FINAL REPORT

Assessing the Results of an Innovative Election Survey to Replace the Exit Poll

Conducted by NORC at the University of Chicago, The Associated Press, and Fox News

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Table of Contents

EXECUTIVE SUMMARY

The Associated Press (AP), Fox News, and NORC at the University of Chicago collaborated to test an innovative, alternate approach to traditional exit polling for the 2017 elections in New Jersey, Virginia, and Alabama.

The experimental methodology involved phone interviews with a probability-based sample of registered voters in sufficient numbers for accurate election forecasting, and supplemented them with larger numbers of less reliable non-probability interviews of registered voters from online panels to help enhance the estimates and allow for editorial coverage of voting behavior for demographic subgroups. The new approach incorporated both calibration and small area modeling techniques to improve the accuracy of results. In addition, this method offered insights into the attitudes of the electorate not available in traditional exit polls by including interviews with both likely voters and unlikely voters. This new approach departs from the traditional exit poll method of interviewing voters in person at the polls on Election Day, accounts for the increasing number of Americans who vote early/absentee, and allows for additional innovations moving forward.

Operational Methods

In advance of the gubernatorial elections in New Jersey and Virginia held in November 2017 and Alabama's special Senate election in December 2017, the team developed election questionnaires and protocols for data collection and data delivery for the experimental polls.

A total of over 15,000 interviews were completed across the three elections, including roughly 3,000 probability interviews completed via telephone and 12,500 non-probability interviews completed online, as shown in Table 1. Data collection for each poll was conducted within a four-day period, including Election Day and the three preceding days.

Table 1: Total Completed Interviews by State and Mode

	New Jersey	Virginia	Alabama	Total
Total interview completes	5,355	6,154	4,063	15,572
Probability completes	834	1,130	1,065	3,029
Non-probability completes	4,521	5,024	2,998	12,543

To obtain a probability-based sample of registered voters, NORC purchased a list for each state from a commercial vendor, who matched these address-based lists to phone numbers so they could be contacted via telephone. We chose to use these lists as tools to more efficiently locate registered voters, rather than a list sample of specific registered voters. That is, interviewers verified that respondents were registered to vote in the appropriate state before proceeding with the survey, but did not require respondents to confirm that their names and addresses matched the sample file information.

The non-probability interviews were obtained from three additional commercial vendors. Because there was a potential for the same individuals to be recruited to the survey via multiple methods, NORC worked with the vendor Imperium to integrate an application programming interface (API) solution called RelevantID into the survey to prevent respondents from completing the survey multiple times.

Weighting

The primary innovation of the approach was the development of a statistical methodology to combine the scientific probability sample with the less reliable non-probability sample. This approach involved calculating four different weights for the election polls, and these weights allowed for analyzing the probability and non-probability samples both separately and in combination.

First, we calculated a post-stratification weight separately for the probability sample and the non-probability sample. The post-stratification weights correct for demographic imbalances compared to the population of registered voters in each state according to 2016 Current Population Survey (CPS) data. Since the design includes interviewing both likely and unlikely voters, we can weight respondents to high-quality benchmarks of registered voters, which is an advantage over methods such as an exit poll that only obtains demographic information from voters and cannot weight to such benchmarks.

Second, all non-probability cases received a calibration weight. The calibration weight is designed to make sure the non-probability sample is similar to the probability sample in regard to variables that are predictive of vote choice and that cannot be fully captured through demographic corrections in the post-stratification.

Third, all cases received a combined weight for the probability and non-probability samples. This weight combined the weighted probability sample and the calibrated non-probability sample, and then used a small area model to improve the estimate for all cases at the subregional level. The small area modeling significantly reduced the error for the vote choice estimate within each subregion of each state, which helps improve election forecasting.

Lastly, we weighted the survey results to the actual vote count following the completion of the election. We weighted to significantly smaller geographic areas than the traditional exit poll to improve the precision of the results. We weighted the survey results to the 17 subregions in New Jersey, 23 subregions in Virginia, and 20 subregions in Alabama. This offers an advantage over the traditional exit poll, which weights to just five regions in a state, because it reduces the likelihood of over/under weighting certain populations or demographic groups.

Results

The vote choice estimates for all three elections were relatively accurate, and all three predicted the correct winner. When looking at the estimates of the Democratic and Republican candidates' vote share in each state, the combined survey results were within 4 percentage points in all six cases and within 2 percentage points of the actual vote total in four out of six cases.

When comparing our data weighted to the final vote count with the publicly available weighted data from the traditional exit poll conducted by the National Election Pool (NEP), we found no discrepancies for most of the demographic variables in each state that would yield different headlines or stories for election reporting in terms of the candidate who was estimated to win the majority/plurality of voters within particular subgroups.

In regard to the composition of the electorate for the two methods, the largest difference between the experimental approach and the traditional exit poll is the portion of the electorate with a college degree. Our experimental approach produced estimates much more consistent with government estimates for registered voters than the traditional exit poll. For example, in Alabama the experimental

poll found 33 percent of the electorate had a college degree while the traditional exit poll estimated 44 percent had a college degree. The CPS estimates the share of all registered Alabama voters with a college degree is 29 percent, making the experimental poll's 33 percent of the electorate more reasonable.

One of the key benefits of the experimental approach is the ability to get insights into unlikely voters—who they are, why they might choose not to turn out, what they think, and how they could have influenced the election. We found the results could have provided data for a number of stories about unlikely voters, including the following headlines:

- "Dissatisfaction with the candidates caused many Alabamans to skip the polls"
- "Unfamiliar candidates lead some to stay home in New Jersey and Virginia"
- "Young adults in Virginia were more likely to skip election"
- "Independents stayed home from Alabama election"
- "Turnout limits [Murphy's/Northam's/Jones'] margin of victory"
- "Trump voters more likely to stay home in Alabama"
- "Alabama nonvoters more pessimistic about economy, country's direction"

2017 OPERATIONS

Data Collection

The elections covered by the experimental polls included the gubernatorial elections in New Jersey and Virginia, held on November 7, 2017, and the special Senate election in Alabama, held on December 12, 2017. Polls for all three states were conducted over the course of a four-day period that included Election Day and the three days prior.

All probability sample interviews were conducted by telephone and all non-probability sample interviews were conducted online. Interviews in both modes were available in English and Spanish according to respondent preference. Appendix A includes summaries of the total number of interviews collected by mode for each state, and also breaks these counts out based on likely vs. unlikely voters and those who provided or did not provide a vote choice.

For phone interviews, NORC project staff actively coordinated with phone center staff to monitor and adjust dialing efforts as needed throughout the course of data collection. For online interviews, survey invitations were sent via email by the three non-probability sample vendors (SSI, Research Now, and Lucid) to their respective panelists, who accessed the survey via vendor portals. NORC provided each vendor with customized links to the survey so that online respondents were seamlessly redirected to the survey and then sent back to their portals upon completion of the survey. NORC worked with each vendor to monitor online interview production and encouraged vendors to send out additional survey invitations and reminders as needed. The majority of online interviews (53-63 percent, depending on the state) were completed on mobile devices.

Probability Sample Approach

Sample Source and Contacting Strategy

We elected to use a list sample of registered voters purchased from the commercial vendor Catalist as a tool to efficiently find adults who were registered to vote. We selected the vendor as our source because its lists were updated recently and we believed this would lead to higher-quality contact information and more efficient data collection. The vendor was able to match the address-based registered voter sample to landline and cell phone numbers at varying rates across the states we surveyed. Across the three states, we obtained at least one phone number for 82 percent to 89 percent of the registered voter records. For voter records that were matched to multiple phone numbers, we developed and implemented calling rules that would allow us to "cycle" to a new number if attempts to the first number were non-working or otherwise unproductive.

Screening and Gaining Cooperation

The study's sampling and contact approach meant that we would sometimes reach a different voter than the one named in the sample file. We therefore elected to confirm that the individual we were speaking to was registered to vote in the appropriate state to determine eligibility, but not to ask whether he or she was the specific registered voter whose name and address were listed on the sample record.

When contacting landline households during the November elections, we proceeded with interviewing whoever answered the phone (once registered voter status was confirmed). This method was quick and effective, but seemed to result in a high proportion of interviews with older respondents, even in

landline households where the sample information from the vendor indicated a younger voter age. We assumed this to be because older individuals were more likely to be home and to answer the landline phone than younger members of the same households. To address this, we changed the screening method for landline households for the Alabama election. Once we made contact with a resident, we asked to speak to the youngest adult (age 18 or older) who was home at the time before proceeding to the confirmation of registered voter status.

For the Alabama election, we offered incentives of five dollars to some respondents. Incentive offers were limited to those reached on cell phones and who were flagged as being under the age of 65.

Non-Probability Sample Approach

Vendor Selection and Interviews

NORC contracted with three vendors to obtain the non-probability samples of registered voters for this work: Survey Sampling International (SSI), Research Now, and Lucid. Most of the completes came from traditionally recruited and verified opt-in panelists, and a small portion came from river samples sourced via online advertising and engagement through social media platforms. We asked each vendor to achieve an overall number of completed interviews with registered voters, and to space the interviews out over the course of the data collection period using daily targets. We did not ask the vendors to use demographic quotas for respondents.

Data Quality and Data Review

Because we used multiple sources to recruit the non-probability sample for the experimental poll, we expected to see a substantial amount of duplication between sources, with the same individuals being invited to complete the survey multiple times due to participation in multiple online survey panels. To prevent the same individuals from responding to the survey multiple times, NORC worked with Imperium to implement RelevantID in the deduplication process. RelevantID uniquely identifies a computer for the purpose of identifying duplicates within a survey. This is accomplished through a combination of digital watermarking and digital fingerprinting. RelevantID assigns a digital ID to the respondent's computer and browser and the digital fingerprinting technology gathers over 80 data points from the respondent's computer. RelevantID was implemented for all three elections and integrated into the surveys in such a way that the same respondent would be allowed to break off in the middle of a survey and return later to complete it, but the same respondent would not be allowed to complete the survey once and then gain entry to the survey again via a different survey invitation and complete it again.

Data Processing

Coding of Third-Party Candidate Vote Choices

For all three elections, respondents were able to indicate that they were planning to vote for a third-party candidate. If they did so, they were asked to specify who that candidate was. In preparation for the Alabama election, we added a new data processing step to clean and categorize the verbatim mentions for third-party candidates. We created a new, expanded vote choice variable that showed the overall vote choice distribution for all candidates. Appendix B shows the count of mentions for each candidate along with the weighted frequencies for likely voters and unlikely voters.

METHODOLOGICAL APPROACH

Weighting Methodology

We calculated four different weights for the election polls, and the weights allowed us to look at the probability and non-probability samples both separately and in combination. In addition to post-stratification weights, we used several innovative approaches when weighting, including calibration, small area modeling, and adjusting to the actual vote count at a much smaller geographic area than past polls.

Post-Stratification Weights

A post-stratification weight was calculated separately for the probability sample and the non-probability sample for each state. The post-stratification weights correct for demographic imbalances compared to the population of registered voters in each state according to 2016 CPS data and provide weighted estimates for each individual sample in each election. Since the design includes interviewing both likely and unlikely voters, we can weight respondents to high-quality benchmarks of registered voters, which is an advantage over methods such as an exit poll that only obtain demographic information from voters and cannot weight to such benchmarks.

Prior to the post-stratification weighting for each election, nonresponse adjustments were conducted for the probability sample based on information from the voter list sample frame. The nonresponse adjustments were done in multiple stages and included adjustments based on partisanship, age, modeled educational attainment, marital status, voter status (active or not), voted in 2016 or not, phone match type (landline only or cell only/cell and landline).

With the post-stratification weights, the 2016 CPS estimates of registered voters served as the benchmark for all weighting variables, except the voter list sample frame was used as the benchmark for age and the number of registered voters in each region of the state.

The post-stratification weighting featured the following variables for both samples: gender, age, race/ethnicity, education, income, marital status, employment, education * race (white/nonwhite), and age * race (white/nonwhite). The non-probability samples were also weighted to the registered vote count per nine regions for each state. These nine regions per state were groupings of counties created by taking the five AP political stratum and further dividing them based on past vote.

Weights were also trimmed following the nonresponse adjustment and post-stratification process. Trimming is a process in which the largest weights are reduced in order to limit the impact of those cases. Weights were trimmed to the median weight plus three times the inter-quartile range of the weights.

Calibration Weight for the Non-Probability Sample

All non-probability cases received a calibration weight. The calibration weight is designed to make sure the non-probability sample is similar to the probability sample in regards to variables that are predictive of vote choice and that cannot be fully captured through demographic corrections in the post-stratification. The calibration weighting starts with the post-stratification variables, and then adds a second step to weight the non-probability sample to the probability sample based on an additional set of variables related to vote choice.

With each election, we analyzed which variables and combination of variables was most predictive of vote choice. We considered variables such as partisanship, presidential favorability, assessment of the state/national economy, whether the state/nation was headed in the right/wrong direction, and gun rights/gun control.

Small Area Model Weight for Probability and Non-Probability Samples

All cases received a combined weight for the probability and non-probability samples. This weight featured the weighted probability sample and the calibrated non-probability sample in a small area model to improve the vote choice estimates for all likely voters. With the small area models, each state was divided into subregions consisting of counties (17 subregions in New Jersey, 23 subregions in Virginia, and 20 subregions in Alabama). These subregions are based on the AP political and geographic strata, which are further divided based on past vote at the county level.

The models refine the vote estimates within each subregion by predicting vote choice based on area-level variables related to past vote and demographics. For each state, there are two models: 1) predicting percent of vote share that goes for either of the two major parties' candidates, 2) predicting percent of major party vote share that goes for the Democratic/Republican candidate.

For each state, we included in the models: 1) the 2016 presidential vote choice, 2) a measure of socioeconomic status, and 3) up to three predictive demographic or geographic measures.

The small area models significantly improved estimates at the subregion level in each state. The small area estimate reduced the average absolute error in the subregions for the Democratic vote from 6.0 percentage points to 4.8 percentage points in New Jersey, from 5.6 percentage points to 3.2 percentage points in Virginia, and from 5.8 percentage points to 5.1 percentage points in Alabama. See Table 2 below.

Table 2: Average Absolute Difference between Weighted Estimate and Actual Proportion of the Vote per Subregion for Each State

State	Party	Probability Sample		Non-Probability Sample		Combined Sample	
		Non-response adjusted (%)	Post-stratified (%)	Post-stratified (all non-prob sample sources, %)	Calibrated to probability sample (all non-prob sample sources, %)	Probability sample + calibrated non-probability sample (%)	Small area modeled (%)
NJ	Democrat	9.0	14.4	3.9	4.2	6.0	4.8
NJ	GOP	9.0	14.0	3.5	3.8	5.4	4.3
NJ	Third Party	2.4	5.8	1.3	1.7	2.9	2.3
VA	Democrat	6.8	10.9	6.5	6.8	5.6	3.2
VA	GOP	6.6	10.5	6.4	6.3	5.2	2.9
VA	Third Party	1.7	3.1	1.3	1.5	1.8	1.1
AL	Democrat	6.8	8.8	6.9	8.4	5.8	5.1
AL	GOP	6.3	9.8	7.1	8.9	6.3	5.4
AL	Third Party	2.8	2.5	2.0	2.2	1.8	1.7

Weighting to Final Vote Count

Following the vote count, we weighted the survey results to the 17 subregions in New Jersey, 23 subregions in Virginia, and 20 subregions in Alabama. In contrast, the NEP weights its data to vote count in just five main regions of a state. A review of the 2017 election results highlights the increased precision in the final estimates when the survey is weighted to the vote count at the subregion level compared to only five regions within a state. In addition, weighting to smaller geographic regions reduces the likelihood of over/under weighting certain populations or demographic groups.

In order to compare the two approaches, we estimated the average error at the subregion level if we forced the weighted data to the actual vote count using the five AP political strata in each state. The subregions in each state could be mostly collapsed down into the five AP political strata, so weighting to the subregion should provide more precision within each of the five AP regions but will not change the overall estimate for each of the five AP regions (e.g., subregions 1, 2, and 3 are combined to form AP region 1 in Virginia). Both weighting approaches provide the same estimates for the state overall and the five AP regions, but there are differences at the subregion level.

In order to test this, we did both weighting approaches and then analyzed how each approach compared to the actual results for the subregions in each state. Table 3 below shows that there is significant error within the subregions in each state when weighting to only the five AP regions. For example, estimates of the Democratic candidate's vote share in Alabama is off by about 3.7 percentage points on average in the 20 subregions across the state when weighting to the five AP regions. In contrast, the average error in the subregions for all states is zero when you weight directly to it.

Table 3: Average Error in Subregions when Weighting to Five AP Party Regions

State	Vote Choice	Average Absolute Error for Subregions (%)
NJ	Democrat	3.0
NJ	GOP	2.2
NJ	Third Party	0.9
VA	Democrat	1.7
VA	GOP	1.8
VA	Third Party	0.1
AL	Democrat	3.7
AL	GOP	3.6
AL	Third Party	0.6

Likewise, we compared how the two weighting approaches impacted the estimates within the Fox News Geographic Analytic Units (GAUs) in each state. The results in Table 4 below show that the average error for the Fox GAUs in each state is larger when weighting to the AP regions rather than the subregions. For example, the average error for the New Jersey Democratic candidate in each GAU was 1.9 percentage points when weighting to the five AP regions, compared to 0.1 percentage point when weighting to the 17 subregions.

Table 4: Average Absolute Error in Fox GAUs for Weights Forced to NORC Subregion and AP Region

State	Weights Forced to NORC Subregion		Weights Forced to AP Region	
	Dem (%)	GOP (%)	Dem (%)	GOP (%)
AL	1.2	1.1	2.2	2.1
NJ	0.1	0.3	1.9	1.4
VA	0.8	0.7	1.4	1.2

Election Survey Results

The vote choice estimates for all three elections were relatively accurate and all three predicted the correct winner. Table 5 below shows how the weighted results, before forcing to the outcome, for each sample and the combined samples compare to the final actual vote.

Table 5: 2017 Gubernatorial/Senatorial Election Vote

State	Vote distribution	Actual vote (%)	Probability Sample Post-stratified weight (%)	Non-Probability Sample Post-stratified weight (%)	Calibrated weight (%)	Combined Sample Small area weight (%)	Difference between actual vote and final estimate (%)
New Jersey	Democrat	56	55	57	57	57	1
	Republican	42	37	40	40	38	4
	Other	2	8	3	4	4	2
Virginia	Democrat	54	50	53	51	51	3
	Republican	45	47	44	47	47	2
	Other	1	3	2	3	2	1
Alabama	Democrat	50	52	49	51	51	1
	Republican	48	46	47	46	46	2
	Other	2	3	3	3	3	1

When looking at the estimates of the Democratic and Republican candidates' vote share in each state, the combined survey results were within 4 percentage points in all six cases and within 2 percentage points of the actual vote total in four out of six cases.

The design effect for likely voters was 3.3 in both New Jersey and Virginia, and the margins of sampling error were +/- 6.6 percentage points and +/- 5.5 percentage points, respectively. The design effect for the Alabama probability sample was 1.4, and the margin of sampling error among likely voters was +/- 4.1 percentage points.

In all three elections, the combined post-stratified non-probability sample provided a closer estimate to the actual vote than the probability sample. However, the individual estimates provided by the four different non-probability samples varied widely within each election. For example, two of the four non-probability samples incorrectly predicted the Republican winning in Alabama while the other two had the Democrat winning by 8 points and 16 points. The quality of the vote choice estimates from each non-probability vendor also varied across elections. The results illustrate that the accuracy of a non-probability sample in predicting vote choice in one election does not mean it will be accurate in future elections. The variation in the representativeness of the various non-probability samples and the difficulty in assessing the quality of such samples illustrates the need to continue to use a probability sample to help calibrate the non-probability samples.

Comparison to the National Election Pool Exit Poll

Using data published by NBC from the NEP,[123] a number of comparisons are possible between subgroups in the NEP exit poll and the 2017 experimental study using the final data that were forced to the actual vote totals. While impossible to know which poll is "correct," we compare the two surveys' vote choice margins and discrepancies in winners/pluralities for subgroups. We also compare the demographic composition of the final samples.

Winner Switches/"Headline" Differences

When comparing weighted data from the NEP poll and the experimental poll, we found no discrepancies for most of the demographic characteristics in each state that would yield different headlines or stories for election reporting in terms of the candidate who was estimated to win the majority or plurality of voters within particular subgroups. There are two ways to summarize the results of these comparisons: using the demographic variable/characteristic (e.g., gender) as the unit of comparison, or using the individual subgroups corresponding to that variable (e.g., males and females) as the units of comparison.[4]

These results were similar to the 2016 AP-NORC experimental election study using a national probability-based panel sample.[5] Seventy percent of variables had no difference in New Jersey, 64 percent in Virginia, and 82 percent in Alabama (Table 6).

Table 6: Proportion of Subgroups and Variables with Discrepancies between NEP and NORC Polls that Would Yield Different Headlines

	Demographic Subgroups		Demographic Variables or Characteristics	
	Discrepancy	No discrepancy	Discrepancy	No discrepancy
New Jersey	3	33	3	8
Virginia	4	33	4	8
Alabama	2	34	2	9

In New Jersey, the three discrepancies within the total of 34 subgroups across 10 variables were for those age 65 and over, white women, and white men college graduates.

- For those **age 65 and over**, the NORC poll showed Democrat Phil Murphy tied 49 percent/49 percent with Republican Kim Guadagno, while the NEP poll showed Murphy trailing 44 percent/55 percent behind Guadagno (a difference in margins of +11 points).

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[1] Alabama: https://www.nbcnews.com/politics/2017-election/AL
[2] New Jersey: https://www.nbcnews.com/politics/2017-election/NJ
[3] Virginia: https://www.nbcnews.com/politics/2017-election/VA
[4] Note that age discrepancies were tallied using two distinct age variables: one with four age subgroups and one with two age subgroups.
[5] The AP-NORC Center for Public Affairs Research. 2016. *Testing a New Methodology for Exit Polling: A National, Panel-Based Experiment*. http://data.ap.org/projects/2016/final-norc-report/NationalExitPoll.pdf

- For **white women**, the NORC poll showed Murphy leading 53 percent/45 percent over Guadagno, while the NEP poll showed Murphy trailing 44 percent/55 percent behind Guadagno (a difference in margins of +19 points).
- For **white men college graduates**, the NORC poll showed a tie between Murphy and Guadagno 49 percent/49 percent, while the NEP poll showed Murphy leading 50 percent/47 percent (a difference in margins of -3 points).

In Virginia, the four discrepancies within the 35 subgroups across 11 variables were for those age 45-64, those age 45 and over, those without a college degree, and independents.

- For those **age 45-64**, the NORC poll showed Democrat Ralph Northam leading 52 percent/47 percent over Republican Ed Gillespie, while the NEP poll showed Northam trailing 49 percent/50 percent (a difference in margins of +6 points).
- For those **age 45 and over**, the NORC poll showed Northam leading 51 percent/48 percent over Gillespie, while the NEP poll showed Northam trailing 49 percent/51 percent (a difference in margins of +5 points).
- For those **without a college degree**, the NORC poll showed Northam leading 50 percent/49 percent over Gillespie, while the NEP poll showed Northam trailing 46 percent/52 percent (a difference in margins of +7 points).
- For **independents**, the NORC poll showed Northam leading 50 percent/47 percent over Gillespie, while the NEP poll showed Northam trailing 47 percent/50 percent (a difference in margins of +6 points).

Finally, in Alabama, the two discrepancies within the total of 36 subgroups across 11 variables were for those without a college degree and for white women college graduates.

- For those **without a college degree**, the NORC poll showed Democrat Doug Jones leading 50 percent/49 percent over Republican Roy Moore, while the NEP poll showed Jones trailing 47 percent/52 percent behind Moore (a difference in margins of +6 points).
- For **white women college graduates**, the NORC poll showed Jones leading 51 percent/45 percent over Moore, while the NEP poll showed Jones trailing 45 percent/52 percent (a difference in margins of +13 points).

In all but one of these discrepancies, the experimental poll had either a tie or a majority/plurality for the Democratic candidate, and the NEP poll had a majority/plurality for the Republican candidate.

Vote Choice Margins

For each state, the difference between the Democratic candidate's share of the vote and the Republican's share of the vote (Democrat minus Republican) was calculated for available subgroups. The resulting NEP vote margin was then subtracted from the experimental study's vote margin. All results are reported in Table 7, with larger numbers and warmer colors indicating larger differences in margins between the two polls. Positive numbers reflect that the experimental poll's results were more favorable than the NEP to the Democratic candidate, and negative numbers indicate that they were more favorable than the NEP toward the Republican candidate.

All three states had at least one subgroup where the vote choice matched exactly, and at least one subgroup with a difference in margins of over 20 points. The median difference across variables for all

three states was about 7 points (see Table 7). These differences are covered in additional detail below the table.

Table 7: Difference in Democratic Candidate Margin between NORC and NEP (NORC minus NEP) for Key Demographic Variables

	New Jersey (%)	Virginia (%)	Alabama (%)
Sex			
Male	-14	-1	4
Female	11	-3	-4
Age			
18-29	-18	-10	16
30-44	1	-12	-3
45-64	-2	6	-5
65 or over	11	5	4
Age (2 categories)			
18-44	-6	-12	3
45+	1	5	-2
Race/ethnicity			
White	6	4	11
African American/Black	-14	10	-5
Latino/Hispanic	-13	-19	#
Asian	#	#	#
Other	#	#	#
Sex by race			
White men	-8	10	14
White women	19	0	7
Black men	#	11	-8
Black women	-4	9	-5
Latino men	-1	#	#
Latino women	-21	#	#
All other races	-8	-17	#
Education			
College graduate	4	-4	-9
No college degree	-4	7	6
Education by race			
White college graduates	8	4	3
White non-college graduates	6	19	20
Non-white college graduates	-4	-10	-12
Non-white non-college	-19	3	-8
Education by white by sex			
White women college graduates	19	7	13
White women non-college	22	11	15
White men college graduates	-3	2	2
White men non-college	-12	23	21
Non-whites	-12	-2	-8
Income			

Under $50,000	-16	-8	N/A
$50,000-$99,999	-2	-5	N/A
$100,000 or more	5	2	N/A
Party ID – no leaners			
Democrat	0	-2	0
Republican	14	3	11
Independent	0	6	5
Party ID by gender			
Democratic men	N/A	N/A	0
Democratic women	N/A	N/A	-1
Republican men	N/A	N/A	12
Republican women	N/A	N/A	12
Independent men	N/A	N/A	-2
Independent women	N/A	N/A	13
White evangelical/born-again			
White evangelical/born-again	N/A	5	6
All others	N/A	-7	-7
Median*	8	6	7

Note: Pound symbols (#) indicate that not enough information was available due to a small base size in NEP, N/A = Comparison not available.

Note: Positive numbers indicate that the NORC study reported a larger margin for the Democrat / smaller margin for the Republican than the NEP, and negative numbers indicate that the NORC study reported a smaller margin for the Democrat / larger margin for the Republican than the NEP.

Note: Green indicates small differences in margin, and yellow, orange, and red represent progressively larger absolute differences.

*Calculated using the absolute value of the difference in margins.

There are several interesting differences between the two polls' vote margins, including results for age, education, party identification, and gender.

Age

In all three states, the candidate margins differed by at least 10 points between the two surveys for young adults age 18 to 29. In New Jersey and Virginia, the experimental surveys produced smaller margins for the Democratic candidate, while in Alabama, the experimental survey produced a larger margin for the Democrat.

- In **New Jersey**, for those **age 18 to 29**, the NORC poll showed Democrat Phil Murphy leading 64 percent/34 percent over Republican Kim Guadagno, while the NEP poll showed Murphy with a larger lead of 73 percent/25 percent over Guadagno (a difference in margins of -18 points).
- In **Virginia**, for those **age 18 to 29**, the NORC poll showed Democrat Ralph Northam leading 64 percent/35 percent over Republican Ed Gillespie, while the NEP poll showed Northam with a larger lead of 69 percent/30 percent over Gillespie (a difference in margins of -10 points).
- In **Alabama**, for those **age 18 to 29**, the NORC poll showed Democrat Doug Jones leading 68 percent/30 percent over Republican Roy Moore, while the NEP poll showed Jones with a smaller lead of 60 percent/38 percent over Moore (a difference in margins of +16 points).

Larger differences between the two polls for age groups also occurred for some older age groups. The difference among New Jersey voters age 65 and over was also a case in which the winner switched between the NORC and NEP polls.

- In **New Jersey**, for those **65 and over**, the NORC poll showed Murphy tied 49 percent/49 percent with Guadagno, while the NEP poll showed Murphy trailing 44 percent/55 percent behind Guadagno (a difference in margins of +11 points).
- In **Virginia**, for those age **30 to 44**, the NORC poll showed Northam leading 55 percent/43 percent over Gillespie, while the NEP poll showed Northam with a larger lead of 61 percent/37 percent over Gillespie (a difference in margins of -12 points).

Race

There were also differences between the experimental study and the traditional exit poll on vote choice for African Americans. In Virginia, the experimental survey produced a larger margin for the Democratic candidate, while in New Jersey, the experimental survey produced a smaller margin for the Democrat.

- In **Virginia**, for **African Americans/Blacks**, the NORC poll showed Northam leading 92 percent/7 percent over Gillespie, while the NEP poll showed Northam with a smaller lead of 87 percent/12 percent over Gillespie (a difference in margins of +10 points).
- In **New Jersey**, for **African Americans/Blacks**, the NORC poll showed Murphy leading 87 percent/11 percent over Guadagno, while the NEP poll showed Murphy with a larger lead of 94 percent/4 percent over Guadagno (a difference in margins of -14 points).

Education by Race

The two polls produced very different vote margins for white voters without a college education in Alabama and Virginia, with the experimental poll reporting smaller Republican margins in both cases. Within white non-college graduates, these differences were largest among men.

- In **Virginia**, for **white non-college graduates**, the NORC poll showed Northam trailing 36 percent/63 percent behind Gillespie, while the NEP poll showed Northam trailing further behind Gillespie, 26 percent/72 percent (a difference in margins of +19 points).
- In **Alabama**, for **white non-college graduates**, the NORC poll showed Jones trailing 32 percent/67 percent behind Moore, while the NEP poll showed Jones trailing further behind Moore, 22 percent/77 percent (a difference in margins of +20 points).

Party Identification

While differences in vote choice margins among Democrats were small across the board in all three states, and all were fairly close for independents, there were some larger differences in margins among Republicans for New Jersey and Alabama with the experimental poll producing smaller margins for the Republican candidate.

- In **New Jersey**, for **Republicans**, the NORC poll showed Murphy trailing 14 percent/85 percent behind Guadagno, while the NEP poll showed Murphy trailing further behind Guadagno, 7 percent/92 percent (a difference in margins of +14 points).
- In **Alabama**, for **Republicans**, the NORC poll showed Jones trailing 13 percent/85 percent behind Moore, while the NEP poll showed Jones trailing further behind Moore, 8 percent/91 percent (a difference in margins of +11 points).

In New Jersey, the difference in margins was fairly large for gender, with the experimental study producing a smaller Democratic margin among men and a larger Democratic margin among women than the NEP. The difference was particularly large among white women, with a difference in margins of +19 points and a winner switch between the two polls.

- In **New Jersey**, for **men**, the NORC poll showed Murphy leading 49 percent/48 percent over Guadagno, while the NEP poll showed Murphy with a larger lead of 56 percent/41 percent over Guadagno (a difference in margins of -14 points).
- In **New Jersey**, for **women**, the NORC poll showed Murphy leading 61 percent/38 percent over Guadagno, while the NEP poll showed Murphy with a smaller lead of 55 percent/43 percent over Guadagno (a difference in margins of +11 points).

Composition of the Electorate

In addition to comparing the final vote choice outcomes between the two studies, we can compare the demographic composition of the weighted samples in New Jersey, Virginia, and Alabama. All similarities and differences can be observed in Table 8.

All three states had at least one subgroup where the share of the electorate matched exactly, and at least one subgroup where the share of the electorate differed by at least 3 points. The median difference across variables for all three states was about 2 points (see Table 8).

Across the board, the largest differences in demographic breakdowns are for college educated vs. non-college educated, with the experimental study consistently finding fewer voters who have a college degree. Given the share of registered voters with a college degree from the 2016 CPS, the experimental study estimates of voters with a college degree seem more plausible than the NEP.

In New Jersey, the experimental poll found 49 percent of voters had a college education compared with 58 percent in the NEP (while the CPS estimate for the registered voter population is 45 percent), Alabama was 33 percent vs. 44 percent (CPS estimate for registered voters is 29 percent), and Virginia was 47 percent vs. 58 percent (CPS estimate for registered voters is 40 percent). The experimental study shows those with a college degree were more likely to turnout than those without a college degree, and the 4-7 percentage point estimated differences between register voters and voters with a college degree are reasonable. These differences are also visible in the two-way and three-way breakdowns for education by race and sex (Table 8).

Table 8: Difference in Final Voter Sample Composition (NORC minus NEP) for Key Demographic Variables

	New Jersey (%)	Virginia (%)	Alabama (%)
Sex			
Male	0	-4	-2
Female	0	4	2
Age			
18-29	1	-1	0
30-44	2	1	0
45-64	-5	-3	-2
65 or over	1	3	2
Age (2 categories)			
18-44	4	1	0
45+	-4	-1	0
Race/ethnicity			
White	3	6	4
African American/Black	0	-4	-6
Latino/Hispanic	-3	-2	0
Asian	0	1	1
Other	0	1	1
Sex by race			
White men	1	-1	-1
White women	0	6	5
Black men	-1	-3	-2
Black women	1	-2	-3
Latino men	-2	-1	0
Latino women	-1	-1	0
All other races	0	1	1
Education			
College graduate	-9	-11	-11
No college degree	9	11	11
Education by race			
White college graduates	-4	-5	-4
White non-college graduates	7	11	8
Non-white college graduates	-4	-6	-7
Non-white non-college	2	0	3
Education by white by sex			
White women college graduates	-3	-4	-4
White women non-college	5	10	9
White men college graduates	0	-2	0
White men non-college	2	1	-1
Non-whites	-3	-6	-4
Income			
Under $50,000	0	6	N/A
$50,000-$99,999	4	-2	N/A
$100,000 or more	-4	-3	N/A
Party ID – no leaners			
Democrat	-4	-3	-6

Republican	2	1	1
Independent	1	3	4
Party ID by gender			
Democratic men	N/A	N/A	-2
Democratic women	N/A	N/A	-4
Republican men	N/A	N/A	-2
Republican women	N/A	N/A	4
Independent men	N/A	N/A	2
Independent women	N/A	N/A	3
White evangelical/born-again			
White evangelical/born-again	N/A	N/A	0
All others	N/A	N/A	0
Median*	2	3	2

Note: N/A = Comparison not available.
Note: Positive numbers indicate that the NORC study reported a larger share of a given subgroup than the NEP, and negative numbers indicate that the NORC study reported a smaller share of a subgroup than the NEP.
Note: Green indicates small differences, and yellow, orange, and red represent progressively larger absolute differences.
*Calculated using the absolute value of the difference.

One area in which the experimental study estimates appear off is the percent of voters who were black in the 2017 election in Alabama. Data from the state voter files show that 29 percent of the electorate was black while the experimental study estimates the proportion of blacks at 23 percent. A preliminary analysis shows the underrepresentation in blacks is likely based on a combination of factors. For example, the likely voter model used screened out some blacks who do not regularly vote, and the post-stratification weighting process underweighted blacks while overweighting Hispanics and other non-white racial groups.

Many in the press focused on a narrative that the black vote turned the election for Democrat Doug Jones in Alabama, but the experimental study also shows there might be more to the story of Jones' victory. While the portion of the electorate that was black in the 2017 election was 29 percent, Barack Obama lost Alabama in 2012 by 22 points when blacks made up 28 of the electorate. Obama's defeat with a similar black turnout indicates that black turnout was likely not solely responsible for Jones' victory. For example, the experimental survey shows greater levels of crossover voting among Republicans as a key factor influencing Jones' win. While the NEP data show 8 percent of Republicans voting for Jones, the experimental survey has 13 percent.

To further highlight the multiple factors at play in Alabama, we calculated what proportion of likely voters were in each subregion and compared it with the share of the overall vote by subregion (i.e., how many total votes statewide came from each subregion) using the actual election returns, with all subregions summing to 100 percent. This can be observed in the three rightmost columns of Table 9.

Breaking the state down by NORC's subregions, we see that the differences in overall share of the vote by subregion are small. Still, we find that the experimental poll slightly, but consistently, underrepresented subregions that are highly Democratic, and slightly overrepresented subregions that are highly Republican in Alabama.

Our overall vote estimate was very close to the actual election, suggesting that we compensated for lower black/Democratic turnout by observing a higher Democratic vote in more Republican areas. The likely voter model we used required respondents to have voted in the 2016 election, and this likely led to turnout estimates that were more similar to the 2016 election, when Republican presidential candidate Donald Trump won the election by nearly 28 percentage points.

This systematic direction of error in turnout by party strata did not occur in either New Jersey or Virginia. Differences were more evenly distributed across both heavily Democratic and heavily Republican areas of those states, with both over- and underestimation of some subregions for each type of party strata. Share of the overall vote by subregion in New Jersey and Virginia can be observed in Appendix C.

Table 9: Share of Overall Vote by Subregion in Alabama

Subregion	Counties in Subregion	Party Strata	Share of Overall Vote in Subregion – *Experimental Survey* (%)	Share of Overall Vote in Subregion – *Election Returns* (%)	Difference between Election Returns and Survey (%)
1	Jefferson	High Democrat	15.3	16.3	-1.0
2	Hale, Montgomery	High Democrat	4.0	5.4	-1.4
3	Bullock, Dallas, Greene, Lowndes, Macon, Perry, Sumter, Wilcox	High Democrat	3.0	3.4	-0.4
4	Madison	Mod Democrat	8.9	8.6	0.4
5	Barbour, Chambers, Choctaw, Marengo, Pickens, Russell	Mod Democrat	3.1	3.1	-0.1
6	Butler, Clarke, Conecuh, Mobile, Monroe	Mod Democrat	9.4	10.1	-0.7
7	Colbert, Lauderdale	Middle	3.2	2.8	0.3
8	Calhoun, Coosa, Tallapoosa	Middle	2.7	3.1	-0.4
9	Lee, Talladega	Middle	3.9	4.0	-0.1
10	Tuscaloosa	Middle	4.5	4.0	0.4

11	Crenshaw, Escambia, Henry, Pike, Washington	Middle	2.1	2.3	-0.2
12	Lawrence, Limestone, Morgan	Mod Republican	5.2	4.7	0.5
13	Bibb, Elmore, Etowah, Randolph	Mod Republican	4.3	4.4	-0.1
14	Autauga, Shelby	Mod Republican	5.4	6.0	-0.5
15	Coffee, Dale, Houston	Mod Republican	4.6	3.5	1.1
16	Cullman, Marion, Winston	High Republican	2.7	2.5	0.2
17	DeKalb, Franklin, Jackson, Marshall	High Republican	5.0	3.7	1.3
18	Blount, Cherokee, Cleburne, Lamar, St. Clair	High Republican	4.0	3.7	0.3
19	Chilton, Clay, Fayette, Walker	High Republican	2.8	2.6	0.2
20	Baldwin, Covington, Geneva	High Republican	5.9	5.8	0.1

Unlikely Voters

One of the key benefits of the experimental approach is the ability to get insight into unlikely voters—who they are, why they might choose not to turn out, what they think, and how they could have influenced the election. Interviews with those who probably did not show up to the polls yielded many findings that could produce editorial content beyond what can be gleaned from the traditional exit poll. Some key findings and potential headlines from these unlikely voters are explained in the following sections.

What Was Keeping Unlikely Voters from Turning Out?

Those who were deemed unlikely voters were asked what the biggest factor was that might prevent them from voting in the election. The main reasons for not voting varied between states, yielding unique and interesting stories about why unlikely voters thought they might avoid a particular election:

- **"Dissatisfaction with the candidates caused many Alabamans to skip the polls"** – In Alabama, where a more conservative electorate was faced with voting for a Republican candidate being accused of sexual misconduct or voting across party lines, unlikely voters were most likely to say that they didn't like the candidates (22 percent). Unlikely voters who did not pick a candidate when asked their preference were twice as likely to say disliking the candidates was why they

would not vote as were those who would pick Jones, Moore, or someone else (32 percent vs. 16 percent).

- **"Unfamiliar candidates lead some to stay home in New Jersey and Virginia"** – In New Jersey and Virginia, which were more traditional and low-information campaigns than Alabama, the top reason for not going to the polls was not knowing enough about the candidates (18 percent in New Jersey and 23 percent in Virginia). Unlikely voters in both states who did not express a candidate preference were more likely than those who did to say they just were not interested in the election.

All reasons cited by unlikely voters in each of the three states can be observed in Chart 1.

The "other" response option received a relatively high share of responses (as high as 23 percent in Virginia), and those who chose this option were asked to specify an open-ended response. The most common open-ended responses were situational factors, such as: being sick, disabled, or in poor health; being out of town, on vacation, or having recently moved; having to go to work; or forgetting to get an absentee ballot before the deadline. Some of these could be added as response options in the future to reduce the percentage of "other" responses.

Chart 1: Reasons for Not Voting by State among Unlikely Voters
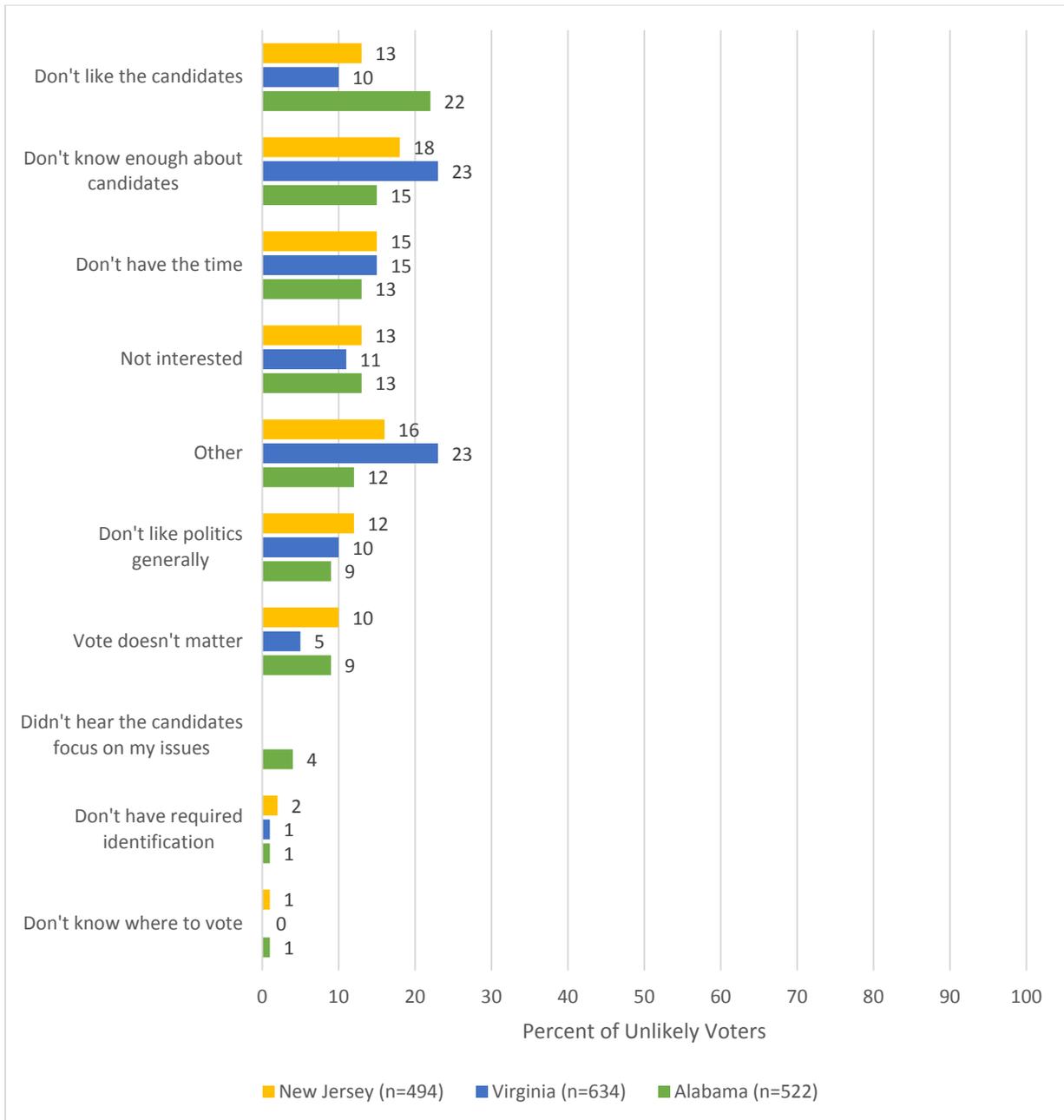
Who Isn't Voting?

As expected, there were differences in the weighted demographics of unlikely and likely voters. Across all three states, unlikely voters were generally younger, less white, less-educated, lower-income, and less Republican. Some specific headlines that could be derived from larger demographic differences are:

- **"Young adults in Virginia were more likely to miss election"** – In Virginia, nearly half (46 percent) of unlikely voters were age 18-29, compared with just 13 percent of likely voters.

- **"Independents stayed home from Alabama election"** – In Alabama, 38 percent of unlikely voters were independents, compared with 25 percent of likely voters. This could also be tied in with findings about dissatisfaction with the candidates.

Additionally, in both Virginia and Alabama, unlikely voters were less likely to be white evangelical or born-again Christians (24 percent vs. 17 percent in Virginia, 44 percent vs. 36 percent in Alabama) and less likely to be gun owners (46 percent vs. 35 percent in Virginia, 62 percent vs. 56 percent in Alabama). All demographic comparisons can be observed in Table 10.

Table 10: Demographic Comparison between Likely Voters and Unlikely Voters

|	Alabama		New Jersey		Virginia	
	Likely voters (%)	Unlikely voters (%)	Likely voters (%)	Unlikely voters (%)	Likely voters (%)	Unlikely voters (%)
Sex						
Male	46	45	46	43	46	43
Female	54	55	54	57	54	57
Age						
18-29	13	33	12	30	13	46
30-44	22	31	23	32	25	23
45-64	39	26	39	27	38	23
65 or over	26	10	24	10	23	7
Race/ethnicity						
White	70	63	72	62	72	50
African Amer./Black	23	24	11	12	16	25
Latino/Hispanic	3	6	10	15	4	12
Asian	1	1	3	6	3	7
Other	3	4	3	3	4	6
Education						
High school or less	33	53	27	42	25	47
Some college	34	29	25	23	29	32
College graduate	20	12	31	24	28	14
Postgraduate study	13	5	17	11	18	7
Income						
Under $50,000	42	57	22	39	28	48
$50,000-$99,999	31	23	29	25	29	22
$100,000 or more	22	16	43	33	38	23
Party ID – no leaners						
Democrat	31	30	38	41	37	45
Republican	44	31	30	22	31	19
Independent	25	38	31	37	33	36
N=	2,714	1,349	4,134	1,221	4,792	1,362

Who Would They Have Voted For?

Unlikely voters were also asked for whom they would vote if they did end up voting in the election. Overall, 84 percent of unlikely voters in New Jersey, 83 percent in Virginia, and 84 percent in Alabama gave a valid vote choice (Appendix A).

Looking at these unlikely voters provides insight into how the election outcome might have changed if these registered voters had come out to the polls. They are also slightly more likely to choose "another candidate" over one of the main two-party candidates, though these differences are not likely to be significant. In general, unlikely voters are more likely to vote for the Democratic candidate and less likely to vote Republican (Chart 2). A potential headline could be:

- **"Turnout limits [Murphy's/Northam's/Jones'] margin of victory"** – Six in 10 unlikely voters in Alabama, New Jersey, and Virginia would have voted for the Democratic candidate in each race, and just 1 in 3 would vote for the Republican. If these voters had come out to the polls, the Democratic winner would have had a greater vote margin.

Chart 2: Vote Choice by State for Likely Voters and Unlikely Voters
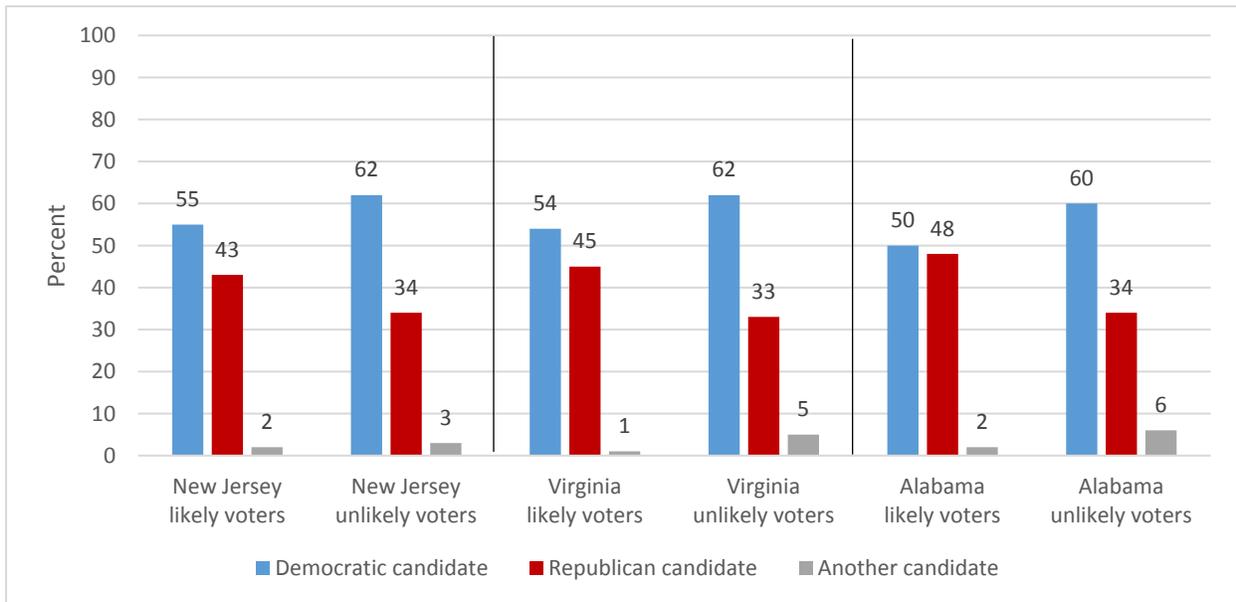
What Do They Believe?

There are additional differences between likely voters and unlikely voters when it comes to attitudinal factors, which could help to shape news coverage. Some potential headlines using unlikely voters' vote in the 2016 election, views on Trump, and attitudes towards the economy and the direction of the country are:

- **"Trump voters more likely to turn out in New Jersey and Virginia"** – Unlikely voters in New Jersey and Virginia were less likely to have voted for Trump than likely voters (41 percent vs. 36 percent in New Jersey, 42 percent vs. 27 percent in Virginia).
- **"Trump voters more likely to stay home in Alabama"** – In Alabama, unlikely voters were more likely to have voted for Trump (54 percent of likely voters vs. 64 percent of unlikely voters). However, unlikely voters were less likely to feel favorable towards the president.
- **"Alabama nonvoters more pessimistic about economy, country's direction"** – In Alabama, 46 percent of likely voters said the country is heading in the right direction compared with 36

percent of unlikely voters, and likely voters were 19 points more likely to say the condition of the nation's economy is excellent or good (55 percent vs. 36 percent).

All comparisons of 2016 vote choice and Trump favorability are in Table 11.

Table 11: Comparison of 2016 Vote and Trump Favorability between Likely Voters and Unlikely Voters

	New Jersey		Virginia		Alabama	
	Likely voters (%)	**Unlikely voters (%)**	**Likely voters (%)**	**Unlikely voters (%)**	**Likely voters (%)**	**Unlikely voters (%)**
2016 vote						
Donald Trump	41	36	42	27	54	69
Hillary Clinton	47	50	47	58	35	18
Someone else	10	11	9	11	10	11
Trump favorability						
Favorable	36	28	41	23	50	42
Unfavorable	58	62	55	67	47	48
N=	4,134	1,221	4,792	1,362	2,714	1,349

APPENDICES

Appendix A: Summary of Interviews Completed by State

New Jersey

	Probability Sample (phone)	Non-Probability Sample (web)	Total Completed Interviews
With vote choice			
Likely/Actual voters with vote choice	644	3407	4051
Non-voters / Unlikely voters with vote choice	83	943	1026
Total voters with candidate choice	727	4350	5077
Without vote choice			
Likely/Actual voters without vote choice	67	16	83
Non-voters / Unlikely voters without vote choice	40	155	195
Total interviews without vote choice	107	171	278
Total completed interviews	834	4521	5355

Virginia

	Probability Sample (phone)	Non-Probability Sample (web)	Total Completed Interviews
With vote choice			
Likely/Actual voters with vote choice	982	3746	4728
Non-voters / Unlikely voters with vote choice	69	1063	1132
Total voters with candidate choice	1051	4809	5860
Without vote choice			
Likely/Actual voters without vote choice	54	10	64
Non-voters / Unlikely voters without vote choice	25	205	230
Total interviews without vote choice	79	215	294
Total completed interviews	1130	5024	6154

	Probability Sample (phone)	Non-Probability Sample (web)	Total Completed Interviews
With vote choice			
Likely/Actual voters with vote choice	834	1853	2687
Non-voters / Unlikely voters with vote choice	153	975	1128
Total voters with candidate choice	987	2828	3815
Without vote choice			
Likely/Actual voters without vote choice	25	2	27
Non-voters / Unlikely voters without vote choice	53	168	221
Total interviews without vote choice	78	170	248
Total completed interviews	1065	2998	4063

Appendix B: Vote Choice Distribution for Alabama, after Back-Coding and Categorization of Other Specify Mentions

Expanded Vote Choice	Unweighted N	Weighted Frequency among Likely Voters (%)	Weighted Frequency among Non-Voters (%)
Doug Jones	2019	49.92	60.45
Roy Moore	1622	48.38	33.57
Another Candidate/Unknown	125	1.19	5.34
Luther Strange	35	0.35	0.54
Jeff Sessions	2	0.01	0.02
Lee Busby	12	0.14	0.08

Appendix C: Share of Overall Vote by Subregion

New Jersey

Subregion	Counties in Subregion	Party Strata	Share of Overall Vote in Subregion – *Experimental Survey* (%)	Share of Overall Vote in Subregion – *Election Returns* (%)	Difference between Election Returns and Survey (%)
1	Mercer	High Democrat	4.9	4.1	0.8
2	Union	Mod Democrat	5.4	5.9	-0.6
3	Hudson	High Democrat	4.5	5.0	-0.5
4	Essex	High Democrat	10.2	7.5	2.6
5	Middlesex	Middle	10.0	7.6	2.4
6	Camden	Mod Democrat	6.5	4.7	1.8
7	Passaic	Mod Democrat	5.0	4.3	0.6
8	Somerset	Mod Republican	3.0	4.5	-1.6
9	Burlington	Middle	5.4	6.1	-0.7
10	Bergen	Middle	9.9	10.6	-0.7
11	Morris	Mod Republican	7.5	7.2	0.3
12	Monmouth	High Republican	6.8	8.5	-1.7
13	Gloucester	Mod Republican	3.2	3.8	-0.5
14	Atlantic, Cumberland	Mod Republican	3.7	4.4	-0.6
15	Hunterdon, Cape May	High Republican	2.8	3.7	-0.9
16	Warren, Sussex	High Republican	4.1	3.5	0.6
17	Ocean, Salem	High Republican	7.2	8.6	-1.4

Virginia

Subregion	Counties in Subregion	Party Strata	Share of Overall Vote in Subregion- *Experimental Survey* (%)	Share of Overall Vote in Subregion – *Election Returns* (%)	Difference between Election Returns and Survey (%)
18	Fairfax	Mod Democrat	11.9	14.6	-2.7
19	Petersburg, Charlottesville, Richmond City	High Democrat	3.5	3.7	-0.2
20	Arlington	High Democrat	2.4	3.3	-0.9
21	Falls Church, Alexandria, Williamsburg, Norfolk City	High Democrat	4.5	4.5	0.0
22	Hampton, Portsmouth	High Democrat	2.6	2.6	-0.1
23	Abemarle, Harrisonburg, Danville, Fairfax City, Manassas Park, Henrico	Mod Democrat, Middle	6.5	7.3	-0.8
24	Prince William, Brunswick, Emporia, Charles City, Martinsville, Greensville	Mod Democrat	4.6	5.1	-0.5
25	Lexington, Fredericksburg, Newport News, Franklin City	Mod Democrat	2.4	2.3	0.1
26	Hopewell, Winchester, Staunton, Chesterfield	Middle	4.8	5.2	-0.5
27	Virginia Beach, Essex, Caroline	Middle, Mod Republican	5.9	5.4	0.5

28	Loudoun	Middle	4.0	4.5	-0.5
29	Radford, Prince Edward, Montgomery, Chesapeake	Middle	4.6	4.2	0.3
30	Manassas, Sussex, Suffolk, Northampton, Roanoke City, Surry	Middle	3.7	2.8	1.0
31	Waynesboro, Clarke, Fauquier, Louisa, Culpeper, Richmond, Middlesex, Orange	Mod Republican	3.2	3.0	0.2
32	Goochland, James City, Nelson, Fluvanna, Lancaster, Buckingham, Accomack, Dinwiddie, Cumberland, Mecklenburg, York	Mod Republican	4.5	4.6	-0.1
33	Spotsylvania, Prince George, Southampton, Rappahannock, King And Queen, Lunenburg, Isle of Wight, Northumberland, Salem, Charlotte, Roanoke, Henry	Mod Republican, High Republican	6.4	5.4	1.0
34	Stafford, Westmoreland, Halifax, Lynchburg,	Mod Republican	4.0	3.2	0.8

	Nottoway, Covington				
35	Mathews, Gloucester, Colonial Height, Shenandoah, Rockingham, Powhatan, Campbell, Poquoson, Botetourt, Appomattox	High Republican	4.0	4.3	-0.3
36	Augusta, Bedford, Page, Washington, Wythe, Smyth	High Republican	4.4	3.5	0.9
37	Patrick, Craig, Grayson, Carroll, Buchanan, Wise, Lee, Scott, Tazewell, Bland	High Republican	3.7	2.2	1.5
38	New Kent, Rockbridge, Green, Amherst, Hanover	High Republican	3.0	2.9	0.1
39	Madison, Frederick, King William, Warren, Floyd, Amelia, Pulaski, Pittsylvania	High Republican	3.0	3.3	-0.4
40	Highland, Franklin, Bristol, Giles, Dickenson, Russell, Buena Vista, King George, Galax, Norton, Alleghany, Bath	High Republican	2.4	2.1	0.2