```
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NOTE: SAS (r) Proprietary Software 9.2 (TS1M0)
  Licensed to SOCIAL & SCIENTIFIC SYSTEMS INC/AHRQ/NIH/HRSA, Site 0070021279.
NOTE: This session is executing on the XP_PRO platform.
NOTE: SAS initialization used:
     real time 0:01.77 user cpu time 0:00.21
     system cpu time 0:00.93
                                     2554k
     OS Memory
                                     3292k
                       12/16/2008 2:00:10 PM
     Timestamp
NOTE: AUTOEXEC processing beginning; file is C:\PROGRA~1\SAS92\SASFOU~1\9.2\autoexec.sas.
NOTE: AUTOEXEC processing completed.
          /***********************
          PROGRAM:
                       C:\\MEPS\PROG\M2.SAS
          DESCRIPTION: THIS EXAMPLE SHOWS THE NEED FOR USING THE
                                        STRATUM AND PSU VARIABLES WHEN ANALYZING MEPS
                                        DATA FOR NATIONAL ESTIMATES. THAT IS, TAKING
                                        THE MEPS COMPLEX DESIGN PROPERTIES INTO
                                        ACCOUNT.
10
          INPUT FILE: C:\MEPS\DATA\H97.SAS7BDAT (2005 FULL-YEAR DATA FILE)
11
12
          14
15
          FOOTNOTE 'PROGRAM: C:\MEPS\PROG\M2.SAS';
         LIBNAME CDATA 'C:\MEPS\DATA';
17
NOTE: Libref CDATA was successfully assigned as follows:
     Engine: V9
     Physical Name: C:\MEPS\DATA
18
19
          TITLE1 'AHRQ MEPS DATA USERS WORKSHOP -- SEPTEMBER 2008';
          TITLE2 'EFFECT OF STRATA AND PSU VARIABLES ON COMPUTING';
21
          TITLE3 'STANDARD ERRORS FOR TOTAL HEALTH-CARE EXPENDITURES';
22
23
          * READ 2005 CONSOLIDATED FULL YEAR FILE;
2.4
          DATA PUF97 ;
25
                SET CDATA.H97 (KEEP= TOTEXP05 VARPSU VARSTR PERWT05F);
NOTE: There were 33961 observations read from the data set CDATA.H97.
NOTE: The data set WORK.PUF97 has 33961 observations and 4 variables.
NOTE: DATA statement used (Total process time):
     user cpu time 0:01.66
     system cpu time 0:00.21
     Memory
                                     586k
     OS Memory
                                     4316k
                       12/16/2008 2:00:12 PM
     Timestamp
2.7
28
          /**** ASSUME SIMPLE RANDOM SAMPLE ****/
29
30
          PROC SURVEYMEANS DATA= PUF97 NOBS SUM ;
               WEIGHT PERWTOSE ;
31
32
                VAR TOTEXP05 ;
33
                ODS OUTPUT STATISTICS= SRSTOT (KEEP= SUM STDDEV) ;
          RUN;
NOTE: Due to nonpositive weights, 1641 observation(s) were deleted.
NOTE: The data set WORK.SRSTOT has 1 observations and 2 variables.
NOTE: The PROCEDURE SURVEYMEANS printed page 1.
NOTE: PROCEDURE SURVEYMEANS used (Total process time):
     real time 0:00.35 user cpu time 0:00.03
```

2781k

system cpu time 0:00.09

Memory

```
OS Memory
                                      6680k
                        12/16/2008 2:00:12 PM
     Timestamp
35
          /**** ACCOUNT FOR MEPS COMPLEX SAMPLE DESIGN *****/
36
37
          PROC SURVEYMEANS DATA= PUF97 NOBS SUM ;
39
               STRATUM VARSTR ;
40
                CLUSTER VARPSU ;
                WEIGHT PERWT05F ;
41
42
                VAR TOTEXP05 ;
                ODS OUTPUT STATISTICS= COMPTOT (KEEP= SUM STDDEV);
43
          RUN;
44
NOTE: Due to nonpositive weights, 1641 observation(s) were deleted.
NOTE: The data set WORK.COMPTOT has 1 observations and 2 variables.
NOTE: The PROCEDURE SURVEYMEANS printed page 2.
NOTE: PROCEDURE SURVEYMEANS used (Total process time):
                        0:00.09
     real time
     user cpu time
                        0:00.06
     system cpu time 0:00.03
     Memory
                                      2371k
     OS Memory
                                      7704k
                       12/16/2008 2:00:12 PM
     Timestamp
45
46
          DATA _NULL_;
47
                SET SRSTOT;
                PUT 'SRS TOTAL IS ' SUM DOLLAR22.2;
48
49
                PUT 'SRS SE TOTAL IS ' STDDEV DOLLAR22.2;
50
          RUN;
     TOTAL IS $1,023,763,462,949.70
SRS SE TOTAL IS $23,916,914,371.13
NOTE: There were 1 observations read from the data set WORK.SRSTOT.
NOTE: DATA statement used (Total process time):
                   0:00.01
     real time
     user cpu time
                        0:00.00
     system cpu time 0:00.01
                                      169k
     OS Memory
                                      6904k
                       12/16/2008 2:00:12 PM
     Timestamp
51
          DATA _NULL_;
52
53
                SET COMPTOT;
54
                PUT 'COMPLEX DESIGN TOTAL IS ' SUM DOLLAR22.2;
                PUT 'COMPLEX DESIGN TOTAL SE IS ' STDDEV DOLLAR22.2;
55
COMPLEX DESIGN TOTAL IS $1,023,763,462,949.70
COMPLEX DESIGN TOTAL SE IS
                           $33,630,954,197.88
NOTE: There were 1 observations read from the data set WORK.COMPTOT.
NOTE: DATA statement used (Total process time):
                    0:00.01
     real time
     user cpu time
                       0:00.00
     system cpu time 0:00.00
     Memory
                                      169k
     OS Memory
                                      6904k
                        12/16/2008 2:00:12 PM
     Timestamp
NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414
NOTE: The SAS System used:
     real time
                       0:04.30
     user cpu time
     system cpu time 0:01.40
     Memory
                                      6438k
     OS Memory
                                      7704k
                       12/16/2008 2:00:12 PM
     Timestamp
```

AHRQ MEPS DATA USERS WORKSHOP -- SEPTEMBER 2008 EFFECT OF STRATA AND PSU VARIABLES ON COMPUTING STANDARD ERRORS FOR TOTAL HEALTH-CARE EXPENDITURES

The SURVEYMEANS Procedure

Data Summary

Number of Observations 33961 Number of Observations Used 32320 Number of Obs with Nonpositive Weights 1641 296185002 Sum of Weights

Statistics

Variable	Label	N	Sum	Std Dev
TOTEXP05	TOTAL HEALTH CARE EXP	05 32320	1.0237635E12	23916914371

The SURVEYMEANS Procedure

Data Summary

Number	of	Strata	203
Number	of	Clusters	452
Number	of	Observations	33961
Number	of	Observations Used	32320
Number	of	Obs with Nonpositive Weights	1641
Sum of	We	ights	296185002

Statistics

Variable	Label	N	Sum	Std Dev			
TOTEXP05	TOTAL HEALTH CARE EXP 05	32320	1.0237635E12	33630954198			