

The Power of Random Address-Based Sampling and Online Recruitment

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Reality Check Insights White Paper

[Reality Check Insights](#) is a data technology company that combines scientific sampling, big data, and rigorous analytics to provide fast, accurate, and targeted insights into attitudes, preferences, and behaviors. Our data help researchers, companies, and organizations better understand the individuals they seek to serve.

The 2020 U.S. presidential election offers an ideal context to demonstrate the accuracy and efficiency of our approach. Using much smaller samples (in some cases 10X and 100X less) and drastically lower costs, we consistently match or exceed the accuracy of others.

Accurate Results and Insights

We begin by considering the **presidential vote intentions** from our [final pre-election Reality Check Insights' survey](#) along with the final surveys from all the major news organizations, two of the largest online panels, and two independent surveys conducted by NORC, which we include given NORC's partnership with the Associated Press.¹ Figure 1 reports the percent of the two-party vote going to Biden (i.e., percent Biden vote out of all Biden and Trump votes) in each of these surveys minus the actual two-party vote Biden received. Focusing on the two-party vote allows direct comparison across surveys since not all surveys asked about third-party candidates in the same way. **The blue vertical bar shows that Reality Check Insights had the lowest error overall, with an estimated two-party vote share for Biden among registered voters just over one percentage point from the current vote tally.**

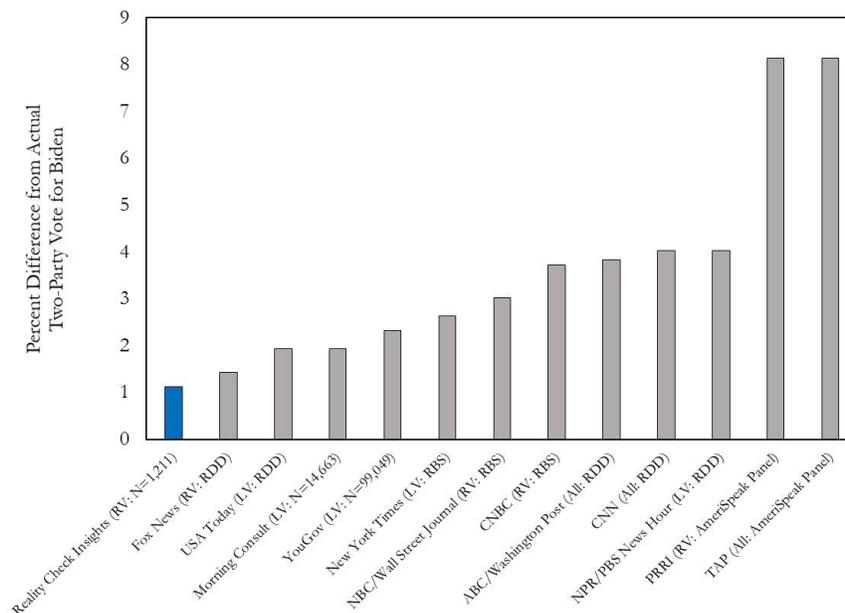


Figure 1: Comparison of survey error in 2020 presidential vote intentions.

Note: Vertical bars represent the amount of survey error, calculated by subtracting the two-party vote for Biden in each survey minus the actual two-party vote. RV=registered voters, LV=likely voters, All=all adults, RDD=Random Digit Dial, RBS= Registration-Based Sampling.

¹ All survey dates and details reported in the appendix.

To evaluate how Reality Check Insights' surveys earlier in the year compared with high-quality survey organizations, Figures 2 and 3 compare presidential approval ratings. We include all the survey organizations evaluated above that asked about presidential approval during our survey periods. We also include Gallup given its status in the industry.² Unlike vote choice, there is no objective measure of presidential approval to evaluate these results, but we note that approval ratings are quite similar across random digit dial (RDD) surveys, and Reality Check Insights is exactly in line with these surveys in both instances.

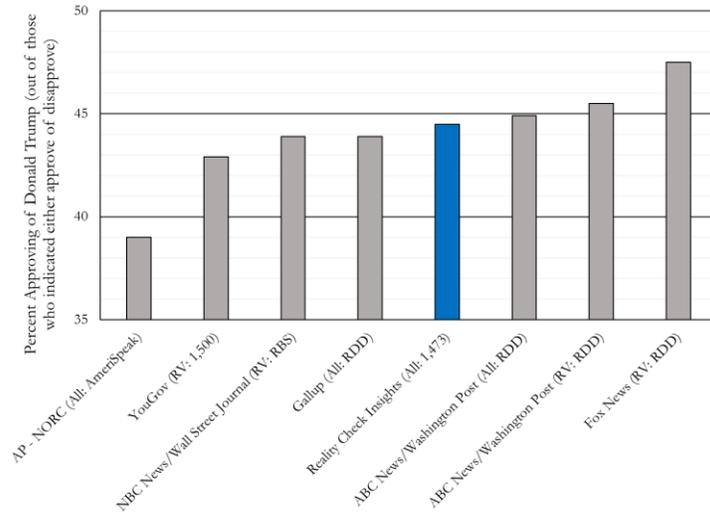


Figure 2: Presidential Approval ratings from late September and early October, 2020

Note: Vertical bars represent the percent approving of Donald Trump among those who indicated they either approve or disapprove. RV=registered voters, All=all adults, RDD=Random Digit Dial, RBS=Registration-Based Sampling.

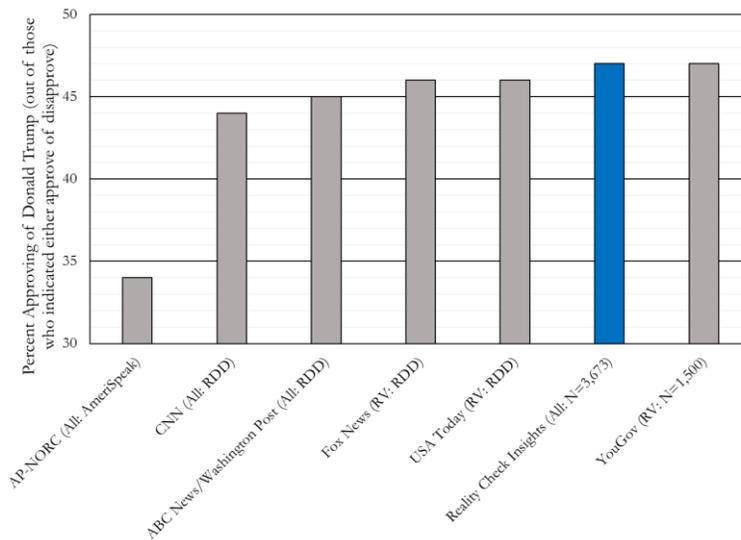


Figure 3: Presidential Approval ratings from mid to late-August, 2020.

Note: Vertical bars represent the percent approving of Donald Trump among those who indicated they either approve or disapprove. RV=registered voters, All=all adults, RDD=Random Digit Dial.

² Gallup no longer asks vote intentions, so we were unable to include Gallup in Figure 1

Methodological Approach

Our ability to provide industry leading results for lower costs and with less data is based on four core strategies: complete population coverage, fresh respondents, rigorous analytics, and data transparency.

Complete population coverage

Reality Check Insights relies on two sampling strategies to ensure complete population coverage: random sampling of all U.S. addresses (ABS) and recruiting respondents online. As shown above, these sampling approaches are ideal for national-level surveys but can also be adjusted for target populations, such as specific geographic regions, age groups, or other characteristics.

Our random sample ensures that all households are eligible for inclusion in our survey. We used paid incentives and targeted mailers that vary the invitation language and message based on predictive analytics to maximize response rates. Respondents can take the survey in the language of their choice from their smart phone or tablet, computer, or by calling from a landline phone.

Our targeted online sample reaches respondents where they spend their time on mobile devices or computers. By oversampling respondents across online mediums, Reality Check Insights can build a representative sample for our clients that does not require significant post-survey weighting techniques. This sampling strategy is especially important for reaching the growing portion of the public that might be [distrustful of traditional surveys](#).

Fresh Respondents

Many survey organizations interview the same respondents repeatedly, which introduces two types of bias: panel attrition and interviewer learning effects. To eliminate this bias, Reality Check Insights surveys contain fresh respondents through the two sampling methods described above: random address-based sampling (ABS) and targeted online recruitment through oversampling and population matching. Our samples also include a matched sample of respondents from our **Reality Checker Database** who were originally contacted via both sampling methods.

Rigorous Data Analytics

Our methodological approach relies on three steps. First, our online population matching. We oversample online respondents and then we ensure that the subsample we utilize represents our target population based on key demographic characteristics (and their interactions). Those not utilized in the particular survey are eligible to take future surveys via our Reality Checker Database. Second, we combine the three sample types (random address-based sample, targeted online sample, and Reality Checker Database). The proportion of each sample type is estimated based on prior data analysis and then empirically tested to ensure that no particular sample is over-influencing the final results. Finally, we use multilevel regression with synthetic poststratification to obtain final weighted population-level estimates.

Another major differentiator is our attention to population-level benchmarks. All high-quality surveys weight to population-level benchmarks, but often surveys weight to the wrong benchmarks. We devote substantial time and resources to ensure we are using the correct benchmarks measured correctly.

Data Transparency

Data transparency is [associated with greater accuracy](#). Reality Check Insights makes all its non-proprietary data available at the Roper Center for Public Opinion Research and adheres to the Roper Center’s highest standard of transparency (our Roper Center Transparency Score = 10/10: “Greatly Exceeds Expectations”). Our clients know exact details such as how each respondent was selected, whether the respondent has taken previous surveys (and if so, how many), and how fast the survey was completed.

Conclusion

Reality Check Insights believes that the future of survey research requires blending traditional methods with modern forms of participant recruitment. In this election cycle, we’ve demonstrated our ability to deliver high-quality survey results at a significantly reduced cost.

Appendix

Table A-1: Presidential vote intention among surveys of registered voters, likely voters, or all adults. ABS = address-based sample, RV=registered voters, LV=likely voters, All=all adults, RDD=Random Digit Dial, RBS=Registration-Based Sampling.

Survey Organization	Biden Two-Party Vote Share	Trump Two-Party Vote Share	Sample Size	Respondent Type	Survey Dates	Method	Data Provider
National Two-Party Vote Share	52.27%	47.73%					https://uselectionatlas.org/RESULTS/
Reality Check Insights	53.4%	46.6%	1,211	RV	Oct. 17 - Oct. 27	ABS + Online	
Fox News	53.7%	46.3%	1,318	RV	Oct. 27 - Oct. 29	RDD	Beacon Research; Shaw & Co. Research
USA Today	54.2%	45.8%	1,000	LV	Oct. 23 - Oct. 27	RDD	Suffolk University Political Research Center
Morning Consult	54.2%	45.8%	14,663	LV	Oct. 29 - Oct. 31	Online	
YouGov	54.6%	45.4%	99,049	LV	Reported 11/1/2020	Online	
New York Times	54.9%	45.1%	987	LV	Oct. 15 - Oct. 18	RBS	Sienna College
NBC/Wall Street Journal	55.3%	44.7%	1,000	RV	Oct. 29 - Oct. 31	RBS	Hart Research Associates; Public Opinion Strategies
CNBC	56.0%	44.0%	800	RV	Oct. 21 - Oct. 24	RBS	Hart Research Associates; Public Opinion Strategies
ABC/Washington Post	56.1%	43.9%	1,014	LV	Oct. 6 - Oct. 9	RDD	Abt Associates
CNN	56.3%	43.8%	1,005	All	Oct. 23 - Oct. 26	RDD	SSRS
NPR/PBS News Hour	56.3%	43.8%	1,397	All	Oct. 8 - Oct. 13	RDD	Marist College Institute for Public Opinion
Taking America's Pulse	60.4%	39.6%	1,159	All	Oct. 14 - Oct. 21	AmeriSpeak	NORC
Public Religion Research Institute	60.4%	39.6%	978	RV	Oct. 9 - Oct. 12	AmeriSpeak	NORC

Table A-2: Presidential Approval ratings from late September and early October, 2020

Presidential Approval	Approve	Disapprove	Sample Size	Respondent Type	Survey Dates	Method	Data Provider
AP - NORC	39%	61%	1121	All	Oct. 8 - Oct. 12	AmeriSpeak	NORC
YouGov	43%	57%	1500	RV	Sept. 27 - Oct. 3	Online	
NBC News/Wall Street Journal	44%	56%	800	RV	Sept. 30 - Oct. 1	RBS	Hart Research Associates; Public Opinion Strategies
Gallup	44%	56%	1035	All	Sept. 30 - Oct. 15	RDD	Gallup
Reality Check Insights	45%	56%	1473	All	Sept. 23 - Oct. 7	ABS + Online	
Kaiser Family Foundation	45%	55%	1207	All	Oct. 7 - Oct. 12	RDD	SSRS
ABC News/Washington Post	45%	55%	1008	All Adult	Sept. 21 - Sept. 24	RDD	Abt Associates
ABC News/Washington Post	46%	55%	879	RV	Oct. 6 - Oct. 9	RDD	Abt Associates
Fox News	48%	53%	1107	RV	Oct. 3 - Oct. 6	RDD	Beacon Research; Shaw & Company Research

Table A-3: Presidential Approval ratings from mid to late-August, 2020

Presidential Approval	Approve	Disapprove	Sample Size	Type	Survey Dates	Method	Data Provider
AP-NORC	34%	66%	1,075	All	Aug. 17 - Aug. 19	AmeriSpeak	NORC
CNN	44%	56%	1,108	All	Aug. 12 - Aug. 15	RDD	SSRS
Quinnipiac	44%	56%	1,081	LV	Aug. 28 - Aug. 31	RDD	
ABC News/Washington Post	45%	55%	1,001	All	Aug. 12 - Aug. 15	RDD	Langer Research Associates
Fox News	46%	55%	1,000	RV	Aug. 9 - Aug. 12	RDD	Beacon Research; Shaw & Company Research
USA Today	46%	54%	1000	RV	Aug. 28 - Aug. 31	RDD	Suffolk University
Kaiser Family Foundation	46%	54%	1,199	All	Aug. 28 - Sep. 3	RDD	SSRS
Reality Check Insights	47%	53%	3,673	All	Aug. 11 - Aug. 27	ABS + Online	
YouGov	47%	53%	1,500	RV	Aug. 16 - Aug. 22	Online	