## Pew Research Center

FOR RELEASE AUGUST 9, 2018

# For Most Trump Voters, 'Very Warm' Feelings for Him Endured 

Also: A detailed look at the 2016 electorate, based on voter records

FOR MEDIA OR OTHER INQUIRIES:

Carroll Doherty, Director of Political Research
Jocelyn Kiley, Associate Director, Research
Bridget Johnson, Communications Manager
202.419.4372
www.pewresearch.org

RECOMMENDED CITATION
Pew Research Center, August, 2018, "For Most
Trump Voters, 'Very Warm' Feelings for Him
Endured"

PEW RESEARCH CENTER
www.pewresearch.org

## About Pew Research Center

Pew Research Center is a nonpartisan fact tank that informs the public about the issues, attitudes and trends shaping America and the world. It does not take policy positions. It conducts public opinion polling, demographic research, content analysis and other data-driven social science research. The Center studies U.S. politics and policy; journalism and media; internet, science and technology; religion and public life; Hispanic trends; global attitudes and trends; and U.S. social and demographic trends. All of the Center's reports are available at www.pewresearch.org. Pew Research Center is a subsidiary of The Pew Charitable Trusts, its primary funder. This report was made possible by The Pew Charitable Trusts.
(C) Pew Research Center 2018

# For Most Trump Voters, 'Very Warm’ Feelings for Him Endured 

## Also: A detailed look at the 2016 electorate, based on voter records

In the wake of Donald Trump's 2016 election victory, an overwhelming majority of those who said they had voted for him had "warm" feelings for him.

By this spring, more than a year into Trump's presidency, the feelings of these same Trump voters had changed very little.

In March, $82 \%$ of those who reported voting for Trump - and whom researchers were able to verify through voting records as having voted in 2016 - said they felt "warmly" toward Trump, with $62 \%$ saying they had "very warm" feelings toward him. Their feelings were expressed on a 0-100 "feeling thermometer." A rating of 51 or higher is "warm," with 76 or higher indicating "very warm" feelings.

The views of these same Trump voters had been quite similar in November 2016: At that time, $87 \%$ had warm feelings toward him, including $63 \%$ who had very warm feelings.


Note: Feeling thermometer ratings: very cold (0-24), cold (25-49), neutral (50), somewhat warm (51-75), very warm (76-100). Among those who were validated as having voted in the 2016 general election and who said they voted for Donald Trump.
Source: Surveys of U.S. adults conducted April 2016 through March 2018 and matched to voter files. See Methodology for details.
PEW RESEARCH CENTER

This report is based on surveys conducted on
Pew Research Center's nationally representative American Trends Panel. The Center tracked views of Trump among the same groups of Americans in March 2018 and at three points in 2016, including in November shortly after the election. In that survey, respondents reported whom they had voted for.

When state voter files - publicly available records of who turned out to vote - became available months after the election, respondents were matched to these files. Self-reported turnout was not
used in this analysis; rather, researchers took extensive effort to determine which respondents had in fact voted. And unlike other studies that have employed voter validation, this one employs five different commercial voter files in an effort to minimize the possibility that actual voters were incorrectly classified as nonvoters due to errors in locating their turnout records.

This study also includes a detailed portrait of the electorate - which also is based on the reported voting preferences of validated voters. It casts the widely reported educational divide among white voters in 2016 into stark relief: A majority of white college graduates (55\%) reported voting for Hillary Clinton, compared with $38 \%$ who supported Trump. Among the much larger share of white voters who did not complete college, $64 \%$ backed Trump and just $28 \%$ supported Clinton.

## Views of Trump among Clinton voters, supporters of other candidates

Many voters who ultimately supported Trump in the general election did not always feel so warmly toward him. In April 2016, shortly before Trump secured the Republican nomination for president, a substantial share of those who would go on to vote for him in November expressed mixed, or even cold, feelings toward him: While most ( $65 \%$ ) either viewed him warmly or very warmly, about a third (35\%) felt either cold or neutral toward him. About one-in-five (19\%) of those who ended up voting for Trump had very cold feelings for him at that time (rating him lower than 25 on the $0-100$ scale).

Yet just a few months later, after Trump had wrapped up the GOP nomination and the general election campaign was underway, Trump voters' feelings toward him grew more positive. And in the wake of his election victory, the feelings of these same Trump voters turned even more positive. In November 2016, 87\% of Trump voters said they had warm feelings toward him; and in March of this year, $82 \%$ did so.

While most Trump voters

## In March, large majorities of Clinton, Johnson and Stein voters had 'very cold' feelings for Trump

\% of validated voters in 2016 who rated Trump___ on a 'feeling thermometer' from o (coldest) to 100 (warmest) in March 2018


*Those who voted for Gary Johnson or Jill Stein.
Note: Feeling thermometer ratings: very cold (0-24), cold (25-49), neutral (50), somewhat warm (51-75), very warm (76-100). Among those who were validated as having voted in the 2016 general election.
Source: Surveys of U.S. adults conducted April 2016 through March 2018 and matched to voter files. See Methodology for details.

PEW RESEARCH CENTER
continued to have very positive feelings for him, Clinton voters - and voters who supported Gary Johnson and Jill Stein - continued to have even more negative views of Trump.

This March, an overwhelming share (93\%) of verified voters who had backed Clinton in the 2016 election gave Trump a cold rating, with $88 \%$ giving him a very cold rating. Only $3 \%$ of those who voted for Clinton felt at all warmly toward Trump. In fact, a majority of Clinton voters (65\%) gave Trump the coldest possible rating ( o on the $\mathrm{o}-100$ scale).

A large majority of verified voters who reported voting for Gary Johnson or Jill Stein in 2016 also viewed Trump very negatively this spring. Among voters who said they voted for either of these candidates, $84 \%$ gave Trump a cold rating, with $70 \%$ rating him very coldly.

## From cold (or neutral) to warm

About a third of Trump's November 2016 voters (35\%) had cold or neutral feelings toward him earlier that year. By September 2016, a $57 \%$ majority of these voters had warmed to him, including $24 \%$ who felt very warmly. And shortly after the election, threequarters of these once cold or neutral voters (74\%) felt warmly toward him, including 43\% who rated him very warmly.

Among the $65 \%$ majority of Trump voters who felt warmly toward him in April 2016, there was much less change in opinions about him. Of this group, $90 \%$ or more maintained warm feelings toward him in September and November 2016.

And among both of these groups of verified voters who cast ballots for Trump in November - those who felt warmly toward Trump in April 2016 and those who did not opinions about Trump changed little between November 2016 and March 2018.

## Most Trump voters who had been cold or neutral toward him in April 2016 turned warmer, stayed warm

Among validated voters in 2016 who reported voting for Trump, \% who rated him warm on a 'feeling thermometer' from o (coldest rating) to 100 (warmest rating) in ...


Note: Feeling thermometer ratings: somewhat warm (51-75), very warm (76-100). Among those who were validated as having voted in the 2016 general election and who said they voted for Donald Trump.
Source: Surveys of U.S. adults conducted April 2016 through March 2018 and matched to voter files. See Methodology for details.

PEW RESEARCH CENTER

## Four types of Trump voters, based on their views in 2016 and 2018

Comparing Trump voters' feelings about him in April 2016 with their views in March 2018 divides them into four groups: Enthusiasts, who had warm feelings for Trump at both points; Converts, who were initially cold or neutral but warmed over time; Skeptics, who were cold toward Trump in April 2016 and cold again in March 2018; and Disillusioned Trump voters, who were initially warm toward him but were cold or neutral in March 2018.

Enthusiasts make up the largest share of Trump voters (59\% of verified voters who reported voting for Trump); they gave Trump warm ratings on the feeling thermometer in both April 2016 and March 2018. Their loyalty to Trump was evident in the primary campaign: In April 2016, six-in-ten Enthusiasts (60\%) said they wanted to see Trump receive the nomination compared with just $14 \%$ of the other groups of Trump general election voters.

Converts make up the next largest share of Trump voters (23\%). These voters were cold or neutral toward Trump prior to his receiving the Republican nomination. In April 2016, nearly half of Converts (44\%) favored Ted Cruz for the GOP presidential nomination. But in September 2016, during the general election campaign, $73 \%$ of this group had warm feelings for Trump, including $31 \%$ who gave Trump a very warm rating. By March 2018, 71\% gave him a very warm rating.


Skeptics, like Converts, had cold or neutral feelings for Trump in April 2016. Unlike Converts, however, Skeptics did not have warm feelings toward Trump nearly two years later, after he became president. Skeptics, who constitute $12 \%$ of Trump voters, reported voting for him, and their feelings for the president became somewhat warmer in the wake of the election. But their views of him grew more negative after he became president.

A very small segment of Trump voters, the Disillusioned, had warm feelings for him in April 2016 - and reported voting for him that November - but had cold or neutral feelings for him in March 2018. The Disillusioned make up just 6\% of Trump voters.

Looking at the average thermometer ratings for Trump from 2016 to 2018 among three groups of Trump voters (there are too few of the Disillusioned for this analysis) underscores the different trajectories in feelings toward Trump among the Converts, Skeptics and Enthusiasts.

In April 2016, the average thermometer ratings for Trump among both Converts and Skeptics were very low (27 among Converts, 24 among Skeptics). By contrast, the average rating among Enthusiasts was 85 .

Shortly after the election, both Converts and Skeptics warmed considerably toward Trump, but there were sizable differences in views of the president-elect among the two groups: In November 2016, the average rating for Trump among Converts was 22 points higher than among Skeptics (79 vs. 57).

By March 2018, the average thermometer rating among Converts was 85 , slightly higher than it had been shortly after the election. The average rating among Skeptics plummeted more than 20 points (from 57 to 33 ). The average thermometer rating for Trump among Enthusiasts remained very high over the course of the 2016 campaign and into the

## Differing trajectories in views of Trump among 'Enthusiasts,' 'Converts’ and 'Skeptics'

Among verified voters who reported voting for Trump, average rating of him on a 'feeling thermometer' from $o$ (coldest rating) to 100 (warmest rating) in ...


Note: Among those who were validated as having voted in the 2016 general election and who said they voted for Donald Trump. There were not enough "disillusioned" voters to display.
Source: Surveys of U.S. adults conducted April 2016 through March 2018 and matched to voter files. See Methodology for details.
PEW RESEARCH CENTER second year of Trump's presidency (88 in March 2018).

## In March 2018, modest gender gap in views of Trump among supporters

In April 2016, men who ended up voting for Trump gave him somewhat higher average thermometer ratings than did his women supporters. There were no gender differences in November 2016, following the election. But a significant gap is now evident. Among voters who had reported voting for Trump, men gave him an average thermometer rating of 80 in March 2018, unchanged from November 2016. The average rating among women Trump voters was 74 , down 7 points from shortly after the election. There were comparable gender differences during the primary campaign in April 2016, when the average rating for Trump was 6 points higher among men (67) than women (61) who said they voted for him.

The oldest Trump voters, those in the Silent Generation (born 1928-1945), gave him the highest average thermometer ratings in March of this year (82) and in November 2016 (87). There were more modest generational differences in April of that year.

## Gender, age and educational differences in views of Trump among his voters

Among validated voters who reported voting for Trump, average rating of him on a 'feeling thermometer' from $o$ (coldest rating) to 100 (warmest rating) in ...

|  | April <br> $\mathbf{2 0 1 6}$ | Nov <br> $\mathbf{2 0 1 6}$ | March <br> $\mathbf{2 0 1 8}$ |
| :--- | :---: | :---: | :---: |
| All validated Trump voters | 64 | 81 | 78 |
| Men (53\%) | 67 | 80 | 80 |
| Women (47\%) | 61 | 81 | 74 |
| Silent (20\%) | 61 | 87 | 82 |
| Boomer (40\%) | 67 | 81 | 76 |
| Gen X (23\%) | 61 | 77 | 77 |
| Millennial (15\%) | 62 | 76 | 75 |
| Postgrad (9\%) | 56 | 76 | 74 |
| College grad (21\%) | 58 | 77 | 72 |
| Some college (38\%) | 69 | 80 | 80 |
| HS or less (31\%) | 64 | 84 | 79 |

Note: Among those who were validated as having voted in the 2016 general election and who said they voted for Donald Trump.
Source: Surveys of U.S. adults conducted April 2016 through March 2018 and matched to voter files. See Methodology for details.

PEW RESEARCH CENTER

Trump voters without a four-year college
degree have rated him consistently higher on the thermometer than have his supporters with a four-year college degree or more advanced education. In March of this year, the average rating among Trump voters who had not completed college was 8o, compared with 72 among college graduates.

## An examination of the 2016 electorate, based on validated voters

One of the biggest challenges facing those who seek to understand U.S. elections is establishing an accurate portrait of the American electorate and the choices made by different kinds of voters. Obtaining accurate data on how people voted is difficult for a number of reasons.

Surveys conducted before an election can overstate - or understate - the likelihood of some voters to vote. Depending on when a survey is conducted, voters might change their preferences before Election Day. Surveys conducted after an election can be affected by errors stemming from respondents' recall, either for whom they voted for or whether they voted at all. Even the special surveys conducted by major news organizations on Election Day - the "exit polls" - face challenges from refusals to participate and from the fact that a sizable minority of voters actually vote prior to Election Day and must be interviewed using conventional surveys beforehand.

This report introduces a new approach for looking at the electorate in the 2016 general election: matching members of Pew Research Center's nationally representative American Trends Panel to voter files to create a dataset of verified voters.

The analysis in this report uses post-election survey reports of 2016 vote preferences (conducted Nov. 29-Dec. 12, 2016) among those who were identified as having voted using official voting records. These voter file records become available in the months after the election. (For more details, see "Methodology.") Among these verified voters, the overall vote preference mirrors the election results very closely: $48 \%$ reported voting for Hillary Clinton and $45 \%$ for Donald Trump; by comparison, the official national vote tally was $48 \%$ for Clinton, $46 \%$ for Trump.

This data source allows researchers to take a detailed look at the voting preferences of Americans across a range of demographic traits and characteristics. It joins resources already available including the National Election Pool exit polls, the American National Election Studies and the Current Population Survey's Voting and Registration Supplement - in hopes of helping researchers continue to refine their understanding of the 2016 election and electorate, and address complex questions such as the role of race and education in 2016 candidate preferences.

It reaffirms many of the key findings about how different groups voted - and the composition of the electorate - that emerged from post-election analyses based on other surveys. Consistent with other analyses and past elections, race was strongly correlated with voting preference in 2016. But there are some differences as well. For instance, the wide educational divisions among white voters seen in other surveys are even more striking in these data.

Overall, whites with a four-year college degree or more education made up $30 \%$ of all validated voters. Among these voters, far more (55\%) said they voted for Clinton than for Trump (38\%). Among the much larger group of white voters who had not completed college ( $44 \%$ of all voters), Trump won by more than two-to-one ( $64 \%$ to $28 \%$ ).

There also were large differences in voter preferences by gender, age and marital status. Women were 13 percentage points more likely than men to have voted for Clinton (54\% among women, $41 \%$ among men). The gender gap was particularly large among validated voters younger than 50 . In this group, $63 \%$ of women said they voted for Clinton, compared with just $43 \%$ of men. Among voters ages 50 and older, the gender gap in support for Clinton was much narrower ( $48 \%$ vs. $40 \%$ ).

About half (52\%) of validated voters were married; among them, Trump had a $55 \%$ to $39 \%$ majority. Among unmarried voters, Clinton led by a similar margin ( $58 \%$ to $34 \%$ ).

Just $13 \%$ of validated voters in 2016 were younger than 30 . Voters in this age group reported voting for Clinton over Trump by a margin of $58 \%$ to $28 \%$, with $14 \%$ supporting one of the third-party candidates. Among voters ages 30 to $49,51 \%$ supported Clinton and $40 \%$ favored Trump. Trump had an advantage among 50- to 64-year-old voters ( $51 \%$ to $45 \%$ ) and those 65 and older ( $53 \%$ to 44\%).

## Among validated voters in 2016,

 wide gap among whites by education\% of validated voters in 2016 who reported voting for ...


Notes: Based on 3,014 validated 2016 general election voters. Validated voters are those found to have voted in any of five commercial voter files; corrected for questionable matches. Vote choice is from a post-election survey and excludes those who refused to answer or reported voting for a candidate other than Trump, Clinton, Johnson or Stein. Whites and blacks include only those who are not Hispanic; Hispanics are of any race. Don't know responses not shown.
Source: Survey conducted Nov. 29-Dec. 12, 2016.
PEW RESEARCH CENTER

For a detailed breakdown of the composition of the 2016 electorate and voting preferences among a wide range of subgroups of voters, see Appendix. For the survey methodology and details on how survey respondents were matched to voter records, see "Methodology."

## 2016 vote by party and ideology

Voter choice and party affiliation were nearly synonymous. Republican validated voters reported choosing Trump by a margin of $92 \%$ to $4 \%$, while Democrats supported Clinton by $94 \%$ to $5 \%$. The roughly one-third (34\%) of the electorate who identified as independent or with another party divided their votes about evenly ( $43 \%$ Trump, $42 \%$ Clinton).

Similarly, voting was strongly correlated with ideological consistency, based on a scale composed of 10 political values - including opinions on race, homosexuality, the environment, foreign policy and the social safety net. Respondents are placed into five categories ranging from "consistently conservative" to "consistently liberal." (For more, see "The Partisan Divide on Political Values Grows Even Wider.")

Virtually all validated voters with consistently liberal values voted for Clinton over Trump ( $95 \%$ to $2 \%$ ), while nearly all those with consistently conservative values went for Trump ( $98 \%$ to less than $1 \%$ for Clinton). Those who held conservative views on most political values ("mostly conservative") favored Trump by $87 \%$ to $7 \%$, while Clinton received the support of somewhat fewer among those who were "mostly liberal" (78\%-

## 2016 electorate was deeply divided along ideological lines

$\%$ of validated voters who reported voting for ...

*For items in the ideological consistency scale, see report "The Partisan Divide on Political Values Grows Even Wider," Oct. 5, 2017. Notes: Based on 3,014 validated 2016 general election voters. Validated voters are those found to have voted in any of five commercial voter files; corrected for questionable matches. Vote choice is from a post-election survey and excludes those who refused to answer or reported voting for a candidate other than Trump, Clinton, Johnson or Stein.
Source: Survey conducted Nov. 29-Dec. 12, 2016.
PEW RESEARCH CENTER $13 \%)$. Among the nearly one-third of voters whose ideological profile was mixed, the vote was divided (48\% Trump, 42\% Clinton).

## Religious affiliation and attendance

As in previous elections, voters in 2016 were sharply divided along religious lines. Protestants constituted about half of the electorate and reported voting for Trump over Clinton by a $56 \%$ to $39 \%$ margin. Catholics were more evenly divided; $52 \%$ reported voting for Trump, while $44 \%$ said they backed Clinton. Conversely, a solid majority of the religiously unaffiliated - atheists, agnostics and those who said their religion was "nothing in particular" - said they voted for Clinton (65\%) over Trump (24\%).

Within the Protestant tradition, voters were divided by race and evangelicalism. White evangelical Protestants, who constituted one out of every five voters, consistently have been among the strongest supporters of Republican candidates and supported Trump by a $77 \%$ to 16\% margin.

This is nearly identical to the $78 \%$ to $16 \%$ advantage that Mitt Romney held over Barack Obama among white evangelicals in Pew Research Center polling on the eve of the 2012 presidential election.

Among white mainline Protestants ( $15 \%$ of voters overall) $52 \%$ said they voted for Trump and $44 \%$ reported voting for Clinton. This, too, was very similar to the mainline Protestant split in 2012. Clinton won overwhelmingly among black Protestants ( $96 \%$ vs. $3 \%$ for Trump).

## Wide divisions by religious affiliation, attendance by 2016 validated voters

$\%$ of validated voters who reported voting for ...


Notes: Based on 3,014 validated 2016 general election voters. Validated voters are those found to have voted in any of five commercial voter files; corrected for questionable matches. Vote choice is from a post-election survey and excludes those who refused to answer or reported voting for a candidate other than Trump, Clinton, Johnson or Stein. Whites and blacks include only those who are not Hispanic; Hispanics are of any race. Don't know responses not shown.
Source: Survey conducted Nov. 29-Dec. 12, 2016.
PEW RESEARCH CENTER

White non-Hispanic Catholics supported Trump by a ratio of about two-to-one ( $64 \%$ to $31 \%$ ), while Hispanic Catholics favored Clinton by an even larger $78 \%$ to $19 \%$ margin.

Among all voters, those who reported attending services at least weekly favored Trump by a margin of $58 \%$ to $36 \%$; the margin was similar among those who said they attended once or twice a month ( $60 \%$ to $38 \%$ ). Those who reported attending services a few times a year or seldom were divided; $51 \%$ supported Clinton and $42 \%$ supported Trump. Among the nearly one-quarter of voters ( $23 \%$ ) who said they never attend religious services, Clinton led Trump by $61 \%$ to $30 \%$.

## Demographic and political profiles of Clinton and Trump voters

As the pattern of the votes implies, the coalitions that supported the two major party nominees were very different demographically. These differences mirror the broad changes in the compositions of the two parties: The Republican and Democratic coalitions are more dissimilar demographically than at any point in the past two decades.

In 2016, a $61 \%$ majority of those who said they voted for Clinton were women, while Trump voters were more evenly divided between men and women. Whites constituted nearly nine-in-ten (88\%) of Trump's supporters, compared with a smaller majority ( $60 \%$ ) who voted for Clinton. Clinton's

The demographic profiles of Trump and Clinton voters differed dramatically
$\%$ composition of Clinton voters and Trump voters

voters also were younger than Trump's on average ( $48 \%$ were younger than 50, compared with $35 \%$ for Trump).

Among Clinton voters, $43 \%$ were college graduates, compared with $29 \%$ of Trump voters. And while non-college whites made up a majority of Trump's voters (63\%), they constituted only about a quarter of Clinton's (26\%).

About a third of Clinton voters (32\%) lived in urban areas, versus just $12 \%$ among Trump voters. By contrast, $35 \%$ of Trump voters said they were from a rural area; among Clinton voters, $19 \%$ lived in a rural community.

The religious profile of the two candidates' voters also differed considerably. About a third of Clinton voters ( $35 \%$ ) were religiously unaffiliated, as were just $14 \%$ of Trump voters. White evangelical voters made up a much greater share of Trump's voters (34\%) than Clinton's (7\%). One-in-five Trump voters (20\%) were white non-Hispanic Catholics, compared with just 9\% of Clinton voters. And black Protestants were $14 \%$ of Clintons supporters, while almost no black Protestants in the survey reported voting for Trump.

## How did 2016 voters and nonvoters compare?

The data also provide a profile of voting-eligible nonvoters. Four-in-ten Americans who were eligible to vote did not do so in 2016. There are striking demographic differences between voters and nonvoters, and significant political differences as well. Compared with validated voters, nonvoters were more likely to be younger, less educated, less affluent and nonwhite. And nonvoters were much more Democratic.

## Profiles of validated voters and nonvoters in 2016; nonwhites made up nearly half of nonvoters, but only a quarter of voters

\% composition of validated voters and nonvoters


Notes: Validated voters are those found to have voted in any of five commercial voter files in November 2016 and reported voting for Trump, Clinton, Johnson or Stein. Nonvoters are those who were not found to have voted in any of the files. Corrected for questionable matches. Whites include only those who are not Hispanic; Hispanics are of any race. Nonwhites include Hispanics. No answer not shown.
Source: Survey conducted Nov. 29-Dec. 12, 2016.
PEW RESEARCH CENTER

Among members of the panel who were categorized as nonvoters, $37 \%$ expressed a preference for Hillary Clinton, 30\% for Donald Trump and 9\% for Gary Johnson or Jill Stein; 14\% preferred another candidate or declined to express a preference. Party affiliation among nonvoters skewed even more Democratic than did candidate preferences. Democrats and Democratic-leaning independents made up a $55 \%$ majority of nonvoters; about four-in-ten (41\%) nonvoters were Republicans and Republican leaners. Voters were split almost evenly between Democrats and Democratic leaners (51\%) and Republicans and Republican leaners (48\%).

While nonvoters were less likely than voters to align with the GOP, the picture was less clear with respect to ideology. Owing in part to the tendency of nonvoters to be politically disengaged more generally, there are far more nonvoters than voters who fall into the "mixed" category on the ideological consistency scale. Among nonvoters who hold a set of political values with a distinct ideological orientation, those with generally liberal values ( $30 \%$ of all nonvoters) considerably outnumbered those with generally conservative values (18\%).

Voters were much more highly educated than nonvoters. Just 16\% of nonvoters were college graduates, compared with $37 \%$ of voters. Adults with only a high school education constituted half (51\%) of nonvoters, compared with $30 \%$ among voters. Whites without a college degree made up $43 \%$ of nonvoters, about the same as among voters (44\%). But nonwhites without a college degree were far more numerous among nonvoters (at 42\%) than they were among voters (19\%).

There also were wide income differences between voters and nonvoters. More than half (56\%) of nonvoters reported annual family incomes under \$30,000. Among voters, just $28 \%$ fell into this income category.

## Acknowledgements

This report is a collaborative effort based on the input and analysis of the following individuals:

## Research team

Carroll Doherty, Director, Political Research
Jocelyn Kiley, Associate Director, Political Research
Courtney Kennedy, Director, Survey Research
Scott Keeter, Senior Survey Advisor
Ruth Igielnik, Senior Researcher
Andrew Mercer, Senior Research Methodologist
Alec Tyson, Senior Researcher
Nick Bertoni, Panel Manager
Bradley Jones, Research Associate
Baxter Oliphant, Research Associate
Hannah Fingerhut, Research Analyst
Hannah Hartig, Research Analyst
Nick Hatley, Research Analyst
Arnold Lau, Research Analyst
Amina Dunn, Research Assistant
John LaLoggia, Research Assistant
Claire Sukumar, Intern

## Communications and editorial

Bridget Johnson, Communications Manager
Rachel Weisel, Communications Manager
David Kent, Copy Editor
Graphic design and web publishing
Alissa Scheller, Information Graphics
Designer

## Methodology

This report is based on respondents to a self-administered web survey conducted between Nov. 29 and Dec. 12, 2016, who were matched to at least one of five different commercial voter file databases. This includes 3,014 individuals who were validated as having voted in the 2016 general election and 756 who were classified as nonvoters. Respondents were members of Pew Research Center's American Trends Panel, a nationally representative panel of randomly selected U.S. adults recruited from landline and cellphone random-digit-dial surveys. Panelists participate via monthly self-administered web surveys. Panelists who do not have internet access are provided with a tablet and wireless internet connection. At the time of the Nov. 29-Dec. 12, 2016 survey, the panel was managed by Abt, and it is currently being managed by GfK.

An effort was made to match the panelists to five commercially available databases that contain information about voter registration and turnout for nearly every U.S. adult. In total, 91\% of panelists were located in at least one of the files. Panelists who were verified as having voted in at least one of the commercial voter databases were considered to be validated voters and are included in the tabulations here. Panelists for whom no turnout record was located were considered to be nonvoters. Details about the validation process are discussed in a more general report about commercial voter files published in February 2018, "Commercial Voter Files and the Study of U.S. Politics."

The resulting sample of verified voters mirrored the election results very closely. After the validation was done and the sample was limited to those for whom a turnout record could be located, $48 \%$ reported voting for Hillary Clinton and $45 \%$ for Donald Trump; by comparison the official national vote tally was $48 \%$ for Clinton, $46 \%$ for Trump.

No one survey is perfect, and like others this one is subject to error. But a number of features may help to bolster its value as a source of information about who participated in the election and for whom they voted. First, the panel is based on a probability sample of the U.S. public and is weighted to correct for nonresponse and other biases. Second, vote preference was gathered using a self-administered survey, minimizing the risk that respondents might decline to answer. Third, the interviews were conducted within about a month of the election, reducing the potential for memory errors or subsequent political events to affect recall of candidate preference. In addition, pre-election vote preferences from a survey conducted with the same set of respondents are largely consistent with this post-election analysis. Fourth - and perhaps most important - the survey did not use self-reported turnout but rather made an extensive effort to validate whether each respondent actually voted in the election. Unlike other studies that have employed vote validation, this one employed five different commercial voter files in an effort to minimize the possibility that
actual voters were incorrectly classified as nonvoters due to errors in locating their turnout records.

For full details about the voter file matching and voter verification process, see the February 2018 report.

See topline from "In Election's Wake, Partisans Assess the State of Their Parties," December 20, 2016 for full wording of the questions used in this analysis.

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:

| Survey conducted Nov. 29-Dec. 12, 2016 |
| :--- | :---: | :---: |
| Unweighted |
| Gample size |$\quad$|  |
| :---: |
| Voup |
| Voters |
| College degree or more minus ... |
| No college degree |
| White, college graduates |
| White, no college degree |
| Non-white, college graduates |
| Non-white, no college degree |
| Non-voters |
| Trump voters |
| Enthusiasts |
| Converts |
| Skeptics |
| Clinton voters |

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.

## About the missing data imputation

Participants in the American Trends Panel are sent surveys to complete roughly monthly. While wave-level response rates are relatively high, not every individual in the panel participates in every
survey. The analyses of sentiment of 2016 voters at different time points in this report are based on four surveys fielded in April 2016, September 2016, November 2016 and March 2018.

Of the more than 3,000 respondents who participated in the November 2016 wave and were validated as having voted in the 2016 election, several hundred respondents ( $16 \%$ overall) did not respond to at least one of the other waves. A statistical procedure called multiple imputation by chained equations was used to guard against the analysis being undermined by this wave level nonresponse. In particular, there is some evidence that those who are most likely to participate consistently in the panel are more interested and knowledgeable about politics than those who only periodically respond. Omitting the individuals who did not participate in every wave of the survey might introduce bias into the sample.

The particular missing data imputation algorithm we used is a method known as multiple imputation by chained equations, or MICE. The MICE algorithm is designed for situations where there are several variables with missing data that need to be imputed at the same time. MICE takes the full survey dataset and iteratively fills in missing data for each question using a statistical model that more closely approximates the overall distribution with each iteration. The process is repeated many times until the distribution of imputed data no longer changes. Although many kinds of statistical models can be used with MICE, this project used classification and regression trees (CART). For more details on the MICE algorithm and the use of CART for imputation, see:

Azur, Melissa J., Elizabeth A. Stuart, Constantine Frangakis, and Philip J. Leaf. March 2011. "Multiple Imputation by Chained Equations: What Is It and How Does It Work." International Journal of Methods in Psychiatric Research.

Burgette, Lane F., and Jerome P. Reiter. Nov. 1, 2010. "Multiple Imputation for Missing Data via Sequential Regression Trees." American Journal of Epidemiology.

## Appendix: Detailed tables of the 2016 electorate

## 2016 vote choice among validated voters

\% of validated voters who reported voting for ...

| Share of electorate |  | Hillary Clinton | Donald Trump |
| :---: | :---: | :---: | :---: |
| (45) | Men | 41 | 52 |
| (55) | Women | 54 | 39 |
| (13) | 18-29 | 58 | 28 |
| (30) | 30-49 | 51 | 40 |
| (29) | 50-64 | 45 | 51 |
| (27) | 65+ | 44 | 53 |
| (74) | White | 39 | 54 |
| (10) | Black | 91 | 6 |
| (10) | Hispanic | 66 | 28 |
| (5) | Other/Mixed race | 59 | 32 |
| (33) | White men | 32 | 62 |
| (41) | White women | 45 | 47 |
| (4) | Black men | 81 | 14 |
| (6) | Black women | 98 | * |
| (5) | Hispanic men | 65 | 28 |
| (5) | Hispanic women | 67 | 28 |
| Among ages 18-49 |  |  |  |
| (21) | Men | 43 | 46 |
| (23) | Women | 63 | 27 |
| (14) | White men | 34 | 55 |
| (16) | White women | 55 | 33 |
| (7) | Nonwhite men | 62 | 29 |
| (7) | Nonwhite women | 81 | 12 |
| Among ages 50 and older |  |  |  |
| (24) | Men | 40 | 58 |
| (32) | Women | 48 | 47 |
| (20) | White men | 31 | 67 |
| (25) | White women | 39 | 56 |
| (5) | Nonwhite men | 75 | 23 |
| (7) | Nonwhite women | 82 | 16 |
| (Continued, next page) |  |  |  |

## 2016 vote choice among validated voters, continued

$\%$ of validated voters who reported voting for ...

| Share of <br> electorate | Hillary <br> Clinton | Donald <br> Trump |  |
| :---: | :--- | :---: | :---: |
| $(23)$ | Postgrad | 66 | 29 |
| $(34)$ | College grad | 52 | 41 |
| $(30)$ | HS or less | 42 | 49 |
| $(37)$ | College grad+ | 44 | 51 |
| $(63)$ | Non-college grad | 57 | 36 |
|  | Among whites | 43 | 50 |
| $(30)$ | College grad+ |  |  |
| $(44)$ | Non-college grad | 55 | 38 |
| $(13)$ | College grad+ men | 28 | 64 |
| $(21)$ | Non-college grad men | 47 | 44 |
| $(17)$ | College grad+ women | 23 | 73 |
| $(24)$ | Non-college grad women | 61 | 35 |
|  | Among nonwhites | 33 | 56 |
| $(7)$ | College grad+ |  |  |
| $(19)$ | Non-college grad | 68 | 26 |
|  | Among all | 77 | 18 |
| $(52)$ | Married |  |  |
| $(48)$ | Unmarried | 39 | 55 |
| $(27)$ | Married men | 58 | 34 |
| $(19)$ | Unmarried men | 32 | 62 |
| $(26)$ | Married women | 34 | 39 |
| $(29)$ | Unmarried women | 47 | 48 |

(Continued, next page)

PEW RESEARCH CENTER

CORRECTION (October 17, 2018): In the chart above, the "share of electorate" column has been edited to reflect updated percentages for gender and race by education to correct for a data tabulation error. Changes did not affect the report's substantive findings.

## 2016 vote choice among validated voters, continued

$\%$ of validated voters who reported voting for ...

| Share of electorate |  | Hillary Clinton | Donald Trump |
| :---: | :---: | :---: | :---: |
|  | Family income |  |  |
| (7) | \$150,000 or more | 51 | 44 |
| (11) | \$100,000-\$149,999 | 48 | 45 |
| (15) | \$75,000-\$99,999 | 39 | 55 |
| (18) | \$50,000-\$74,999 | 48 | 46 |
| (20) | \$30,000-\$49,999 | 42 | 54 |
| (28) | Less than \$30,000 | 58 | 32 |
| (33) | \$75,000 or more | 45 | 49 |
| (38) | \$30,000-\$74,999 | 45 | 50 |
| (28) | Less than \$30,000 | 58 | 32 |
|  | Among whites |  |  |
| (27) | \$75,000 or more | 39 | 55 |
| (28) | \$30,000-\$74,999 | 37 | 58 |
| (18) | Less than \$30,000 | 44 | 43 |
|  | Among nonwhites |  |  |
| (6) | \$75,000 or more | 71 | 23 |
| (10) | \$30,000-\$74,999 | 68 | 27 |
| (10) | Less than \$30,000 | 84 | 10 |
|  | Among all, say they live in $\qquad$ community |  |  |
| (22) | Urban | 70 | 24 |
| (50) | Suburban | 45 | 47 |
| (27) | Rural | 34 | 59 |

(Continued, next page)
PEW RESEARCH CENTER

## 2016 vote choice among validated voters, continued

$\%$ of validated voters who reported voting for ...

| Share of electorate |  | Hillary Clinton | Donald Trump |
| :---: | :---: | :---: | :---: |
| (47) | Protestant | 39 | 56 |
| (20) | Catholic | 44 | 52 |
| (26) | Unaffiliated | 65 | 24 |
| (20) | White Evangelical Protestant | 16 | 77 |
| (15) | White Mainline Protestant | 37 | 57 |
| (7) | Black Protestant | 96 | 3 |
| (5) | Other race Protestant | 51 | 46 |
| (14) | White non-Hispanic Catholic | 31 | 64 |
| (5) | Hispanic Catholic | 78 | 19 |
| (12) | Atheist/Agnostic | 69 | 20 |
| (14) | Nothing in particular | 61 | 27 |
|  | Attend religious services... |  |  |
| (26) | At least once a week | 36 | 58 |
| (26) | Once or twice a month/a few times a year | 44 | 48 |
| (47) | Seldom/Never | 57 | 36 |
| (Continued, next page) |  |  |  |

## 2016 vote choice among validated voters; continued

$\%$ of validated voters who reported voting for ...

| Share of <br> electorate | Hillary <br> Clinton | Donald <br> Trump |  |
| :---: | :--- | :---: | :---: |
| $(31)$ | Republican | 4 | 92 |
| $(35)$ | Democrat | 94 | 5 |
| $(34)$ | Independent/other | 42 | 43 |
| $(48)$ | Republican/Lean Republican | 4 | 89 |
| $(51)$ | Democrat/Lean Democrat | 89 | 5 |
|  | Self-identified ideology |  |  |
| $(9)$ | Very conservative | 16 | 83 |
| $(26)$ | Conservative | 10 | 84 |
| $(38)$ | Moderate | 55 | 36 |
| $(18)$ | Liberal | 86 | 8 |
| $(9)$ | Very liberal | 88 | 4 |
|  | Ideological consistency scale* |  |  |
| $(12)$ | Consistently conservative | $*$ | 98 |
| $(19)$ | Mostly conservative | 7 | 87 |
| $(30)$ | Mixed | 42 | 48 |
| $(20)$ | Mostly liberal | 78 | 13 |
| $(20)$ | Consistently liberal | 95 | 2 |

*For items in the ideological consistency scale, see the Center's report "The Partisan Divide on Political Values Grows Even Wider," Oct. 5, 2017.
Notes: Based on 3,014 validated 2016 general election voters. Validated voters are those found to have voted in any of five commercial voter files; corrected for questionable matches. Vote choice is from a post-election survey and excludes those who refused to answer or reported voting for a candidate other than Trump, Clinton, Johnson or Stein. Source: Survey conducted Nov. 29-Dec. 12, 2016.

Profile of voters and nonvoters
\% composition of validated voters and nonvoters

|  | Voters | Nonvoters |
| :---: | :---: | :---: |
| Candidate preference |  |  |
| Hillary Clinton | 48 | 37 |
| Donald Trump | 45 | 30 |
| Male | 45 | 51 |
| Female | 55 | 49 |
| 18-29 | 13 | 33 |
| 30-49 | 30 | 33 |
| 50-64 | 29 | 24 |
| 65+ | 27 | 9 |
| White | 74 | 52 |
| Black | 10 | 15 |
| Hispanic | 10 | 19 |
| Other | 5 | 12 |
| Postgrad | 14 | 6 |
| College grad | 23 | 10 |
| Some college | 34 | 33 |
| HS or less | 30 | 51 |
| College grad+ | 37 | 16 |
| Non-college grad | 63 | 84 |
| Among whites |  |  |
| College grad+ | 30 | 11 |
| Non-college grad | 44 | 43 |
| Among nonwhites |  |  |
| College grad+ | 7 | 5 |
| Non-college grad | 19 | 42 |
| $N=$ | 3,014 | 756 |
| *For items in the ideological consistency scale, see the Center's report "The Partisan Divid on Political Values Grows Even Wider," Oct. 5, 2017. <br> Notes: Based on validated 2016 general election voters. Validated voters are those found to have voted in any of five commercial voter files; corrected for questionable matches. Vote choice is from a post-election survey. <br> Source: Survey conducted Nov. 29-Dec. 12, 2016. |  |  |
| (Continued, next page) |  |  |
| PEW RESEARCH CEN |  |  |

Profile of voters and nonvoters, continued
\% composition of validated voters and nonvoters

|  | Voters | Nonvoters |
| :--- | :---: | :---: |
| Family income |  |  |
| \$150,000 or more | 7 | 4 |
| \$100,000-\$149,999 | 11 | 4 |
| \$75,000-\$99,999 | 15 | 8 |
| \$50,000-\$74,999 | 18 | 11 |
| \$30,000-\$49,999 | 20 | 17 |
| Less than \$30,000 | 28 | 56 |
| \$75,000 or more | 33 | 15 |
| \$30,000-\$74,999 | 38 | 28 |
| Less than \$30,000 | 28 | 56 |
| Among whites |  |  |
| \$75,000 or more | 27 | 9 |
| \$30,000-\$74,999 | 28 | 15 |
| Less than \$30,000 | 18 | 29 |
| Among nonwhites |  |  |
| \$75,000 or more | 6 | 5 |
| \$30,000-\$74,999 | 10 | 13 |
| Less than \$30,000 | 10 | 28 |
| Among all, say they live in ___ community |  |  |
| Urban |  |  |
| Suburban | 22 | 27 |
| Rural |  |  |
| N= |  |  |
| (Continued, next page) | 50 | 42 |
| PEW RESEARCH CENTER | 27 | 30 |

PEW RESEARCH CENTER

## Profile of voters and nonvoters, continued

\% composition of validated voters and nonvoters

|  | Voters | Nonvoters |
| :--- | :---: | :---: |
| White Evangelical Protestant | 20 | 13 |
| White Mainline Protestant | 15 | 10 |
| Black Protestant | 7 | 9 |
| Other race Protestant | 5 | 13 |
| White non-Hispanic Catholic | 14 | 6 |
| Hispanic Catholic | 5 | 7 |
| Atheist/Agnostic | 12 | 10 |
| Nothing in particular | 14 | 22 |
| Attend religious services... |  |  |
| At least once a week | 26 | 23 |
| Once or twice a month/a few times a year | 26 | 29 |
| Seldom/Never | 47 | 48 |
| Married | 52 | 36 |
| Unmarried | 48 | 64 |
| Married men | 27 | 17 |
| Unmarried men | 19 | 34 |
| Married women | 26 | 20 |
| Unmarried women | 29 | 30 |
| N= | 314 | 756 |

(Continued, next page)
PEW RESEARCH CENTER

## Profile of voters and nonvoters, continued

$\%$ composition of validated voters and nonvoters

|  | Voters | Nonvoters |
| :--- | :---: | :---: |
| Candidate preference |  |  |
| Hillary Clinton | 48 | 37 |
| Donald Trump | 45 | 30 |
| Republican/Lean Republican | 48 | 41 |
| Democrat/Lean Democrat | 51 | 55 |
| Self-identified ideology |  |  |
| Very conservative | 9 | 14 |
| Conservative | 26 | 23 |
| Moderate | 38 | 39 |
| Liberal | 18 | 17 |
| Very liberal | 9 | 6 |
| Ideological consistency scale* | 12 | 5 |
| Consistently conservative | 19 | 13 |
| Mostly conservative | 30 | 52 |
| Mixed | 20 | 22 |
| Mostly liberal | 20 | 8 |
| Consistently liberal | 3,014 | 756 |
| N= |  |  |
| *For items in the ideological consistency scale, see the Center's report "The Partisan Divide |  |  |
| on Political Values Grows Even Wider," Oct. 5, 2017. |  |  |
| Notes: Validated voters are those found to have voted in any of 5 commercial voter files in |  |  |
| November 2016 and reported voting for Trump, Clinton, Johnson or Stein. Nonvoters are |  |  |
| those who were not found to have voted in any of the files. Corrected for questionable |  |  |
| matches. Don't know responses not shown. |  |  |
| Source: Survey conducted Nov. 29-Dec. 12, 2016. |  |  |

PEW RESEARCH CENTER

## Profile of Clinton and Trump voters

|  | Clinton voters | Trump voters |
| :---: | :---: | :---: |
| Male | 39 | 53 |
| Female | 61 | 47 |
| 18-29 | 16 | 8 |
| 30-49 | 32 | 27 |
| 50-64 | 27 | 33 |
| 65+ | 25 | 32 |
| White | 60 | 88 |
| Black | 19 | 1 |
| Hispanic | 14 | 6 |
| Other/Mixed race | 7 | 4 |
| Postgrad | 19 | 9 |
| College grad | 25 | 21 |
| Some college | 29 | 37 |
| HS or less | 28 | 34 |
| College grad+ | 43 | 29 |
| Non-college grad | 57 | 71 |
| Among whites |  |  |
| College grad+ | 34 | 26 |
| Non-college grad | 26 | 63 |
| Among nonwhites |  |  |
| College grad+ | 9 | 4 |
| Non-college grad | 30 | 7 |
| $N=$ | 1,552 | 1,283 |

(Continued, next page)
PEW RESEARCH CENTER

## Profile of Clinton and Trump voters, continued

$\%$ composition of validated Clinton voters and Trump voters

|  | Clinton voters | Trump voters |
| :---: | :---: | :---: |
| Family income |  |  |
| \$150,000 or more | 8 | 7 |
| \$100,000-\$149,999 | 11 | 11 |
| \$75,000-\$99,999 | 12 | 18 |
| \$50,000-\$74,999 | 18 | 19 |
| \$30,000-\$49,999 | 17 | 23 |
| Less than \$30,000 | 33 | 20 |
| \$75,000 or more | 31 | 36 |
| \$30,000-\$74,999 | 35 | 42 |
| Less than \$30,000 | 33 | 20 |
| Among whites |  |  |
| \$75,000 or more | 22 | 34 |
| \$30,000-\$74,999 | 22 | 37 |
| Less than \$30,000 | 16 | 18 |
| Among nonwhites |  |  |
| \$75,000 or more | 9 | 3 |
| \$30,000-\$74,999 | 14 | 6 |
| Less than \$30,000 | 17 | 2 |
| Among all, say they live in ___ community |  |  |
| Urban | 32 | 12 |
| Suburban | 48 | 53 |
| Rural | 19 | 35 |
| $N=$ | 1,552 | 1,283 |

(Continued, next page)

PEW RESEARCH CENTER

Profile of Clinton and Trump voters, continued
\% composition of validated Clinton voters and Trump voters

|  | Clinton <br> voters | Trump <br> voters |
| :--- | :---: | :---: |
| White Evangelical Protestant | 7 | 34 |
| White Mainline Protestant | 11 | 19 |
| Black Protestant | 14 | $*$ |
| Other race Protestant | 5 | 5 |
| White non-Hispanic Catholic | 9 | 20 |
| Hispanic Catholic | 8 | 2 |
| Atheist/Agnostic | 17 | 5 |
| Nothing in particular | 17 | 8 |
| Attend religious services... |  |  |
| At least once a week | 20 | 34 |
| Once or twice a month/a few times a year | 24 | 29 |
| Seldom/Never | 56 | 38 |
| Married | 43 | 64 |
| Unmarried | 57 | 36 |
| Married men | 18 | 36 |
| Unmarried men | 21 | 17 |
| Married women | 25 | 27 |
| Unmarried women | 36 | 20 |
| $N=$ | 1,552 | 1,283 |

(Continued, next page)

PEW RESEARCH CENTER

## Profile of Clinton and Trump voters, continued

$\left.\begin{array}{l|ccc}\text { \% composition of validated Clinton voters and Trump voters } \\ \text { Clinton } \\ \text { voters }\end{array} \quad \begin{array}{c}\text { Trump } \\ \text { voters }\end{array}\right\}$

PEW RESEARCH CENTER

