

ABOUT THE NOVEMBER 2016 VANDERBILT UNIVERSITY POLL

This survey was sponsored and funded by the Center for the Study of Democratic Institutions at Vanderbilt University. It was conducted by interviewers at Princeton Survey Research Associates International (PSRAI; www.psrai.com), who also calculated the appropriate sampling error (taking into account design effects) and associated weights to be used in analysis (described in greater detail below). Telephone interviews were conducted in English by Princeton Data Source from November 14th through 29th, 2016.

This survey was the 15th iteration of the Vanderbilt Poll. The Poll routinely contracts with PSRAI in the manner mentioned above, and PSRAI uses probability methods to randomly select individuals to be interviewed.

To reach respondents, PSRAI used a sample constructed by Marketing Systems Group from the Tennessee state voter file using four strata. Four independent samples were pulled from the Tennessee state voter file: (1) adults 18-44 with a landline phone; (2) adults 45 or over with only a cell phone; (3) adults aged 45 or older with a landline; and (4) adults aged 45 or older who only have a cell phone.¹² Ultimately, this survey's sample was of 1,005 adult registered voters living in Tennessee. Seven hundred and ninety eight (798) interviews were conducted by landline and 207 were conducted via cell phone.

As many as five attempts were made to contact every sampled telephone number. The sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each phone number received at least one daytime call when necessary.

For the landline sample, interviewers asked to speak with the person named in the sample file. If there were two or more respondents with the same name at that number, interviewers asked for the respondent who is registered to vote at that address. For the cellular sample, interviews were conducted with the person named in the sample file. Interviewers verified that the person was in a safe place before administering the survey. Once the target respondent was on the phone, interviewers confirmed that they lived in Tennessee and are registered to vote before conducting the full interview.

All statistical estimates are adjusted to account for systematic non-response as well as a disproportionate sample design in order to ameliorate any loss in statistical efficiency. The weighting balanced sample demographics to voter parameters for sex, age, race, and region.³ The basic weighting parameters were provided by Catalist's Demographic Profile of Registered Voters in Tennessee.

Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the

¹ The database included approximately 3.6 million total records of which approximately 917,000 had a phone number.

² Records with both a landline and cell phone were included in the landline strata.

³ Tennessee counties are aggregated into four regions: Eastern Tennessee, the Nashville area, Central Tennessee, and Memphis/Western Tennessee.

population. Table 1 compares weighted and unweighted sample distributions to population parameters.

Table 1: Sample Demographics

	<u>Parameter</u>	<u>Unweighted</u>	<u>Weighted</u>
<u>Gender</u>			
	Male	44.6%	45.2%
	Female	55.4%	54.8%
<u>Age</u>			
	18-29	17.0%	16.2%
	30-34	8.6%	8.2%
	35-44	16.8%	17.1%
	45-54	18.2%	18.5%
	55-64	17.8%	18.1%
	65+	21.6%	21.9%
<u>Race/Ethnicity</u>			
	White/not Hispanic	81.7%	81.5%
	Other	18.3%	18.5%
<u>Region</u>			
	East	37.1%	37.1%
	Nashville	23.3%	23.3%
	Central	20.6%	20.6%
	Memphis/West	19.0%	19.0%

Table 2 reports the disposition of all sampled telephone numbers ever dialed from the original telephone number samples. This study's response rate for the landline samples was 11 percent; the response rate for the cellular samples was 8 percent. Response rates are computed according to AAPOR standards using the formula below.

Table 2. Sample Disposition

<u>Landline</u>	<u>Cell</u>	
138	16	Non-residential/Business
0	6	Over quota
725	864	Listed person does not exist/deceased
1	0	Cell in landline frame
864	886	OF = Out of Frame
1,494	437	Not working
178	5	Computer/fax/modem
1,672	442	NWC = Not working/computer
558	166	NA/Busy all attempts
0	134	VM not set up/caller out of range
558	300	UHUO _{NC} = Non-contact, unknown if household/unknown other
3,203	1,730	Voice mail
55	6	Other non-contact (deaf/disabled)
3,258	1,736	UO _{NC} = Non-contact, unknown eligibility
1,545	621	Refusals
900	172	Callbacks
2,445	793	UO _R = Refusal, unknown if eligible
12	15	O = Other (language)
83	17	Out of state
5	5	County out of range
88	22	SO = Screen out
177	21	R = Refusal, known eligible (breakoffs and qualified CBs)
798	207	I = Completed interviews
9,872	4,422	T = Total numbers sampled

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Table 2. Sample Disposition (continued)

<u>Landline</u>	<u>Cell</u>	
72.8%	67.8%	$e1 = (I+R+SO+O+UO_R+UO_{NC})/(I+R+SO+O+UO_R+UO_{NC}+OF+NWC)$ - Est. frame eligibility of non-contacts
91.7%	91.2%	$e2 = (I+R)/(I+R+SO)$ - Est. screening eligibility of unscreened contacts
49.0%	35.3%	$CON = [I + R + (e2*[O + UO_R])]/[I + R + (e2*[O + UO_R + UO_{NC}]) + (e1*e2*UHUO_{NC})]$
24.7%	21.5%	$COOP = I/[I + R + (e2*[O + UO_R])]$
12.1%	7.6%	$AAPOR\ RR3 = I/[I+R+(e2*(UO_R+UO_{NC}+O))+[e1*e2*UHUO_{NC}]] = CON*COOP$

Including adjustments for design effects, the resulting margin of sampling error for the complete set of weighted data in this survey is ± 3.5 percentage points at a confidence level of 95%. In analysis of questions that required random half samples of respondents, we further adjusted the margin of error to reflect the greater imprecision associated with smaller samples.⁴ Appropriately weighted data were used for all analyses. All data analysis was conducted using STATA SE Version 13, which allows for adjustment of standard errors for complex sample designs.

The questionnaire used in this survey, along with topline results, is available at www.vu.edu/poll.

For more information, please contact Shannon Meldon-Corney, Program Coordinator, at the Center for the Study of Democratic Institutions at (615)-875-6954 or at csdi@vanderbilt.edu.



⁴ For more information about these questions and their corresponding sample sizes, please refer to the questionnaire and our topline results at www.vu.edu/poll.