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 panel wave conducted from Oct. 10 to Oct. 16, 2022, and included oversamples of Hispanic men, non-Hispanic Black men and non-Hispanic Asian adults in order to provide more precise estimates of the opinions and experiences of these smaller demographic subgroups. These oversampled groups are weighted back to reflect their correct proportions in the population. A total of 5,098 panelists responded out of 5,726 who were sampled, for a response rate of 89%. 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 5,098 respondents is plus or minus 1.7 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

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	1,504
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	882
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	434
Aug. 8 to Oct. 31, 2018	ABS	9,396	8,778	4,119
Aug. 19 to Nov. 30, 2019	ABS	5,900	4,720	1,477
June 1 to July 19, 2020; Feb. 10 to March 31, 2021	ABS	3,197	2,812	1,542
May 29 to July 7, 2021 Sept. 16 to Nov. 1, 2021	ABS	1,329	1,162	790
May 24 to July 6, 2022	ABS	2,724	2,324	1,389
	Total	**42,264**	**29,738**	**12,137**

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 2022 recruitment survey was ongoing at the time W116 was conducted. The counts reflect completed recruitment interviews up through July 6, 2022.

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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 address-based recruitment. Invitations were sent to a stratified, random sample of households selected from the U.S. Postal Service's Delivery Sequence File. Sampled households receive mailings asking a randomly selected adult to complete a survey online. A question at the end of the survey asks if the respondent is willing to join the ATP. In 2020 and 2021 another stage was added to the recruitment. Households that did not respond to the online survey were sent a paper version of the questionnaire, $5 and a postage-paid return envelope. A subset of the adults who returned the paper version of the survey were invited to join the ATP. This subset of adults received a follow-up mailing with a $10 pre-incentive and invitation to join the ATP.

Across the five address-based recruitments, a total of 22,546 adults were invited to join the ATP, of whom 19,796 agreed to join the panel and completed an initial profile survey. In each household, one adult was selected and asked to go online to complete a survey, at the end of which they were invited to join the panel. Of the 29,738 individuals who have ever joined the ATP, 12,137 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.[1] 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. It featured a stratified random sample from the ATP in which Hispanic men, non-Hispanic Black men and non-Hispanic Asian adults were selected with certainty. The remaining panelists were sampled at rates designed to ensure that the share of respondents in each stratum is proportional to its share of the U.S. adult population to the greatest extent possible. Respondent weights are adjusted to account for differential probabilities of selection as described in the Weighting section below.

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

[1] AAPOR Task Force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

team and Pew Research Center researchers. The Ipsos project management team also populated test data that 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.

Data collection protocol

The data collection field period for this survey was Oct. 10 to Oct 16, 2022. Postcard notifications were mailed to all ATP panelists with a known residential address on Oct 11.

Invitations were sent out in two separate launches: Soft Launch and Full Launch. Sixty panelists were included in the soft launch, which began with an initial invitation sent on Oct 10. The ATP panelists chosen for the initial soft launch were known responders who 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 Oct. 11.

All panelists with an email address received an email invitation and up to two 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 two SMS reminders.

Invitation and reminder dates

	Soft Launch	Full Launch
Initial invitation	Oct. 10, 2022	Oct. 11, 2022
First reminder	Oct. 13, 2022	Oct. 13, 2022
Final reminder	Oct. 15, 2022	Oct. 15, 2022

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, three ATP respondents were removed from the survey dataset prior to weighting and analysis.

Weighting

The ATP data is 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. These weights are then rescaled and adjusted to account for changes in the design of ATP recruitment surveys from year to year. Finally, the weights are calibrated to align with the population benchmarks in the accompanying table to correct for nonresponse to recruitment surveys and panel attrition. If only a subsample of panelists was invited to participate in the wave, this weight is adjusted to account for any differential probabilities of selection.

Weighting dimensions

Variable	Benchmark source
Age (detailed) 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.	2019 American Community Survey (ACS)
Census region x Metro/Non-metro	2020 CPS March Supplement
Volunteerism	2021 American Trends Panel Annual Profile Survey/2019 CPS Volunteering & Civic Life Supplement
Voter registration	2018 CPS Voting and Registration Supplement
Party affiliation Frequency of internet use Religious affiliation	2022 National Public Opinion Reference Survey (NPORS)
Additional weighting dimensions applied within Black adults	
Age Gender Education Hispanic ethnicity	2019 American Community Survey (ACS)
Voter registration	2018 CPS Voting and Registration Supplement
Party affiliation Religious affiliation	2022 National Public Opinion Reference Survey (NPORS)

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. Volunteerism is estimated using a model to account for potential changes in volunteering behavior due to the coronavirus outbreak that began in February 2020.

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Among the panelists who completed the survey, this weight is then calibrated again to align with the population 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 tests of statistical significance take into account the effect of weighting.

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	5,098	1.7 percentage points
Subgroup 1		percentage points
Subgroup 2		percentage points
Subgroup 3		percentage points

Note: This survey includes oversamples of Hispanic men, Non-Hispanic Black men, and Non-Hispanic Asian adults. Unweighted sample sizes do not account for the sample design or weighting and do not describe a group's contribution to weighted estimates. See the Sample design and Weighting sections above for details.

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	5,098
Logged onto survey; broke off	2.12	72
Logged onto survey; did not complete any items	2.1121	27
Never logged on (implicit refusal)	2.11	524
Survey completed after close of the field period	2.27	2
Completed interview but was removed for data quality		3
Screened out		0
Total panelists in the survey		**5,726**
Completed interviews	I	5,098
Partial interviews	P	0
Refusals	R	626
Non-contact	NC	2
Other	O	0
Unknown household	UH	0
Unknown other	UO	0
Not eligible	NE	0
Total		**5,726**
AAPOR RR1 = I / (I+P+R+NC+O+UH+UO)		89%

Cumulative response rate	Total
Weighted response rate to recruitment surveys	10%
% of recruitment survey respondents who agreed to join the panel, among those invited	70%
% of those agreeing to join who were active panelists at start of Wave 116	41%
Response rate to Wave 116 survey	89%
Cumulative response rate	**3%**