## 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 GfK.

Data in this report are drawn from the panel wave conducted September 24-October 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.

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

American Trends Panel recruitment surveys

| Recruitment Dates | Mode <br> Landline/ | Invited | Joined | Active <br> panelists <br> remaining |
| :--- | :---: | :---: | :---: | :---: |
| Jan. 23 to March 16, 2014 | cell RDD | 9,809 | 5,338 | 2,756 |
| Aug. 27 to Oct. 4, 2015 | Landline/ <br> cell RDD | 6,004 | 2,976 | 1,639 |
|  | Landline/ |  | 3,905 | 1,628 |
| April 25 to June 4, 2017 | cell RDD | 1,075 |  |  |
| Aug. 8, 2018-Ongoing | ABS/web | 8,611 | 8,023 | 8,023 |
|  | Total | $\mathbf{2 8 , 3 2 9}$ | $\mathbf{1 7 , 9 6 5}$ | $\mathbf{1 3 , 4 9 3}$ |

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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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 halfsample 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 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.

Weighting dimensions

| Variable | Benchmark source |
| :---: | :---: |
| Gender | 2016 American |
| Age | Community Survey |
| 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 <br> 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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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 | 10,683 | 1.5 percentage points |
| 18-49 | 5,018 | 2.2 percentage points |
| 50+ | 5,660 | 2.1 percentage points |
| Less than \$30K | 1,861 | 3.6 percentage points |
| \$30K-\$74,999 | 3,537 | 2.6 percentage points |


| $\$ 75 \mathrm{~K}$ or more | 4,681 | 2.3 percentage points |
| :--- | :---: | :---: |
| White, non-Hispanic | 7,796 | 1.8 percentage points |
| Black, non-Hispanic | 999 | 4.9 percentage points |
| Hispanic | 1,066 | 4.8 percentage points |

Sample sizes and sampling errors for other subgroups are available upon request.
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## 2018 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL WAVE 38 SEPTEMBER <br> FINAL TOPLINE <br> SEPTEMBER 24 - OCTOBER 72018 <br> TOTAL $\mathbf{N}=10,683$

ASK FORMS 1 AND 4 ONLY [N=5,376]:
SHOP18
Now thinking about ALL of the purchases you make in a typical week (including things like groceries, gas, services, or meals) how many do you pay for using cash?

| Sep 24- <br> Oct 7 |  | Nov 24- |
| :---: | :--- | :---: |
| $\frac{2018}{18}$ | All or almost all | $\frac{2015}{24}$ |
| 52 | Some | 51 |
| 29 | None | 24 |
| 1 | No Answer | 1 |

## ASK FORMS 1 AND 4 ONLY [N=5,376]:

## SHOP19

Which of the following statements best describes you?

| Sep 24- <br> Oct 7 <br> $\frac{2018}{5}$ | I try to make sure that I always have cash with me, just in <br> case I need it | Nov 24- <br> Dec 21 <br> I |
| :---: | :--- | :---: |
| 46 | I don't really worry much about whether or not I have cash <br> with me -- there are lots of other ways to pay for things these <br> days | 60 |

