

## Methodology

### The American Trends Panel survey methodology

The American Trends Panel (ATP), created by Pew Research Center, is a nationally representative panel of randomly selected U.S. adults. Panelists participate via self-administered web surveys. Panelists who do not have internet access at home are provided with a tablet and wireless internet connection. The panel is being managed by Ipsos.

Data in this report is drawn from the panel wave conducted June 16 to June 22, 2020. A total of 4,708 panelists responded out of 6,080 who were sampled, for a response rate of 77%. This does not include one panelist who

was removed from the data due to extremely high rates of refusal or straightlining. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 4.3%. The break-off rate among panelists who logged on to the survey and completed at least one item is 1.4%. The margin of sampling error for the full sample of 4,708 respondents is plus or minus 1.9 percentage points.

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#### American Trends Panel recruitment surveys

Recruitment dates	Mode	Invited	Joined	Active panelists remaining
Jan. 23 to March 16, 2014	Landline/ cell RDD	9,809	5,338	2,307
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	1,335
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	684
Aug. 8 to Oct. 31, 2018	ABS/web	9,396	8,778	6,407
Aug. 19 to Nov. 30, 2019	ABS/web	5,900	4,720	4,682
	<b>Total</b>	<b>35,014</b>	<b>23,440</b>	<b>15,415</b>

Note: Approximately once per year, panelists who have not participated in multiple consecutive waves or who did not complete an annual profiling survey are removed from the panel. Panelists also become inactive if they ask to be removed from the panel.

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This study featured a stratified random sample from the ATP. The sample was allocated according to the following strata, in order: tablet households, Mexican-born Hispanics, U.S.-born Hispanics, other foreign-born Hispanics, Cuban-born Hispanics, non-internet, high school education or less, not registered to vote, nonvolunteers, people ages 18 to 34, non-Hispanic Black adults, and all other categories not already falling into any of the above.

The ATP was created in 2014, with the first cohort of panelists invited to join the panel at the end of a large, national, landline and cellphone random-digit-dial survey that was conducted in both English and Spanish. Two additional recruitments were conducted using the same method in 2015 and 2017, respectively. Across these three surveys, a total of 19,718 adults were invited to join the ATP, of whom 9,942 agreed to participate.

In August 2018, the ATP switched from telephone to address-based recruitment. Invitations were sent to a random, address-based sample (ABS) of households selected from the U.S. Postal Service's Delivery Sequence File. In each household, the adult with the next birthday was asked to go online to complete a survey, at the end of which they were invited to join the panel. For a random half-sample of invitations, households without internet access were instructed to return a postcard. These households were contacted by telephone and sent a tablet if they agreed to participate. A total of 9,396 were invited to join the panel, and 8,778 agreed to join the panel and completed an initial profile survey. The same recruitment procedure was carried out on August 19, 2019, from which a total of 5,900 were invited to join the panel and 4,720 agreed to join the panel and completed an initial profile survey. Of the 23,440 individuals who have ever joined the ATP, 15,415 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

The U.S. Postal Service's Delivery Sequence File has been estimated to cover as much as 98% of the population, although some studies suggest that the coverage could be in the low 90% range.<sup>1</sup> The American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

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<sup>1</sup> AAPOR Task Force on Address-based Sampling. 2016. "[AAPOR Report: Address-based Sampling](#)."

## Weighting

The ATP data was weighted in a multistep process that begins with a base weight incorporating the respondents' original selection probability. The next step in the weighting uses an iterative technique that aligns the sample to population benchmarks on the dimensions listed in the accompanying table. Analyses of participation in the 2020 decennial census also align the sample to an additional dimension for what the census has reported as of July 13, 2020.<sup>2</sup>

Sampling errors and test of statistical significance take into account the effect of weighting. Interviews are conducted in both English and Spanish.

In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

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## Weighting dimensions

Variable	Benchmark source
Gender	2018 American Community Survey
Age	
Education	
Race/Hispanic origin	
Born inside vs. outside the U.S. among Asians	
Country of birth among Hispanics	
Years lived in the United States	
Home internet access	
Region x Metropolitan status	2019 CPS March Supplement
Volunteerism	2017 CPS Volunteering & Civic Life Supplement
Voter registration	2018 CPS Voting and Registration Supplement
Party affiliation	Average of the three most recent Pew Research Center telephone surveys.
2020 Decennial Census participation	2020census.gov response rates

Note: Estimates from the ACS are based on non-institutionalized adults. Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total U.S. adult population.

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<sup>2</sup> As of July 13, the national self-response rate given at <https://2020census.gov/en/response-rates.html> is 62%, which includes nonexistent addresses and vacant units in the denominator. In 2010, this rate was reported at 63.5%, while the rate after removing invalid units was reported to be 75.8%. Thus, under the assumption that the proportion of invalid units in 2020 is similar to in 2010, the final target is:  $62 * (75.8/63.5) = 74\%$ .

The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey:

<b>Group</b>	<b>Unweighted sample size</b>	<b>Plus or minus ...</b>
Total sample	4,708	1.9 percentage points
Rep/Lean Rep	1,359	2.7 percentage points
Dem/Lean Dem	1,285	2.6 percentage points
Non-Hispanic white	3,120	2.1 percentage points
Non-Hispanic Black	474	5.8 percentage points
Hispanic	742	5.6 percentage points
Ages 18-29	607	5.2 percentage points
30-49	1,453	3.3 percentage points
50-64	1,449	3.3 percentage points
65+	1,175	3.4 percentage points
Male	2,041	2.9 percentage points
Female	2,659	2.4 percentage points

Sample sizes and sampling errors for other subgroups are available upon request.

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