



Methodology Statement

Firehouse/Optimus
Democratic Primary Survey
July 23-25, 2019

The Firehouse/Optimus survey was conducted from July 23-25, 2019 and interviewed a total of 1,771 likely 2020 Democratic presidential primary voters in the early primary states of Iowa, New Hampshire, and South Carolina. Interviews were conducted using a combination of live interviews via landline (39.6%) and cell phones (20.6%) and peer-to-peer text messaging (39.9%). Telephone interviews were conducted by Dynata and text messages were sent by Opn Sesame.

The sample frame covers likely 2020 Democratic primary voters with reported landline or cellphone numbers from each state's voter file. Likely voters were identified as those who voted in either the 2016 or 2018 Democratic primaries plus additional voters who are expected to vote in the 2020 presidential primary as determined by Optimus turnout modeling. The probability sample was selected using registration-based sampling (RBS) stratified by age group, gender, and party for each early primary state.

The full sample included 630 likely voters in Iowa, 587 likely voters in New Hampshire, and 554 likely voters in South Carolina. While the margins of error vary slightly across questions due to item non-response and the base rate, the margins of errors based on Q1 are reported as $\pm 3.3\%$ in Iowa, $\pm 3.3\%$ in New Hampshire, and $\pm 3.8\%$ in South Carolina. We calculate the margin of error as:

$$1.96 * \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}}$$

where n is sample size and \hat{p} is the response proportion.

Post-stratification weighting was used to correct for non-response across age group, gender, and party cohorts to allow the sample composition to match the sample frame composition. Further details are shown below.

Survey items can be found reported as topline and as cross-tabulations on our [GitHub repository](#). The presidential candidates listed in the ballot test questions reflect the top eight polling candidates according to the RealClearPolitics 2020 Democratic Presidential Nomination National Average on the first day of sample collection.



Mode Breakdown by State

	IOWA	NEW HAMPSHIRE	SOUTH CAROLINA	TOTAL
LIVE LANDLINE	228 (36%)	221 (38%)	252 (45%)	701 (40%)
LIVE CELL	118 (19%)	128 (22%)	118 (21%)	364 (21%)
PEER-TO-PEER	284 (45%)	238 (41%)	184 (33%)	706 (40%)
TOTAL N =	630	587	554	1771

Note: Column percentages may not add to 100% due to rounding.

Weighted Data

IOWA	RAW N	UNBALANCED (%)	BALANCED (%)	POPULATION (%)
AGE GROUP				
18-35	122	19.4	14.5	14.5
35-55	165	26.2	21.0	21.0
55+	330	52.4	63.1	62.8
OTHER/MISSING	13	2.1	1.5	1.7
GENDER				
MALE	288	45.7	42.3	42.1
FEMALE	342	54.3	57.7	57.7
OTHER	0	0	0	<1

NEW HAMPSHIRE	RAW N	UNBALANCED (%)	BALANCED (%)	POPULATION (%)
AGE GROUP				
18-35	90	15.3	11.7	11.7
35-55	180	30.7	24.9	24.9
55+	249	42.4	49.1	48.4
OTHER/MISSING	68		14.3	14.9
GENDER				
MALE	244	41.6	40.6	40.6
FEMALE	337	57.4	58.8	58.8
OTHER	6	1.0	0.6	<1



SOUTH CAROLINA	RAW N	UNBALANCED (%)	BALANCED (%)	POPULATION (%)
AGE GROUP				
18-35	71	12.8	14.9	15.1%
35-55	179	32.3	29.0	28.9%
55+	292	52.7	54.2	54.0%
OTHER/MISSING	12	2.2	1.9	2.0%
GENDER				
MALE	216	39.0	37.3	37.3%
FEMALE	338	61.0	62.7	62.7%
OTHER	0		0	<1%

Note: Column percentages may not add to 100% due to rounding.