**CALSPEAKS Survey Panel Methodology**
February 2019 Update

In keeping with the **CALSPEAKS** at Sacramento State research team’s commitment to research transparency (see [www.aapor.org/AAPORKentico/Transparency-Initiative.aspx](http://www.aapor.org/AAPORKentico/Transparency-Initiative.aspx)), we have summarized the **CALSPEAKS** methodology below. Any remaining details are accessible by contacting the Institute for Social Research directly.

### Background on Panel Surveys

Survey panels consist of citizens who have agreed to participate in multiple surveys over time. In recent years, in response to the declining response rates and reliability associated with telephone surveys, online survey panels have proliferated at the national level (e.g. GfK’s **Knowledge Panel**, Yougov’s **Omnibus Panel**, the National Opinion Research Center (NORC)’s **Amerispeak Panel**, and the Pew Research Center’s **American Trends Panel**). These and other research panels are increasingly using probability-based sampling methods (defined as a randomized selection process where everyone in the population has a chance of being invited to participate).

### Panel Size

The **CALSPEAKS** panel includes thousands of Californians (non-institutionalized residents, 18 and over), a number that continues to grow every year. Panel recruitment is continuous to increase the size of the panel and to compensate for ongoing attrition.

### Sampling and Recruitment

**CALSPEAKS was the first California-focused panel that uses probability-based sampling methods.** Specifically, to recruit a random sample of Californians we use as sampling frame the United States Postal Service Delivery Sequence File (USPS DSF) of California residential addresses (stratified geographically by region and population density)\(^1\), procured from Marketing Systems Group. We send postcards or letters to the sampled residences and invite adult residents to join the panel (via a URL address, or by calling us to indicate a preference for mail participation). The strength of this sampling method is that virtually everyone in the population has a non-zero chance of being included but must chose to do so.

In the initial phase of **CALSPEAKS** (2015-2016), in addition to the above-mentioned approach using USPS DSF, we also used three other recruitment methods, to assess the relative efficiency and representativeness of these methodologies. Initially, (in 2015-2016) the research team recruited **CALSPEAKS** panelists using three distinct sampling methodologies. Panelists are distinguished according to the methodology used to recruit them throughout their tenure on the panel. The purpose of this multi-mode recruitment was to facilitate research regarding the relative efficiency and representativeness of these different methodologies.

The first recruitment method uses a mixed-mode random probability selection method. Specifically, we worked closely with Marketing Systems Group, using two frames to obtain random samples of Californians

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\(^1\) In recent years, **CALSPEAKS** has focused efforts to oversample rural geographic areas and those that have higher concentrations of young adults and Hispanic Californians, to compensate for the tendency for surveys to underrepresent these groups.
(stratified geographically by region and population density)²: (1) the United States Postal Service Delivery Sequence File (USPS DSF) of California residential addresses (N=25,000) and (2) comprehensive telephone number listings (N=15,000 of which 65% are mobile phone numbers, a proportion that has grown over time). We used these dual sampling frames to maximize response rates. Sending postcards to the residences, we invited adult residents to join the panel (via a URL address, or by calling us to indicate a preference for mail participation). Using Computer Assisted Telephone Interviewing technology (Sawtooth Technologies’ Sensus WinCATI 6.0), we gathered email addresses (or home addresses, for those who did not use the internet) from interested telephone respondents, and followed up with profile survey invitations. We performed up to three callbacks or re-contact efforts to all sampled households. This sampling method mimicked those used to recruit traditional telephone survey samples, in that virtually everyone in the population had a non-zero chance of being included but must chose to do so.

Second, we initially recruited participants for the panel as an addendum to the California Behavioral Risk Factor Surveillance Survey (BRFSS), a large (n=10,000) random digit-dialing (RDD) telephone survey (50% mobile) of Californians conducted between March and December of each year by the Public Health Survey Research Program at California State University, Sacramento. At the end of that survey, interviewers asked respondents to provide their email address (or phone number for those without internet access) after indicating that they were “interested in participating in future surveys.” We then followed up with an email/phone invitation to join the panel and complete a profile survey. This sampling method resembled in many respects the one used by Pew Research Center to recruit the American Trends Panel (http://www.pewresearch.org/methodology/u-s-survey-research/american-trends-panel).

Lastly, we used a quota-based recruitment method. Drawing upon California demographic statistics obtained from voter registration lists and the U.S. Bureau of the Census’s American Community Survey, we established sample quotas for age, gender, race, ethnicity, income and party identification. Applying those quotas, Qualtrics recruited panelists from the internet using ads, and other “opt-in” methods, and delivered those panelists to CALSPEAKS.

We have included a Spanish language recruitment beginning in 2017. All three sampling methodologies produced panel samples that diverged by varying degrees from population parameters. The quota-based method produced the most representative samples in terms of demographics, but its non-probability based methodology means that panelists may actually be less representative of the population in other ways that are unrelated to demographics. Accordingly, we applied sampling weights to the estimates we obtained in each individual survey collected (more details below). As of 2018, we have begun transitioning to solely using the probability-based methodology, as described above in our MSG sampling methodology of sending postcards/letters to potential respondents.

**Consent and Initial Profile**

During recruitment (and at the beginning of each subsequent survey), panelists learn that their participation is entirely voluntary and that they have the right to opt out at any time. They also learn that their survey responses are strictly confidential.

Immediately upon agreeing to join the panel, panelists complete a 15 minute survey that includes questions pertaining to demographics, political identity, background, interests, personality, and household composition. This profile information is merged with future survey data collections, thereby reducing survey burden (i.e. redundant questioning) on panelists over time.

**CALSPEAKS:** Your Voice Counts. Make it Heard.
Survey Procedures
ISR researchers can administer up to 18 CALSPEAKS surveys per year, on topics of interest to public policymakers, administrators, and researchers in California. As the panel grows, individual surveys will sample a random subset of the larger panel. Panelists receive reminders to complete the surveys within two weeks following the initial invitation (or within 72 hours for election polls). Since 2017 surveys can be conducted in both English and Spanish.

CALSPEAKS uses the Qualtrics Research Suite online survey platform to administer surveys. The research team optimizes all CALSPEAKS surveys for completion on mobile phones and tablets, and provides Spanish translations.

All surveys include “attention check” questions, embedded in the survey to ensure that panelists are maintaining attention throughout completion. Completed surveys that fail the attention check questions or that were completed in less than one-half of the mean completion time are excluded. Qualtrics also prevents “ballot box stuffing” - individual IP addresses submitting more than one survey.

Every time a CALSPEAKS panelist completes a survey, s/he receives a $5 Tango gift card, delivered directly to his or her email inbox (or home), which is redeemable at most online retailers. The research team designs CALSPEAKS surveys to be completed in under ten minutes. When the mean completion time for a survey exceeds 15 minutes, CALSPEAKS panel administrators award respondents larger incentives.

Finally, CALSPEAKS researchers follow AAPOR standards for response rate reporting, as published in AAPOR’s Standard Definitions. Thus, we include contact rates, break-off rates, and overall response rates, as applied to each stage of the respondent participation process (panel recruitment, retention, and individual survey sub-sampling).

IRB Review
All surveys undergo review by the Institutional Review Board (IRB) at California State University, Sacramento, and the CALSPEAKS’s research team manages this IRB review process on behalf of its non-academic clients. The process is usually completed within 10 business days.

Survey Weighting
For each survey, the weighting protocol proceeds in stages. First, the base weights are computed to reflect the various selection probabilities for respondents selected from different sampling frames. Second, we adjust for nonresponse and under coverage by calibrating the base weights to known population-based control totals for gender and age, race/ethnicity, education, income and phone status, using a ‘raking’ process. The population benchmarks are obtained from the most recent Census Bureau’s American Community Survey. Finally, we “trim” the raked weights (typically at the 1st and 99th percentiles) to reduce extreme values.

Panel Management
Panel administrators try to maintain regular contact with panelists, sending holiday well wishes, CALSPEAKS updates, and links to CALSPEAKS-related press, reports related to specific surveys, academic research publications, and other relevant news.

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Panel administrators also monitor (1) how often individual panelists are invited to take surveys, (2) how many surveys individual panelists complete over time, (3) how often they complete surveys, (4) individual panelist response rates, and (5) individual panelist “quality” (average time to complete, and whether a panelist’s completed survey has ever been rejected by an attention check validation). To prevent the professionalization of survey respondents, no individual panelist takes more than six surveys per year or serves on the panel for more than three years, as long as the panel is above 3,000 participants.

**Data Security**
Qualtrics stores all data on servers that are protected by high-end firewall systems, and performs regular scans to ensure that any vulnerabilities are quickly found and patched. Qualtrics performs complete penetration tests yearly. All services have redundant hardware, with complete backups performed nightly. Most important is the confidential system component design. It uses multiple checks to certify that packets from one subsystem can only be received by a designated subsystem. Access to any customer-facing system is restricted to specific individuals whose access is monitored and audited for compliance.

Qualtrics stores all data in a specific location; that is, data does not float around in the “cloud.” In addition, Qualtrics processes all data in the same location. In other words, if data are collected in the U.S., all data are processed in the U.S.

Qualtrics uses Transport Layer Security (TLS) encryption (also known as HTTPS) for all transmitted data, and can also protect surveys with passwords and HTTP referrer checking. Qualtrics services are hosted by trusted data centers that are independently audited using the industry standard SSAE-16 method. We meet or exceed the minimum requirements as outlined in FIPS Publication.

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