	191,916.90	4,148.61	-856.72	588.10	-1.4568	-
2532	176,215.47	2,629.45	175,798.68	2,613.52	416.78	371.07	1.1232	-
2541	655,644.20	9,896.04	653,427.09	8,351.98	2,217.11	2,009.27	1.1034	-
2542	672,270.85	9,747.44	671,304.05	9,213.09	966.80	1,442.78	0.6701	-
2551	678,025.65	9,685.04	677,016.08	9,512.16	1,009.57	1,368.36	0.7378	-
2552	703,766.16	7,672.76	700,604.58	6,736.68	3,161.58	1,382.04	2.2876	Yes
2610	833,703.29	7,514.83	833,523.57	7,421.54	179.72	1,060.25	0.1695	-
2620	876,683.11	5,463.43	876,710.53	5,454.22	-27.43	772.05	-0.0355	-
2631	335,590.23	4,709.69	335,627.26	4,778.40	-37.03	674.40	-0.0549	-
2632	312,831.33	3,665.02	313,030.86	3,716.93	-199.53	524.54	-0.3804	-
2641	1,023,573.35	5,688.18	1,023,038.40	5,409.26	534.95	832.57	0.6425	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
2642	1,009,460.41	4,963.66	1,009,839.91	5,062.69	-379.50	715.82	-0.5302	-
2651	1,126,131.18	8,236.60	1,125,199.03	7,981.48	932.15	1,174.69	0.7935	-
2652	1,166,718.07	7,586.97	1,165,914.72	7,347.60	803.35	1,082.69	0.7420	-
2710	561,757.59	6,404.61	561,627.98	6,260.13	129.60	907.05	0.1429	-
2720	554,568.22	8,166.36	554,835.97	8,129.17	-267.75	1,152.87	-0.2322	-
2731	264,405.41	7,010.93	264,329.90	6,942.36	75.51	989.01	0.0763	-
2732	253,734.46	7,773.34	253,734.46	7,773.34	0.00	1,099.32	0.0000	-
2741	747,041.47	8,383.98	747,014.30	8,383.47	27.16	1,185.64	0.0229	-
2742	763,102.01	7,454.66	763,105.48	7,442.66	-3.47	1,053.47	-0.0033	-
2751	880,737.78	15,691.35	881,016.38	15,706.41	-278.60	2,220.21	-0.1255	-
2752	952,595.06	14,270.00	952,746.60	14,329.33	-151.53	2,023.14	-0.0749	-
2810	216,861.08	5,718.96	216,636.57	5,076.39	224.50	996.76	0.2252	-
2820	230,063.01	4,012.58	229,742.05	3,702.54	320.96	627.10	0.5118	-
2831	79,250.92	2,783.65	79,198.11	2,773.13	52.81	393.06	0.1344	-
2832	76,897.48	3,875.18	76,237.48	2,413.80	660.01	1,524.04	0.4331	-
2841	277,244.86	9,445.78	276,555.83	7,971.18	689.03	1,918.42	0.3592	-
2842	280,788.75	7,313.75	280,774.27	6,735.90	14.49	1,148.57	0.0126	-
2851	333,026.44	6,273.32	333,181.01	6,363.51	-154.57	898.08	-0.1721	-
2852	330,246.06	5,403.42	330,532.33	5,564.66	-286.27	792.06	-0.3614	-
2910	178,944.32	9,807.10	178,944.32	9,807.10	0.00	1,386.93	0.0000	-
2920	175,646.13	3,186.81	175,646.13	3,186.81	0.00	450.68	0.0000	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
2931	66,506.69	3,911.76	66,506.69	3,911.76	0.00	553.21	0.0000	-
2932	65,316.44	5,356.70	65,316.44	5,356.70	0.00	757.55	0.0000	-
2941	224,356.81	2,453.15	224,356.81	2,453.15	0.00	346.93	0.0000	-
2942	232,196.88	4,445.57	232,196.88	4,445.57	0.00	628.70	0.0000	-
2951	231,726.55	9,140.30	231,726.55	9,140.30	0.00	1,292.63	0.0000	-
2952	230,120.34	3,542.42	230,120.34	3,542.42	0.00	500.97	0.0000	-
3010	129,049.17	2,281.27	129,049.17	2,281.27	0.00	322.62	0.0000	-
3020	135,398.03	2,918.11	135,398.03	2,918.11	0.00	412.68	0.0000	-
3031	59,541.91	2,144.65	59,541.91	2,144.65	0.00	303.30	0.0000	-
3032	58,179.46	2,951.90	58,107.92	2,909.10	71.54	416.63	0.1717	-
3041	162,426.69	2,367.18	162,426.69	2,367.18	0.00	334.77	0.0000	-
3042	159,241.11	2,280.71	159,241.11	2,280.71	0.00	322.54	0.0000	-
3051	174,977.88	3,007.63	174,977.88	3,007.63	0.00	425.34	0.0000	-
3052	184,841.78	4,717.30	184,841.78	4,717.30	0.00	667.13	0.0000	-
3110	1,411,589.37	17,919.37	1,411,614.84	17,873.88	8,003.74	2,531.37	3.1618	Yes
3120	1,358,948.14	17,131.65	1,361,769.24	17,331.87	-2,821.10	2,445.11	-1.1538	-
3131	703,074.68	10,135.88	703,909.23	10,213.74	-834.55	1,441.03	-0.5791	-
3132	684,028.89	9,484.92	684,018.36	9,461.45	10.53	1,339.92	0.0079	-
3141	1,807,116.38	18,321.15	1,807,520.85	18,235.14	-404.48	2,586.34	-0.1564	-
3142	1,807,288.06	14,985.42	1,807,702.49	14,932.55	-414.42	2,116.18	-0.1958	-
3151	1,911,286.74	13,713.29	1,912,581.63	13,850.38	-1,294.89	1,953.84	-0.6627	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
3152	2,086,888.82	15,363.39	2,087,990.58	15,443.59	-1,101.77	2,179.85	-0.5054	-
3210	273,749.49	8,704.45	273,991.70	8,922.18	-242.21	1,265.17	-0.1914	-
3220	275,983.10	5,750.62	275,983.10	5,750.62	0.00	813.26	0.0000	-
3231	101,459.29	4,087.02	101,458.28	4,066.37	1.01	576.90	0.0018	-
3232	100,569.53	4,216.11	100,276.11	3,998.97	293.42	619.96	0.4733	-
3241	364,386.58	7,782.29	364,353.36	7,831.71	33.23	1,105.18	0.0301	-
3242	361,219.65	5,854.01	360,935.67	5,796.48	283.98	825.81	0.3439	-
3251	445,336.08	8,928.44	442,582.39	8,053.61	2,753.69	1,484.40	1.8551	Yes
3252	440,390.20	9,442.36	436,420.97	8,217.59	3,969.22	1,746.98	2.2721	Yes
3310	973,012.90	11,140.15	973,027.66	11,091.67	-14.76	1,572.77	-0.0094	-
3320	671,607.13	10,475.34	675,279.15	10,570.09	-3,672.02	1,491.13	-2.4626	Yes
3331	979,523.01	13,994.88	976,438.25	13,701.75	3,084.77	1,980.15	1.5578	-
3332	1,009,824.94	12,956.78	1,006,142.95	12,502.96	3,681.99	1,856.32	1.9835	Yes
3341	1,522,294.21	16,001.37	1,524,256.82	15,713.11	-1,962.61	2,260.91	-0.8681	-
3342	1,434,700.97	13,033.67	1,436,976.30	12,957.39	-2,275.33	1,839.42	-1.2370	-
3351	774,325.85	9,443.08	773,885.96	9,386.10	439.89	1,332.64	0.3301	-
3352	1,122,894.84	13,624.01	1,120,840.15	13,346.53	2,054.69	1,927.09	1.0662	-
3410	378,063.08	7,233.58	379,074.86	7,212.36	-1,011.79	1,021.70	-0.9903	-
3420	240,807.12	6,250.90	241,451.24	6,269.82	-644.12	885.55	-0.7274	-
3431	530,935.47	11,390.01	532,318.22	10,982.36	-1,382.75	1,633.39	-0.8466	-
3432	527,232.83	9,827.99	526,996.55	9,869.70	236.28	1,393.46	0.1696	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover} - DSE_{raked}$	S.E.($DSE_{inmover} - DSE_{raked}$)	t-value	Significant?
3441	706,490.52	12,185.88	709,729.22	12,147.67	-3,238.70	1,721.06	-1.8818	Yes
3442	580,236.70	7,652.73	583,804.61	7,929.32	-3,567.91	1,135.83	-3.1412	Yes
3451	364,873.13	6,563.93	364,380.66	6,526.20	492.47	926.38	0.5316	-
3452	467,236.92	8,815.31	466,696.17	8,797.47	540.75	1,245.54	0.4341	-
3510	1,535,418.18	24,473.16	1,539,635.08	27,162.36	-4,216.89	4,530.65	-0.9307	-
3520	977,439.68	19,215.76	980,414.51	21,792.28	-2,974.83	3,874.73	-0.7678	-
3531	1,577,264.62	21,687.91	1,572,606.99	20,801.92	4,657.63	3,131.77	1.4872	-
3532	1,591,926.85	16,751.59	1,584,889.03	15,772.97	7,037.82	2,498.43	2.8169	Yes
3541	1,824,100.74	17,956.17	1,828,317.32	18,357.46	-4,216.58	2,598.77	-1.6225	-
3542	1,720,267.11	15,722.27	1,729,608.61	17,697.81	-9,341.50	3,076.97	-3.0359	Yes
3551	866,972.84	8,676.12	866,295.41	8,621.81	677.43	1,224.35	0.5533	-
3552	1,320,984.70	13,372.26	1,321,977.00	13,262.03	-992.30	1,886.54	-0.5260	-
3610	380,579.61	8,235.97	376,978.04	7,611.23	3,601.58	1,282.19	2.8089	Yes
3620	210,744.03	3,957.39	210,151.28	3,849.88	592.76	562.38	1.0540	-
3631	537,996.19	11,588.00	538,699.25	11,643.28	-703.06	1,643.62	-0.4278	-
3632	515,676.08	12,012.42	517,760.78	12,344.48	-2,084.70	1,753.85	-1.1886	-
3641	534,924.20	11,415.95	536,283.02	11,622.32	-1,358.81	1,642.01	-0.8275	-
3642	431,893.75	8,488.02	431,284.37	8,387.00	609.38	1,197.49	0.5089	-
3651	251,122.22	8,540.23	252,708.04	8,944.50	-1,585.82	1,300.46	-1.2194	-
3652	288,994.79	6,565.23	292,097.24	6,974.95	-3,102.44	1,041.02	-2.9802	Yes
3710	1,403,776.94	13,854.18	1,401,987.64	13,412.40	1,789.30	1,977.76	0.9047	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
3720	863,252.59	11,040.32	860,832.47	10,695.77	2,420.12	1,574.93	1.5367	-
3731	1,353,760.58	17,055.66	1,359,008.86	16,988.14	-5,248.28	2,408.20	-2.1793	Yes
3732	1,394,711.19	14,520.28	1,404,667.72	14,186.87	-9,956.53	2,056.97	-4.8404	Yes
3741	1,326,941.33	14,709.40	1,326,630.78	14,692.87	310.55	2,079.12	0.1494	-
3742	1,304,618.34	13,152.73	1,303,725.77	13,112.19	892.57	1,857.65	0.4805	-
3751	668,611.45	7,789.03	666,191.37	7,564.14	2,420.07	1,108.57	2.1831	Yes
3752	1,067,675.15	9,394.55	1,066,207.38	9,346.06	1,467.77	1,326.04	1.1069	-
3810	287,952.66	6,645.07	288,685.51	6,552.97	-732.85	937.75	-0.7815	-
3820	170,576.86	5,149.69	169,831.14	5,122.83	745.72	726.87	1.0259	-
3831	433,286.05	10,528.70	436,195.19	11,233.52	-2,909.15	1,691.82	-1.7195	Yes
3832	403,660.52	7,933.57	404,139.70	8,225.46	-479.17	1,179.13	-0.4064	-
3841	298,808.69	6,949.47	295,964.09	6,525.37	2,844.60	1,042.51	2.7286	Yes
3842	267,235.41	7,157.00	267,135.14	6,973.80	100.28	1,015.77	0.0987	-
3851	145,438.48	3,752.02	144,689.04	3,476.47	749.44	580.35	1.2914	-
3852	187,082.39	3,333.73	187,247.57	3,306.13	-165.18	470.32	-0.3512	-
3910	842,641.40	10,706.16	842,715.20	10,671.23	-73.80	1,512.01	-0.0488	-
3920	557,786.20	7,200.03	557,381.37	7,137.47	404.83	1,015.73	0.3986	-
3931	551,244.28	10,936.79	553,346.62	11,840.72	-2,102.34	1,845.83	-1.1390	-
3932	562,183.46	10,881.78	562,502.44	10,900.08	-318.98	1,540.32	-0.2071	-
3941	757,315.73	12,061.74	758,694.32	12,156.75	-1,378.60	1,715.13	-0.8038	-
3942	743,870.95	9,809.09	743,500.31	9,743.65	370.65	1,384.13	0.2678	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover} - DSE_{raked}$	S.E.($DSE_{inmover} - DSE_{raked}$)	t-value	Significant?
3951	405,730.17	8,465.41	403,168.53	7,932.99	2,561.64	1,275.38	2.0085	Yes
3952	524,778.12	7,525.62	522,421.81	6,937.44	2,356.31	1,179.04	1.9985	Yes
4010	418,178.13	8,441.85	418,927.54	8,465.97	-749.42	1,195.81	-0.6267	-
4020	295,391.65	9,659.59	295,297.17	9,636.82	94.47	1,364.65	0.0692	-
4031	311,656.18	13,241.97	310,492.37	13,061.99	1,163.81	1,868.62	0.6228	-
4032	324,523.69	14,496.89	322,668.30	14,909.81	1,855.38	2,119.77	0.8753	-
4041	390,558.77	8,855.90	389,495.94	8,621.92	1,062.83	1,257.71	0.8450	-
4042	367,001.95	7,794.38	366,800.77	7,687.38	201.18	1,099.92	0.1829	-
4051	208,354.40	5,784.76	208,286.04	5,694.62	68.36	816.68	0.0837	-
4052	244,838.03	5,957.81	247,271.26	6,882.75	-2,433.23	1,294.46	-1.8797	Yes
4110	1,284,226.48	13,694.77	1,283,690.46	13,613.74	536.03	1,932.69	0.2773	-
4120	1,208,170.64	10,682.99	1,207,743.12	10,603.03	427.52	1,507.26	0.2836	-
4131	549,809.74	9,277.84	549,690.10	9,210.21	119.65	1,309.04	0.0914	-
4132	520,662.32	7,569.27	520,603.77	7,578.81	58.54	1,071.17	0.0547	-
4141	1,375,968.22	12,184.06	1,374,278.43	12,033.97	1,689.79	1,719.01	0.9830	-
4142	1,461,622.75	10,972.75	1,459,639.67	10,840.92	1,983.07	1,548.05	1.2810	-
4151	971,787.19	7,553.44	971,754.22	7,551.83	32.98	1,068.11	0.0309	-
4152	1,186,450.85	7,121.80	1,186,566.65	7,126.11	-115.81	1,007.49	-0.1149	-
4210	396,660.59	12,614.98	394,922.58	12,412.25	1,738.01	1,781.21	0.9757	-
4220	386,973.22	7,951.57	386,664.31	8,112.01	308.90	1,147.09	0.2693	-
4231	200,423.51	5,513.79	199,954.68	5,397.41	468.83	780.22	0.6009	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
4232	194,552.04	7,018.48	194,627.66	7,029.39	-75.62	993.39	-0.0761	-
4241	419,146.87	7,630.84	420,221.22	7,791.47	-1,074.36	1,102.23	-0.9747	-
4242	437,829.85	6,613.22	437,752.25	6,589.54	77.60	933.87	0.0831	-
4251	360,152.67	4,407.66	360,152.67	4,407.66	0.00	623.34	0.0000	-
4252	482,927.19	4,530.10	482,927.19	4,530.10	0.00	640.65	0.0000	-
4310	586,720.53	10,782.12	591,529.40	11,251.55	-4,808.88	1,626.86	-2.9559	Yes
4320	567,079.79	5,712.97	567,947.89	6,021.38	-868.10	884.94	-0.9810	-
4331	269,013.38	7,290.35	269,265.14	7,310.15	-251.75	1,032.60	-0.2438	-
4332	243,620.14	5,227.48	244,695.97	5,413.16	-1,075.84	774.87	-1.3884	-
4341	583,229.49	7,964.37	583,202.90	7,930.32	26.59	1,124.44	0.0236	-
4342	598,509.04	6,352.37	598,724.03	6,402.58	-214.99	903.30	-0.2380	-
4351	476,012.17	6,826.40	476,012.17	6,826.40	0.00	965.40	0.0000	-
4352	588,408.85	9,203.03	588,410.27	9,197.30	-1.42	1,301.11	-0.0011	-
4410	191,718.57	6,510.32	193,328.13	7,146.67	-1,609.55	1,155.63	-1.3928	-
4420	189,824.81	4,167.29	189,824.81	4,167.29	0.00	589.34	0.0000	-
4431	99,466.65	7,848.06	99,141.09	7,591.74	325.56	1,121.30	0.2903	-
4432	92,111.72	5,277.32	92,111.72	5,277.32	0.00	746.33	0.0000	-
4441	181,956.07	5,603.92	181,956.07	5,603.92	0.00	792.51	0.0000	-
4442	193,472.94	4,140.92	193,472.94	4,140.92	0.00	585.61	0.0000	-
4451	147,821.39	2,244.31	147,821.39	2,244.31	0.00	317.39	0.0000	-
4452	195,186.68	2,535.64	195,186.68	2,535.64	0.00	358.59	0.0000	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
4510	2,070,927.51	24,252.34	2,071,202.42	24,297.67	-274.92	3,433.30	-0.0801	-
4520	1,353,727.64	16,652.28	1,353,697.21	16,613.54	30.43	2,352.57	0.0129	-
4531	925,897.50	18,439.81	924,511.41	18,183.52	1,386.08	2,602.25	0.5326	-
4532	1,123,434.01	17,739.96	1,116,350.27	16,982.07	7,083.75	2,568.97	2.7574	Yes
4541	1,289,918.69	17,083.63	1,291,962.09	17,370.81	-2,043.40	2,453.08	-0.8330	-
4542	1,555,803.10	14,283.99	1,558,973.00	14,597.94	-3,169.90	2,066.13	-1.5342	-
4551	491,086.81	8,810.48	491,762.73	8,868.50	-675.92	1,251.43	-0.5401	-
4552	730,861.68	10,101.94	730,699.12	10,054.73	162.56	1,426.07	0.1140	-
4610	823,524.42	13,688.60	822,769.60	13,595.42	754.82	1,931.51	0.3908	-
4620	556,772.55	10,394.44	555,889.68	10,161.00	882.87	1,472.02	0.5998	-
4631	339,712.21	9,314.55	339,735.19	9,306.55	-22.98	1,316.73	-0.0175	-
4632	445,325.68	7,879.72	445,767.84	7,769.18	-442.16	1,112.02	-0.3976	-
4641	489,610.23	9,057.89	489,315.43	9,026.36	294.80	1,279.14	0.2305	-
4642	611,040.20	9,086.81	610,088.99	8,970.27	951.20	1,282.11	0.7419	-
4651	239,345.62	5,507.72	238,923.55	5,419.61	422.07	777.66	0.5427	-
4652	348,540.42	10,663.33	348,631.37	10,848.12	-90.95	1,532.22	-0.0594	-
4710	868,172.76	13,047.90	867,230.13	12,780.81	942.64	1,845.70	0.5107	-
4720	535,154.27	9,813.65	535,429.34	9,771.38	-275.07	1,385.51	-0.1985	-
4731	358,030.56	9,085.12	357,813.72	9,025.60	216.84	1,282.00	0.1691	-
4732	427,526.19	8,180.59	428,710.28	8,670.49	-1,184.10	1,287.87	-0.9194	-
4741	434,520.26	9,948.92	434,747.71	10,154.05	-227.45	1,436.15	-0.1584	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
4742	507,551.90	6,471.33	506,862.16	6,372.03	689.74	913.55	0.7550	-
4751	177,198.76	5,973.33	176,056.11	5,780.03	1,142.65	853.16	1.3393	-
4752	236,352.23	5,216.80	236,149.97	5,195.69	202.26	736.58	0.2746	-
4810	121,014.96	3,421.91	121,199.53	3,335.38	-184.57	485.55	-0.3801	-
4820	83,500.55	4,880.24	84,028.14	4,763.93	-527.59	691.74	-0.7627	-
4871	138,748.51	3,953.35	138,635.81	3,902.95	112.70	557.79	0.2020	-
4872	173,146.97	3,174.11	173,605.02	3,085.06	-458.05	451.42	-1.0147	-
4910	1,800,418.06	17,565.84	1,799,557.19	17,524.60	860.86	2,481.61	0.3469	-
4920	1,441,145.34	12,306.18	1,439,668.71	12,061.92	1,476.63	1,740.23	0.8485	-
4931	834,765.54	13,030.26	836,532.47	13,110.78	-1,766.92	1,850.19	-0.9550	-
4932	801,199.97	9,924.40	798,920.05	9,694.95	2,279.92	1,406.05	1.6215	-
4941	1,480,066.43	11,189.04	1,478,657.99	10,991.12	1,408.44	1,580.75	0.8910	-
4942	1,512,194.50	9,914.70	1,511,685.89	9,755.24	508.60	1,399.94	0.3633	-
4951	793,591.03	6,946.74	793,629.99	6,952.10	-38.96	982.81	-0.0396	-
4952	973,964.39	7,295.10	973,685.14	7,210.18	279.26	1,029.17	0.2713	-
5010	482,736.77	11,218.91	482,322.77	11,204.17	413.99	1,585.62	0.2611	-
5020	368,721.94	5,722.67	369,857.33	5,903.29	-1,135.39	841.59	-1.3491	-
5031	254,369.76	6,751.11	254,487.20	6,718.32	-117.44	952.99	-0.1232	-
5032	220,569.96	4,578.22	221,365.65	4,717.96	-795.70	671.96	-1.1842	-
5041	376,220.95	6,763.66	376,033.11	6,709.74	187.84	954.23	0.1969	-
5042	347,065.42	5,648.19	347,042.45	5,673.84	22.97	801.00	0.0287	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
5051	195,313.32	4,289.79	195,913.47	4,369.46	-600.15	617.44	-0.9720	-
5052	221,992.22	5,685.36	222,366.93	5,638.36	-374.71	802.08	-0.4672	-
5110	591,811.98	9,204.87	591,935.25	9,181.93	-123.27	1,300.34	-0.0948	-
5120	489,794.37	7,677.56	489,808.16	7,514.40	-13.79	1,086.49	-0.0127	-
5131	240,475.84	5,621.36	240,955.13	5,869.83	-479.29	849.51	-0.5642	-
5132	228,535.48	5,012.89	228,713.26	4,950.15	-177.77	707.27	-0.2513	-
5141	412,228.84	5,553.13	411,756.31	5,442.41	472.53	785.31	0.6017	-
5142	419,879.33	6,101.63	420,392.89	6,266.26	-513.56	889.83	-0.5771	-
5151	227,351.81	2,853.37	227,397.35	2,854.99	-45.54	403.65	-0.1128	-
5152	257,457.52	3,362.70	257,457.52	3,362.70	0.00	475.56	0.0000	-
5210	335,015.55	15,269.19	339,608.71	18,889.90	-4,593.16	4,344.91	-1.0571	-
5220	263,361.29	4,096.11	263,866.37	4,104.51	-505.08	579.93	-0.8709	-
5231	155,035.48	9,152.43	154,857.79	9,215.08	177.69	1,300.28	0.1367	-
5232	147,464.91	6,277.97	149,672.13	7,250.96	-2,207.22	1,362.77	-1.6197	-
5241	222,799.95	5,132.06	222,801.27	5,131.10	-1.32	725.72	-0.0018	-
5242	222,277.47	3,904.83	222,277.47	3,904.83	0.00	552.23	0.0000	-
5251	138,903.58	3,155.63	138,903.58	3,155.63	0.00	446.27	0.0000	-
5252	156,960.80	3,788.00	156,960.80	3,788.00	0.00	535.70	0.0000	-
5310	2,426,419.26	25,996.39	2,430,037.12	26,354.73	-3,617.85	3,719.00	-0.9728	-
5320	1,382,526.10	14,765.00	1,386,801.26	15,360.11	-4,275.16	2,211.33	-1.9333	Yes
5331	1,626,635.35	23,266.66	1,626,082.62	23,080.53	552.73	3,282.50	0.1684	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
5332	1,342,026.40	16,034.39	1,342,698.02	16,034.72	-671.62	2,267.63	-0.2962	-
5341	1,601,507.76	18,060.73	1,599,277.46	18,040.24	2,230.30	2,552.81	0.8737	-
5342	1,407,336.04	10,898.37	1,409,295.50	11,092.81	-1,959.46	1,567.06	-1.2504	-
5351	465,107.58	8,565.12	465,233.61	8,610.83	-126.03	1,215.38	-0.1037	-
5352	597,243.18	8,765.66	596,524.20	8,482.53	718.97	1,251.90	0.5743	-
5410	849,812.12	14,288.54	846,331.23	14,103.84	3,480.89	2,016.08	1.7266	Yes
5420	471,784.49	7,846.03	470,998.86	7,466.88	785.63	1,146.94	0.6850	-
5431	696,780.62	16,808.80	695,846.26	16,567.37	934.36	2,372.31	0.3939	-
5432	496,267.01	9,228.58	495,848.59	9,202.70	418.42	1,303.54	0.3210	-
5441	589,451.54	10,300.33	591,321.95	10,409.29	-1,870.42	1,468.42	-1.2738	-
5442	490,245.15	7,365.86	489,665.19	7,296.05	579.95	1,039.09	0.5581	-
5451	174,920.97	4,703.71	175,141.52	4,724.98	-220.55	667.05	-0.3306	-
5452	193,609.34	4,841.73	193,618.66	4,867.33	-9.33	687.01	-0.0136	-
5510	643,705.51	10,818.74	644,143.60	10,881.59	-438.09	1,535.73	-0.2853	-
5520	368,954.75	11,195.36	368,097.55	11,075.40	857.21	1,579.32	0.5428	-
5531	446,404.15	14,558.94	445,295.19	14,417.89	1,108.96	2,053.80	0.5400	-
5532	323,318.62	6,540.84	323,299.97	6,486.91	18.65	922.77	0.0202	-
5541	354,821.25	8,411.90	356,396.78	8,458.63	-1,575.53	1,193.84	-1.3197	-
5542	289,712.99	9,051.51	289,673.16	9,039.11	39.83	1,279.26	0.0311	-
5551	99,775.18	3,596.64	99,946.71	3,642.16	-171.53	513.87	-0.3338	-
5552	96,427.42	2,532.27	96,427.42	2,532.27	0.00	358.12	0.0000	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
5610	167,300.79	6,849.70	166,960.03	6,973.84	340.76	985.28	0.3458	-
5620	103,395.44	9,333.30	102,642.50	9,441.76	752.94	1,332.00	0.5653	-
5671	265,152.05	12,846.42	265,103.37	12,468.75	48.67	1,829.27	0.0266	-
5672	201,825.26	9,238.32	200,481.51	9,356.52	1,343.74	1,320.13	1.0179	-
5710	50,789.51	1,932.18	50,789.51	1,932.18	0.00	273.25	0.0000	-
5720	49,284.66	3,112.19	49,284.66	22,261.24	0.00	19,185.20	0.0000	-
5771	109,160.43	10,401.38	109,160.43	10,401.38	0.00	1,470.98	0.0000	-
5772	99,277.92	1,653.45	99,277.92	1,653.45	0.00	233.83	0.0000	-
5810	64,144.24	3,239.68	64,142.55	3,161.74	1.69	459.28	0.0037	-
5820	45,635.29	3,120.72	45,635.29	3,120.72	0.00	441.34	0.0000	-
5871	88,067.00	2,601.13	88,067.00	2,601.13	0.00	367.86	0.0000	-
5872	96,628.18	4,799.91	96,742.22	4,807.15	-114.04	679.36	-0.1679	-
5910	793,431.22	10,897.29	793,776.72	10,923.22	-345.51	1,543.16	-0.2239	-
5920	703,303.61	7,044.20	703,192.56	7,001.87	111.05	994.10	0.1117	-
5931	388,753.74	7,865.52	389,136.88	7,950.12	-383.15	1,121.51	-0.3416	-
5932	419,085.87	9,491.68	418,875.76	9,469.97	210.11	1,340.97	0.1567	-
5941	943,786.83	12,316.60	943,089.09	12,183.77	697.75	1,737.50	0.4016	-
5942	1,125,500.67	9,955.11	1,125,487.74	10,043.05	12.93	1,416.80	0.0091	-
5951	698,938.29	7,672.66	698,991.52	7,657.41	-53.23	1,084.11	-0.0491	-
5952	858,339.27	8,347.71	857,972.01	8,274.43	367.25	1,177.63	0.3119	-
6010	519,775.17	9,112.76	519,502.68	9,096.25	272.49	1,287.68	0.2116	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
6020	360,407.78	6,333.30	360,436.53	6,306.68	-28.76	894.18	-0.0322	-
6031	557,522.19	11,661.00	557,422.72	11,632.42	99.47	1,647.34	0.0604	-
6032	549,245.09	10,716.14	548,098.80	10,387.23	1,146.30	1,527.88	0.7503	-
6041	704,917.42	10,602.57	705,531.04	10,727.29	-613.62	1,513.37	-0.4055	-
6042	648,255.09	7,799.60	648,269.60	7,815.51	-14.51	1,104.27	-0.0131	-
6051	285,953.24	4,920.23	285,891.25	4,940.24	61.99	697.53	0.0889	-
6052	327,969.59	5,949.49	327,960.07	5,927.81	9.52	840.13	0.0113	-
6110	74,122.52	1,829.30	74,034.68	1,816.87	87.84	258.12	0.3403	-
6120	66,970.79	1,189.29	67,006.22	1,189.96	-35.43	168.24	-0.2106	-
6131	29,477.31	871.81	29,488.49	871.89	-11.18	123.30	-0.0907	-
6132	28,718.06	837.67	28,706.63	825.38	11.42	118.23	0.0966	-
6141	47,096.50	1,219.16	47,059.46	1,213.84	37.04	172.12	0.2152	-
6142	47,647.12	1,238.65	47,643.49	1,238.87	3.64	175.19	0.0208	-
6151	32,633.86	1,082.81	32,665.85	1,085.78	-31.98	153.37	-0.2085	-
6152	37,087.84	1,010.63	37,066.99	991.20	20.85	142.87	0.1459	-
6210	46,043.47	1,138.75	46,394.74	1,243.97	-351.28	198.50	-1.7697	Yes
6220	33,699.21	741.10	33,643.60	721.53	55.61	105.25	0.5284	-
6231	14,714.19	639.94	14,701.10	625.08	13.09	90.67	0.1444	-
6232	16,546.88	400.19	16,552.08	400.97	-5.19	56.66	-0.0916	-
6241	19,416.29	484.02	19,488.65	492.94	-72.36	69.65	-1.0389	-
6242	22,275.51	633.52	22,334.98	648.53	-59.47	91.88	-0.6472	-

Post-Stratum Test Results with ρ=0.99

Post-Stratum	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover} - DSE_{raked}$	S.E.($DSE_{inmover} - DSE_{raked}$)	t-value	Significant?
6251	8,019.85	314.48	8,019.85	314.48	0.00	44.47	0.0000	-
6252	10,964.35	513.85	11,045.84	521.98	-81.49	73.69	-1.1058	-
6310	134,410.09	4,031.52	135,610.15	4,282.47	-1,200.05	638.96	-1.8781	Yes
6320	143,353.80	5,998.07	143,353.80	5,998.07	0.00	848.26	0.0000	-
6331	58,719.09	1,613.96	58,719.09	1,613.96	0.00	228.25	0.0000	-
6332	63,624.73	3,396.56	63,624.73	3,396.56	0.00	480.35	0.0000	-
6341	136,966.20	3,223.15	136,966.20	3,223.15	0.00	455.82	0.0000	-
6342	156,884.92	4,544.82	156,884.92	4,544.82	0.00	642.73	0.0000	-
6351	102,416.73	1,978.41	102,416.73	1,978.41	0.00	279.79	0.0000	-
6352	111,179.15	1,791.37	111,179.15	1,791.37	0.00	253.34	0.0000	-
6410	129,680.66	4,865.72	129,502.47	4,736.93	178.18	691.06	0.2578	-
6420	88,560.29	4,336.17	88,705.94	4,412.86	-145.65	623.36	-0.2337	-
6431	81,807.69	4,537.82	81,704.34	4,536.84	103.35	641.68	0.1611	-
6432	89,946.58	5,569.43	90,069.28	5,635.85	-122.70	795.10	-0.1543	-
6441	94,751.30	3,623.83	95,155.82	3,829.79	-404.51	565.68	-0.7151	-
6442	103,932.22	3,040.80	104,134.86	3,088.13	-202.63	435.94	-0.4648	-
6451	34,033.87	1,155.39	34,033.87	1,155.39	0.00	163.40	0.0000	-
6452	44,376.67	1,552.79	44,376.67	1,552.79	0.00	219.60	0.0000	-

FIPS State Code Test Results with ρ=0.99

FIPS State	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
Alabama	4,432,192.36	11,538.61	4,434,783.88	11,600.62	-2,591.52	1,637.36	-1.5827	-
Alaska	628,773.99	2,989.70	628,716.58	3,016.38	57.41	425.53	0.1349	-
Arizona	5,114,151.84	18,097.65	5,114,821.98	18,102.04	-670.14	2,559.71	-0.2618	-
Arkansas	2,670,914.52	7,781.81	2,672,009.46	7,793.28	-1,094.94	1,101.38	-0.9941	-
California	33,915,727.88	86,153.74	33,920,077.25	86,296.38	-4,349.37	12,194.89	-0.3567	-
Colorado	4,300,930.00	13,978.91	4,301,047.22	13,812.13	-117.22	1,972.15	-0.0594	-
Connecticut	3,380,306.74	7,958.12	3,379,927.21	7,923.02	379.53	1,123.51	0.3378	-
Delaware	781,132.07	2,382.45	781,272.84	2,388.88	-140.77	337.44	-0.4172	-
District of Columbia	580,981.63	1,833.11	580,854.41	1,830.81	127.22	259.09	0.4910	-
Florida	15,880,398.22	34,146.06	15,890,099.06	34,430.20	-9,700.84	4,857.35	-1.9971	Yes
Georgia	8,208,426.67	19,594.81	8,212,073.03	19,664.83	-3,646.36	2,776.95	-1.3131	-
Hawaii	1,214,225.18	8,981.51	1,214,169.75	14,328.93	55.43	5,582.90	0.0099	-
Idaho	1,288,683.43	4,631.86	1,288,926.70	4,651.32	-243.27	656.71	-0.3704	-
Illinois	12,245,193.13	26,334.28	12,246,012.31	26,387.73	-819.18	3,728.39	-0.2197	-
Indiana	5,981,090.44	13,366.04	5,981,332.86	13,369.04	-242.42	1,890.46	-0.1282	-
Iowa	2,884,711.48	6,902.26	2,884,827.67	6,879.06	-116.19	974.76	-0.1192	-
Kansas	2,654,471.11	5,440.25	2,654,614.09	5,447.69	-142.98	769.93	-0.1857	-
Kentucky	4,022,525.88	10,435.08	4,024,596.83	10,476.84	-2,070.95	1,479.28	-1.4000	-
Louisiana	4,465,176.39	11,094.87	4,467,434.17	11,143.17	-2,257.78	1,573.20	-1.4351	-
Maine	1,259,856.00	9,060.21	1,259,594.81	9,112.18	261.19	1,286.03	0.2031	-
Maryland	5,309,520.78	16,057.49	5,309,451.86	16,064.58	68.92	2,271.38	0.0303	-

FIPS State Code Test Results with ρ=0.99

FIPS State	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
Massachusetts	6,285,987.13	15,606.08	6,285,463.55	15,459.98	523.58	2,201.53	0.2378	-
Michigan	9,845,027.81	20,182.77	9,845,490.44	20,216.70	-462.63	2,856.87	-0.1619	-
Minnesota	4,837,391.69	9,431.98	4,837,165.61	9,400.39	226.08	1,332.02	0.1697	-
Mississippi	2,832,957.88	9,258.49	2,835,055.73	9,307.87	-2,097.85	1,313.76	-1.5968	-
Missouri	5,520,892.25	11,043.76	5,520,521.41	11,023.06	370.84	1,560.50	0.2376	-
Montana	906,594.78	7,543.71	906,089.52	7,051.87	505.26	1,142.74	0.4421	-
Nebraska	1,697,592.27	3,487.16	1,697,595.15	3,477.89	-2.88	492.59	-0.0058	-
Nevada	2,008,215.98	7,883.91	2,008,092.88	7,735.66	123.10	1,114.33	0.1105	-
New Hampshire	1,221,756.74	5,234.09	1,221,544.54	5,269.07	212.20	743.50	0.2854	-
New Jersey	8,370,927.31	21,495.40	8,369,351.77	21,259.16	1,575.54	3,032.37	0.5196	-
New Mexico	1,819,367.41	8,346.76	1,819,794.32	8,680.97	-426.91	1,249.34	-0.3417	-
New York	18,928,894.69	48,114.93	18,928,483.75	48,265.00	410.94	6,816.73	0.0603	-
North Carolina	8,037,252.53	20,548.43	8,040,980.25	20,630.94	-3,727.72	2,912.98	-1.2797	-
North Dakota	633,175.82	1,546.37	633,243.37	1,538.47	-67.55	218.27	-0.3095	-
Ohio	11,210,356.06	22,322.15	11,210,008.13	22,380.84	347.93	3,161.52	0.1101	-
Oklahoma	3,443,912.93	9,500.25	3,445,933.26	9,571.40	-2,020.33	1,350.44	-1.4961	-
Oregon	3,409,372.64	10,759.79	3,410,128.95	10,833.22	-756.31	1,528.61	-0.4948	-
Pennsylvania	12,169,920.56	32,705.36	12,168,536.09	32,991.59	1,384.47	4,654.24	0.2975	-
Rhode Island	1,036,530.61	3,424.33	1,036,624.59	3,446.98	-93.98	486.40	-0.1932	-
South Carolina	3,997,436.34	10,395.95	3,999,688.88	10,459.42	-2,252.54	1,476.06	-1.5261	-
South Dakota	745,278.09	1,864.13	745,358.46	1,858.27	-80.37	263.28	-0.3053	-

FIPS State Code Test Results with ρ=0.99

FIPS State	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
Tennessee	5,666,046.48	13,026.67	5,668,776.47	13,084.39	-2,729.99	1,847.23	-1.4779	-
Texas	20,862,065.00	54,255.72	20,869,969.06	55,165.04	-7,904.06	7,790.20	-1.0146	-
Utah	2,230,962.09	9,157.96	2,231,529.35	9,126.26	-567.26	1,293.28	-0.4386	-
Vermont	602,065.53	4,339.25	601,988.19	4,380.23	77.34	617.91	0.1252	-
Virginia	7,098,004.27	16,667.24	7,099,935.22	16,683.36	-1,930.95	2,358.30	-0.8188	-
Washington	5,881,536.94	26,293.25	5,883,250.73	26,145.48	-1,713.79	3,710.91	-0.4618	-
West virginia	1,795,195.00	7,280.54	1,795,790.85	7,279.80	-595.85	1,029.57	-0.5787	-
Wisconsin	5,284,299.34	11,134.42	5,284,574.13	11,123.14	-274.79	1,573.89	-0.1746	-
Wyoming	491,840.79	2,941.53	491,755.00	2,760.19	85.79	441.89	0.1941	-

Region Test Results with ρ=0.99

Region	$DSE_{inmover}$	S.E. ($DSE_{inmover}$)	DSE_{raked}	S.E. (DSE_{raked})	$DSE_{inmover}$ - DSE_{raked}	S.E.($DSE_{inmover}$ - DSE_{raked})	t-value	Significant?
Northeast	53,256,245.38	127,158.99	53,251,514.50	127,400.26	4,730.88	18,001.67	0.2628	-
Midwest	63,539,479.50	119,626.54	63,540,743.63	119,558.08	-1,264.13	16,913.04	-0.0747	-
South	100,084,139.00	217,527.12	100,128,705.25	218,695.15	-44,566.25	30,867.57	-1.4438	-
West	63,210,383.00	164,227.61	63,218,400.25	165,199.92	-6,017.25	23,314.23	-0.3439	-