2021 Methodological Report

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Funding and Administration

The 2021 West Virginia Social Survey (WVSS) was made possible by support from the Department of Political Science and the Department of Sociology and Anthropology at West Virginia University. The survey was fielded by the Survey Research Center at West Virginia University.

Sampling

The 2021 WVSS utilized address-based sampling. Residential household addresses were randomly selected from a database that draws upon multiple sources, including county recorder data, county tax assessor files, telephone directories, National Change of Address (NCOA) records, the USPS Delivery Sequence File (DSF), Locatable Address Conversion Service (LACS), and other third-party sources. The data is passed against suppression files to eliminate consumers or telephone numbers as appropriate: A Deceased File, State Attorney General (SAG) data, the Direct Marketing Association's (DMA) do-not-mail and do-not-call lists, and the national FTC do-not-call file.

In an effort to obtain enough responses from each county in West Virginia, ninety (90) addresses were randomly selected from each of the state's fifty-five (55) counties, equating to a sample of 4,950 addresses. This represents an oversampling of smaller population counties and, in turn, and undersampling of higher population counties. See the weighting section below for information on returning WVSS estimates to population level estimates.

Fielding

Sampled addresses first received an advanced letter, which was mailed on June 15th. A survey instrument with an enclosed $2 pre-paid incentive was then mailed on June 18th. This was followed by a reminder postcard mailed on June 24th. Finally, a second and final survey instrument (without an incentive payment) was mailed to non-responding households on August 18th.

Response Rate

A total of 1,317 responses were received, equating to an overall response rate of 26.7% as calculated based on the American Association for Public Opinion Research Response Rate Definition 1. As seen in the Table 1, the county-level response rate ranged from 40.0% (Preston County) to 13.3% (Mingo County).

Table 1: Response Rate by County

County Name	Mailed Surveys	Responses	Response Rate
Barbour	90	18	20.0%
Berkeley	90	21	23.3%
Boone	90	18	20.0%
Braxton	90	23	25.6%
Brooke	90	23	25.6%
Cabell	90	23	25.6%
Calhoun	90	23	25.6%
Clay	90	22	24.4%
Doddridge	90	23	25.6%
Fayette	90	28	31.1%
Gilmer	90	28	31.1%
Grant	90	23	25.6%
Greenbrier	90	24	26.7%
Hampshire	90	25	27.8%
Hancock	90	32	35.6%
Hardy	90	22	24.4%
Harrison	90	22	24.4%
Jackson	90	24	26.7%
Jefferson	90	19	21.1%
Kanawha	90	26	28.9%
Lewis	90	19	21.1%
Lincoln	90	20	22.2%
Logan	90	17	18.9%
Marion	90	22	24.4%
Marshall	90	22	24.4%
Mason	90	23	25.6%
McDowell	90	23	25.6%
Mercer	90	24	26.7%
Mineral	90	28	31.1%
Mingo	90	12	13.3%
Monongalia	90	20	22.2%
Monroe	90	18	20.0%
Morgan	90	26	28.9%
Nicholas	90	26	28.9%
Ohio	90	30	33.3%

Pendleton	90	30	33.3%
Pleasants	90	26	28.9%
Pocahontas	90	23	25.6%
Preston	90	36	40.0%
Putnam	90	22	24.4%
Raleigh	90	24	26.7%
Randolph	90	26	28.9%
Ritchie	90	26	28.9%
Roane	90	28	31.1%
Summers	90	22	24.4%
Taylor	90	29	32.2%
Tucker	90	28	31.1%
Tyler	90	28	31.1%
Upshur	90	22	24.4%
Wayne	90	18	20.0%
Webster	90	28	31.1%
Wetzel	90	25	27.8%
Wirt	90	22	24.4%
Wood	90	27	30.0%
Wyoming	90	30	33.3%
Overall	4,950	1,317	26.70%

Of the returned surveys, 1,039 (78.89%) were from the first survey mailing, 110 were from the second mailing (8.35%), and 168 (12.76%) were completed online.

Weighting

Because of the designed oversampling of smaller population counties and patterns of nonresponse, unweighted estimates from the WVSS will likely not be representative of the population. To account for this, weights have been computed to return WVSS estimates to a representative level.

The weights account for design effects (i.e., the probability of a household and individual[1] being selected), nonresponse, and is adjusted to reflect WV's population in terms of individuals per county or households per county, gender, race, age, education, and marital status. Five-year estimates from the American Community Survey were used as population benchmarks in computing the weights. Table 2 and Table 3 present descriptive statistics for the original WVSS sample, WVSS weighted sample, population data and the difference between the weighted WVSS data and the population data.

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[1] Five respondents did not identify how many adults live in their household. We imputed their design weight using the average design weight for the county they reside in.

Although the weights largely return the WVSS estimates to representative levels, the weighted data still somewhat underrepresents those aged 18-24 and those aged 70-79.

Table 2: Comparison of WVSS and Census Distributions by County

County Name	WVSS Sample (%)	WVSS Respondents (%)	WVSS Weighted Respondents* (%)	Census (%)	% Difference WVSS Weighted Respondents & Census
Barbour	1.81	1.37	0.93	0.92	0.01
Berkeley	1.81	1.59	6.35	6.65	-0.30
Boone	1.81	1.37	1.21	1.20	0.01
Braxton	1.81	1.75	0.81	0.78	0.03
Brooke	1.81	1.75	1.24	1.22	0.02
Cabell	1.81	1.75	5.08	5.13	-0.05
Calhoun	1.81	1.75	0.42	0.40	0.02
Clay	1.81	1.67	0.49	0.47	0.02
Doddridge	1.81	1.75	0.50	0.47	0.03
Fayette	1.81	2.13	2.40	2.37	0.03
Gilmer	1.81	2.13	0.61	0.44	0.17
Grant	1.81	1.75	0.65	0.65	0.00
Greenbrier	1.81	1.82	1.96	1.93	0.03
Hampshire	1.81	1.90	1.31	1.29	0.02
Hancock	1.81	2.43	1.64	1.61	0.03
Hardy	1.81	1.67	0.78	0.77	0.01
Harrison	1.81	1.67	3.76	3.75	0.01
Jackson	1.81	1.82	1.61	1.59	0.02
Jefferson	1.81	1.44	3.19	3.19	0.00
Kanawha	1.81	1.97	8.94	9.94	-1.00
Lewis	1.81	1.44	0.91	0.89	0.02
Lincoln	1.81	1.52	1.16	1.14	0.02
Logan	1.81	1.29	1.77	1.79	-0.02
Marion	1.81	1.67	1.01	0.98	0.03
Marshall	1.81	1.67	3.12	3.13	-0.01
Mason	1.81	1.75	1.72	1.70	0.02
McDowell	1.81	1.75	1.50	1.48	0.02
Mercer	1.81	1.82	3.29	3.28	0.01
Mineral	1.81	2.13	1.52	1.50	0.02
Mingo	1.81	0.91	1.32	1.31	0.01
Monongalia	1.81	1.52	5.60	5.89	-0.29
Monroe	1.81	1.37	0.75	0.74	0.01

Morgan	1.81	1.97	1.02	1.00	0.02
Nicholas	1.81	1.97	1.38	1.37	0.01
Ohio	1.81	2.28	2.33	2.31	0.02
Pendleton	1.81	2.28	0.62	0.39	0.23
Pleasants	1.81	1.97	0.44	0.42	0.02
Pocahontas	1.81	1.75	0.48	0.46	0.02
Preston	1.81	2.73	1.89	1.87	0.02
Putnam	1.81	1.67	3.16	3.15	0.01
Raleigh	1.81	1.82	4.07	4.09	-0.02
Randolph	1.81	1.97	1.62	1.60	0.02
Ritchie	1.81	1.97	0.55	0.53	0.02
Roane	1.81	2.13	0.89	0.76	0.13
Summers	1.81	1.67	0.71	0.70	0.01
Taylor	1.81	2.20	0.96	0.93	0.03
Tucker	1.81	2.13	0.42	0.38	0.04
Tyler	1.81	2.13	0.63	0.48	0.15
Upshur	1.81	1.67	1.38	1.35	0.03
Wayne	1.81	1.37	2.22	2.20	0.02
Webster	1.81	2.13	0.47	0.45	0.02
Wetzel	1.81	1.90	0.86	0.84	0.02
Wirt	1.81	1.67	0.46	0.32	0.14
Wood	1.81	2.05	4.65	4.66	-0.01
Wyoming	1.81	2.28	1.17	1.14	0.03

*WVSS Weighted data accounts for design effects (probability of a household being selected), nonresponse, and is adjusted to reflect WV's population in terms of individuals per county, gender, race, age, education, and marital status.

Table 3: Comparison of WVSS and Census Distributions by Demographic Categories

Demographic Category	WVSS Sample (%)	WVSS Weighted Sample* (%)	Census (%)	% Difference WVSS Weighted & Census
Gender				
Male	39.28	48.75	49.50	-0.75
Female	60.71	51.25	50.50	0.75
Race				
White	96.64	93.57	93.19	0.38
Black or African American	0.84	3.25	3.71	-0.46
American Indian or Alaskan Native	0.15	0.16	0.17	-0.01
Asian	0.31	0.80	0.79	0.01

Native Hawaiian or other Pacific Islander	0.00	0.00	0.02	-0.02
Some other race	0.31	0.43	0.38	0.05
Mixed Race	1.75	1.77	1.74	0.03
Age				
18-24	1.07	4.16	11.39	-7.23
25-29	3.13	6.17	6.05	0.11
30-39	8.70	15.43	14.95	0.48
40-49	11.37	16.98	16.29	0.69
50-59	14.26	19.28	17.90	1.38
60-69	29.60	20.16	17.73	2.43
70-79	22.58	11.41	19.08	-7.67
80 or older	9.31	6.42	5.59	0.83
Education				
Less than High School	3.50	3.98	4.10	-0.12
Some High School	5.06	9.32	9.70	-0.38
High School Graduate	36.58	39.98	40.50	-0.52
Some college	18.68	19.07	18.50	0.57
Associate Degree	9.81	6.89	6.80	0.09
Bachelor's Degree	14.24	12.38	11.90	0.48
Master's Degree	9.26	5.92	5.60	0.32
Professional	1.71	1.50	1.30	0.20
Doctorate	1.17	0.97	0.80	0.17
Marital Status				
Married	57.56	50.61	50.00	0.61
Separated/Divorced	16.64	15.44	14.90	0.54
Widowed	14.81	8.54	7.75	0.79
Never Married	10.99	25.41	27.40	-1.99

*WVSS Weighted data accounts for design effects (probability of a household being selected), nonresponse, and is adjusted to reflect WV's population in terms of individuals per county, gender, race, age, education, and marital status.

Data Analysis

When using Stata and performing individual-level analyses use the syntax:

svyset surveyid [pw = wgt], strata(County) fpc(cntyind)

Where surveyid = unique respondent identifier; wgt = weight; County = counties; cntyind = # of individuals in each county.

Item-Specific Notes

Q20 on the survey asked respondents to identify "the most important issues facing West Virginia….Please select ONE as the most important and ONE as next or second most important." The variables representing responses to this question are found in in the datafile from *impaccesstohc* to *implsspecify_text*.

However, it became clear that some respondents did not follow the instructions to select a single item in these columns. That is, some respondents selected two or more issues as most important and\or two or more issues as the next most important. To retain these responses, we created a second set of variables represented in the datafile from *impaccesstohc2* to *implsspecify_text2*. These variables represent the selections of those respondents who did not follow the instructions and therefore have more than one issue selected as most important and\or second most important.