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ABOUT THE MAY 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 April 25 to May 11, 2016.

This survey was the 13th 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. Two independent samples were pulled from the Tennessee state voter file. The first was a simple random sample of 14,000 drawn from all records with a landline phone number.[1] An additional sample was drawn to account for the fact that younger registered voters and those with no landline telephone access were likely underrepresented in the sample frame. This second sample of 7,000 was drawn from records with an age of 18-34 and a cellular phone number. Ultimately, this survey's sample was of 1,001 adult registered voters living in Tennessee. Eight hundred and twelve (812) interviews were conducted by landline and 189 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. A two-stage weighting procedure was used to weight this dual-frame sample.

The first stage of weighting corrected for different probabilities of selection associated with the number of adults in each household. Only one record was sampled for each household so that those respondents in households with more than one registered voter had a smaller probability of being sampled. The first stage adjustment was simply the reciprocal of the number of listed household members. The second stage of weighting balanced sample demographics to

[1] The database included approximately 3.3 million total records of which 1.90 million had a phone number.

population parameters. The sample is balanced to match Tennessee registered voter parameters for sex, age, race, and region.[2] 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 population. Table 1 compares weighted and unweighted sample distributions to population parameters.

Table 1: Sample Demographics

	Parameter	Unweighted	Weight
Gender			
Male	44.6	45.3	44.9
Female	55.4	54.7	55.1
Age			
18-29	17.0	11.6	17.1
30-34	8.6	6.9	8.7
35-44	16.8	3.1	16.3
45-54	18.2	10.6	18.4
55-64	17.8	16.7	17.9
65+	21.6	51.1	21.6
Race/Ethnicity			
White/not Hispanic	81.7	83.3	81.7
Other	18.3	16.7	18.3
Region			
East	37.1	37.8	37.0
Nashville	23.3	21.9	23.3
Central	20.6	21.0	20.7
Memphis/West	19.0	19.4	19.1

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 15 percent; the response rate for the cellular samples was 7 percent. Response rates are computed according to AAPOR standards using the formula below.

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

Table 2. Sample Disposition

Landline	Cell	
98	46	Non-residential/Business
204	1,297	Resident does not exist
4	----	Cell in landline frame
306	1,343	OF = Out of Frame
4,523	1,083	Not working
147	1	Computer/fax/modem
4,670	1,084	NWC = Not working/computer
330	1,085	$UHUO_{NC}$ = Non-contact, unknown if household/unknown other
1,862	1,859	Voice mail
90	40	Other non-contact
1,952	1,899	UO_{NC} = Non-contact, unknown eligibility
2,317	949	Refusals
38	6	On DNC list - not dialed
573	195	Callbacks
2,928	1,150	UO_R = Refusal, unknown if eligible
7	56	O = Other
----	1	Child's cell phone
80	109	Not a TN resident/Registered Voter
80	110	SO = Screen out
118	33	R = Refusal, known eligible
812	189	I = Completed interviews
11,203	6,949	T = Total numbers sampled

Landline	Cell	
		$e1 = (I+R+SO+O+UO_R+UO_{NC})/(I+R+SO+O+UO_R+UO_{NC}+OF+NWC)$ - Est.
54.2%	58.6%	frame eligibility of non-contacts
92.1%	66.9%	$e2 = (I+R)/(I+R+SO)$ - Est. screening eligibility of unscreened contacts
		$CON = [I + R + (e2*[O + UO_R])]/[I + R + (e2*[O + UO_R + UO_{NC}]) +$
64.9%	37.8%	$(e1*e2*UHUO_{NC})]$
22.4%	18.4%	$COOP = I/[I + R + (e2*[O + UO_R])]$
		AAPOR RR3=$I/[I+R+[e2*(UO_R+UO_{NC}+O)]+[e1*e2*UHUO_{NC}]]$ =
14.5%	**6.9%**	**CON*COOP**

Including adjustments for design effects, the resulting margin of sampling error for the complete set of weighted data in this survey is ± 4.2 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.[3] 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.

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[3] 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.