# Methodology Statement
Firehouse/0ptimus
Democratic Primary Survey
January 31, 2019 – February 2, 2019

The Firehouse/0ptimus survey was conducted from January 31, 2019 to February 2, 2019 and interviewed a total of 1,633 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 (43.4%) and cell phones (23.1%) and peer-to-peer text messaging (33.5%). Telephone interviews were conducted by Dynata and text messages were sent by RumbleUp.

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 0ptimus 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 558 likely voters in Iowa, 518 likely voters in New Hampshire, and 557 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 ± 3.5% in Iowa, ± 4.1% in New Hampshire, and ± 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 toplines and as cross-tabulations on our [GitHub repository](#).

## Mode Breakdown by State

| | IOWA | NEW HAMPSHIRE | SOUTH CAROLINA | TOTAL |
|---|---|---|---|---|
| **LIVE LANDLINE** | 224 (40%) | 231 (45%) | 254 (46%) | 709 (43%) |
| **LIVE CELL** | 113 (20%) | 143 (28%) | 121 (22%) | 377 (23%) |
| **PEER-TO-PEER** | 221 (40%) | 144 (28%) | 182 (33%) | 547 (33%) |
| | | | | |
| **TOTAL N =** | 558 | 518 | 557 | 1633 |

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

## Weighted Data

| IOWA | RAW N | UNBALANCED (%) | BALANCED (%) | POPULATION (%) |
|---|---|---|---|---|
| **AGE GROUP** | | | | |
| **18-35** | 99 | 17.7 | 13.8 | 13.7 |
| **35-55** | 136 | 24.4 | 20.5 | 20.6 |
| **55+** | 311 | 55.7 | 64.2 | 63.9 |
| **OTHER/MISSING** | 12 | 2.2 | 1.5 | 1.6 |
| **GENDER** | | | | |
| **MALE** | 243 | 43.5 | 41.9 | 41.8 |
| **FEMALE** | 315 | 56.5 | 58.1 | 57.9 |
| **OTHER** | 0 | 0 | 0 | <1 |
| | | | | |

| NEW HAMPSHIRE | RAW N | UNBALANCED (%) | BALANCED (%) | POPULATION (%) |
|---|---|---|---|---|
| **AGE GROUP** | | | | |
| **18-35** | 46 | 8.9 | 13.0 | 12.7 |
| **35-55** | 201 | 38.8 | 27.8 | 27.1 |
| **55+** | 213 | 41.1 | 51.4 | 49.6 |
| **OTHER/MISSING** | 58 | 11.2 | 7.8 | 8.2 |
| **GENDER** | | | | |
| **MALE** | 204 | 39.4 | 40.5 | 39.6 |
| **FEMALE** | 310 | 59.8 | 58.8 | 57.4 |
| **OTHER** | 4 | 0.8 | 0.6 | 0.6 |
| | | | | |

![0PTIMUS logo]

| SOUTH CAROLINA | RAW N | UNBALANCED (%) | BALANCED (%) | POPULATION (%) |
|---|---|---|---|---|
| **AGE GROUP** | | | | |
| **18-35** | 54 | 9.7 | 12.1 | 12.7 |
| **35-55** | 178 | 32.0 | 28.2 | 27.1 |
| **55+** | 325 | 58.3 | 59.6 | 49.6 |
| **OTHER/MISSING** | 0 | 0 | 0 | 8.2 |
| **GENDER** | | | | |
| **MALE** | 233 | 41.8 | 37.8 | 39.6 |
| **FEMALE** | 324 | 58.2 | 62.2 | 57.4 |
| **OTHER** | 0 | 0 | 0 | 0.6 |
| | | | | |

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