



Methodology Statement

Firehouse/Optimus
Democratic Primary Survey
April 30, 2019 -May 2, 2019

The Firehouse/Optimus survey was conducted from April 30, 2019 to May 2, 2019 and interviewed a total of 1,695 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 (42.7%) and cell phones (21.4%) and peer-to-peer text messaging (36.0%). 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 576 likely voters in Iowa, 551 likely voters in New Hampshire, and 568 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 $\pm 3.6\%$ in Iowa, $\pm 4.1\%$ in New Hampshire, and $\pm 4.0\%$ 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](#).



Mode Breakdown by State

	IOWA	NEW HAMPSHIRE	SOUTH CAROLINA	TOTAL
LIVE LANDLINE	243 (42%)	228 (41%)	252 (44%)	723 (43%)
LIVE CELL	121 (21%)	115 (21%)	126 (22%)	362 (21%)
PEER-TO-PEER	212 (37%)	208 (38%)	190 (33%)	610 (36%)
TOTAL N =	576	551	568	1695

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

Weighted Data

IOWA	RAW N	UNBALANCED (%)	BALANCED (%)	POPULATION (%)
AGE GROUP				
18-35	91	15.8	14.5	14.5
35-55	142	24.7	21.0	21.0
55+	334	58.0	63.1	62.8
OTHER/MISSING	9	1.5	1.5	1.7
GENDER				
MALE	258	44.8	42.3	42.1
FEMALE	318	55.2	57.7	57.7
OTHER	0	0	0	<1

NEW HAMPSHIRE	RAW N	UNBALANCED (%)	BALANCED (%)	POPULATION (%)
AGE GROUP				
18-35	47	8.5	11.8	11.8
35-55	176	31.9	25.3	25.1
55+	284	51.5	50.1	49.7
OTHER/MISSING	44	8.0	12.8	13.4
GENDER				
MALE	229	41.6	41.0	41.0
FEMALE	319	57.9	58.4	58.4
OTHER	3	0.5	0.6	<1



SOUTH CAROLINA	RAW N	UNBALANCED (%)	BALANCED (%)	POPULATION (%)
AGE GROUP				
18-35	70	12.3	13.0	13.0
35-55	167	29.4	26.5	26.5
55+	317	55.8	58.6	58.6
OTHER/MISSING	14	2.5	1.9	1.9
GENDER				
MALE	228	40.1	37.8	37.8
FEMALE	340	59.9	62.2	62.2
OTHER	0	0	0	0

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