

SUDAAN Code Resource Document

In addition to the resource documents provided in the Common Module titled, 'Statistical Analysis of NCES Datasets Employing a Complex Sample Design,' this Resource Document provides examples of SUDAAN code to calculate standard errors for different types of SASS data. Categorical estimates, those with "Yes/No" response categories, Likert scales or with a limited number of discrete categories use PROC CROSSTABS. Continuous data estimates, such as the total student enrollment, require PROC DESCRIPT. Percentage estimates require PROC RATIO. It is important to note that before using this code for your own research purposes, you will need to **substitute S0146 and schlevel with file or variable names that are relevant to your specific analyses.**

Sample SUDAAN code for PROC DESCRIPT (continuous variables such as total enrollment)

Use PROC DESCRIPT to get averages (student enrollment, hours worked, etc.) as well as for generating standard errors on counts.

```
PROC DESCRIPT data=school filetype=sas design=brr; /* Sets file type and design
option */
WEIGHT sfnlwgt; /* Specifies final weight */
REPWGT SREPWT1—SREPWT88/adjfay=1; /* Specifies replicate weights */
VAR s0095; /* Produces specified statistics for variable */
TABLES
Schlevel; /* Produces specified statistic for VAR by subgroup categories */
SUBGROUP
schlevel; /* Repeat subgroup variable */
LEVELS
3; /* Specify number of subgroup categories */
PRINT MEAN SEMEAN TOTAL SETOTAL /* List statistics you want printed */
/meanfmt=f9.1 semeanfmt=f9.1 totalfmt=f15.2 setotalfmt=f15.2 style=nchs; /* formatting
*/
RUN;
```

Sample SUDAAN code for PROC RATIO

Use PROC RATIO for generating percentages that change the unit of analysis. For example, the percentage of male students has to be generated as the ratio of the number of male students divided by the total student enrollment.

```
PROC RATIO data=school filetype=sas design=brr; /* Specifies file type and design
option */
WEIGHT sfnlwgt; /* Specifies final weight */
REPWGT SREPWT1—SREPWT88/adjfay=1; /* Specifies replicate weights */
NUMER s0095; /* Specifies numerator variable */
DENOM ENRK12UG; /* Specifies denominator variable */
subgroup SCHLEVEL URBANIC; /* Specify subgroup variables */
```

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```
levels      3      3      ; /* Specify number of subgroup categories for
subgroup variables */
tables SCHLEVEL URBANIC;
PRINT RHAT SERHAT /* List statistics you want printed */
      / RHATFMT=F9.3 SERHATFMT=F9.5 style=nchs; /* formatting */
RUN;
```

Remember, the SASS variable names used here may not be accurate for your analytic purposes. Always verify that you are using the correct file or variable names that are relevant to your specific analyses.