## Pew Research Center

# Americans' Use of Mobile Technology and Home Broadband 

Some aspects of the digital divide remain, even as most U.S. adults have a smartphone or subscribe to home broadband. About 4 in 10 report being online almost constantly

BY Risa Gelles-Watnick

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## How we did this

To better understand Americans' smartphone and broadband adoption, Pew Research Center surveyed 5,733 U.S. adults from May 19 to Sept. 5, 2023. Ipsos conducted this National Public Opinion Reference Survey (NPORS) for the Center using address-based sampling and a multimode protocol that included both web and mail. This way nearly all U.S. adults have a chance of selection. The survey is weighted to be representative of the U.S. adult population by gender, race and ethnicity, education and other categories.

Polls from 2000 to 2021 were conducted via phone. For more on this mode shift, please read our Q\&A.

Here are the questions used for this analysis, along with responses, and its methodology.

# Americans' Use of Mobile Technology and Home Broadband 

Some aspects of the digital divide remain, even as most U.S. adults have a smartphone or subscribe to home broadband. About 4 in 10 report being online almost constantly

In a far cry from the early 2000s, most U.S. adults today say they use the internet (95\%), have a smartphone (90\%) or subscribe to high-speed internet at home (80\%), according to a Pew Research Center survey conducted May 19 to Sept. 5, 2023.

Though adoption of these technologies has surged over the past two decades, there are notable differences by age, household income and educational attainment.

The Center has been tracking technology use for many years. Recently, we shifted from gathering responses via telephone to the web and mail. Mode changes can affect study results in a number of ways, therefore, we have to take a cautious approach when examining how things have -


Note: Dotted line indicates a change in mode. Polls from 2000-2021 were conducted via phone. In 2023, the poll was conducted via web and mail. Refer to the topline for more information on how question wording varied over the years. Those who did not give an answer or who gave other responses are not shown.
Source: Survey of U.S. adults conducted May 19-Sept. 5, 2023.
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or have not - changed since our last study on these topics in 2021. For more details on this shift, please .

## Who has a smartphone and home broadband?

Even with high rates of adoption overall, divides exist by income, level of formal education and age. These differences are in line with the last time the Center asked about smartphone ownership and home broadband subscription in 2021.

## Smartphone use

Smartphones are common across income levels, but those in households earning $\$ 100,000$ or more annually are far more likely than those earning less than \$30,000 per year to have one ( $98 \%$ vs. $79 \%$ ).

There are also differences by education. Adults who have a bachelor's degree or some college education own smartphones at higher rates than those with a high school diploma or less.

Age also plays a role: Adults 50 and older - especially those who are at least 65 - are less likely than their younger counterparts to own a smartphone.

Rates of smartphone ownership, broadband subscription vary across groups, including by household income and education
\% of U.S. adults who say they own or subscribe to the following


* Estimates for Asian adults are representative of English speakers only.

Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanic adults are of any race. Those who did not give an answer or who gave other responses are not shown.
Source: Survey of U.S. adults conducted May 19-Sept. 5, 2023.
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## Home broadband

There are large gaps between the lowest- and highest-income Americans in whether they have a broadband subscription. Nearly all (95\%) adults with an annual household income of at least $\$ 100,000$ say they have one. This compares with $57 \%$ of adults in households that make less than $\$ 30,000$ per year. A similar pattern emerges by level of formal education.

While most adults living in rural areas (73\%) subscribe to high-speed internet at home, they are less likely to do so than their peers living in suburban areas (86\%) and slightly less likely than those living in urban settings (77\%).

Asian (84\%) and White (83\%) adults are more likely than Hispanic ( $75 \%$ ) or Black ( $68 \%$ ) adults to say they subscribe to home broadband. Many of these differences between racial and ethnic groups fade, though, when accounting for income, education, age and community type. ${ }^{1}$

[^0]
## 'Smartphone-dependent’ adults

Some $15 \%$ of adults are "smartphone dependent," meaning they own a smartphone but do not subscribe to a high-speed home broadband service. This share has remained relatively stable in recent years but is roughly double what we found in 2013 (8\%).

Those who live in lower-income households are particularly likely to rely on their smartphone to go online. The shares who fall into this category are:

- $28 \%$ of Americans in households earning less than \$30,000 per year
- $19 \%$ of Americans in households earning $\$ 30,000$ to $\$ 69,999$ per year
- $9 \%$ of Americans in households earning $\$ 70,000$ to $\$ 99,999$ per year
- $4 \%$ of Americans in households earning $\$ 100,000$ or more per year

Adults with lower levels of formal education are also more likely to be smartphone dependent. About a quarter (24\%) of those who have completed high school or less education rely on a mobile device for internet, compared with $6 \%$ of those with a college degree.

## 15\% of U.S. adults are 'smartphone dependent,' and this share is greater among those with lower incomes

\% of U.S. adults who are smartphone dependent (i.e., say they have a smartphone but do not subscribe to home broadband)


* Estimates for Asian adults are representative of English speakers only.
Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanic adults are of any race. Those who did not give an answer or who gave other responses are not shown
Source: Survey of U.S. adults conducted May 19-Sept. 5, 2023.
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Roughly one-in-five Black or Hispanic adults are smartphone dependent, compared with a smaller share of White adults.

## What share of Americans are constantly online?

With the internet becoming more and more central to Americans' daily lives, nine-inten U.S. adults now say they go online every day. This includes $41 \%$ who report using the internet almost constantly.

## Roughly 4 in 10 U.S. adults say they're online almost constantly

\% of U.S. adults who say they use the internet ...


Note: Figures may not add up to the NET values due to rounding. Those who did not give an answer are not shown.
Source: Survey of U.S. adults conducted May 19-Sept. 5, 2023.
"Americans' Use of Mobile Technology and Home Broadband"

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However, some are more likely to be constantly online than others - especially the youngest adults. About six-in-ten adults ages 18 to 29 (62\%) say they are constantly online, compared with smaller shares of those in older age groups, including only $15 \%$ of those 65 and older.

Those with higher levels of education and household incomes are also more likely to say they are online almost constantly. For instance, roughly half ( $52 \%$ ) of adults with an annual household income of at least \$100,000 report using the internet almost constantly. This compares with about four-in-ten or fewer among those with an annual household income less than $\$ 100,000$.

Differences also emerge by the type of community that adults live in. About half of those living in urban areas (48\%) say they use the internet almost constantly, compared with $43 \%$ of those in suburban communities and $32 \%$ of those in rural settings.


* Estimates for Asian adults are representative of English speakers only.
Note: White, Black and Asian adults include those who report being only one race and are not Hispanic. Hispanic adults are of any race. Those who did not give an answer or who gave other responses are not shown.
Source: Survey of U.S. adults conducted May 19-Sept. 5, 2023.
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Find related reports online at pewresearch.org/internet.

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## 2023 National Public Opinion Reference Survey (NPORS) Methodology

## Summary

Ipsos 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 May 19 to Sept. 5, 2023. Participants were first mailed an invitation to complete an online survey. A paper survey was later mailed to those who did not respond. In total, 2,217 respondents completed the survey online, and 3,516 respondents completed the paper survey (total $n=5,733$ ). The survey was administered in English and Spanish. The AAPOR Response Rate 1 was 31\%.

## 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. Ipsos designed the sample plan as shown in the table below.

| Stratum | Race/Ethnicity | \% of specified race/ethnicity | Education | Total ABS households | Total sampled households |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Black, non-Hispanic | 50\%-74.99\% Black, non-Hispanic | 65\%+ HS or less | 0.5\% | 0.6\% |
| 2 | Black, non-Hispanic | 50\%-74.99\% Black, non-Hispanic | Remaining census block groups | 3.3\% | 4.0\% |
| 3 | Black, non-Hispanic | 75\%+ Black, non-Hispanic | $65 \%+$ HS or less | 0.4\% | 0.6\% |
| 4 | Black, non-Hispanic | 75\%+ Black, non-Hispanic | Remaining census block groups | 2.4\% | 3.1\% |
| 5 | Hispanic | 50\%-74.99\% Hispanic | $65 \%+$ HS or less | 1.2\% | 5.6\% |
| 6 | Hispanic | 50\%-74.99\% Hispanic | Remaining census block groups | 4.7\% | 12.4\% |
| 7 | Hispanic | 75\%+ Hispanic | $65 \%+$ HS or less | 2.0\% | 5.8\% |
| 8 | Hispanic | 75\%+ Hispanic | Remaining census block groups | 1.8\% | 3.9\% |
| 9 | All other | Remaining census block groups | 65\%+HS or less | 3.0\% | 4.5\% |
| 10 | All other | Remaining census block groups | Remaining census block groups | 80.8\% | 59.3\% |
|  |  |  |  |  | 100\% |

## Mailing protocol

Ipsos sent initial mailings in a 9-by-12-inch envelope via first-class mail to the 19,498 sampled households. These packets included two $\$ 1$ bills and a letter asking a member of the household to complete an online survey using the website and password provided. If two or more adults were in the household, the letter asked the adult with the next birthday to complete the survey. Sampled households were later sent a reminder postcard and then a reminder letter via first-class mail.

Ipsos sent nonresponding households with a deliverable address a 9-by-12-inch Priority Mail envelope. The Priority envelope contained a letter, a $\$ 5$ 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. Nonresponding households were later sent a second envelope containing another copy of the paper questionnaire by first-class mail.

The initial mailing and the first mailing containing the paper version of the survey were each sent out in two separate launches: soft launch and full launch. The soft launch made up $5 \%$ of the sample at each point in the field period 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 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-incentive.

## Questionnaire development and testing

Pew Research Center developed the questionnaire in consultation with Ipsos. 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.

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 about 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, NPORS 2023

| Raking dimension* | Source |
| :---: | :---: |
| Age(5) | 2021 American Community Survey |
| Gender(2) x Age(3) | 2021 American Community Survey |
| Gender(2) x Education(3) | 2021 American Community Survey |
| Age(3) $\times$ Education(3) | 2021 American Community Survey |
| Race/ethnicity(5)** | 2021 American Community Survey |
| Education(3) x Race/ethnicity(4)*** | 2021 American Community Survey |
| Race/ethnicity(4) x Born inside or outside the U.S.(2)*** | 2021 American Community Survey |
| Census region(4) by metro status(2) | 2021 Current Population Survey ASEC March Supplement |
| Voter registration(2)* | 2018 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) $\times$ Age(3) | 2022 National Health Interview Survey |
| * Voter registration is calculated using procedures <br> ** The standalone raking dimension for race/ethni with "Other, non-Hispanic" when crossed with other <br> *** Education is collapsed for the "Other, non-Hisp <br> **** Cellphone only, landline only or both. | ur, Achen (2013) and rescaled to include the total U.S. adult population. ludes "Asian, non-Hispanic" as its own category, but this category is combined sions. <br> category. Born inside or outside the U.S. is crossed only among Hispanics. |

## 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 <br> interviews | Approximate <br> design effect | Effective <br> sample size | Margin of error <br> (95\% confidence level) |
| :---: | :---: | :---: | :---: | :---: |
| WEIGHT | 5,733 | 1.9 | 2,980 | $\pm 1.8$ percentage points |

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, NPORS 2023

| Group | Unweighted sample size | Plus or minus ... |
| :---: | :---: | :---: |
| Total sample | 5,733 | 1.8 percentage points |
| White, non-Hispanic | 3,729 | 2.2 percentage points |
| Black, non-Hispanic | 528 | 5.7 percentage points |
| Hispanic | 941 | 4.8 percentage points |
| Asian, non-Hispanic | 244 | 8.5 percentage points |
| Ages 18-29 | 546 | 5.3 percentage points |
| 30-49 | 1,589 | 3.3 percentage points |
| 50-64 | 1,591 | 3.3 percentage points |
| 65+ | 1,914 | 2.8 percentage points |
| High school or less | 1,344 | 3.5 percentage points |
| Some college | 1,873 | 3.2 percentage points |
| College grad+ | 2,466 | 2.5 percentage points |
| Household income |  |  |
| <\$30K | 1,068 | 4.3 percentage points |
| \$30K-\$69,999 | 1,777 | 3.4 percentage points |
| \$70K-\$99,999 | 894 | 4.5 percentage points |
| \$100K+ | 1,712 | 3.1 percentage points |
| Urban | 1,487 | 3.7 percentage points |
| Suburban | 2,718 | 2.6 percentage points |
| Rural | 1,449 | 3.5 percentage points |

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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.

## A note about the Asian adult sample

This survey includes a total sample size of 325 Asian adults. The sample primarily includes English-speaking Asian adults and, therefore, may not be representative of the overall Asian adult population. Despite this limitation, it is important to report the views of Asian adults on the topics in this study. As always, Asian adults' responses are incorporated into the general population figures throughout this report.

## Dispositions

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

Final dispositions and rates, NPORS 2023

| Interview | Code | Cases |
| :---: | :---: | :---: |
| Complete | 1.10 | 5,733 |
| Partial | 1.20 | 89 |
| Eligible, non-interview |  |  |
| Refusal | 2.11 | 21 |
| Blank questionnaire returned | 2.1131 | 51 |
| Completed questionnaire, but not returned during field period | 2.27 | 82 |
| Unknown eligibility, non-interview |  |  |
| Nothing returned or completed | 3.199 | 12,246 |
| Housing unit, unknown if eligible respondent | 3.20 | 37 |
| Not eligible |  |  |
| Selected respondent screened out of sample | 4.10 | 7 |
| No such address | 4.313 | 1,232 |
| Total sample used |  | 19,498 |
| Complete interviews (1.1) | 1 | 5,733 |
| Partial interviews (1.2) | P | 89 |
| Refusal and break off (2.1) | R | 72 |
| Non-contact (2.2) | NC | 82 |
| Other (2.3, 2.9) | 0 | 0 |
| Unknown household (3.1) | UH | 12,246 |
| Unknown respondent eligibility (3.2, 3.9) | UO | 37 |
| Not eligible (4.1, 4.313) | NE | 1,239 |
| TOTAL |  | 19,498 |
| AAPOR RR1 $=\mathrm{I} /((\mathrm{l}+\mathrm{P})+(\mathrm{R}+\mathrm{NC}+\mathrm{O})+(\mathrm{UH}+\mathrm{UO})$ ) |  | 31\% |

## 2023 PEW RESEARCH CENTER NPORS INTERNET TOPLINE <br> MAY 19 - SEPTEMBER 5, 2023 <br> $\mathrm{N}=5,733$

# NOTE: ALL NUMBERS ARE PERCENTAGES UNLESS OTHERWISE NOTED. THE PERCENTAGES LESS THAN 0.5\% ARE REPLACED BY AN ASTERISK (*). IF NO ONE ANSWERED THE QUESTION, THE CELL CONTAINS ZERO (0). A DOUBLE HYPHEN (--) INDICATES THAT THE RESPONSE OPTION WAS NOT PRESENT IN THAT SURVEY. ROWS/COLUMNS MAY NOT TOTAL 100\% DUE TO ROUNDING. 

U.S. adults
Sample size
5,733

Margin of error at 95\% confidence level<br>+/- 1.8 percentage points

ASK ALL:
EMINUSE
Do you use the internet or email, at least occasionally?
ASK ALL:
INTMOB Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally? ${ }^{2}$

May 19-Sep 5, 2023
$\underline{\text { Uses internet }}$
Does not use internet
95
5

## PHONE TREND FOR COMPARISON:

|  | Uses internet | Does not use internet |
| :---: | :---: | :---: |
| Jan 2021 | 93 | 7 |
| Feb 2019 | 90 | 10 |
| Jan 2018 | 89 | 11 |
| Nov 2016 | 90 | 10 |
| May 2016 | 87 | 13 |
| Apr 2016* | 86 | 14 |
| Nov 2015 | 87 | 13 |
| Jul 2015 | 87 | 13 |
| Apr 2015* | 85 | 15 |
| Sep 2013* | 86 | 14 |
| Aug 2013 | 80 | 20 |
| May 2013 | 85 | 15 |
| Dec 2012 | 81 | 19 |

[^1]|  | Uses internet | Does not use internet |
| :---: | :---: | :---: |
| Nov 2012* | 85 | 15 |
| Sep 2012 | 81 | 19 |
| Aug 2012 | 85 | 15 |
| Apr 2012 | 82 | 18 |
| Feb 2012 | 80 | 20 |
| Dec 2011* | 81 | 19 |
| Aug 2011 | 78 | 22 |
| May 2011 | 78 | 22 |
| Jan 2011 | 79 | 21 |
| Dec 2010 | 77 | 23 |
| Nov 2010 | 74 | 26 |
| Sep 2010 | 74 | 26 |
| May 2010 | 79 | 21 |
| Jan 2010 | 75 | 25 |
| Dec 2009 | 74 | 26 |
| Sep 2009 | 77 | 23 |
| Apr 2009 | 79 | 21 |
| Dec 2008 | 74 | 26 |
| Nov 2008 | 74 | 26 |
| Aug 2008 | 75 | 25 |
| Jul 2008 | 77 | 23 |
| May 2008 | 73 | 27 |
| Apr 2008 | 73 | 27 |
| Jan 2008 | 70 | 30 |
| Dec 2007 | 75 | 25 |
| Sep 2007 | 73 | 27 |
| Feb 2007 | 71 | 29 |
| Dec 2006 | 70 | 30 |
| Nov 2006 | 68 | 32 |
| Aug 2006 | 70 | 30 |
| Apr 2006 | 73 | 27 |
| Feb 2006 | 73 | 27 |
| Dec 2005 | 66 | 34 |
| Sep 2005 | 72 | 28 |
| Jun 2005 | 68 | 32 |
| Feb 2005 | 67 | 33 |
| Jan 2005 | 66 | 34 |
| Nov 2004 | 59 | 41 |
| Nov 2004 | 61 | 39 |
| Jul 2004 | 67 | 33 |
| Jun 2004 | 63 | 37 |
| Mar 2004 | 69 | 31 |
| Feb 2004 | 63 | 37 |
| Nov 2003 | 64 | 36 |
| Aug 2003 | 63 | 37 |
| Jun 2003 | 62 | 38 |


|  | Uses internet | Does not use internet |
| :---: | :---: | :---: |
| May 2003 | 63 | 37 |
| Mar 2003 | 62 | 38 |
| Feb 2003 | 64 | 36 |
| Dec 2002 | 57 | 43 |
| Nov 2002 | 61 | 39 |
| Oct 2002 | 59 | 41 |
| Sep 2002 | 61 | 39 |
| Jul 2002 | 59 | 41 |
| Mar/May 2002 | 58 | 42 |
| Jan 2002 | 61 | 39 |
| Dec 2001 | 58 | 42 |
| Nov 2001 | 58 | 42 |
| Oct 2001 | 56 | 44 |
| Sep 2001 | 55 | 45 |
| Aug 2001 | 59 | 41 |
| Feb 2001 | 53 | 47 |
| Dec 2000 | 59 | 41 |
| Nov 2000 | 53 | 47 |
| Oct 2000 | 52 | 48 |
| Sep 2000 | 50 | 50 |
| Aug 2000 | 49 | 51 |
| Jun 2000 | 47 | 53 |
| May 2000 | 48 | 52 |

ASK IF INTERNET USER (EMINUSE=1 OR INTMOB=1) [ $N=5,461$ ]:
INTFREQ About how often do you use the internet? ${ }^{3}$

|  | Almost <br> constantly | Several <br> times a <br> day | About once <br> a day | Several <br> times a <br> week | Less <br> 2, 20ften |
| :---: | :---: | :---: | :---: | :---: | :---: |

PHONE TREND FOR COMPARISON:

|  | Almost <br> constantly | Several <br> times a <br> day | Sbout once <br> a day | Several <br> times a | Less <br> week | (VOL.) <br> Don't | often <br> (VOL.) No <br> answer |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan 2021 | 33 | 51 | 6 | 5 | 4 | $*$ | $*$ |
| Feb 2019 | 31 | 49 | 10 | 5 | 4 | $*$ | $*$ |
| Jan 2018 | 30 | 49 | 9 | 7 | 6 | $*$ | $*$ |
| May 2016 | 25 | 50 | 11 | 7 | 6 | $*$ | $*$ |
| Apr 2016* | 28 | 49 | 10 | 7 | 6 | $*$ | $*$ |
| Jul 2015 | 24 | 49 | 11 | 7 | 8 | $*$ | 1 |

[^2]
## INTFREQ BASED ON ALL ADULTS:

|  | Almost constantly | Several times a day | About once a day | Several times a week | Less often | No answer to INTFREQ | Not an internet user |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} \text { May } 19 \text {-Sep } \\ 5,2023 \end{array}$ | 41 | 43 | 5 | 3 | 2 | 1 | 5 |

ASK IF INTERNET USER (EMINUSE=1 OR INTMOB=1) [N=5,461]:
HOME4NW2 Do you currently subscribe to internet service installed at your home (other than data plans on mobile devices)?

May 19-Sep 5, $2023 \quad \frac{\text { Yes }}{89}$
$\frac{\text { No }}{10} \quad \frac{\text { No answer }}{1}$

PHONE TREND FOR COMPARISON4:

| Yes | No | (VOL.) <br> Don't know | (VOL.) No <br> answer |  |
| ---: | :---: | :---: | :---: | :---: |
| Jan 2021 | 86 | 14 | $*$ | 0 |
| Feb 2019 | 84 | 16 | $*$ | 0 |
| Jan 2018 | 80 | 20 | $*$ | 0 |
| Jul 2015 | 84 | 16 | $*$ | 0 |

## HOME4NW2 BASED ON ALL ADULTS:

May 19-Sep 5, 2023

| Yes | No | No answer to <br> HOME4NW2 | Not an <br> internet user |
| :---: | :---: | :---: | :---: |
| 10 | 1 | 5 |  |

## ASK IF HOME INTERNET SUBSCRIBER (HOME4NW2=1) [N=4,892]:

Is the home internet service you subscribe to...

|  | Dial$u^{5}$ | High-speed broadband ${ }^{6}$ | Other service [TEXT BOX] | Not sure | No answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| May 19Sep 5, 2023 | 2 | 94 | * | 4 | 1 |

[^3]
## PHONE TREND FOR COMPARISON:

(VOL).

|  | $\begin{aligned} & \text { Dial- } \\ & \text { up } \end{aligned}$ | Higherspeed broadband | (VOL.) Both dial-up and higher-speed | (VOL). <br> Access net on cell or tablet only | (VOL.) No home net access | (VOL.) Don't know | $\begin{gathered} \text { (VOL.) } \\ \text { No } \\ \text { answer } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan 2021 | 2 | 91 | 3 | 1 | * | 4 | 0 |
| Feb 2019 | 2 | 92 | 3 | * | * | 2 | * |
| Jan 2018 | 3 | 90 | 2 | * | * | 5 | * |
| Jul 2015 | 3 | 91 | 1 | * | 1 | 4 | * |

SUMMARY OF HOME BROADBAND BASED ON HOME INTERNET SUBSCRIBERS (HOME4NW2=1) [ $\mathrm{N}=4,892]^{8}$ :
May 19-Sep 5, $2023 \frac{\text { Home broadband users }}{94} \quad$ No home broadband

PHONE TREND FOR COMPARISON:

|  | Home broadband users | No home broadband |
| ---: | :---: | :---: |
| Jan 2021 | 94 | 6 |
| Feb 2019 | 94 | 6 |
| Jan 2018 | 91 | 9 |
| Jul 2015 | 92 | 8 |

## SUMMARY OF HOME BROADBAND BASED ON ALL ADULTS9:

May 19-Sep 5, $2023 \quad \frac{\text { Home broadband users }}{80} \quad$ No home broadband

PHONE TREND FOR COMPARISON:

|  | Home broadband users |  |
| ---: | :---: | :---: |
| Jo home broadband |  |  |
| Jan 2021 | 77 | 23 |
| Feb 2019 | 73 | 27 |
| Jan 2018 | 65 | 35 |
| Jul 2015 | 67 | 33 |

ASK IF INTERNET USER (EMINUSE=1 OR INTMOB=1) [N=5,461]:
SMUSE Please indicate whether or not you ever use the following websites or apps.
[RANDOMIZE AND SPLIT ACROSS TWO SCREENS]

|  | Yes, use this | No, don't use this | No answer |
| :---: | :---: | :---: | :---: |
| a. Facebook |  |  |  |
| May 19-Sep 5, 2023 | 71 | 27 | 1 |
| b. YouTube |  |  |  |
| May 19-Sep 5, 2023 | 87 | 12 | 1 |
| c. Twitter ${ }^{10}$ |  |  |  |
| May 19-Sep 5, 2023 | 23 | 74 | 3 |

[^4]|  | Yes, use this | No, don't use this | No answer |
| :---: | :---: | :---: | :---: |
| d. Instagram |  |  |  |
| May 19-Sep 5, 2023 | 49 | 49 | 2 |
| e. Snapchat |  |  |  |
| May 19-Sep 5, 2023 | 28 | 69 | 3 |
| f. WhatsApp |  |  |  |
| May 19-Sep 5, 2023 | 31 | 67 | 2 |
| g. LinkedIn |  |  |  |
| May 19-Sep 5, 2023 | 31 | 66 | 3 |
| h. Pinterest |  |  |  |
| May 19-Sep 5, 2023 | 36 | 61 | 2 |
| i. TikTok |  |  |  |
| May 19-Sep 5, 2023 | 34 | 63 | 2 |
| j. BeReal |  |  |  |
| May 19-Sep 5, 2023 | 4 | 93 | 3 |
| k. Reddit |  |  |  |
| May 19-Sep 5, 2023 | 23 | 74 | 3 |


|  | Yes, use this | No, don't use this | (VOL.) Don't know | (VOL.) No answer |
| :---: | :---: | :---: | :---: | :---: |
| Use Facebook ${ }^{12}$ |  |  |  |  |
| Jan 2021 | 73 | 27 | * | * |
| Feb 2019 | 75 | 25 | 0 | 0 |
| Jan 2018 | 76 | 24 | * | * |
| Apr 2016* | 79 | 21 | 0 | 0 |
| Apr 2015* | 72 | 28 | 0 | 0 |
| Sep 2014 | 71 | 28 | 0 | 0 |
| Sep 2013 | 71 | 29 | * | 0 |

[^5]

|  | Yes, use this | No, don't use this | (VOL.) Don't know | (VOL.) No answer |
| :---: | :---: | :---: | :---: | :---: |
| Use Pinterest |  |  |  |  |
| Jan 2021 | 33 | 67 | * | * |
| Feb 2019 | 31 | 68 | * | * |
| Jan 2018 | 32 | 67 | * | * |
| Apr 2016* | 31 | 69 | * | 0 |
| Apr 2015* | 31 | 68 | 1 | * |
| Sep 2014 | 28 | 72 | * | 0 |
| Sept 2013 | 21 | 77 | 2 | * |
| Dec 2012 | 15 | 83 | 2 | 0 |
| Aug 2012 | 12 | 87 | 1 | * |
| Use TikTok |  |  |  |  |
| Jan 2021 | 23 | 77 | 0 | * |
| Use Reddit |  |  |  |  |
| Jan 2021 | 19 | 81 | * | * |
| Feb 2019 | 12 | 87 | 1 | 0 |

## SMUSE BASED ON ALL ADULTS:

| Yes, use this | No, don't use this | No answer | Not an internet <br> user |
| :---: | :---: | :---: | :---: |
| 68 | 26 | 1 | 5 |

b. YouTube

May 19-Sep 5, 2023

83
12
1

3

2
5
e. Snapchat

May 19-Sep 5, 2023

27
$66 \quad 2$
f. WhatsApp

May 19-Sep 5, 2023

29
64
2
5
g. LinkedIn

May 19-Sep 5, 2023

30
63
3
5
h. Pinterest

May 19-Sep 5, 2023

35
58

May 19-Sep 5, 2023

33
60
2

3
May 19-Sep 5, 2023

3
89
k. Reddit

May 19-Sep 5, 2023

22
70
3

5

5

5

## ASK ALL:

DEVICE1a Do you have a cell phone?
Yes, have
a cell

phone $~$\begin{tabular}{c}
No, do not <br>
have a cell <br>
phone

$\quad 2$

No answer <br>
May 19-Sep 5, 2023
\end{tabular}

PHONE TREND FOR COMPARISON ${ }^{13}$ :

|  | Yes | No | (VOL.) <br> Don't know | (VOL.) <br> No answer |
| :---: | :---: | :---: | :---: | :---: |
| Jan 2021 | 97 | 3 | 0 | 0 |
| Feb 2019 | 96 | 4 | 0 | 0 |
| Jan 2018 | 95 | 5 | 0 | 0 |
| Nov 2016 | 95 | 5 | 0 | 0 |
| May 2016 | 92 | 8 | 0 | 0 |
| Apr 2016* | 92 | 8 | 0 | 0 |
| Nov 2015 | 91 | 9 | 0 | 0 |
| Jul 2015 | 92 | 8 | * | * |
| Apr 2015* | 92 | 8 | * | 0 |
| Sep 2013* | 91 | 9 | 0 | 0 |
| Aug 2013 | 89 | 11 | 0 | 0 |
| May 2013 | 91 | 9 | 0 | * |
| Dec 2012 | 87 | 13 | * | 0 |
| Nov 2012* | 84 | 16 | 0 | * |
| Sep 2012 | 85 | 15 | * | 0 |
| Aug 2012 | 89 | 10 | 0 | * |
| Apr 2012 | 88 | 12 | * | * |
| Feb 2012 | 88 | 12 | 0 | * |
| Dec 2011* | 87 | 13 | 0 | * |
| Aug 2011 | 84 | 15 | * | * |
| May 2011 | 83 | 17 | * | 0 |
| Jan 2011 | 84 | 16 | * | * |
| Dec 2010 | 81 | 19 | * | * |
| Nov 2010 | 82 | 18 | 0 | * |
| Sep 2010 | 85 | 15 | * | * |
| May 2010 | 82 | 18 | * | 0 |
| Jan 2010 | 80 | 20 | 0 | * |
| Dec 2009 | 83 | 17 | 0 | * |
| Sep 2009 | 84 | 15 | * | * |
| Apr 2009 | 85 | 15 | * | * |
| Dec 2008 | 84 | 16 | * | * |
| Jul 2008 | 82 | 18 | * | -- |
| May 2008 | 78 | 22 | * | 0 |
| Apr 2008 | 78 | 22 | * | -- |

[^6]| Jan 2008 | 77 | 22 | $*$ | -- |
| :---: | :---: | :---: | :---: | :---: |
| Dec 2007 | 75 | 25 | $*$ | -- |
| Sep 2007 | 78 | 22 | $*$ | -- |
| Apr 2006 | 73 | 27 | $*$ | -- |
| Jan 2005 | 66 | 34 | $*$ | -- |

ASK IF CELL PHONE OWNER (DEVICE1a=1) [N=5,558]:
SMART2
Is your cell phone a smartphone?

| Yes, |  |
| :---: | :---: | :---: |
| May 19-Sep 5, 2023 | $\frac{\text { No, not a }}{\text { smartphone }}$ |
| 93 | $\frac{\text { smartphone }}{7}$ |$\quad \frac{\text { No answer }}{*}$

PHONE TREND FOR COMPARISON ${ }^{14}$ :

|  | Yes, <br> smartphone | No, not a <br> smartphone | (VOL.) Don't know | (VOL.) No <br> answer |
| ---: | :---: | :---: | :---: | :---: |
| Jan 2021 | 87 | 12 | 1 | $*$ |
| Feb 2019 | 84 | 15 | 1 | 0 |
| Jan 2018 | 82 | 17 | 1 | $*$ |
| Nov 2016 | 81 | 16 | 3 | $*$ |
| May 2016 | 76 | 17 | 7 | 0 |
| Apr 2016* | 78 | 16 | 6 | $*$ |
| Nov 2015 | 76 | 17 | 7 | $*$ |
| Jul 2015 | 73 | 20 | 7 | $*$ |
| Apr 2015* | 73 | 22 | 5 | $*$ |
| Sep 2013* | 60 | 33 | 7 | $*$ |
| Aug 2013 | 60 | 33 | 6 | $*$ |
| May 2013 | 55 | 39 | 6 | $*$ |
| Dec 2012 | 52 | 41 | 6 | $*$ |
| Nov 2012* | 55 | 39 | 6 | $*$ |
| Sep 2012 | 53 | 40 | 10 | $*$ |
| Apr 2012 | 46 | 44 | 8 | $*$ |
| Feb 2012 | 45 | 46 | 14 | $*$ |
| May 2011 | 33 | 53 |  |  |

[^7]
## SMART2 BASED ON ALL ADULTS:

|  | Yes, smartphone | No, not a smartphone | No answer to SMART2 | No cell phone | No answer to DEVICE1a |
| :---: | :---: | :---: | :---: | :---: | :---: |
| May 19-Sep 5, 2023 | 90 | 7 |  | 2 | 1 |


[^0]:    ${ }^{1}$ Estimates for Asian adults are representative of English speakers only.

[^1]:    ${ }^{2}$ The definition of an internet user varies from survey to survey. Prior to January 2005, internet users were defined as those who said "yes" to "Do you ever go online to access the Internet or World Wide Web or to send and receive email?" From January 2005 through February 2012, an internet user is someone who said "yes" to either "Do you use the internet, at least occasionally?" (INTUSE) OR "Do you send or receive email, at least occasionally?" (EMLOCC). From April 2012 through December 2012, an internet user is someone said "yes" to any of three questions: INTUSE, EMLOCC or "Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally?" (INTMOB). In May 2013, half the sample was asked INTUSE/EMLOCC/INTMOB and half was asked EMINUSE/INTMOB. Those May 2013 trend results are for both forms combined. Since then, anyone who responds "yes" to EMINUSE or INTMOB is considered an internet user. The surveys with an asterisk (*) originally included 16-and 17-year-olds in their samples, while all other surveys were exclusively conducted among adults ages 18 and older. In some prior Pew Research Center publications, findings from the asterisked surveys included those under 18. In this table, results have been recalculated to only include adults ages 18 and older on all surveys to enable comparisons.

[^2]:    ${ }^{3}$ The surveys with an asterisk (*) originally included 16- and 17-year-olds in their samples, while all other surveys were exclusively conducted among adults ages 18 and older. In some prior Pew Research Center publications, findings from the asterisked surveys included those under 18. In this table, results have been recalculated to only include adults ages 18 and older on all surveys to enable comparisons.

[^3]:    ${ }^{4}$ For surveys conducted 2021 and earlier, the question wording was "Do you currently subscribe to internet service at HOME?"
    ${ }^{5}$ The dial-up response option wording was "Dial-up (over a landline phone connection)."
    ${ }^{6}$ The high-speed home broadband response option wording was "High-speed broadband like cable, fiber optic, wireless router, satellite, or DSL."

[^4]:    10 The company changed its name to $X$ while our May 19-Sept. 5, 2023, survey was in the field.

[^5]:    ${ }^{8}$ Home broadband users are defined as those who said they have high-speed broadband. Those defined as not having home broadband gave any other answer, including not sure or refusing the question.
    9 Home broadband users are defined as those who said they have high-speed broadband. Those defined as not having home broadband gave any other answer, including not sure or refusing the question.
    ${ }^{10}$ The company changed its name to $X$ while our May 19-Sept. 5, 2023, survey was in the field.
    ${ }^{11}$ Wording in January 2021 was "Please tell me if you ever use any of the following. Do you ever use... [INSERT ITEMS; RANDOMIZE ITEM $\rightarrow$ S ae FIRST AS A BLOCK, THEN RANDOMIZE ITEMS f-k AS A BLOCK]?" Wording in February 2019 was "Please tell me if you ever use any of the following social media sites. Do you ever use... [INSERT ITEMS; RANDOMIZE]?" For January 2018, it was "Please tell me if you ever use any of the following social media sites online or on your cell phone. Do you ever use... [INSERT ITEMS; RANDOMIZE]?" May 2013 wording was "Do you ever use the internet to... [INSERT ITEM; RANDOMIZE]?" For August and December 2012, as well as September 2013 through September 2014, the wording was "Please tell me if you ever use the internet to do any of the following things. Do you ever... [INSERT ITEM;
    RANDOMIZE]?" For April 2015 through April 2016, the question wording was "Please tell me if you ever use the internet or a mobile app to do any of the following things. Do you ever use the internet or a mobile app to... [INSERT ITEM; RANDOMIZE]?" The surveys with an asterisk (*) originally included 16- and 17-year-olds in their samples, while all other surveys were exclusively conducted among adults ages 18 and older. In some prior Pew Research Center publications, findings from the asterisked surveys included those under 18. In this table, results have been recalculated to only include adults ages 18 and older on all surveys to enable comparisons.
    ${ }^{12}$ Dec. 13-16, 2012, trend was asked of all internet users as a standalone question: "Do you ever use Facebook?"

[^6]:    ${ }^{13}$ This question was asked of landline sample only. Results shown here have been recalculated to include cell phone sample in the "Yes" percentage. Beginning September 2007, the question/item was not asked of the cell phone sample, but trend results shown here reflect Total combined landline and cell phone sample. In past polls, the question was sometimes asked as an independent question and sometimes as an item in a series. Wording may vary from survey to survey. Wording variations include: "Do you have a cell phone or a Blackberry or iPhone or other device that is also a cell phone?"; "Do you have...a cell phone or a Blackberry or iPhone or other handheld device that is also a cell phone?"; Do you have a cell phone, or a Blackberry or other device that is also a cell phone?"; "Do you happen to have a cell phone?"; "Do you have a cell phone?"; "Next, do you have a cell phone, or not?" The surveys with an asterisk (*) originally included 16- and 17-year-olds in their samples, while all other surveys were exclusively conducted among adults ages 18 and older. In some prior Pew Research Center publications, findings from the asterisked surveys included those under 18. In this table, results have been recalculated to only include adults ages 18 and older on all surveys to enable comparisons.

[^7]:    ${ }^{14}$ The surveys with an asterisk (*) originally included 16-and 17-year-olds in their samples, while all other surveys were exclusively conducted among adults ages 18 and older. In some prior Pew Research Center publications, findings from the asterisked surveys included those under 18. In this table, results have been recalculated to only include adults ages 18 and older on all surveys to enable comparisons.

