

AmericasBarometer 2023: Nicaragua

Technical Information

Country	Year	Sample Size	Weighted/Unweighted	Fieldwork dates
Nicaragua	2023	3,004	Weighted	June 9 th -July 14 th , 2023

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 sample 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, making adjustments 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 online surveys in the U.S. and Canada. In Haiti and Nicaragua CATI interviews were conducted using Random-Digit Dialing (RDD) using mobile phone numbers as sampling frames.

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.

The remaining pages of this technical note describe the sample design of the 2023 AmericasBarometer CATI survey in Nicaragua.

2023 AmericasBarometer: Nicaragua

This survey was carried out between June 9th and July 14th, 2023, as part of LAPOP's 2023 AmericasBarometer. It is a follow up to LAPOP's AmericasBarometer Nicaragua surveys of 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2019 and 2021. The 2023 survey fieldwork was carried out by Cid-Gallup on behalf of LAPOP. Key funding came from USAID and Vanderbilt University.

Questionnaire cognitive pretesting took place on April 11th to April 13th, 2023, and interviewer training took place on May 8th and 9th, 2023. Pilot surveys were conducted on May 10th, 2023. A full copy of the 2023 AmericasBarometer Nicaragua questionnaire can be found at LAPOP's website at www.LapopSurveys.org.

The survey collects information from a nationally representative sample of voting-age respondents, who are 16 years of age or older, are citizens or permanent residents of Nicaragua and have access to a functioning mobile phone. The study excludes individuals with no access to mobile phones or with only landline phones. Participation in the AmericasBarometer survey is voluntary.¹ Eligible respondents who agree to participate in the survey are administered the questionnaire after giving their consent to interviewers.²

The sampling frame corresponds to all possible mobile phone numbers available in the country, drawn from the National Telephone Numbering System. A sample with 300,000 mobile phone numbers was generated by the firm. The survey firm used an automatic dialing system to call the mobile phone numbers. LAPOP Lab approved a final dataset of 3,004 complete interviews. All calls were conducted in Spanish and data was collected with STG.

¹ No incentives (cash or in-kind) are provided to respondents for participating in the survey.

² For the purpose of an informed consent process, interviewers are required to read a letter containing details about the study and participation before starting the interview.

With a confidence level for the national unweighted sample at 95 percent, the estimated margin of error is 1.79 percent, assuming a 50/50 response distribution on dichotomous variables.

The mobile phone number is the final unit of selection. In other words, the survey is conducted with any eligible individual who answers the call. Interviewers calling mobile phone numbers screen informants who answer the call to determine their eligibility. The study excludes business-only mobile phones.³

LAPOP Lab instructed interviewers to call during business hours and on weekends, except when the potential respondent requested an appointment outside that timeframe. Callbacks after unsuccessful attempts were staggered over times of day and days of the week to maximize the chance of contacting informants and to minimize nonresponse. If no one was available to answer our call, we instructed interviewers to call back at least 4 times before a final disposition was made for that number.

Weighting of the Nicaragua datasets

The dataset contains a variable called “wt” which is the “country weight” variable. Since in the case of 2023 Americas Barometer Survey in Nicaragua is weighted, the variable “wt” must be used in the estimations. Table 1 shows the unweighted sample size in each of the regions (strata) and by demographic characteristics.

³ A screening question was included in the questionnaire to identify business-only cellphones.

**Table 1: Weighted and Unweighted Distributions
2023 AmericasBarometer Survey in Nicaragua**

	Unweighted Distribution	Weighted Distribution
Strata		
Metropolitana	654	729
Centro	569	419
Norte	561	459
Pacífico Norte	408	464
Pacífico Sur	484	508
Caribe	276	370
Missing	52	56
Age groups		
16-25	776	795
26-35	1,237	1,072
36-45	596	484
46-55	238	394
56-65	113	179
66+	44	79
Gender		
Male	1,220	1,487
Female and Non- binary	1,774	1,506
Missing	10	11
Education		
No education	97	145
Primary	616	805
Secondary	1,598	1,443
University	675	587
Missing	18	25

When using this dataset for cross-country comparisons, LAPOP reweights each country data set in the merged files so that each country has an N of 1,500. 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, the svyset command to weight the data and declare the sampling information to correctly compute standard errors that take into account the design effects is as follows: for single country, single year studies, the command is **svyset upm [pw=wt], strata(strata)**; for cross-country and/or cross-time studies, the command is **svyset upm [pw=weight1500], strata(strata)**. Stata datasets are preset; however, users must use the svy prefix

with estimation commands to compute the weighted statistics and correct standard errors (see **help svy_estimation** within Stata for more information).

Quality Control in Nicaragua

In the 2023 AmericasBarometer, Quality Control was based on FALCON-CATI© (Fieldwork Algorithm for LAPOP’s Control over Survey Operations and Norms). It includes, but is not limited to, an interviewer identity monitoring check, time checks, a reading control check, and data fabrication and falsification audits. The system also includes a quality control score that assigns penalties (or demerits) to interviews during the audit. In this system, higher scores indicate more serious errors, and we refuse to accept (that is, we require the cancelation of) low quality interviews.

The local firm audited 100% of interviews. All interviews were also run through LAPOP’s automatic flagging system, and then LAPOP’s team manually audited a subset of the interviews. A total of 90 interviews were canceled in Nicaragua in the 2023 AmericasBarometer. The most predominant reasons for canceling an interview were interviewers offering an interpretation of questions, not reading questions completely or correctly, and skipping questions. There were 55 incomplete/early termination interviews.

Response Rates in Nicaragua

In this section we present the survey response rates.⁴ 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 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:

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

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

⁴ 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>

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: $e = \text{Eligible} / (\text{Eligible} + \text{Ineligible})$.

Table 2: Response Rates in the 2023 Americas Barometer Survey by Country

Country	RR1 (%)	RR3 (%)
Argentina	8.8	23.8
Bahamas	27.2	31.4
Belize	34.9	42.0
Bolivia	15.6	22.7
Brazil	28.1	32.5
Chile	39.0	42.0
Colombia	31.7	39.1
Costa Rica	9.2	22.4
Dominican Republic	19.0	48.0
Ecuador	14.5	26.2
El Salvador	7.3	10.6
Grenada	56.0	59.7
Guatemala	39.6	43.1
Haiti*	6.6	10.6
Honduras	23.0	36.3
Jamaica	27.9	35.0
Mexico	19.6	31.1
Nicaragua*	8.9	9.8
Panama	35.0	40.9
Paraguay	28.5	39.0
Peru	13.3	28.6
Suriname	42.0	51.3
Trinidad & Tobago**	--	--
Uruguay	12.7	24.9
LAC REGION	16.1	25.2

* Response rates based on CATI surveys in Haiti and Nicaragua

** Disposition codes not registered in Trinidad and Tobago in 2023

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