IPSOS / REUTERS POLL DATA

Prepared by Ipsos Public Affairs

Ipsos Poll Conducted for Reuters

Democratic Primary Poll 05.15.2019

These are findings from an Ipsos poll conducted May 10-14, 2019 on behalf of Thomson Reuters. For the survey, a sample of roughly 2,010 adults age 18+ from the continental U.S., Alaska and Hawaii was interviewed online in English. The sample includes 1,707 registered voters, 646 registered Democrats, 657 registered Republicans, and 318 registered Independents

The sample for this study was randomly drawn from Ipsos's online panel (see link below for more info on "Access Panels and Recruitment"), partner online panel sources, and "river" sampling (see link below for more info on the Ipsos "Amparo Overview" sample method) and does not rely on a population frame in the traditional sense. Ipsos uses fixed sample targets, unique to each study, in drawing sample. After a sample has been obtained from the Ipsos panel, Ipsos calibrates respondent characteristics to be representative of the U.S. Population using standard procedures such as raking-ratio adjustments. The source of these population targets is U.S. Census 2016 American Community Survey data. The sample drawn for this study reflects fixed sample targets on demographics. Post-hoc weights were made to the population characteristics on gender, age, region, race/ethnicity and income.

Statistical margins of error are not applicable to online non-probability polls. All sample surveys and polls may be subject to other sources of error, including, but not limited to coverage error and measurement error. Where figures do not sum to 100, this is due to the effects of rounding. The precision of Ipsos online polls is measured using a credibility interval. In this case, the poll has a credibility interval of plus or minus 2.5 percentage points for all respondents (see link below for more info on Ipsos online polling "Credibility Intervals"). Ipsos calculates a design effect (DEFF) for each study based on the variation of the weights, following the formula of Kish (1965). This study had a credibility interval adjusted for design effect of the following (n=2,010 DEFF=1.5, adjusted Confidence Interval=4.0).

The poll also has a credibility interval of plus or minus 3.9 percentage points for registered voters, 6.1 percentage points for registered Democrats, 6.4 percentage points for registered Republicans, and 8.6 percentage points for registered Independents. (see link below for more info on Ipsos online polling "Credibility Intervals").

For more information about Ipsos online polling methodology, please go here http://goo.gl/yJBkuf

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		All Americans	Registered Voters	Registered Democrats	Registered Republicans	Registered Independents
If the 2020 Democratic presidential primary election were held today, and you had to choose from the list of candidates below, for whom would you vote?	Joe Biden	29%	32%	36%	-	23%
	Kamala Harris	6%	7%	8%	-	4%
	Elizabeth Warren	6%	7%	9%	-	2%
	Bernie Sanders	13%	14%	15%	-	10%
	Beto O'Rourke	6%	6%	7%	-	5%
	Cory Booker	2%	2%	2%	-	1%
	Julian Castro	1%	1%	1%	-	0%
	Amy Klobuchar	1%	1%	1%	-	1%
	Kirsten Gillibrand	1%	1%	0%	-	1%
	Pete Buttigieg	4%	4%	5%	-	3%
	Tulsi Gabbard	0%	0%	0%	-	1%
	John Hickenlooper	1%	1%	1%	-	1%
	Steve Bullock	0%	0%	1%	-	0%
	Jay Inslee	1%	1%	1%	-	0%
	John Delaney	0%	0%	0%	-	0%
	Marianne Williamson	0%	0%	0%	-	0%
	Andrew Yang	1%	1%	0%	-	1%
	Tim Ryan	1%	1%	1%	-	0%
	Wayne Messam	0%	0%	0%	-	0%
	Eric Swalwell	0%	0%	0%	-	0%
	Seth Moulton	0%	0%	0%	-	0%
	Michael Bennet	1%	1%	1%	-	0%
	Bill de Blasio	1%	0%	1%	-	0%
	I can't/won't vote in the Democratic primary	8%	7%	0%	-	24%
	Other	1%	2%	2%	-	1%
	Don't know	16%	12%	9%	-	20%
	Total	1132	964	646	-	318

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		All Americans	Registered Voters	Registered Democrats	Registered Republicans	Registered Independents
If your first choice dropped out of the race or you had to choose someone to vote for, who would you vote for in the upcoming presidential primary election?	Joe Biden	12%	12%	13%	-	10%
	Kamala Harris	9%	10%	12%	-	5%
	Elizabeth Warren	10%	11%	12%	-	6%
	Bernie Sanders	14%	15%	16%	-	14%
	Beto O'Rourke	6%	7%	7%	-	6%
	Cory Booker	5%	5%	7%	-	1%
	Julian Castro	2%	1%	2%	-	1%
	Amy Klobuchar	1%	1%	1%	-	0%
	Kirsten Gillibrand	1%	2%	1%	-	3%
	Pete Buttigieg	4%	4%	5%	-	4%
	Tulsi Gabbard	1%	1%	0%	-	2%
	John Hickenlooper	1%	1%	1%	-	2%
	Steve Bullock	1%	1%	1%	-	0%
	Jay Inslee	1%	1%	1%	-	0%
	John Delaney	1%	0%	0%	-	0%
	Marianne Williamson	0%	0%	0%	-	1%
	Andrew Yang	1%	1%	1%	-	2%
	Tim Ryan	1%	1%	1%	-	1%
	Wayne Messam	0%	0%	0%	-	0%
	Eric Swalwell	0%	0%	1%	-	0%
	Seth Moulton	0%	0%	0%	-	0%
	Michael Bennet	1%	1%	1%	-	0%
	Bill de Blasio	1%	1%	1%	-	1%
	Other	3%	3%	2%	-	4%
	Don't know	24%	20%	15%	-	34%
	Total	1030	886	646	-	240

REUP1. Are you currently registered to vote, or not? (Select one)

Yes
No
Don't know / Refused

REUS8. In your opinion, what is the most important problem facing the US today? (Select from below or write in)

[RANDOMIZE]
Economy generally
Unemployment / lack of jobs
War / foreign conflicts
Immigration
Terrorism / terrorist attacks
Healthcare
Energy issues
Morality
Education
Crime
Environment
Other **[INSERT TEXT BOX]**
Don't know
[ASK ALL GROUPS]

REUAB1. Generally speaking, would you say things in this country are heading in the right direction, or are they off on the wrong track?

[ROTATE 1-2; 2-1]
Right direction
Wrong track
Don't know **[ANCHOR]**

REUAB11. Overall, do you approve or disapprove of the way Donald Trump is handling his job as President?

[ROTATE 1-2; 2-1]
Approve
Disapprove
Don't know **[ANCHOR]**

[IF "APPROVE" OR "DISAPPROVE" TO REUAB11, ASK QUESTION REUAB12.]
REUAB12. Is that strongly [INSERT RESPONSE FROM AB11] or somewhat [INSERT RESPONSE FROM AB11]

[ROTATE 1-2; 2-1]
Strongly [INSERT RESPONSE FROM AB11]
Somewhat [INSERT RESPONSE FROM AB11]

[IF "DK" TO AB11, ASK QUESTION REUAB13]
AB13. If you had to choose, do you lean more towards approve or disapprove?

[ROTATE 1-2; 2-1]
Approve
Disapprove
Don't know / Refused **[ANCHOR]**

REUTM4. Would you say you are generally favorable or unfavorable towards these public figures?

[GRID ACROSS: PROGRESSIVE ROTATE 1-6;6-1]
Very favorable
Somewhat favorable
Lean towards favorable
Lean towards unfavorable
Somewhat unfavorable
Very unfavorable

[GRID DOWN: ONLY INCLUDE INDIVIDUALS RESPONDENT IS AWARE OF (REUTM3:1-4); RANDOMIZE IN SAME ORDER]
Donald Trump
Joe Biden
Kamala Harris
Elizabeth Warren
Bernie Sanders
Beto O'Rourke
Cory Booker
Julian Castro
Amy Klobuchar
Kirsten Gillibrand
Pete Buttigieg
Tulsi Gabbard
John Hickenlooper
Steve Bullock
Jay Inslee
John Delaney
Marianne Williamson
Andrew Yang
Tim Ryan
Wayne Messam
Eric Swalwell
Seth Moulton
Michael Bennet
Bill de Blasio

[ASK STRONG/MODERATE/LEAN DEMOCRAT AND INDEPENDENTS ONLY FROM PID]
TM1633Y19. If the 2020 Democratic presidential primary election were held today, for whom would you vote?

[OPEN END]

[ASK STRONG/MODERATE/LEAN DEMOCRAT AND INDEPENDENTS ONLY FROM PID]
TM1634Y19. If the 2020 Democratic presidential primary election were held today, and you had to choose from the list of candidates below, for whom would you vote?

[RANDOMIZE LIST]
Joe Biden
Kamala Harris
Elizabeth Warren
Bernie Sanders
Beto O'Rourke
Cory Booker
Julian Castro
Amy Klobuchar
Kirsten Gillibrand
Pete Buttigieg
Tulsi Gabbard
John Hickenlooper
Steve Bullock
Jay Inslee
John Delaney
Marianne Williamson
Andrew Yang
Tim Ryan
Wayne Messam
Eric Swalwell
Seth Moulton
Michael Bennet
Bill de Blasio
I can't/won't vote in the Democratic primary **[ASK INDEPENDENTS ONLY]**
Other **[ANCHOR]**
Don't know **[ANCHOR]**

[ASK STRONG/MODERATE/LEAN DEMOCRAT AND INDEPENDENTS ONLY FROM PID AND ONLY THOSE DID NOT SAY 'CAN'T/WON'T VOTE IN THE DEMOCRATIC PRIMARY' IN TM1634Y19]

TM1657Y19. If your first choice dropped out of the race or you had to choose someone to vote for, who would you vote for in the upcoming presidential primary election?

[HOLD ORDER FROM PREVIOUS QUESTION, DO NOT INCLUDE RESPONSE FROM TM1634Y19]

Joe Biden
Kamala Harris
Elizabeth Warren
Bernie Sanders
Beto O'Rourke
Cory Booker
Julian Castro
Amy Klobuchar
Kirsten Gillibrand
Pete Buttigieg
Tulsi Gabbard
John Hickenlooper
Steve Bullock
Jay Inslee
John Delaney
Marianne Williamson
Andrew Yang
Tim Ryan
Wayne Messam
Eric Swalwell
Seth Moulton
Michael Bennet
Bill de Blasio
Other **[ANCHOR]**
Don't know **[ANCHOR]**

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How to Calculate Bayesian Credibility Intervals

The calculation of credibility intervals assumes that Y has a binomial distribution conditioned on the parameter θ\, i.e., Y|θ~Bin(n,θ), 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 θ. This model is often called the likelihood function, and it is a standard concept in both the Bayesian and the Classical framework. The Bayesian [1] 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 θ 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 (π(θ/y)~β(y+a,n-y+b)), but with updated hyper-parameters.

Our credibility interval for ϑ is based on this posterior distribution. As mentioned above, these intervals represent our belief about which are the most plausible values for ϑ given our updated knowledge base. There are different ways to calculate these intervals based on π(θ/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:

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

For this poll, the Bayesian Credibility Interval was adjusted using standard weighting design effect 1+L=1.3 to account for complex weighting[2]

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