

Methodological Note #005

## How Does LAPOP Calculate Response Rates?

Zach Warner and Gabriel N. Camargo-Toledo

Cardiff University and Vanderbilt University

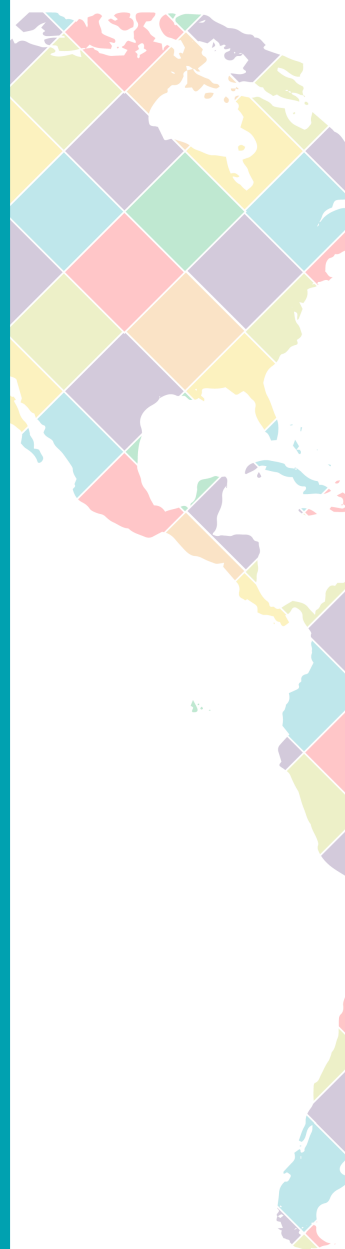
WarnerZ@cardiff.ac.uk

gabriel.n.camargo-toledo@vanderbilt.edu

June 24, 2019

### Key Findings:

- We outline LAPOP's method for calculating response rates for the 2016/17 round of the AmericasBarometer.
- Our method utilizes conservative coding rules within AAPOR's guideline.
- Of the approximately 175,000 interview attempts conducted in 2016/17 using handheld electronic devices, 33,000 resulted in interviews, giving a global response rate of 20%, varying across countries from 10% to 55%.
- We provide response rates for each country in the 2016/17 AmericasBarometer round.



Survey response rates provide important information, but only to the degree that they are tracked accurately and reported with transparency. This *Methodological Note* describes LAPOP's procedures for calculating response rates for the 2016/17 round of the AmericasBarometer. This information can be used to assess the potential for nonresponse bias, a key source of *total survey error* (TSE; see Groves 1989).

In 2010, the American Association for Public Opinion Research (AAPOR) introduced the Transparency Initiative, a system of guidelines and standards for the routine disclosure of methodological information in survey research.<sup>1</sup> As a charter member of this initiative, LAPOP is committed to making publicly available information about our data collection and reporting processes.

## Step 1: Gather data on attempted interviews

In most of the countries included in the 2016/17 round of the AmericasBarometer, interviews were conducted face-to-face by enumerators using handheld electronic devices, a method known as computer-assisted personal interviews (CAPI). The CAPI surveys were administered using the SurveyToGo (STG) platform, into which we programmed a module that provides electronic information about every attempted interview. Through LAPOP's quality control suite, FALCON<sup>®</sup>, the LAPOP team monitored the reliability of this information.<sup>2</sup> In Canada and the United States, the AmericasBarometer survey was fielded using a probability-based Internet panel; we do not collect response rates for these studies. In the few countries in 2016/17 where we did not use the STG platform,<sup>3</sup> our information about attempted interviews was recorded on paper. Due to concerns about the comparability of attempts recorded electronically and on paper, and our inability to audit paper records for accuracy, we discuss in this *Methodological Note* only the response rates for countries that used STG.

Enumerators working in STG record each attempted interview, coding

them into one of the following categories:

1. Respondent willing to proceed;
2. Respondent refused;
3. No one home;
4. Respondent unable to be interviewed (e.g., blind, deaf, or ill);
5. Unsuccessful, other reason; or
6. Household unoccupied, abandoned, destroyed, or doesn't exist.

If a respondent indicates that she is willing to proceed, the enumerator then verifies that she lives at the address, that she is a citizen or permanent resident,<sup>4</sup> that she gives her informed consent to be interviewed, and that she meets our sampling quota. If any of these conditions are not met, then the enumerator records the failed attempt and moves on to the next.

## Step 2: Process the sample for quality

LAPOP's extensive quality control efforts include a number of checks that lead to canceled interviews. FALCON<sup>®</sup> monitors interview quality in real time, scripts written in the statistical software R are used to spot anomalous patterns in interview logs, and thousands of manual audits supplement these automatic flagging systems. When these processes indicate a strong probability that an interview is of dubious quality, we remove not only the interview but also the attempts reported in connection to the interview. Intuitively, if we have evidence that field protocols were not followed during an interview, we cannot assume that field protocols were followed in the attempts that led up to it. In total, some 35,000 attempts—17% of the 210,000 conducted this round—are excluded from the response rates for quality control reasons. Put differently, our reported response rates are the rates associated with the published dataset.

All other attempts are counted in the response rates, even those that did not eventually lead to an interview included in the final data (e.g., when the interview was terminated early). This is a conservative coding rule in that it likely exaggerates nonresponse; for instance, we include attempts that may have been entered in error and those that did not lead to an interview for unknown reasons.

### Step 3: Classify the attempts into categories

We map each attempt to an AAPOR *final disposition code*. AAPOR's *Standard Definitions* classifies all attempts into four groups: interviews; non-interviews with an eligible respondent; non-interviews with a respondent of unknown eligibility; and non-interviews with ineligible respondents.<sup>5</sup> These categories are given numeric codes 1-4, with more specific categories given by the first and second decimal places.

For example, all eligible non-interviews are given a code that begins with 2. AAPOR's guidelines indicate that eligible respondents who are unable to do an interview for logistical reasons are given codes that begin with 2.3. This code distinguishes them against other eligible non-interviews, such as those who were known to be eligible but refused, which would receive a code beginning with 2.1. Logistical problems can then be disaggregated using a further decimal place, for instance by assigning code 2.33 to attempts that failed because the respondent did not speak the language in which the survey was administered, versus 2.32 for respondents who were physically or mentally unable to complete an interview. In practice, response rates do not typically require this level of granularity, so we collapse codes to the first decimal place.

Our attempts are mapped to disposition codes as follows:

1. Respondent willing to proceed → 1.0;
2. Respondent refused after eligibility screening → 2.1;

3. Respondent unable to be interviewed (e.g., blind, deaf, or ill) → 2.3;
4. Respondent refused before eligibility screening → 3.2;
5. No one home → 3.2;
6. Unsuccessful, other reason → 3.9; and
7. Household unoccupied, abandoned, destroyed, or doesn't exist → 4.0.

Since only the last group has a code beginning with 4, the only attempted interviews for which we assume respondents are ineligible are those for which there is no evidence a respondent even exists. Where we are able to collect data on eligibility through questions about citizenship, residency, and sampling quota, we use these screening questions to place attempts into the correct eligibility classifications—for instance, a refusal *after* the respondent established his or her eligibility is assigned disposition code 2.1. All other non-interviews—including refusals and “no one home”s—are marked as of unknown eligibility and assigned a code 3.

Since our sampling methodology uses gender and age group frequency matches,<sup>6</sup> a very large proportion of attempted interviews (72%) are coded as being of unknown eligibility. This is because the interview was refused before the enumerator could establish whether anyone in the household met the sample requirements, or no one was home who could establish this information. Samples like this thus generate high numbers of cases of unknown eligibility. It is surely the case that some of these cases of unknown eligibility would have met the sample requirements; thus, AAPOR's response rates 5 and 6 (RR5 and RR6), which assume that none of the cases of unknown eligibility were eligible, are not appropriate and we do not report them.

We then break out interviews by completion percentage. Not all respondents who begin an interview (code 1) complete it, but there is no set standard for distinguishing complete (coded as 1.1) from partial (1.2) interviews, and partials from break-offs (2.1). We therefore adopt a conservative rule based on percent of questions answered (excluding “don't

know,” “not applicable,” and “no response” answers). We code interviews as complete only if the respondent answered more than 70% of questions, and partial if she answered 50–70%. Cases in which a respondent began the interview but answered less than 50% of the questions are coded as break-offs. We calculate these proportions using substantive variables only,<sup>7</sup> specific to each country questionnaire, an approach that likely overestimates eligible non-interviews and thus underestimates response rates.

Finally, these codes are then mapped back to *final disposition categories*. This step simply formalizes definitions for well-known categories: attempts coded as 1.1 are completed interviews, 1.2 are partial interviews, 2.1 are refusals (including break-offs), 2.2 are noncontacts of known eligibility, 2.3 are simply “others,” 3.2 are noncontacts and refusals of unknown eligibility, 3.9 are “unknown, other,” and 4.0 are ineligible.

## Step 4: Estimate eligibility ratio

Another challenge in calculating response rates is deciding how to treat attempts with respondents of unknown eligibility. While the most conservative strategy is to simply assume all of these attempts were with eligible respondents, and the most aggressive to assume that none were eligible, scholars commonly adopt a middle ground by attempting to estimate the proportion of such attempts likely to be eligible ( $e$ ). Ideally, fine-grained demographic information could be used to estimate eligibility rates that vary locally. In practice, such data are not generally available, and so scholars instead simply assume that the observed ratio of eligible to ineligible respondents is mirrored among those of unknown eligibility. This approach, known as the CASRO method (named after the Council of American Survey Research Organizations), thus computes the eligibility rate as

$$\hat{e} = \frac{\text{Eligible}}{\text{Eligible} + \text{Ineligible}} \quad (1)$$

and applies it to all attempts with a final disposition code that begins with a 3.<sup>8</sup>

Many of the countries in the AmericasBarometer lack the current census data that would allow us to generate sophisticated estimates of  $\hat{e}$ . We therefore adopt the CASRO method for estimating  $\hat{e}$ . For transparency, however, we report the total number of attempts in each eligibility category, as well as  $\hat{e}$  itself, so that users of our data can examine the effect of this approach on our response rates. In practice, we estimate very high eligibility rates, typically around  $\hat{e} = 0.80$  or greater, partly because so many of our cases of attempted interviews are of unknown eligibility.

## Step 5: Calculate response rates

Finally, we use the disposition categories to compute four response rates, according to the formulas given in AAPOR's *Standard Definitions*. These rates differ only in how partial interviews are classified and how eligibility is estimated.

Response rates are given by

$$\text{Response Rate 1 (RR1)} = \frac{C}{C + P + R + N + O + UH + UO}, \quad (2)$$

$$\text{Response Rate 2 (RR2)} = \frac{C + P}{C + P + R + N + O + UH + UO}, \quad (3)$$

$$\text{Response Rate 3 (RR3)} = \frac{C}{C + P + R + N + O + \hat{e}(UH + UO)}, \quad (4)$$

$$\text{Response Rate 4 (RR4)} = \frac{C + P}{C + P + R + N + O + \hat{e}(UH + UO)}, \quad (5)$$

where C refers to completed interviews, P to partial interviews, R to refusals and break-offs of known eligibility, N for noncontacts of known eligibility, O for other failures of known eligibility, UH for unknown if

household, UO for unknown others, and  $\hat{e}$  is the eligibility rate calculated using the CASRO method. RR2 and RR4 treat partial interviews as a successful “response” while RR1 and RR3 do not. The difference between RR1 and RR3 is only whether respondents whose eligibility is unknown are assumed to be always or sometimes eligible, respectively.

The official response rates published along with this *Methodological Note* provide enough detail to back out these calculations. For example, in Brazil, our enumerators made 7,443 attempts. Among these, we had C=1,532 complete interviews, P=0 partials, R=100 refusals of known eligibility (including break-offs), N=0 noncontacts of known eligibility, O=95 others, and 5,165 cases of unknown eligibility (including categories UH and UO). Thus, RR1 for Brazil this round is calculated to be  $\frac{1532}{1532+0+100+0+95+5165} = \frac{1532}{6892} \approx 0.22$ , for a response rate of 22%. Since we had 1,727 attempts with eligible respondents (C+P+R+N+O) and 551 attempts with ineligible respondents, the CASRO method yields  $\hat{e} = \frac{1727}{1727+551} \approx 0.76$ . RR3 is therefore given by  $\frac{1532}{1532+0+100+0+95+(0.76)(5165)} \approx \frac{1532}{5652} \approx 0.27$ , yielding a response rate of 27%.

From 2016/17 forward, LAPOP is publishing all of these response rates so that researchers can see how these various coding decisions reflect different views of the potential for nonresponse bias in our data. Still, it is not always feasible to report all of these rates and their component categories, so following common practice, we use RR1 as our standard response rate. As noted in the foregoing discussion, this is the most conservative response rate. By adopting this as our default response rate, we are emphasizing the upper bound on nonresponse.

## LAPOP’s response rates

The first section of Table 1 provides a breakdown of all attempted interviews conducted during data collection for this round. Approximately half of all unsuccessful attempts were cases in which there was no respondent home. Among cases where a respondent answered the door,



half of those that did not result in an interview were unsuccessful because the respondent refused to participate. Very few interviewees were known to be ineligible, yielding a very high estimated eligibility rate, with  $\hat{e} = 0.80$ . These attempts data are translated into response rates in the final section of Table 1. The overall response rate for the 2016/2017 AmericasBarometer is 20%, though different response rate definitions yield a higher rate of 23%. This range provides an indication of the uncertainty induced by choosing various coding rules, all within the bounds of AAPOR's *Standard Definitions*.

**Table 1: Attempts conducted in the 2016/17 round**

Total attempts	175,292
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	1,402
...among which other failure, eligible respondent	5,362
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	125,646
...among which ineligible respondent	9,773
Total interviews published	33,111
...among which partials	139
...among which break-offs	26
Total eligible attempts	39,873
Total attempts of unknown eligibility	125,646
Total ineligible attempts	9,773
Estimated eligibility rate (CASRO method)	0.80
Response rate 1	0.20
Response rate 2	0.20
Response rate 3	0.23
Response rate 4	0.23

These topline results hide substantial variation across countries, presented in Table 2. Response rates in the 2016/17 AmericasBarometer varied from a low of 10% in El Salvador to a high of 56% in Jamaica. The data indicate that response rates tend to be lower in more economically developed countries, though there are clear exceptions. Anecdotally, it is likely that many other factors contribute to this cross-national varia-

tion, including geography and linguistic diversity, although we leave such questions for future research.

**Table 2: Response rates by country**

Argentina	0.12	Guyana	0.46
Bolivia	0.15	Haiti	0.52
Brazil	0.22	Honduras	0.23
Chile	0.14	Jamaica	0.55
Colombia	0.28	Mexico	0.11
Costa Rica	0.16	Nicaragua	0.30
Dominican Republic	0.23	Panama	0.42
Ecuador	0.23	Paraguay	0.45
El Salvador	0.10	Peru	0.17
Guatemala	0.30	Uruguay	0.13
Guyana (capital)	0.45	Venezuela	0.21

These response rates may strike some as low by comparison to other survey studies published in the region. We think there are a number of reasons for this.

First, the AmericasBarometer does not provide financial incentives to participate in the survey and does not rely on a list of individuals selected into a sample. Both features likely decrease response rates. While monetary rewards increase participation by compensating respondents for their time, pre-selecting respondents increases response rates by allowing survey organizations to send letters to selected individuals to introduce the study in advance, and to more accurately track participation *ex post*.

Second, these response rates reflect recent improvements upon standard data collection procedures. The 2016/17 round of the AmericasBarometer is the first in which we collected data about attempted interviews electronically, through our new Automatic Response Tracking (ART) module. We also introduced a sophisticated method of oversight and quality control with the introduction of FALCON<sup>®</sup>.<sup>9</sup> In the past, and in most surveys in the region, information about attempted interviews has been gathered on paper – often by field supervisors and not the enumera-

tors themselves – with no way of verifying their accuracy. Given these substantial improvements in data collection, the response rates for this round may not be directly comparable to those of previous rounds – nor to other public opinion surveys in the Americas.

Third, in computing these response rates, we consistently take the most conservative coding decisions available: canceling the bare minimum of attempts as warranted by quality control procedures, assuming a very high proportion of respondents are eligible, counting respondents unable to participate against our response rates, and so on. As noted above, these response rates therefore characterize an upper bound on nonresponse.

Fourth, shrinking response rates are a concern worldwide, but the scholarly evidence indicates that the problem this poses for substantive interpretations of the data has been largely overstated.<sup>10</sup> Declining response rates certainly hurt statistical power and precision if they produce noisier samples, but do not necessarily bias conclusions about public opinion. While recent research on this problem has largely been confined to surveys in the U.S., we have no reason to expect that survey nonresponse generates greater bias elsewhere in the Americas.

Finally, response rates may be a useful heuristic for evaluating survey quality, but TSE is a more reliable measure. Although nonresponse bias is one component of survey error, minimizing TSE can often require trade-offs that increase nonresponse: for instance, drawing a more precise sample of the population can increase nonresponse by turning away eligible respondents who do not meet demographic targets specific to the sample design. We urge researchers to evaluate our data in the broader context of all of our research methods and efforts to minimize TSE.

## Conclusions

Empirical social science has recently undergone a “credibility revolution,” a movement which seeks to produce more reliable scientific findings.<sup>11</sup> Scholars have increasingly focused their efforts on making their methodological choices more transparent. Transparency facilitates engagement with (and critique of) others’ work, leading to a virtuous cycle of more credible science.

LAPOP and the other members of AAPOR’s Transparency Initiative are at the forefront of such advances in the world of public opinion. Now more than ever, it is possible to evaluate survey research on its methodological merit. However, much more remains to be done. Unexpected outcomes in successive American and British elections have sown distrust in polling. Inquiries by professional organizations in both the United States and the United Kingdom have emphasized the trustworthiness of survey research,<sup>12</sup> yet concerns linger. Improving methodological transparency is a necessary step toward assuaging these concerns about public opinion research.<sup>13</sup>

This *Methodological Note* is part of LAPOP’s series of reports on our research methods. In developing this series, we are expanding our efforts to conduct transparent social science, continuing our work to keep LAPOP at the cutting edge of survey research, and disseminating information on how to adopt improved practices in public opinion research (such as the electronic capture of contact attempts in face-to-face interviews). Our hope is that these *Methodological Notes* not only make our findings more credible and useful to the individuals and organizations who analyze our data, but also help other researchers improve their own survey projects. This methodological dialogue supports LAPOP’s central mission: to advance the quality of survey research in the Americas and beyond.

## Appendix

### *Antigua*

Attempts data were collected on paper in Antigua; analysis of these results will be posted on the LAPOP website at a later date.

### *Argentina*

**Table 3: Attempts**

Total attempts	13,467
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	22
...among which other failure, eligible respondent	130
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	10,887
...among which ineligible respondent	903
Total interviews published	1,525
...among which partials	2
...among which break-offs	2
Total eligible attempts	1,677
Total attempts of unknown eligibility	10,887
Total ineligible attempts	903
Estimated eligibility rate (CASRO method)	0.65
Response rate 1	0.12
Response rate 2	0.12
Response rate 3	0.17
Response rate 4	0.17

**Bolivia****Table 4: Attempts**

Total attempts	11,847
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	119
...among which other failure, eligible respondent	339
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	9,029
...among which ineligible respondent	669
Total interviews published	1,691
...among which partials	9
...among which break-offs	1
Total eligible attempts	2,149
Total attempts of unknown eligibility	9,029
Total ineligible attempts	669
Estimated eligibility rate (CASRO method)	0.76
Response rate 1	0.15
Response rate 2	0.15
Response rate 3	0.19
Response rate 4	0.19

**Brazil****Table 5: Attempts**

Total attempts	7,443
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	100
...among which other failure, eligible respondent	95
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	5,165
...among which ineligible respondent	551
Total interviews published	1,532
...among which partials	0
...among which break-offs	0
Total eligible attempts	1,727
Total attempts of unknown eligibility	5,165
Total ineligible attempts	551
Estimated eligibility rate (CASRO method)	0.76
Response rate 1	0.22
Response rate 2	0.22
Response rate 3	0.27
Response rate 4	0.27

**Canada**

We use an opt-in internet panel in Canada, so response rates are not applicable here.

**Chile****Table 6: Attempts**

Total attempts	11,660
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	24
...among which other failure, eligible respondent	300
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	9,425
...among which ineligible respondent	287
Total interviews published	1,624
...among which partials	2
...among which break-offs	2
Total eligible attempts	1,948
Total attempts of unknown eligibility	9,425
Total ineligible attempts	287
Estimated eligibility rate (CASRO method)	0.87
Response rate 1	0.14
Response rate 2	0.14
Response rate 3	0.16
Response rate 4	0.16



**Colombia****Table 7: Attempts**

Total attempts	5,760
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	22
...among which other failure, eligible respondent	77
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	3,837
...among which ineligible respondent	261
Total interviews published	1,563
...among which partials	1
...among which break-offs	0
Total eligible attempts	1,662
Total attempts of unknown eligibility	3,837
Total ineligible attempts	261
Estimated eligibility rate (CASRO method)	0.86
Response rate 1	0.28
Response rate 2	0.28
Response rate 3	0.31
Response rate 4	0.31

**Costa Rica****Table 8: Attempts**

Total attempts	9,501
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	31
...among which other failure, eligible respondent	103
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	7,610
...among which ineligible respondent	239
Total interviews published	1,518
...among which partials	3
...among which break-offs	0
Total eligible attempts	1,652
Total attempts of unknown eligibility	7,610
Total ineligible attempts	239
Estimated eligibility rate (CASRO method)	0.87
Response rate 1	0.16
Response rate 2	0.16
Response rate 3	0.18
Response rate 4	0.18

**Dominica**

Attempts data were collected on paper in Dominica; analysis of these results will be posted on the LAPOP website at a later date.

***Dominican Republic*****Table 9: Attempts**

Total attempts	7,077
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	41
...among which other failure, eligible respondent	406
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	4,679
...among which ineligible respondent	433
Total interviews published	1,518
...among which partials	4
...among which break-offs	0
Total eligible attempts	1,965
Total attempts of unknown eligibility	4,679
Total ineligible attempts	433
Estimated eligibility rate (CASRO method)	0.82
Response rate 1	0.23
Response rate 2	0.23
Response rate 3	0.26
Response rate 4	0.26

**Ecuador****Table 10: Attempts**

Total attempts	7,549
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	94
...among which other failure, eligible respondent	239
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	4,838
...among which ineligible respondent	831
Total interviews published	1,547
...among which partials	1
...among which break-offs	0
Total eligible attempts	1,880
Total attempts of unknown eligibility	4,838
Total ineligible attempts	831
Estimated eligibility rate (CASRO method)	0.69
Response rate 1	0.23
Response rate 2	0.23
Response rate 3	0.30
Response rate 4	0.30

***El Salvador*****Table 11: Attempts**

Total attempts	15,738
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	83
...among which other failure, eligible respondent	1,724
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	11,972
...among which ineligible respondent	408
Total interviews published	1,551
...among which partials	1
...among which break-offs	0
Total eligible attempts	3,358
Total attempts of unknown eligibility	11,972
Total ineligible attempts	408
Estimated eligibility rate (CASRO method)	0.89
Response rate 1	0.10
Response rate 2	0.10
Response rate 3	0.11
Response rate 4	0.11

***Grenada***

Attempts data were collected on paper in Grenada; analysis of these results will be posted on the LAPOP website at a later date.

**Guatemala****Table 12: Attempts**

Total attempts	5,362
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	51
...among which other failure, eligible respondent	26
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	3,601
...among which ineligible respondent	139
Total interviews published	1,546
...among which partials	2
...among which break-offs	1
Total eligible attempts	1,622
Total attempts of unknown eligibility	3,601
Total ineligible attempts	139
Estimated eligibility rate (CASRO method)	0.92
Response rate 1	0.30
Response rate 2	0.30
Response rate 3	0.31
Response rate 4	0.31

***Guyana (Capital)*****Table 13: Attempts**

Total attempts	679
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	11
...among which other failure, eligible respondent	3
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	335
...among which ineligible respondent	30
Total interviews published	300
...among which partials	3
...among which break-offs	0
Total eligible attempts	314
Total attempts of unknown eligibility	335
Total ineligible attempts	30
Estimated eligibility rate (CASRO method)	0.91
Response rate 1	0.46
Response rate 2	0.46
Response rate 3	0.48
Response rate 4	0.48

***Guyana (Non-capital)*****Table 14: Attempts**

Total attempts	2,950
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	83
...among which other failure, eligible respondent	22
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	1,332
...among which ineligible respondent	236
Total interviews published	1,277
...among which partials	43
...among which break-offs	11
Total eligible attempts	1,382
Total attempts of unknown eligibility	1,332
Total ineligible attempts	236
Estimated eligibility rate (CASRO method)	0.85
Response rate 1	0.45
Response rate 2	0.47
Response rate 3	0.49
Response rate 4	0.50

**Haiti (paper only)**

We did not collect attempts data from paper interviews in Haiti (but see below for our electronic interviews in Haiti).



***Haiti (electronic)*****Table 15: Attempts**

Total attempts	1,772
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	24
...among which other failure, eligible respondent	34
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	743
...among which ineligible respondent	23
Total interviews published	948
...among which partials	25
...among which break-offs	6
Total eligible attempts	1,006
Total attempts of unknown eligibility	743
Total ineligible attempts	23
Estimated eligibility rate (CASRO method)	0.98
Response rate 1	0.52
Response rate 2	0.54
Response rate 3	0.53
Response rate 4	0.54

***Honduras*****Table 16: Attempts**

Total attempts	6,970
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	25
...among which other failure, eligible respondent	374
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	4,775
...among which ineligible respondent	236
Total interviews published	1,560
...among which partials	3
...among which break-offs	0
Total eligible attempts	1,959
Total attempts of unknown eligibility	4,775
Total ineligible attempts	236
Estimated eligibility rate (CASRO method)	0.89
Response rate 1	0.23
Response rate 2	0.23
Response rate 3	0.25
Response rate 4	0.25

***Jamaica*****Table 17: Attempts**

Total attempts	2,847
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	0
...among which other failure, eligible respondent	35
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	1,215
...among which ineligible respondent	82
Total interviews published	1,515
...among which partials	7
...among which break-offs	0
Total eligible attempts	1,550
Total attempts of unknown eligibility	1,215
Total ineligible attempts	82
Estimated eligibility rate (CASRO method)	0.95
Response rate 1	0.55
Response rate 2	0.55
Response rate 3	0.56
Response rate 4	0.56

**Mexico****Table 18: Attempts**

Total attempts	15,292
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	162
...among which other failure, eligible respondent	608
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	11,532
...among which ineligible respondent	1,426
Total interviews published	1,564
...among which partials	2
...among which break-offs	0
Total eligible attempts	2,334
Total attempts of unknown eligibility	11,532
Total ineligible attempts	1,426
Estimated eligibility rate (CASRO method)	0.62
Response rate 1	0.11
Response rate 2	0.11
Response rate 3	0.16
Response rate 4	0.16

**Nicaragua****Table 19: Attempts**

Total attempts	5,270
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	206
...among which other failure, eligible respondent	47
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	3,314
...among which ineligible respondent	143
Total interviews published	1,560
...among which partials	1
...among which break-offs	1
Total eligible attempts	1,813
Total attempts of unknown eligibility	3,314
Total ineligible attempts	143
Estimated eligibility rate (CASRO method)	0.93
Response rate 1	0.30
Response rate 2	0.30
Response rate 3	0.32
Response rate 4	0.32

**Panama****Table 20: Attempts**

Total attempts	3,767
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	21
...among which other failure, eligible respondent	78
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	1,986
...among which ineligible respondent	161
Total interviews published	1,521
...among which partials	2
...among which break-offs	0
Total eligible attempts	1,620
Total attempts of unknown eligibility	1,986
Total ineligible attempts	161
Estimated eligibility rate (CASRO method)	0.91
Response rate 1	0.42
Response rate 2	0.42
Response rate 3	0.44
Response rate 4	0.44

***Paraguay*****Table 21: Attempts**

Total attempts	3,527
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	28
...among which other failure, eligible respondent	44
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	1,762
...among which ineligible respondent	164
Total interviews published	1,529
...among which partials	11
...among which break-offs	1
Total eligible attempts	1,601
Total attempts of unknown eligibility	1,762
Total ineligible attempts	164
Estimated eligibility rate (CASRO method)	0.91
Response rate 1	0.45
Response rate 2	0.45
Response rate 3	0.47
Response rate 4	0.48

**Peru****Table 22: Attempts**

Total attempts	16,530
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	196
...among which other failure, eligible respondent	338
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	12,121
...among which ineligible respondent	1,226
Total interviews published	2,649
...among which partials	2
...among which break-offs	0
Total eligible attempts	3,183
Total attempts of unknown eligibility	12,121
Total ineligible attempts	1,226
Estimated eligibility rate (CASRO method)	0.72
Response rate 1	0.17
Response rate 2	0.17
Response rate 3	0.22
Response rate 4	0.22

**St. Kitts and Nevis**

Attempts data were collected on paper in St. Kitts and Nevis; analysis of these results will be posted on the LAPOP website at a later date.

**St. Lucia**

Attempts data were collected on paper in St. Lucia; analysis of these results will be posted on the LAPOP website at a later date.



***St. Vincent and the Grenadines***

Attempts data were collected on paper in St. Vincent and the Grenadines; analysis of these results will be posted on the LAPOP website at a later date.

***United States of America***

We use an opt-in internet panel in the United States of America, so response rates are not applicable here.

**Uruguay****Table 23: Attempts**

Total attempts	12,385
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	8
...among which other failure, eligible respondent	128
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	9,847
...among which ineligible respondent	888
Total interviews published	1,511
...among which partials	3
...among which break-offs	0
Total eligible attempts	1,650
Total attempts of unknown eligibility	9,847
Total ineligible attempts	888
Estimated eligibility rate (CASRO method)	0.65
Response rate 1	0.13
Response rate 2	0.13
Response rate 3	0.19
Response rate 4	0.19

**Venezuela****Table 24: Attempts**

Total attempts	7,899
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	51
...among which other failure, eligible respondent	212
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	5,641
...among which ineligible respondent	437
Total interviews published	1,558
...among which partials	12
...among which break-offs	1
Total eligible attempts	1,821
Total attempts of unknown eligibility	5,641
Total ineligible attempts	437
Estimated eligibility rate (CASRO method)	0.81
Response rate 1	0.21
Response rate 2	0.21
Response rate 3	0.24
Response rate 4	0.24

**Overall rates, 2017/17 round****Table 25: Attempts**

Total attempts	175,292
...among which noncontacts, eligible respondent	0
...among which refusals, eligible respondent	1,402
...among which other failure, eligible respondent	5,362
...among which unknown if location inhabited	0
...among which other failure, unknown eligibility	125,646
...among which ineligible respondent	9,773
Total interviews published	33,111
...among which partials	139
...among which break-offs	26
Total eligible attempts	39,873
Total attempts of unknown eligibility	125,646
Total ineligible attempts	9,773
Estimated eligibility rate (CASRO method)	0.80
Response rate 1	0.20
Response rate 2	0.20
Response rate 3	0.23
Response rate 4	0.23

**Notes**

1. See [www.aapor.org/Standards-Ethics/Transparency-Initiative/FAQS](http://www.aapor.org/Standards-Ethics/Transparency-Initiative/FAQS).
2. Cohen and Larrea (2018); Montalvo, Seligson, and Zechmeister (2018).
3. These are Antigua and Barbuda, Dominica, Grenada, St. Kitts, St. Lucia, and St. Vincent and the Grenadines, in which we used a different software platform. Paper-and-pencil interviewing (PAPI) was used to collect approximately half of the interviews in Haiti. We intend to use CAPI and the STG platform to capture attempts data electronically in all interviews in future rounds of the AmericasBarometer.

4. The screening question for citizenship in the 2016/17 round of the Americas Barometer was **CIUDADANO**. Are you a citizen or permanent resident of (country)?
5. The American Association for Public Opinion Research (2016).
6. See [https://www.vanderbilt.edu/lapop/ab2016/AmericasBarometer\\_2016-17\\_Sample\\_Design.pdf](https://www.vanderbilt.edu/lapop/ab2016/AmericasBarometer_2016-17_Sample_Design.pdf).
7. By “substantive variables” we mean questions asked as part of the survey instrument. This category excludes the metadata about the interview, as well as questions we ask enumerators to answer after completing the interview.
8. Smith (2009).
9. Cohen and Larrea (2018).
10. Keeter et al. (2006); Meterko et al. (2015).
11. Angrist and Pischke (2010).
12. Kennedy et al. (2017) and Sturgis et al. (2016).
13. See Lupu and Michelitch (2018).

## References

- Angrist, Joshua D., and Jörn-Steffen Pischke. 2010. “The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics.” *Journal of Economic Perspectives* 24 (2): 3–30.
- Cohen, Mollie J., and Sebastian Larrea. 2018. “Methodological Note: Assessing and Improving Interview Quality in the 2016/17 Americas-Barometer.” *Insights Series*, no. 2: 1–10.

- Keeter, Scott, Courtney Kennedy, Michael Dimock, Jonathan Best, and Peyton Craighill. 2006. "Gauging the Impact of Growing Nonresponse on Estimates from a National RDD Telephone Survey." *Public Opinion Quarterly* 70 (5): 759–779.
- Kennedy, Courtney, Mark Blumenthal, Scott Clement, Joshua D. Clinton, Claire Durand, Charles Franklin, Kyley McGeeney, et al. 2017. "An Evaluation of 2016 Election Polls in the U.S." [www.aapor.org](http://www.aapor.org).
- Lupu, Noam, and Kristin Michelitch. 2018. "Advances in Survey Methods for the Developing World." *Annual Review of Political Science* 21:195–214.
- Meterko, Mark, Joseph D. Restuccia, Kelly Stolzmann, David Mohr, Caitlin Brennan, Justin Glasgow, and Peter Kaboli. 2015. "Response Rates, Nonresponse Bias, and Data Quality: Results from a National Survey of Senior Healthcare Leaders." *Public Opinion Quarterly* 79 (1): 130–144.
- Montalvo, Daniel, Mitchell A. Seligson, and Elizabeth J. Zechmeister. 2018. "Data Collection in Cross-National and International Surveys: Latin America and the Caribbean." Chap. 27 in *Advances in Comparative Survey Methods: Multicultural, Multinational and Multiregional Contexts*, edited by Timothy P. Johnson, Beth-Ellen Pennell, Ineke Stoop, and Brita Dorer, 569–581. New York: Wiley.
- Smith, Tom W. 2009. "A Revised Review of Methods to Estimate the Status of Cases with Unknown Eligibility." National Opinion Research Center, University of Chicago.
- Sturgis, Patrick, Nick Baker, Mario Callegaro, Stephen Fisher, Jane Green, Will Jennings, Jouni Kuha, Ben Lauderdale, and Patten Smith. 2016. *Report of the Inquiry into the 2015 British General Election Opinion Polls*. London: Market Research Society / British Polling Council.

The American Association for Public Opinion Research. 2016. "Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys (9th ed.)" [http://www.aapor.org/Standards-Ethics/Standard-Definitions-\(1\)](http://www.aapor.org/Standards-Ethics/Standard-Definitions-(1)).



Zach Warner is a Postdoctoral Research Fellow at the Centre for Political and Legal Analytics at Cardiff University and a consulting researcher at LAPOP.

Gabriel N. Camargo-Toledo is a Ph.D. Student in Political Science at Vanderbilt University.

This report was edited by Dr. Noam Lupu and Dr. Elizabeth J. Zechmeister. Auditing for this report was done by Gabriel N. Camargo-Toledo, Maita Schade, and Adam Wolsky. This report was translated by Dr. Juan Camilo Plata and Rubí Arana. Formatting, production, copy editing, graphics and report distribution were handled by Rubí Arana, Alexa Rains, Laura Sellers, and Dr. Zach Warner. Our data and reports are available for free download on the project website. Please follow us on Twitter or Facebook to stay in touch.

As a charter member of the American Association for Public Opinion Research (AAPOR) Transparency Initiative, LAPOP is committed to routine disclosure of our data collection and reporting processes. More information about the AmericasBarometer sample designs can be found at [vanderbilt.edu/lapop/core-surveys](http://vanderbilt.edu/lapop/core-surveys).

This *Methodological Note* is made possible by the support of the American People through the United States Agency for International Development (USAID) and Vanderbilt University. The contents of this *Methodological Note* are the sole responsibility of its authors and LAPOP and do not necessarily reflect the views of USAID, the United States Government or any other supporting organization. LAPOP's AmericasBarometer surveys are supported predominantly by USAID and Vanderbilt University. The 2016/17 round also had support from the IADB, the UNDP, the Open Society Foundations, and academic partners and researchers across the Americas.

[vanderbilt.edu/lapop](http://vanderbilt.edu/lapop)  
@lapop\_barometro  
@LatinAmericanPublicOpinionProject  
[lapop@vanderbilt.edu](mailto:lapop@vanderbilt.edu)  
+1-615-322-4033  
230 Appleton Place, PMB 505, Suite 304, Nashville, TN 37203, USA

