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 ATP Wave 134, conducted from Sept. 12 to Sept. 24, 2023, A total of 7,470 panelists responded out of 10,219 who were sampled, for a response rate of 74% (AAPOR RR3). This includes 4,489 respondents from the ATP and an oversample of 2,981 Black Americans from Ipsos' KnowledgePanel. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 2%. The break-off rate among panelists who logged on to the survey and completed at least one item is 3%. The margin of sampling error for the full sample of 7,470 respondents is plus or minus 1.9 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.

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	1,395
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	833
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	405
Aug. 8 to Oct. 31, 2018	ABS	9,396	8,778	3,853
Aug. 19 to Nov. 30, 2019	ABS	5,900	4,720	1,388
June 1 to July 19, 2020; Feb. 10 to March 31, 2021	ABS	3,197	2,812	1,441
May 29 to July 7, 2021; Sept. 16 to Nov. 1, 2021	ABS	1,329	1,162	732
May 24 to Sept. 29, 2022	ABS	3,354	2,869	1,462
April 17 to May 30, 2023	ABS	686	576	435
Total		**43,580**	**30,859**	**11,944**

Note: RDD is random-digit dial; ABS is address-based sampling. 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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In August 2018, the ATP switched from telephone to address-based sampling (ABS) recruitment. A study cover letter and a pre-incentive are mailed to a stratified, random sample of households selected from the U.S. Postal Service's Delivery Sequence File. This Postal Service 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] Within each sampled household, the adult with the next birthday is asked to participate. Other details of the ABS recruitment protocol have changed over time but are available upon request.[2]

We have recruited a national sample of U.S. adults to the ATP approximately once per year since 2014. In some years, the recruitment has included additional effort (known as an "oversample") to boost sample size with underrepresented groups. For example, Hispanic adults, Black adults, and Asian adults were oversampled in 2019, 2022 and 2023, respectively.

Across the six address-based recruitments, a total of 23,862 adults were invited to join the ATP, of whom 20,917 agreed to join the panel and completed an initial profile survey. Of the 30,859 individuals who have ever joined the ATP, 11,944 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

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 noninstitutionalized 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 Black 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.

The ATP was supplemented with an oversample from the KnowledgePanel in which all panelists who had previously identified as Black or African American (including those who identify as Hispanic or Black in combination with another race) were selected with certainty.

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

[2] Email pewsurveys@pewresearch.org.

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 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 Sept. 12 to Sept. 24, 2023. Postcard notifications were mailed to all ATP panelists with a known residential address on Sept. 11.

Invitations were sent out in two separate launches: soft launch and full launch. Eighty ATP panelists and 484 KnowledgePanel panelists were included in the soft launch, which began with an initial invitation sent on Sept. 12, 2023. 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 sampled panelists were included in the full launch and were sent an invitation on Sept. 13.

Invitation and reminder dates, ATP Wave 134

	Soft launch	Full launch
Initial invitation	September 12, 2023	September 13, 2023
First reminder	September 15, 2023	September 15, 2023
Second reminder	September 18, 2023	September 18, 2023
Third reminder	September 21, 2023	September 21, 2023
Final reminder	September 23, 2023	September 23, 2023

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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 who consented to SMS messages received an SMS invitation and up to four SMS reminders.

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, six ATP and 11 KnowledgePanel respondents were removed from the survey dataset prior to weighting and analysis.

Weighting

The 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. That weight is then adjusted to account for nonresponse to the recruitment surveys and panel attrition. Next, respondents are divided into three groups, which are ATP Black respondents, ATP non-Black respondents, and KnowledgePanel Black respondents. The base weights for each group are separately scaled to be proportional to their effective sample size before being recombined and calibrated so that the proportion of Black (alone or in combination) respondents matches the American Community Survey benchmark.

American Trends Panel 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.	2021 American Community Survey (ACS)
Census region x Metro/Non-metro	2021 CPS March Supplement
Volunteerism	2021 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	2021 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 noninstitutionalized 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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This weight is further calibrated again to align with the population benchmarks identified in the accompanying table and trimmed at the 1st and 99th percentiles separately for Black and non-Black respondents 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.

Sample sizes and margins of error, ATP Wave 134

Group	Unweighted sample size	Plus or minus …
Total sample	7,470	1.9 percentage points
Black adults	4,736	2.2 percentage points

Note: This survey includes an oversample of Black respondents. Unweighted sample sizes do not account for the sample design or weighting and do not describe a group's contribution to weighted estimates. Refer to the Sample design and Weighting sections above for details.

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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, ATP Wave 134

	AAPOR code	ATP	KP	Total
Completed interview	1.1	4,489	2,981	7,470
Logged on to survey; broke off	2.12	34	167	201
Logged on to survey; did not complete any items	2.1121	23	91	114
Never logged on (implicit refusal)	2.11	197	2,087	2,284
Survey completed after close of the field period	2.27	0	0	0
Completed interview but was removed for data quality	2.3	6	11	17
Screened out	4.7	0	133	133
Total panelists sampled for the survey		**4,749**	**5,470**	**10,219**
Completed interviews	I	4,489	2,981	7,470
Partial interviews	P	0	0	0
Refusals	R	254	167	421
Non-contact	NC	0	0	0
Other	O	6	11	17
Unknown household	UH	0	0	0
Unknown other	UO	0	2,178	2,178
Not eligible	NE	0	0	0
Screen out	SO	0	133	133
Total		**4,749**	**5,470**	**10,219**
AAPOR RR1 = I / (I+P+R+NC+O+UH+UO)		95%	56%	74%
AAPOR RR3 = I / (I+R+[e*UO])		95%	57%	74%

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Cumulative response rate as of ATP Wave 134

	ATP	KP	Total
Weighted response rate to recruitment surveys	11%	10%	10%
% of recruitment survey respondents who agreed to join the panel, among those invited	71%	61%	65%
% of those agreeing to join who were active panelists at start of Wave 134	46%	33%	39%
Response rate to Wave 134 survey	95%	57%	74%
Cumulative response rate	**3%**	**1%**	**2%**

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How family income tiers are calculated

Family income data reported in this study is adjusted for household size and cost-of-living differences by geography. Panelists then are assigned to income tiers that are based on the median adjusted family income of all American Trends Panel members. The process uses the following steps:

1. First, panelists are assigned to the midpoint of the income range they selected in a family income question that was measured on either the most recent annual profile survey or, for newly recruited panelists, their recruitment survey. This provides an approximate income value that can be used in calculations for the adjustment.

2. Next, these income values are adjusted for the cost of living in the geographic area where the panelist lives. This is calculated using price indexes published by the U.S. Bureau of Economic Analysis. These indexes, known as Regional Price Parities (RPP), compare the prices of goods and services across all U.S. metropolitan statistical areas as well as non-metro areas with the national average prices for the same goods and services. The most recent available data at the time of the annual profile survey is from 2021. Those who fall outside of metropolitan statistical areas are assigned the overall RPP for their state's non-metropolitan area.

3. Family incomes are further adjusted for the number of people in a household using the methodology from Pew Research Center's previous work on the American middle class. This is done because a four-person household with an income of say, $50,000, faces a tighter budget constraint than a two-person household with the same income.

4. Panelists are then assigned an income tier. "Middle-income" adults are in families with adjusted family incomes that are between two-thirds and double the median adjusted family income for the full ATP at the time of the most recent annual profile survey. The median adjusted family income for the panel is roughly $71,700. Using this median income, the middle-income range is about $47,800 to $143,400. Lower-income families have adjusted incomes less than $47,800 and upper-income families have adjusted incomes greater than $143,400 (all figures expressed in 2022 dollars and scaled to a household size of three). If a panelist did not provide their income and/or their household size, they are assigned "no answer" in the income tier variable.

Two examples of how a given area's cost-of-living adjustment was calculated are as follows: The Anniston-Oxford metropolitan area in Alabama is a relatively inexpensive area, with a price level that is 16.2% less than the national average. The San Francisco-Oakland-Berkeley metropolitan

area in California is one of the most expensive areas, with a price level that is 19.8% higher than the national average. Income in the sample is adjusted to make up for this difference. As a result, a family with an income of $41,900 in the Anniston-Oxford area is as well off financially as a family of the same size with an income of $59,900 in San Francisco.

The respondents from the KnowledgePanel oversample answered the same family income and household size questions, and their incomes were adjusted using the procedures detailed above. They were then assigned an income tier based on the median adjusted family income for the full ATP at the time of the most recent annual profile survey.