

CPS Complex Sample Specification for SAS and Stata

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Before any analysis is attempted, the public use data set must be merged with the separate replicate weight data file. Note that SAS supports jackknife only but Stata supports both jackknife and SDR estimation. SDR is the recommended method.

SAS:

```
proc survey___ data=__your_datafile___ varmethod = jackknife;
  *your_secondary_command and your variable(s) or model statement;
  weight      __your_weight__;      * person/family/household weight variable;
  repweights  REPWTP1- REPWTP160;   * replicate weights;
run;
```

Of course, change the `proc survey___` for other procedures. For example:

```
proc surveylogistic data=your_datafile varmethod = jackknife;
  model      DEPENDENT (event='1')= INDEPENDENT;
  weight     __your_weight__;      * person/family/household weight variable;
  repweights REPWTP1- REPWTP160;   * replicate weights;
run;
```

Stata: (using the estimation of a mean value as our example)

Replicate weight method using menus

Sampling weight variable is your full sample pweight.
Successive Difference Replicates (sdr) are REPWTP1- REPWTP160
Within the procedure, specify "survey data estimation" in SE.

Replicate weight method using code

```
First svyset [pweight=__yourwgt], sdrweight(REPWTP1- REPWTP160) vce(sdr)
Then svy: mean __yourvariable__
```

References

- Minnesota Population Center. (n.d.). IPUMS CPS: Replicate weights in the Current Population Survey. University of Minnesota. Available:
<https://cps.ipums.org/cps/repwt.shtml>
- U.S. Bureau of Labor Statistics. (2006). Estimation of variance, Chapter 14. In *Design and Methodology: Current Population Survey*. Current Population Survey Technical Paper 66. Washington, DC. Available:
<http://www.census.gov/prod/2006pubs/tp-66.pdf>

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