# 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 July 22 to August 4, 2019. A total of 4,175 panelists responded out of 5,766 who were sampled, for a response rate of 72%. This does

not include 12 panelists who were 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 5.1%. The break-off rate among panelists who logged onto the survey and completed at least one item is 1.6%. The margin of sampling error for the full sample of 4,175 respondents is plus or minus 1.9 percentage points.

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	2,499			
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	1,463			
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	799			
Aug. 8, 2018–Oct. 31, 2018	ABS/web	9,396	8,778	8,670			
	Total	29,114	18,720	13,431			

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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The subsample from the ATP was selected by grouping panelists into five strata so demographic groups that are underrepresented in the panel had a higher probability of selection than overrepresented groups:

- Stratum A consists of panelists who are non-internet users. They were sampled at a rate of 100%.
- Stratum B consists of panelists with a high school education or less. They were sampled at a rate of 98.6%.
- Stratum C consists of panelists that are Hispanic, unregistered to vote, or non-volunteers. They were sampled at a rate of 41.5%.

- Stratum D consists of panelists that are black or 18-34 years old. They were sampled at a rate of 20.4%.
- Stratum E consists of the remaining panelists. They were sampled at a rate of 15%.

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 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. Of the 18,720 individuals who have ever joined the ATP, 13,431 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.

To calculate the distance to the nearest abortion clinic, respondents' addresses were geocoded and combined with the ANSIRH Abortion Facility Database (2018). The minimum distance between each respondent's address and the nearest abortion clinic was calculated using the spherical law of cosines approximation.

### 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 respondents were subsampled for invitation to the panel. 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.

Sampling errors and test of statistical-significance 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 U.S. 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.

### Weighting dimensions

# Variable Benchmark source Gender Age 2017 American Community Survey

Race/Hispanic origin Hispanic nativity Home internet

Education

access	
Region x Metropolitan status	2018 CPS March Supplement
Volunteerism	2017 CPS Volunteering & Civic Life Supplement
Voter registration	2016 CPS Voting and Registration Supplement
Party affiliation	Average of the three most recent Pew Research Center telephone surveys.

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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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> Total sample	Unweighted sample size 4.175	Weighted percentage	Plus or minus 1.9 percentage points
rotal sample	4,175		1.9 percentage points
Rep/Lean Rep	1,789	44	2.9 percentage points
Dem/Lean Dem	2,239	52	2.6 percentage points
Distance to nearest abortion clinic			
<5 miles	1,379	34	3.3 percentage points
5-25 miles	1,628	39	3.0 percentage points
25-50 miles	554	13	5.3 percentage points
50+ miles	602	14	5.0 percentage points

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

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