APPENDIX E

EXAMPLES IN SPSS

In SPSS, the NCVS sample design must be appropriately specified within a complex samples analysis plan, which is saved and referenced in all complex samples procedures. This plan specifies the analysis weight, stratification variables, and cluster variable. Because the analysis plan specifies the weight variable in addition to the stratification and cluster variables, separate plans must be created for analyses based on the modified incident-level, person-level, and household-level files. Analysis plans can be generated from the code below, or using the "Analysis Preparation Wizard" (*Analyze → Complex Samples → Prepare for Analysis*). Before interpreting results produced by SPSS, the analyst must ensure that the appropriate analysis plan was specified based on the type of estimate produced.

```
*Incident-level analysis plan (for calculating victimization
totals and proportions).
csplan analysis
     /plan file='<user-specified path>\incidentfileanalysisplan'
      /planvars analysisweight=newwgt
      /srsestimator type=wr
      /print plan
      /design strata=yr_grp v2117 cluster=v2118
  /estimator type=wr.

*Person-level analysis plan (for calculating personal
victimization rates).
csplan analysis
      /plan file='<user-specified path>\personfileanalysisplan'
       /planvars analysisweight=wgtpercy
       /srsestimator type=wr
       /print plan
       /design strata=yr_grp v2117 cluster=v2118
  /estimator type=wr.
```

```
*Household-level analysis plan (for calculating property
victimization rates).
csplan analysis
       /plan file='<user-specified path>\hhfileanalysisplan'
       /planvars analysisweight=wgthhcy
       /srsestimator type=wr
       /print plan
       /design strata=yr_grp v2117 cluster=v2118
  /estimator type=wr.
```

Because SPSS does not support the specification of formulas within the analysis procedures, for the calculation of victimization rates analysts must first create a new variable equal to the product of the victimization count and the adjustment factor (*ADJINC_WT*), multiplied by 1,000 (as outlined in the examples below).

The *subpop* statement is used to limit the analysis to the appropriate set of cases. While all combinations of variables included in the *subpop* statement will be included in the results, only the results meeting all subpopulation conditions are relevant. For this reason, prior to each analysis a "subpop" variable is created based on all exclusions (e.g. victimizations occurring outside of the US and outside the year(s) of interest). Including this single recoded variable on the *subpop* statement simplifies examination of the results.

Examples 1 and *2* demonstrate how to estimate the total number of victimizations. *Examples 3* and *4* demonstrate how to calculate the proportion of victimizations with given characteristics. *Examples 5* and *6* demonstrate the calculation of personal and property victimization rates for victimization characteristics included on the modified person and household files, while *Example 7* demonstrates the calculation of victimization rates for victimization characteristics not on the modified files. Examples are included for both single- and pooled-year estimates. Finally, *Example 8* demonstrates how to identify low quality estimates and implement the rounding recommended as discussed in ***Section 4*** of the user's guide.

E.1 Victimization Totals

SPSS's *csdescriptives* and *cstabulate* procedures are used to estimate the total number of victimizations from the modified incident-level file. Both procedures can be found under the complex samples menu (*Analyze* → *Complex Samples* → *Descriptives* and *Analyze* → *Complex Samples* → *Frequencies*, respectively). If the analysis does not include domains (i.e. subsets of the population based on characteristics of the victimization or victim), *csdescriptives* is used and the crime of interest is specified in the *summary* statement. If the analysis includes domains, *cstabulate* is used, and both the crime type of interest as well as the domain variable(s) are specified on the *tables* statement. *Examples 1A-1C* demonstrate the calculation of victimization totals for single years, and *Examples 2A-2C* demonstrate pooled year estimates.

Example 1: Number of victimizations, single year

Examples 1A and *1B* below are estimates of personal crimes, while *Example 1C* is an estimate of property crimes. *Examples 1A* and *1C* provide overall crime estimates (and therefore use the *csdescriptives* procedure), while *Example 1B* provides estimated totals for person-level characteristics of interest (and therefore uses the *cstabulate* procedure).

Example 1A - Total number of violent victimizations, 2011

Year(s): 2011
Crime Type: violent victimizations (*vcrime*)
Domain(s): n/a
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2011 (*year*=**2011**)

Code:

```
compute subpop=0. *a.
if (exclude_outus=0) & (dummy=0) & (year=2011) subpop=1.
execute.

csdescriptives
 /plan file='<user-specified path>\incidentfileanalysisplan' *b.
 /summary variables=vcrime *c.
 /subpop table=subpop display=layered  *d.
 /sum *e.
 /statistics se
 /missing scope=analysis classmissing=exclude.
```

Code Comment(s):

a) Derive subpop variable based on all exclusions
b) Specify analysis plan
c) Outcome of interest
d) Limit analysis to records of interest
e) Specify which estimates to produce

Output:

Complex Samples: Descriptives

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under "Subpopulation Descriptives" with a "SUBPOP" value of 1 is relevant (highlighted row).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Sum	vcrime	23976614.05	927768.23307
1.00	Sum	vcrime	5812522.79	357912.35847

Example 1B - Total number of violent victimizations by sex, age category, and race/ethnicity, 2011

Year(s): 2011
Crime Type: violent victimizations (*vcrime*)
Domain(s): sex (*sex*), age category (*agecat*), and race/ethnicity (*race_eth*)
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2011 (*year*=**2011**)

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (year=2011) subpop=1.
execute.

cstabulate
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /tables variables=sex agecat race_eth by vcrime *a.
  /subpop table=subpop display=layered
  /cells popsize
  /statistics se
  /missing scope=table classmissing=exclude.
```

Code Comment(s):

a) Domain variables (victim characteristics) by outcome of interest

Output:

Complex Samples: Tables

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Tables” with a “SUBPOP” value of 1 is relevant (highlighted row). Totals are provided for all levels of vcrime. In this example, we are only interested in violent crime totals so only the vcrime=1 column is relevant (highlighted column).

Subpopulation Tables

sex * vcrime

SUBPOP	sex			vcrime		
				.00	1.00	Total
.00	1	Population Size	Estimate	32219384.920	12443057.531	44662442.451
			Standard Error	690676.171	568390.821	1077196.933
	2	Population Size	Estimate	36577838.621	11533556.522	48111395.143
			Standard Error	803036.041	551251.116	1160732.875
	Total	Population Size	Estimate	68797223.541	23976614.053	92773837.594
			Standard Error	1333196.366	927768.233	2017311.416
1.00	1	Population Size	Estimate	7795652.041	3209724.890	11005376.931
			Standard Error	323095.548	236960.554	446932.563
	2	Population Size	Estimate	9433265.935	2602797.900	12036063.835
			Standard Error	329977.007	252785.857	478305.159
	Total	Population Size	Estimate	17228917.976	5812522.790	23041440.766
			Standard Error	550787.547	357912.358	778410.043

agecat * vcrime

SUBPOP	agecat			vcrime		
				.00	1.00	Total
.00	1	Population Size	Estimate	1981307.834	2350413.907	4331721.741
			Standard Error	109047.461	190557.367	241427.677
	2	Population Size	Estimate	2603878.933	2351590.635	4955469.569
			Standard Error	124476.392	231698.034	281466.263
	3	Population Size	Estimate	3960439.644	2120992.823	6081432.467
			Standard Error	218665.494	169060.973	316019.919
	4	Population Size	Estimate	5820296.167	2671424.117	8491720.284
			Standard Error	251906.397	218251.773	375620.617
	5	Population Size	Estimate	14356409.872	5052311.446	19408721.318
			Standard Error	454815.742	372357.766	680840.047
	6	Population Size	Estimate	19541173.383	5846190.803	25387364.186
			Standard Error	424762.173	336303.660	609402.635
	7	Population Size	Estimate	14462897.031	3086188.150	17549085.181
			Standard Error	428871.761	201163.547	550198.770
	8	Population Size	Estimate	6070820.676	497502.172	6568322.848
			Standard Error	247557.051	61068.304	267065.667
	Total	Population Size	Estimate	68797223.541	23976614.053	92773837.594
			Standard Error	1333196.366	927768.233	2017311.416
1.00	1	Population Size	Estimate	453847.222	488382.861	942230.084
			Standard Error	49235.342	77367.955	88478.239
	2	Population Size	Estimate	684428.051	428879.617	1113307.668
			Standard Error	65569.214	64692.495	96621.558
	3	Population Size	Estimate	1017747.795	843753.107	1861500.903
			Standard Error	104487.308	220103.552	272084.313
	4	Population Size	Estimate	1429762.185	617719.577	2047481.762
			Standard Error	134154.442	69925.517	167756.280
	5	Population Size	Estimate	3379090.369	1114834.023	4493924.392
			Standard Error	156914.995	118262.084	211965.446
	6	Population Size	Estimate	4774494.938	1365450.414	6139945.351
			Standard Error	203404.494	141010.684	280210.777
	7	Population Size	Estimate	3649171.756	776857.477	4426029.233
			Standard Error	169226.609	90922.036	200452.275
	8	Population Size	Estimate	1840375.660	176645.712	2017021.373
			Standard Error	162233.670	46321.039	173776.292
	Total	Population Size	Estimate	17228917.976	5812522.790	23041440.766
			Standard Error	550787.547	357912.358	778410.043

race_eth * vcrime

SUBPOP	race_eth			vcrime		
				.00	1.00	Total
.00	1	Population Size	Estimate	44956475.614	16135968.556	61092444.169
			Standard Error	1024401.027	781566.768	1596615.581
	2	Population Size	Estimate	9770948.409	3535331.686	13306280.095
			Standard Error	507185.285	327426.200	739440.974
	3	Population Size	Estimate	10198773.423	2877571.000	13076344.424
			Standard Error	448563.990	187303.486	561526.519
	4	Population Size	Estimate	2485369.723	807283.763	3292653.485
			Standard Error	169235.838	131642.300	260524.761
	5	Population Size	Estimate	1385656.373	620459.048	2006115.421
			Standard Error	125554.074	102505.202	180980.354
	Total	Population Size	Estimate	68797223.541	23976614.053	92773837.594
			Standard Error	1333196.366	927768.233	2017311.416
1.00	1	Population Size	Estimate	10805598.125	3719729.131	14525327.257
			Standard Error	430773.901	242039.222	581793.456
	2	Population Size	Estimate	2516469.848	812173.248	3328643.096
			Standard Error	190881.304	181536.144	285574.792
	3	Population Size	Estimate	2635144.854	895434.044	3530578.898
			Standard Error	174931.005	130311.382	220930.630
	4	Population Size	Estimate	804288.672	197081.805	1001370.477
			Standard Error	77261.287	46736.134	97436.688
	5	Population Size	Estimate	467416.477	188104.562	655521.039
			Standard Error	88239.819	43090.356	104863.490
	Total	Population Size	Estimate	17228917.976	5812522.790	23041440.766
			Standard Error	550787.547	357912.358	778410.043

Example 1C - Total number of property victimizations, 2011

Year(s): 2011
Crime Type: property victimizations (*pcrime*)
Domain(s): n/a
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2011 (*year*=**2011**)

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (year=2011) subpop=1.
execute.

csdescriptives
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /summary variables=pcrime
  /subpop table=subpop display=layered
  /sum
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Output:

Complex Samples: Descriptives

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under "Subpopulation Descriptives" with a "SUBPOP" value of 1 is relevant (highlighted row).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Sum	pcrime	68063729.91	1324121.82561
1.00	Sum	pcrime	17063147.83	543578.63838

Example 2: Number of crimes, aggregated years

Examples 2A and *2B* are estimates of personal crimes, while *Example 2C* is an estimate of a property crime. *Examples 2A* and *2C* provide overall crime estimates and *Example 2B* provides estimated totals for a victimization-level characteristic of interest. The code provided calculates the estimated number of victimization across the pooled years. To calculate the average number of victimizations per year, estimated totals and standard errors must be divided by the number of pooled years, as shown in the following examples.

Example 2A - Total and average number of aggravated assaults, 2009-2011

Year(s): 2009-2011
Crime Type: aggravated assaults (*aast*)
Domain(s): n/a
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2009-2011 ((**2009** <= *year*) and (*year* <=**2011**))

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (2009 <= year) & (year <=2011)
subpop=1. *a.

csdescriptives
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /summary variables=aast
  /subpop table=subpop display=layered
  /sum
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Code Comment(s):

a) *Subpopn* statement includes the range of years to be analyzed

Output:

Complex Samples: Descriptives

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Descriptives” with a “SUBPOP” value of 1 is relevant (highlighted row).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Sum	AAST	2248758.19	206952.96109
1.00	Sum	AAST	2940415.60	160814.14604

NOTE: The estimate above represents the total number of aggravated assaults from 2009-2011. To obtain the average number of aggravated assaults, both the estimate and the standard error must be divided by the number of pooled years (3), as follows:

$$avg\ number\ of\ aggravated\ assaults = \frac{total\ number\ of\ aggravated\ asaults}{number\ of\ pooled\ years}$$

$$= \frac{2940415.60}{3}$$

$$= 980138.53$$

$$SE(avg\ number\ of\ aggravated\ assaults) = \frac{se(total\ number\ of\ aggravated\ asaults)}{number\ of\ pooled\ years}$$

$$= \frac{160814.15}{3}$$

$$= 53604.72$$

Example 2B - Total and average number of aggravated assaults involving firearm, 2009–2011

Year(s): 2009-2011
Crime Type: aggravated assaults (*aast*)
Domain(s): weapon category (*weapcat*)
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2009-2011 ((**2009** <= *year*) and (*year* <=**2011**))

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (2009 <= year) & (year <=2011)
subpop=1.

cstabulate
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /tables variables=weapcat by aast *a.
  /subpop table=subpop display=layered
  /cells popsize
  /statistics se
  /missing scope=table classmissing=exclude.
```

Code Comment(s):

a) *Cstabulate* is used because analysis incudes a person-level characteristic of interest. Both the crime type and domain variable are specified on the *tables* statement.

Output:

Complex Samples: Tables

[AdjIncident]

NOTE: Output is provided for all levels of aast and weapcat. Level 1 of weapcat is associated with firearms, so the estimate under subpop=1, aast=1, and weapcat=1 is the estimated total (highlighted).

Subpopulation Tables

weapcat * AAST

SUBPOP	weapcat			AAST		
				.00	1.00	Total
.00	0	Population Size	Estimate	9936166.095	110713.031	10046879.126
			Standard Error	466017.647	21765.954	467758.978
	1	Population Size	Estimate	302320.987	647126.964	949447.952
			Standard Error	37935.432	176780.793	184298.088
	2	Population Size	Estimate	243047.013	601553.505	844600.518
			Standard Error	65743.632	74541.499	97537.709
	3	Population Size	Estimate	62911.143	706901.084	769812.228
			Standard Error	14481.535	98433.953	99176.495
	4	Population Size	Estimate	18158.860	158174.978	176333.838
			Standard Error	8637.248	40728.240	41804.820
	5	Population Size	Estimate	1021973.773	24288.625	1046262.398
			Standard Error	105870.615	6567.738	105814.735
	Total	Population Size	Estimate	11584577.872	2248758.187	13833336.059
			Standard Error	481060.515	206952.961	576155.184
1.00	0	Population Size	Estimate	11827446.902	318541.931	12145988.833
			Standard Error	600893.088	53739.508	609094.461
	1	Population Size	Estimate	514332.213	778706.285	1293038.498
			Standard Error	67289.557	81552.160	110285.878
	2	Population Size	Estimate	248287.678	642022.335	890310.013
			Standard Error	62826.526	65520.620	91949.547
	3	Population Size	Estimate	75988.460	939927.297	1015915.757
			Standard Error	16737.304	96628.218	98919.577
	4	Population Size	Estimate	52334.271	228754.770	281089.041
			Standard Error	18655.466	52287.675	43955.329
	5	Population Size	Estimate	1196259.431	32462.985	1228722.417
			Standard Error	124007.208	11505.767	124734.911
	Total	Population Size	Estimate	13914648.955	2940415.604	16855064.559
			Standard Error	665668.186	160814.146	725887.504

NOTE: The estimate above represents the total number of aggravated assaults involving a firearm from 2009-2011. To obtain the average number of aggravated assaults involving a firearm, both the estimate and the standard error must be divided by the number of pooled years (3), as follows:

$$avg\ number\ of\ aggravated\ assaults\ w\ firearm = \frac{total\ number\ of\ aggravated\ asaults\ w\ firearm}{number\ of\ pooled\ years}$$

$$= \frac{778706.29}{3}$$

$$= 259568.76$$

$$SE(avg\ number\ of\ aggravated\ assaults\ w\ firearm) = \frac{se(total\ number\ of\ aggravated\ asaults\ w\ firearm)}{number\ of\ pooled\ years}$$

$$= \frac{81552.16}{3}$$

$$= 27184.05$$

Example 2C - Total and average number of household burglaries, 2009-2011

Year(s): 2009-2011
Crime Type: household burglary (*hburg*)
Domain(s): n/a
Weight: *newwgt*
Subpopulation: Within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2009-2011 ((**2009** <= *year*) and (*year* <=**2011**))

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (2009 <= year) & (year <=2011)
subpop=1.

csdescriptives
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /summary variables=hburg
  /subpop table=subpop display=layered
  /sum
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Output:

Complex Samples: Descriptives

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under "Subpopulation Descriptives" with a "SUBPOP" value of 1 is relevant (highlighted row).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Sum	HBURG	7148810.97	254130.47664
1.00	Sum	HBURG	10201317.31	336711.45333

NOTE: The estimate above represents the total number of household burglaries from 2009-2011. To obtain the average number of household burglaries, both the estimate and the standard error must be divided by the number of pooled years (3), as follows:

$$avg\ number\ of\ household\ burglaries = \frac{total\ number\ of\ household\ burglaries}{number\ of\ pooled\ years}$$

$$= \frac{10201317.31}{3}$$

$$= 3400439.10$$

$$SE(avg\ number\ of\ household\ burglaries) = \frac{se(total\ number\ of\ household\ burglaries)}{number\ of\ pooled\ years}$$

$$= \frac{336711.45}{3}$$

$$= 112237.15$$

E.2 Victimization Proportions

SPSS's *cstabulate* procedure is used to estimate the percent distribution of victimizations in a specific domain across covariates from the modified incident-level file. This procedure can be found under the complex samples menu (*Analyze* → *Complex Samples* → *Frequencies*). If the analysis is limited to a specific domain (i.e. a subset of the population based on characteristics of the victimization or victim) then it is specified on the *subpop* statement. Covariates of interest are specified on the *tables* statement.

Example 3: Percent distribution of victims across characteristics, single year

Example 3A is an estimate of personal crimes, while *Example 3B* is an estimate of property crimes. In *Example 3A*, both the analysis domain and covariates are specified based on person- and incident-level characteristics. In *Example 3B*, the analysis domain is specified based on an incident-level characteristic, while the covariates are household-level characteristics.

Example 3A - Distribution of female violent crime victims by age category, race/ethnicity, and victim-offender relationship, 2011

Year(s): 2011
Domain(s): female (*sex*=2); violent victimizations (*vcrime*=1)
Covariate(s): age category (*agecat*); race/ethnicity (*race_eth*); victim-offender relationship (*direl*)
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2011 (*year*=**2011**); female (*sex*=2); violent victimizations (*vcrime*=1)

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (year=2011) & (sex=2) & (vcrime=1)
subpop=1. *a.

cstabulate
 /plan file='<user-specified path>\incidentfileanalysisplan' *b.
 /tables variables=agecat race_eth direl *c.
 /subpop table=subpop display=layered
 /cells tablepct
 /statistics se cumulative
 /missing scope=table classmissing=exclude.
```

Code Comment(s):

a) Limits analysis to records of interest
b) Specifies sample design
c) Covariates of interest

Output:

Complex Samples: Tables

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Tables” with a “SUBPOP” value of 1 is relevant (highlighted rows).

Subpopulation Tables

agecat

SUBPOP			Estimate	Standard Error	Cumulative
.00	% of Total	1	4.5%	0.2%	4.5%
		2	5.2%	0.2%	9.7%
		3	6.7%	0.3%	16.4%
		4	9.1%	0.3%	25.5%
		5	20.7%	0.5%	46.1%
		6	27.3%	0.4%	73.4%
		7	19.1%	0.4%	92.5%
		8	7.5%	0.3%	100.0%
		Total	100.0%	0.0%	100.0%
1.00	% of Total	1	7.6%	1.9%	7.6%
		2	6.3%	1.3%	13.9%
		3	15.5%	5.4%	29.4%
		4	9.3%	1.6%	38.7%
		5	19.3%	2.4%	58.0%
		6	24.6%	3.1%	82.6%
		7	12.9%	2.0%	95.5%
		8	4.5%	1.7%	100.0%
		Total	100.0%	0.0%	100.0%

race_eth

SUBPOP			Estimate	Standard Error	Cumulative
.00	% of Total	1	65.4%	0.8%	65.4%
		2	14.2%	0.7%	79.7%
		3	14.4%	0.6%	94.1%
		4	3.7%	0.2%	97.8%
		5	2.2%	0.2%	100.0%
		Total	100.0%	0.0%	100.0%
1.00	% of Total	1	59.9%	4.5%	59.9%
		2	19.4%	5.2%	79.3%
		3	11.7%	2.0%	91.0%
		4	4.4%	1.5%	95.4%
		5	4.6%	1.3%	100.0%
		Total	100.0%	0.0%	100.0%

direl

SUBPOP			Estimate	Standard Error	Cumulative
.00	% of Total	1	10.7%	0.6%	10.7%
		2	6.8%	0.5%	17.5%
		3	26.4%	0.8%	43.9%
		4	33.1%	0.8%	77.1%
		5	6.6%	0.3%	83.7%
		6	16.3%	0.5%	100.0%
		Total	100.0%	0.0%	100.0%
1.00	% of Total	1	23.2%	3.5%	23.2%
		2	10.0%	1.6%	33.2%
		3	35.3%	4.6%	68.5%
		4	25.3%	3.2%	93.8%
		5	2.7%	0.6%	96.5%
		6	3.5%	0.9%	100.0%
		Total	100.0%	0.0%	100.0%

Example 3B - Distribution of property crime victims by household income, MSA status, and region, 2011

Year(s): 2011
Domain(s): property victimizations (*pcrime*=1)
Covariate(s): household income (*hincome*); MSA status (*msa*); region (*region*)
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2011 (*year*=**2011**); property victimizations (*pcrime*=1)

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (year=2011) & (pcrime=1) subpop=1.

cstabulate
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /tables variables=hincome msa region
  /subpop table=subpop display=layered
  /cells tablepct
  /statistics se cumulative
  /missing scope=table classmissing=exclude.
```

Output:

Complex Samples: Tables

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under "Subpopulation Tables" with a "SUBPOP" value of 1 is relevant (highlighted rows).

Subpopulation Tables

hincome

SUBPOP			Estimate	Standard Error	Cumulative
.00	% of Total	1	5.8%	0.3%	5.8%
		2	8.0%	0.3%	13.8%
		3	9.7%	0.3%	23.5%
		4	9.3%	0.4%	32.8%
		5	11.4%	0.4%	44.2%
		6	11.6%	0.4%	55.8%
		7	17.9%	0.5%	73.7%
		8	26.3%	0.7%	100.0%
		Total	100.0%	0.0%	100.0%
1.00	% of Total	1	6.5%	0.7%	6.5%
		2	8.7%	0.7%	15.1%
		3	10.2%	0.7%	25.4%
		4	8.9%	0.6%	34.3%
		5	11.7%	0.6%	46.0%
		6	11.5%	0.7%	57.5%
		7	16.5%	0.7%	73.9%
		8	26.1%	1.1%	100.0%
		Total	100.0%	0.0%	100.0%

HOUSEHOLD LOCALE

SUBPOP			Estimate	Standard Error	Cumulative
.00	% of Total	1	39.8%	1.3%	39.8%
		2	45.0%	1.4%	84.8%
		3	15.2%	1.6%	100.0%
		Total	100.0%	0.0%	100.0%
1.00	% of Total	1	40.6%	1.5%	40.6%
		2	46.6%	1.6%	87.2%
		3	12.8%	1.6%	100.0%
		Total	100.0%	0.0%	100.0%

Region

SUBPOP			Estimate	Standard Error	Cumulative
.00	% of Total	1	14.2%	0.6%	14.2%
		2	24.0%	1.2%	38.3%
		3	35.9%	1.0%	74.2%
		4	25.8%	0.8%	100.0%
		Total	100.0%	0.0%	100.0%
1.00	% of Total	1	13.4%	1.1%	13.4%
		2	21.4%	1.4%	34.8%
		3	34.8%	1.5%	69.6%
		4	30.4%	1.4%	100.0%
		Total	100.0%	0.0%	100.0%

Example 4: Percent distribution of victims across characteristics, aggregated years

Example 4A is an estimate of personal crimes, while *Example 4B* is an estimate of property crimes. Both examples specify multiple covariates based on incident-level characteristics.

Example 4A - Percent of violent victimizations reported and not reported to police by type of crime, 2009-2011

Year(s): 2009-2011
Domain(s): violent victimizations (*vcrime*=1)
Covariate(s): report status (*notify*); type of crime (*newoff*)
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2009-2011 ((**2009** <= *year*) and (*year* <=**2011**)); violent victimizations (*vcrime*=1)

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (2009 <= year) &
(year<=2011)& (vcrime=1) subpop=1.

cstabulate
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /tables variables=newoff by notify *a.
  /subpop table=subpop display=layered
  /cells rowpct
  /statistics se
  /missing scope=table classmissing=exclude.
```

Code Comment(s):

a) The goal is to obtain the distribution of victimizations by report status for each type of violent crime. Therefore, *newoff by notify* is specified on the *tables* statement and row percents and standard errors (*ROWPCT* and *SE*) are requested. If the percent distribution of crimes among those reported or not reported to police were desired, column percents and standard errors (*COLPCT* and *SE*)would be requested.

Output:

Complex Samples: Tables

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Tables” with a “SUBPOP” value of 1 is relevant (highlighted row).

Subpopulation Tables

newoff * notify

SUBPOP	newoff			notify			
				1	2	3	Total
.00	1	% within newoff	Estimate	41.1%	58.9%		100.0%
			Standard Error	6.3%	6.3%		0.0%
	2	% within newoff	Estimate	64.9%	35.1%		100.0%
			Standard Error	3.5%	3.5%		0.0%
	3	% within newoff	Estimate	54.4%	43.9%	1.6%	100.0%
			Standard Error	5.1%	5.0%	0.7%	0.0%
	4	% within newoff	Estimate	40.7%	58.3%	1.1%	100.0%
			Standard Error	2.0%	2.0%	0.2%	0.0%
	5	% within newoff	Estimate	53.6%	44.8%	1.6%	100.0%
			Standard Error	4.1%	4.1%	0.9%	0.0%
	6	% within newoff	Estimate	53.9%	45.1%	1.1%	100.0%
			Standard Error	1.1%	1.1%	0.3%	0.0%
	7	% within newoff	Estimate	83.1%	16.5%	0.3%	100.0%
			Standard Error	1.1%	1.1%	0.2%	0.0%
	8	% within newoff	Estimate	31.5%	67.6%	0.9%	100.0%
			Standard Error	0.5%	0.5%	0.1%	0.0%
	Total	% within newoff	Estimate	39.4%	59.6%	0.9%	100.0%
			Standard Error	0.5%	0.5%	0.1%	0.0%
1.00	1	% within newoff	Estimate	32.5%	67.5%		100.0%
			Standard Error	6.4%	6.4%		0.0%
	2	% within newoff	Estimate	61.6%	37.7%	0.8%	100.0%
			Standard Error	3.3%	3.4%	0.5%	0.0%
	3	% within newoff	Estimate	59.0%	39.5%	1.5%	100.0%
			Standard Error	2.6%	2.7%	0.9%	0.0%
	4	% within newoff	Estimate	44.1%	54.4%	1.5%	100.0%
			Standard Error	1.8%	1.8%	0.4%	0.0%
	Total	% within newoff	Estimate	48.1%	50.6%	1.3%	100.0%
			Standard Error	1.5%	1.5%	0.4%	0.0%

Example 4B - Percent of property victimizations reported and not reported to police by type of crime, 2009-2011

Year(s): 2009-2011
Domain(s): property victimizations (*pcrime*=1)
Covariate(s): report status (*notify*); type of crime (*newoff*)
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2009-2011 ((**2009** <= *year*) and (*year* <=**2011**)); property victimizations (*pcrime*=1)

Code:

```
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (2009 <= year) & (year<=2011)&
(pcrime=1) subpop=1.

cstabulate
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /tables variables=newoff by notify
  /subpop table=subpop display=layered
  /cells rowpct
  /statistics se
  /missing scope=table classmissing=exclude.
```

Output:

Complex Samples: Tables

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Tables” with a “SUBPOP” value of 1 is relevant (highlighted row).

Subpopulation Tables

newoff * notify

SUBPOP	newoff			notify			
				1	2	3	Total
.00	1	% within newoff	Estimate	36.2%	63.8%		100.0%
			Standard Error	4.6%	4.6%		0.0%
	2	% within newoff	Estimate	63.1%	36.5%	0.4%	100.0%
			Standard Error	2.4%	2.5%	0.3%	0.0%
	3	% within newoff	Estimate	57.0%	41.4%	1.6%	100.0%
			Standard Error	2.6%	2.7%	0.6%	0.0%
	4	% within newoff	Estimate	42.6%	56.2%	1.3%	100.0%
			Standard Error	1.3%	1.3%	0.3%	0.0%
	5	% within newoff	Estimate	53.6%	44.8%	1.6%	100.0%
			Standard Error	4.1%	4.1%	0.9%	0.0%
	6	% within newoff	Estimate	52.8%	45.7%	1.5%	100.0%
			Standard Error	1.3%	1.3%	0.5%	0.0%
	7	% within newoff	Estimate	82.4%	17.2%	0.4%	100.0%
			Standard Error	1.9%	1.9%	0.2%	0.0%
	8	% within newoff	Estimate	31.8%	67.0%	1.2%	100.0%
			Standard Error	0.7%	0.7%	0.2%	0.0%
	Total	% within newoff	Estimate	42.5%	56.3%	1.2%	100.0%
			Standard Error	0.6%	0.6%	0.2%	0.0%
1.00	6	% within newoff	Estimate	54.6%	44.7%	0.8%	100.0%
			Standard Error	1.5%	1.5%	0.4%	0.0%
	7	% within newoff	Estimate	83.7%	16.0%	0.3%	100.0%
			Standard Error	1.4%	1.4%	0.2%	0.0%
	8	% within newoff	Estimate	31.2%	68.2%	0.7%	100.0%
			Standard Error	0.5%	0.5%	0.1%	0.0%
	Total	% within newoff	Estimate	38.2%	61.1%	0.7%	100.0%
			Standard Error	0.5%	0.5%	0.1%	0.0%

E.3 Victimization Rates

Victimization rates are calculated from the modified person-level file (for personal crimes) or the modified household-level file (for property crimes) using SPSS's *csdescriptives* procedure. This procedure can be found under the complex samples menu (*Analyze → Complex Samples → Descriptives*). Because *csdescriptives* does not allow the user to specify a formula for the variable of interest, the analyst must first create a new variable equal to the product of the victimization count for the victimization type of interest and the victimization adjustment factor (*ADJINC_WT*), multiplied by 1,000. This new variable is used as the analysis variable in *csdescriptives'summary* statement, as demonstrated in the examples below.

To calculate victimization rates for person- or household-level characteristics, these characteristics are included on the *subpop* statement (in addition to the derived "subpop" variable that limits the analysis to records of interest). However, if victimization rates are desired based on incident-level characteristics, separate variables are defined for each level of the incident characteristic of interest and are included on the *summary* statement. Exclusions based on the incident characteristics must be made when calculating victimization summaries, as outlined in ***Section 3.2***. For example, the modified person- and household-level files exclude victimizations occurring outside of the United States. Because there are no dummy records on the modified person and household files, no exclusions are needed to remove dummy records from the analysis.

The modified person and household files contain the victimization counts needed to calculate victimization rates for the most common victimization characteristics analyzed using NCVS data. *Examples 5A-5C* demonstrate the calculation of personal and property victimizations rates that can be calculated directly from the modified person and household level files provided for a single year and *Examples 6A-6B* demonstrate these calculations for pooled year estimates. If an analyst wants to calculate a victimization rate for an incident-level characteristic that is not included on the modified files, preprocessing steps are needed to calculate victimization summaries from the incident-level file and move these summaries to the person file (for personal crimes) or the household file (for property crimes). ***Section 3.2*** documents these steps. *Examples 7A-7B* demonstrate the calculation of personal and property

victimization rates for incident characteristics not included on the modified person and household files.

Example 5: Rate of crime, single year

Example 5A is an estimate of an overall personal victimization rate. *Example 5B* is an estimate of a property victimization rate with the inclusion of household-level domain characteristics. *Example 5C* is an estimate of a personal victimization rate, where the domain characteristics of interest are incident-level characteristics. All three estimates are computed with variables available on the modified person and household files.

Example 5A - Rate of simple assaults, 2011

Year(s): 2011
Crime Type(s): simple assault (*sast*)
Domain(s): n/a
Weight: *wgtpercy*
Subpopulation: 2011 (*year*=**2011**)
Calculated Directly from Adjusted Files?: yes

Code:

```
compute subpop=0.
if (year=2011) subpop=1. *a.
compute vrsast=adjinc_wt * sast * 1000. *b.

csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrsast
  /subpop table=subpop display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Code Comment(s):

a) Derive subpop variable based on all exclusions
b) Create derived variable for calculation of victimization rate

Output:

Complex Samples: Descriptives

[AdjPer]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Descriptives” with a “SUBPOP” value of 1 is relevant (highlighted row).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Mean	VRSAST	15.7079	.66983
1.00	Mean	VRSAST	15.3671	1.17685

Example 5B - Rate of household burglary by MSA status, household income, and family structure, 2011

Year(s): 2011
Crime Type(s): household burglary (*hburg*)
Domain(s): MSA status (*msa*); household income (*hincome*); family structure (*fam_structure2*)
Weight: *wgthhcy*
Subpopulation: 2011 (*year*=**2011**)
Calculated Directly from Adjusted Files?: yes

Code:

```
compute subpop=0.
if (year=2011) subpop=1.
compute vrburg=adjinc_wt * hburg * 1000.

csdescriptives
  /plan file='<user-specified path>\hhfileanalysisplan'
  /summary variables=vrburg
  /subpop table=subpop by msa display=layered *a.
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.

csdescriptives
  /plan file='<user-specified path>\hhfileanalysisplan'
  /summary variables=vrburg
  /subpop table=subpop by hincome display=layered *a.
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.

csdescriptives
  /plan file='<user-specified path>\hhfileanalysisplan'
  /summary variables=vrburg
  /subpop table=subpop by fam_structure2 display=layered *a.
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Code Comment(s):

a) Specifies domain of interest. A different procedure call is used for each domain variable.

Output:

Complex Samples: Descriptives

[AdjHH]

NOTE: Output is provided overall and by subpopulation. Only the output under "Subpopulation Descriptives" with a "SUBPOP" value of 1 is relevant (highlighted rows).

Subpopulation Descriptives

Univariate Statistics

SUBPOP	HOUSEHOLD LOCALE			Estimate	Standard Error
.00	1	Mean	VRBURG	33.3885	1.17940
	2	Mean	VRBURG	22.2843	1.16165
	3	Mean	VRBURG	35.0728	2.72418
1.00	1	Mean	VRBURG	33.4870	2.51543
	2	Mean	VRBURG	25.4453	2.00861
	3	Mean	VRBURG	33.0191	4.53445

Univariate Statistics

SUBPOP	hincome			Estimate	Standard Error
.00	1	Mean	VRBURG	59.6517	5.78404
	2	Mean	VRBURG	56.8876	4.76016
	3	Mean	VRBURG	36.9889	3.62568
	4	Mean	VRBURG	32.4619	2.31748
	5	Mean	VRBURG	28.3719	1.75219
	6	Mean	VRBURG	21.1643	1.17131
	7	Mean	VRBURG	16.8111	.86850
	8	Mean	VRBURG	25.4765	1.28101
1.00	1	Mean	VRBURG	67.1650	14.00675
	2	Mean	VRBURG	58.8451	9.94479
	3	Mean	VRBURG	42.7762	5.55678
	4	Mean	VRBURG	33.3401	5.83093
	5	Mean	VRBURG	26.3012	2.68244
	6	Mean	VRBURG	21.5063	3.00622
	7	Mean	VRBURG	12.2887	1.23588
	8	Mean	VRBURG	29.5496	2.70272

Univariate Statistics

SUBPOP	Family Structure			Estimate	Standard Error
.00	1	Mean	VRBURG	21.2906	.93060
	2	Mean	VRBURG	28.4411	1.05904
	3	Mean	VRBURG	36.1636	3.60326
	4	Mean	VRBURG	52.5266	9.16782
	5	Mean	VRBURG	25.7509	1.58875
	6	Mean	VRBURG	64.9617	4.89956
1.00	1	Mean	VRBURG	24.2089	2.30429
	2	Mean	VRBURG	29.6100	2.38192
	3	Mean	VRBURG	30.9970	2.92235
	4	Mean	VRBURG	46.6697	14.31937
	5	Mean	VRBURG	30.1057	4.79787
	6	Mean	VRBURG	61.9628	8.31509

Example 5C - Rate of violent crime by weapon involvement, injury, and victim-offender relationship, 2011

Year(s): 2011
Crime Type(s): violent victimizations (*rsa+rob+aast+sast*)
Domain(s): weapon involvement (*wpnuse*); injury (*inj*), victim-offender relationship (*rel*)
Weight: *wgtpercy*
Subpopulation: 2011 (*year*=**2011**)
Calculated Directly from Adjusted Files?: yes

Code:

```
*aggregate violent crimes into a single measure for each
  outcome of interest.
compute vrweap1=(rsa_wpnuse1 + rob_wpnuse1 + aast_wpnuse1 +
sast_wpnuse1) * adjinc_wt * 1000.
compute vrweap2=(rsa_wpnuse2 + rob_wpnuse2 + aast_wpnuse2 +
sast_wpnuse2) * adjinc_wt * 1000.
compute vrweap3=(rsa_wpnuse3 + rob_wpnuse3 + aast_wpnuse3 +
sast_wpnuse3) * adjinc_wt * 1000.
compute vrinj1=(rsa_inj1+rob_inj1+aast_inj1+sast_inj1) * adjinc_wt *
1000.
compute vrinj2=(rsa_inj2+rob_inj2+aast_inj2+sast_inj2) * adjinc_wt *
1000.
compute vrinj3=(rsa_inj3+rob_inj3+aast_inj3+sast_inj3) * adjinc_wt *
1000.
compute vrinj4=(rsa_inj4+rob_inj4+aast_inj4+sast_inj4) * adjinc_wt *
1000.
compute vrrel1=(rsa_rel1+rob_rel1+aast_rel1+sast_rel1) * adjinc_wt *
1000.
compute vrrel2=(rsa_rel2+rob_rel2+aast_rel2+sast_rel2) * adjinc_wt *
1000.
compute vrrel3=(rsa_rel3+rob_rel3+aast_rel3+sast_rel3) * adjinc_wt *
1000.
compute vrrel4=(rsa_rel4+rob_rel4+aast_rel4+sast_rel4) * adjinc_wt *
1000.
compute vrrel5=(rsa_rel5+rob_rel5+aast_rel5+sast_rel5) * adjinc_wt *
1000.
compute vrrel6=(rsa_rel6+rob_rel6+aast_rel6+sast_rel6) * adjinc_wt *
1000.
```

```
csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrweap1 *a.
                     vrweap2 *b.
                     vrweap3 *c.
                     vrinj1 *d.
                     vrinj2 *e.
                     vrinj3 *f.
                     vrinj4 *g.
                     vrrel1 *h.
                     vrrel2 *i.
                     vrrel3 *j.
                     vrrel4 *k.
                     vrrel5 *l.
                     vrrel6 *m.
  /subpop table=subpop display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Code Comment(s):

a) Yes, offender had a weapon
b) No, offender did not have a weapon
c) Do not know if offender had a weapon
d) No injury
e) Serious injury
f) Minor injury
g) Rape without other injuries
h) Intimates
i) Other relatives
j) well known/casual acquaintances
k) Strangers
l) Do not know relationship
m) Do not know number of offenders

Output:

Complex Samples: Descriptives

[AdjPer]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Descriptives” with a “SUBPOP” value of 1 is relevant (highlighted rows).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Mean	VRWEAP1	4.8812	.27995
		VRWEAP2	17.0212	.73290
		VRWEAP3	1.6129	.13562
		VRINJ1	17.6085	.73100
		VRINJ2	.9917	.11036
		VRINJ3	4.6332	.27466
		VRINJ4	.2635	.06576
		VRREL1	3.7745	.25582
		VRREL2	1.6350	.18850
		VRREL3	7.0190	.39529
		VRREL4	8.7286	.41025
		VRREL5	1.4230	.10988
		VRREL6	.9283	.12478
1.00	Mean	VRWEAP1	4.6378	.34818
		VRWEAP2	16.4524	1.17620
		VRWEAP3	1.4790	.30060
		VRINJ1	16.9365	1.22551
		VRINJ2	1.1299	.19134
		VRINJ3	4.0854	.38482
		VRINJ4	.4174	.09706
		VRREL1	3.3034	.49965
		VRREL2	1.9575	.35481
		VRREL3	6.9100	.77793
		VRREL4	8.3338	.68670
		VRREL5	.9356	.12568
		VRREL6	1.1289	.21522

Example 6: Rate of crime, aggregated years

Example 6A is an estimate of a personal victimization rate with person-level domain characteristics of interest. *Example 6B* is an estimate of a property victimization rate with the inclusion of a household-level domain characteristic. Both estimates are computed with variables available on the modified person and household files.

Example 6A - Rate of violent crimes reported to police by sex, age category, race/ethnicity, and marital status, 2009–2011

Year(s): 2009-2011
Crime Type(s): violent victimizations reported to police (*rsa_rpt1+rob_rpt1+aast_rpt1+sast_rpt1*)
Domain(s): sex (*sex*); age category (*agecat*); race/ethnicity (*race_eth*); marital status (*marital*)
Weight: *wgtpercy*
Subpopulation: 2009-2011 ((**2009** <= *year*) and (*year* <=**2011**))
Calculated Directly from Adjusted Files?: yes

Code:

```
compute subpop=0.
if (2009 <= year) & (year <= 2011) subpop=1.

*aggregate violent crimes into a single measure for outcome of
   interest.
compute vrviolrpt=(rsa_rpt1 + rob_rpt1 + aast_rpt1 + sast_rpt1) *
adjinc_wt * 1000.

csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrviolrpt
  /subpop table=subpop by sex display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.

csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrviolrpt
  /subpop table=subpop by agecat display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

```
csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrviolrpt
  /subpop table=subpop by race_eth display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.

csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrviolrpt
  /subpop table=subpop by marital display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Output:

Complex Samples: Descriptives

[AdjPer]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Descriptives” with a “SUBPOP” value of 1 is relevant (highlighted rows).

Subpopulation Descriptives

Univariate Statistics

SUBPOP	sex			Estimate	Standard Error
.00	1	Mean	VRVIOLRPT	12.2631	.84753
	2	Mean	VRVIOLRPT	11.7357	.79274
1.00	1	Mean	VRVIOLRPT	9.6830	.53535
	2	Mean	VRVIOLRPT	10.8013	.75009

Univariate Statistics

SUBPOP	agecat			Estimate	Standard Error
.00	1	Mean	VRVIOLRPT	10.7066	1.51416
	2	Mean	VRVIOLRPT	20.3252	2.98361
	3	Mean	VRVIOLRPT	18.5083	2.10336
	4	Mean	VRVIOLRPT	19.1590	2.59549
	5	Mean	VRVIOLRPT	17.9981	2.20134
	6	Mean	VRVIOLRPT	13.1971	1.22109
	7	Mean	VRVIOLRPT	7.6578	.94452
	8	Mean	VRVIOLRPT	1.6628	.35934
1.00	1	Mean	VRVIOLRPT	10.1425	1.52829
	2	Mean	VRVIOLRPT	13.0413	1.60744
	3	Mean	VRVIOLRPT	22.5770	4.63942
	4	Mean	VRVIOLRPT	16.9336	1.89590
	5	Mean	VRVIOLRPT	14.0759	1.17349
	6	Mean	VRVIOLRPT	11.4140	.89398
	7	Mean	VRVIOLRPT	6.5932	.58231
	8	Mean	VRVIOLRPT	1.9027	.37196

Univariate Statistics

SUBPOP	race_eth			Estimate	Standard Error
.00	1	Mean	VRVIOLRPT	11.7794	.68995
	2	Mean	VRVIOLRPT	17.0805	2.12940
	3	Mean	VRVIOLRPT	9.6062	1.01284
	4	Mean	VRVIOLRPT	8.0944	2.96519
	5	Mean	VRVIOLRPT	20.6533	4.00212
1.00	1	Mean	VRVIOLRPT	9.5911	.55619
	2	Mean	VRVIOLRPT	16.3245	2.15038
	3	Mean	VRVIOLRPT	9.1108	.90575
	4	Mean	VRVIOLRPT	6.2156	1.43177
	5	Mean	VRVIOLRPT	20.7855	3.67528

Univariate Statistics

SUBPOP	marital			Estimate	Standard Error
.00	1	Mean	VRVIOLRPT	18.2091	1.21918
	2	Mean	VRVIOLRPT	6.0650	.53685
	3	Mean	VRVIOLRPT	5.6307	2.10228
	4	Mean	VRVIOLRPT	21.8732	2.58756
	5	Mean	VRVIOLRPT	37.1788	7.17108
1.00	1	Mean	VRVIOLRPT	15.2488	1.03449
	2	Mean	VRVIOLRPT	5.0358	.38311
	3	Mean	VRVIOLRPT	3.7387	.91618
	4	Mean	VRVIOLRPT	18.3727	1.86821
	5	Mean	VRVIOLRPT	38.6034	5.88557

Example 6B - Rate of property crimes reported to police by household income, 2009–2011

Year(s): 2009-2011
Crime Type(s): property crimes reported to police (*hburg_rpt1+tft_rpt1+mvtft_rpt1*)
Domain(s): household income (*hincome*)
Weight: *wgthhcy*
Subpopulation: 2009-2011 ((**2009** <= *year*) and (*year* <=**2011**))
Calculated Directly from Adjusted Files?: yes

Code:

```
compute subpop=0.
if (2009 <= year) & (year <= 2011) subpop=1.
*aggregate property crimes into a single measure for outcome of
  Interest.
compute vrproprpt=(hburg_rpt1 + tft_rpt1 + mvtft_rpt1) * adjinc_wt *
1000.

csdescriptives
  /plan file='<user-specified path>\hhfileanalysisplan'
  /summary variables=vrproprpt
  /subpop table=subpop by hincome display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Output:

Complex Samples: Descriptives

[AdjHH]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Descriptives” with a “SUBPOP” value of 1 is relevant (highlighted row).

Subpopulation Descriptives

Univariate Statistics

SUBPOP	hincome			Estimate	Standard Error
.00	1	Mean	VRPROPRPT	81.0446	8.65819
	2	Mean	VRPROPRPT	74.3576	6.66841
	3	Mean	VRPROPRPT	60.6609	3.55599
	4	Mean	VRPROPRPT	58.3037	4.12274
	5	Mean	VRPROPRPT	60.2202	3.25015
	6	Mean	VRPROPRPT	56.1866	3.56863
	7	Mean	VRPROPRPT	58.2267	2.11555
	8	Mean	VRPROPRPT	49.8636	1.99744
1.00	1	Mean	VRPROPRPT	64.0527	4.36642
	2	Mean	VRPROPRPT	60.8408	3.67851
	3	Mean	VRPROPRPT	54.8320	2.79486
	4	Mean	VRPROPRPT	54.8321	3.22249
	5	Mean	VRPROPRPT	55.9213	3.03029
	6	Mean	VRPROPRPT	49.0111	2.02956
	7	Mean	VRPROPRPT	49.9461	1.49055
	8	Mean	VRPROPRPT	43.6170	1.54434

Example 7: Computing victimization rates based on incident characteristics not included on the provided file

The two examples below estimate personal and property victimization rates for incident-level characteristics not contained on the modified person and household files, and thus require the pre-processing steps outlined in ***Section 3.2***. Victimization summaries are calculated from the incident-level file and merged onto the household and person files. Victimization rates are then calculated from the modified person-level file (for personal crimes) or the modified household-level file (for property crimes). *Example 7A* is an estimate of a personal victimization rate and *Example 7B* is an estimate of a property victimization rate. *Example 7A* is for a single year, and *Example 7B* is for aggregated years.

Example 7A - Rate of violent crimes by location of crime, 2011

Year(s): 2011
Crime Type(s): violent victimizations by location of crime (*violent_home*; *violent_other*)
Domain(s): n/a
Weight: *wgtpercy*
Subpopulation: 2011 (*year*=**2011**)
Calculated Directly from Adjusted Files?: no

Code:

```
*step1: identify records with victimization characteristic(s) of
 interest on the modified incident-level file.
get sas data='<user-specified path>\incident_analysis.sas7bdat'.
dataset name adjincident window=front.
sort cases by yearq(a) idper(a) .

*identify location of crime.
recode v4024 (23=8) (sysmis=9) (1 thru 4=1) (5 thru 7=2) (8 thru 11=3)
(12 thru 14=4) (24 thru 27=4) (15 thru 17=5) (18 thru 19=6) (20 thru
22=7) into place_inc.

*collapse location of crime.
recode place_inc (1 thru 2=1) (else=2) into place.
```

```
*create binary classifications for each location, excluding
  dummy records and crimes that occurred outside of the united
  states.
compute violent_home=0.
if (vcrime=1)  & (place=1) & (exclude_outus=0) & (dummy=0)
violent_home=1.
compute violent_other=0.
if (vcrime=1) & (place=2) & (exclude_outus=0) & (dummy=0)
violent_other=1.
execute.

*step2: create victimization summary file.
*calculate the number of victimizations of each type by person
 and reporting period.
weight by serieswgt.
dataset declare violent_place_sums.
aggregate
  /outfile='violent_place_sums'
  /break=yearq idper
  /violent_home=sum(violent_home)
  /violent_other=sum(violent_other).
execute.

dataset activate violent_place_sums.
select if not (sysmis(yearq)).
execute.

*step3: merge victimization summary file onto the person-level
        file.
get sas data='<user-specified path>\person_analysis.sas7bdat'.
dataset name adjperson window=front.

sort cases by yearq(a) idper(a).
execute.

match files file='adjperson' /table='violent_place_sums'
 /by yearq idper.
execute.
dataset name example7a_per.
dataset activate example7a_per.
recode violent_home violent_other (sysmis=0). *a.

*calculate victimization rates.
compute subpop=0.
if (year=2011) subpop=1.
compute vrviolrhome=violent_home * adjinc_wt * 1000. *b.
compute vrviolother=violent_other * adjinc_wt * 1000.
execute.
```

```
dataset activate example7a_per.
csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrviolrhome vrviolother
  /subpop table=subpop display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Code Comment(s):

a) The two incident count variables are missing for persons not included on the victimization summary file, so they are set to '0' (no victimizations of this type)

b) The final step outlined in section 3.2 was to calculate the victimization adjustment factor, but it is already contained on the modified person file.

Output:

Complex Samples: Descriptives

[Example7A_per]

NOTE: Output is provided overall and by subpopulation. Only the output under "Subpopulation Descriptives" with a "SUBPOP" value of 1 is relevant (highlighted row).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Mean	VRVIOLRHOME	9.0383	.42506
		VRVIOLOTHER	14.4770	.60869
1.00	Mean	VRVIOLRHOME	8.3345	.63137
		VRVIOLOTHER	14.2347	1.15399

Example 7B - Rate of property crimes by time of day, 2009-2011

Year(s): 2009-2011
Crime Type(s): property crimes by time of day (*property_day*; *property_night*; *property_missing*)
Domain(s): n/a
Weight: *wgthhcy*
Subpopulation: 2009-2011 ((**2009** <= *year*) and (*year* <=**2011**))
Calculated Directly from Adjusted Files?: no

```
*step1: identify records with victimization characteristic(s) of
 interest on the modified incident-level file.
get
  sas data='<user-specified path>\incident_analysis.sas7bdat'.
dataset name adjincident window=front.

sort cases by yearq(a) idhh(a) .
recode newoff (6 thru 8=1) (else=0) into pcrime.

*identify time of incident.
recode v4021b (1 thru 4=1) (5 thru 8=2) (9=3) (98=3) into time_day.

*create binary classifications for each time, excluding dummy
  records and crimes that occurred outside of the united states.
compute property_day=0.
if (pcrime=1)  & (time_day=1) & (exclude_outus=0) & (dummy=0)
property_day=1.
compute property_night=0.
if (pcrime=1)  & (time_day=2) & (exclude_outus=0) & (dummy=0)
property_night=1.
compute property_missing=0.
if (pcrime=1)  & (time_day=3) & (exclude_outus=0) & (dummy=0)
property_missing=1.
execute.

*step2: create victimization summary file.
*calculate the number of victimizations of each type by household and
reporting period.
weight by serieswgt.
dataset declare property_time_sums.
aggregate
  /outfile='property_time_sums'
  /break=yearq idhh
  /property_day=sum(property_day)
  /property_night=sum(property_night)
  /property_missing=sum(property_missing).
execute.
```

```
dataset activate property_time_sums.
select if not (sysmis(yearq)).
execute.

*step3: merge victimization summary file onto the HH-level
        file.
get
  sas data='<user-specified path>\hh_analysis.sas7bdat'.
dataset name adjhh window=front.
sort cases by yearq(a) idhh(a) .
execute.

match files file='adjhh' /table='property_time_sums'
 /by yearq idhh.
execute.
dataset name example7b_hh.

dataset activate example7b_hh.
recode property_day property_night property_missing (sysmis=0). *a.

*calculate victimization rates.
compute subpop=0.
if (2009 <= year) & (year <= 2011) subpop=1.
compute vrpropday=property_day * adjinc_wt * 1000. *b.
compute vrpropnight=property_night * adjinc_wt * 1000.
compute vrpropmiss=property_missing * adjinc_wt * 1000.
execute.

dataset activate example7b_hh.
csdescriptives
  /plan file='<user-specified path>\hhfileanalysisplan'
  /summary variables=vrpropday vrpropnight vrpropmiss
  /subpop table=subpop display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.
```

Code Comment(s):

a) The three incident count variables are missing for households not included on the victimization summary file, so they are set to '0' (no victimizations of this type)

b) The final step outlined in section 3.2 was to calculate the victimization adjustment factor, but it is already contained on the modified person file.

Output:

Complex Samples: Descriptives

[Example7B_hh]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Descriptives” with a “SUBPOP” value of 1 is relevant (highlighted row).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Mean	VRPROPDAY	59.0228	1.51862
		VRPROPNIGHT	63.7017	1.68811
		VRPROPMISS	26.0180	1.02075
1.00	Mean	VRPROPDAY	51.6205	1.22708
		VRPROPNIGHT	56.4775	1.33153
		VRPROPMISS	24.1425	.80690

E.4 Identifying Low Quality Estimates

This section demonstrates how to implement the recommendations for identifying low quality estimates and the rounding rules discussed in ***Section 4*** of the user's guide. Three types of data are needed to identify and flag low quality estimates, regardless of the estimate type: the estimate, the standard error of the estimate, and the unweighted sample size of the estimate. Because *Examples 1-7* provided details for obtaining estimates and standard errors, the examples in this section will focus primarily on calculating the percent relative standard error (RSE), calculating unweighted sample sizes, identifying estimates that should be flagged as unreliable, and verifying that estimates rounding to zero are not presented.

Unweighted sample sizes should take into account the series adjustment. For example, a series victimization with a series count of seven would count as seven victimizations in the unweighted sample size, while a non-series victimization would only count as one. This series adjustment is already incorporated in the victimization counts on the modified person and household-level files, so sample sizes for victimization rates are obtained by taking unweighted sums of victimization counts with the specified characteristic(s) of interest. However, for victimization totals and proportions, the series count must be included in the calculation of the sample size, as demonstrated in the examples below. *Example 8A* demonstrates implementation of flagging and rounding rules for victimization totals, *Example 8B* for victimization proportions, and *Example 8C* for victimization rates.

Example 8A - Total number of personal thefts by sex and race/ethnicity, 2011

Year(s): 2011
Crime Type: personal thefts (*ptft*)
Domain(s): sex (*sex*) and race/ethnicity (*race_eth*)
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2011 (*year*=**2011**)

Code:

```
*calculate estimates and standard errors.
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (year=2011) subpop=1.
```

```
cstabulate
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /tables variables=sex race_eth by ptft
  /subpop table=subpop display=layered
  /cells popsize
  /statistics se
  /missing scope=table classmissing=exclude.

*calculate sample sizes.
weight by serieswgt. *a.
crosstabs
  /tables=sex race_eth by ptft by subpop
  /format=avalue tables
  /cells=count
  /count round cell.
```

Code Comment(s):

a) Weight by the series weight to obtain the series-adjusted count of victimizations

Output:

Complex Samples: Tables

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under "Subpopulation Tables" with a "SUBPOP" value of 1 is relevant (highlighted rows).

Subpopulation Tables

sex * PTFT

SUBPOP	sex			PTFT		
				.00	1.00	Total
.00	1	Population Size	Estimate	150391124.325	1244807.542	151635931.867
			Standard Error	2652027.581	92801.489	2668694.153
	2	Population Size	Estimate	166408038.559	1377053.934	167785092.493
			Standard Error	2932251.104	72295.072	2946142.399
	Total	Population Size	Estimate	316799162.884	2621861.476	319421024.360
			Standard Error	5236798.165	116411.783	5259446.687
1.00	1	Population Size	Estimate	10951793.452	53583.480	11005376.931
			Standard Error	441239.647	18913.897	446932.563
	2	Population Size	Estimate	11923877.167	112186.668	12036063.835
			Standard Error	473305.989	19313.730	478305.159
	Total	Population Size	Estimate	22875670.619	165770.147	23041440.766
			Standard Error	771278.462	24276.547	778410.043

race_eth * PTFT

SUBPOP	race_eth			PTFT		
				.00	1.00	Total
.00	1	Population Size	Estimate	219060624.388	1615705.470	220676329.859
			Standard Error	4676192.767	86825.661	4695337.206
	2	Population Size	Estimate	43592041.127	435124.100	44027165.227
			Standard Error	1261654.061	52924.283	1279045.966
	3	Population Size	Estimate	39646807.817	371335.761	40018143.578
			Standard Error	1018161.545	44116.689	1023834.990
	4	Population Size	Estimate	10440511.961	172087.954	10612599.915
			Standard Error	449443.975	39824.055	464491.308
	5	Population Size	Estimate	4059177.592	27608.190	4086785.782
			Standard Error	291633.050	9540.768	291448.968
	Total	Population Size	Estimate	316799162.884	2621861.476	319421024.360
			Standard Error	5236798.165	116411.783	5259446.687
1.00	1	Population Size	Estimate	14441371.700	83955.556	14525327.257
			Standard Error	573878.218	21478.967	581793.456
	2	Population Size	Estimate	3299136.113	29506.983	3328643.096
			Standard Error	285213.478	10989.442	285574.792
	3	Population Size	Estimate	3500292.236	30286.661	3530578.898
			Standard Error	219190.159	10488.600	220930.630
	4	Population Size	Estimate	987851.403	13519.074	1001370.477
			Standard Error	97200.409	5943.552	97436.688
	5	Population Size	Estimate	647019.166	8501.872	655521.039
			Standard Error	104487.688	5281.778	104863.490
	Total	Population Size	Estimate	22875670.619	165770.147	23041440.766
			Standard Error	771278.462	24276.547	778410.043

Crosstabs

[AdjIncident]

sex * PTFT * SUBPOP Crosstabulation

Count

SUBPOP			PTFT		Total
			.00	1.00	
.00	sex	1	51636	342	51978
		2	59349	469	59818
	Total		110985	811	111796
1.00	sex	1	3736	16	3752
		2	4277	35	4312
	Total		8013	51	8064
Total	sex	1	55372	358	55730
		2	63626	504	64130
	Total		118998	862	119860

race_eth * PTFT * SUBPOP Crosstabulation

Count

SUBPOP			PTFT		Total
			.00	1.00	
.00	race_eth	1	77836	517	78353
		2	13898	115	14013
		3	14244	116	14360
		4	3675	54	3729
		5	1332	9	1341
	Total		110985	811	111796
1.00	race_eth	1	5245	24	5269
		2	987	9	996
		3	1235	9	1244
		4	327	6	333
		5	219	3	222
	Total		8013	51	8064
Total	race_eth	1	83081	541	83622
		2	14885	124	15009
		3	15479	125	15604
		4	4002	60	4062
		5	1551	12	1563
	Total		118998	862	119860

Identifying Unreliable Estimates:

As outlined in ***Section 4***, it is recommended that estimated totals meeting either of the following criteria be identified as unreliable. In addition, any estimate rounding to zero should not be displayed.

- RSE > 30%
- Count sample size ≤ 10

The percent relative standard error of an estimated total is calculated as:

$$\%\, RSE(Total) = \frac{SE(Total)}{Total} * 100$$

Estimated totals, standard errors, and unweighted sample sizes from the output above are included in ***Table E-1*** (in the "Total," "SE(Total)," and "n" columns, respectively). Percent RSEs are calculated based on the formula above. Based on the recommendations, five of the eight estimates are flagged as unreliable. The estimate for males is flagged because the percent RSE is greater than 30 percent, while the other four estimates are flagged both because their RSEs exceed 30 percent and because their unweighted sample sizes are less than or equal to 10. All estimates can be displayed because none of the estimates round to zero.

Table E-1. Identifying Low Quality Victimization Totals

Domain	Total	SE(Total)	n	%RSE (Total)	Flag as Unreliable?	Rounds to Zero?
Overall	165770.15	24276.55	51	14.64		
Male	53583.48	18913.90	16	35.30	√	
Female	112186.67	19313.73	35	17.22		
Non-Hispanic White	83955.56	21478.97	24	25.58		
Non-Hispanic Black	29506.98	10989.44	9	37.24	√	
Hispanic	30286.66	10488.60	9	34.63	√	
Non-Hispanic Other	13519.07	5943.55	6	43.96	√	
Non-Hispanic More than One Race	8501.87	5281.78	3	62.12	√	

Example 8B – Distribution of motor vehicle theft in the Northeast Census Region by report status, 2011

Year(s): 2011
Domain(s): Northeast Census Region (*region*=1); motor vehicle theft (*mvtft*=1)
Covariate(s): report status (*notify*)
Weight: *newwgt*
Subpopulation: within the United States (*exclude_outUS*=**0**); non-dummy records (*dummy*=**0**); 2011 (*year*=**2011**); Northeast Census Region (*region*=1); motor vehicle theft (*mvtft*=1)

Code:

```
*calculate estimates and standard errors.
compute subpop=0.
if (exclude_outus=0) & (dummy=0) & (year=2011) & (region=1) &
(mvtft=1) subpop=1.

cstabulate
  /plan file='<user-specified path>\incidentfileanalysisplan'
  /tables variables=notify
  /subpop table=subpop display=layered
  /cells tablepct
  /statistics se cumulative
  /missing scope=table classmissing=exclude.

*calculate sample sizes.
weight by serieswgt. *a.
crosstabs
  /tables=notify by subpop
  /format=avalue tables
  /cells=count
  /count round cell.
```

Code Comment(s):

a) Weight by the series weight to obtain the series-adjusted count of victimizations. Because flagging rules are based on the denominator sample size, only the overall sample size is needed (not estimates by report status).

Output:

Complex Samples: Tables

[AdjIncident]

NOTE: Output is provided overall and by subpopulation. Only the output under “Subpopulation Tables” with a “SUBPOP” value of 1 is relevant (highlighted rows).

Subpopulation Tables

notify

SUBPOP			Estimate	Standard Error	Cumulative
.00	% of Total	1	40.1%	0.3%	40.1%
		2	58.9%	0.3%	99.0%
		3	1.0%	0.0%	100.0%
		Total	100.0%	0.0%	100.0%
1.00	% of Total	1	92.6%	5.4%	92.6%
		2	7.4%	5.4%	100.0%
		Total	100.0%	0.0%	100.0%

Crosstabs

```
[AdjIncident]
```

notify * SUBPOP Crosstabulation

Count

		SUBPOP		Total
		.00	1.00	
notify	1	47439	17	47456
	2	71046	2	71048
	3	1196	0	1196
Total		119681	19	119700

Identifying Unreliable Estimates:

As outlined in ***Section 4***, it is recommended that victimization percentages (P) meeting either of the following criteria be flagged as unreliable. In addition, any estimate rounding to zero should not be displayed.

- RSE > 30%, where
  - If the percentage is ≤ 50%, use the RSE of log(P)
  - If the percentage is > 50%, use the RSE of log(100-P); or
- Denominator sample size ≤ 10

The percent relative standard errors of the log of the percentages (P) and (1-P) are calculated as:

$$\%\, RSE(\log(P)) = \frac{SE(P)}{P * abs(\log\left(\frac{P}{100}\right))} * 100$$

$$\%\, RSE(\log(100 - P)) = \frac{SE(P)}{(100 - P) * abs(\log\left(1 - \frac{P}{100}\right))} * 100$$

Estimated percentages, standard errors, and the unweighted denominator sample size from the output above are included in ***Table E-2*** (in the "P," "SE(P)," and "n (denom)" columns, respectively). Percent RSEs are calculated based on the formulas above. Based on these recommendations, none of the estimates are flagged as unreliable. The denominator sample size is 19, which is greater than the recommended threshold of 10. The percent RSEs for the reported and not reported estimates are 28.03, which are below the 30 percent threshold. However, because no respondents reported that they did not know whether or not the motor vehicle theft was reported to the police, the estimated percent is 0. This estimate should not be presented because it rounds to zero.

Table E-2. Identifying Low Quality Victimization Percentages

Estimate	P	SE(P)	n (denom)	%RSE(P) OR %RSE(100-P)	Flag as Unreliable?	Rounds to Zero?
Reported to Police	92.60	5.40	19	28.03		
Not Reported to Police	7.40	5.40	19	28.03		
Do Not Know	0.00	-	19	-		√

Example 8C – Rate of rape/sexual assault by sex, 2011

Year(s): 2011
Crime Type(s): rape/sexual assault (*rsa*)
Domain(s): sex (*sex*)
Weight: *wgtpercy*
Subpopulation: 2011 (*year*=**2011**)
Calculated Directly from Adjusted Files?: yes

Code:

```
*calculate estimates and standard errors (overall and by sex).
compute subpop=0.
if (year=2011) subpop=1.
compute vrrsa=adjinc_wt * rsa * 1000.

csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrrsa
  /subpop table=subpop display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.

csdescriptives
  /plan file='<user-specified path>\personfileanalysisplan'
  /summary variables=vrrsa
  /subpop table=subpop by sex display=layered
  /mean
  /statistics se
  /missing scope=analysis classmissing=exclude.

*calculate sample sizes.
weight by rsa. *a.
crosstabs
  /tables=subpop by sex
  /format=avalue tables
  /cells=count
  /count round cell.
```

Code Comment(s):

a) Weight by the RSA victimization count because it already includes the series adjustment

Output:

Complex Samples: Descriptives

[AdjPer]

NOTE: Output is provided overall and by subpopulation. Only the output under "Subpopulation Descriptives" with a "SUBPOP" value of 1 is relevant (highlighted rows).

Subpopulation Descriptives

Univariate Statistics

SUBPOP			Estimate	Standard Error
.00	Mean	VRRSA	1.4526	.09903
1.00	Mean	VRRSA	.9481	.16253

Univariate Statistics

SUBPOP	sex			Estimate	Standard Error
.00	1	Mean	VRRSA	.2687	.05211
	2	Mean	VRRSA	2.5732	.19019
1.00	1	Mean	VRRSA	.2760	.08970
	2	Mean	VRRSA	1.5929	.33234

Crosstabs

[AdjPer]

SUBPOP * sex Crosstabulation

Count

		sex		Total
		1	2	
SUBPOP	.00	112	1145	1257
	1.00	10	69	79
Total		122	1214	1336

Identifying Unreliable Estimates:

As outlined in ***Section 4***, it is recommended that victimization rates meeting either of the following criteria be flagged as unreliable. In addition, any estimate rounding to zero should not be displayed.

- RSE > 30%
- Numerator sample size ≤ 10

The percent relative standard errors of the victimization rates (VR) are calculated as:

$$\%\, RSE(VR) = \frac{SE(VR)}{VR} * 100$$

Estimates, standard errors, and unweighted sample sizes from the output above are included in ***Table E-3*** (in the "VR," "SE(VR)," and "n (num)" columns, respectively). Percent RSEs are calculated based on the formula above. Based on these recommendations, the estimated victimization rate for males is flagged as unreliable because the percent RSE is greater than 30 percent and the sample size of the numerator is less than or equal to 10. Because none of the estimates round to zero, all three estimates can be presented.

Table E-3. Identifying Low Quality Victimization Rates

Domain	VR	SE(VR)	n (num)	%RSE(VR)	Flag as Unreliable?	Rounds to Zero?
Overall	0.94815	0.16253	79	17.14		
Male	0.27602	0.0897	10	32.50	√	
Female	1.59287	0.33234	69	20.86		