



## IPSOS / REUTERS POLL DATA

Prepared by Ipsos Public Affairs

### Ipsos Poll Conducted for Reuters

2020 Democratic Primary Horserace Poll 4.24.2019

*These are findings from an Ipsos poll conducted **April 17-23, 2019** on behalf of Thomson Reuters. For the survey, a sample of roughly 4,018 adults age 18+ from the continental U.S., Alaska and Hawaii was interviewed online in English. This sample includes 1,449 Democrats, 1,437 Republicans, and 788 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 "Ampario 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 1.8 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 ( $n=4,018$   $DEFF=1.5$ , adjusted Confidence Interval=3.3).*

*The poll also has a credibility interval plus or minus percentage points for 2.9 Democrats, plus or minus 2.9 percentage points for Republicans, and plus or minus 4.0 percentage points for 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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**Q12. 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?**

	<b>Total</b>	<b>Democrat</b>	<b>Republican</b>	<b>Independent</b>
Joe Biden	24%	30%	-	14%
Kamala Harris	6%	7%	-	4%
Elizabeth Warren	5%	6%	-	3%
Bernie Sanders	15%	15%	-	14%
Beto O'Rourke	6%	6%	-	4%
Cory Booker	3%	3%	-	2%
Julian Castro	1%	1%	-	1%
Amy Klobuchar	1%	2%	-	1%
Kirsten Gillibrand	1%	1%	-	0%
Pete Buttigieg	7%	8%	-	4%
Tulsi Gabbard	0%	0%	-	1%
John Hickenlooper	1%	1%	-	1%
Steve Bullock	1%	0%	-	1%
Jay Inslee	0%	0%	-	0%
John Delaney	0%	0%	-	1%
Marianne Williamson	0%	0%	-	0%
Andrew Yang	1%	1%	-	2%
Tim Ryan	1%	0%	-	1%
Wayne Messam	0%	0%	-	0%
Eric Swalwell	0%	0%	-	0%
Other	6%	2%	-	12%
Don't know	21%	15%	-	34%
Sample Sizes	2237	1449	-	788



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## MAIN QUESTIONNAIRE TEXT

1. With which political party do you most identify?

[ROTATE 1-6: 6-1]

Strong Democrat

Moderate Democrat

Lean Democrat

Lean Republican

Moderate Republican

Strong Republican

Independent

Other [ANCHOR]

Don't know/Refuse [ANCHOR]

2. How would you describe the area in which you live? (Select one)

[ROTATE 1-3: 3-1]

Rural

Suburban

Urban

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

Yes

No

Don't know / Refused

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

**[RANDOMIZE: ANCHOR OTHER AND DON'T KNOW]**

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]

5. 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]**



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Right direction  
Wrong track  
Don't know **[ANCHOR]**

6. 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 Q6, ASK QUESTION Q7.]**

7. Is that strongly [INSERT RESPONSE FROM Q6] or somewhat [INSERT RESPONSE FROM Q6]?

**[ROTATE 1-2; 2-1]**

Strongly [INSERT RESPONSE FROM Q6]  
Somewhat [INSERT RESPONSE FROM Q6]

**[IF "Don't Know" TO Q6, ASK Q8]**

8. 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]**

9. How familiar are you with the following public figures, taking into account all the ways you may have heard about them?

**[GRID ACROSS: PROGRESSIVE ROTATE 1-5;5-1]**

Very familiar  
Somewhat familiar  
Not very familiar  
Have heard of them, but that's it  
Have not heard about them

**[GRID DOWN: RANDOMIZE]**

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



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John Delaney  
Marianne Williamson  
Andrew Yang  
Tim Ryan  
Wayne Messam  
Eric Swalwell

10. 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 (Q9:1-4);  
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

**[ASK STRONG/MODERATE/LEAN DEMOCRAT AND INDEPENDENTS ONLY]**

11. If the 2020 Democratic presidential primary election were held today, for whom would you vote?

**[OPEN END]**

**[ASK STRONG/MODERATE/LEAN DEMOCRAT AND INDEPENDENTS]**

12. 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]**



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Kamala Harris  
Elizabeth Warren  
Bernie Sanders  
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Cory Booker  
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John Hickenlooper  
Steve Bullock  
Jay Inslee  
John Delaney  
Marianne Williamson  
Andrew Yang  
Tim Ryan  
Wayne Messam  
Eric Swalwell  
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  $\theta$ , 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