

These are findings from an Ipsos poll conducted for Thomson Reuters from July 10 – 20, 2015. For the survey, a sample of 1,461 Americans ages 18+ who identify as either Democratic or Independent were interviewed online, including 907 Democrats and 326 Independents. The precision of the Reuters/Ipsos online polls is measured using a [credibility interval](#). In this case, the poll has a credibility interval of plus or minus 2.9 percentage points for all, 3.7 percentage points for Democrats, and 6.2 percentage points for Independents. For more information about credibility intervals, please see the appendix.

The data were weighted to the U.S. current population data by gender, age, education, and ethnicity. Statistical margins of error are not applicable to online polls. All sample surveys and polls may be subject to other sources of error, including, but not limited to coverage error and measurement error. Figures marked by an asterisk (\*) indicate a percentage value of greater than zero but less than one half of one per cent. Where figures do not sum to 100, this is due to the effects of rounding.

### DREAM DEMOCRATIC CANDIDATES

Q1. When thinking about the Primary Elections and process of choosing the next Democratic candidate for president, please choose the response below that best reflects your own opinion:

	Total	Dem	Indep
I will <u>enthusiastically</u> vote for Hillary Clinton as the Democratic nominee	27%	38%	11%
I will vote for Hillary Clinton because she is most likely to win a Presidential election, but I'd prefer a different Democrat	16%	20%	11%
I will <u>definitely not</u> vote for Hillary Clinton as the Democratic nominee	23%	20%	35%
I will probably not vote in the Primaries at all	17%	9%	26%
Don't know	18%	13%	17%

Q2. And assume for a moment that Hillary Clinton wins the Democratic nomination, and becomes the Democratic Presidential candidate for the 2016 Presidential election. Which of the following is closest to your personal opinion?

	Total	Dem	Indep
Hillary Clinton is a great candidate for President	29%	40%	11%
Hillary Clinton is an adequate candidate for President	34%	40%	31%
Hillary Clinton is a bad candidate for President	21%	13%	38%
Don't know	16%	7%	20%

Q3. Please think ahead now to the next Presidential election in one year's time, in 2016. If the 2016 Democratic presidential primaries were being held today, and the candidates were the individuals below, for whom of the following would you vote?

	Total	Dem	Indep
Former Secretary of State and former First Lady Hillary Clinton	26%	37%	11%
Former President Bill Clinton	13%	16%	9%
First Lady Michelle Obama	7%	8%	5%
Host of Comedy Central's Daily Show Jon Stewart	7%	6%	9%
Comedian and television host Ellen DeGeneres	6%	5%	9%
Former Vice-President and Democratic Presidential nominee Al Gore	5%	6%	3%
Secretary of State and Democratic Presidential nominee John Kerry	4%	5%	6%
Publisher, producer, television host, executive and actress Oprah Winfrey	2%	2%	4%
Housing and Urban Development Secretary and former San Antonio Mayor Julian Castro	2%	2%	*%
California Governor Jerry Brown	2%	2%	3%
Academy Award winning actor and activist George Clooney	2%	1%	3%
Wouldn't vote	25%	11%	38%

Q4. And if the 2016 Democratic presidential primaries were being held today, and the candidates were as below, for whom would you vote?

	Total	Dem	Indep
Former Secretary of State and former First Lady Hillary Clinton	39%	51%	22%
Former President Bill Clinton	22%	26%	18%
Neither/Other	15%	12%	28%
Wouldn't vote	15%	6%	21%
Don't know/Refused	9%	4%	12%
Former Secretary of State and former First Lady Hillary Clinton	47%	63%	26%
Former Vice-President and Democratic Presidential nominee Al Gore	14%	16%	12%
Neither/Other	14%	11%	28%
Wouldn't vote	16%	6%	22%
Don't know/Refused	9%	5%	12%
Former Secretary of State and former First Lady Hillary Clinton	48%	64%	26%
Secretary of State and Democratic Presidential nominee John Kerry	13%	14%	11%
Neither/Other	13%	10%	30%
Wouldn't vote	16%	6%	21%
Don't know/Refused	10%	5%	13%
Former Secretary of State and former First Lady Hillary Clinton	49%	67%	25%
Publisher, producer, television host, executive and actress Oprah Winfrey	11%	10%	12%
Neither/Other	16%	13%	33%
Wouldn't vote	15%	6%	18%
Don't know/Refused	9%	4%	12%
Former Secretary of State and former First Lady Hillary Clinton	48%	66%	24%
Comedian and television host Ellen DeGeneres	14%	13%	19%
Neither/Other	14%	12%	25%
Wouldn't vote	15%	5%	20%
Don't know/Refused	8%	4%	12%
Former Secretary of State and former First Lady Hillary Clinton	51%	68%	29%
Housing and Urban Development Secretary and former San Antonio Mayor Julian Castro	6%	7%	7%
Neither/Other	15%	13%	27%
Wouldn't vote	16%	6%	22%
Don't know/Refused	11%	7%	14%

Q4. And if the 2016 Democratic presidential primaries were being held today, and the candidates were as below, for whom would you vote? (cont.) *(Asked among Democrats and Independents)*

	<u>Total</u>	<u>Dem</u>	<u>Indep</u>
Former Secretary of State and former First Lady Hillary Clinton	44%	59%	25%
First Lady Michelle Obama	17%	19%	15%
Neither/Other	14%	11%	27%
Wouldn't vote	17%	6%	23%
Don't know/Refused	9%	5%	10%
Former Secretary of State and former First Lady Hillary Clinton	51%	68%	27%
California Governor Jerry Brown	8%	9%	9%
Neither/Other	14%	11%	28%
Wouldn't vote	16%	6%	24%
Don't know/Refused	11%	6%	13%
Former Secretary of State and former First Lady Hillary Clinton	50%	69%	22%
Academy Award winning actor and activist George Clooney	10%	8%	15%
Neither/Other	15%	12%	29%
Wouldn't vote	16%	7%	20%
Don't know/Refused	9%	4%	14%
Former Secretary of State and former First Lady Hillary Clinton	46%	62%	23%
Host of Comedy Central Daily Show Jon Stewart	15%	15%	21%
Neither/Other	13%	11%	22%
Wouldn't vote	16%	6%	21%
Don't know/Refused	10%	5%	13%

## How to Calculate Bayesian Credibility Intervals

The calculation of credibility intervals assumes that  $Y$  has a binomial distribution conditioned on the parameter  $\theta$ , i.e.,  $Y|\theta \sim \text{Bin}(n, \theta)$ , where  $n$  is the size of our sample. In this setting,  $Y$  counts the number of “yes”, or “1”, observed in the sample, so that the sample mean ( $\bar{y}$ ) is a natural estimate of the true population proportion  $\theta$ . This model is often called the likelihood function, and it is a standard concept in both the Bayesian and the Classical framework. The Bayesian <sup>1</sup> statistics combines both the prior distribution and the likelihood function to create a posterior distribution. The posterior distribution represents our opinion about which are the plausible values for  $\theta$  adjusted after observing the sample data. In reality, the posterior distribution is one’s knowledge base updated using the latest survey information. For the prior and likelihood functions specified here, the posterior distribution is also a beta distribution ( $\pi(\theta/y) \sim \beta(y+a, n-y+b)$ ), but with updated hyper-parameters.

Our credibility interval for  $\vartheta$  is based on this posterior distribution. As mentioned above, these intervals represent our belief about which are the most plausible values for  $\vartheta$  given our updated knowledge base. There are different ways to calculate these intervals based on  $\pi(\theta/y)$ . Since we want only one measure of precision for all variables in the survey, analogous to what is done within the Classical framework, we will compute the largest possible credibility interval for any observed sample. The worst case occurs when we assume that  $a=1$  and  $b=1$  and  $y=n/2$ . Using a simple approximation of the posterior by the normal distribution, the 95% credibility interval is given by, approximately:

$$\bar{y} \pm \frac{1}{\sqrt{n}}$$

For this poll, the Bayesian Credibility Interval was adjusted using standard weighting design effect  $1+L=1.3$  to account for complex weighting<sup>2</sup>

Examples of credibility intervals for different base sizes are below. Ipsos does not publish data for base sizes (sample sizes) below 100.

Sample size	Credibility intervals
2,000	2.5
1,500	2.9
1,000	3.5
750	4.1
500	5.0
350	6.0
200	7.9
100	11.2

<sup>1</sup> *Bayesian Data Analysis, Second Edition, Andrew Gelman, John B. Carlin, Hal S. Stern, Donald B. Rubin, Chapman & Hall/CRC | ISBN: 158488388X | 2003*

<sup>2</sup> Kish, L. (1992). *Weighting for unequal Pi*. *Journal of Official, Statistics*, 8, 2, 183200.