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SURVEY BASED ESTIMATES OF CENSUS ADJUSTMENT FACTORS AND
ITS VARIANCES AND COVARIANCES - A MONTE CARLO STUDY

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I.   Introduction

The Census Bureau is currently evaluating strategies for adjusting the census count for small areas. One of the adjustment strategies being studied is termed the statistical synthetic procedure. This procedure utilizes survey based estimates of total population by specified (non-administrative) categories to construct census adjustment factors. As studied in Isaki, Diffendal and Schultz (1986), the adjustment factors are applied to Enumeration District (ED) counts of the appropriate category. Several statistical synthetic procedures were constructed and evaluated using four artificial populations as proxies for the 1980 true population counts. The adjustment factors for different synthetic estimators were calculated based on the artificial population counts versus census counts for each category. The census adjustments were at the ED level and the performances of the synthetic estimators were evaluated at state or county level using several measures of improvement.

In practice, the adjustment factors required for statistical synthetic estimation must be estimated. For example, they can be estimated via a Post Enumeration Survey (PES). In the following, it is assumed that the estimated adjustment factors are consistent.

In this study, we try to simulate the effects of sampling on the adjustment factors and the resulting statistical synthetic estimates. Construction of a sample design using information from the available 1980 Census file will be described. The estimated census adjustment factors from a

single replicated sample and a Monte Carlo based estimate of its variance and covariance will be provided. The two purposes of the study are -

(1) The sample estimated adjustment factors can be used to obtain sample based statistical synthetic estimates of the census population. We then can evaluate the effect of sampling error on the adjusted census counts based on the artificial populations.

(2) The variance and covariance of the estimated census adjustment factors can be used for further smoothing of the adjustment factors through a modelling approach. In addition, variances of the sample based statistical synthetic estimators can be obtained.

II. Data Files

The 1980 Census ED file used in the second annual research conference paper (ARC II) (See Isaki, Diffendal and Schultz (1986)) was used as our sampling frame. Based on the results of the ARC II paper, we considered two of the four artificial populations - AP2, AP3 and two synthetic estimators - syn DA, syn 2. AP2 and AP3 were formed so that these artificial population counts by age-race-sex at the U.S. level equaled the comparable demographic analysis counts. AP2 and AP3 differ on the basis of how the Hispanic (and hence the Rest) artificial population data are derived. For AP2, it is assumed that Hispanics are like the Nonblack population. For AP3, it is assumed that Hispanics are similar to Blacks. The differences between syn DA and syn 2 lay in the adjustment strata. It is assumed that the adjustment of census undercount in small areas (EDs or blocks) is based on the construction of strata of persons felt to possess similar undercount rates. Syn 2 uses geographic division, size of place, and race as strata. (There are 96 strata); while syn DA uses age, race and sex as strata (there are 30

strata). In Isaki, et.al. (1986), it is concluded that syn 2 is better than the other synthetic estimates considered on the basis of the measures of improvement used when estimating at the state and county level and when adjustment factors are estimated without error.

Our objectives are to obtain sample replicates through a simple sampling plan, to calculate replicate based adjustment factors of syn 2 and syn DA using artificial populations AP2 and AP3 and to compute the variance and covariance of the estimates. In the next section, a sample design and sample size allocation will be described.

III. Sample Design and Allocation

A.   Stratification of 1980 Census Enumeration District (ED) Files

The sampling frame for the study is the 1980 Census ED files. The variables for each ED in the file are the geographic information (state, county, SMSA, place size, etc.) and population tallies by age, race and sex for 1980 census counts and census substitution counts. There are 289,237 EDs in the 1980 Census ED files. The selected summary statistics for the ED files by geographic divisions are tabulated in Table 1. Our objective is to obtain a simple sample design in order to estimate the adjustment factors of synthetic 2 estimator and its variance and covariance from fairly large samples. For easy handling of such a big file – 1980 ED file, and to support the estimation of syn 2 adjustment factors, we decided to use a stratified sample design where the strata are similar to the adjustment strata characterizing the synthetic 2 estimator. The adjustment strata of syn 2 were defined on the basis of geographic divisions, size of place and race. Within each geographic division, the population was divided by size of place and race. The size of place categories generally were: central cities (CC) in a

SMSA with population 250,000 +; population in a SMSA but not in a central
city; population in cities 10,000 to 50,000 (not in SMSA), and rural areas
with population less than 10,000. In some geographic divisions, big cities
such as New York, Chicago, Detroit and Los Angeles were formed as a separate
stratum; in other divisions, central cities in SMSA with population 50,000-
250,000 were formed as a separate stratum. The three race groups were Black,
Hispanic and Rest. In some geographic divisions, some races were collapsed
(see Appendix 1 for syn 2 adjustment strata). In calculating the adjustment
factor, the unit in the adjustment strata is a person, while the sampling unit
for the study is an enumeration district (ED), which contains, on average,
approximately 775 persons or 200 households. There are sometimes persons of
several races in an ED. To stratify 1980 Census ED files we first used the
adjustment strata (geographic information only) of syn 2 to obtain an initial
stratification. We had 54 strata from this initial stratification by
geographic information. The summary statistics for each stratum of the 1st
stratification are tabulated in Table 3. We then used race variables as
defined in the adjustment strata of syn 2 to get the final stratification. We
defined a cutoff point such that the race proportion of each ED in the stratum
will be in a specified range. In a 1990 PES it will not be possible to define
ED strata in the manner used in this report. Such loss in efficiency could be
compensated by a more efficient block (rather than ED) unit sample design.
This is open to speculation. We did some collapsing or splitting if the
number of EDs in the stratum was too small or too large. For example, in most
geographic divisions, the number of EDs in a city with population between
10,000 and 50,000 is much smaller than the number of EDs in the rural area
with population of less than 10,000. We combined these two areas for most
divisions. For division 8 - mountain area, the rural area with population of

less than 10,000 is split by race (white and nonwhite). After taking race into account, we ended up with EDs stratified into 88 sampling strata. There are 96 adjustment strata for syn 2. The summary statistics (no. of EDs, total persons, variances, CVs for each race) for each stratum of the final stratification (labeled stratification 2) is tabulated in Table 2. The stratum code for the 1st stratification in the ED file is G2. The stratum code for the final stratification in the ED files is G3. The correspondence of these two codes are tabulated in Table 4.

Using race variables in the sampling stratification 2 minimizes zero count cells in the syn 2 adjustment strata. Using sampling stratification 2 rather than 1 also increases the efficiency of the estimated totals for each race either at the division or national level.

Let $\hat{y}_{st}^{(i)}$ be the estimated total of the ith race in the geographic division or United States from a stratified random sample for i = 1, 2, 3 (Black, Hispanic and Rest).

A proportional sample allocation was used to determine the stratum sample size. The population size is N ED's. The sample size is n ED's. The stratum sample size n_h via proportional allocation is $n_h = N_h f$, where N_h is the population stratum size of stratum h, and f is the sampling fraction in each stratum;

$f = n/N$.

The variance of the $\hat{y}_{st}^{(i)}$ is

$$V(\hat{y}_{st}^{(i)}) = (1-f)\ f^{-1}\ \sum_h N_h\ S_h^2$$

We have calculated the $\sum_h N_h\ S_h^2$ for each race i using the stratification 1 (geographic adjustment strata of synthetic 2 without using race), and the

stratification 2 (using stratification 1 and race variables). The calculations showed that for the United States, the reductions in variance of estimated total by using stratification 2 over stratification 1 are 26%, 19% and 2% for Black, Hispanic and Rest, respectively. The ratio of variances for each division by using stratification 2 versus 1 is tabulated in the last column of Table 2.

B.   Sample Allocation

Two sampling schemes were originally suggested by Bob Fay. The first assumes a sample of ED's that equal the anticipated 1990 PES sample size in terms of total number of persons. The other is to translate the anticipated sample size into blocks and use the number of blocks as the sample number for ED's. The first sampling scheme would represent an upper bound on sampling error while the latter would represent an lower bound on the sampling error. Assume that the 1990 PES will use 1,000,000 sample persons. Then the sample size in our study for the 1st sampling scheme would be approximately 1440 EDs; for the 2nd sampling scheme - approximately 10,000 EDs. It was decided to draw 100 samples to do the Monte Carlo study to calculate the variances. With computer limitation, timing and cost considerations, we were forced to reduce the number of sample replicates to 90 and not to study the 10,000 ED sample. The Monte Carlo study was first carried out for sample size of 1440 EDs. We later repeated the study with sample size 721 to study the effect of sample size on the variances of the adjustment factors.

Two sample allocations, Neyman allocation and proportional allocation, were compared. For Neyman allocation, the stratum sample size, $n_h^{(N)}$, in each stratum h is $n \, N_h S_h \, (\sum_h N_h \, S_h)^{-1}$, where N_h is the stratum size, S_h^2 is the stratum variance. For proportional allocation, the stratum sample size $n_h^{(P)}$ is nf, where $f = N_h N^{-1}$. Geographic division 2's data were used for the

comparison. The stratum sample sizes from both allocations using three race stratum information were tabulated in Table 5.

Neyman allocations did give us better efficiency for estimating the three race totals at the division level. However, the stratum sample size given by the Neyman allocation using Hispanic or Black characteristic was 1 or 2 for those strata with mainly "rest" race, and large stratum sample sizes were allocated for those strata concentrated with Hispanic or Black. Since the Rest group was also important, we decided to use proportional allocation.

With a frame size of 289,237 EDs, and specified sample size of 1440 EDs, the sampling rate is 0.00498 for each stratum or approximately one in 200 in each stratum. With the rounding errors of obtaining integer strata sizes, the sampling strata weights varied about 200. The sample strata sizes are tabulated in Table 6 with total sample sizes of 1440 and 721, respectively.

The EDs of each geographic division were sorted by the sampling strata, and the EDs within a sampling stratum were then sorted by the syn 2 adjustment stratum according to the geographic area order. For easy operating and economic reasons, a stratified equal probability systematic sampling procedure was used.

IV. Estimation Procedure

The adjustment factors for syn DA and syn 2 using 2 artificial populations, AP2 and AP3, were calculated for each of the selected samples as follows.

Let $\hat{F}_j^{(1)}$ be the estimated adjustment factor of the j-th adjustment stratum by using sample l, j = 1, ...,J, l = 1, ...,L, where J is the number of strata, L is the number of samples.

Let $t_{hij}^{(1)}$ be the number of true counts in the j-th adjustment stratum from the l-th sample of the i-th area (ED) within the h-th sampling stratum;

Let $c_{hij}^{(1)}$ be the number of census counts in the j-th adjustment stratum from the l-th sample of the i-th area (ED) within the h-th sampling stratum;

Let N_h, n_h be the number of population ED's and selected sample ED's in the h-th stratum.

- The estimated true counts, census counts, and the adjustment factors of the adjustment stratum j using sample l are:

$$T_j^{(1)} = \sum_h \frac{N_h}{n_h} \sum_i t_{hij}^{(1)}$$

$$C_j^{(1)} = \sum_h \frac{N_h}{n_h} \sum_i c_{hij}^{(1)}$$

$$\hat{F}_j^{(1)} = T_j^{(1)} (C_j^{(1)})^{-1} \qquad \begin{aligned} l &= 1, \ldots, L, \\ j &= 1, \ldots, J. \end{aligned}$$

The average of estimated adjustment factors from all samples is

$$F_j = \sum_{l=1}^{L} \hat{F}_j^{(1)}/L$$

The variance and covariance of $\hat{F}_j$ can be computed by

$$\text{Cov}\,(\hat{F}_i, \hat{F}_j) = \sum_{l=1}^{L} (\hat{F}_i^{(1)} - F_i)\,(\hat{F}_j^{(1)} - F_j)/L, \quad i=1, \ldots, J, \ j=1, \ldots, J, \text{ except}$$

some $\text{Cov}\,(\hat{F}_i, \hat{F}_j)$'s of syn 2 are zeros by design. The sample ED's are drawn independently from each stratum, and the sampling strata are constructed similarly as the adjustment strata. Hence, for example, the total sample

counts of White in central cities 50,000 + in the New England division come from the selected ED's from sampling strata 1 or 3 in the New England division; they will not be located in the selected ED's of Rural areas (stratum 4) in the New England division or any selected places in other geographic divisions. The variance and covariance matrix of $\hat{F}_j$'s for syn 2 is a 96x96 block diagonal matrix Σ with 9 block covariance matrices on the diagonal, i.e., $\Sigma = \text{diag}(\Sigma_i)$, i=1, ..., 9, where Σ_i is the covariance matrix of $\hat{F}_j$s for all js in the i-th geographic division. The variance and covariance of $\hat{F}_j$s for syn 2 is displayed by geographic division in Appendix 2.

In our study, we couldn't afford to draw all possible samples, so we used 90 samples to compute $\hat{F}_j$'s, and Cov $(\hat{F}_i, \hat{F}_j)$'s for syn DA and syn 2 synthetic estimators. There are 88 sampling strata for each sample. For syn DA, there are 30 (2x3x5) Sex x Race x Age adjustment strata. For syn 2, there are 96 adjustment strata by geographic division, size of place and race (see Appendix 1).

The mean and the standard deviation (SD) of $\hat{F}_j$'s for syn DA and syn 2 using 2 artificial populations AP2 and AP3 are tabulated in tables 7 and 8, respectively, for sample size 1440, and in tables 7-1 and 8-1, respectively, for sample size 721. The variance and covariance matrices of $\hat{F}_j$s for syn DA using artificial populations AP2 and AP3 are tabulated in Tables 9 and 10, respectively, for sample size 1440, and in Tables 9-1 and 10-1, respectively, for sample size 721. The block diagonal parts of the variance and covariance matrices of $\hat{F}_j$s for syn 2 by geographic division using artificial populations AP2 and AP3 are tabulated in Tables 11 and 12, respectively, for sample size 1440, and in Tables 11-1 and 12-1, respectively, for sample size 721.

The variance of syn 2 or syn DA for a given area i can be calculated by using the information of variance and covariance of the sample adjustment factors.

Recall the synthetic estimator for an area i is $\hat{Y}_i = \sum_{j=1}^{J} \hat{F}_j c_{ij}$, where $\hat{F}_j$ is the sample estimated adjustment factor from adjustment stratum j, and c_{ij} is the census count of i-th area and j-th adjustment stratum. J is the total number of adjustment strata. The variance of $\hat{Y}_i$ is

$$\cdot \; V(\hat{Y}_i) = \sum_{j=1}^{J} c_{ij}^2 \; V(\hat{F}_j) + \sum_{j \neq 1} c_{ij} \, c_{i1} \, Cov(\hat{F}_j, \hat{F}_1).$$

The variances of syn 2 estimates derived from one replicate at state level are given in Tables 13 and 14 for artificial population AP2 and AP3 respectively; where the $V(\hat{F}_i)$ and $Cov(\hat{F}_j, \hat{F}_1)$ used are based on a Monte Carlo study of 90 replicates each with sample size of 1440. (See Tables 11 and 12).

V.   Summary

The variance and covariance matrices of sample based syn 2 and syn DA adjustment factors were obtained via a Monte Carlo study of 90 samples from 2 different sample sizes 1440 and 721, respectively. The CVs for sample based syn DA adjustment factors ranged from 0.00002 to 0.0215 and 0.0003 to 0.0329 for AP2 and AP3, respectively, using sample size 1440. (See Table 7); from 0.00005 to 0.0288 and 0.0004 to 0.0465 for AP2 and AP3, respectively using sample size 721. (See Table 7-1). Since syn DA was categorized by race, age and sex, the CVs of syn DA adjustment factors were varied by race, age and sex. The Monte Carlo results showed that in the same age and sex group, the CVs of the Black were bigger than the Hispanics, and the Hispanics were bigger

than the Rest; in the same age and race group, the male CV was bigger than the female CV.

For sample based syn 2 adjustment factors, the CVs ranged from 0.0018 to 0.0692 and 0.0011 to 0.1098 for AP2 and AP3, respectively, using sample size 1440. (See Table 8); from 0.0021 to 0.1235 and 0.0012 to 0.1231 for AP2 and AP3, respectively, using sample size 721. (See Table 8-1). Syn 2 adjustment factors were categorized by geographic division, size of place, and race. The Monte Carlo results showed that in each geographic division, Black and Hispanics (Non white) had higher CVs than the Rest (White), the SMSA area had higher CV than the Non SMSA area.

The variances for sample based state syn 2 estimators were also obtained using sample size 1440. The CVs ranged from 0.0011 to 0.026 and 0.0011 to 0.0260 for AP2 and AP3, respectively. (See Tables 13 and 14).

VI. References

(1) Isaki, Diffendal and Schultz (1986). "Statistical Synthetic Estimates of Undercount for Small Area." Appearing in the proceedings of the Second Annual Research Conference. Bureau of the Census.

(2) Cochran, W.G. (1977). Sampling Techniques, John Wiley & Sons, N.Y.

Appendix 1

Adjustment Strata for Syn 2

Listed below are 96 strata used under strata formation 2. The strata

formation is based on three variables believed to highly influence the

undercount: geography, size of place and race. Separate adjustment strata

are formed within each of nine census divisions using size of place and race

(Black, Hispanic, Rest) where nonwhite is defined as Black or Hispanic. More

emphasis is placed on geography and less on demographic variables than in

formation 1. For example, within a census division, separate strata are

formed for specific place sizes by race excluding sex and age.

Each race category listed on a separate line is a strata. For example,

for the New England division, the first stratum is whites living in the

central city of 50,000 people or more. The second stratum is whites living in

a SMSA but not in a central city. The total number of strata is listed for

each geography grouping.

Tabulation Strata

1. New England - MA, ME, VT, NH, CT, RI

   Total number of strata = 6

   a) Central Cities 50,000 +
              White

   b) In SMSA, not in Central City
              White

   c) a and b
              Nonwhite

   d) Cities 10,000 - 50,000
              White

   e) Rural 0 - 10,000
              White

f) d and e
                Nonwhite

2. NY, NJ, PA

    Total number of strata = 15

    a) New York City
                Black
                Hispanic
                Nonblack, Nonhispanic

    b) Central Cities 250,000 +
                Black
                Nonblack, Nonhispanic

    c) Central Cities 50,000 - 250,000
                Black
                Nonblack, Nonhispanic

    d) b and c
                Hispanic

    e) In NY City SMSA, not in Central City
                Nonblack, Nonhispanic

    f) In SMSA, not in Central City 250,000 + (except NY SMSA)
                Nonblack, Nonhispanic

    g) e and f
                Black and Hispanic

    h) In SMSA, not in Central City 50,000 - 250,000
                Nonblack, Nonhispanic

    j) Rural 0 -10,000
                Nonblack, Nonhispanic

    k) h, i and j
                Black and Hispanic

3. South - WV, VA, NC, SC, GA, FL, MD, DE, DC

    Total number of strata = 15

    a) Central Cities 250,000 +
                Black
                Nonblack, Nonhispanic

    b) Central Cities 50,000 - 250,000
                Black
                Nonblack, Nonhispanic

c) a and b
>> Hispanic

d) In SMSA, not in Central City 250,000 +
>> Black
>> Nonblack, Nonhispanic

e) In SMSA, not in Central City 50,000 to 250,000
>> Black
>> Nonblack, Nonhispanic

f) d and e
>> Hispanic

g) Cities 10,000 - 50,000
>> Black
>> Nonblack, Nonhispanic

h) Rural 0 - 10,000
>> Black
>> Nonblack, Nonhispanic

i) g and h
>> Hispanic

4. KY, TN, AL, MS

Total number of strata = 7

a) Central Cities 250,000 +
>> White

b) Central Cities 50,000 - 250,000
>> White

c) a and b
>> Nonwhite

d) In SMSA, not in Central City
>> White

e) Cities 10,000 - 50,000
>> White

f) Rural 0 - 10,000
>> White

g) d, e and f
>> Nonwhite

5.   MI, OH, IN, IL

Total number of Strata = 12

a)   Chicago and Detroit
                    Nonblack, Nonhispanic
                    Black

b)   Central Cities 250,000 +
                    Nonblack, Nonhispanic
                    Black

c)   a and b
                    Hispanic

d)   Central Cities 50,000 - 250,000
                    White

e)   In SMSA, not in Central City 250,000 +
                    White

f)   In SMSA, not in Central City 50,000 -250,000
                    White

g)   d, e and f
                    Nonwhite

h)   Cities 10,000 - 50,000
                    White

i)   Rural 0 -10,000
                    White

j)   h and i
                    Nonwhite

6.   MN, WI, IA, MO, KS, NB, SD, ND

Total number of strata = 9

a)   Central Cities 250,000 +
                    White
                    Nonwhite

b)   Central Cities 50,000 - 250,000
                    White

c)   In SMSA, not in Central City 250,000 +
                    White

f)   Cities 10,000 - 50,000
                    White

g) Rural 0 - 10,000
                White

h) e, f and g
                Nonwhite

7. TX, OK, AR, LA

Total number of strata = 11

a) Houston and Dallas
                Black
                Hispanic
                Nonblack, Nonhispanic

b) Central Cities 250,000 +
                Nonblack, Nonhispanic

c) Central Cities 50,000 - 250,000
                Nonblack, Nonhispanic

d) b and c
                Black
                Hispanic

e) In SMSA, not in Central City
                Nonblack, Nonhispanic

f) Cities 10,000 - 50,000
                Nonblack, Nonhispanic

g) Rural 0 - 10,000
                Nonblack, Nonhispanic

h) e, f and g
                Black and Hispanic

8. NM, CO, WY, MT, ID, UT, AZ, NV

Total number of strata = 7

a) Central Cities 250,000 +
                White

b) Central Cities 50,000 +
                White

c) a and b
                Nonwhite

d) In SMSA, not in Central City
                White

e) City 10,000 - 50,000
                   White

f) d and e
                   Nonwhite

g) Rural 0 - 10,000
                   All races

9.   CA, OR, WA, AK, HI

Total number of strata = 14

a) Los Angeles
                   Black
                   Hispanic
                   Nonblack, Nonhispanic

b) Central Cities 250,000 +
                   Nonblack, Nonhispanic

c) Central Cities 50,000 - 250,000
                   Nonblack, Nonhispanic

d) b and c
                   Black
                   Hispanic

e) In SMSA, not in Central City 250,000 +
                   Nonblack, Nonhispanic

f) In SMSA, not in Central City 50,000 - 250,000
                   Nonblack, Nonhispanic

g) e and f
                   Black
                   Hispanic

h) Cities 10,000 - 50,000
                   Nonblack, Nonhispanic

j) h and i
                   Black and Hispanic

Appendix 2

Variance and Covariance Matrix of Estimated Adjustment
Factors of Syn 2 for Each Geographic Division

1. Geographic division 1 - New England

   Total number of adjustment strata = 6

   Σ_1=Diag(Σ_{1i}),i = 1,2, where Σ_{11} is a 3x3 symmetric matrix of SMSA areas,

   Σ_{12} is a 3x3 symmetric matrix of NSMSA areas.

2. Geographic division 2 - NY, NJ, PA

   Total number of adjustment strata = 15

   Σ_2 = Diag(Σ_{2i}), i = 1, ..., 4

   where

   Σ_{21} is a 3x3 symmetric matrix of N.Y. City areas

   Σ_{22} is a 5x5 symmetric matrix of Central City areas

   Σ_{23} is a 3x3 symmetric matrix of Noncentral Cities
   (250,000+) in SMSA areas

   Σ_{24} is a 4x4 symmetric matrix of Noncentral Cities
   (50,000 - 250,000) and NSMSA areas

3. Geographic division 3 - South - WV, VA, NC, SC, GA, FL, MD, DE, DC.

   Total number of adjustment strata = 13

   Σ_3 = Diag(Σ_{3i}), i=1, ..., 3

   where

   Σ_{31} is a 5x5 symmetric matrix of Central Cities areas

   Σ_{32} is a 5x5 symmetric matrix of Noncentral Cities areas

   Σ_{33} is a 5x5 symmetric matrix of NSMSA areas

4. Geographic division 4 - KY, TN, AL, MS

   Total number of adjustment strata = 7

   Σ_4 = Diag(Σ_{4i}), i=1,2

   where

Σ_{41} is a 3x3 symmetric matrix of Central Cities areas

Σ_{42} is a 4x4 symmetric matrix of Noncentral Cities and NSMSA areas

5.   Geographic division 5 - MI, OH, IN, IL

Total number of adjustment strata = 12

Σ_5 = Diag(Σ_{5i}), i=1, ..., 3

where

Σ_{51} is a 5x5 symmetric matrix of Chicago, Detroit and Central Cities
(250,000+)
Σ_{52} is a 4x4 symmetric matrix of Central Cities
(50,000-250,000) of Noncentral Cities
Σ_{53} is a 3x3 symmetric matrix of NSMSA areas

6.   Geographic division 6 - MN, WI, IA, MO, KS, NB, SD, ND

Total number of adjustment strata = 9

Σ_6 = Diag(Σ_{6i}), i=1, ..., 3

where

Σ_{61} is a 2x2 symmetric matrix of Central Cities 250,000 +

Σ_{62} is a 3x3 symmetric matrix of Central Cities 50,000-250,000
in SMSA, not in Central Cities 250,000 +
Σ_{63} is a 4x4 symmetric matrix of NSMSA areas

7.   Geographic division 7 - TX, OK, AR, LA

Total number of adjustment strata = 11

Σ_7 = Diag(Σ_{7i}), i=1, ..., 3

where

Σ_{71} is a 3x3 symmetric matrix of Houston and Dallas areas

Σ_{72} is a 4x4 symmetric matrix of Central Cities 50,000 +

Σ_{73} is a 4x4 symmetric matrix of areas in SMSA,
not in Central Cities and NSMSA areas

8.   Geographic division 8 - NM, CO, WY, MT, ID, UT, AZ, NV

Total number of adjustment strata = 7

Σ_8= Diag(Σ_{8i}), i=1, ..., 3

where

Σ_{81} is a 3x3 symmetric matrix of Central Cities 50,000 +

Σ_{82} is a 3x3 symmetric matrix of areas in SMSA, not in
Central Cities (10,000-50,000)

Σ_{83} is a scalar of areas in Rural 0 - 10,000

9. Geographic division 9 - CA, OR, WA, AK, HI

Total number of adjustment strata = 14

$\Sigma_9 = \text{Diag}(\Sigma_{9i})$, i=1, ..., 4

where

Σ_{91} is a 3x3 matrix of areas in Los Angeles

Σ_{92} is a 4x4 matrix of areas in Central City 50,000 +

Σ_{93} is a 4x4 matrix of areas in SMSA, not in Central City 50,000 +

Σ_{94} is a 3x3 matrix of NSMSA areas

Table 1. The Summary Statistics for Each Geographic Division
1980 Census ED Files

Geographic Division	Black	Hispanic	Rest	Total Persons	Avg. Persons per ED	# ED
(1) New England-MA, ME, VT, NH,CT, RI	466,959 (0.038)	283,990 (0.023)	11,438,143 (0.938)	12,189,092	858	14,199
(2) Middle Atlantic-NY, NJ, PA	4,306,760 (0.1184)	2,159,031 (0.0594)	29,903,591 (0.8222)	36,369,382	920	39,528
(3) South Atlantic-WV, VA, NC, SC, GA, FL, MD, DE, DC	7,541,980 (0.206)	1,095,624 (0.030)	27,954,430 (0.764)	36,592,034	792	46,216
(4) East South Central-KY, TN, AL, MS	2,837,644 (0.195)	86,317 (0.006)	11,602,214 (0.799)	14,526,175	792	18,346
(5) East North Central-MI, OH, IN, IL	4,298,517 (0.1175)	968,132 (0.0265)	31,301,903 (0.8560)	36,568,552	797	45,909
(6) West North Central-MN, WI, IA, MO, KS, NB, SD, ND	953,745 (0.0442)	261,357 (0.0121)	20,355,355 (0.9437)	21,570,457	557	38,749
(7) West South Central-TX, OK, AR, LA	3,472,915 (0.1480)	3,102,122 (0.1322)	16,898,468 (0.7199)	23,473,505	770	30,493
(8) Mountain-NM, CO, WY, MT,ID, UT, AZ, NV	264,583 (0.0235)	1,427,430 (0.1265)	9,591,392 (0.8500)	11,283,405	591	19,084
(9) Pacific-CA, OR, WA, AK, HI	1,959,046 (0.0623)	4,741,383 (0.1507)	24,765,997 (0.7871)	31,466,426	857	36,713
Total	26,102,149 (0.1165)	14,125,386 (0.0630)	183,811,493 (0.8204)	224,039,028	775	289,237

Table 2. The Sampling Stratum Statistics for Each Race - Stratification 2
1980 Census ED Files

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
Geographic div. 1 - New England						14,199	
Black	0.038	466,959			157,897		0.797
Hispanic	0.023	283,990			41,295		0.828
Rest	0.938	11,438,143			5,124,063		0.999
Total		12,189,092					
No. of sampling strata = 4							

1) Central cities 50,000+, the proportion of Black and Hispanic is less than 0.06 (white)   2,368

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.009	16,629	122	1.5719	288
Hispanic	0.012	23,401	135	1.1774	320
Rest	0.979	1,889,064	279,687	0.6629	662,298

2) In SMSA, not in Central City, the proportion of Black and Hispanic is less than 0.07 (white)   6,030

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.007	39,627	133	1.7559	802
Hispanic	0.008	45,605	85	1.2193	512
Rest	0.985	5,575,890	431,488	0.7104	2,601,869

3) SMSA, the proportion of Black and Hispanic is greater than or equal to 0.06 for Central cities;
0.07 for balance of Central City (Nonwhite)   2,001

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.221	386,978	76,216	1.4275	152,509
Hispanic	0.110	191,624	19,602	1.4620	39,223
Rest	0.669	1,170,273	264,302	0.8790	528,869

4) NSMSA (All race)   3,800

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.008	23,725	1,131	5.3859	4,296
Hispanic	0.008	23,360	326	2.9373	1,239
Rest	0.983	2,802,916	350,270	0.8024	1,331,025

Table 2. Continued
Sampling Strata - Geographic Division 2

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
Geographic div. 2 - Middle Atlantic - NY, NJ, PA						39,528	
Black	0.1184	4,306,760			1,813,200		0.6262
Hispanic	0.0594	2,159,031			545,897		0.8068
Rest	0.8222	29,903,591			13,719,153		0.9316
Total		36,369,382					

No. of sampling strata = 14

1) New York City, $R^{1/}$(Black) $\geq$ R(Hispanic) and R(Black) $\geq$ 0.10 (Black)   2,333

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.672	1,491,309	352,483	0.9288	822,343
Hispanic	0.135	300,598	38,374	1.5204	89,527
Rest	0.192	427,092	146,406	2.0901	341,565

2) New York City, R(Black) < R(Hispanic) and R(Hispanic) $\geq$ 0.05   (Hispanic)   3,312

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.089	255,269	17,886	1.7352	59,238
Hispanic	0.331	954,287	88,563	1.0329	293,321
Rest	0.581	1,674,767	235,677	0.9601	780,562

3) New York City, R(Black) < 0.10 or R(Hispanic) < 0.05 (Rest)   1,927

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.011	21,008	582	2.2127	1,122
Hispanic	0.029	54,487	517	0.8041	996
Rest	0.960	1,822,180	357,251	0.6321	688,423

4) Central Cities 250,000 +, R(Black) $\geq$ R(Hispanic) and R(Black) $\geq$ 0.06 (Black)   1,791

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.715	987,050	160,518	0.7270	287,488
Hispanic	0.025	34,411	3,970	3.2792	7,110
Rest	0.260	358,211	86,988	1.4746	155,796

5) Central Cities 250,000 +, R(Black) < 0.06 or R(Hispanic) < 0.02 (Rest)   1,414

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.010	10,237	216	2.0294	305
Hispanic	0.007	7,891	31	0.9923	44
Rest	0.983	1,049,456	123,589	0.4737	174,755

Table 2. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
Geographic div. 2 (cont.)						
6) Central cities 50,000-250,000, R(Black)≥ R(Hispanic) and R(Black)≥ 0.04 (Black)						1,009
Black	0.374	379,254	140,303	0.9965	141,566	
Hispanic	0.057	58,034	8,178	1.5723	8,252	
Rest	0.569	577,849	280,322	0.9245	282,845	
7) Central cities 50,000-250,000, R(Black) < 0.04 or R(Hispanic) < 0.02 (Rest)						1,103
Black	0.012	11,955	274	1.5275	302	
Hispanic	0.008	7,837	72	1.1929	79	
Rest	0.981	1,012,052	349,265	0.6441	385,239	
8) Central cities, R(Hispanic) > R(Black) and R(Hispanic) ≥ 0.02 (Hispanic)						1,128
Black	0.067	63,599	7,592	1.5454	8,564	
Hispanic	0.228	217,634	52,671	1.1895	59,413	
Rest	0.706	673,793	146,521	0.6408	165,276	
9) In NY City SMSA, not in Central City, R(Black) + R(Hispanic) < 0.08 (Rest)						1,289
Black	0.009	13,766	345	1.7394	445	
Hispanic	0.023	33,799	696	1.0060	897	
Rest	0.968	1,444,019	669,569	0.7304	863,074	
10) In SMSA, not in central city 250,000+, (except NY SMSA), R(Black) + R(Hispanic) < 0.08 (Rest)						5,727
Black	0.011	62,845	428	1.8861	2,451	
Hispanic	0.008	45,379	119	1.3761	682	
Rest	0.981	5,701,605	515,615	0.7213	2,952,927	
11) Areas in (9) and (10), R(Black) + R(Hispanic) ≥ 0.08 (Black and Hispanic)						1,862
Black	0.309	628,856	168,273	1.2146	313,324	
Hispanic	0.066	134,733	16,193	1.7586	30,151	
Rest	0.625	1,272,561	327,370	0.8372	609,563	

Table 2. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED

Geographic div. 2 (cont.)

12) In SMSA, not in Central City 50,000-250,000, R(Black) + R(Hispanic) < 0.04 (Rest)   7,731

Black	0.005	34,622	76	1.9421	588
Hispanic	0.009	69,591	168	1.4378	1,299
Rest	0.986	7,555,475	437,948	0.6772	3,385,776

13) Cities 10,000-50,000 and Rural 0-10,000, R(Black) + R(Hispanic) < 0.05 (Rest)   6,049

Black	0.004	17,671	55	2.5392	333
Hispanic	0.005	22,301	39	1.6975	236
Rest	0.990	4,039,740	280,367	0.7929	1,695,940

14) Areas in (12), R(Black) + R(Hispanic) ≥ 0.04; or 0.05 for
    Areas in (13)   (Black and Hispanic)   2,853

Black	0.116	329,319	61,385	2.1464	175,131
Hispanic	0.077	218,049	18,889	1.7983	53,890
Rest	0.807	2,294,791	433,723	0.8188	1,237,412

1/ R(Race) is the Proportion of the Race in Each ED.

Table 2. Continued
Sampling Strata - Div. 3 - South - WV, VA, NC, SC, GA, FL, MD, DE, DC

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
Geographic div. 3 - South Atlantic		36,592,034				46,216	
Black	0.206	7,541,980			3,624,015		0.73
Hispanic	0.030	1,095,624			499,412		0.88
Rest	0.764	27,954,430			17,683,515		0.98
No. of sampling strata = 13							
1) Central Cities 250,000+, R(Black) > R(Hispanic), and R(Black) ≥ 0.07, (Black)						2,588	
Black	0.686	1,614,257	229,735	0.7684	594,555		
Hispanic	0.016	36,786	2,035	3.1739	5,267		
Rest	0.298	700,511	385,002	2.2923	996,385		
2) Central Cities 250,000+, R(Black) < 0.07, or R(Hispanic) < 0.02, (Rest)						1,071	
Black	0.023	19,832	736	1.4654	789		
Hispanic	0.013	11,244	174	1.2562	186		
Rest	0.964	843,879	318,533	0.7163	341,149		
3) Central Cities 50,000-250,000, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.05, (Black)						2,832	
Black	0.512	1,350,961	294,720	1.1380	834,648		
Hispanic	0.011	30,139	1,573	3.7271	4,455		
Rest	0.476	1,254,949	352,777	1.3403	999,063		
4) Central Cities 50,000-250,000, R(Black) < 0.05 or R(Hispanic) < 0.02, (Rest)						2,281	
Black	0.014	21,179	247	1.6930	564		
Hispanic	0.008	11,928	53	1.3967	122		
Rest	0.978	1,443,808	316,284	0.8885	721,443		
5) Central Cities, R(Hispanic) > R(Black) and R(Hispanic) ≥ 0.02, (Hispanic)						1,271	
Black	0.023	24,717	2,120	2.3678	2,695		
Hispanic	0.225	242,975	114,258	1.7682	145,222		
Rest	0.752	812,399	244,246	0.7732	310,436		

Table 2. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
Geographic div. 3 (cont.)						
6) In SMSA, not in Central City 250,000+, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.04, (Black)						3,091
Black	0.303	995,049	184,999	1.3361	571,832	
Hispanic	0.024	79,145	2,846	2.0837	8,799	
Rest	0.673	2,213,252	506,435	0.9939	1,565,391	
7) In SMSA, not in Central City 250,000+, R(Black) < 0.04, and R(Hispanic) < 0.02, (Rest)						3,925
Black	0.010	29,271	220	1.9911	865	
Hispanic	0.009	27,254	102	1.4532	400	
Rest	0.981	2,894,338	539,885	0.9964	2,119,048	
8) In SMSA, not in Central City 50,000-250,000, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.04, (Black)						4,477
Black	0.282	1,077,939	154,432	1.6322	691,392	
Hispanic	0.014	52,981	2,249	4.0074	10,069	
Rest	0.704	2,690,062	421,665	1.0807	1,887,795	
9) In SMSA, not in Central City 50,000-250,000, R(Black) < 0.04 and R(Hispanic) < 0.02, (Rest)						6,829
Black	0.009	34,512	139	2.3293	946	
Hispanic	0.007	28,774	50	1.6853	344	
Rest	0.984	3,939,604	399,865	1.0961	2,730,681	
10) In SMSA, not in Central City 50,000+, R(Black) < R(Hispanic) and R(Hispanic) ≥ 0.02, (Hispanic)						3,659
Black	0.018	60,624	2,415	2.9659	8,835	
Hispanic	0.146	481,865	84,789	2.2111	310,243	
Rest	0.836	2,767,941	496,520	0.9315	1,816,767	
11) Cities & Rural, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.04, (Black)						7,604
Black	0.349	2,277,378	120,446	1.1588	915,873	
Hispanic	0.006	41,018	801	5.2473	6,092	
Rest	0.645	4,208,888	249,094	0.9017	1,894,110	

Table 2. Continued

	Race Pro.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
Geographic div. 3 (cont.)						
12) Cities + Rural, R(Black) < 0.04 or R(Hispanic) < 0.02 for Cities, 0.01 for Rural, (Rest)						5,478
Black	0.009	31,234	149	2.1396	815	
Hispanic	0.005	17,264	25	1.5756	135	
Rest	0.986	3,418,213	359,109	0.9604	1,967,198	
13) Cities + Rural, R(Black) < R(Hispanic) and R(Hispanic) ≥ 0.02 for Cities,						
0.01 for Rural, (Hispanic)						1,110
Black	0.006	5,027	185	3.0056	206	
Hispanic	0.043	34,251	7,277	2.7645	8,077	
Rest	0.951	766,586	300,945	0.7943	334,049	

Table 2. Continued
Sampling Strata - Division 4

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
Geographic div. 4 - East South Central-KY, IN, AL, MS						18,346	
Black	0.195	2,837,644			1,858,315		0.7384
Hispanic	0.006	86,317			4,611		1.0008
Rest	0.799	11,602,214			6,688,168		0.9681
Total		14,526,175					

No. of sampling strata = 5

1) Central Cities 50,000 +, R(Black) + R(Hispanic) < 0.06 for Central Cities 250,000+,
    0.07 for Central Cities 50,000+   (White)

						1,956	
Black	0.016	24,332	447	1.6994	874		
Hispanic	0.007	10,090	45	1.2957	87		
Rest	0.978	1,505,471	390,392	0.8118	763,607		

2) Central Cities 50,000 +, R(Black) + R(Hispanic) ≥ 0.06 for Central Cities 250,000+,
    0.07 for Central Cities 50,000+(Nonwhite)

						2,117	
Black	0.568	1,112,056	268,038	0.9856	567,437		
Hispanic	0.006	10,810	154	2.4293	326		
Rest	0.426	833,541	256,417	1.2861	542,835		

3) In SMSA, not in Central City, R(Black) + R(Hispanic) < 0.05   (White)

						3,876	
Black	0.008	21,063	153	2.2760	593		
Hispanic	0.005	14,022	29	1.4960	114		
Rest	0.987	2,586,278	424,874	0.9769	1,646,813		

4) Cities + Rural, R(Black) + R(Hispanic) < 0.04   (White)

						4,472	
Black	0.006	20,380	88	2.0589	394		
Hispanic	0.006	20,385	36	1.3251	163		
Rest	0.988	3,321,843	349,652	0.7961	1,563,642		

5) Areas in (3) and (4), R(Black) + R(Hispanic) ≥ 0.05 for areas in (3),
    0.04 for areas in (4) (Nonwhite)

						5,925	
Black	0.329	1,659,813	135,503	1.3140	802,858		
Hispanic	0.006	31,010	662	4.9179	3,925		
Rest	0.665	3,355,081	330,398	1.0151	1,957,607		

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Table 2. Continued

Sampling Strata - Division 5 - East North Central - MI, OH, IN, IL

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
Geographic div. 5 - MI, OH, IN, IL						45,909	
Black	0.1175	4,298,517			1,727,108		0.6699
Hispanic	0.0265	968,132			193,183		0.7967
Rest	0.8560	31,301,903			16,833,872		0.9720
No. of sample strata = 12							
1) Chicago and Detroit, R(Hispanic) < 0.02 or R(Black) < 0.18 (Rest)						692	
Black	0.037	21,696	2,675	1.6495	1,851		
Hispanic	0.017	9,862	224	1.0497	155		
Rest	0.946	549,072	230,859	0.6055	159,754		
2) Chicago and Detroit, R(Black) ≥ R(Hispanic), and R(Black) ≥ 0.18 (Black)						2,694	
Black	0.857	1,884,562	206,403	0.6494	556,049		
Hispanic	0.013	29,490	1,328	3.3294	3,578		
Rest	0.130	285,114	41,356	1.9215	111,414		
3) Central Cities 250,000+, R(Black) < 0.05 or R(Hispanic) < 0.02 (Rest)						1,359	
Black	0.011	11,683	200	1.6452	272		
Hispanic	0.007	7,853	41	1.1053	55		
Rest	0.981	1,029,686	252,533	0.6632	343,192		
4) Central Cities 250,000 +, R(Black) > R(Hispanic), and R(Black) ≥ 0.05 (Black)						1,615	
Black	0.558	699,026	146,470	0.8842	236,549		
Hispanic	0.008	10,031	155	2.0032	250		
Rest	0.434	543,818	217,706	1.3857	351,595		
5) Chicago and Detroit and Central Cities 250,000 +, R(Hispanic) > R(Black) and R(Hispanic) ≥ 0.02 (Hispanic)						2,137	
Black	0.023	38,270	2,101	2.5596	4,490		
Hispanic	0.254	416,328	60,976	1.2675	130,305		
Rest	0.723	1,184,726	92,059	0.5473	196,730		

Table 2. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
Geographic div. 5 (cont.)						
6) Central cities 50,000-250,000, R(Black) + R(Hispanic) < 0.03 (White)						1,750
Black	0.008	9,489	62	1.4478	108	
Hispanic	0.007	8,906	50	1.3921	88	
Rest	0.985	1,239,384	378,233	0.8684	661,908	
7) In SMSA, not in Central City 250,000 +, R(Black) + R(Hispanic) < 0.03 (White)						8,259
Black	0.003	18,961	31	2.4318	257	
Hispanic	0.009	67,549	125	1.3663	1,031	
Rest	0.988	7,380,599	587,379	0.8576	4,851,160	
8) In SMSA, not in Central City 50,000-250,000, R(Black) + R(Hispanic) < 0.03 (White)						7,939
Black	0.003	19,908	33	2.2941	263	
Hispanic	0.007	39,076	54	1.4904	427	
Rest	0.990	5,756,723	412,449	0.8857	3,274,432	
9) Geograpahic areas in (6), (7), (8), R(Black) + R(Hispanic) ≥ 0.03 (Nonwhite)						8,097
Black	0.189	1,482,293	111,331	1.8226	901,443	
Hispanic	0.039	306,045	6,548	2.1408	53,016	
Rest	0.772	6,069,716	482,639	0.9268	3,907,925	
10) Cities 10,000-50,000, R(Black) + R(Hispanic) < 0.02 (White)						1,067
Black	0.004	3,091	23	1.6416	24	
Hispanic	0.005	3,527	20	1.3675	22	
Rest	0.991	729,934	305,172	0.8075	325,618	
11) Rural 0-10,000, R(Black) + R(Hispanic) < 0.02 (White)						8,235
Black	0.001	6,634	6	3.1017	51	
Hispanic	0.004	22,107	18	1.5812	148	
Rest	0.994	4,919,361	238,793	0.8180	1,966,457	
12) Areas in (10) and (11), R(Black) + R(Hispanic) ≥ 0.02 (Nonwhite)						2,065
Black	0.058	102,904	12,470	2.2409	25,751	
Hispanic	0.027	47,358	1,988	1.9444	4,106	
Rest	0.915	1,613,770	331,082	0.7363	683,685	

Table 2. Continued

Sampling Strata - Division 6 - West North Central

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
Geographic div. 6 - MN, WI, IA, MO, KS, NB, SD, ND						38,749	
Black	0.0442	953,745			378,644		0.7712
Hispanic	0.0121	261,357			21,601		0.9
Rest	0.9437	20,355,355			9,397,172		0.98
Total							

No. of sampling strata = 9

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	
1) Central Cities 250,000 +, R(Black) + R(Hispanic) < 0.06 (White)						1,656	
Black	0.009	13,327	139	1.4624	229		
Hispanic	0.015	21,368	172	1.0176	286		
Rest	0.976	1,394,742	241,366	0.5833	399,702		
2) Central Cities 250,000 +, R(Black) + R(Hispanic) ≥ 0.06, (Nonwhite)						1,707	
Black	0.435	568,135	127,712	1.0737	218,004		
Hispanic	0.038	50,084	5,701	2.5733	9,731		
Rest	0.527	687,762	167,953	1.0172	286,696		
3) Central Cities 50,000-250,000, R(Black) + R(Hispanic) < 0.04 (White)						2,328	
Black	0.006	11,596	74	1.7250	172		
Hispanic	0.008	15,290	68	1.2595	159		
Rest	0.986	1,923,573	397,132	0.7627	924,524		
4) In SMSA, not in Central City 250,000 +, R(Black) + R(Hispanic) < 0.04 (White)						5,012	
Black	0.005	18,172	56	2.0695	282		
Hispanic	0.008	31,461	75	1.3764	374		
Rest	0.988	3,944,243	488,362	0.8880	2,447,668		
5) Areas in (3) and (4), R(Black) + R(Hispanic) ≥ 0.04, (Nonwhite)						1,659	
Black	0.165	238,767	64,310	1.7620	106,691		
Hispanic	0.029	42,275	2,215	1.8471	3,675		
Rest	0.806	1,166,875	362,847	0.8564	601,963		

Table 2. Continued

Sampling Strata - Div. 6 (continued)

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h \, S_h^2}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
6) In SMSA, not in Central City, 50,000-250,000, R(Black) + R(Hispanic) < 0.02 (White)						3,751	
Black	0.001	1,988	4	3.6030	14		
Hispanic	0.004	7,296	13	1.8688	50		
Rest	0.995	1,763,997	246,002	1.0547	922,753		
7) Cities 10,000-50,000, R(Black) + R(Hispanic) < 0.02 (White)						1,392	
Black	0.002	2,568	16	2.1897	23		
Hispanic	0.005	5,717	25	1.2259	35		
Rest	0.992	1,061,192	323,126	0.7456	449,792		
8) Rural 0-10,000, R(Black) + R(Hispanic) < 0.02 (White)						18,205	
Black	0.001	4,934	2	4.8946	32		
Hispanic	0.004	23,674	8	2.1438	141		
Rest	0.996	6,637,872	132,400	0.9979	2,410,350		
9) Areas in (6), (7), (8), R(Black) + R(Hispanic) ≥ 0.02 (Nonwhite)						3,039	
Black	0.049	94,258	16,094	4.0902	48,910		
Hispanic	0.033	64,192	2,253	2.2470	6,846		
Rest	0.918	1,775,099	318,835	0.9667	968,938		

Table 2. Continued

Sampling Strata - Division 7 - TX, OK, AR, LA

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
Geographic div. 7 - TX, OK, AR, LA		234,473,505		'		30,493	
Black	0.1480	3,472,915			1,725,659		0.6650
Hispanic	0.1322	3,102,122			1,924,211		0.7698
Rest	0.7199	16,898,468			11,100,386		0.9704
No. of sampling strata = 11							
1) Houston and Dallas, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.10 (Black)						989	
Black	0.680	719,660	418,113	0.8886	413,514		
Hispanic	0.072	75,737	23,997	2.0229	23,733		
Rest	0.249	263,160	295,632	2.0434	292,380		
2) Houston and Dallas, R(Black) < R(Hispanic) and R(Hispanic) ≥ 0.05 (Hispanic)						1,099	
Black	0.045	55,263	9,522	1.9405	10,464		
Hispanic	0.276	339,807	107,822	1.0620	118,497		
Rest	0.679	835,706	687,702	1.0905	755,785		
3) Houston and Dallas, R(Black) < 0.10 or R(Hispanic) < 0.05 (Rest)						591	
Black	0.026	14,791	2,501	1.9982	1,478		
Hispanic	0.032	18,431	1,835	1.3735	1,084		
Rest	0.942	542,293	721,739	0.9259	426,548		
4) Central Cities 250,000 +, R(Black) < 0.05 or R(Hispanic) < 0.05 (Rest)						723	
Black	0.011	6,891	261	1.6948	189		
Hispanic	0.020	12,228	243	0.9213	176		
Rest	0.969	589,288	356,229	0.7323	257,554		
5) Central Cities 50,000-250,000, R(Black) < 0.06 or R(Hispanic) < 0.06 (Rest)						1,433	
Black	0.014	15,653	364	1.7460	521		
Hispanic	0.020	22,141	562	1.5347	806		
Rest	0.966	1,059,179	481,312	0.9386	689,721		

Table 2.   Continued

Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$

Geographic div. 7 (continued)

6) Central City 50,000 +, R(Black) ≥ R(Hispanic), and R(Black) ≥ 0.05 for ED in Central City 250,000+,
   R(Black) ≥ 0.06 for Central City 50,000-250,000 (Black) — #ED: 2,121

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.545	1,061,253	259,407	1.0179	550,202
Hispanic	0.039	76,765	7,378	2.3733	15,649
Rest	0.415	807,847	222,336	1.2380	471,574

7) Central City 50,000 +, R(Black) < R(Hispanic), and R(Hispanic) ≥ 0.05 for ED in Central City 250,000+,
   R(Hispanic) ≥ 0.06 for ED in Central City 50,000-250,000 (Hispanic) — #ED: 2,325

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.035	92,001	7,065	2.1241	16,426
Hispanic	0.483	1,265,867	446,309	1.2270	1,037,669
Rest	0.482	1,261,296	261,636	0.9429	608,305

8) In SMSA, not in Central City, R(Black) < 0.03 or R(Hispanic) < 0.04 (Rest) — #ED: 5,801

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.006	16,901	75	2.9630	432
Hispanic	0.017	50,307	280	1.9292	1,624
Rest	0.977	2,864,555	421,064	1.3141	2,442,592

9) Cities 10,000-50,000 and Rural 0-10,000, R(Black) < 0.04 or R(Hispanic) < 0.03 (Rest) — #ED: 5,031

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.007	16,645	68	2.4961	343
Hispanic	0.009	23,239	54	1.5850	270
Rest	0.984	2,499,013	217,710	0.9393	1,095,298

10) Areas in (8) and (9), R(Black) ≥ R(Hispanic); R(Black) ≥ 0.03 and 0.04
   for EDs in Areas (8) and (9) respectively (Black) — #ED: 5,064

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.308	1,368,538	141,715	1.3930	717,644
Hispanic	0.026	114,764	4,964	3.1089	25,137
Rest	0.666	2,956,379	370,770	1.0430	1,877,580

11) Areas in (8) and (9), R(Black) < R(Hispanic); R(Hispanic) ≥ 0.04 and 0.03 for EDs in
   Areas (8) and (9) respectively (Hispanic) — #ED: 5,316

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$
Black	0.024	105,319	2,717	2.6312	14,446
Hispanic	0.249	1,102,836	131,596	1.7486	699,565
Rest	0.727	3,219,752	410,657	1.0580	2,183,051

Table 2. Continued

Sampling Strata - Division 8 - NM, CO, WY, MT, ID, UT, AZ, NV

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED	$\dfrac{\hat{V}(\hat{y}_{st2})}{\hat{V}(\hat{y}_{st1})}$
Geographic division 8		11,283,405				19,084	
Black	0.0235	264,583			110,233		0.9703
Hispanic	0.1265	1,427,430			511,626		0.8773
Rest	0.8500	9,591,392			5,857,509		0.9877
No. of sampling strata = 7							

1) Central Cities 50,000+, R(Black) + R(Hispanic) < 0.09 for ED's in Central Cities 250,000+,
   0.04 for ED's in Central Cities 50,000-250,000 (White)

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
						1,415
Black	0.007	8,117	87	1.6271	123	
Hispanic	0.031	36,084	957	1.2131	1,354	
Rest	0.962	1,121,922	515,672	0.9057	729,676	

2) Central Cities 50,000+, R(Black) + R(Hispanic) ≥ 0.09 for ED's in Central Cities 250,000+,
   0.04 for ED's in Central Cities 50,000-250,000 (Nonwhite)

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
						2,373
Black	0.070	154,765	27,475	2.5415	65,197	
Hispanic	0.226	498,315	72,859	1.2854	172,894	
Rest	0.703	1,549,432	270,978	0.7972	643,031	

3) In SMSA, not in Central City, R(Black) + R(Hispanic) < 0.04 (White)

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
						2,322
Black	0.002	2,518	8	2.6601	19	
Hispanic	0.018	22,800	269	1.6708	625	
Rest	0.980	1,228,130	496,923	1.3328	1,153,855	

4) City 10,000-50,000, R(Black) + R(Hispanic) < 0.04 (White)

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
						809
Black	0.002	834	6	2.4414	5	
Hispanic	0.016	7,359	137	1.2844	110	
Rest	0.982	451,009	236,643	0.8726	191,444	

5) Areas in (3) and (4), R(Black) + R(Hispanic) ≥ 0.04 (Nonwhite)

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
						3,573
Black	0.027	86,134	11,973	4.5391	42,781	
Hispanic	0.158	507,492	65,794	1.8059	235,082	
Rest	0.816	2,627,325	536,661	0.9963	1,917,489	

Table 2. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{S_h^2 N_h}{10^3}$	#ED
Geographic division 8 (continued)						
6) Rural 0-10,000, R(Black) + R(Hispanic) < 0.04 (White)						5,666
Black	0.001	858	1	5.0065	3	
Hispanic	0.013	20,751	59	2.0936	333	
Rest	0.986	1,568,117	123,432	1.2694	699,365	
7) Rural 0-10,000, R(Black) + R(Hispanic) ≥ 0.04 (Nonwhite)						2,926
Black	0.008	11,357	719	6.9082	2,104	
Hispanic	0.240	334,629	34,596	1.6264	101,227	
Rest	0.751	1,045,457	178,622	1.1829	522,648	

Table 2. Continued

Sampling Strata - Division 9 - Pacific

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h S_h^2}{10^3}$	#ED	$\dfrac{V(\hat{y}_{st2})}{V(\hat{y}_{st1})}$
Geographic div. 9 - CA, OR, WA, AK, HI		31,466,426				36,713	
Black	0.0623	1,959,046			653,989		0.6318
Hispanic	0.1507	4,741,383			1,889,093		0.8288
Rest	0.7871	24,765,997			15,135,128		0.9754
No. of sampling strata = 13							
1) Los Angeles, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.06 (Black)						752	
Black	0.680	440,692	109,772	0.5654	82,549		
Hispanic	0.128	83,023	14,443	1.0885	10,861		
Rest	0.192	124,611	79,475	1.7013	59,765		
2) Los Angeles, R(Black) < R(Hispanic) and R(Hispanic) ≥ 0.10 (Hispanic)						1,644	
Black	0.050	83,811	9,923	1.9540	16,313		
Hispanic	0.427	716,191	149,894	0.8887	246,426		
Rest	0.523	876,156	146,818	0.7190	241,369		
3) Los Angeles, R(Black) < 0.06 or R(Hispanic) < 0.10 (Rest)						976	
Black	0.015	14,702	264	1.0787	258		
Hispanic	0.055	53,329	1,866	0.7905	1,821		
Rest	0.930	897,876	351,386	0.6444	342,953		
4) Central Cities 250,000+, R(Black) < 0.03 or R(Hispanic) < 0.05 (Rest)						1,471	
Black	0.010	11,539	87	1.1895	128		
Hispanic	0.026	31,620	482	1.0213	709		
Rest	0.964	1,150,287	349,065	0.7555	513,475		
5) Central Cities 50,000-250,000, R(Black) < 0.03 or R(Hispanic) < 0.05 (Rest)						1,564	
Black	0.009	8,874	86	1.6372	135		
Hispanic	0.022	22,106	328	1.2806	512		
Rest	0.969	955,498	377,656	1.0059	590,654		

Table 2. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h S_h^2}{10^3}$	#ED
Geographic div. 9 (continued)						
6) Central Cities 50,000+, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.03 (Black)						1,675
Black	0.314	464,612	111,938	1.2062	187,497	
Hispanic	0.075	110,282	12,109	1.6714	20,283	
Rest	0.612	905,215	588,510	1.4195	985,754	
7) Central Cities 50,000+, R(Black) < R(Hispanic) and R(Hispanic) ≥ 0.05 (Hispanic)						3,810
Black	0.041	158,721	5,369	1.7589	20,457	
Hispanic	0.215	837,019	97,295	1.4198	370,694	
Rest	0.745	2,903,163	345,875	0.7718	1,317,784	
8) In SMSA, not in Central City 250,000+, R(Black) < 0.02 or R(Hispanic) <0.05 (Rest)						4,308
Black	0.007	23,402	94	1.7811	403	
Hispanic	0.025	83,686	561	1.2193	2,417	
Rest	0.968	3,245,599	533,489	0.9695	2,298,271	
9) In SMSA, not in Central City 50,000-250,000, R(Black) < 0.02 or R(Hispanic) < 0.05 (Rest)						3,238
Black	0.004	8,288	38	2.4228	125	
Hispanic	0.025	53,498	596	1.4773	1,929	
Rest	0.971	2,054,182	534,659	1.1526	1,731,226	
10) In SMSA, not in Central City 50,000+, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.02 (Black)						1,458
Black	0.326	478,405	211,433	1.4014	308,269	
Hispanic	0.094	137,639	24,640	1.6628	35,925	
Rest	0.580	849,981	721,230	1.4568	1,051,553	
11) In SMSA, not in Central City 50,000+, R(Black) < R(Hispanic) and R(Hispanic) ≥ 0.05 (Hispanic)						9,972
Black	0.023	236,707	3,323	2.4285	33,138	
Hispanic	0.229	2,367,095	113,091	1.4167	1,127,748	
Rest	0.749	7,751,356	411,105	0.8249	4,099,538	

Table 2. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\,S_h^2}{10^3}$	#ED
Geographic div. 9 (continued)						
12) Cities 10,000-50,000 and Rural 0-10,000, R(Black) + R(Hispanic) < 0.03 (Rest)						3,496
Black	0.001	2,335	4	2.9015	13	
Hispanic	0.014	23,139	113	1.6050	395	
Rest	0.985	1,662,544	338,386	1.2232	1,182,998	
13) Cities 10,000-50,000 and Rural 0-10,000, R(Black) + R(Hispanic $\geq$ 0.03 (Black & Hispanic)						2,349
Black	0.016	26,958	2,003	3.8995	4,704	
Hispanic	0.136	222,756	29,534	1.8122	69,374	
Rest	0.848	1,389,529	306,423	0.9358	719,787	

Table 3. The Stratum Statistics for Each Race - Stratification 1
1980 Census ED Files

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\,S_h^2}{10^3}$	#ED
New England division		12,189,092				14,199
Black	0.038	466,959			198,029	
Hispanic	0.023	283,990			49,889	
Rest	0.938	11,438,143			5,124,762	
1) Central Cities 50,000 +						3,951
Black	0.110	366,550	46,099	2.3143	182,136	
Hispanic	0.058	194,440	11,569	2.1856	45,711	
Rest	0.832	2,778,619	285,612	0.7599	1,128,455	
2) In SMSA, not in Central City						6,448
Black	0.013	76,684	1,820	3.5868	11,733	
Hispanic	0.011	66,190	468	2.1070	3,016	
Rest	0.975	5,856,608	424,650	0.7175	2,738,142	
3) Cities 10,000-50,000						557
Black	0.019	11,642	3,703	2.9113	2,062,452	
Hispanic	0.015	9,526	1,168	1.9984	650,595	
Rest	0.966	597,600	568,322	0.7027	316,555,577	
4) Rural 0-10,000						3,243
Black	0.005	12,083	647	6.8254	2,097,264	
Hispanic	0.006	13,834	158	2.9427	511,018	
Rest	0.988	2,205,316	290,351	0.7924	941,609,852	

Table 3 Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h \, S_h^2}{10^3}$	#ED
Geographic Division 2		36,369,382				39,528
Black	0.1184	4,306,760			2,895,369	
Hispanic	0.0594	2,159,031			676,582	
Rest	0.8222	29,903,591			14,724,927	
1) N.Y.						7,572
Black	0.252	1,767,586	190,582	1.8701	1,443,087	
Hispanic	0.187	1,309,372	62,413	1.4447	472,591	
Rest	0.560	3,924,039	320,219	1.0919	2,424,698	
2) Central Cities 250,000 +						3,643
Black	0.368	1,020,383	151,169	1.3881	550,709	
Hispanic	0.046	127,180	11,478	3.0689	41,814	
Rest	0.586	1,627,519	167,115	0.9150	608,800	
3) Central Cities 50,000-250,000						2,802
Black	0.161	431,712	80,457	1.8410	225,441	
Hispanic	0.074	198,627	21,634	2.0749	60,618	
Rest	0.764	2,043,842	303,077	0.7547	849,222	
4) In NY City SMSA, not in Central City						1,742
Black	0.075	151,578	63,245	2.8902	110,173	
Hispanic	0.041	81,944	6,732	1.7442	22,727	
Rest	0.885	1,789,588	596,640	0.7519	1,039,347	
5) In SMSA, not in Central City, 250,000+ (Except NY SMSA)						7,136
Black	0.076	553,889	50,874	2.9059	363,037	
Hispanic	0.018	131,967	3,461	3.1811	24,698	
Rest	0.906	6,628,597	498,006	0.7597	3,553,771	
6) In SMSA, not in Central City 50,000-250,000						10,083
Black	0.032	323,578	19,117	4.3084	192,757	
Hispanic	0.027	272,600	6,172	2.9059	62,232	
Rest	0.941	9,540,714	439,437	0.7006	4,430,843	

Table 3.   Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\,S_h^2}{10^3}$	#ED
Geographic Div. 2						
7) Cities 10,000-50,000						680
Black	0.031	21,926	7,835	2.7452	5,328	
Hispanic	0.015	10,299	1,705	2.7266	1,159	
Rest	0.954	675,003	312,236	0.5629	212,320	
8) Rural 0-10,000						5,870
Black	0.010	36,108	824	4.6672	4,837	
Hispanic	0.007	27,042	297	3.7395	1,743	
Rest	0.983	3,674,289	273,582	0.8356	1,605,926	

Table 3. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\, S_h^2}{10^3}$	#ED
Division 3 South Atlantic:		36,592,034				46,216
Black	0.2061	7,541,980			4,963,990	
Hispanic	0.0299	1,095,624			565,178	
Rest	0.7639	27,954,430			18,005,977	
1) Central Cities > 250,000+						4,343
Black	0.433	1,654,176	224,611	1.2443	975,487	
Hispanic	0.070	265,367	40,960	3.3122	177,887	
Rest	0.497	1,896,991	385,030	1.4206	1,672,185	
2) Central Cities 50,000-250,000						5,700
Black	0.299	1,376,770	201,308	1.8576	1,147,457	
Hispanic	0.015	67,705	1,359	3.1032	7,744	
Rest	0.686	3,158,555	343,922	1.0583	1,960,356	
3) In SMSA, not in Central City 250,000+						9,158
Black	0.129	1,071,719	84,794	2.4883	776,540	
Hispanic	0.063	523,679	37,880	3.4036	346,905	
Rest	0.809	6,737,856	522,178	0.9822	4,782,106	
4) In SMSA, not in Central City 50,000 to 250,000						12,823
Black	0.125	1,125,676	66,612	2.9400	854,164	
Hispanic	0.016	146,340	1,381	3.2560	17,705	
Rest	0.859	7,767,341	419,244	1.0689	5,375,969	
5) Cities 10,000-50,000						1,669
Black	0.266	403,821	190,437	1.8036	317,840	
Hispanic	0.015	22,727	5,535	5.4635	9,238	
Rest	0.719	1,091,962	439,335	1.0131	733,249	
6) Rural						12,523
Black	0.206	1,909,818	71,269	1.7505	892,502	
Hispanic	0.008	69,806	455	3.8268	5,698	
Rest	0.787	7,301,725	278,057	0.9044	3,482,112	

Table 3. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\,S_h^2}{10^3}$	#ED
Div. 4 - East South Central - KY, TN, AL, MS		14,526,175				18,346
Black	0.195	2,837,644			1,372,156	
Hispanic	0.006	86,317			4,615	
Rest	0.799	11,602,214			6,474,504	
1) Central Cities 250,000+						1,939
Black	0.390	648,789	210,190	1.3702	407,558	
Hispanic	0.005	7,625	34	1.4836	66	
Rest	0.605	1,006,516	287,499	1.0329	557,460	
2) Central Cities 50,000-250,000						2,134
Black	0.266	487,599	195,340	1.934	416,857	
Hispanic	0.007	13,275	160	2.0345	342	
Rest	0.727	1,332,496	413,048	1.0293	881,445	
3) In SMSA, not in Central City						5,573
Black	0.102	411,421	46,549	2.9225	259,415	
Hispanic	0.006	25,183	337	4.0651	1,880	
Rest	0.892	3,600,144	418,094	1.0009	2,330,040	
4) Cities 10,000-50,000						1,406
Black	0.267	335,453	171,880	1.7377	241,663	
Hispanic	0.007	9,045	1,345	5.7001	1,891	
Rest	0.726	910,703	467,990	1.0562	657,994	
5) Rural 0-10,000						7,294
Black	0.166	954,382	73,049	2.0656	532,822	
Hispanic	0.005	31,189	59	1.8009	433	
Rest	0.828	4,752,355	310,012	0.8546	2,261,228	

Table 3. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h S_h^2}{10^3}$	#ED
Geograpic division 5 - East North Central-MI, OH, IN, IL						45,909
Black	0.1175	4,298,517			2,578,264	
Hispanic	0.0265	968,132			242,478	
Rest	0.8560	31,301,903			17,317,136	
1) Chicago and Detroit						5,149
Black	0.465	1,941,988	223,264	1.2528	1,149,586	
Hispanic	0.105	436,399	34,290	2.1848	176,557	
Rest	0.430	1,794,860	155,699	1.1320	801,693	
2) Central Cities 250,000+						3,348
Black	0.280	713,249	115,763	1.5971	387,575	
Hispanic	0.015	37,165	609	2.2233	2,039	
Rest	0.705	1,797,556	255,592	0.9416	855,722	
3) Central Cities 50,000-250,000						4,528
Black	0.190	773,139	104,326	1.8917	472,389	
Hispanic	0.028	112,400	4,245	2.6248	19,223	
Rest	0.783	3,186,335	408,249	0.9080	1,848,553	
4) In SMSA, not in Central City 250,000+						11,349
Black	0.047	502,213	35,455	4.2551	402,379	
Hispanic	0.021	222,341	3,108	2.8455	35,269	
Rest	0.932	9,930,716	578,873	0.8695	6,569,628	
5) In SMSA, not in Central City 50,000-250,000						10,168
Black	0.033	255,299	13,592	4.6433	138,205	
Hispanic	0.011	86,835	447	2.4747	4,542	
Rest	0.955	7,329,371	418,902	0.8979	4,259,396	

Table 3. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\,S_h^2}{10^3}$	#ED
Geographic division 5 - East North Central-MI, OH, IN, IL						
6) Cities 10,000-50,000						1,931
Black	0.044	71,656	10,535	2.7660	20,343	
Hispanic	0.016	26,088	1,369	2.7388	2,644	
Rest	0.940	1,521,701	345,386	0.7458	666,941	
7) Rural 0-10,000						9,436
Black	0.007	40,973	825	6.6161	7,788	
Hispanic	0.008	46,904	234	3.0744	2,204	
Rest	0.985	5,741,364	265,359	0.8141	2,315,203	

Table 3. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\, S_h^2}{10^3}$	#ED
Div. 6 - West North Central - NM, WI, IA, MO, KS, NB, SD, ND						38,749
Black	0.0442	953,745			491,008	
Hispanic	0.0121	261,357			22,628	
Rest	0.9437	20,355,355			9,519,396	
1) Central Cities 250,000+						3,363
Black	0.213	581,462	91,246	1.7471	306,860	
Hispanic	0.026	71,452	3,045	2.5973	10,241	
Rest	0.761	2,082,504	252,297	0.8111	848,476	
2) Central Cities 50,000-250,000						3,027
Black	0.034	87,340	9,635	3.4019	29,164	
Hispanic	0.015	38,691	812	2.2291	2,457	
Rest	0.952	2,476,284	393,389	0.7667	1,190,787	
3) In SMSA, not in Central City 250,000+						5,972
Black	0.038	181,195	17,484	4.3580	104,413	
Hispanic	0.011	50,335	370	2.2807	2,207	
Rest	0.952	4,558,407	467,498	0.8958	2,791,900	
4) In SMSA, not in Central City 50,000-250,000+						4,195
Black	0.004	8,542	262	7.9508	1,100	
Hispanic	0.007	13,698	105	3.1323	439	
Rest	0.989	2,003,970	262,329	1.0722	1,100,468	
5) Cities 10,000-50,000						2,286
Black	0.028	53,081	16,284	5.4956	37,224	
Hispanic	0.020	37,148	2,395	3.0118	5,476	
Rest	0.953	1,809,615	364,303	0.7625	832,797	
6) Rural 0-10,000						19,906
Black	0.006	42,125	615	11.7213	12,248	
Hispanic	0.007	50,033	91	3.7920	1,808	
Rest	0.988	7,424,575	138,399	0.9974	2,754,967	

Table 3. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\,S_h^2}{10^3}$	#ED
Division 7 - TX, OK, AR, LA		234,473,505				30,493
Black	0.1480	3,472,915			2,594,921	
Hispanic	0.1322	3,102,122			2,499,518	
Rest	0.7199	16,898,468			11,439,181	
1) Houston and Dallas						2,679
Black	0.276	789,714	268,504	1.7578	719,323	
Hispanic	0.151	433,975	68,828	1.6195	184,391	
Rest	0.573	1,641,159	623,878	1.2894	1,671,370	
2) Central Cities 250,000+						2,885
Black	0.182	517,842	113,317	1.8754	326,920	
Hispanic	0.273	779,063	271,524	1.9296	783,347	
Rest	0.545	1,555,350	284,555	0.9895	820,942	
3) Central Cities 50,000-250,000						3,717
Black	0.192	657,956	152,241	2.2043	565,880	
Hispanic	0.175	597,938	176,734	2.6133	656,921	
Rest	0.633	2,162,260	367,046	1.0415	1,364,311	
4) In SMSA, not in Central City						10,755
Black	0.075	553,749	41,938	3.9774	451,039	
Hispanic	0.094	700,498	44,815	3.2502	481,981	
Rest	0.831	6,175,032	504,663	1.2373	5,427,656	
5) Cities 10,000-50,000						1,710
Black	0.161	253,606	109,635	2.2326	187,475	
Hispanic	0.113	178,551	72,052	2.5707	123,208	
Rest	0.726	1,144,260	318,889	0.8439	545,301	
6) Rural 0-10,000						8,747
Black	0.131	700,048	39,360	2.4789	344,284	
Hispanic	0.077	412,097	30,830	3.7269	269,668	
Rest	0.791	4,220,407	184,018	0.8891	1,609,602	

Table 3. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h S_h^2}{10^3}$	#ED
Division 8 - NM, CO, WY, MI, ID, UT, AZ, NV		11,283,405				19,084
Black	0.0235	264,583			113,602	
Hispanic	0.1265	1,427,430			583,169	
Rest	0.8500	9,591,392			5,930,237	
1) Central Cities 250,000+						2,132
Black	0.060	116,597	20,088	2.5916	42,828	
Hispanic	0.207	398,920	75,502	1.4685	160,971	
Rest	0.733	1,413,957	294,180	0.8178	627,192	
2) Central Cities 50,000+						1,656
Black	0.032	46,285	15,079	4.3934	24,970	
Hispanic	0.094	135,479	20,010	1.7290	33,136	
Rest	0.874	1,257,397	455,453	0.8888	754,230	
3) In SMSA, not in Central City						4,964
Black	0.019	71,130	7,883	6.1961	39,129	
Hispanic	0.095	358,562	36,392	2.6410	180,648	
Rest	0.886	3,325,435	577,807	1.1347	2,868,233	
4) City 10,000-50,000						1,740
Black	0.016	18,356	2,610	4.8428	4,541	
Hispanic	0.152	179,089	47,832	2.1249	83,228	
Rest	0.832	981,029	256,442	0.8982	446,210	
5) Rural 0-10,000						8,592
Black	0.004	12,215	248	11.0836	2,133	
Hispanic	0.119	355,380	14,570	2.9183	125,187	
Rest	0.877	2,613,574	143,665	1.2460	1,234,371	

Table 3. Continued

	Race Prop.	# Persons	S_h^{*2}	CV	$\dfrac{N_h\,S_h^2}{10^3}$	#ED
Division 9 - CA, OR, WA, AK, HI						36,713
Black	0.0623	1,959,046			1,035,114	
Hispanic	0.1507	4,741,383			2,279,338	
Rest	0.7871	24,765,997			15,516,638	
1) Los Angeles						3,372
Black	0.164	539,205	81,735	1.7879	275,611	
Hispanic	0.259	852,543	109,010	1.3059	367,583	
Rest	0.577	1,898,643	263,439	0.9116	888,315	
2) Central Cities 250,000+						4,394
Black	0.116	464,292	44,787	2.0028	196,792	
Hispanic	0.114	454,817	40,982	1.9558	180,077	
Rest	0.770	3,068,927	412,382	0.9194	1,812,007	
3) Central Cities 50,000-250,000						4,126
Black	0.050	179,454	21,846	3.3983	90,137	
Hispanic	0.153	546,210	69,043	1.9849	284,873	
Rest	0.797	2,845,236	405,706	0.9237	1,673,942	
4) In SMSA, not in Central City 250,000+						11,305
Black	0.057	627,884	37,076	3.4669	419,141	
Hispanic	0.162	1,778,014	85,123	1.8551	962,310	
Rest	0.781	8,593,057	477,527	0.9091	5,398,446	
5) In SMSA, not in Central City 50,000-250,000						7,671
Black	0.019	118,918	6,342	5.1371	48,650	
Hispanic	0.137	863,904	52,948	2.0432	406,165	
Rest	0.844	5,308,061	501,286	1.0232	3,845,362	

Table 3. Continued

	Race Prop.	# Persons	S_h^2	CV	$\dfrac{N_h\ S_h^2}{10^3}$	#ED
Division 9 - CA, OR, WA, AK, HI						
6) Cities 10,000-50,000						1,147
Black	0.018	15,291	2,556	3.7922	2,932	
Hispanic	0.111	95,132	34,137	2.2277	39,155	
Rest	0.871	745,080	386,604	0.9572	443,435	
7) Rural 0-10,000						4,698
Black	0.006	14,002	394	6.6624	1,852	
Hispanic	0.061	150,763	8,339	2.8456	39,176	
Rest	0.933	2,306,993	309,734	1.1333	1,455,132	

Table 4. The Correspondence of the Strata Code
From Stratification 1 (G2) and 2 (G3)

Geographic
Division

Division		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	G3	1	2	3	4										
	G2	1	2	1,2	4,5										
2	G3	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	G2	1	1	1	4	4	6	6	4,6	9	10	9,10	12	13,14	12,13,14
3	G3	1	2	3	4	5	6	7	8	9	10	11	12	13	
	G2	1	1	3	3	1,3	6	6	8	8	6,8	11,13	11,13	11,13	
4	G3	1	2	3	4	5									
	G2	1,2	1,2	4	5,6	4,5,6									
5	G3	1	2	3	4	5	6	7	8	9	10	11	12		
	G2	1	1	3	3	1,3	6	7	8	6,7,8	10	11	10,11		
6	G3	1	2	3	4	5	6	7	8	9					
	G2	1	1	3	4	3,4	6	7	8	6,7,8					
7	G3	1	2	3	4	5	6	7	8	9	10	11			
	G2	1	1	1	4	5	4,5	4,5	8	9,10	8,9,10	8,9,10			
8	G3	1	2	3	4	5	6	7							
	G2	1,2	1,2	4	5	4,5	7	7							
9	G3	1	2	3	4	5	6	7	8	9	10	11	12	13	
	G2	1	1	1	4	5	4,5	4,5	8	9	8,9	8,9	12,13	12,13	

Table 5. Sample Strata Sizes from Proportional and Neyman Allocations for
Geographic Division 2

Strata Divison 2	Race	Proportional Allocation	Neyman Allocation Hispanic	Black	Rest
1) New York City, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.10	Black	12	32	56	8
2) New York City, R(Black) < R(Hispanic) and R(Hispanic) ≥ 0.05	Hispanic	17	69	18	14
3) New York City, R(Black) < 0.10 or R(Hispanic) < 0.05	Rest	10	3	3	10
4) Central Cities 250,000+, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.06	Black	9	8	29	5
5) Central Cities 250,000+, R(Black) <0.06 or R(Hispanic) < 0.02	Rest	7	1	1	4
6) Central Cities 50,000-250,000, R(Black) ≥ R(Hispanic) and R(Black) ≥ 0.04	Black	5	6	15	5
7) Central Cities 50,000-250,000, R(Black) < 0.04 or R(Hispanic) < 0.02	Rest	5	1	1	6
8) Central Cities, R(Hispanic) > R(Black) and R(Hispanic) ≥ 0.02	Hispanic	6	18	4	4
9) In NY City SMSA, not in Central City, R(Black) + R(Hispanic) < 0.08	Rest	6	2	1	9
10) In SMSA, not in central city 250,000+,(except NY SMSA), R(Black) + R(Hispanic) < 0.08	Rest	29	4	5	35
11) Areas in (9) and (10), R(Black) + R(Hispanic) ≥ 0.08	Black,Hispanic	9	16	31	9
12) In SMSA, not in Central City 50,000-250,000, R(Black) + R(Hispanic) < 0.04	Rest	38	7	3	33
13) Cities 10,000-50,000 and Rural 0-10,000, R(Black) + R(Hispanic) < 0.05	Rest	30	3	2	28
14) Areas in (12), R(Black) + R(Hispanic) ≥ 0.04; or 0.05 for Areas in (13)	Black, Hispanic	14	27	28	16
Total		197	197	197	197
$V_{opt}(\hat{Y}_{st}^{(1)})/V_{prop}(\hat{Y}_{st}^{(1)})$			0.3574	0.3267	0.951
$CV(\hat{Y}_{st})$			0.091	0.080	0.054

Table 6. Proportional Sample Allocation for Each Sampling Stratum
$(N = 289,237, n_1 = 1440, n_2 = 721)$

Strata	N_h	n_{1h}	n_{2h}		N_h	n_{1h}	n_{2h}		N_h	n_{1h}	n_{2h}
Division 1	14,199	71	36	Division 3				Division 7			
1	2,368	12	6	13	1,110	6	3	2	1,099	5	3
2	6,030	30	15	Division 4	18,346	91	46	3	591	3	2
3	2,001	10	5	1	1,956	10	5	4	723	4	2
4	3,800	19	10	2	2,117	11	5	5	1,433	7	4
Division 2	39,528	197	98	3	3,876	19	10	6	2,121	11	5
1	2,333	12	6	4	4,472	22	11	7	2,325	12	6
2	3,312	17	9	5	5,925	29	15	8	5,801	29	15
3	1,927	10	5	Division 5	45,909	228	114	9	5,031	25	12
4	1,791	9	4	1	692	3	2	10	5,064	25	12
5	1,414	7	3	2	2,694	13	7	11	5,316	26	13
6	1,009	5	2	3	1,359	7	3	Division 8	19,084	95	47
7	1,103	5	2	4	1,615	8	4	1	1,415	7	3
8	1,128	6	3	5	2,137	11	5	2	2,373	12	6
9	1,289	6	3	6	1,750	9	4	3	2,322	12	6
10	5,727	29	15	7	8,259	41	21	4	809	4	2
11	1,862	9	5	8	7,939	40	20	5	3,573	18	9
12	7,731	38	19	9	8,097	40	20	6	5,666	28	14
13	6,049	30	15	10	1,067	5	2	7	2,926	14	7
14	2,853	14	7	11	8,235	41	21	Division 9	36,713	183	92
Division 3	46,216	230	115	12	2,065	10	5	1	752	4	2
1	2,588	13	6	Division 6	38,749	193	97	2	1,644	8	4
2	1,071	6	3	1	1,656	8	4	3	976	5	2
3	2,832	14	7	2	1,707	8	4	4	1,471	7	4
4	2,281	11	6	3	2,328	12	6	5	1,564	8	4
5	1,271	6	3	4	5,012	25	13	6	1,675	8	4
6	3,091	15	8	5	1,659	8	4	7	3,810	19	9
7	3,925	20	10	6	3,751	19	10	8	4,308	22	11
8	4,477	22	11	7	1,392	7	3	9	3,238	16	8
9	6,829	34	17	8	18,205	91	46	10	1,458	7	4
10	3,659	18	9	9	3,039	15	7	11	9,972	50	25
11	7,604	38	19	Division 7	30,493	152	76	12	3,496	17	9
12	5,478	27	13	1	989	5	2	13	2,349	12	6

TABLE 7 MEAN AND STANDARD DEVIATION OF THE ESTIMATED CENSUS ADJUSTMENT FACTOR FOR SYN DA

SAMPLE SIZE 1440.

	AGE	RACE	SEX	AP2			AP3		
				MEAN	SD	CV	MEAN	SD	CV
1:	0-14	BLACK	MALE	1.07057	.10837991-001	.0101	1.07057	.10837991-001	.0101
2:	0-14	BLACK	FEMALE	1.06559	.10662428-001	.0100	1.06559	.10662428-001	.0100
3:	0-14	HISPANIC	MALE	1.00661	.15072704-002	.0016	1.06162	.14043739-001	.0132
4:	0-14	HISPANIC	FEMALE	1.00402	.12348748-002	.0012	1.05737	.12945119-001	.0122
5:	0-14	REST	MALE	1.00327	.45652151-003	.0005	.99709	.39247175-003	.0004
6:	0-14	REST	FEMALE	1.00193	.39802137-003	.0004	.99667	.55064150-003	.0006
7:	15-29	BLACK	MALE	1.08637	.13038408-001	.0120	1.08637	.13038408-001	.0120
8:	15-29	BLACK	FEMALE	1.03101	.42647213-002	.0041	1.03101	.42647213-002	.0041
9:	15-29	HISPANIC	MALE	1.02431	.69071118-002	.0067	1.07702	.21612005-001	.0201
10:	15-29	HISPANIC	FEMALE	.99966	.27260766-003	.0003	1.02561	.69931231-002	.0068
11:	15-29	REST	MALE	1.01342	.16102293-002	.0016	1.00913	.10578232-002	.0010
12:	15-29	REST	FEMALE	.99980	.24319982-004	.0000	.99774	.35996475-003	.0004
13:	30-44	BLACK	MALE	1.20341	.25929965-001	.0215	1.20341	.25929965-001	.0215
14:	30-44	BLACK	FEMALE	1.05053	.63000895-002	.0060	1.05053	.63000895-002	.0060
15:	30-44	HISPANIC	MALE	1.05153	.12018109-001	.0114	1.17653	.38683365-001	.0329
16:	30-44	HISPANIC	FEMALE	1.01421	.28815579-002	.0028	1.04151	.10089135-001	.0097
17:	30-44	REST	MALE	1.02861	.38059336-002	.0037	1.02119	.26885417-002	.0026
18:	30-44	REST	FEMALE	1.00743	.92489519-003	.0009	1.00343	.60039802-003	.0006
19:	45-64	BLACK	MALE	1.14007	.19681795-001	.0173	1.14007	.19681795-001	.0173
20:	45-64	BLACK	FEMALE	1.02873	.44525642-002	.0043	1.02873	.44525642-002	.0043
21:	45-64	HISPANIC	MALE	1.03905	.97277842-002	.0094	1.11316	.29876110-001	.0268
22:	45-64	HISPANIC	FEMALE	1.01635	.36677187-002	.0036	1.02288	.59766128-002	.0058
23:	45-64	REST	MALE	1.02087	.27218143-002	.0027	1.01589	.22232786-002	.0022
24:	45-64	REST	FEMALE	1.00852	.91272493-003	.0009	1.00832	.86022684-003	.0009
25:	65+	BLACK	MALE	.96605	.71479985-002	.0074	.96605	.71479985-002	.0074
26:	65+	BLACK	FEMALE	.98981	.23101725-002	.0023	.98981	.23101725-002	.0023
27:	65+	HISPANIC	MALE	.99778	.21128024-002	.0021	.97170	.12666858-001	.0130
28:	65+	HISPANIC	FEMALE	1.00605	.34102264-002	.0034	.99355	.38944895-002	.0039
29:	65+	REST	MALE	.99844	.37225841-003	.0004	.99911	.25883642-003	.0003
30:	65+	REST	FEMALE	1.00446	.71345680-003	.0007	1.00477	.78445680-003	.0008

TABLE 7-I MEAN AND STANDARD DEVIATION OF THE ESTIMATED CENSUS ADJUSTMENT FACTOR FOR SYN DA

SAMPLE SIZE 721

	AGE	RACE	SEX	AP2			AP3		
				MEAN	SD	CV	MEAN	SD	CV
1:	0-14	BLACK	MALE	1.07030	.16331350-001	.0153	1.07030	.16331350-001	.0153
2:	0-14	BLACK	FEMALE	1.06519	.17271216-001	.0162	1.06519	.17271216-001	.0162
3:	0-14	HISPANIC	MALE	1.00673	.23230930-002	.0023	1.06249	.20252409-001	.0191
4:	0-14	HISPANIC	FEMALE	1.00411	.19018441-002	.0019	1.05812	.19992034-001	.0189
5:	0-14	REST	MALE	1.00316	.57481833-003	.0006	.99718	.49580432-003	.0005
6:	0-14	REST	FEMALE	1.00185	.40181971-003	.0004	.99680	.57213220-003	.0006
7:	15-29	BLACK	MALE	1.08390	.17613629-001	.0163	1.08390	.17613629-001	.0163
8:	15-29	BLACK	FEMALE	1.03047	.66231446-002	.0064	1.03047	.66231446-002	.0064
9:	15-29	HISPANIC	MALE	1.02438	.82476854-002	.0081	1.07720	.25749808-001	.0239
10:	15-29	HISPANIC	FEMALE	.99965	.36513858-003	.0004	1.02565	.91889597-002	.0090
11:	15-29	REST	MALE	1.01307	.21702625-002	.0021	1.00889	.14251259-002	.0014
12:	15-29	REST	FEMALE	.99982	.49921423-004	.0000	.99782	.43965588-003	.0004
13:	30-44	BLACK	MALE	1.20144	.34544146-001	.0288	1.20144	.34544146-001	.0288
14:	30-44	BLACK	FEMALE	1.05043	.96514217-002	.0092	1.05043	.96514217-002	.0092
15:	30-44	HISPANIC	MALE	1.05137	.16917355-001	.0161	1.17465	.54563429-001	.0465
16:	30-44	HISPANIC	FEMALE	1.01406	.37546858-002	.0037	1.04106	.13110716-001	.0126
17:	30-44	REST	MALE	1.02743	.44789752-002	.0044	1.02038	.31756535-002	.0031
18:	30-44	REST	FEMALE	1.00719	.10293960-002	.0010	1.00330	.66561348-003	.0007
19:	45-64	BLACK	MALE	1.14186	.29570404-001	.0259	1.14186	.29570404-001	.0259
20:	45-64	BLACK	FEMALE	1.02856	.65303951-002	.0063	1.02856	.65303951-002	.0063
21:	45-64	HISPANIC	MALE	1.03823	.13387638-001	.0129	1.11082	.40945764-001	.0369
22:	45-64	HISPANIC	FEMALE	1.01615	.53654375-002	.0053	1.02253	.86525064-002	.0085
23:	45-64	REST	MALE	1.02056	.39340240-002	.0039	1.01563	.31839719-002	.0031
24:	45-64	REST	FEMALE	1.00844	.13415041-002	.0013	1.00825	.12695366-002	.0013
25:	65+	BLACK	MALE	.96601	.11538888-001	.0119	.96601	.11538888-001	.0119
26:	65+	BLACK	FEMALE	.98984	.34962428-002	.0035	.98984	.34962428-002	.0035
27:	65+	HISPANIC	MALE	.99781	.27535328-002	.0028	.97160	.16364865-001	.0168
28:	65+	HISPANIC	FEMALE	1.00546	.39653673-002	.0039	.99420	.45495699-002	.0046
29:	65+	REST	MALE	.99847	.64474570-003	.0006	.99914	.46440610-003	.0005
30:	65+	REST	FEMALE	1.00442	.12594023-002	.0013	1.00473	.13999111-002	.0014

Table 8. Mean and Standard Deviation of the Estimated Census Adjustment Factors for Syn 2

JED,R MSDCVG.
READ-ONLY MODE
ED 16R1C-C FRI-12/12/86-15:30:25-(0,)

SAMPLE SIZE 1440

EDIT	Division	Stratum	Race	AP2 MEAN	AP2 SD	AP2 CV	AP3 MEAN	AP3 SD	AP3 CV
1:		1	white	1.00908	.62774819-002	.0062	1.00556	.36452649-002	.0036
2:		2	white	1.00494	.18173443-002	.0018	1.00304	.10787887-002	.0011
3:	1	3	Nonwhite	1.05186	.33866592-001	.0322	1.06893	.39391686-001	.0369
4:		4	white	1.00406	.39948842-002	.0040	1.00249	.24740734-002	.0025
5:		5	white	1.00597	.28899376-002	.0029	1.00373	.18375820-002	.0018
6:		6	Nonwhite	1.01351	.22169788-001	.0219	1.02615	.43428498-001	.0423
7:		1	Black	1.07433	.21019175-001	.0196	1.07433	.21019175-001	.0196
8:		2	Hispanic	1.01437	.51005462-002	.0050	1.05771	.20309253-001	.0192
9:		3	NB,NH	1.01052	.46462074-002	.0046	1.00692	.31879600-002	.0032
10:		4	Black	1.10642	.55222025-001	.0499	1.10642	.55222025-001	.0499
11:		5	NB,NH	1.00858	.47475562-002	.0047	1.00576	.31758060-002	.0032
12:	2	6	Black	1.07233	.61183571-001	.0571	1.07233	.61183571-001	.0571
13:		7	NB,NH	1.00770	.43579481-002	.0043	1.00492	.27510510-002	.0027
14:		8	Hispanic	1.01640	.12511380-001	.0123	1.07073	.56221300-001	.0525
15:		9	NB,NH	1.00482	.27104845-002	.0027	1.00307	.16906815-002	.0017
16:		10	NB,NH	1.00409	.32624881-002	.0032	1.00258	.21271576-002	.0021
17:		11	B,H	1.03305	.23005997-001	.0223	1.03902	.25126655-001	.0242
18:		12	NB,UH	1.00557	.19354595-002	.0019	1.00335	.11707441-002	.0012
19:		13	NB,UH	1.00473	.45799225-002	.0046	1.00290	.28478618-002	.0028
20:		14	NB,NH	1.00769	.43430115-002	.0043	1.00458	.28175628-002	.0028
21:		15	B,H	1.02119	.14572197-001	.0143	1.02971	.17123695-001	.0166
22:		1	Black	1.08255	.36000242-001	.0333	1.08255	.36000242-001	.0333
23:		2	NB,NH	1.01487	.82649420-002	.0081	1.00953	.52149994-002	.0052
24:		3	Black	1.06912	.43931190-001	.0411	1.06912	.43931190-001	.0411
25:		4	NB,NH	1.01050	.51532454-002	.0051	1.00641	.30815366-002	.0031
26:		5	Hispanic	1.02679	.33926108-001	.0330	1.09144	.11979661+000	.1098
27:		6	Black	1.08941	.59300570-001	.0544	1.08941	.59300570-001	.0544
28:	3	7	NB,NH	1.01378	.51442924-002	.0051	1.00848	.31403966-002	.0031
29:		8	Black	1.08807	.51164903-001	.0470	1.08807	.51164903-001	.0470
30:		9	NB,NH	1.01474	.60530040-002	.0060	1.00879	.38379604-002	.0038
31:		10	Hispanic	1.02481	.14591125-001	.0142	1.09288	.60204398-001	.0551
32:		11	Black	1.03497	.38010279-001	.0367	1.03497	.38010279-001	.0367
33:		12	NB,NH	1.00877	.78872359-002	.0078	1.00533	.47625585-002	.0047
34:		13	Black	1.06194	.27472494-001	.0259	1.06194	.27472494-001	.0259
35:		14	NB,NH	1.01391	.40903969-002	.0040	1.00828	.23796231-002	.0024
36:		15	Hispanic	1.01772	.22474129-001	.0221	1.07005	.93548509-001	.0874
37:		1	White	1.02360	.18473985-001	.0180	1.01412	.10732090-001	.0106
38:		2	White	1.01044	.12409316-001	.0123	1.00621	.73373120-002	.0073
39:		3	NW	1.07869	.46252450-001	.0429	1.07975	.46293968-001	.0429
40:	4	4	white	1.01051	.64191616-002	.0064	1.00598	.37294258-002	.0037
41:		5	white	1.00721	.59526492-002	.0059	1.00433	.37924719-002	.0038
42:		6	White	1.01107	.37043662-002	.0037	1.00624	.20785915-002	.0021
43:		7	NW	1.03417	.14685840-001	.0142	1.03530	.14891320-001	.0144
44:		1	NB,NH	1.01849	.13396182-001	.0132	1.01228	.92266592-002	.0091
45:		2	Black	1.08550	.36579310-001	.0337	1.08550	.36579310-001	.0337
46:		3	NB,NH	1.00474	.32356700-002	.0032	1.00292	.18752886-002	.0019
47:		4	Black	1.05760	.37513788-001	.0355	1.05760	.37513788-001	.0355
48:		5	Hispanic	1.03862	.19251449-001	.0185	1.16276	.81773131-001	.0703
49:	5	6	white	1.00534	.25431934-002	.0025	1.00313	.13197815-002	.0013
50:		7	white	1.00763	.57067390-002	.0057	1.00446	.32905954-002	.0033
51:		8	white	1.00601	.28111683-002	.0028	1.00351	.16394681-002	.0016
52:		9	NW	1.04690	.26759732-001	.0256	1.05740	.28934970-001	.0274
53:		10	white	1.00648	.98798672-002	.0098	1.00378	.59012975-002	.0059

Table 8.

			AP2			AP3		
			MEAN	SD	CV	MEAN	SD	CV
54:		11	White	1.00827	.74295060-002	.0074	1.00493	.61290763-002	.0061
55:		12	NW	1.02037	.27006527-001	.0265	1.02905	.30505812-001	.0296
56:		1	White	1.00652	.39037217-002	.0039	1.00408	.24820712-002	.0025
57:		2	NW	1.06635	.63230961-001	.0593	1.07040	.63630672-001	.0594
58:		3	White	1.00283	.23044844-002	.0028	1.00169	.13457455-002	.0013
59:	6	4	White	1.00468	.27019755-002	.0027	1.00269	.15202561-002	.0015
60:		5	NW	1.02352	.21342234-001	.0209	1.02783	.21565981-001	.0210
61:		6	White	1.00491	.10993957-001	.0109	1.00270	.55351100-002	.0055
62:		7	White	1.00304	.34185645-002	.0034	1.00180	.21606452-002	.0022
63:		8	White	1.00565	.23977774-002	.0024	1.00340	.14578647-002	.0015
64:		9	NW	1.01363	.16461711-001	.0162	1.02181	.22179763-001	.0217
65:		1	Black	1.12449	.77867384-001	.0692	1.12449	.77867384-001	.0692
66:		2	Hispanic	1.02933	.14845816-001	.0144	1.12440	.61199888-001	.0544
67:		3	NB,NH	1.01794	.11813954-001	.0116	1.01107	.72382567-002	.0072
68:		4	NB,NH	1.01187	.88480372-002	.0087	1.00712	.45920579-002	.0046
69:	7	5	NB,NH	1.01135	.11125539-001	.0110	1.00674	.64608438-002	.0064
70:		6	Black	1.04970	.26870923-001	.0256	1.04970	.26870923-001	.0256
71:		7	Hispanic	1.01218	.70481472-002	.0070	1.05127	.29855199-001	.0284
72:		8	NB,NH	1.01474	.76649836-002	.0076	1.00826	.44169275-002	.0044
73:		9	NB,NH	1.01173	.23711991-001	.0234	1.00716	.16108541-001	.0160
74:		10	NB,NH	1.01382	.54174349-002	.0053	1.00810	.30311845-002	.0030
75:		11	B,H	1.04170	.18068075-001	.0173	1.06749	.25401934-001	.0238
76:		1	White	1.01015	.11484142-001	.0114	1.00584	.46091927-002	.0046
77:		2	White	1.00633	.77662689-002	.0077	1.00376	.53878617-002	.0054
78:		3	NW	1.02452	.23044729-001	.0225	1.06040	.54405429-001	.0513
79:	8	4	White	1.01049	.69324065-002	.0069	1.00604	.41564257-002	.0041
80:		5	White	1.00530	.57876254-002	.0058	1.00330	.35615956-002	.0035
81:		6	NW	1.02326	.25829950-001	.0252	1.06293	.73753696-001	.0694
82:		7	All races	1.01406	.26001295-001	.0256	1.01319	.20019086-001	.0198
83:		1	Black	1.05850	.32011104-001	.0302	1.05850	.32011104-001	.0302
84:		2	Hispanic	1.01541	.19289808-001	.0190	1.06404	.80653624-001	.0758
85:		3	NB,NH	1.00788	.37030803-002	.0037	1.00504	.23640053-002	.0024
86:		4	NB,NH	1.01150	.46068683-002	.0046	1.00704	.27086733-002	.0027
87:		5	NB,NH	1.00775	.32614599-002	.0032	1.00450	.19441051-002	.0019
88:		6	Black	1.06073	.35506013-001	.0335	1.06073	.35506013-001	.0335
89:	9	7	Hispanic	1.01496	.10470381-001	.0103	1.06270	.45599476-001	.0429
90:		8	NB,NH	1.00813	.51022408-002	.0051	1.00490	.30026750-002	.0030
91:		9	NB,NH	1.01120	.80455292-002	.0080	1.00668	.48454879-002	.0048
92:		10	Black	1.04288	.53902491-001	.0517	1.04288	.53902491-001	.0517
93:		11	Hispanic	1.00910	.63832920-002	.0063	1.03865	.29011023-001	.0279
94:		12	NB,NH	1.00498	.46762447-002	.0047	1.00294	.26036669-002	.0026
95:		13	NB,NH	1.00890	.91837251-002	.0091	1.00550	.66315710-002	.0066
96:		14	B,H	1.01137	.10026433-001	.0099	1.03772	.32298656-001	.0311

EOF:96
END ED. NO CORRECTIONS APPLIED

Table 8:1 Mean and Standard Deviation of the Estimated Census Adjustment Factors for Syn 2

SAMPLE SIZE 721

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dED,R MSDCVG-S.
READ-ONLY MODE
ED 16R1C-C FRI-12/12/86-15:30:29-(0,)
EDIT
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#	Division	Stratum	Race	AP2 MEAN	AP2 SD	AP2 CV	AP3 MEAN	AP3 SD	AP3 CV
1:	1	1	White	1.00841	.76790382-002	.0076	1.00516	.47325861-002	.0047
2:		2	White	1.00503	.24191678-002	.0024	1.00312	.14833110-002	.0015
3:		3	Nonwhite	1.05152	.53676976-001	.0510	1.06827	.65815822-001	.0616
4:		4	White	1.00440	.60694105-002	.0060	1.00265	.35284277-002	.0035
5:		5	White	1.00678	.45931656-002	.0046	1.00422	.28188628-002	.0028
6:		6	Nonwhite	1.01639	.32427934-001	.0319	1.03136	.65480508-001	.0635
7:	2	1	Black	1.07584	.28047002-001	.0261	1.07584	.28047002-001	.0261
8:		2	Hispanic	1.01378	.65962640-002	.0065	1.05546	.26812676-001	.0254
9:		3	NB,NH	1.00996	.43953776-002	.0044	1.00652	.28300630-002	.0028
10:		4	Black	1.07446	.54441084-001	.0507	1.07446	.54441084-001	.0507
11:		5	NB,NH	1.00642	.47214198-002	.0047	1.00436	.31896032-002	.0032
12:		6	Black	1.05321	.61923450-001	.0588	1.05321	.61923450-001	.0588
13:		7	NB,NH	1.00766	.82567078-002	.0082	1.00480	.50064709-002	.0050
14:		8	Hispanic	1.01372	.12407661-001	.0122	1.05767	.52679864-001	.0498
15:		9	NB,NH	1.00448	.36959599-002	.0037	1.00275	.22942065-002	.0023
16:		10	NB,VH	1.00372	.36516726-002	.0036	1.00235	.23502276-002	.0023
17:		11	B,H	1.03714	.32671535-001	.0315	1.04181	.34983668-001	.0336
18:		12	NB,NH	1.00510	.21584010-002	.0021	1.00309	.13829984-002	.0014
19:		13	NB,NH	1.00419	.52985677-002	.0053	1.00260	.35914143-002	.0036
20:		14	NB,UH	1.00774	.47740352-002	.0047	1.00460	.27466818-002	.0027
21:		15	B,H	1.01942	.15322925-001	.0150	1.02821	.18775743-001	.0183
22:	3	1	Black	1.07183	.42948662-001	.0401	1.07183	.42948662-001	.0401
23:		2	NB,NH	1.01533	.10772753-001	.0106	1.00991	.70477650-002	.0070
24:		3	Black	1.05670	.47100823-001	.0446	1.05670	.47100823-001	.0446
25:		4	NB,NH	1.00923	.67934689-002	.0067	1.00563	.40943760-002	.0041
26:		5	Hispanic	1.02135	.25533948-001	.0250	1.07616	.95488021-001	.0887
27:		6	Black	1.09653	.82418931-001	.0752	1.09653	.82418931-001	.0752
28:		7	NB,NH	1.01309	.74236710-002	.0073	1.00801	.45571761-002	.0045
29:		8	Black	1.09723	.74924780-001	.0683	1.09723	.74924780-001	.0683
30:		9	NB,NH	1.01457	.74990965-002	.0074	1.00864	.45390448-002	.0045
31:		10	Hispanic	1.02188	.19867140-001	.0194	1.08481	.87315059-001	.0805
32:		11	Black	1.04073	.67909844-001	.0653	1.04073	.67909844-001	.0653
33:		12	NB,NH	1.01202	.14407478-001	.0142	1.00730	.89263572-002	.0089
34:		13	Black	1.06268	.40262363-001	.0379	1.06268	.40262363-001	.0379
35:		14	NB,NH	1.01447	.80573911-002	.0079	1.00851	.43772823-002	.0043
36:		15	Hispanic	1.01762	.26687816-001	.0262	1.06764	.10858956+000	.1017
37:	4	1	White	1.02640	.27464636-001	.0268	1.01576	.16140489-001	.0159
38:		2	White	1.00948	.12494945-001	.0124	1.00559	.70760233-002	.0070
39:		3	NW	1.05689	.46152985-001	.0437	1.05796	.46078213-001	.0436
40:		4	White	1.01130	.13737563-001	.0136	1.00650	.80253264-002	.0080
41:		5	White	1.00588	.58146786-002	.0058	1.00355	.35169569-002	.0035
42:		6	White	1.00994	.51542409-002	.0051	1.00568	.30940962-002	.0031
43:		7	NW	1.03498	.21934078-001	.0212	1.03591	.22210457-001	.0214
44:	5	1	NB,NH	1.02352	.23430622-001	.0229	1.01545	.16124991-001	.0159
45:		2	Black	1.09249	.50935598-001	.0466	1.09249	.50935598-001	.0466
46:		3	NB,NH	1.00439	.34627864-002	.0034	1.00268	.20306106-002	.0020
47:		4	Black	1.07146	.80146255-001	.0748	1.07146	.80146255-001	.0748
48:		5	Hispanic	1.04427	.27765278-001	.0266	1.18911	.12185300+000	.1025
49:		6	White	1.00559	.62556417-002	.0062	1.00317	.30870853-002	.0031
50:		7	White	1.00557	.23368622-002	.0023	1.00328	.13310451-002	.0013
51:		8	White	1.00632	.46184044-002	.0046	1.00370	.26840642-002	.0027
52:		9	NW	1.04184	.35039391-001	.0336	1.05014	.35608158-001	.0339
53:		10	White	1.00520	.11283127-001	.0112	1.00313	.73052314-002	.0073

				AP2			AP3		
				MEAN	SD	CV	MEAN	SD	CV
54:		11	White	1.00913	.16595048-001	.0164	1.00575	.14053029-001	.0140
55:		12	NW	1.01853	.28631206-001	.0281	1.02581	.35930161-001	.0350
56:		1	White	1.00550	.44317997-002	.0044	1.00359	.30353201-002	.0030
57:		2	NW	1.06440	.13143647+000	.1235	1.06732	.13133469+000	.1231
58:		3	white	1.00328	.21772989-002	.0022	1.00200	.12334668-002	.0012
59:	6	4	white	1.00512	.46730062-002	.0046	1.00296	.27004083-002	.0027
60:		5	NW	1.02291	.28743428-001	.0281	1.02873	.30977970-001	.0301
61:		6	White	1.00606	.20354529-001	.0202	1.00329	.10175850-001	.0101
62:		7	white	1.00247	.24220199-002	.0024	1.00149	.15217720-002	.0015
63:		8	White	1.00596	.32928520-002	.0033	1.00362	.20418955-002	.0020
64:		9	NW	1.01425	.23331306-001	.0230	1.02394	.31167761-001	.0304
65:		1	Black	1.14402	.10308424+000	.0901	1.14402	.10308424+000	.0901
66:		2	Hispanic	1.02638	.18263125-001	.0178	1.11070	.73747776-001	.0664
67:		3	NB,NH	1.01686	.10795576-001	.0106	1.01050	.67719807-002	.0067
68:		4	NB,NH	1.01230	.11483408-001	.0113	1.00735	.61600689-002	.0061
69:	7	5	NB,NH	1.01485	.33681192-001	.0332	1.00875	.19379546-001	.0192
70:		6	Black	1.05870	.43134642-001	.0407	1.05870	.43134642-001	.0407
71:		7	Hispanic	1.01081	.94063641-002	.0093	1.04530	.39482919-001	.0378
72:		8	NB,NH	1.01446	.11832512-001	.0117	1.00813	.67892347-002	.0067
73:		9	NB,NH	1.01446	.41913461-001	.0413	1.00900	.28771257-001	.0285
74:		10	NB,NH	1.01300	.64466560-002	.0064	1.00757	.39042170-002	.0039
75:		11	B,H	1.03864	.22274734-001	.0214	1.06515	.36056648-001	.0339
76:		1	white	1.01060	.84867382-002	.0084	1.00632	.50835744-002	.0051
77:		2	White	1.00642	.68733309-002	.0068	1.00376	.36618198-002	.0036
78:		3	NW	1.02375	.29814349-001	.0291	1.06412	.75085926-001	.0706
79:	8	4	White	1.01126	.92362078-002	.0091	1.00644	.53092158-002	.0053
80:		5	White	1.00355	.62230728-002	.0062	1.00238	.44727979-002	.0045
81:		6	NW	1.02406	.34822955-001	.0340	1.06757	.93947930-001	.0880
82:		7	All races	1.01109	.12972156-001	.0128	1.01211	.13684461-001	.0135
83:		1	Black	1.05697	.56243234-001	.0532	1.05697	.56243234-001	.0532
84:		2	Hispanic	1.01198	.95834832-002	.0095	1.05050	.40240383-001	.0383
85:		3	NB,NH	1.00781	.49435712-002	.0049	1.00506	.33108706-002	.0033
86:		4	NB,NH	1.01037	.54619803-002	.0054	1.00640	.33567541-002	.0033
87:		5	NB,NH	1.00827	.54348960-002	.0054	1.00477	.31728080-002	.0032
88:		6	Black	1.05786	.51169528-001	.0484	1.05786	.51169528-001	.0484
89:	9	7	Hispanic	1.01356	.13287122-001	.0131	1.05606	.57869079-001	.0548
90:		8	NB,NH	1.00742	.32962004-002	.0033	1.00443	.20883593-002	.0021
91:		9	NB,NH	1.01018	.10175960-001	.0101	1.00614	.61868483-002	.0061
92:		10	Black	1.05030	.92413323-001	.0880	1.05030	.92413323-001	.0880
93:		11	Hispanic	1.00912	.10881989-001	.0108	1.03946	.50666331-001	.0487
94:		12	NB,NH	1.00527	.58108770-002	.0058	1.00314	.32330711-002	.0032
95:		13	NB,NH	1.00924	.83613393-002	.0083	1.00553	.47257227-002	.0047
96:		14	B,H	1.01081	.14118525-001	.0140	1.03938	.46014290-001	.0443

EOF:96
END ED. NO CORRECTIONS APPLIED

Table 9. Variance and Covariance Matrix of the Estimated Census Adjustment Factors
Syn DA - AP2

ED 16R1C-C TUE-07/01/86-09:56:00-(0,)   SAMPLE SIZE 1440
EDIT

1:	1	.11746205-003	.96729756-004	.31610165-007	-.70563532-008	-.54239757-006	-.44742840-006
2:		.85494475-004	.34720086-004	-.19748797-005	.17577951-006	-.35282454-005	.10968645-006
3:		.17297051-003	.57421603-004	.30821100-005	.28954529-005	-.40324666-005	-.10975366-005
4:		.14097034-003	.32410431-004	.77756953-005	.16365987-005	-.29541145-005	-.88186831-006
5:		-.35299610-004	-.12465940-004	.36255983-006	.37477547-005	-.23328634-006	.80344642-006
6:							
7:	2	.96729756-004	.11368736-003	.21617224-006	.79641092-006	-.46191803-006	-.46050359-006
8:		.81225139-004	.36987339-004	.31131511-005	-.50253269-007	-.32146252-005	.12144924-006
9:		.16276853-003	.57007503-004	.51414803-005	.56369877-005	-.32701607-005	-.10050836-005
10:		.11535235-003	.27676047-004	.64892134-005	.35514687-005	-.15212619-005	-.66033848-007
11:		-.28779194-004	-.92447247-005	-.10426994-005	.32288096-005	-.34171074-006	.50964698-006
12:							
13:	3	.31610165-007	.21617224-006	.25833181-005	.16617268-005	.13739097-006	.17923470-006
14:		.27077458-005	.96953733-006	.77487059-005	-.33306961-006	-.27791221-009	-.14517198-007
15:		.51693816-005	.73725863-006	.16959749-004	.35784655-005	.96785600-006	.25335567-006
16:		.30780727-005	.25709184-006	.10325783-004	.43021471-005	.21071126-006	.28467422-007
17:		.48622658-006	-.28978077-006	-.16823997-005	.22139036-005	-.34670575-007	.94089208-007
18:							
19:	4	-.70563532-008	.79641092-006	.16617268-005	.15249158-005	.88684348-007	.81650626-007
20:		.22399341-005	.87742662-006	.62606233-005	-.27787298-006	.62750725-008	-.13443670-007
21:		.12293247-005	.53414056-006	.11217992-004	.26567395-005	.27334135-006	.10281161-006
22:		-.11096644-006	-.23594595-006	.78036264-005	.30431078-005	-.43287186-007	-.34763148-007
23:		.71035625-006	-.37415149-007	-.12075498-005	.13976690-005	.20242711-007	-.60122671-007
24:							
25:	5	-.54239757-006	-.46191803-006	.13739097-006	.88684348-007	.20841189-006	.15707972-006
26:		-.49035290-006	.42528997-007	.26634572-006	-.20962773-007	.59626888-006	-.30342028-007
27:		.15273660-006	-.90816287-007	.89482316-006	.82511133-007	.15112809-005	.35941275-006
28:		.22842778-006	-.21581332-006	.37049131-006	.22616760-006	.74215642-006	.23147389-006
29:		.30381536-007	-.92156454-007	-.74859124-007	.25847207-007	-.57188799-007	.85762352-007
30:							
31:	6	-.44742840-006	-.46050359-006	.17923470-006	.81650626-007	.15707972-006	.15842101-006
32:		-.45168538-006	.26534109-008	.21513391-006	-.14275633-007	.45291956-006	-.26859130-007
33:		-.12325107-006	-.10556666-006	.10147726-005	.90053036-007	.13663681-005	.32628779-006
34:		-.13054145-006	-.36107908-007	.11227474-006	.18518558-006	.67336994-006	.20571248-006
35:		.18078716-006	.78810682-008	-.32399242-007	.25086813-007	-.54937661-007	.85842237-007
36:							
37:	7	.85494475-004	.81225139-004	.27077458-005	.22399341-005	-.49035290-006	-.45168538-006
38:		.17000009-003	.39393190-004	.16324257-004	-.35729624-006	-.18526614-005	.61412134-007
39:		.15913090-003	.47960785-004	.30242742-004	.72279587-005	-.58534282-005	-.14039191-005
40:		.15413280-003	.30545666-004	.17428736-004	.71501312-005	-.15518158-005	-.47054545-007
41:		-.40082071-004	-.12121238-004	-.19597119-005	.97566912-005	-.65343590-006	.15781200-005
42:							
43:	8	.34720086-004	.36987339-004	.96953733-006	.87742662-006	.42528997-007	.26534109-008
44:		.39393190-004	.18187848-004	.45538907-005	-.12912730-006	.63181976-007	-.95914121-008
45:		.69567601-004	.21876898-004	.92789965-005	.30794683-005	.71408931-006	.10299659-006
46:		.49544286-004	.11605226-004	.50197123-005	.30835749-005	.64078269-006	.41888870-006
47:		-.14417123-004	-.43324115-005	-.11773841-005	.28064602-005	-.28953735-006	.48720557-006
48:							
49:	9	-.19748797-005	.31131511-005	.77487059-005	.62606233-005	.26634572-006	.21513391-006
50:		.16324257-004	.45538907-005	.47708193-004	-.16583187-005	-.40410230-006	-.40654502-007
51:		.17135033-004	.49427943-005	.57714791-004	.16386812-004	-.72446607-006	.15906988-006
52:		.82905929-005	.10866439-005	.41930139-004	.19779721-004	.22772963-006	-.38790009-007
53:		-.16776940-005	-.11247242-005	-.88182918-005	.11012746-004	.10981911-006	-.25007582-006

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54:
55:    10   .17577951-006  -.50253269-007  -.33306961-006  -.27787298-006  -.20962773-007  -.14275633-007
56:        -.35729624-006  -.12912730-006  -.16583187-005   .74314938-007   .32322475-009  -.24377205-008
57:        -.94960304-007  -.12327681-006  -.23234258-005  -.60486914-006   .51667489-007  -.41869721-008
58:        -.24090849-006  -.19211287-007  -.16088535-005  -.75619971-006   .10542513-007   .37739325-008
59:        -.33879254-008   .32457885-008   .32368031-006  -.37107912-006  -.84076631-008   .76944377-008
60:
61:    11  -.35282454-005  -.32146252-005  -.27791221-009   .62750725-008   .59626888-006   .45291956-006
62:        -.18526614-005   .63181976-007  -.40410230-006   .32322475-009   .25928385-005  -.92490656-007
63:        -.16173690-005  -.12204681-005   .88915477-006  -.60155301-006   .45343735-005   .11672766-005
64:        -.12251902-005  -.44462198-006  -.48645615-007   .56177378-007   .30327020-005   .10648858-005
65:        -.24328324-007  -.18214876-006  -.98685917-007  -.91044815-007  -.20650356-006   .44138304-006
66:
67:    12   .10968645-006   .12144924-006  -.14517198-007  -.13443670-007  -.30342028-007  -.26859130-007
68:         .61412134-007  -.95914121-008  -.40654502-007  -.24377205-008  -.92490656-007   .59146152-009
69:         .10228091-006   .35284893-007  -.98880623-007   .15603557-007  -.18355765-006  -.54425419-007
70:         .47027389-007   .18451553-008  -.20798295-007  -.13209539-007  -.12681895-006  -.45673851-007
71:        -.29996920-007   .15057838-009   .42514448-008  -.33418479-008   .34802739-008  -.23180000-007
72:
73:    13   .17297051-003   .16276853-003   .51693816-005   .12293247-005   .15273660-006  -.12325107-006
74:         .15913090-003   .69567601-004   .17135033-004  -.94960304-007  -.16173690-005   .10228091-006
75:         .67236308-003   .12906937-003   .58498056-004   .12223394-004   .37499130-005  -.55751271-006
76:         .30324386-003   .73028495-004   .22652570-004   .10903592-004  -.47899317-006   .66590713-006
77:        -.84210115-004  -.28768425-004  -.68536671-005   .22114243-004  -.13544240-005   .36523475-005
78:
79:    14   .57421603-004   .57007503-004   .73725863-006   .53414056-006  -.90816287-007  -.10556666-006
80:         .47960785-004   .21876898-004   .49427943-005  -.12327681-006  -.12204681-005   .35284893-007
81:         .12906937-003   .39691128-004   .99936266-005   .36419567-005  -.17677704-006  -.13151618-006
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84:
85:    15   .30821100-005   .51414803-005   .16959749-004   .11217992-004   .89482316-006   .10147726-005
86:         .30242742-004   .92789965-005   .57714791-004  -.23234258-005   .88915477-006  -.98880623-007
87:         .58498056-004   .99936266-005   .14443494-003   .27772798-004   .46195521-005   .15320959-005
88:         .33938511-004   .38510467-005   .79943989-004   .31503171-004   .19510058-005   .46593906-006
89:        -.39657128-005  -.37980013-005  -.13215005-004   .20505600-004  -.37748729-006   .12592890-005
90:
91:    16   .28954529-005   .56369877-005   .35784655-005   .26567395-005   .82511133-007   .90053036-007
92:         .72279587-005   .30794683-005   .16386812-004  -.60486914-006  -.60155301-006   .15603557-008
93:         .12223394-004   .36419567-005   .27772798-004   .83033759-005   .44112333-006   .13873074-006
94:         .62871126-005   .10847045-005   .19037669-004   .81707094-005  -.18497570-006  -.12935687-006
95:        -.22167366-005  -.91401261-006  -.33494815-005   .45337849-005  -.73606114-007   .72656194-007
96:
97:    17  -.40324666-005  -.32701607-005   .96785600-006   .27334135-006   .15112809-005   .13663681-005
98:        -.58534282-005   .71408931-006  -.72446607-006   .51667489-007   .45343735-005  -.18355765-006
99:         .37499130-005  -.17677704-006   .46195521-005   .44112333-006   .14485131-004   .33090425-005
100:        .24462374-005   .96348217-006   .15351589-005   .90668955-006   .68260847-005   .21714009-005
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102:
103:    18  -.10975366-005  -.10050836-005   .25335567-006   .10281161-006   .35941275-006   .32628779-006
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106:       -.15464082-006  -.48955661-007   .48468724-006   .27064928-006   .18349642-005   .57991998-006
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108:
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110:        .15413280-003   .49544286-004   .82905929-005  -.24090849-006  -.12251902-005   .47027389-007
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111:		.30324386-003	.80274189-004	.33938511-004	.62871126-005	.24462374-005	-.15464082-006
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119:		-.24537691-004	-.78266514-005	-.10601586-005	.88434378-006	-.26815162-006	.58605569-006
120:							
121:	21	.77756953-005	.64892134-005	.10325783-004	.78036264-005	.37049131-006	.11227474-006
122:		.17428736-004	.50197123-005	.41930139-004	-.16088535-005	-.48645615-007	-.20798295-007
123:		.22652570-004	.40459288-005	.79943989-004	.19037669-004	.15351589-005	.48468724-006
124:		.21042498-004	.10060013-005	.94629785-004	.27268556-004	.64554592-006	.23941393-006
125:		-.32828235-005	-.36086334-005	-.14363265-004	.22354889-004	.20450415-006	.18785231-006
126:							
127:	22	.16365987-005	.35514687-005	.43021471-005	.30431078-005	.22616760-006	.18518558-006
128:		.71501312-005	.30835749-005	.19779721-004	-.75619971-006	.56177378-007	-.13209539-007
129:		.10903592-004	.29410898-005	.31503171-004	.81707094-005	.90668955-006	.27064928-006
130:		.60315272-005	.13598964-005	.27268556-004	.13452160-004	.70227027-006	.12580260-006
131:		-.18653335-005	-.12095344-005	-.53962896-005	.71520150-005	-.30298132-007	.13570848-006
132:							
133:	23	-.29541145-005	-.15212619-005	.21071126-006	-.43287186-007	.74215642-006	.67836994-006
134:		-.15518158-005	.64078269-006	.22772963-006	.10542513-007	.30327020-005	-.12681895-006
135:		-.47899317-006	-.29142726-006	.19510058-005	-.18497570-006	.68260847-005	.18349642-005
136:		.17760977-005	.80110842-006	.64554592-006	.70227027-006	.74082733-005	.23297432-005
137:		-.18557107-005	-.48870859-006	-.54727016-006	.64303033-007	-.72276453-006	.12536645-005
138:							
139:	24	-.88186831-006	-.66033848-007	.28467422-007	-.34763148-007	.23147389-006	.20571248-006
140:		-.47054545-007	.41888870-006	-.38790009-007	.37739325-008	.10648858-005	-.45673851-007
141:		.66590713-006	.74308601-007	.46593906-006	-.12935687-006	.21714009-005	.57991998-006
142:		.67990773-006	.24624506-006	.23941393-006	.12580260-006	.23297432-005	.83306679-006
143:		-.76734642-006	-.22515828-006	-.18331811-006	-.30474095-007	-.22897487-006	.41449566-006
144:							
145:	25	-.35299610-004	-.28779194-004	.48622658-006	.71035625-006	.30381536-007	.18078716-006
146:		-.40082071-004	-.14417123-004	-.16776940-005	-.33879254-008	-.24328324-007	-.29996920-007
147:		-.84210115-004	-.20530365-004	-.39657128-005	-.22167366-005	-.13602647-005	.10806126-005
148:		-.10049069-003	-.24537691-004	-.32828235-005	-.18653335-005	-.18557107-005	-.76734642-006
149:		.51093883-004	.13127022-004	.96962334-006	-.15836219-006	.42029412-006	-.73111317-006
150:							
151:	26	-.12465940-004	-.92447247-005	-.28978077-006	-.37415149-007	-.92156454-007	.78810682-008
152:		-.12121238-004	-.43324115-005	-.11247242-005	.32457885-008	-.18214876-006	.15057838-009
153:		-.28768425-004	-.67211552-005	-.37980013-005	-.91401261-006	-.81727877-006	-.58510136-007
154:		-.32858220-004	-.78266514-005	-.36086334-005	-.12095344-005	-.48870859-006	-.22515828-006
155:		.13127022-004	.53368971-005	.40380069-006	-.10386821-006	.52271799-007	-.23091090-006
156:							
157:	27	.36255983-006	-.10426994-005	-.16823997-005	-.12075498-005	-.74859124-007	-.32399242-007
158:		-.19597119-005	-.11773841-005	-.88182918-005	.32368031-006	-.98685917-007	.42514448-008
159:		-.68536671-005	-.87178185-006	-.13215005-004	-.33494815-005	-.50953378-006	-.50442110-007
160:		-.60465190-005	-.10601586-005	-.14363265-004	-.53962896-005	-.54727016-006	-.18331811-006
161:		.96962334-006	.40380069-006	.44639341-005	-.52937042-005	.60976180-008	-.16262800-006
162:							
163:	28	.37477547-005	.32288096-005	.22139036-005	.13976690-005	.25847207-007	.25086813-007
164:		.97566912-005	.28064602-005	.11012746-004	-.37107912-006	-.91044815-007	-.33418479-008
165:		.22114243-004	.32166241-005	.20505600-004	.45337849-005	.39329432-006	.18005402-007
166:		.70644097-005	.88434378-006	.22354889-004	.71520150-005	.64303033-007	-.30474095-007
167:		-.15836219-006	-.10386821-006	-.52937042-005	.11629644-004	.61305946-007	.17818740-007

```
168:
169:  29   -.23328634-006   -.34171074-006   -.34670575-007    .20242711-007   -.57188799-007   -.54937661-007
170:       -.65343590-006   -.28953735-006    .10981911-006   -.84076631-008   -.20650356-006    .34802739-008
171:       -.13544240-005   -.26704819-006   -.37748729-006   -.73606114-007   -.50225246-006   -.14110227-006
172:       -.10150021-005   -.26815162-006    .20450415-006   -.30298132-007   -.72276453-006   -.22897487-006
173:        .42029412-006    .52271799-007    .60976180-008    .61305946-007    .13857632-006   -.23765891-006
174:
175:  30    .80344642-006    .50964698-006    .94089208-007   -.60122671-007    .85762352-007    .85842237-007
176:        .15781200-005    .48720557-006   -.25007582-006    .76944377-008    .44138304-006   -.23180000-007
177:        .36523475-005    .56124488-006    .12592890-005    .72656194-007    .92654031-006    .24351496-006
178:        .22541470-005    .58605569-006    .18785231-006    .13570848-006    .12536645-005    .41449566-006
179:       -.73111317-006   -.23091090-006   -.16262800-006    .17818740-007   -.23765891-006    .50902061-006
180:
EOF:180
END ED. NO CORRECTIONS APPLIED
```

Table 9.-1 Variance and Covariance Matrix of the Estimated Census Adjustment Factors
Syn DA - AP2

```
∂ED,R COVFTRDA3-S.                               SAMPLE SIZE 721
READ-ONLY MODE
ED 16R1C-C MON-12/01/86-09:40:21-(0,)
EDIT
```

Line		Col1	Col2	Col3	Col4	Col5	Col6
1:	1	.26671300-003	.24156644-003	.86791358-007	.18316328-006	.73443487-006	.10456622-006
2:		.21502035-003	.86893429-004	.15169311-005	.55333216-006	.89012395-006	-.11868813-006
3:		.34815047-003	.13253944-003	.15900512-004	.51598646-005	.29666407-005	.97838080-006
4:		.31953886-003	.68983542-004	.10639327-004	.52794712-005	.81047770-005	.33314923-005
5:		-.74825055-004	-.25757325-004	.44336583-006	.29630744-005	-.20352855-005	.44208918-005
6:							
7:	2	.24156644-003	.29829490-003	.15607939-005	.29111016-005	.13742230-005	.74164236-006
8:		.22633926-003	.98130531-004	.14336490-004	.23597399-007	.29322239-005	-.17890292-006
9:		.36066103-003	.14564639-003	.31955567-004	.14064687-004	.89533751-005	.26103288-005
10:		.28151064-003	.65181615-004	.31221206-005	.72314910-005	.12759043-004	.49537544-005
11:		-.66066471-004	-.21353497-004	.38345417-006	.58116478-006	-.25300887-005	.47319397-005
12:							
13:	3	.86791358-007	.15607939-005	.53967610-005	.39934176-005	.77321378-007	.85270876-007
14:		.45455769-005	.18786676-005	.16795413-004	-.71584655-006	.77169874-007	-.31243839-008
15:		.67788781-006	.10547323-005	.32890595-004	.69008640-005	-.49653352-007	.12440649-007
16:		-.69495064-006	.73523804-006	.21552719-004	.91063932-005	-.76196789-006	-.23371382-006
17:		.18144128-005	.51994221-006	-.37686438-005	.52082226-005	.14081233-006	-.10056627-006
18:							
19:	4	.18316328-006	.29111016-005	.39934176-005	.36170111-005	.62894499-007	.71798855-007
20:		.44313816-005	.18084198-005	.13722449-004	-.59204939-006	.82821612-008	-.39793259-008
21:		.13053815-005	.18522664-005	.26491540-004	.57590322-005	-.95098563-008	.22182856-007
22:		-.10071645-005	.61159257-006	.16051975-004	.68279341-005	-.52900767-006	-.18440404-006
23:		.26655692-005	.80719212-006	-.25940934-005	.34836751-005	.14827309-006	-.17729380-006
24:							
25:	5	.73443487-006	.13742230-005	.77321378-007	.62894499-007	.33041612-006	.20031156-006
26:		.11590655-005	.34812823-006	.33195356-006	-.17307711-007	.98773476-006	-.39655600-007
27:		.41359291-005	.87130860-006	.13895629-005	.21012712-006	.21612007-005	.50210687-006
28:		.40442265-005	.79186150-006	.60116634-006	.32628955-006	.12427156-005	.45352631-006
29:		-.13397597-005	-.46588242-006	-.21498567-006	.33976064-006	-.86903788-007	.19412693-006
30:							
31:	6	.10456622-006	.74164236-006	.85270876-007	.71798855-007	.20031156-006	.16145908-006
32:		.87479841-006	.14298649-006	.40617070-006	-.21309385-007	.71138988-006	-.30688498-007
33:		.27415499-005	.48500829-006	.10602444-005	.93387808-007	.15646338-005	.34014289-006
34:		.26635247-005	.61640616-006	.46457725-006	.23541205-006	.93350663-006	.33946441-006
35:		-.10899981-005	-.30331963-006	-.17426287-006	.16760628-006	-.61227268-007	.13184998-006
36:							
37:	7	.21502035-003	.22633926-003	.45455769-005	.44313816-005	.11590655-005	.87479841-006
38:		.31023992-003	.10236473-003	.21131494-004	-.15952616-006	.57258172-005	-.24474184-006
39:		.41753665-003	.13949652-003	.50554894-004	.11209171-004	.10097276-004	.23841929-005
40:		.32890574-003	.76300537-004	.11267070-004	.10850476-004	.13308411-004	.53718875-005
41:		-.86039088-004	-.24768796-004	.53615758-006	.32432293-005	-.27476795-005	.66881195-005
42:							
43:	8	.86893429-004	.98130531-004	.18786676-005	.18084198-005	.34812823-006	.14298649-006
44:		.10236473-003	.43866045-004	.72003004-005	-.89461049-007	.14464799-005	-.91871388-007
45:		.14792928-003	.54872791-004	.19977546-004	.55788122-005	.20952243-005	.64776682-006
46:		.11532296-003	.27062004-004	.15929746-005	.47401874-005	.41217756-005	.18014142-005
47:		-.30977089-004	-.97508249-005	.20874598-006	.11198240-005	-.90163529-006	.19472812-005
48:							
49:	9	.15169311-005	.14336490-004	.16795413-004	.13722449-004	.33195356-006	.40617070-006
50:		.21131494-004	.72003004-005	.68024315-004	-.26185985-005	.95050512-006	.40360388-008
51:		.20189050-004	.96352377-005	.11694216-003	.25535297-004	.35716410-006	.47292431-006
52:		.30351149-005	.28691596-005	.74470356-004	.32265863-004	-.74372776-006	-.47918644-006
53:		.11793324-004	.40430250-005	-.12488883-004	.18560319-004	.60905959-006	-.78909556-006

54:						
55:	10	.55333216-006	.23597399-007	-.71584655-006	-.59204939-006	-.17307711-007	-.21309385-007
56:		-.15952616-006	-.89461049-007	-.26185985-005	.13332618-006	-.46273621-009	-.41959492-008
57:		.40370732-006	.14018589-007	-.48627691-005	-.10854917-005	.44227606-007	-.12844187-007
58:		.82427137-006	-.33209462-007	-.31127718-005	-.13644317-005	.22443292-007	.25998003-007
59:		-.37625986-006	-.20084366-006	.52087121-006	-.78521641-006	-.24481862-007	.21406479-007
60:							
61:	11	.89012395-006	.29322239-005	.77169874-007	.82821612-008	.98773476-006	.71138988-006
62:		.57258172-005	.14464799-005	.95050512-006	-.46273621-009	.47100392-005	-.14109143-006
63:		.16864030-004	.22368018-005	.48463769-005	-.73130979-007	.79181744-005	.18655269-005
64:		.11656942-004	.18263158-005	.78482933-006	.10656392-005	.53889539-005	.19688339-005
65:		-.32545903-005	-.14131108-005	-.91213044-006	.11809631-005	-.38737422-006	.10656844-005
66:							
67:	12	-.11868813-006	-.17890292-006	-.31243839-008	-.39793259-008	-.39655600-007	-.30688498-007
68:		-.24474184-006	-.91871388-007	.40360388-008	-.41959492-008	-.14109143-006	.24921485-008
69:		-.73447332-006	-.14815444-006	-.17761198-006	.79822087-010	-.25740660-006	-.64200099-007
70:		-.54516307-006	-.13748982-006	-.68419133-007	-.25193498-007	-.18070803-006	-.71894386-007
71:		.15613643-006	.58262026-007	.26444648-007	-.38796179-007	.89369598-008	-.45716176-007
72:							
73:	13	.34815047-003	.36066103-003	.67788781-006	.13053815-005	.41359291-005	.27415499-005
74:		.41753665-003	.14792928-003	.20189050-004	.40370732-005	.16864030-004	-.73447332-006
75:		.11932981-002	.25890380-003	.91673619-004	.14065136-004	.32842121-004	.86355278-005
76:		.53762160-003	.13468132-003	.18279010-004	.90019402-005	.27087275-004	.94371567-005
77:		-.16010916-003	-.52421827-004	.12862484-005	.51087179-006	-.41307167-005	.10868860-004
78:							
79:	14	.13253944-003	.14564639-003	.10547323-005	.18522664-005	.87130860-006	.48500829-006
80:		.13949652-003	.54872791-004	.96352377-005	.14018589-007	.22368018-005	-.14815444-006
81:		.25890380-003	.93149940-004	.27035867-004	.71310170-005	.69947570-005	.19268811-005
82:		.18480240-003	.43761844-004	.10400094-004	.64450081-005	.67344430-005	.26151603-005
83:		-.45266680-004	-.15027311-004	.10636163-006	.19892296-005	-.14610994-005	.29234377-005
84:							
85:	15	.15900512-004	.31955567-004	.32890595-004	.26491540-004	.13895629-005	.10602444-005
86:		.50554894-004	.19977546-004	.11694216-003	-.48627691-005	.48463769-005	-.17761198-006
87:		.91673619-004	.27035867-004	.28619689-003	.51941972-004	.78685055-005	.21493255-005
88:		.31008625-004	.13101952-004	.17339107-003	.70668050-004	.29553368-005	.98074957-006
89:		.55350053-005	.20139295-005	-.31089855-004	.46832160-004	.73721546-006	.95910837-006
90:							
91:	16	.51598646-005	.14064687-004	.69008640-005	.57590322-005	.21012712-006	.93387808-007
92:		.11209171-004	.55788122-005	.25535297-004	-.10854917-005	-.73130979-007	.79822087-010
93:		.14065136-004	.71310170-005	.51941972-004	.14097666-004	.11892047-005	.27924189-006
94:		.39320463-005	.20421897-005	.38197522-004	.15104530-004	-.43211819-006	-.32788954-006
95:		.10231039-005	.67054072-006	-.61866768-005	.89901400-005	.26383268-006	-.44332379-006
96:							
97:	17	.29666407-005	.89533751-005	-.49653352-007	-.95098563-008	.21612007-005	.15646338-005
98:		.10097276-004	.20952323-005	.35716410-006	.44227606-007	.79181744-005	-.25740660-006
99:		.32842121-004	.69947570-005	.78685055-005	.11892047-005	.20061219-004	.42407603-005
100:		.37294994-004	.79144591-005	.82233847-005	.32253238-005	.10847761-004	.38641342-005
101:		-.17168350-004	-.48742763-005	-.24635079-005	.23789005-005	-.84687918-006	.20521228-005
102:							
103:	18	.97838080-006	.26103288-005	.12440649-007	.22182856-007	.50210687-006	.34014289-006
104:		.23841929-005	.64776682-006	.47292431-006	-.12844187-007	.18655269-005	-.64200099-007
105:		.86355278-005	.19268811-005	.21493255-005	.27924189-006	.42407603-005	.10596561-005
106:		.69456586-005	.14439920-005	.15323696-005	.59349840-006	.25050301-005	.86145803-006
107:		-.31248365-005	-.87533661-006	-.33581072-006	.46189172-006	-.22054652-006	.51757614-006
108:							
109:	19	.31953886-003	.28151064-003	-.69495064-006	-.10071645-005	.40442265-005	.26635247-005
110:		.32890574-003	.11532296-003	.30351149-005	.82427137-006	.11656942-004	-.54516307-006

111:		.53762160-003	.18480240-003	.31008625-004	.39320463-005	.37294994-004	.69456586-005
112:		.87440877-003	.16380471-003	.85051038-005	.10743134-004	.30413123-004	.10458129-004
113:		-.21947107-003	-.67088155-004	-.51837551-005	-.14104551-005	-.45824191-005	.86390007-005
114:							
115:	20	.68983542-004	.65181615-004	.73523804-006	.61159257-006	.79186150-006	.61640616-006
116:		.76300537-004	.27062004-004	.28691596-005	-.33209462-007	.18263158-005	-.13748982-006
117:		.13468132-003	.43761844-004	.13101952-004	.20421897-005	.79144591-005	.14439920-005
118:		.16380471-003	.42646060-004	.75322185-005	.40918682-005	.67463895-005	.22668354-005
119:		-.55198509-004	-.15953906-004	-.20652624-005	.89774956-006	-.95737591-006	.20464996-005
120:							
121:	21	.10639327-004	.31221206-005	.21552719-004	.16051975-004	.60116634-006	.46457725-006
122:		.11267070-004	.15929746-005	.74470356-004	-.31127718-005	.78482933-006	-.68419133-007
123:		.18279010-004	.10400094-004	.17339107-003	.38197522-004	.82233847-005	.15323696-005
124:		.85051038-005	.75322185-005	.17922885-003	.60343400-004	.23026420-005	.46924340-007
125:		.21682114-005	-.83800930-006	-.27899726-004	.40965326-004	.42268946-006	-.24442086-007
126:							
127:	22	.52794712-005	.72314910-005	.91063932-005	.68279341-005	.32628955-006	.23541205-006
128:		.10850476-004	.47401874-005	.32265863-004	-.13644317-005	.10656392-005	-.25193498-007
129:		.90019402-005	.64450081-005	.70668050-004	.15104530-004	.32253238-005	.59349840-006
130:		.10743134-004	.40918682-005	.60343400-004	.28787920-004	.15816152-005	.35128861-006
131:		.90815170-006	-.93201437-006	-.10588657-004	.16020938-004	-.36690172-007	.52811339-006
132:							
133:	23	.81047770-005	.12759043-004	-.76196789-006	-.52900767-006	.12427156-005	.93350663-006
134:		.13308411-004	.41217756-005	-.74372776-005	.22443292-007	.53889539-005	-.18070803-006
135:		.27087275-004	.67344430-005	.29553368-005	-.43211819-006	.10847761-004	.25050301-005
136:		.30413123-004	.67463895-005	.23026420-005	.15816152-005	.15476545-004	.50222977-005
137:		-.13572027-004	-.37898010-005	-.18450586-005	.16024425-005	-.18427224-005	.36002568-005
138:							
139:	24	.33314923-005	.49537544-005	-.23371382-006	-.18440404-006	.45352631-006	.33946441-006
140:		.53718875-005	.18014142-005	-.47918644-006	.25998003-007	.19688339-005	-.71894386-007
141:		.94371567-005	.26151603-005	.98074957-006	-.32788954-006	.38641342-005	.86145803-006
142:		.10458129-004	.22668354-005	.46924340-007	.35128861-006	.50222977-005	.17996331-005
143:		-.49257483-005	-.14318646-005	-.62475105-006	.53320773-006	-.58569889-006	.11845375-005
144:							
145:	25	-.74825055-004	-.66066471-004	.18144128-005	.26655692-005	-.13397597-005	-.10899981-005
146:		-.86039088-004	-.30977089-004	.11793324-004	-.37625986-006	-.32545903-005	.15613643-006
147:		-.16010916-003	-.45266680-004	.55350053-005	.10231039-005	-.17168350-004	-.31248365-005
148:		-.21947107-003	-.55198509-004	.21682114-005	.90815170-006	-.13572027-004	-.49257483-005
149:		.13314594-003	.32764601-004	.15981498-006	.19770369-005	.19308319-005	-.36881332-005
150:							
151:	26	-.25757325-004	-.21353497-004	.51994221-006	.80719212-006	-.46588242-006	-.30331963-006
152:		-.24768796-004	-.97508249-005	.40430250-005	-.20084366-006	-.14131108-005	.58262026-007
153:		-.52421827-004	-.15027311-004	.20139295-005	.67054072-006	-.48742763-005	-.87533661-006
154:		-.67088155-004	-.15953906-004	-.83800930-006	-.93201437-006	-.37898010-005	-.14318646-005
155:		.32764601-004	.12223714-004	.27816973-006	.50309694-006	.43753968-006	-.10681555-005
156:							
157:	27	.44336583-006	.38345417-006	-.37686938-005	-.25940934-005	-.21498567-006	-.17426287-006
158:		.53615758-006	.20874598-006	-.12488883-004	.52087121-006	-.91213044-006	.26444648-007
159:		.12862484-005	.10636163-006	-.31089855-004	-.61866768-005	-.24635079-005	-.33581072-006
160:		-.51837551-005	-.20652624-005	-.27899726-004	-.10588657-004	-.18450586-005	-.62475105-006
161:		.15981498-006	.27816973-006	.75819430-005	-.85484050-005	.71718389-007	-.34668024-006
162:							
163:	28	.29630744-005	.58116478-006	.52082226-005	.34836751-005	.33976064-006	.16760628-006
164:		.32432293-005	.11198240-005	.18560319-004	-.78521641-006	.11809631-005	-.38796179-007
165:		.51087179-006	.19892296-005	.46832160-004	.89901400-005	.23789005-005	.46189172-006
166:		-.14104551-005	.89774956-006	.40965326-004	.16020938-004	.16024425-005	.53320773-006
167:		.19770369-005	.50309694-006	-.85484050-005	.15724138-004	.52770077-007	.16440522-006

q - V

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168:
169:  29  -.20352855-005  -.25300887-005   .14081233-006   .14827309-006  -.86903788-007  -.61227268-007
170:      -.27476795-005  -.90163529-006   .60905959-006  -.24481862-007  -.18737422-006   .89369598-008
171:      -.41307167-005  -.14610994-005   .73721546-006   .26383268-006  -.84687918-006  -.22054652-006
172:      -.45824191-005  -.95737591-006   .42268946-006  -.36690172-007  -.18427224-005  -.58569889-006
173:       .19308319-005   .43753968-006   .71718389-007   .52770077-007   .41569701-006  -.73363841-006
174:
175:  30   .44208918-005   .47319397-005  -.10056627-006  -.17729380-006   .19412693-006   .13184998-006
176:       .66881195-005   .19472812-005  -.78909556-006   .21406479-007   .10656844-005  -.45716176-007
177:       .10868860-004   .29234377-005   .95910837-006  -.44332379-006   .20521228-005   .51757614-006
178:       .86390007-005   .20464996-005  -.24442086-007   .52811339-006   .36002568-005   .11845375-005
179:      -.36881332-005  -.10681555-005  -.34668024-006   .16440522-006  -.73363841-006   .15860941-005
180:
EOF:180
END ED. NO CORRECTIONS APPLIED
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Table 10. Variance and Covariance Matrix of the Estimated Census Adjustment Factors

Syn DA - AP3

ED 16R1C-C TUE-07/01/86-09:56:01-(0,)

EDIT

SAMPLE SIZE 1440

Row	Grp	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6
1:	1	.11746205-003	.96729756-004	.26616449-005	-.35812288-005	.55191951-006	.69250656-006
2:		.85494475-004	.34720086-004	-.52086668-005	-.15687842-005	-.23467192-005	.89024559-006
3:		.17297051-003	.57421603-004	.72488803-005	.10035713-004	-.28475180-005	-.97010995-006
4:		.14097034-003	.32410431-004	.22799712-004	.30326817-005	-.25485465-005	-.81749820-006
5:		-.35299610-004	-.12465940-004	.93508282-006	-.47613384-005	-.93192485-008	.84116143-006
6:							
7:	2	.96729756-004	.11368736-003	.55380250-005	.79909522-005	.47807948-006	.64742446-006
8:		.81225139-004	.36987339-004	.10450068-004	.30120820-005	-.21581877-005	.85380475-006
9:		.16276853-003	.57007503-004	.13783354-004	.19555676-004	-.22164053-005	-.93217325-006
10:		.11535235-003	.27676047-004	.18971102-004	.64773484-005	-.14499512-005	-.42202764-007
11:		-.28779194-004	-.92447247-005	-.71774345-005	-.41029805-005	-.88251232-007	.46069613-006
12:							
13:	3	.26616449-005	.55380250-005	.19722660-003	.15863732-003	-.10540031-005	-.23436363-005
14:		.23995325-004	.89203647-005	.21198651-003	.77621947-004	-.19549637-006	-.27455915-006
15:		.46929241-004	.75678823-005	.47435495-003	.11333121-003	.54063841-005	.13573682-005
16:		.26358834-004	.27806205-005	.28324828-003	.62423428-004	.97380274-006	.58175099-007
17:		.42155314-005	-.20435564-005	-.93883481-004	-.22270087-004	-.27588649-006	.99023364-006
18:							
19:	4	-.35812288-005	.79909522-005	.15863732-003	.16757610-003	-.75300198-006	-.14107139-005
20:		.21391363-004	.77498349-005	.20404495-003	.73711074-004	-.24305199-007	-.36465744-006
21:		.32482005-005	.30292981-005	.38743097-003	.10014228-003	.13858060-005	.50336335-006
22:		-.43021596-005	-.29184747-005	.25653155-003	.54539733-004	-.24159622-006	-.20414362-006
23:		.93234111-005	-.17755257-006	-.81741895-004	-.17016823-004	.49183232-008	-.54191925-006
24:							
25:	5	.55191951-006	.47807948-006	-.10540031-005	-.75300198-006	.15403407-006	.18569127-006
26:		.48529533-006	-.29062583-007	-.90712637-006	-.29511497-006	-.34606883-006	.11123747-006
27:		-.59089659-007	.10556782-006	-.25751080-005	-.37322867-006	-.91866118-006	-.20768065-006
28:		-.18389878-006	.16048586-007	-.14424021-005	-.40346261-006	-.51947846-006	-.19403374-006
29:		-.29369525-007	.78507942-007	.79405612-006	.27003730-007	.21716498-007	-.88568598-007
30:							
31:	6	.69250656-006	.64742446-006	-.23436363-005	-.14107139-005	.18569127-006	.30320606-006
32:		.65356072-006	-.10499229-007	-.11074227-005	-.30879140-006	-.40920443-006	.14446584-006
33:		.53366828-006	.17832941-006	-.48247612-005	-.66680192-006	-.13207338-005	-.30274482-006
34:		.34315184-006	.38339774-007	-.83914674-006	-.49315469-006	-.72632784-006	-.26451470-006
35:		-.27920960-006	-.17687803-007	.62597934-006	-.79741769-008	.30411478-007	-.11811668-006
36:							
37:	7	.85494475-004	.81225139-004	.23995325-004	.21391363-004	.48529533-006	.65356072-006
38:		.17000009-003	.39393190-004	.51369769-004	.13677727-004	-.11773291-005	.75642460-006
39:		.15913090-003	.47960785-004	.96513290-004	.23886554-004	-.40493294-005	-.88992523-006
40:		.15413280-003	.30545666-004	.55415814-004	.13106181-004	-.14647762-005	-.48033706-007
41:		-.40082071-004	-.12121238-004	-.16875578-004	-.11854412-004	-.44386491-006	.17684281-005
42:							
43:	8	.34720086-004	.36987339-004	.89203647-005	.77498349-005	-.29062583-007	-.10499229-007
44:		.39393190-004	.18187848-004	.14636512-004	.43642692-005	.37883742-007	.67669171-007
45:		.69567601-004	.21876898-004	.28586727-004	.10983203-004	.54586851-006	.30439292-007
46:		.49544286-004	.11605226-004	.15705094-004	.54021458-005	.43073149-006	.40001104-006
47:		-.14417123-004	-.43324115-005	-.90980116-005	-.34280824-005	-.17409804-006	.52490520-006
48:							
49:	9	-.52086668-005	.10450068-004	.21198651-003	.20404495-003	-.90712637-006	-.11074227-005
50:		.51369769-004	.14636512-004	.46707874-003	.13676528-003	-.76120011-006	-.34085520-006
51:		.56004446-004	.16132940-004	.58068999-003	.18006962-003	-.16184399-005	-.24074245-008
52:		.26906337-004	.37703250-005	.39933280-003	.10309555-003	.27807585-006	-.24619922-006
53:		-.56050131-005	-.34729585-005	-.16801341-003	-.40100908-004	.34116670-007	-.67053807-006

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55:   10   -.15687842-005    .30120820-005    .77621947-004    .73711074-004   -.29511497-006   -.30879140-006
56:         .13677727-004    .43642692-005    .13676528-003    .48903770-004   -.19008024-006   -.25542842-007
57:         .14397655-004    .43786209-005    .19738222-003    .57052544-004   -.48213223-006   -.16640414-006
58:         .10060952-004    .85313976-006    .13587194-003    .34153790-004   -.80970138-006   -.39644119-006
59:        -.13586083-005   -.96104601-006   -.54949387-004   -.12079100-004    .31610035-009   -.22989368-006
60:
61:   11   -.23467192-005   -.21581877-005   -.19549637-006   -.24305199-007   -.34606883-006   -.40920443-006
62:        -.11773291-005    .37883742-007   -.76120011-006   -.19008024-006    .11189899-005   -.34158720-006
63:        -.13089581-005   -.83541806-006    .16360385-005   -.12629247-005    .20991414-005    .49421550-006
64:        -.96811290-006   -.33275924-006    .18176580-006    .96564494-007    .16303256-005    .65944094-006
65:        -.28590786-008   -.10369902-006   -.10401636-005    .12154786-006   -.96462964-007    .31116343-006
66:
67:   12    .89024559-006    .85380475-006   -.27455915-006   -.36465744-006    .11123747-006    .14446584-006
68:         .75642460-006    .67669171-007   -.34085520-006   -.25542842-007   -.34158720-006    .12957462-006
69:         .10638462-005    .34974925-006   -.13712058-005    .24073423-006   -.74406412-006   -.18260272-006
70:         .36910078-006    .84114296-007   -.25334914-006   -.83826685-007   -.59342199-006   -.23357635-006
71:        -.11727620-006    .38200236-008    .56400488-006   -.46592022-007    .25711802-007   -.10611886-006
72:
73:   13    .17297051-003    .16276853-003    .46929241-004    .32482005-005   -.59089659-007    .53366828-006
74:         .15913090-003    .69567601-004    .56004446-004    .14397655-004   -.13089581-005    .10638462-005
75:         .67236308-003    .12906937-003    .18207102-003    .41945436-004    .24712537-005   -.44906148-006
76:         .30324386-003    .73028495-004    .71979448-004    .18536708-004   -.35473914-006    .52958101-006
77:        -.84210115-004   -.28768425-004   -.42627489-004   -.24958896-004   -.70650511-006    .39558630-005
78:
79:   14    .57421603-004    .57007503-004    .75678823-005    .30292981-005    .10556782-006    .17832941-006
80:         .47960785-004    .21876898-004    .16132940-004    .43786209-005   -.83541806-006    .34974925-006
81:         .12906937-003    .39691128-004    .29707705-004    .12975384-004   -.76344026-007   -.26250923-006
82:         .80274189-004    .19882927-004    .12830173-004    .50929696-005   -.29801188-006    .64393004-007
83:        -.20530365-004   -.67211552-005   -.57142695-005   -.37757651-005   -.15522914-006    .59077544-006
84:
85:   15    .72488803-005    .13783354-004    .47435495-003    .38743097-003   -.25751080-005   -.48247612-005
86:         .96513290-004    .28586727-004    .58068999-003    .19738222-003    .16360385-005   -.13712058-005
87:         .18207102-003    .29707705-004    .14964027-002    .32221429-003    .10368413-004    .31078706-005
88:         .10818742-003    .12387436-004    .80496247-003    .16791806-003    .45217367-005    .12637631-005
89:        -.12829151-004   -.12537724-004   -.26660362-003   -.76995842-004   -.78968109-006    .47880510-005
90:
91:   16    .10035713-004    .19555676-004    .11333121-003    .10014228-003   -.37322867-006   -.66680192-006
92:         .23886554-004    .10983203-004    .18006962-003    .57052544-004   -.12629247-005    .24073423-006
93:         .41945436-004    .12975384-004    .32221429-003    .10179064-003    .11462333-005    .21726872-006
94:         .21204284-004    .35717342-005    .20840141-003    .48401218-004   -.44036702-006   -.27442062-006
95:        -.69533435-005   -.33999907-005   -.74264854-004   -.18250248-004   -.19507505-006    .39976155-006
96:
97:   17   -.28475180-005   -.22164053-005    .54063841-005    .13858060-005   -.91866118-006   -.13207338-005
98:        -.40493294-005    .54586851-006   -.16184399-005   -.48213223-006    .20991414-005   -.74406412-006
99:         .24712537-005   -.76344026-007    .10368413-004    .11462333-005    .72282562-005    .15257271-005
100:         .16742550-005    .68579239-006    .43974187-005    .11416864-005    .39831315-005    .14576759-005
101:        -.96600121-006   -.57237380-006   -.43899343-005   -.16490093-006   -.23183062-006    .71709114-006
102:
103:   18   -.97010995-006   -.93217325-006    .13573682-005    .50336335-006   -.20768065-006   -.30274482-006
104:        -.88992523-006    .30439292-007   -.24074245-008   -.16640414-006    .49421550-006   -.18260272-006
105:        -.44906148-006   -.26250923-006    .31078706-005    .21726872-006    .15257271-005    .36047778-006
106:        -.35911400-006   -.79595566-007    .83975157-006    .24300167-006    .98534829-006    .35764399-006
107:         .10456924-006   -.29874302-007   -.53390290-006    .51322797-007   -.64656480-007    .18029541-006
108:
109:   19    .14097034-003    .11535235-003    .26358834-004   -.43021596-005   -.18389878-006    .34315184-006
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111:		.30324386-003	.80274189-004	.10818742-003	.21204284-004	.16742550-005	-.35911400-006
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114:							
115:	20	.32410431-004	.27676047-004	.27806205-005	-.29184747-005	.16048586-007	.38339774-007
116:		.30545666-004	.11605226-004	.37703250-005	.85313976-006	-.33275924-006	.84114296-007
117:		.73028495-004	.19882927-004	.12387436-004	.35717342-005	.68579239-006	-.79595566-007
118:		.75228061-004	.19825328-004	.24778730-005	.19808391-005	.60456372-006	.23324036-006
119:		-.24537691-004	-.78266514-005	-.53399404-005	-.11227938-005	-.12131572-006	.63830443-006
120:							
121:	21	.22799712-004	.18971102-004	.28324828-003	.25653155-003	-.14424021-005	-.83914674-006
122:		.55415814-004	.15705094-004	.39933280-003	.13587194-003	.18176580-006	-.25334914-006
123:		.71979448-004	.12830173-004	.80496247-003	.20840141-003	.43974187-005	.83975157-006
124:		.63546468-004	.24778730-005	.89258195-003	.13685786-003	.19765072-005	.80368088-006
125:		-.89541165-005	-.11103458-004	-.27476209-003	-.80711457-004	.46417972-006	.11225881-005
126:							
127:	22	.30326817-005	.64773484-005	.62423428-004	.54539733-004	-.40346261-006	-.49315469-006
128:		.13106181-004	.54021458-005	.10309555-003	.34153790-004	.96564494-007	-.83826685-007
129:		.18536708-004	.50929696-005	.16791806-003	.48401218-004	.11416864-005	.24300167-006
130:		.96954783-005	.19808391-005	.13685786-003	.35719900-004	.82908847-006	.17083930-006
131:		-.23171928-005	-.16604630-005	-.56636168-004	-.14169090-004	-.46151776-007	.29708561-006
132:							
133:	23	-.25485465-005	-.14499512-005	.97380274-006	-.24159622-006	-.51947846-006	-.72632784-006
134:		-.14647762-005	.43073149-006	.27807585-006	-.80970138-006	.16303256-005	-.59342199-006
135:		-.35473914-006	-.29801188-006	.45217367-005	-.44036702-006	.39831315-005	.98534829-006
136:		.11183617-005	.60456372-006	.19765072-005	.82908847-006	.49429676-005	.17952219-005
137:		-.14642611-005	-.38691330-006	-.33833904-005	-.31502387-007	-.39352506-006	.11112103-005
138:							
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140:		-.48033706-007	.40001104-006	-.24619922-006	-.39644119-006	.65944094-006	-.23357635-006
141:		.52958101-006	.64393004-007	.12637631-005	-.27442062-006	.14576759-005	.35764399-006
142:		.59899246-006	.23324036-006	.80368088-006	.17083930-006	.17952219-005	.73999021-006
143:		-.71716548-006	-.20550637-006	-.13618288-005	.46243635-007	-.14477598-006	.42666561-006
144:							
145:	25	-.35299610-004	-.28779194-004	.42155314-005	.93234111-005	-.29369525-007	-.27920960-006
146:		-.40082071-004	-.14417123-004	-.56050131-005	-.13586083-005	-.28590786-008	-.11727620-006
147:		-.84210115-004	-.20530365-004	-.12829151-004	-.69533435-005	-.96600121-006	.10456924-006
148:		-.10049069-003	-.24537691-004	-.89541165-005	-.23171928-005	-.14642611-005	-.71716548-006
149:		.51093883-004	.13127022-004	.77922081-005	.44347622-006	.20432673-006	-.80369438-006
150:							
151:	26	-.12465940-004	-.92447247-005	-.20435564-005	-.17755257-006	.78507942-007	-.17687803-007
152:		-.12121238-004	-.43324115-005	-.34729585-005	-.96104601-006	-.10369902-006	.38200236-008
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154:		-.32858220-004	-.78266514-005	-.11103458-004	-.16604630-005	-.38691330-006	-.20550637-006
155:		.13127022-004	.53368971-005	.28694034-005	.14870780-006	-.42869132-008	-.24635602-006
156:							
157:	27	.93508282-006	-.71774345-005	-.93883481-004	-.81741895-004	.79405612-006	.62597934-006
158:		-.16875578-004	-.90980116-005	-.16801341-003	-.54949387-004	-.10401636-005	.56400488-006
159:		-.42627489-004	-.57142695-005	-.26660362-003	-.74264854-004	-.43899343-005	-.53390290-006
160:		-.30578739-004	-.53399404-005	-.27476209-003	-.56636168-004	-.33833904-005	-.13618288-005
161:		.77922081-005	.28694034-005	.16044930-003	.36447494-004	.13267413-006	-.13663206-005
162:							
163:	28	-.47613384-005	-.41029805-005	-.22270087-004	-.17016823-004	.27003730-007	-.79741769-008
164:		-.11854412-004	-.34280824-005	-.40100908-004	-.12079100-004	.12154786-006	-.46592022-007
165:		-.24958896-004	-.37757651-005	-.76995842-004	-.18250248-004	-.16490093-006	.51322797-007
166:		-.86753087-005	-.11227938-005	-.80711457-004	-.14169090-004	-.31502387-007	.46243635-007
167:		.44347622-006	.14870780-006	.36447494-004	.15167049-004	-.83431475-007	-.70898650-007

168:						
169:	29	-.93192485-008	-.88251232-007	-.27588649-006	.49183232-008	.21716498-007	.30411478-007
170:		-.44386491-006	-.17409804-006	.34116670-007	.31610035-009	-.96462964-007	.25711802-007
171:		-.70650511-006	-.15522914-006	-.78968109-006	-.19507505-006	-.23183062-006	-.64656480-007
172:		-.38984650-006	-.12131572-006	.46417972-006	-.46151776-007	-.39852506-006	-.14477598-006
173:		.20432673-006	-.42869132-008	.13267413-006	-.83431475-007	.66996293-007	-.17793396-006
174:							
175:	30	.84116143-006	.46069613-006	.99023364-006	-.54191925-006	-.88568598-007	-.11811668-006
176:		.17684281-005	.52490520-006	-.67053807-006	-.22989368-006	.31116343-006	-.10611886-006
177:		.39558630-005	.59077544-006	.47880510-005	.39976155-006	.71709114-006	.18029541-006
178:		.25664077-005	.63830443-006	.11225881-005	.29708561-006	.11112103-005	.42666561-006
179:		-.80369438-006	-.24635602-006	-.13663206-005	-.70898650-007	-.17793396-006	.61537248-006
180:							

EOF:180
END ED. NO CORRECTIONS APPLIED

Table 10-1 Variance and Covariance Matrix of the Estimated Census Adjustment Factors
Syn DA - AP3

SAMPLE SIZE   721

1:	1	.26671300-003	.24156644-003	.40972437-005	.12655250-005	-.48954205-006	-.29129429-006
2:		.21502035-003	.86893429-004	.68794621-005	.19275552-006	.48571391-006	-.21744396-006
3:		.34815047-003	.13253944-003	.50195285-004	.15119642-004	.19950258-005	.16260191-006
4:		.31953886-003	.68983542-004	.33506639-004	.96678741-005	.58936910-005	.31683505-005
5:		-.74825055-004	-.25757325-004	.57986531-005	-.46570013-005	-.10280076-005	.49583430-005
6:							
7:	2	.24156644-003	.29829490-003	.17927296-004	.31270098-004	-.98189771-006	-.11781633-005
8:		.22633926-003	.98130531-004	.46344570-004	.11877527-004	.19565197-005	-.76815545-006
9:		.36066103-003	.14564639-003	.10287719-003	.47653715-004	.63397098-005	.13666523-005
10:		.28151064-003	.65181615-004	.11079685-004	.14440401-004	.96904419-005	.47634083-005
11:		-.66066471-004	-.21353497-004	-.52582764-006	-.23561697-005	-.13115549-005	.51644824-005
12:							
13:	3	.40972437-005	.17927296-004	.41016006-003	.37844556-003	-.85162509-006	-.17562638-005
14:		.41887924-004	.17256977-004	.46638529-003	.17065955-003	.84630569-006	-.61216654-006
15:		.23651704-004	.12595650-004	.92809782-003	.21942365-003	.11989840-005	.29145431-006
16:		-.55124260-005	.73792292-005	.59315569-003	.13112021-003	-.41444792-005	-.17796566-005
17:		.17150433-004	.59294811-005	-.21100371-003	-.52406133-004	.24972260-006	-.56379653-006
18:							
19:	4	.12655250-005	.31270098-004	.37844556-003	.39968140-003	-.55042256-006	-.17752905-005
20:		.46543510-004	.19762483-004	.45654147-003	.17035890-003	.63017298-006	-.61016695-006
21:		.12422979-004	.16666664-004	.90737222-003	.21947028-003	.48294149-006	.16985340-006
22:		-.71545505-005	.65773919-005	.53635797-003	.12242529-003	-.36569013-005	-.16838376-005
23:		.26607848-004	.77543761-005	-.17964013-003	-.43562312-004	.69846412-006	-.17138124-005
24:							
25:	5	-.48954205-006	-.98189771-006	-.85162509-006	-.55042256-006	.24582193-006	.24417664-006
26:		-.83347164-006	-.24866481-006	-.10653592-005	-.34771442-006	-.57091122-006	.17129370-006
27:		-.33210428-005	-.69000538-006	-.39891066-005	-.71099444-006	-.13338814-005	-.29027645-006
28:		-.34128563-005	-.64463741-006	-.20550560-005	-.58027007-006	-.87483571-006	-.37452460-006
29:		.10867451-005	.38346125-006	.18418400-005	.34366228-006	.52330307-007	-.19546706-006
30:							
31:	6	-.29129429-006	-.11781633-005	-.17562638-005	-.17752905-005	.24417664-006	.32733525-006
32:		-.13406171-005	-.28449479-006	-.24090831-005	-.10248753-005	-.67317325-006	.20720637-006
33:		-.43022665-005	-.75848369-006	-.64085139-005	-.94468064-006	-.15620460-005	-.32230452-006
34:		-.39899293-005	-.10102896-005	-.30388741-005	-.81202329-006	-.10272885-005	-.43387833-006
35:		.15280632-005	.45613591-006	.19599947-005	.35893933-006	.45665965-007	-.19190805-006
36:							
37:	7	.21502035-003	.22633926-003	.41887924-004	.46543510-004	-.83347164-006	-.13406171-005
38:		.31023992-003	.10236473-003	.67543594-004	.21683044-004	.36793483-005	-.12339865-005
39:		.41753665-003	.13949652-003	.16320563-003	.38538894-004	.71750910-005	.18225692-005
40:		.32890574-003	.76300537-004	.36618928-004	.18675098-004	.10382755-004	.51194675-005
41:		-.86039088-004	-.24768796-004	.28014366-005	-.51204614-005	-.19177609-005	.76028917-005
42:							
43:	8	.86893429-004	.98130531-004	.17256977-004	.19762483-004	-.24866481-006	-.28449479-006
44:		.10236473-003	.43866045-004	.23268317-004	.88185796-005	.94263616-006	-.35669690-006
45:		.14792928-003	.54872791-004	.63627777-004	.19693507-004	.14895783-005	.42960241-006
46:		.11532296-003	.27062004-004	.53859814-005	.83005524-005	.31068606-005	.17051604-005
47:		-.30977089-004	-.97508249-005	.13111805-005	-.19254210-005	-.54936720-006	.21858996-005
48:							
49:	9	.68794621-005	.46344570-004	.46638529-003	.45654147-003	-.10653592-005	-.24090831-005
50:		.67543594-004	.23268317-004	.66305259-003	.21589886-003	.19314609-005	-.67473893-006
51:		.67133723-004	.31302440-004	.11793293-002	.27958237-003	.12988259-005	.81379486-006
52:		.13346320-004	.98422341-005	.70878020-003	.16601579-003	-.20967587-005	-.16365837-005
53:		.35779879-004	.12426456-004	-.24775236-003	-.65234336-004	.50078461-006	-.25601339-005

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54:
55:   10    .19275552-006    .11877527-004    .17065955-003    .17035890-003   -.34771442-006   -.10248753-005
56:          .21683044-004    .88185796-005    .21589886-003    .84436981-004    .79320716-006   -.42297519-006
57:          .15425976-004    .71239199-005    .40893922-003    .98811899-004    .10591894-005    .24720853-006
58:         -.78381457-006    .42990124-005    .25552523-003    .62209297-004   -.93279452-006   -.73241349-006
59:          .77977014-005    .30634295-005   -.87670210-004   -.22702539-004    .12327870-006   -.54334222-006
60:
61:   11    .48571391-006    .19565197-005    .84630569-006    .63017298-006   -.57091122-006   -.67317325-006
62:          .36793483-005    .94263616-006    .19314609-005    .79320716-006    .20309839-005   -.56033284-006
63:          .10935868-004    .14516390-005    .94226539-005   -.73179192-007    .36782759-005    .79359806-006
64:          .73158861-005    .11285963-005    .12786847-005    .10759423-005    .28857608-005    .12182264-005
65:         -.20415029-005   -.89938167-006   -.36240627-005   -.74033819-006   -.22862476-006    .77942724-006
66:
67:   12   -.21744396-006   -.76815545-006   -.61216654-006   -.61016695-006    .17129370-006    .20720637-006
68:         -.12339865-005   -.35669690-006   -.67473893-006   -.42297519-006   -.56033284-006    .19329729-006
69:         -.34226483-005   -.64836895-006   -.42065191-005   -.33980331-006   -.11213430-005   -.24340528-006
70:         -.24221725-005   -.53993771-006   -.16406354-005   -.47872279-006   -.85869944-006   -.37595535-006
71:          .64238128-006    .26598731-006    .16333263-005    .32649797-006    .57875204-007   -.25241821-006
72:
73:   13    .34815047-003    .36066103-003    .23651704-004    .12422979-004   -.33210428-005   -.43022665-005
74:          .41753665-003    .14792928-003    .67133723-004    .15425976-004    .10935868-004   -.34226483-005
75:          .11932981-002    .25890380-003    .29001616-003    .47602480-004    .23105247-004    .55193932-005
76:          .53762160-003    .13468132-003    .53959905-004    .19009411-004    .21711058-004    .89170386-005
77:         -.16010916-003   -.52421827-004    .23228501-004   -.28247853-005   -.25377212-005    .12041121-004
78:
79:   14    .13253944-003    .14564639-003    .12595650-004    .16666664-004   -.69000538-006   -.75848369-006
80:          .13949652-003    .54872791-004    .31302440-004    .71239199-005    .14516390-005   -.64836895-006
81:          .25890380-003    .93149940-004    .87261785-004    .25835225-004    .49525409-005    .11055702-005
82:          .18480240-003    .43761844-004    .32399250-004    .10943903-004    .51217352-005    .24924891-005
83:         -.45266680-004   -.15027311-004    .88674491-006   -.29671941-005   -.90534148-006    .32351252-005
84:
85:   15    .50195285-004    .10287719-003    .92809782-003    .90737222-003   -.39891066-005   -.64085139-005
86:          .16320563-003    .63627777-004    .11793293-002    .40893922-003    .94226539-005   -.42065191-005
87:          .29001616-003    .87261785-004    .29771678-002    .59869021-003    .17704835-004    .46454766-005
88:          .99678387-004    .41991832-004    .17231042-002    .37668838-003    .74574019-005    .23510806-005
89:          .21136741-004    .73621320-005   -.61909525-003   -.17030013-003    .19569968-007    .31412057-005
90:
91:   16    .15119642-004    .47653715-004    .21942365-003    .21947028-003   -.71099444-006   -.94468064-006
92:          .38538894-004    .19693507-004    .27958237-003    .98811899-004   -.73179192-007   -.33980331-006
93:          .47602480-004    .25835225-004    .59869021-003    .17189086-003    .36969715-005    .74045197-006
94:          .89701299-005    .78980409-005    .42181397-003    .90337794-004   -.84458427-006   -.80762753-006
95:          .30751331-005    .14398782-005   -.14077245-003   -.37738918-004    .23999468-006   -.13133437-005
96:
97:   17    .19950258-005    .63397098-005    .11989840-005    .48294149-006   -.13338814-005   -.15620460-005
98:          .71750910-005    .14895783-005    .12988259-005    .10591894-005    .36782759-005   -.11213430-005
99:          .23105247-004    .49525409-005    .17704835-004    .36969715-005    .10084775-004    .19624811-005
100:         .26285075-004    .56568490-005    .17972273-004    .36691596-005    .62879154-005    .25976622-005
101:        -.12374407-004   -.34744983-005   -.10629738-004   -.18156065-005   -.51152096-006    .16358845-005
102:
103:   18    .16260191-006    .13666523-005    .29145431-006    .16985340-006   -.29027645-006   -.32230452-006
104:         .18225692-005    .42960241-006    .81379486-006    .24720853-006    .79359806-006   -.24340528-006
105:         .55193932-005    .11055702-005    .46454766-005    .74045197-006    .19624811-005    .44304397-006
106:         .43921125-005    .89680380-006    .32429299-005    .60937138-006    .13487901-005    .54556122-006
107:        -.20567786-005   -.56246634-006   -.16607798-005   -.37541305-006   -.12780680-006    .38331677-006
108:
109:   19    .31953886-003    .28151064-003   -.55124260-005   -.71545505-005   -.34128563-005   -.39899293-005
110:         .32890574-003    .11532296-003    .13346320-004   -.78381457-006    .73158861-005   -.24221725-005
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111:		.53762160-003	.18480240-003	.99678387-004	.89701299-005	.26285075-004	.43921125-005
112:		.87440877-003	.16380471-003	.31119163-004	.15513200-004	.23780008-004	.10018703-004
113:		-.21947107-003	-.67088155-004	-.91974424-005	.78613848-006	-.31622637-005	.99017397-005
114:							
115:	20	.68983542-004	.65181615-004	.73792292-005	.65773919-005	-.64463741-006	-.10102896-005
116:		.76300537-004	.27062004-004	.98422341-005	.42990124-005	-.11285963-005	-.53993771-006
117:		.13468132-003	.43761844-004	.41991832-004	.78980409-005	.56568490-005	.89680380-006
118:		.16380471-003	.42646060-004	.23535581-004	.69506302-005	.53095331-005	.21525767-005
119:		-.55198509-004	-.15953906-004	-.90666222-005	-.15412051-005	-.63356922-006	.22824693-005
120:							
121:	21	.33506639-004	.11079685-004	.59315569-003	.53635797-003	-.20550560-005	-.30388741-005
122:		.36618928-004	.53859814-005	.70878020-003	.25552523-003	.12786847-005	-.16406354-005
123:		.53959905-004	.32399250-004	.17231042-002	.42181397-003	.17972273-004	.32429299-005
124:		.31119163-004	.23535581-004	.16765556-002	.29917940-003	.48216964-005	-.10268465-007
125:		.58031947-005	-.35201247-005	-.51112371-003	-.14570719-003	.10128273-006	.12867598-006
126:							
127:	22	.96678741-005	.14440401-004	.13112021-003	.12242529-003	-.58027007-006	-.81202329-006
128:		.18675098-004	.83005524-005	.16601579-003	.62209297-004	.10759423-005	-.47872279-006
129:		.19009411-004	.10943903-004	.37668838-003	.90337794-004	.36691596-005	.60937138-006
130:		.15513200-004	.69506302-005	.29917940-003	.74865867-004	.16169689-005	.38927611-006
131:		.12820835-005	-.11698978-005	-.10657400-003	-.30399160-004	-.27714220-006	.10180650-005
132:							
133:	23	.58936910-005	.96904419-005	-.41444792-005	-.36569013-005	-.87483571-006	-.10272885-005
134:		.10382755-004	.31068606-005	-.20967587-005	-.93279452-006	.28857608-005	-.85869944-006
135:		.21711058-004	.51217352-005	.74574019-005	-.84458427-006	.62879154-005	.13487901-005
136:		.23780008-004	.53095331-005	.48216964-005	.16169689-005	.10137677-004	.38458162-005
137:		-.10993909-004	-.30637828-005	-.82933210-005	-.15857093-005	-.10782864-005	.31437950-005
138:							
139:	24	.31683505-005	.47634083-005	-.17796566-005	-.16838376-005	-.37452460-006	-.43387833-006
140:		.51194675-005	.17051604-005	-.16365837-005	-.73241349-006	.12182264-005	-.37595535-006
141:		.89170386-005	.24924891-005	.23510806-005	-.80762753-006	.25976622-005	.54556122-006
142:		.10018703-004	.21525767-005	-.10268465-007	.38927611-006	.38458162-005	.16117232-005
143:		-.47153726-005	-.13698413-005	-.38509111-005	-.61820348-006	-.40735426-006	.12385442-005
144:							
145:	25	-.74825055-004	-.66066471-004	.17150433-004	.26607848-004	.10867451-005	.15280632-005
146:		-.86039088-004	-.30977089-004	.35779879-004	.77977014-004	-.20415029-005	.64238128-006
147:		-.16010916-003	-.45266680-004	.21136741-004	.30751331-005	-.12374407-004	-.20567786-005
148:		-.21947107-003	-.55198509-004	.58031947-005	.12820835-005	-.10993909-004	-.47153726-005
149:		.13314594-003	.32764601-004	-.11817561-005	-.76995295-006	.13215957-005	-.40809931-005
150:							
151:	26	-.25757325-004	-.21353497-004	.59294811-005	.77543761-005	.38346125-006	.45613591-006
152:		-.24768796-004	-.97508249-005	.12426456-004	.30634295-005	-.89938167-006	.26598731-006
153:		-.52421827-004	-.15027311-004	.73621320-005	.14398782-005	-.34744983-005	-.56246634-006
154:		-.67088155-004	-.15953906-004	-.35201247-005	-.11698978-005	-.30637828-005	-.13698413-005
155:		.32764601-004	.12223714-004	.12095578-005	-.25341523-006	.25571229-006	-.11677377-005
156:							
157:	27	.57986531-005	-.52582764-006	-.21100371-003	-.17964013-003	.18418400-005	.19599947-005
158:		.28014366-005	-.13111805-005	-.24775236-003	-.87670210-004	-.36240627-005	.16333263-005
159:		.23228501-004	.88674491-006	-.61909525-003	-.14077245-003	-.10629738-004	-.16607798-005
160:		-.91974424-005	-.90666222-005	-.51112371-003	-.10657400-003	-.82933210-005	-.38509111-005
161:		-.11817561-005	.12095578-005	.26780882-003	.60422834-004	.84927553-006	-.24945387-005
162:							
163:	28	-.46570013-005	-.23561697-005	-.52406133-004	-.43562312-004	.34366228-006	.35893933-006
164:		-.51204614-005	-.19254210-005	-.65234336-004	-.22702539-004	-.74033819-006	.32649797-006
165:		-.28247853-005	-.29671941-005	-.17030013-003	-.37738918-004	-.18156065-005	-.37541305-006
166:		.78613848-006	-.15412051-005	-.14570719-003	-.30399160-004	-.15857093-005	-.61820348-006
167:		-.76995295-006	-.25341523-006	.60422834-004	.20698586-004	.97367730-007	-.34366090-006

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168:
169:   29  -.10280076-005  -.13115549-005   .24972260-006   .69846412-006   .52330307-007   .45665965-007
170:       -.19177609-005  -.54936720-006   .50078461-006   .12327870-006  -.22862476-006   .57875204-007
171:       -.25377212-005  -.90534148-006   .19569968-007   .23999468-006  -.51152096-006  -.12780680-006
172:       -.31622637-005  -.63356922-006   .10128273-006  -.27714220-006  -.10782864-005  -.40735426-006
173:        .13215957-005   .25571229-006   .84927553-006   .97367730-007   .21567303-006  -.59104523-006
174:
175:   30   .49583430-005   .51644824-005  -.56379653-006  -.17138124-005  -.19546706-006  -.19190805-006
176:        .76028917-005   .21858996-005  -.25601339-005  -.54334222-006   .77942724-006  -.25241821-006
177:        .12041121-004   .32351252-005   .31412057-005  -.13133437-005   .16358845-005   .38331677-006
178:        .99017397-005   .22824693-005   .12867598-006   .10180650-005   .31437950-005   .12385442-005
179:       -.40809931-005  -.11677377-005  -.24945387-005  -.34366090-006  -.59104523-006   .19597510-005
180:
OF:180
ND ED. NO CORRECTIONS APPLIED
```

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Table 11. Variance and Covariance Matrix of the Estimated Adjustment Factors by Geographic Division

Syn 2 - AP2

SAMPLE SIZE 1440

DIV 1	1:	1	.39406779-004	.18559959-005	.38418879-005	.00000000	.00000000	.00000000
	2:	2	.18559959-005	.33027404-005	.49401721-005	.00000000	.00000000	.00000000
	3:	3	.38418879-005	.49401721-005	.11469460-002	.00000000	.00000000	.00000000
	4:	4	.00000000	.00000000	.00000000	.15959100-004	-.12143522-005	.10662674-004
	5:	5	.00000000	.00000000	.00000000	-.12143522-005	.83517393-005	.61464635-005
	6:	6	.00000000	.00000000	.00000000	.10662674-004	.61464635-005	.49149950-003
	7:	7	.44180571-003	.36102538-004	.40761031-005	.00000000	.00000000	.00000000
	8:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	9:		.00000000	.00000000	.00000000			
	10:	8	.36102538-004	.26015571-004	.50947816-005	.00000000	.00000000	.00000000
	11:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	12:		.00000000	.00000000	.00000000			
	13:	9	.40761031-005	.50947816-005	.21587243-004	.00000000	.00000000	.00000000
	14:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	15:		.00000000	.00000000	.00000000			
	16:	10	.00000000	.00000000	.00000000	.30494720-002	.48308497-004	.28164088-003
	17:		-.10312891-004	.28316684-003	.00000000	.00000000	.00000000	.00000000
	18:		.00000000	.00000000	.00000000			
	19:	11	.00000000	.00000000	.00000000	.48308497-004	.22539290-004	.38676245-004
	20:		-.29844217-005	.87503258-005	.00000000	.00000000	.00000000	.00000000
	21:		.00000000	.00000000	.00000000			
	22:	12	.00000000	.00000000	.00000000	.28164088-003	.38676245-004	.37434293-002
	23:		.58679929-004	.16521445-003	.00000000	.00000000	.00000000	.00000000
	24:		.00000000	.00000000	.00000000			
	25:	13	.00000000	.00000000	.00000000	-.10312891-004	-.29844217-005	.58679929-004
DIV 2	26:		.18991712-004	.33170177-005	.00000000	.00000000	.00000000	.00000000
	27:		.00000000	.00000000	.00000000			
	28:	14	.00000000	.00000000	.00000000	.28316684-003	.87503258-005	.16521445-003
	29:		.33170177-005	.15653463-003	.00000000	.00000000	.00000000	.00000000
	30:		.00000000	.00000000	.00000000			
	31:	15	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	32:		.00000000	.00000000	.73467260-005	.18261804-006	.10923146-004	.00000000
	33:		.00000000	.00000000	.00000000			
	34:	16	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	35:		.00000000	.00000000	.18261804-006	.10643828-004	.50023643-005	.00000000
	36:		.00000000	.00000000	.00000000			
	37:	17	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	38:		.00000000	.00000000	.10923146-004	.50023643-005	.52927588-003	.00000000
	39:		.00000000	.00000000	.00000000			
	40:	18	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	41:		.00000000	.00000000	.00000000	.00000000	.00000000	.37460033-005
	42:		.79174755-006	.39085186-006	.86519238-005			
	43:	19	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	44:		.00000000	.00000000	.00000000	.00000000	.00000000	.79174755-006
	45:		.20975690-004	.21948246-005	.47092595-005			
	46:	20	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	47:		.00000000	.00000000	.00000000	.00000000	.00000000	.39085186-006
	48:		.21948246-005	.18861749-004	-.30716819-005			
	49:	21	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	50:		.00000000	.00000000	.00000000	.00000000	.00000000	.86519238-005
	51:		.47092595-005	-.30716819-005	.21234892-003			
	52:	22	.12960174-002	.10807434-003	-.28936857-003	-.44208750-004	-.43984726-004	.00000000
	53:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

54:		.00000000	.00000000	.00000000			
55:	23	.10807434-003	.68309266-004	-.37297302-004	-.61345707-005	.68279344-004	.00000000
56:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
57:		.00000000	.00000000	.00000000			
58:	24	-.28936857-003	-.37297302-004	.19299495-002	.72248379-004	.38900924-003	.00000000
59:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
60:		.00000000	.00000000	.00000000			
61:	25	-.44208750-004	-.61345707-005	.72248379-004	.26555938-004	.26362861-004	.00000000
62:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
63:		.00000000	.00000000	.00000000			
64:	26	-.43984726-004	.68279344-004	.38900924-003	.26362861-004	.11509808-002	.00000000
65:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
66:		.00000000	.00000000	.00000000			
67:	27	.00000000	.00000000	.00000000	.00000000	.00000000	.35165576-002
68:		.31536829-004	.26015541-003	.46732850-004	.67237637-004	.00000000	.00000000
69:		.00000000	.00000000	.00000000			
70:	28	.00000000	.00000000	.00000000	.00000000	.00000000	.31536829-004
71:		.26463744-004	.23024084-005	.10001955-005	.26773172-004	.00000000	.00000000
72:		.00000000	.00000000	.00000000			
73:	29	.00000000	.00000000	.00000000	.00000000	.00000000	.26015541-003
74:		.23024084-005	.26178473-002	.94080885-004	.11283528-003	.00000000	.00000000
75:		.00000000	.00000000	.00000000			
76:	30	.00000000	.00000000	.00000000	.00000000	.00000000	.46732850-004
77:		.10001955-005	.94080885-004	.36638858-004	.92107221-005	.00000000	.00000000
78:		.00000000	.00000000	.00000000			
79:	31	.00000000	.00000000	.00000000	.00000000	.00000000	.67237637-004
80:		.26773172-004	.11283528-003	.92107221-005	.21290092-003	.00000000	.00000000
81:		.00000000	.00000000	.00000000			
82:	32	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
83:		.00000000	.00000000	.00000000	.00000000	.14447813-002	.47509192-004
84:		.14304949-004	.63448250-005	.21561752-003			
85:	33	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
86:		.00000000	.00000000	.00000000	.00000000	.47509192-004	.62208490-004
87:		.46699722-004	.28237336-005	.61263492-004			
88:	34	.00000000	.00000000	.00000000	.00000000	.00000000	
89:		.00000000	.00000000	.00000000	.00000000	.14304949-004	.46699722-004
90:		.75473794-003	.38469296-004	.12823436-003			
91:	35	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
92:		.00000000	.00000000	.00000000	.00000000	.63448250-005	.28237336-005
93:		.38469296-004	.16731347-004	.28484345-004			
94:	36	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
95:		.00000000	.00000000	.00000000	.00000000	.21561752-003	.61263492-004
96:		.12823436-003	.28484345-004	.50508645-003			

97:	37	.34128812-003	-.65874067-006	.54700984-004	.00000000	.00000000	.00000000	.00000000
98:	38	-.65874067-006	.15399113-003	.14941949-003	.00000000	.00000000	.00000000	.00000000
99:	39	.54700984-004	.14941949-003	.21392892-002	.00000000	.00000000	.00000000	.00000000
100:	40	.00000000	.00000000	.00000000	.41205636-004	-.41398062-005	-.39354688-005	.17703292-004
101:	41	.00000000	.00000000	.00000000	-.41398062-005	.35434032-004	.36964357-006	.24222576-005
102:	42	.00000000	.00000000	.00000000	-.39354688-005	.36964357-006	.13722329-004	.19767567-004
103:	43	.00000000	.00000000	.00000000	.17703292-004	.24222576-005	.19767567-004	.21567389-003

104:	44	.17945770-003	-.19721790-004	-.10091398-006	.19332818-004	.30283263-004	.00000000
105:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
106:	45	-.19721790-004	.13380459-002	-.10490899-004	.10946864-003	-.59946587-005	.00000000
107:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
108:	46	-.10091398-006	-.10490899-004	.10469560-004	.35168466-005	.13440469-005	.00000000
109:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
110:	47	.19332818-004	.10946864-003	.35168466-005	.14072843-002	.63385682-004	.00000000

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111:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
112:	48	.30283263-004	-.59946587-005	.13440469-005	.63385682-004	.37061828-003	.00000000
113:		.00000000	.00000000	.00000000	.00000000	.00000000	
114:	49	.00000000	.00000000	.00000000	.00000000	.00000000	.64678328-005
115:		-.22240192-007	-.78190490-006	.94852649-005	.00000000	.00000000	.00000000
116:	50	.00000000	.00000000	.00000000	.00000000	.00000000	-.22240192-007
117:		.32566870-004	-.21558845-005	.39391732-005	.00000000	.00000000	.00000000
118:	51	.00000000	.00000000	.00000000	.00000000	.00000000	-.78190490-006
119:		-.21558845-005	.79026673-005	-.15918926-004	.00000000	.00000000	.00000000
120:	52	.00000000	.00000000	.00000000	.00000000	.00000000	.94852649-005
121:		.39391732-005	-.15918926-004	.71608328-003	.00000000	.00000000	.00000000
122:	53	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
123:		.00000000	.00000000	.00000000	.97611775-004	.23897964-005	.12045524-003
124:	54	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
125:		.00000000	.00000000	.00000000	.23897964-005	.55197560-004	.72071911-005
126:	55	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
127:		.00000000	.00000000	.00000000	.12045524-003	.72071911-005	.72935253-003
128:	56	.15239043-004	.39039664-005	.00000000	.00000000	.00000000	.00000000
129:		.00000000	.00000000	.00000000			
130:	57	.39039664-005	.39981544-002	.00000000	.00000000	.00000000	.00000000
131:		.00000000	.00000000	.00000000			
132:	58	.00000000	.00000000	.53106484-005	-.91787941-006	.45296164-005	.00000000
133:		.00000000	.00000000	.00000000			
134:	59	.00000000	.00000000	-.91787941-006	.73006715-005	.43501458-005	.00000000
135:		.00000000	.00000000	.00000000			
136:	60	.00000000	.00000000	.45296164-005	.43501458-005	.45549096-003	.00000000
137:		.00000000	.00000000	.00000000			
138:	61	.00000000	.00000000	.00000000	.00000000	.00000000	.12086710-003
139:		.17599678-005	-.21796171-005	-.11069527-004			
140:	62	.00000000	.00000000	.00000000	.00000000	.00000000	.17599678-005
141:		.11686583-004	.10237283-005	.67805297-005			
142:	63	.00000000	.00000000	.00000000	.00000000	.00000000	-.21796171-005
143:		.10237283-005	.57493363-005	.30353081-006			
144:	64	.00000000	.00000000	.00000000	.00000000	.00000000	-.11069527-004
145:		.67805297-005	.30353081-006	.27098794-003			
146:	65	.60633295-002	.31256394-003	.19503100-003	.00000000	.00000000	.00000000
147:		.00000000	.00000000	.00000000	.00000000	.00000000	
148:							
149:	66	.31256394-003	.22039824-003	.66780882-004	.00000000	.00000000	.00000000
150:		.00000000	.00000000	.00000000	.00000000	.00000000	
151:							
152:	67	.19503100-003	.66780882-004	.13956951-003	.00000000	.00000000	.00000000
153:		.00000000	.00000000	.00000000	.00000000	.00000000	
154:							
155:	68	.00000000	.00000000	.00000000	.78287762-004	.12459436-004	.81271891-004
156:		.12197296-005	.00000000	.00000000	.00000000	.00000000	
157:							
158:	69	.00000000	.00000000	.00000000	.12459436-004	.12377761-003	.10139816-003
159:		.28415589-004	.00000000	.00000000	.00000000	.00000000	
160:							
161:	70	.00000000	.00000000	.00000000	.81271891-004	.10139816-003	.72204653-003
162:		.32393001-004	.00000000	.00000000	.00000000	.00000000	
163:							
164:	71	.00000000	.00000000	.00000000	.12197296-005	.28415589-004	.32393001-004
165:		.49676379-004	.00000000	.00000000	.00000000	.00000000	
166:							
167:	72	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

IV 6

IV 7

```
168:      .00000000      .58751973-004  -.44289499-005   .38346036-005   .24521150-004
169:
170: 73   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000
171:      .00000000     -.44289499-005   .56225850-003  -.22318280-004  -.20495455-004
172:
173: 74   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000
174:      .00000000      .38346036-005  -.22318280-004   .29348601-004   .27479623-004
175:
176: 75   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000
177:      .00000000      .24521150-004  -.20495455-004   .27479623-004   .32645532-003
178:
179: 76   .13188551-003 -.68892946-005   .70990006-004   .00000000       .00000000       .00000000       .00000000
180: 77  -.68892946-005  .60314933-004   .10264398-004   .00000000       .00000000       .00000000       .00000000
181: 78   .70990006-004  .10264398-004   .53105953-003   .00000000       .00000000       .00000000       .00000000
182: 79   .00000000      .00000000       .00000000       .48058260-004  -.19722539-005   .10427973-003   .00000000
183: 80   .00000000      .00000000       .00000000      -.19722539-005   .33496608-004   .66345241-005   .00000000
184: 81   .00000000      .00000000       .00000000       .10427973-003   .66345241-005   .66718632-003   .00000000
185: 82   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .67606736-003
186: 83   .10247108-002  .10874340-003   .45197395-004   .00000000       .00000000       .00000000       .00000000
187:      .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
188:
189: 84   .10874340-003  .37209668-003   .26156643-004   .00000000       .00000000       .00000000       .00000000
190:      .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
191:
192: 85   .45197395-004  .26156643-004   .13712804-004   .00000000       .00000000       .00000000       .00000000
193:      .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
194:
195: 86   .00000000      .00000000       .00000000       .21223235-004  -.30551767-005   .54557850-004   .16075491-004
196:      .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
197:
198: 87   .00000000      .00000000       .00000000      -.30551767-005   .10637121-004  -.18366128-004   .53544755-005
199:      .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
200:
201: 88   .00000000      .00000000       .00000000       .54557850-004  -.18366128-004   .12606770-002   .13422498-003
202:      .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
203:
204: 89   .00000000      .00000000       .00000000       .16075491-004   .53544755-005   .13422498-003   .10962888-003
205:      .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
206:
207: 90   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
208:      .26032861-004 -.68574786-006   .21159701-004   .53850534-005   .00000000       .00000000       .00000000
209:
210: 91   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
211:     -.68574786-006  .64730540-004  -.81670302-005   .11128279-004   .00000000       .00000000       .00000000
212:
213: 92   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
214:      .21159701-004 -.81670302-005   .29054785-002   .47758630-004   .00000000       .00000000       .00000000
215:
216: 93   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
217:      .53850534-005  .11128279-004   .47758630-004   .40746416-004   .00000000       .00000000       .00000000
218:
219: 94   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
220:      .00000000      .00000000       .00000000       .00000000       .21867264-004   .31039789-005   .77239092-005
221:
222: 95   .00000000      .00000000       .00000000       .00000000       .00000000       .00000000       .00000000
223:      .00000000      .00000000       .00000000       .00000000       .31039789-005   .84340806-004   .70243368-005
224:
```

```
225: 96      .00000000      .00000000      .00000000      .00000000      .00000000      .00000000      .00000000
226:         .00000000      .00000000      .00000000      .00000000      .77239092-005  .70243368-005  .10052935-003
227:
EOF:227
END ED. NO CORRECTIONS APPLIED
```

Table 11-1 Variance and Covariance Matrix of the Estimated Adjustment Factors by Geographic Division

dED,R COVFIRG3P-S.
READ-ONLY MODE
ED 16R1C-C MON-12/01/86-09:40:16-(0,)
EDIT

Syn 2 - AR2
SAMPLE SIZE 721

	#	grp						
DIV1	1:	1	.58967628-004	-.25186872-005	.55089557-004	.00000000	.00000000	.00000000
	2:	2	-.25186872-005	.58523726-005	-.23456458-004	.00000000	.00000000	.00000000
	3:	3	.55089557-004	-.23456458-004	.28812177-002	.00000000	.00000000	.00000000
	4:	4	.00000000	.00000000	.00000000	.36837743-004	-.11149293-005	.53485730-005
	5:	5	.00000000	.00000000	.00000000	-.11149293-005	.21097170-004	.21574657-004
	6:	6	.00000000	.00000000	.00000000	.53485730-005	.21574657-004	.10515709-002
	7:	7	.78663434-003	.63377200-004	.77350426-005	.00000000	.00000000	.00000000
	8:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	9:		.00000000	.00000000	.00000000			
	10:	8	.63377200-004	.43510698-004	.12379665-004	.00000000	.00000000	.00000000
	11:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	12:		.00000000	.00000000	.00000000			
	13:	9	.77350426-005	.12379665-004	.19319344-004	.00000000	.00000000	.00000000
	14:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	15:		.00000000	.00000000	.00000000			
	16:	10	.00000000	.00000000	.00000000	.29638317-002	.11239058-003	-.58344264-003
	17:		-.36860576-004	.20129204-006	.00000000	.00000000	.00000000	.00000000
	18:		.00000000	.00000000	.00000000			
	19:	11	.00000000	.00000000	.00000000	.11239058-003	.22291805-004	-.75269289-004
	20:		-.90992285-005	.19165221-004	.00000000	.00000000	.00000000	.00000000
	21:		.00000000	.00000000	.00000000			
	22:	12	.00000000	.00000000	.00000000	-.58344264-003	-.75269289-004	.38345137-002
	23:		.13884990-003	.48153018-004	.00000000	.00000000	.00000000	.00000000
	24:		.00000000	.00000000	.00000000			
IV2	25:	13	.00000000	.00000000	.00000000	-.36860576-004	-.90992285-005	.13884990-003
	26:		.68173223-004	.13744797-004	.00000000	.00000000	.00000000	.00000000
	27:		.00000000	.00000000	.00000000			
	28:	14	.00000000	.00000000	.00000000	.20129204-006	.19165221-004	.48153018-004
	29:		.13744797-004	.15395006-003	.00000000	.00000000	.00000000	.00000000
	30:		.00000000	.00000000	.00000000			
	31:	15	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	32:		.00000000	.00000000	.13660120-004	-.13278350-006	.20851204-004	.00000000
	33:		.00000000	.00000000	.00000000			
	34:	16	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	35:		.00000000	.00000000	-.13278350-006	.13334713-004	-.29212781-006	.00000000
	36:		.00000000	.00000000	.00000000			
	37:	17	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	38:		.00000000	.00000000	.20851204-004	-.29212781-006	.10674292-002	.00000000
	39:		.00000000	.00000000	.00000000			
	40:	18	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	41:		.00000000	.00000000	.00000000	.00000000	.00000000	.46586948-005
	42:		.15987273-005	.48156021-006	.54941181-005			
	43:	19	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	44:		.00000000	.00000000	.00000000	.00000000	.00000000	.15987273-005
	45:		.28074820-004	.53379159-006	.15548155-004			
	46:	20	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	47:		.00000000	.00000000	.00000000	.00000000	.00000000	.48156021-006
	48:		.53379159-006	.22791412-004	.10863339-004			
	49:	21	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	50:		.00000000	.00000000	.00000000	.00000000	.00000000	.54941181-005
	51:		.15548155-004	.10863339-004	.23479202-003			
	52:	22	.18445876-002	.25255906-003	-.28530657-003	.86440322-005	.15022802-003	.00000000
	53:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

	row: idx	c1	c2	c3	c4	c5	c6	c7
	54:	.00000000	.00000000	.00000000				
	55: 23	.25255906-003	.11605222-003	-.22433319-004	-.21888339-005	.11040740-003	.00000000	
	56:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	57:	.00000000	.00000000	.00000000				
	58: 24	-.28530657-003	-.22433319-004	.22184876-002	.11773382-003	-.59707771-004	.00000000	
	59:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	60:	.00000000	.00000000	.00000000				
	61: 25	.86440322-005	-.21888339-005	.11773382-003	.46151220-004	.33152642-004	.00000000	
	62:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	63:	.00000000	.00000000	.00000000				
	64: 26	.15022802-003	.11040740-003	-.59707771-004	.33152642-004	.65198250-003	.00000000	
	65:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	66:	.00000000	.00000000	.00000000				
	67: 27	.00000000	.00000000	.00000000	.00000000	.00000000	.67928801-002	
	68:	.82722492-004	-.15038697-003	.79206102-004	.22914700-003	.00000000	.00000000	
	69:	.00000000	.00000000	.00000000				
PIV3	70: 28	.00000000	.00000000	.00000000	.00000000	.00000000	.82722492-004	
	71:	.55110890-004	.20802381-004	.87078125-005	.45802402-004	.00000000	.00000000	
	72:	.00000000	.00000000	.00000000				
	73: 29	.00000000	.00000000	.00000000	.00000000	.00000000	-.15038697-003	
	74:	.20802381-004	.56137227-002	.15243540-003	.36417047-003	.00000000	.00000000	
	75:	.00000000	.00000000	.00000000				
	76: 30	.00000000	.00000000	.00000000	.00000000	.00000000	.79206102-004	
	77:	.87078125-005	.15243540-003	.56236448-004	.45883178-004	.00000000	.00000000	
	78:	.00000000	.00000000	.00000000				
	79: 31	.00000000	.00000000	.00000000	.00000000	.00000000	.22914700-003	
	80:	.45802402-004	.36417047-003	.45883178-004	.39470326-003	.00000000	.00000000	
	81:	.00000000	.00000000	.00000000				
	82: 32	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	83:	.00000000	.00000000	.00000000	.00000000	.46117469-002	.23467311-003	
	84:	.19941499-003	.88847333-004	.39887983-003				
	85: 33	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	86:	.00000000	.00000000	.00000000	.00000000	.23467311-003	.20757543-003	
	87:	.19828754-003	.40754732-006	.10144396-003				
	88: 34	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	89:	.00000000	.00000000	.00000000	.00000000	.19941499-003	.19828754-003	
	90:	.16210579-002	.12162448-003	.18186220-004				
	91: 35	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	92:	.00000000	.00000000	.00000000	.00000000	.88847333-004	.40754732-006	
	93:	.12162448-003	.64921552-004	.90192869-004				
	94: 36	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	95:	.00000000	.00000000	.00000000	.00000000	.39887983-003	.10144396-003	
	96:	.18186220-004	.90192869-004	.71223953-003				
	97: 37	.75430625-003	.85926729-005	.12632026-003	.00000000	.00000000	.00000000	.00000000
	98: 38	.85926729-005	.15612364-003	.26927146-004	.00000000	.00000000	.00000000	.00000000
	99: 39	.12632026-003	.26927146-004	.21300980-002	.00000000	.00000000	.00000000	.00000000
DIV4	100: 40	.00000000	.00000000	.00000000	.18872063-003	-.20266696-005	-.31047684-005	.26820812-004
	101: 41	.00000000	.00000000	.00000000	-.20266696-005	.33810487-004	.83708278-006	.12837313-004
	102: 42	.00000000	.00000000	.00000000	-.31047684-005	.83708278-006	.26566200-004	.46468745-004
	103: 43	.00000000	.00000000	.00000000	-.26820812-004	.12837313-004	.46468745-004	.48110377-003
	104: 44	.54899403-003	-.17004477-003	+.14721896-005	.22980300-003	.14852126-003	.00000000	
	105:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	106: 45	-.17004477-003	.25944352-002	.12777334-004	-.18631827-003	-.20139790-003	.00000000	
DIV5	107:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	108: 46	-.14721896-005	.12777334-004	.11990890-004	.10867153-004	-.51460126-005	.00000000	
	109:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
	110: 47	.22980300-003	-.18631827-003	.10867153-004	.64234221-002	.36086745-003	.00000000	

11

111:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
112:	48	.14852126-003	-.20139790-003	-.51460126-005	.36086745-003	.77091069-003	.00000000
113:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
114:	49	.00000000	.00000000	.00000000	.00000000	.00000000	.39133053-004
115:		-.16033656-005	.11023903-006	.10044756-004	.00000000	.00000000	.00000000
116:	50	.00000000	.00000000	.00000000	.00000000	.00000000	-.16033656-005
117:		.54609248-005	-.81772806-006	.15686185-004	.00000000	.00000000	.00000000
118:	51	.00000000	.00000000	.00000000	.00000000	.00000000	.11023903-006
119:		-.81772806-006	.21329659-004	-.20612763-004	.00000000	.00000000	.00000000
120:	52	.00000000	.00000000	.00000000	.00000000	.00000000	.10044756-004
121:		.15686185-004	-.20612763-004	.12277590-002	.00000000	.00000000	.00000000
122:	53	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
123:		.00000000	.00000000	.00000000	.12730895-003	-.30543524-005	.17683798-003
124:	54	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
125:		.00000000	.00000000	.00000000	-.30543524-005	.27539562-003	.14259946-004
126:	55	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
127:		.00000000	.00000000	.00000000	.17683798-003	.14259946-004	.81974596-003
128:	56	.19640848-004	.31210228-005	.00000000	.00000000	.00000000	.00000000
129:		.00000000	.00000000	.00000000			
130:	57	.31210228-005	.17275545-001	.00000000	.00000000	.00000000	.00000000
131:		.00000000	.00000000	.00000000			
132:	58	.00000000	.00000000	.47406305-005	-.54598569-006	-.34362775-005	.00000000
133:		.00000000	.00000000	.00000000			
134:	59	.00000000	.00000000	-.54598569-006	.21836987-004	.57659932-005	.00000000
135:		.00000000	.00000000	.00000000			
136:	60	.00000000	.00000000	-.34362775-005	.57659932-005	.82618468-003	.00000000
137:		.00000000	.00000000	.00000000			
138:	61	.00000000	.00000000	.00000000	.00000000	.00000000	.41430687-003
139:		-.78341930-006	-.48978087-006	-.16947657-004			
140:	62	.00000000	.00000000	.00000000	.00000000	.00000000	-.78341930-006
141:		.58661802-005	-.80639266-007	.20145306-004			
142:	63	.00000000	.00000000	.00000000	.00000000	.00000000	-.48978087-006
143:		-.80639266-007	.10842874-004	.56204461-005			
144:	64	.00000000	.00000000	.00000000	.00000000	.00000000	-.16947657-004
145:		.20145306-004	.56204461-005	.54434986-003			
146:	65	.10626360-001	.38367544-003	.17038710-003	.00000000	.00000000	.00000000
147:		.00000000	.00000000	.00000000	.00000000	.00000000	
148:							
149:	66	.38367544-003	.33354173-003	.41284121-004	.00000000	.00000000	.00000000
150:		.00000000	.00000000	.00000000	.00000000	.00000000	
151:							
152:	67	.17038710-003	.41284121-004	.11654446-003	.00000000	.00000000	.00000000
153:		.00000000	.00000000	.00000000	.00000000	.00000000	
154:							
155:	68	.00000000	.00000000	.00000000	.13186865-003	.47492798-004	.12588292-003
156:		.12502188-004	.00000000	.00000000	.00000000	.00000000	
157:							
158:	69	.00000000	.00000000	.00000000	.47492798-004	.11344227-002	.43706599-003
159:		.17844178-003	.00000000	.00000000	.00000000	.00000000	
160:							
161:	70	.00000000	.00000000	.00000000	.12588292-003	.43706599-003	.18605973-002
162:		.93943369-004	.00000000	.00000000	.00000000	.00000000	
163:							
164:	71	.00000000	.00000000	.00000000	.12502188-004	.17844178-003	.93943369-004
165:		.88479687-004	.00000000	.00000000	.00000000	.00000000	
166:							
167:	72	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

DIV 6 (rows 128–145)

DIV 7 (rows 146–167)

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Line	Idx							
168:		.00000000	.14000833-003	-.15697618-005	.27163850-004	.17920194-003		
169:								
170:	73	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
171:		.00000000	-.15697618-005	.17567382-002	-.14452758-004	.12372360-003		
172:								
173:	74	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
174:		.00000000	.27163850-004	-.14452758-004	.41559373-004	.35681180-004		
175:								
176:	75	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
177:		.00000000	.17920194-003	.12372360-003	.35681180-004	.49616378-003		
178:								
179:	76	.72024725-004	.97462960-006	.11562887-003	.00000000	.00000000	.00000000	.00000000
180:	77	.97462960-006	.47242678-004	.12445121-004	.00000000	.00000000	.00000000	.00000000
181:	78	.11562887-003	.12445121-004	.88889538-003	.00000000	.00000000	.00000000	.00000000
182:	79	.00000000	.00000000	.00000000	.85307535-004	-.22628954-005	.18735798-003	.00000000
183:	80	.00000000	.00000000	.00000000	-.22628954-005	.38726636-004	-.12288101-004	.00000000
184:	81	.00000000	.00000000	.00000000	.18735798-003	-.12288101-004	.12126382-002	.00000000
185:	82	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.16827667-003
186:	83	.31633014-002	.25675424-003	.86253689-004	.00000000	.00000000	.00000000	.00000000
187:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
188:								
189:	84	.25675424-003	.91843150-004	.21141909-004	.00000000	.00000000	.00000000	.00000000
190:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
191:								
192:	85	.86253689-004	.21141909-004	.24438896-004	.00000000	.00000000	.00000000	.00000000
193:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
194:								
195:	86	.00000000	.00000000	.00000000	.29833229-004	.31311485-006	.11456276-003	.11454882-004
196:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
197:								
198:	87	.00000000	.00000000	.00000000	.31311485-006	.29538095-004	-.39709095-006	.18025393-004
199:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
200:								
201:	88	.00000000	.00000000	.00000000	.11456276-003	-.39709095-006	.26183206-002	.29129864-003
202:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
203:								
204:	89	.00000000	.00000000	.00000000	.11454882-004	.18025393-004	.29129864-003	.17654762-003
205:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
206:								
207:	90	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
208:		.10864937-004	-.46613349-005	.47304144-004	.12192066-004	.00000000	.00000000	.00000000
209:								
210:	91	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
211:		-.46613349-005	.10355016-003	.14654231-004	.29354104-004	.00000000	.00000000	.00000000
212:								
213:	92	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
214:		.47304144-004	.14654231-004	.85402322-002	.18081228-003	.00000000	.00000000	.00000000
215:								
216:	93	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
217:		.12192066-004	.29354104-004	.18081228-003	.11841769-003	.00000000	.00000000	.00000000
218:								
219:	94	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
220:		.00000000	.00000000	.00000000	.00000000	.33766292-004	.10005968-005	.74528584-005
221:								
222:	95	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
223:		.00000000	.00000000	.00000000	.00000000	.10005968-005	.69911994-004	.68555064-004
224:								

DIV8 (left margin, rows 182–185)

DIV9 (left margin, rows 195–197)

225: 96	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
226:	.00000000	.00000000	.00000000	.00000000	.74528584-005	.68555064-004	.19933274-003
227:							

EOF:227

END ED. NO CORRECTIONS APPLIED

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Table 12. Variance and Covariance Matrix of the Estimated Adjustment Factors by Geographic Division
Syn 2 - AP3

SAMPLE SIZE 1440

EDIT

Row	#	Col1	Col2	Col3	Col4	Col5	Col6
1:	1	.13287956-004	.55822982-006	.10771948-004	.00000000	.00000000	.00000000
2:	2	.55822982-006	.11637851-005	.67691521-005	.00000000	.00000000	.00000000
3:	3	.10771948-004	.67691521-005	.15517050-002	.00000000	.00000000	.00000000
4:	4	.00000000	.00000000	.00000000	.61210389-005	-.52056984-006	.17180230-004
5:	5	.00000000	.00000000	.00000000	-.52056984-006	.33767075-005	.16959879-004
6:	6	.00000000	.00000000	.00000000	.17180230-004	.16959879-004	.18860344-002
7:	7	.44180571-003	.14609028-003	.21767684-005	.00000000	.00000000	.00000000
8:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
9:		.00000000	.00000000	.00000000			
10:	8	.14609028-003	.41246575-003	.12211136-004	.00000000	.00000000	.00000000
11:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
12:		.00000000	.00000000	.00000000			
13:	9	.21767684-005	.12211136-004	.10163089-004	.00000000	.00000000	.00000000
14:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
15:		.00000000	.00000000	.00000000			
16:	10	.00000000	.00000000	.00000000	.30494720-002	.36651254-004	.28164088-003
17:		-.42540981-005	.13893591-002	.00000000	.00000000	.00000000	.00000000
18:		.00000000	.00000000	.00000000			
19:	11	.00000000	.00000000	.00000000	.36651254-004	.10085744-004	.20988067-004
20:		-.11544657-005	.18272771-004	.00000000	.00000000	.00000000	.00000000
21:		.000000C0	.00000000	.00000000			
22:	12	.000000C0	.00000000	.00000000	.28164088-003	.20988067-004	.37434293-002
23:		.43190593-004	.72961520-003	.00000000	.00000000	.00000000	.00000000
24:		.00000000	.00000000	.00000000			
25:	13	.00000000	.00000000	.00000000	-.42540981-005	-.11544657-005	.43190593-004
26:		.75682818-005	.48117267-005	.00000000	.00000000	.00000000	.00000000
27:		.00000000	.00000000	.00000000			
28:	14	.00000000	.00000000	.00000000	.13893591-002	.18272771-004	.72961520-003
29:		.48117267-005	.31608345-002	.00000000	.00000000	.00000000	.00000000
30:		.00000000	.00000000	.00000000			
31:	15	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
32:		.00000000	.00000000	.28584040-005	.16387329-006	.91408223-005	.00000000
33:		.00000000	.00000000	.00000000			
34:	16	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
35:		.00000000	.00000000	.16387329-006	.45247994-005	.69366274-005	.00000000
36:		.00000000	.00000000	.00000000			
37:	17	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
38:		.00000000	.00000000	.91408223-005	.69366274-005	.63134879-003	.00000000
39:		.00000000	.00000000	.00000000			
40:	18	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
41:		.00000000	.00000000	.00000000	.00000000	.00000000	.13706418-005
42:		.19714829-006	.30714831-006	.63621436-005			
43:	19	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
44:		.00000000	.00000000	.00000000	.00000000	.00000000	.19714829-006
45:		.81103170-005	.78238580-006	.39074027-005			
46:	20	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
47:		.00000000	.00000000	.00000000	.00000000	.00000000	.30714831-006
48:		.78238580-006	.79386603-005	-.43882767-006			
49:	21	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
50:		.00000000	.00000000	.00000000	.00000000	.00000000	.63621436-005
51:		.39074027-005	-.43882767-006	.29322092-003			
52:	22	.12960174-002	.67120418-004	-.28936857-003	-.26386825-004	-.14491215-003	.00000000
53:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

DIV1 spans rows 1-6; DIV2 spans rows 24-51.

54:		.00000000	.00000000	.00000000			
55:	23	.67120418-004	.27196218-004	-.23048776-004	-.21480114-005	.15316365-003	.00000000
56:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
57:		.00000000	.00000000	.00000000			
58:	24	-.28936857-003	-.23048776-004	.19299495-002	.43021997-004	.14129332-002	.00000000
59:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
60:		.00000000	.00000000	.00000000			
61:	25	-.26386825-004	-.21480114-005	.43021997-004	.94958676-005	.65032843-004	.00000000
62:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
63:		.00000000	.00000000	.00000000			
64:	26	-.14491215-003	.15316365-003	.14129332-002	.65032843-004	.14351229-001	.00000000
65:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
66:		.00000000	.00000000	.00000000			
67:	27	.00000000	.00000000	.00000000	.00000000	.00000000	.35165576-002
68:		.15889919-004	.26015541-003	.35492302-004	.21994289-003	.00000000	.00000000
69:		.00000000	.00000000	.00000000			
70:	28	.00000000	.00000000	.00000000	.00000000	.00000000	.15889919-004
71:		.98620906-005	-.14379116-006	-.72099486-007	.59538482-004	.00000000	.00000000
72:		.00000000	.00000000	.00000000			
73:	29	.00000000	.00000000	.00000000	.00000000	.00000000	.26015541-003
74:		-.14379116-006	.26178473-002	.50015581-004	.42942032-003	.00000000	.00000000
75:		.00000000	.00000000	.00000000			
76:	30	.00000000	.00000000	.00000000	.00000000	.00000000	.35492302-004
77:		-.72099486-007	.50015581-004	.14729940-004	.15168814-004	.00000000	.00000000
78:		.00000000	.00000000	.00000000			
79:	31	.00000000	.00000000	.00000000	.00000000	.00000000	.21994289-003
80:		.59538482-004	.42942032-003	.15168814-004	.36245696-002	.00000000	.00000000
81:		.00000000	.00000000	.00000000			
82:	32	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
83:		.00000000	.00000000	.00000000	.00000000	.14447813-002	.30046848-004
84:		.14304949-004	.24154664-005	.90534998-003			
85:	33	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
86:		.00000000	.00000000	.00000000	.00000000	.30046848-004	.22681963-004
87:		.29333572-004	.95850048-006	.13240962-003			
88:	34	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
89:		.00000000	.00000000	.00000000	.00000000	.14304949-004	.29333572-004
90:		.75473794-003	.20186957-004	.54718819-003			
91:	35	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
92:		.00000000	.00000000	.00000000	.00000000	.24154664-005	.95850048-006
93:		.20186957-004	.56626060-005	.49670151-004			
94:	36	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
95:		.00000000	.00000000	.00000000	.00000000	.90534998-003	.13240962-003
96:		.54718819-003	.49670151-004	.87513236-002			

97:	37	.11517775-003	-.16225282-006	.37743783-004	.00000000	.00000000	.00000000	.00000000
98:	38	-.16225282-006	.53836147-004	.85539858-004	.00000000	.00000000	.00000000	.00000000
99:	39	.37743783-004	.85539858-004	.21431315-002	.00000000	.00000000	.00000000	.00000000
100:	40	.00000000	.00000000	.00000000	.13908617-004	-.13497153-005	-.13866192-005	.10437854-004
101:	41	.00000000	.00000000	.00000000	-.13497153-005	.14382843-004	-.38595622-006	.23850491-005
102:	42	.00000000	.00000000	.00000000	-.13866192-005	-.38595622-006	.43205426-005	.12327032-004
103:	43	.00000000	.00000000	.00000000	.10437854-004	.23850491-005	.12327032-004	.22175142-003
104:	44	.85131240-004	-.13168986-004	-.23989776-006	.99106593-005	.68848118-004	.00000000	
105:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
106:	45	-.13168986-004	.13380459-002	-.75344797-005	.10946864-003	-.67552432-004	.00000000	
107:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
108:	46	-.23989776-006	-.75344797-005	.35167073-005	.38771890-005	.83172214-005	.00000000	
109:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
110:	47	.99106593-005	.10946864-003	.38771890-005	.14072843-002	.25474641-003	.00000000	

111:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
112: 48	.68848118-004	-.67552432-004	.83172214-005	.25474641-003	.66868450-002	.00000000
113:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
114: 49	.00000000	.00000000	.00000000	.00000000	.00000000	.17418232-005
115:	-.18536173-006	-.35796791-006	.46432168-005	.00000000	.00000000	.00000000
116: 50	.00000000	.00000000	.00000000	.00000000	.00000000	-.18536173-006
117:	.10828018-004	-.79447488-006	.13422937-004	.00000000	.00000000	.00000000
118: 51	.00000000	.00000000	.00000000	.00000000	.00000000	-.35796791-006
119:	-.79447488-006	.26878556-005	-.90487571-005	.00000000	.00000000	.00000000
120: 52	.00000000	.00000000	.00000000	.00000000	.00000000	.46432168-005
121:	.13422937-004	-.90487571-005	.83723249-003	.00000000	.00000000	.00000000
122: 53	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
123:	.00000000	.00000000	.00000000	.34825313-004	.39716573-006	.95464747-004
124: 54	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
125:	.00000000	.00000000	.00000000	.39716573-006	.37565576-004	.11627652-004
126: 55	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
127:	.00000000	.00000000	.00000000	.95464747-004	.11627652-004	.93060457-003
128: 56	.61606775-005	.51179446-005	.00000000	.00000000	.00000000	.00000000
129:	.00000000	.00000000	.00000000			
130: 57	.51179446-005	.40488624-002	.00000000	.00000000	.00000000	.00000000
131:	.00000000	.00000000	.00000000			
132: 58	.00000000	.00000000	.18110308-005	-.33045884-006	.19811962-005	.00000000
133:	.00000000	.00000000	.00000000			
134: 59	.00000000	.00000000	-.33045884-006	.23111786-005	.26459247-005	.00000000
135:	.00000000	.00000000	.00000000			
136: 60	.00000000	.00000000	.19811962-005	.26459247-005	.46509154-003	.00000000
137:	.00000000	.00000000	.00000000			
138: 61	.00000000	.00000000	.00000000	.00000000	.00000000	.30637442-004
139:	.63029690-006	-.80057615-006	-.10486227-004			
140: 62	.00000000	.00000000	.00000000	.00000000	.00000000	.63029690-006
141:	.46683877-005	.29780071-006	.34405030-005			
142: 63	.00000000	.00000000	.00000000	.00000000	.00000000	-.80057615-006
143:	.29780071-006	.21253693-005	.35111287-005			
144: 64	.00000000	.00000000	.00000000	.00000000	.00000000	-.10486227-004
145:	.34405030-005	.35111287-005	.49194188-003			
146: 65	.60663295-002	.11883731-002	.10013588-003	.00000000	.00000000	.00000000
147:	.00000000	.00000000	.00000000	.00000000	.00000000	
148:						
149: 66	.11883731-002	.37454262-002	.16774791-003	.00000000	.00000000	.00000000
150:	.00000000	.00000000	.00000000	.00000000	.00000000	
151:						
152: 67	.10013588-003	.16774791-003	.52392360-004	.00000000	.00000000	.00000000
153:	.00000000	.00000000	.00000000	.00000000	.00000000	
154:						
155: 68	.00000000	.00000000	.00000000	.21086995-004	.45034719-005	.38911231-004
156:	.31612858-005	.00000000	.00000000	.00000000	.00000000	
157:						
158: 69	.00000000	.00000000	.00000000	.45034719-005	.41742502-004	.57193521-004
159:	.73131954-004	.00000000	.00000000	.00000000	.00000000	
160:						
161: 70	.00000000	.00000000	.00000000	.38911231-004	.57193521-004	.72204653-003
162:	.14664266-003	.00000000	.00000000	.00000000	.00000000	
163:						
164: 71	.00000000	.00000000	.00000000	.31612858-005	.73131954-004	.14664266-003
165:	.89133292-003	.00000000	.00000000	.00000000	.00000000	
166:						
167: 72	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

IV 5 (at row 118)
IV 6 (at row 136)
IV 7 (at row 156)

Line	#						
168:		.00000000	.19509249-004	-.79447862-006	.18952335-005	.21807765-004	
169:							
170:	73	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
171:		.00000000	-.79447862-006	.25948508-003	-.84416219-005	.20858663-004	
172:						•	
173:	74	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
174:		.00000000	.18952335-005	-.84416219-005	.91880792-005	.13951477-004	
175:							
176:	75	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
177:		.00000000	.21807765-004	.20858663-004	.13951477-004	.64525828-003	
178:							

DIV 8

Line	#						
179:	76	.21244657-004	-.14599400-005	.12354994-003	.00000000	.00000000	.00000000	.00000000
180:	77	-.14599400-005	.29029054-004	-.13105458-005	.00000000	.00000000	.00000000	.00000000
181:	78	.12354994-003	-.13105458-005	.29599507-002	.00000000	.00000000	.00000000	.00000000
182:	79	.00000000	.00000000	.00000000	.17275875-004	-.10578042-005	.19612376-003	.00000000
183:	80	.00000000	.00000000	.00000000	-.10578042-005	.12684963-004	-.48947969-006	.00000000
184:	81	.00000000	.00000000	.00000000	.19612376-003	-.48947969-006	.54396077-002	.00000000
185:	82	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.40076379-003
186:	83	.10247108-002	.45631190-003	.27692307-004	.00000000	.00000000	.00000000	.00000000
187:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
188:								
189:	84	.45631190-003	.65050070-002	.67057921-004	.00000000	.00000000	.00000000	.00000000
190:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
191:								
192:	85	.27692307-004	.67057921-004	.55885209-005	.00000000	.00000000	.00000000	.00000000
193:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
194:								
195:	86	.00000000	.00000000	.00000000	.73369112-005	-.10057884-005	.29898719-004	.32396698-004
196:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
197:								
198:	87	.00000000	.00000000	.00000000	-.10057884-005	.37795445-005	-.10896139-004	.11602172-004
199:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

DIV 9

Line	#						
200:								
201:	88	.00000000	.00000000	.00000000	.29898719-004	-.10896139-004	.12606770-002	.56975396-003
202:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
203:								
204:	89	.00000000	.00000000	.00000000	.32396698-004	.11602172-004	.56975396-003	.20793122-002
205:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
206:								
207:	90	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
208:		.90160574-005	.25023024-006	.11212853-004	.91950776-005	.00000000	.00000000	.00000000
209:								
210:	91	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
211:		.25023024-006	.23478753-004	-.56811499-006	.21730337-004	.00000000	.00000000	.00000000
212:								
213:	92	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
214:		.11212853-004	-.56811499-006	.29054785-002	.25476514-003	.00000000	.00000000	.00000000
215:								
216:	93	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
217:		.91950776-005	.21730337-004	.25476514-003	.84163946-003	.00000000	.00000000	.00000000
218:								
219:	94	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
220:		.00000000	.00000000	.00000000	.00000000	.67790814-005	.72181549-006	.15925034-004
221:								
222:	95	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
223:		.00000000	.00000000	.00000000	.00000000	.72181549-006	.43377734-004	.12616022-004
224:								

```
225: 96    .00000000      .00000000      .00000000      .00000000      .00000000      .00000000      .00000000
226:       .00000000      .00000000      .00000000      .00000000     .15925034-004  .12616022-004  .10432032-002
227:
EOF:227
END ED. NO CORRECTIONS APPLIED
```

Table 12-I Variance and Covariance Matrix of the Estimated Adjustment Factors by Geographic Division

Syn 2 - AP3

ƏED,R COVFTRG4P-S.
READ-ONLY MODE   SAMPLE SIZE 721
ED 16R1C-C MON-12/01/86-09:40:17-(0,)
EDIT

Div	Row	C1	C2	C3	C4	C5	C6
DIV 1	1: 1	.22397371-004	-.10010892-005	.69131234-004	.00000000	.00000000	.00000000
	2: 2	-.10010892-005	.22002115-005	-.16224165-004	.00000000	.00000000	.00000000
	3: 3	.69131234-004	-.16224165-004	.43317225-002	.00000000	.00000000	.00000000
	4: 4	.00000000	.00000000	.00000000	.12449802-004	-.55514214-006	.17805510-004
	5: 5	.00000000	.00000000	.00000000	-.55514214-006	.79459876-005	.66246823-004
	6: 6	.00000000	.00000000	.00000000	.17805510-004	.66246823-004	.42876969-002
	7: 7	.78663434-003	.27402562-003	.39185752-005	.00000000	.00000000	.00000000
	8:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	9:	.00000000	.00000000	.00000000			
	10: 8	.27402562-003	.71891958-003	.30537515-004	.00000000	.00000000	.00000000
	11:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	12:	.00000000	.00000000	.00000000			
	13: 9	.39185752-005	.30537515-004	.80092567-005	.00000000	.00000000	.00000000
	14:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	15:	.00000000	.00000000	.00000000			
	16: 10	.00000000	.00000000	.00000000	.29638317-002	.76454832-004	-.58344264-003
	17:	-.21699965-004	.53552682-004	.00000000	.00000000	.00000000	.00000000
	18:	.00000000	.00000000	.00000000			
	19: 11	.00000000	.00000000	.00000000	.76454832-004	.10173568-004	-.48311824-004
	20:	-.39317647-005	.43761466-004	.00000000	.00000000	.00000000	.00000000
	21:	.00000000	.00000000	.00000000			
	22: 12	.00000000	.00000000	.00000000	-.58344264-003	-.48311824-004	.38345137-002
	23:	.90714552-004	.25317843-003	.00000000	.00000000	.00000000	.00000000
	24:	.00000000	.00000000	.00000000			
DIV 2	25: 13	.00000000	.00000000	.00000000	-.21699965-004	-.39317647-005	.90714552-004
	26:	.25064751-004	.29643823-004	.00000000	.00000000	.00000000	.00000000
	27:	.00000000	.00000000	.00000000			
	28: 14	.00000000	.00000000	.00000000	.53552682-004	.43761466-004	.25317843-003
	29:	.29643823-004	.27751681-002	.00000000	.00000000	.00000000	.00000000
	30:	.00000000	.00000000	.00000000			
	31: 15	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	32:	.00000000	.00000000	.52633835-005	-.21160074-006	.14310584-004	.00000000
	33:	.00000000	.00000000	.00000000			
	34: 16	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	35:	.00000000	.00000000	-.21160074-006	.55235698-005	.10211236-005	.00000000
	36:	.00000000	.00000000	.00000000			
	37: 17	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	38:	.00000000	.00000000	.14310584-004	.10211236-005	.12238570-002	.00000000
	39:	.00000000	.00000000	.00000000			
	40: 18	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	41:	.00000000	.00000000	.00000000	.00000000	.00000000	.19126845-005
	42:	.46909025-006	.28236789-006	.36904619-005			
	43: 19	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	44:	.00000000	.00000000	.00000000	.00000000	.00000000	.46909025-006
	45:	.12898257-004	.17060235-006	.99471391-005			
	46: 20	.00000000	.00000000	.99471391-005	.00000000	.00000000	.00000000
	47:	.00000000	.00000000	.00000000	.00000000	.00000000	.28236789-006
	48:	.17060235-006	.75442611-005	.54063047-005			
	49: 21	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
	50:	.00000000	.00000000	.00000000	.00000000	.00000000	.36904619-005
	51:	.99471391-005	.54063047-005	.35252852-003			
	52: 22	.18445876-002	.16508958-003	-.28530657-003	.58366153-005	.65429514-003	.00000000
	53:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

```
54:       .00000000        .00000000        .00000000
55: 23    .16508958-003    .49670991-004   -.26154951-004   -.12234949-005    .25800115-003    .00000000
56:       .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
57:       .00000000        .00000000        .00000000
58: 24   -.28530657-003   -.26154951-004    .22184876-002    .72403799-004   -.33703787-003    .00000000
59:       .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
60:       .00000000        .00000000        .00000000
61: 25    .58366153-005   -.12234949-005    .72403799-004    .16763915-004    .72666631-004    .00000000
62:       .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
63:       .00000000        .00000000        .00000000
64: 26    .65429514-003    .25800115-003   -.33703787-003    .72666631-004    .91179621-002    .00000000
65:       .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
66:       .00000000        .00000000        .00000000
67: 27    .00000000        .00000000        .00000000        .00000000        .00000000        .67928801-002
68:       .36626138-004   -.15038697-003    .56138943-004    .98005796-003    .00000000
69:       .00000000        .00000000        .00000000
70: 28    .00000000        .00000000        .00000000        .00000000        .00000000        .36626138-004
71:       .20767854-004    .93348188-005    .28325221-005    .88045187-004    .00000000        .00000000
72:       .00000000        .00000000        .00000000
73: 29    .00000000        .00000000        .00000000        .00000000        .00000000       -.15038697-003
74:       .93348188-005    .56137227-002    .87002330-004    .13518034-002    .00000000
75:       .00000000        .00000000        .00000000
76: 30    .00000000        .00000000        .00000000        .00000000        .00000000        .56138943-004
77:       .28325221-005    .87002330-004    .20602928-004    .95300055-004    .00000000
78:       .00000000        .00000000        .00000000
79: 31    .00000000        .00000000        .00000000        .00000000        .00000000        .98005796-003
80:       .88045187-004    .13518034-002    .95300055-004    .76239196-002    .00000000
81:       .00000000        .00000000        .00000000
82: 32    .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
83:       .00000000        .00000000        .00000000        .00000000        .46117469-002    .12434040-003
84:       .19941499-003    .43136810-004    .18548247-002
85: 33    .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
86:       .00000000        .00000000        .00000000        .00000000        .12434040-003    .79679853-004
87:       .12947145-003    .93311106-006    .21136077-003
88: 34    .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
89:       .00000000        .00000000        .00000000        .00000000        .19941499-003    .12947145-003
90:       .16210579-002    .64916421-004   -.25489770-003
91: 35    .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
92:       .00000000        .00000000        .00000000        .00000000        .43136810-004    .93311106-006
93:       .64916421-004    .19160600-004    .17574096-003
94: 36    .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
95:       .00000000        .00000000        .00000000        .00000000        .18548247-002    .21136077-003
96:      -.25489770-003    .17574096-003    .11791693-001

97: 37    .26051538-003    .33933194-005    .10673454-003    .00000000        .00000000        .00000000        .00000000
98: 38    .33933194-005    .50070106-004    .80001828-005    .00000000        .00000000        .00000000        .00000000
99: 39    .10673454-003    .80001828-005    .21232017-002    .00000000        .00000000        .00000000        .00000000
100: 40   .00000000        .00000000        .00000000        .64405863-004   -.80614960-006   -.35245574-006    .16999693-004
101: 41   .00000000        .00000000        .00000000       -.80614960-006    .12368986-004   -.32901012-006    .73414261-005
102: 42   .00000000        .00000000        .00000000       -.35245574-006   -.32901012-006    .95734315-005    .26835996-004
103: 43   .00000000        .00000000        .00000000        .16999693-004    .73414261-005    .26835996-004    .49330438-003
104: 44   .26001534-003   -.11780662-003   -.65647528-006    .14397824-003    .39880574-003    .00000000
105:      .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
106: 45  -.11780662-003    .25944352-002    .49539332-005   -.18631827-003   -.88204065-003    .00000000
107:      .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
108: 46  -.65647528-006    .49539332-005    .41233792-005    .51424513-005   -.95751321-005    .00000000
109:      .00000000        .00000000        .00000000        .00000000        .00000000        .00000000
110: 47   .14397824-003   -.18631827-003    .51424513-005    .64234221-002    .14546130-002    .00000000
```

DIV3

DIV4

111:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
112: 48	.39880574-003	-.88204065-003	-.95751321-005	.14546130-002	.14848154-001	.00000000
113:	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
114: 49	.00000000	.00000000	.00000000	.00000000	.00000000	.95300959-005
115:	-.71645757-006	-.21467799-006	.10181874-004	.00000000	.00000000	.00000000
116: 50	.00000000	.00000000	.00000000	.00000000	.00000000	-.71645757-006
117:	.17716812-005	-.44671515-006	.99570784-005	.00000000	.00000000	.00000000
118: 51	.00000000	.00000000	.00000000	.00000000	.00000000	-.21467799-006
119:	-.44671515-006	.72042008-005	-.10232453-004	.00000000	.00000000	.00000000
120: 52	.00000000	.00000000	.00000000	.00000000	.00000000	.10181874-004
121:	.99570784-005	-.10232453-004	.12679409-002	.00000000	.00000000	.00000000
122: 53	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
123:	.00000000	.00000000	.00000000	.53366406-004	-.23951295-005	.10715512-003
124: 54	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
125:	.00000000	.00000000	.00000000	-.23951295-005	.19748763-003	.14489201-005
126: 55	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
127:	.00000000	.00000000	.00000000	.10715512-003	.14489201-005	.12909765-002
128: 56	.92131684-005	-.10747189-004	.00000000	.00000000	.00000000	.00000000
129:	.00000000	.00000000	.00000000			
130: 57	-.10747189-004	.17248800-001	.00000000	.00000000	.00000000	.00000000
131:	.00000000	.00000000	.00000000			
132: 58	.00000000	.00000000	.15214404-005	-.97440118-007	.11615058-005	.00000000
133:	.00000000	.00000000	.00000000			
134: 59	.00000000	.00000000	-.97440118-007	.72922050-005	.34355811-005	.00000000
135:	.00000000	.00000000	.00000000			
136: 60	.00000000	.00000000	.11615058-005	.34355811-005	.95963466-003	.00000000
137:	.00000000	.00000000	.00000000			
138: 61	.00000000	.00000000	.00000000	.00000000	.00000000	.10354793-003
139:	.31789990-006	-.80900997-006	-.21094692-004			
140: 62	.00000000	.00000000	.00000000	.00000000	.00000000	.31789990-006
141:	.23157901-005	-.26897443-007	.13178902-004			
142: 63	.00000000	.00000000	.00000000	.00000000	.00000000	-.80900997-006
143:	-.26897443-007	.41693374-005	.11856431-004			
144: 64	.00000000	.00000000	.00000000	.00000000	.00000000	-.21094692-004
145:	.13178902-004	.11856431-004	.97142930-003			
146: 65	.10626360-001	.15558485-002	.10119692-003	.00000000	.00000000	.00000000
147:	.00000000	.00000000	.00000000	.00000000	.00000000	
148:						
149: 66	.15558485-002	.54387345-002	.10767135-003	.00000000	.00000000	.00000000
150:	.00000000	.00000000	.00000000	.00000000	.00000000	
151:						
152: 67	.10119692-003	.10767135-003	.45859722-004	.00000000	.00000000	.00000000
153:	.00000000	.00000000	.00000000	.00000000	.00000000	
154:						
155: 68	.00000000	.00000000	.00000000	.37946448-004	.16486420-004	.49639844-004
156:	.27265905-004	.00000000	.00000000	.00000000	.00000000	
157:						
158: 69	.00000000	.00000000	.00000000	.16486420-004	.37537302-003	.25079790-003
159:	.43651866-003	.00000000	.00000000	.00000000	.00000000	
160:						
161: 70	.00000000	.00000000	.00000000	.49639844-004	.25079790-003	.18605973-002
162:	.42907118-003	.00000000	.00000000	.00000000	.00000000	
163:						
164: 71	.00000000	.00000000	.00000000	.27265905-004	.43651866-003	.42907118-003
165:	.15589009-002	.00000000	.00000000	.00000000	.00000000	
166:						
167: 72	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

DIV5

DIV6

DIV7

Row	Node	C1	C2	C3	C4	C5	C6	C7
168:		.00000000	.46093708-004	.93255183-006	.11224286-004	.10948321-003		
169:								
170:	73	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
171:		.00000000	.93255183-006	.82778522-003	-.55280410-005	.18491705-003		
172:								
173:	74	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
174:		.00000000	.11224286-004	-.55280410-005	.15242910-004	.30061125-004		
175:								
176:	75	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	
177:		.00000000	.10948321-003	.18491705-003	.30061125-004	.13000818-002		
178:								
179:	76	.25842728-004	.12679401-005	.19696748-003	.00000000	.00000000	.00000000	.00000000
180:	77	.12679401-005	.13408925-004	.24244584-004	.00000000	.00000000	.00000000	.00000000
181:	78	.19696748-003	.24244584-004	.56378963-002	.00000000	.00000000	.00000000	.00000000
182:	79	.00000000	.00000000	.00000000	.28187772-004	-.86269710-006	.29605554-003	.00000000
183:	80	.00000000	.00000000	.00000000	-.86269710-006	.20005921-004	-.32703297-004	.00000000
184:	81	.00000000	.00000000	.00000000	.29605554-003	-.32703297-004	.88262136-002	.00000000
185:	82	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.18726446-003
186:	83	.31633014-002	.10232273-002	.55714956-004	.00000000	.00000000	.00000000	.00000000
187:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
188:								
189:	84	.10232273-002	.16192884-002	.47507607-004	.00000000	.00000000	.00000000	.00000000
190:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
191:								
192:	85	.55714956-004	.47507607-004	.10961864-004	.00000000	.00000000	.00000000	.00000000
193:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
194:								
195:	86	.00000000	.00000000	.00000000	.11267798-004	.31218422-007	.68229639-004	.30276301-004
196:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
197:								
198:	87	.00000000	.00000000	.00000000	.31218422-007	.10066711-004	-.51197827-005	.33971480-004
199:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
200:								
201:	88	.00000000	.00000000	.00000000	.68229639-004	-.51197827-005	.26183206-002	.13297364-002
202:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
203:								
204:	89	.00000000	.00000000	.00000000	.30276301-004	.33971480-004	.13297364-002	.33488304-002
205:		.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
206:								
207:	90	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
208:		.43612447-005	-.11528505-005	.22624725-004	.26405854-004	.00000000	.00000000	.00000000
209:								
210:	91	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
211:		-.11528505-005	.38277092-004	.22774546-004	.69205369-004	.00000000	.00000000	.00000000
212:								
213:	92	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
214:		.22624725-004	.22774546-004	.85402222-002	.93613765-003	.00000000	.00000000	.00000000
215:								
216:	93	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
217:		.26405854-004	.69205369-004	.93613765-003	.25670771-002	.00000000	.00000000	.00000000
218:								
219:	94	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
220:		.00000000	.00000000	.00000000	.00000000	.10452749-004	.83892081-007	.17699059-004
221:								
222:	95	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
223:		.00000000	.00000000	.00000000	.00000000	.83892081-007	.22332455-004	.10688987-003
224:								

DIV 8

DIV 9

225: 96	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
226:	.00000000	.00000000	.00000000	.00000000	.17699059-004	.10688987-003	.21173149-002
227:							

EOF:227
END ED. NO CORRECTIONS APPLIED

Table 13. The Estimated State Adjustment Counts (Syn 2) and Its Variance
n = 1440

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ƏDATA,L STATE-ST-CV.
DATA 9R1-A SL74T9 1C/2J/86 08:17:21 (1)
                        ARTIFICIAL PCPULATION 2
```

DIVISION	STATE	STATE SUM	STANDARD ERROR	VARIANCE	CV
1	9	3065974.	.12746647+005	.16247702+009	.41574545-002
1	23	1110298.	.21650218+004	.46873196+007	.19499466-002
1	25	5661335.	.16111640+005	.25958495+009	.26459083-002
1	33	911430.	.18661488+004	.34925115+007	.20474955-002
1	44	934631.	.26495350+004	.70200355+007	.25348460-002
1	50	505424.	.11163305+004	.12461937+007	.22087009-002
2	34	7295695.	.25202260+005	.63515390+009	.34529816-002
2	36	17337327.	.49103315+005	.24111355+010	.28322310-002
2	42	11733360.	.46347861+005	.21481242+010	.39500926-002
3	10	588036.	.31997934+004	.10238678+008	.54410298-002
3	11	631103.	.16578700+005	.27485329+009	.26269404-001
3	12	9660579.	.44604192+005	.19895339+010	.46171344-002
3	13	5403291.	.28072617+005	.78807181+009	.51954664-002
3	24	4172253.	.33834967+005	.11448050+010	.81095195-002
3	37	5819228.	.29137741+005	.84900797+009	.50071489-002
3	45	3090726.	.23986679+005	.57536077+009	.77608559-002
3	51	5291757.	.24309597+005	.59095649+009	.45938611-002
3	54	1935011.	.60008623+004	.36010348+008	.31012032-002
4	1	3859996.	.24699850+005	.61008261+009	.63989316-002
4	21	3622843.	.12513079+005	.15657714+009	.34539390-002
4	28	2497274.	.15038346+005	.22615185+009	.60219047-002
4	47	4546062.	.30661883+005	.94015106+009	.67447129-002
5	17	11298824.	.56035757+005	.31400061+010	.49594327-002
5	18	5428794.	.14903645+005	.22211862+009	.27452956-002
5	26	9162057.	.37232196+005	.13862364+010	.40637376-002
5	39	10678877.	.32679129+005	.10679255+010	.30601654-002
6	19	2866593.	.55387930+004	.30678228+008	.19321867-002
6	20	2326706.	.45087981+004	.20329260+008	.19378461-002
6	27	4012230.	.72081822+004	.51957691+008	.17965526-002
6	29	4857681.	.23027013+005	.53024334+009	.47403305-002
6	31	1546360.	.35868896+004	.12865777+008	.23195696-002
6	38	642440.	.12604045+004	.15886194+007	.19619022-002
6	46	679030.	.12219454+004	.14931506+007	.17995456-002
6	55	4639417.	.14990574+005	.22471731+009	.32311331-002
7	5	2259264.	.11097561+005	.12315586+009	.49120249-002
7	22	4159154.	.26208303+005	.68687517+009	.63013544-002
7	40	2984879.	.13174296+005	.17356208+009	.44136785-002
7	48	14070208.	.90334720+005	.81603617+010	.64202832-002
8	4	2699724.	.19971819+005	.39887354+009	.73977261-002
8	8	2862337.	.18420713+005	.33932268+009	.64355502-002
8	16	935683.	.13803415+005	.19053426+009	.14752234-001
8	30	773046.	.11317744+005	.12809133+009	.14546369-001
8	32	795150.	.48537453+004	.23558843+008	.61041882-002
8	35	1295683.	.13758796+005	.18930447+009	.10618952-001
8	49	1451408.	.89808904+004	.80656393+008	.61877091-002
8	56	465374.	.66369554+004	.44049177+008	.14261552-001
9	2	399686.	.17789591+004	.31646954+007	.44508916-002
9	6	23416743.	.79180046+005	.62694797+010	.33813433-002
9	15	953906.	.29201701+004	.85273934+007	.30453142-002
9	41	2604853.	.80312662+004	.64501237+008	.30831935-002
9	53	4086238.	.11710161+005		

Table 14. The Estimated State Adjustment Counts (Syn 2) and Its Variance
n = 1440

ARTIFICIAL POPULATION 3

DIVISION	STATE	STATE SUM	STANDARD ERROR	VARIANCE	CV
1	9	3065974.	.13595156+005	.18482827+009	.44342046-002
1	23	1110298.	.14052772+004	.19748040+007	.12656757-002
1	25	.5661335.	.15332154+005	.23507496+009	.27082224-002
1	33	911430.	.11748359+004	.13802395+007	.12890029-002
1	44	934631.	.22156547+004	.49091257+007	.23706197-002
1	50	505424.	.74267034+003	.55155924+006	.14694006-002
2	34	7298695.	.29570496+005	.87441424+009	.40514772-002
2	36	17337327.	.58090476+005	.33745034+010	.33506016-002
2	42	11733360.	.46463200+005	.21588290+010	.39599229-002
3	10	588086.	.27874223+004	.77697229+007	.47398208-002
3	11	631103.	.16402606+005	.26904549+009	.25990379-001
3	12	9660579.	.62305862+005	.38820205+010	.64494957-002
3	13	5403291.	.26403687+005	.69715470+009	.48865936-002
3	24	4172253.	.32175147+005	.10352401+010	.77116961-002
3	37	5819228.	.26580071+005	.70650016+009	.45676283-002
3	45	3090726.	.22470528+005	.50492464+009	.72703074-002
3	51	5291757.	.22877002+005	.52335721+009	.43231391-002
3	54	1935011.	.40822455+004	.16664723+008	.21096756-002
4	1	3859996.	.22464876+005	.50467064+009	.58199220-002
4	21	3622843.	.92085492+004	.84797379+008	.25418019-002
4	28	2497274.	.14123334+005	.19946855+009	.56555002-002
4	47	4546062.	.27031637+005	.73070940+009	.59461655-002
5	17	11298824.	.61465357+005	.37779901+010	.54399783-002
5	18	5428794.	.13572518+005	.18421325+009	.25000982-002
5	26	9162057.	.34669334+005	.12019627+010	.37840120-002
5	39	10678877.	.30129633+005	.90779480+009	.28214234-002
6	19	2366593.	.32075424+004	.10288328+008	.11189389-002
6	20	2326706.	.39221930+004	.15383598+008	.16857273-002
6	27	4012230.	.49784814+004	.24785277+008	.12408265-002
6	29	4357681.	.22585344+005	.51009775+009	.46494086-002
6	31	1546360.	.31889410+004	.10169345+008	.20622242-002
6	38	642440.	.71043834+003	.50472263+006	.11058439-002
6	46	679030.	.75170104+003	.56505446+006	.11070218-002
6	55	4639417.	.12219833+005	.14932432+009	.26339157-002
7	5	2259264.	.10034967+005	.10070057+009	.44416975-002
7	22	4159154.	.26756745+005	.71592341+009	.64332182-002
7	40	2984879.	.92334468+004	.85256540+008	.30934074-002
7	48	14070208.	.10393003+006	.10801452+011	.73865315-002
8	4	2699724.	.24089599+005	.58030879+009	.89229859-002
8	8	2862337.	.21764691+005	.47370178+009	.76038185-002
8	16	935683.	.10653220+005	.11349109+009	.11385501-001
8	30	778046.	.87059806+004	.75794099+008	.11189545-001
8	32	795150.	.59907354+004	.35889510+008	.75341576-002
8	35	1295683.	.18819488+005	.35417312+009	.14524762-001
8	49	1451408.	.74979307+004	.56218965+008	.51659704-002
8	56	465374.	.52100066+004	.27144169+008	.11195311-001
9	2	399686.	.13614998+004	.18536818+007	.34064236-002
9	6	23416743.	.13423747+006	.18019698+011	.57325423-002
9	15	958706.	.25438432+004	.64711384+007	.26528599-002
9	41	2604853.	.58008859+004	.33650277+008	.22269533-002
9	53	4086238.	.86258503+004	.74405293+008	.21109515-002