

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 are drawn from the panel wave conducted Sept. 24-Oct. 7, 2018. A total of 10,683 panelists responded out of 13,493 who were sampled, for a response rate of 79%. The cumulative response rate

accounting for nonresponse to the recruitment surveys and attrition is 3.8%. The margin of sampling error for the full sample of 10,683 respondents is plus or minus 1.5 percentage points. Individuals who refused to provide addresses are dropped. In the end, the sample size is 10,600.

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 which 9,942 agreed to participate.

In August 2018, the ATP switched from telephone to mail 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. As of

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	2,756
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	1,639
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	1,075
Aug. 8, 2018-Ongoing	ABS/web	8,611	8,023	8,023
	Total	28,329	17,965	13,493

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. The number of active panelists in this table reflects the state of the panel on Sept. 17, 2018.

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Sept. 17, 2018, a total of 8,611 had been invited to join the panel, and 8,023 agreed to join the panel and completed an initial profile survey.

Of the 17,965 individuals who have ever joined the ATP, 13,493 remain active panelists and continue to receive survey invitations.

Weighting

The ATP data were weighted in a multistep process that begins with a base weight incorporating the respondents' original survey selection probability and the fact that in 2014 and 2017 some panelists were subsampled for invitation to the panel. For panelists recruited prior to 2018, an adjustment was made for the fact that the propensity to join the panel and remain an active panelist varied across different groups in the sample. No adjustment was made for new panelists from the 2018 recruitment. The final step in the weighting uses an iterative technique that aligns the sample to population benchmarks on the dimensions listed in the accompanying table.

Sampling errors and statistical-significance tests take into account the effect of weighting. Interviews are conducted in both English and Spanish, but the American Trends Panel's Hispanic sample is predominantly native born and English speaking.

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.

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:

Group	Unweighted sample size	Plus or minus ...
Total sample	10,600	1.5 percentage points
Urban	2,692	3.0 percentage points
Suburban	5,458	2.1 percentage points
Rural	2,422	3.1 percentage points

Weighting dimensions

Variable	Benchmark source
Gender	2016 American Community Survey
Age	
Education	
Race/Hispanic origin	
Region x Metropolitan status	2017 CPS March Supplement
Volunteerism	2015 CPS Volunteer Supplement
Voter registration	2016 CPS Voting and Registration Supplement
Party affiliation	Average of the three most recent Pew Research Center telephone surveys.
Internet access	2018 Pew Research Center internet core trends telephone survey

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 US adult population.

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

Travel distance and time calculation

The linear distance calculation between respondents and the list of hospitals is processed by using the Distance function from Django's gis library. The Distance function takes the coordinates of each respondent's address and the addresses of hospitals and returns distances that take into account the curvature of Earth. Researchers then select the hospital with the shortest linear distance to the respondent and use the Google Maps API to estimate driving time and driving distance and better reflect local travel patterns.

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