

2024 National Public Opinion Reference Survey

Methodology

Summary

SSRS conducted the National Public Opinion Reference Survey (NPORS) for Pew Research Center using address-based sampling and a multimode protocol. The survey was fielded from Feb. 1, 2024, to June 10, 2024. Participants were first mailed an invitation to complete an online survey. A paper survey was later mailed to those who did not respond. Additionally, the mailings invited participants to call a toll-free number to take the survey over the phone with a live interviewer. In total, 2,535 respondents completed the survey online, 2,764 respondents completed the paper survey, and 327 respondents completed the survey over the phone (total n=5,626). The survey was administered in English and Spanish. The AAPOR Response Rate 1 was 32%.

Sample definition

The sample was drawn from the U.S. Postal Service Computerized Delivery Sequence File and was provided by MSG (Marketing Systems Group). Occupied residential addresses (including “drop points”) in all U.S. states (including Alaska and Hawaii) and the District of Columbia had a nonzero chance of selection. The draw was a national, stratified random sample, with differential probabilities of selection across the mutually exclusive strata. SSRS designed the sample plan as shown in the table below.

Strata	Race/Ethnicity	% of specified race/ethnicity	Education	Total ABS population distribution %	Total sampled households distribution %
1	Black non-Hispanic	50%-74.99% Black non-Hispanic	65%+ HS or less	0.6%	5.1%
2	Black non-Hispanic	50%-74.99% Black non-Hispanic	Remaining census block groups	3.2%	3.0%
3	Black non-Hispanic	75%+ Black non-Hispanic	65%+ HS or less	0.7%	0.8%
4	Black non-Hispanic	75%+ Black non-Hispanic	Remaining census block groups	2.7%	2.4%
5	Hispanic	50%-74.99% Hispanic	65%+ HS or less	1.1%	1.3%
6	Hispanic	50%-74.99% Hispanic	Remaining census block groups	4.4%	5.3%
7	Hispanic	75%+ Hispanic	65%+ HS or less	1.5%	12.1%
8	Hispanic	75%+ Hispanic	Remaining census block groups	2.2%	4.2%
9	All other	Remaining census block groups	65%+ HS or less	4.9%	4.2%
10	All other	Remaining census block groups	Remaining census block groups	<u>78.7%</u>	<u>61.4%</u>
				100%	100%

Mailing protocol

SSRS sent initial mailings in a 9-by-12-inch window envelope via first-class mail to the 18,834 sampled households. These packets included two \$1 bills (visible from the outside of the envelope) and a letter that asked a member of the household to complete the survey. The letter provided a URL for the online survey; a toll-free call-in number; a password to enter on the online survey's landing page, or tell the telephone interviewers if they chose to call in; and a FAQ section printed on the reverse side. If two or more adults were in the household, the letter asked the adult with the next birthday to complete the survey. Nonresponding households were later sent a reminder postcard and then a reminder letter via first-class mail.

After the web portion of the data collection period had ended, SSRS sent nonresponding households with a deliverable address a 9-by-12-inch Priority Mail window envelope. The Priority envelope contained a letter with a FAQ section printed on the reverse side, a visible \$5 bill, a paper version of the survey and a postage-paid return envelope. The paper survey was one 11-by-17-inch page folded booklet-style. The within-household selection instructions were identical to those used in the earlier online survey request. The same households were later sent a second envelope containing another copy of the paper questionnaire by first-class mail.

The initial mailing was sent out in two separate launches: soft launch and full launch. The soft launch made up 5% of the sample and was sent out several days earlier than the full launch. The full launch consisted of the remaining sample.

Households in Hispanic-dominant census block groups and those predicted to likely be Hispanic received all materials in English and Spanish. All other households received materials in English only. Those who completed the survey online or returned the completed paper survey were sent a \$10 post-paid incentive.

Questionnaire development and testing

Pew Research Center developed the questionnaire in consultation with SSRS. The online questionnaire was tested on both desktop and mobile devices. The test data was analyzed to ensure the logic and randomizations were working as intended before the survey was launched.

Weighting

The survey was weighted to support reliable inference from the sample to the target population of U.S. adults. The weight was created using a multistep process that includes a base weight adjusting for differential probabilities of selection and a raking calibration that aligns the survey with the population benchmarks. The process starts with the base weight, which accounted for the

probability of selection of the address from the U.S. Postal Service Computerized Delivery Sequence File frame, as well as the number of adults living in the household, and incorporated an [adaptive mode adjustment](#) for cases that responded in an offline mode.

Then the base weights are calibrated to population benchmarks using raking, or iterative proportional fitting. The raking dimensions and the source for the population parameter estimates are reported in the table below. All raking targets are based on the noninstitutionalized U.S. adult population (ages 18 and older). These weights are trimmed at the 1st and 99th percentiles to reduce the loss in precision stemming from variance in the weights.

Raking dimensions and source for population parameter estimates

Raking dimension [^]	Source
Age(5)	2022 American Community Survey
Gender(2) x Age(3)	2022 American Community Survey
Gender(2) x Education(3)	2022 American Community Survey
Age(3) x Education(3)	2022 American Community Survey
Race/ethnicity(5)*	2022 American Community Survey
Education(3) x Race/ethnicity(4)**	2022 American Community Survey
Race/ethnicity(4) x Born inside or outside the U.S.(2)**	2022 American Community Survey
Census region(4) by metro status(2)	2022 American Community Survey
Voter registration(2) [^]	2020 Current Population Survey Voting and Registration Supplement
Phone type(3) x Education(3)***	2022 National Health Interview Survey
Phone type(3) x White/non-White(2)***	2022 National Health Interview Survey
Phone type(3) x Age(3)	2022 National Health Interview Survey

[^] Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total U.S. adult population.

* The standalone raking dimension for race/ethnicity includes Asian non-Hispanic as its own category, but this category is combined with Other non-Hispanic when crossed with other dimensions.

** Education is collapsed for the "Other non-Hispanic" category. Born inside or outside the U.S. is crossed only among Hispanics.

*** Cellphone only, landline only or both.

Design effect and margin of error

Weighting and survey design features that depart from simple random sampling tend to result in an increase in the variance of survey estimates. This increase, known as the design effect, or "deff," should be incorporated into the margin of error, standard errors and tests of statistical significance. The overall design effect for a survey is commonly approximated as 1 plus the squared coefficient of variation of the weights.

For this survey, the margin of error (half-width of the 95% confidence interval) incorporating the design effect for full sample estimates at 50% is plus or minus 1.8 percentage points. Estimates

based on subgroups will have larger margins of error. It is important to remember that random sampling error is only one possible source of error in a survey estimate. Other sources, such as question wording and reporting inaccuracy, may contribute additional error. A summary of the weights and their associated design effect is reported in the table below.

Weight variable	Completed interviews	Approximate design effect	Effective sample size	Margin of error (95% confidence level)
WEIGHT	5,626	1.9	2,973	±1.8 percentage points

Dispositions

The table below reports the disposition of all sampled households for the survey.

Final dispositions and rates	Code	Cases
Interview		
Complete	1.10	5,626
Partial	1.20	0
Eligible, non-interview		
Refusal	2.11	53
Unknown eligibility, non-interview		
Nothing returned or completed	3.199	11,869
Housing unit, unknown if eligible respondent	3.20	22
Not eligible		
Selected respondent screened out of sample	4.10	4
No such address	4.313	1,260
Total sample used		18,834
Complete interviews (1.1)	I	5,626
Partial interviews (1.2)	P	0
Refusal and break off (2.1)	R	53
Non-contact (2.2)	NC	0
Other (2.3, 2.9)	O	0
Unknown household (3.1)	UH	11,869
Unknown respondent eligibility (3.2, 3.9)	UO	22
Not eligible (4.1, 4.313)	NE	1,264
TOTAL		18,834
AAPOR RR1 = $1/((I+P) + (R+NC+O) + (UH+UO))$		32%