AmericasBarometer 2023

Technical Information

LAPOP LAB AmericasBarometer 2023 Survey Round

The 2023 AmericasBarometer represents the 10th round of LAPOP Lab main project, which marks a significant milestone in the realm of public opinion research in the Americas. Over the past decade, the Americas Barometer has emerged as a leading source of data, providing valuable insights into the political, social, and economic landscape of the region. With its rigorous methodology and extensive coverage, the survey has been instrumental in understanding the diverse perspectives and attitudes of citizens across Latin America and the Caribbean. The AmericasBarometer permits valid comparisons across countries, and time, via a common core questionnaire and standardized methods. Over the years, the AmericasBarometer have interviewed over 385,000 respondents across the region.

In the 2023 round of the AmericasBarometer, LAPOP Lab switched back to its conventional data collection mode (Face-to-Face household surveys). At the heart of the survey's methodology lies a robust and complex sample design. Following the methodology of previous rounds, the 2023 AmericasBarometer continues to use the sampling strategy introduced in the 2012 round of the surveys and also employed in the 2014, 2016/17 and 2018/19 rounds. This sample design continues to use, in almost all cases, the same stratification employed since 2004, adjusting where necessary when census information is updated. The sample design aims for representative results at the primary stratum level, accounting for urban/rural areas and the size of municipalities. This approach ensures a thorough and nuanced understanding of public opinion across different geographic and demographic segments. By stabilizing primary sampling unit (PSU) and cluster sizes and employing Probability Proportional to Size (PPS) method for PSU selection, the survey maximizes efficiency and minimizes intra-class correlation.

As in previous round of the Americas Barometer, we conducted web surveys in the U.S. and Canada. In Haiti and Nicaragua CATI interviews were conducted using Random-Digit Dialing (RDD) of mobile phone numbers.

The quality control process for the Americas Barometer 2023 round continues using the LAPOP's Fieldwork Algorithm for LAPOP Control over survey Operations and Norms (FALCON). FALCON gathers information about each interview such as recordings, interviewer images, question and

questionnaire timing, and interviewer performance indicators that are daily monitored during data collection to guarantee that each interview meet LAPOP Lab's quality control standards.

For the 2023 AmericasBarometer, LAPOP Lab collected data in 24 countries in the Americas, from January to August 2023. All country datasets and reports available for download for free at www.LapopSurveys.org.

Table 1: Sample sizes and Sampling errors in the 2023 AmericasBarometer

Country	Sample Size	Sampling Error[1]
Mexico	1,622	±2.43%
Guatemala	1,556	±2.48%
El Salvador	1,516	±2.52%
Honduras	1,602	±2.45%
Nicaragua	3,004	±1.79%
Costa Rica	1,527	±2.51%
Panama	1,532	±2.48%
Colombia	1,503	±2.53%
Ecuador	1,604	±2.45%
Bolivia	1,706	±2.37%
Peru	1,535	±2.50%
Paraguay	1,524	±2.51%
Chile	1,653	±2.41%
Uruguay	1,517	±2.51%
Brazil	1,526	±2.51%
Argentina	1,540	±2.50%
Dominican Republic	1,596	±2.43%
Haiti	1,611	±2.44%
Jamaica	1,521	±2.51%
Trinidad & Tobago	1,660	±2.41%
Belize	1,550	±2.48%
Suriname	1,539	±2.50%
Bahamas	1,577	±2.45%
Grenada	1,553	±2.50%
United States	1,500	±2.50%
Canada	2,500	±2.50%
Total	***43,074***	

[1] Confidence intervals based on unweighted sample sizes. For cross-national analysis purposes, LAPOP weights each sample to 1,500. These sampling errors are based on simple random samples and not adjusted for stratification and clustering. For information on the impact of the complex sample design on confidence intervals, see section VII of this document.

2023 AmericasBarometer Sample Design

Universe, Population, Unit of Observation

Universe: The surveys provide national coverage of voting age adults. The universe is comprised of the population living in urban and rural areas and it is representative at the national and regional level.

Target Population: The survey is designed to collect information from a probability sample of the voting-age citizens or permanent residents in each country. Only non-institutionalized voting age adults are eligible to participate in the survey. Therefore, the sample excludes people in boarding schools, hospitals, police academies, military barracks, and inmates of the country's jails.

Unit of Observation: Only one respondent is interviewed per household. The questionnaire almost exclusively includes topics focused on that single respondent, but also does include some questions related to other members of the household and the condition of the household itself. Thus, the statistical unit of observation is the household. However, some respondents live in dwellings that are shared with other households. For this reason, it is more appropriate to consider the dwelling as the final unit of analysis. Additionally, the dwelling is an easily identifiable unit in the field, with relative permanence over time, a characteristic that allows it to be considered as the final unit of selection.

Sampling frame

The sampling frame covers 100% of the eligible voting age population in the surveyed country. This means that every eligible person in the country has known, non-zero chance of being included in the survey sample. It also means that no ethnic group or geographical areas are excluded from the sampling frame unless the country sample design indicates otherwise. For example, certain Island areas and territories might be excluded. See the country study sample descriptions for such exceptions.

Sampling Method

The design corresponds to a **stratified multi-stage cluster sampling** in each country.

Stratification

Stratification is the process by which the population is divided into subgroups. Sampling is then conducted separately in each subgroup. Stratification allows subgroups of interest to be included in the sample whereas in a non-stratified sample some key subgroups may have been left out due to the random nature of the selection process. In an extreme case, samples that are not stratified can, by chance, exclude the nation's capital or largest city. Stratification helps us increase the precision of the sample. It reduces the sampling error. In a stratified sample, the sampling error depends on population variance within strata and not between them.

The AmericasBarometer samples are stratified on three factors:

1) Size of the Municipalities
2) Urban/Rural areas
3) Regions

The stratified sampling ensures a greater reliability in our sample by reducing the variance of the estimates. Stratification improves the quality of estimates, with the sole condition that the whole sample unit belongs to only one stratum, and the combine strata cover the total population. Stratification also enables us to ensure the inclusion in the sample of the most important geographic regions in the country while requiring geographic sample dispersion.

Selection of Respondents

A single respondent is selected in each household, following the frequency matching distribution programmed into the sample design, by gender and age, as mentioned above. Respondents are limited to household members who reside permanently in that household (thus excluding visiting relatives), who fit the age and residency requirements (limited to adult citizens and permanent residents). If two or more people of the same sex and age group were present in the household during the interview, the questionnaire is applied to the person who most recently celebrated a birthday (i.e., the "the last birthday" system).

2023 AmericasBarometer Survey: Weighting of country datasets

Most of the 2023 AmericasBarometer samples are self-weighted except for Bahamas, Brazil, Ecuador, Nicaragua, Haiti, Trinidad and Tobago, United States and Canada. Each country data set contains a variable called WT which is the "country weight" variable. In countries in which the sample is self-weighted, the value of each case = 1.

When using this dataset for cross-country comparisons, LAPOP reweights each country dataset in the merged files so that each country has an *n* of 1,500, with the purpose of giving each country an identical weight in the pooled sample. The weight variable for cross-country comparisons is called "weight1500." In SPSS, this is done via the "weight" command. Weights are already activated in SPSS datasets. In Stata, users must employ the svyset command to weight the data and declare the sampling information to correctly compute standard errors that account for design effects. The command for single country, single year studies is: svyset upm [pw=wt], strata(estratopri). For cross-country and/or cross-time studies, the command is: svyset upm [pw=weight1500], strata(strata). These declarations have been made in Stata datasets. However, users should utilize the svy prefix with estimation commands to compute the weighted statistics and correct standard errors (see help svy_estimation within Stata for more information).

Weighting by country for the 2023 round are reported in Table 2.

Table 2: Weighting by country, AmericasBarometer 2023 surveys

Country	AB2023
Mexico	Self-weighted
Guatemala	Self-weighted
El Salvador	Self-weighted
Honduras	Self-weighted
Nicaragua	Weighted
Costa Rica	Self-weighted
Panama	Self-weighted
Colombia	Self-weighted
Ecuador	Weighted
Bolivia	Self-weighted
Peru	Self-weighted
Paraguay	Self-weighted
Chile	Self-weighted
Uruguay	Self-weighted
Brazil	Weighted
Argentina	Self-weighted
Dominican Republic	Self-weighted
Haiti	Weighted
Jamaica	Self-weighted
Trinidad & Tobago	Weighted
Belize	Self-weighted
Suriname	Self-weighted
Bahamas	Weighted
Grenada	Self-weighted
United States	Weighted
Canada	Weighted

2023 AmericasBarometer Fieldwork dates

Fieldwork dates for each country for the 2023 round are reported in Table 3.

Table 3: Fieldwork dates by country, 2023 AmericasBarometer

Country	Fieldwork Start Date	Fieldwork End Date
Mexico	May 12, 2023	July 19, 2023
Guatemala	March 6, 2023	June 7, 2023
El Salvador	July 12, 2023	August 3, 2023
Honduras	June 16, 2023	August 9, 2023
Nicaragua	June 9, 2023	July 14, 2023
Costa Rica	July 19, 2023	August 20, 2023
Panama	July 20, 2023	August 21, 2023
Colombia	May 16, 2023	July 12, 2023
Ecuador	February 15, 2023	April 6, 2023
Bolivia	April 21, 2023	May 25, 2023
Peru	March 15, 2013	April 28, 2023
Paraguay	February 4, 2023	March 22, 2023
Chile	June 8, 2023	August 13, 2023
Uruguay	April 15, 2023	June 28, 2023
Brazil	June 6, 2023	July 4, 2023
Argentina	May 31, 2023	July 21, 2023
Dominican Republic	April 17, 2023	June 3, 2023
Haiti	May 4, 2023	June 5, 2023
Jamaica	July 7, 2023	September 5, 2023
Trinidad & Tobago	March 10, 2023	April 28, 2023
Belize	September 13, 2023	October 31, 2023
Suriname	March 25, 2023	May 18, 2023
Bahamas	March 13, 2023	July 19, 2023
Grenada	February 28, 2023	July 15, 2023
United States	July 21, 2023	July 26, 2023
Canada	July 20, 2023	August 4, 2023

2023 Americas Barometer Response Rates

In this section we present the survey response rates.[2] The AmericasBarometer response rates are based on AAPOR's Standard Definitions. The response rate is the number of complete interviews with reporting units divided by the number of eligible reporting units in the sample. LAPOP Lab

[2] For additional information on how response rates are estimated, see LAPOP's Methodological Note: "How Does LAPOP Calculate Response Rates?" By Zachary Warner and Gabriel Camargo-Toledo (June 2019). Available at: https://www.vanderbilt.edu/lapop/methods-005rev.pdf

has programmed in STG a module that permits the accurate recording of the number of refusals, ineligible respondents, or non-contact. This in turn allows for estimating the response rates in each country. Two definitions of response rates are provided below, ranging from the definition that yields the lowest rate to the definition that yields the highest rate, depending on how partial interviews are considered and how cases of unknown eligibility are handled.

Response rates reported below are:

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

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

Where: where C refers to completed interviews, P to partial interviews, R to refusals, N for non-contacts, O for others, UH for unknown if household, UO to unknown others, and e is the eligibility rate calculated using the CASRO method: e=Eligible/(Eligible + Ineligible).

Table 4: Response Rates in the 2023 Americas Barometer Survey by Country

	AB202023		
Country	RR1	RR3	Eligibility
Mexico	19.6	31.1	52.8
Guatemala	39.6	43.1	86.1
El Salvador	7.3	10.6	66.2
Honduras	23.0	36.3	51.9
Nicaragua*	8.9	9.8	89.5
Costa Rica	9.2	22.4	34.9
Panama	35.0	40.9	77.3
Colombia	31.7	39.1	71.9
Ecuador	14.5	26.2	46.8
Bolivia	15.6	22.7	62.0
Peru	13.3	28.6	38.0
Paraguay	28.5	39.0	61.4
Chile	39.0	42.0	88.2
Uruguay	12.7	24.9	43.8
Brazil	28.1	32.5	80.9
Argentina	8.8	23.8	30.4
Dominican Republic	19.0	48.0	24.6
Haiti*	6.6	10.6	58.2
Jamaica	27.9	35.0	71.5
Trinidad & Tobago***	--	--	--
Belize	34.9	42.0	73.3
Suriname	42.0	51.3	67.8
Bahamas	27.2	31.4	80.7
Grenada	56.0	59.7	85.6
United States**	-	44.3	-
Canada**	9.9	9.9	10.9

*CATI surveys
**CAWI surveys
*** Disposition codes not registered in Trinidad and Tobago in 2023

2023 Americas Barometer Sampling Points Substitutions

During fieldwork, local teams sometimes request the substitution of a selected sampling point if they believe interviewers might be at risk or local conditions make data collection impossible. These requests are unavoidable and may introduce bias if they are not implemented correctly.[3] For that reason, any substitution request must be made in writing to LAPOP lab and include a

[3] See LAPOP Lab Methodological Note #006 "Sample Substitutions in the AmericasBarometer 2016/17" by F. S. Kobilanski, G. Pizzolitto, and M. Seligson for more information.

detailed justification for the request. After reviewing the request, LAPOP works to identify a replacement sampling point. The LAPOP substitution protocol calls for ensuring, to the degree possible, that candidates for replacement are in an area with a similar population size, similar level of urbanization, and similar socioeconomic characteristics as the original selection. In addition, replacement sampling points must be within the same primary sampling unit (PSU) and ideally share the same census sector and segment. If multiple similar candidate sampling replacements are identified, a replacement is randomly selected from among them.

Table 5 offers another perspective on substitutions in the 2023 round of the AmericasBarometer by country.

Table 5: Substitution Requests in the 2023 Americas Barometer Survey by Country

Country[4]	Number of clusters	Number of interviews
Mexico	8	48
Guatemala	16	96
El Salvador	4	24
Honduras	16	96
Nicaragua	N/A	N/A
Costa Rica	0	0
Panama	15	90
Colombia	0	0
Ecuador	0	0
Bolivia	4	24
Peru	6	36
Paraguay	2	12
Chile	25	150
Uruguay	2	12
Brazil	22	132
Argentina	4	24
Dominican Republic	0	0
Haiti	N/A	N/A
Jamaica	0	0
Trinidad & Tobago	3	18
Belize	1	6
Suriname	4	24
Bahamas	4	24
Grenada	0	0
United States	N/A	N/A
Canada	N/A	N/A
Total	136	816

[4] Nicaragua and Haiti are CATI surveys while the United States and Canada are online surveys. No substitutions are done in these surveys.

The most common justification for substituting a sampling point is concern over the security of the interviewers, insufficient number of households, insufficient participation (high levels of non-response), poor infrastructure that generate difficulties to access very remote areas, and inclement weather conditions (mainly floodings - i.e., in Peru).

2023 AmericasBarometer Survey Design Effects

Survey Error

Two types of errors affect all surveys: non-sampling and sampling errors. Non-sampling errors are usually made during questionnaire design, data collection, and processing. These errors can be mitigated by using a valid and reliable measuring instrument, adequately training fieldwork personnel, supervising, and monitoring fieldwork, and using appropriate software for data collection and processing. Non-sampling errors are difficult to quantify, although comparing the sample results with those of the population is one way to assess whether these errors have generated biases that might reduce or even invalidate the representativeness of the sample. The use of electronic handheld devices in AmericasBarometer fieldwork helps reduce non-sampling errors by providing the capacity to monitor the implementation of the survey in real and quasi-real time. Through geo-fencing, for example, we can determine whether interviews are conducted in the correct geographic area. Additionally, by eliminating the separate process of data entry (necessary when interviews are recorded on paper and then transferred to an electronic medium), we prevent the inevitable errors that this activity generates from happening. Perhaps most importantly, with paper questionnaires computer-based consistency checks can only be run several weeks after the data are collected. Correcting errors post hoc is difficult or impossible given the separation in time and space between the moment an interview is conducted on paper and the later time at which the problem is detected.

Sampling errors, on the other hand, are a product of the design itself, a product of chance, and the inevitable result of the process of surveying a sample and not the entire population. All modern survey research relies on drawing a sample from the population and, therefore, all such surveys suffer from sampling errors. When a sample is drawn, this sample is one of many possible samples that could have been selected from the population. The variability that exists across all these possible samples is the sampling error, which we could measure if all these samples were available. However, that is impossible, since short of interviewing the entire national sample (for example, some 200 million Brazilians), the number of samples that could be drawn is infinite. In practice, sampling error is estimated over the variance obtained from the sample itself. To estimate the sampling error of a statistic (average, percentage, or ratio), we calculate the standard error, which is the square root of the population variance of the statistic. This allows us to measure how close the statistic is to the result that would have been obtained if the entire population were interviewed under the same conditions.

To calculate this error, it is important to consider the specific (complex) design through which the sample was drawn. The design effect (DEFT) in the formula below indicates the efficiency of the design used in relation to an unrestricted random sampling design (URS). A value of 1 indicates that the standard error (SE) obtained for both designs (the complex and the URS) is equal; that is, in this case the complex sampling is as efficient as the URS with the same-sized sample. If the value is greater than 1, the complex sampling produces a SE greater than that obtained with a URS.

$$DEFT = SEcomplex \ / \ SEURS$$

Table 6 shows, for each of 4 measures from the survey instrument, the value of the statistic in question (average or percentage) and the design effect (DEFT) that we calculate for the 2023 round of the AmericasBarometer. The table also reports the design effects of the 2018/19 round for the same variables. The SEs were estimated using Stata 17 software. Extreme values, when they are encountered, come from a high degree of homogeneity within each cluster. In other words, in these cases there is an important spatial segregation of people according to their socioeconomic condition, which reduces the efficiency of cluster sampling (one aspect of the complex design) to measure these characteristics/attitudes.

It is worth noting that, in the case of a standard survey in which a complex design is applied to draw the sample, the sampling error is usually 10% to 40% greater than that which would have been obtained with unrestricted (and extremely costly) random sampling. In general, for a well-designed study, the design effect usually ranges from 1 to 3. In the case of the 2023 AmericasBarometer, the typical sampling error is lower. For example, in the case of Costa Rica, the Support for Democracy (ing4) has a sampling error of 1.11. This means that the 95% confidence interval (1.96 times the SE) for the average of this variable (5.25) goes from 5.17 to 5.35. According to the DEFT of the table, this interval is 11% greater than that which would have been obtained with a URS (see Table 1). In short, we are pleased to report that the design effects in our 26-country, hemisphere-wide survey are very low. Only rarely do we find (in the table below) design effects above 1.5.

Table 3. Design Effects, 2023 AmericasBarometer Survey

Country	lng4r				it1r			
	2023			2018/19 Round	2023			2018/19 Round
	Average	Std. Error	DEFT	DEFT	Average	Std. Error	DEFT	DEFT
Mexico	64.39	0.77	1.20	1.20	54.62	1.02	1.26	1.46
Guatemala	57.33	0.79	1.16	1.00	50.84	1.03	1.24	1.20
El Salvador	62.03	0.64	0.94	1.09	59.64	0.88	1.04	1.21
Honduras	53.36	0.74	0.93	0.92	57.02	1.06	1.16	1.07
Nicaragua	57.75	0.83	1.01	1.04	52.50	0.95	1.08	0.99
Costa Rica	72.25	0.84	1.18	1.18	64.15	1.21	1.47	1.68
Panama	60.03	0.73	0.98	1.13	51.73	1.02	1.25	1.15
Colombia	64.23	0.80	1.17	1.04	61.70	1.31	1.66	1.54
Ecuador	59.90	0.61	0.94	1.25	51.89	0.95	1.22	1.10
Bolivia	56.87	0.72	1.08	1.09	47.52	0.81	1.13	1.16
Peru	57.41	0.67	1.04	1.40	45.94	0.95	1.27	1.43
Paraguay	58.83	0.91	1.25	0.99	60.91	0.97	1.17	1.36
Chile	67.37	0.69	1.01	1.11	59.95	0.93	1.21	1.25
Uruguay	76.83	0.91	1.26	1.43	64.66	1.19	1.59	1.45
Brazil	64.09	0.95	1.22	0.95	48.95	1.04	1.25	1.12
Argentina	72.46	0.94	1.24	1.13	61.77	0.96	1.28	1.28
Dominican Rep.	62.46	0.59	0.76	1.13	57.05	0.95	1.12	1.00
Jamaica	58.41	0.80	0.93	0.96	55.90	1.05	1.31	1.25
United States	74.25	0.74	1.07	1.32	65.02	0.66	1.08	1.30
Canada	73.14	0.65	1.06	1.09	67.02	0.58	1.05	1.09

Table 3. Design Effects, 2023 AmericasBarometer Survey (cont.)

Country	m1				PSA5			
	2023			2018/19 Round	2023			2018/19 Round
	Average	Std. Error	DEFT	DEFT	Average	Std. Error	DEFT	DEFT
Mexico	2.12	0.03	1.29	1.07	58.92	0.71	1.24	1.09
Guatemala	3.46	0.04	1.36	1.36	49.16	0.84	1.42	1.38
El Salvador	1.87	0.03	1.21	1.10	68.68	0.75	1.32	0.97
Honduras	3.26	0.04	1.38	1.31	47.16	0.89	1.36	1.27
Nicaragua	3.41	0.03	1.19	1.42	43.12	1.09	1.20	1.27
Costa Rica	2.46	0.03	1.27	1.12	64.73	0.56	1.05	0.94
Panama	3.44	0.03	1.26	1.49	49.87	0.83	1.33	1.22
Colombia	3.26	0.04	1.28	1.60	46.81	0.75	1.19	1.46
Ecuador	3.72	0.03	1.06	1.24	46.16	0.67	1.13	1.23
Bolivia	3.16	0.04	1.61	1.42	45.64	0.78	1.37	1.36
Peru	3.79	0.03	1.19	1.03	41.08	0.74	1.23	1.24
Paraguay	3.23	0.04	1.30	1.35	42.60	0.75	1.23	1.14
Chile	3.35	0.03	1.17	1.09	46.15	0.62	1.10	1.13
Uruguay	2.84	0.04	1.29	1.09	59.75	0.74	1.21	1.11
Brazil	2.80	0.04	1.24	1.28	46.60	0.71	1.11	1.25
Argentina	3.60	0.03	1.18	1.10	46.54	0.78	1.26	1.31
Dominican Republic	2.80	0.03	1.18	0.98	51.21	0.78	1.17	1.09
Haiti	4.47	0.03	1.43	--	32.88	1.03	1.44	--
Jamaica	2.97	0.04	1.31	1.44	42.89	0.74	1.03	1.16
Trinidad & Tobago	3.29	0.03	1.21	--	39.67	0.56	0.94	--
Belize	3.02	0.03	1.16	--	52.83	0.83	1.31	--
Suriname	4.30	0.02	1.08	--	42.93	0.62	1.11	--
Bahamas	2.59	0.03	1.03	--	51.78	0.65	1.02	--
Grenada	2.29	0.03	1.26	--	60.46	0.66	1.15	--
United States	3.30	0.04	1.08	1.09	54.66	0.69	1.12	1.11
Canada	3.21	0.03	1.16	1.05	61.11	0.55	1.16	1.06