# Methodology

# The American Trends Panel survey methodology

### **Overview**

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. Interviews are conducted in both English and Spanish. The panel is being managed by Ipsos.

Data in this report is drawn from the ATP Wave 93 conducted July 26 to Aug. 8, 2021. A total of 11,178 panelists responded out of 12,632 who were sampled, for a response rate of 88%. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 3%. The break-off rate among panelists who logged on to the survey and completed at least one item is 1%. The margin of sampling error for the full sample of 11,178 respondents is plus or minus 1.4 percentage points.

### **Panel recruitment**

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 (50%) agreed to participate.

In August 2018, the ATP switched from telephone to

Mode	Invited	Joined	panelists remaining
Landline/ cell RDD	9,809	5,338	1,691
Landline/ cell RDD	6,004	2,976	988
Landline/ cell RDD	3,905	1,628	500
ABS	9,396	8,778	4,687
ABS	5,900	4,720	1,752
ABS	3,197	2,812	2,067
ABS	1,085	947	947
Total	39,296	27,199	12,632
	Landline/ cell RDD Landline/ cell RDD Landline/ cell RDD ABS ABS ABS	Landline/ cell RDD 9,809  Landline/ cell RDD 6,004  Landline/ cell RDD 3,905  ABS 9,396  ABS 5,900  ABS 3,197  ABS 1,085	Landline/ cell RDD 9,809 5,338  Landline/ cell RDD 6,004 2,976  Landline/ cell RDD 3,905 1,628  ABS 9,396 8,778  ABS 5,900 4,720  ABS 3,197 2,812  ABS 1,085 947

Active

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 2021 recruitment survey was ongoing at the time W93 was conducted. The counts reflect completed recruitment interviews up through July 7, 2021.

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address-based recruitment. Invitations were sent to a random, address-based sample of households selected from the U.S. Postal Service's Delivery Sequence File. Three additional recruitments were conducted using the same general method in 2019, 2020 and 2021. Across these four address-based recruitments, a total of 19,578 adults were invited to join the ATP, of whom 17,257 agreed to join the panel and completed an initial profile survey. 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. Of the 27,199 individuals who have ever joined the ATP, 12,632 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. The American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

## Sample design

The overall target population for this survey was non-institutionalized persons ages 18 and older, living in the U.S., including Alaska and Hawaii.

### Questionnaire development and testing

The questionnaire was developed by Pew Research Center in consultation with Ipsos. The web program was rigorously tested on both PC and mobile devices by the Ipsos project management team and Pew Research Center researchers. The Ipsos project management team also populated test data which was analyzed in SPSS to ensure the logic and randomizations were working as intended before launching the survey.

#### **Incentives**

All respondents were offered a post-paid incentive for their participation. Respondents could choose to receive the post-paid incentive in the form of a check or a gift code to Amazon.com or could choose to decline the incentive. Incentive amounts ranged from \$5 to \$20 depending on whether the respondent belongs to a part of the population that is harder or easier to reach. Differential incentive amounts were designed to increase panel survey participation among groups that traditionally have low survey response propensities.

<sup>&</sup>lt;sup>1</sup> AAPOR Task Force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

# **Data collection protocol**

The data collection field period for this survey was July 26 to Aug. 8, 2021. Postcard notifications were mailed to all ATP panelists with a known residential address on July 26, 2021.

Invitations were sent out in three separate launches: two Soft Launches and a Full Launch. Sixty (60) panelists were included in the first soft launch, which began with an initial invitation sent on July 26. An initial invitation to the second soft launch was sent to an additional 58 panelists on July 27. The ATP panelists chosen for the soft launches had completed previous ATP surveys within one day of receiving their invitation. All remaining English- and Spanish-speaking panelists were included in the full launch and were sent an invitation on July 28.

All panelists with an email address received an email invitation and up to four email reminders if they did not respond to the survey. All ATP panelists that consented to SMS messages received an SMS invitation and up to four SMS reminders. Interactive voice recording (IVR) reminder calls were made on Aug. 6 to 43 tablet households that previously provided consent to receive these reminders.

Invitation and reminder dates					
	Soft Launch 1	Soft Launch 2	Full Launch		
Initial invitation	July 26, 2021	July 27, 2021	July 28, 2021		
First reminder	July 30, 2021	July 30, 2021	July 30, 2021		
Second reminder	August 2, 2021	August 2, 2021	August 2, 2021		
Third reminder	August 4, 2021	August 4, 2021	August 4, 2021		
IVR reminder	August 6, 2021	August 6, 2021	August 6, 2021		
Final reminder	August 6, 2021	August 6, 2021	August 6, 2021		

## **Data quality checks**

To ensure high-quality data, the Center's researchers performed data quality checks to identify any respondents showing clear patterns of satisficing. This includes checking for very high rates of leaving questions blank, as well as always selecting the first or last answer presented. As a result of this checking, two ATP respondents were removed from the survey dataset prior to weighting and analysis.

# Weighting

The ATP data was weighted in a multistep process that accounts for multiple stages of sampling and nonresponse that occur at different points in the survey process. First, each panelist begins with a base weight that reflects their probability of selection for their initial recruitment survey. Among respondents to Wave 93, the base weights for panelists recruited in different years were scaled to be proportionate to the effective sample size for all respondents in their cohort. These base weights were then calibrated to align with the population

# **Weighting dimensions**

**Variable** 

Age x Gender

Education x Gender Education x Age Race/Ethnicity x Education Born inside vs. outside the U.S. among	
Hispanics and Asian Americans Years lived in the U.S.	
Census region x Metro/Non-metro	2020 CPS March Supplement
Volunteerism	2019 CPS Volunteering & Civic Life Supplement
Voter registration	2018 CPS Voting and Registration Supplement
Party affiliation Frequency of internet use Religious affiliation	2020 National Public Opinion Reference Survey (NPORS)

**Benchmark source** 

2019 American Community 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 U.S. adult population.

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benchmarks identified in the accompanying table and trimmed at the 1st and 99th percentiles to reduce the loss in precision stemming from variance in the weights. Sampling errors and test of statistical significance take into account the effect of weighting.

The population benchmarks used for weighting come from surveys conducted prior to the coronavirus outbreak that began in February 2020. However, the weighting variables for new panelists were measured when they were recruited in 2021. Likewise, the profile variables for preexisting panelists were updated with current measurements on either this survey (Wave 93) or in July 2021 on Wave 91.

This does not pose a problem for most of the variables used in the weighting, which are quite stable at both the population and individual levels. However, volunteerism and party identification in particular may have changed over the intervening period in ways that make their 2021 measurements incompatible with the available (pre-pandemic) benchmarks. To address this, volunteerism and party identification are weighted using the profile variables that were measured in 2020. For all other weighting dimensions, the more recent panelist measurements from 2021 are used.

For panelists recruited in 2021, plausible values were imputed using the 2020 volunteerism and party values from preexisting panelists with similar characteristics. This ensures that any patterns of change that were observed in the preexisting panelists were also reflected in the new recruits when the weighting was performed.

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.

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Group	Unweighted sample size	Plus or minus
Total sample	11,178	1.4 percentage points
Subgroup 1		percentage points
Subgroup 2		percentage points
Subgroup 3		percentage points

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

# **Dispositions and response rates**

Final dispositions	AAPOR code	Total
Completed interview	1.1	11,178
Logged onto survey; broke-off	2.12	79
Logged onto survey; did not complete any items	2.1121	83
Never logged on (implicit refusal)	2.11	1,285
Survey completed after close of the field period	2.27	5
Completed interview but was removed for data quality		2
Screened out		0
Total panelists in the survey		12,632
Completed interviews	l	11,178
Partial interviews	Р	0
Refusals	R	1,449
Non-contact	NC	5
Other	0	0
Unknown household	UH	0
Unknown other	UO	0
Not eligible	NE	0
Total		12,632
AAPOR RR1 = I / (I+P+R+NC+O+UH+UO)		88%

Cumulative response rate	Total
Weighted response rate to recruitment surveys	12%
% of recruitment survey respondents who agreed to join the panel, among those invited	69%
% of those agreeing to join who were active panelists at start of Wave 93	46%
Response rate to Wave 93 survey	88%
Cumulative response rate	3%

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