



## Reuters/Ipsos Poll Data

Prepared by Ipsos

### Ipsos Poll Conducted for Reuters

2020 Democratic Primary Horserace Poll 07.02.2019

*These are findings from an Ipsos poll conducted **June 28-July 2, 2019** on behalf of Thomson Reuters. For the survey, a sample of roughly 2,221 adults age 18+ from the continental U.S., Alaska and Hawaii was interviewed online in English. This sample includes 1,973 registered voters, 909 Democratic registered voters, 800 Republican registered voters, and 189 Independent registered voters.*

*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 2.4 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 ( $n=2,221$  DEFF=1.5, adjusted Confidence Interval=3.9).*

*The poll also has a credibility interval plus or minus 2.5 percentage points for registered voters, plus or minus 3.7 percentage points for Democratic registered voters, plus or minus 4.0 percentage points for Republican registered voters, plus or minus 8.1 percentage points for Independent registered voters (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	All Registered Voters	Democratic Registered Voters	Republican Registered Voters	Independent Registered Voters
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	22%	24%	28%	*	14%
	Kamala Harris	10%	11%	13%	*	4%
	Elizabeth Warren	9%	11%	13%	*	3%
	Bernie Sanders	16%	17%	18%	*	11%
	Beto O'Rourke	3%	3%	4%	*	2%
	Cory Booker	1%	1%	1%	*	1%
	Julian Castro	1%	1%	2%	*	0%
	Amy Klobuchar	0%	1%	1%	*	1%
	Kirsten Gillibrand	1%	1%	1%	*	1%
	Pete Buttigieg	3%	4%	4%	*	3%
	Tulsi Gabbard	0%	0%	0%	*	0%
	John Hickenlooper	0%	0%	0%	*	1%
	Steve Bullock	1%	1%	0%	*	0%
	Jay Inslee	0%	0%	0%	*	0%
	John Delaney	0%	0%	0%	*	1%
	Marianne Williamson	0%	0%	0%	*	0%
	Andrew Yang	2%	3%	3%	*	1%
	Tim Ryan	1%	1%	1%	*	0%
	Wayne Messam	0%	0%	0%	*	0%
	Eric Swalwell	0%	0%	0%	*	0%
	Seth Moulton	0%	0%	0%	*	1%
	Michael Bennet	0%	0%	0%	*	0%
	Bill de Blasio	0%	0%	0%	*	0%
	Mike Gravel	0%	0%	0%	*	0%
	Joe Sestak	0%	0%	0%	*	0%
	Other	2%	1%	1%	*	3%
Don't know	21%	15%	9%	*	32%	
I can't/won't vote in the Democratic primary	4%	3%	1%	*	18%	



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	Total	1367	1173	909	0	189
How certain are you that you will vote for [CANDIDATE NAME] in the Democratic presidential primary?	Completely certain	35%	36%	37%	*	31%
	Mostly certain	44%	44%	45%	*	36%
	Not very certain	17%	17%	15%	*	27%
	Not at all certain	3%	3%	3%	*	6%
	Total	1031	941	812	0	93
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	15%	15%	17%	*	8%
	Kamala Harris	12%	14%	16%	*	8%
	Elizabeth Warren	14%	16%	19%	*	6%
	Bernie Sanders	14%	14%	15%	*	16%
	Beto O'Rourke	4%	5%	5%	*	2%
	Cory Booker	4%	5%	5%	*	3%
	Julian Castro	3%	3%	3%	*	0%
	Amy Klobuchar	3%	3%	3%	*	1%
	Kirsten Gillibrand	2%	2%	1%	*	3%
	Pete Buttigieg	5%	6%	6%	*	3%
	Tulsi Gabbard	0%	0%	0%	*	0%
	John Hickenlooper	0%	0%	0%	*	0%
	Steve Bullock	0%	0%	0%	*	0%
	Jay Inslee	0%	0%	0%	*	0%
	John Delaney	0%	0%	0%	*	0%
	Marianne Williamson	0%	0%	0%	*	0%
	Andrew Yang	0%	0%	0%	*	0%
	Tim Ryan	0%	0%	0%	*	0%
	Wayne Messam	0%	0%	0%	*	0%
	Eric Swalwell	0%	0%	0%	*	0%
	Other	24%	18%	9%	*	50%
	Don't know	0%	0%	0%	*	0%
	Seth Moulton	0%	0%	0%	*	0%
	Michael Bennet	0%	0%	0%	*	0%
	Bill de Blasio	0%	0%	0%	*	0%
	Mike Gravel	0%	0%	0%	*	0%
	Joe Sestak	0%	0%	0%	*	0%
Total	1314	1131	905	0	151	



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How much, if anything, have you seen, heard or read about the most recent Democratic presidential primary debate?	A great deal	17%	19%	27%	13%	11%
	A fair amount	28%	29%	33%	29%	20%
	A little bit	38%	38%	32%	45%	43%
	Not heard anything at all	17%	13%	8%	12%	26%
	Total	2221	1973	909	800	189
Did you watch the Democratic primary debate on June 26th between Cory Booker, Amy Klobuchar, Elizabeth Warren, Tulsi Gabbard, Tim Ryan, John Delaney, Beto O'Rourke, Julian Castro, Bill de Blasio, and Jay Inslee? Yes, I watched it live	No	84%	82%	76%	86%	91%
	Yes	16%	18%	24%	14%	9%
	Total	2221	1973	909	800	189
Did you watch the Democratic primary debate on June 26th between Cory Booker, Amy Klobuchar, Elizabeth Warren, Tulsi Gabbard, Tim Ryan, John Delaney, Beto O'Rourke, Julian Castro, Bill de Blasio, and Jay Inslee? Yes, I saw or heard some clips of the debate on TV/Radio/Podcast	No	86%	85%	83%	84%	92%
	Yes	14%	15%	17%	16%	8%
	Total	2221	1973	909	800	189
Did you watch the Democratic primary debate on June 26th between Cory Booker, Amy Klobuchar, Elizabeth Warren, Tulsi Gabbard, Tim Ryan, John Delaney, Beto O'Rourke, Julian Castro, Bill de Blasio, and Jay Inslee? Yes, I saw some clips of the debate online	No	87%	87%	83%	89%	93%
	Yes	13%	13%	17%	11%	7%
	Total	2221	1973	909	800	189



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Did you watch the Democratic primary debate on June 26th between Cory Booker, Amy Klobuchar, Elizabeth Warren, Tulsi Gabbard, Tim Ryan, John Delaney, Beto O'Rourke, Julian Castro, Bill de Blasio, and Jay Inslee? No, but I read or heard coverage of the debate	No	80%	78%	80%	76%	75%
	Yes	20%	22%	20%	24%	25%
	Total	2221	1973	909	800	189
Did you watch the Democratic primary debate on June 26th between Cory Booker, Amy Klobuchar, Elizabeth Warren, Tulsi Gabbard, Tim Ryan, John Delaney, Beto O'Rourke, Julian Castro, Bill de Blasio, and Jay Inslee? No, I have not seen any of the debate	No	58%	62%	70%	60%	45%
	Yes	42%	38%	30%	40%	55%
	Total	2221	1973	909	800	189
Did you watch the Democratic primary debate on June 27th between Joe Biden, Michael Bennet, Kirsten Gillibrand, Kamala Harris, Bernie Sanders, Pete Buttigieg, John Hickenlooper, Eric Swalwell, Marianne Williamson, and Andrew Yang? Yes, I watched it live	No	83%	81%	74%	86%	91%
	Yes	17%	19%	26%	14%	9%
	Total	2221	1973	909	800	189
Did you watch the Democratic primary debate on June 27th between Joe Biden, Michael Bennet, Kirsten Gillibrand, Kamala Harris, Bernie Sanders, Pete Buttigieg, John Hickenlooper, Eric Swalwell, Marianne Williamson, and Andrew Yang? Yes, I saw or heard some clips of the debate on TV/Radio/Podcast	No	86%	85%	83%	85%	91%
	Yes	14%	15%	17%	15%	9%
	Total	2221	1973	909	800	189



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Did you watch the Democratic primary debate on June 27th between Joe Biden, Michael Bennet, Kirsten Gillibrand, Kamala Harris, Bernie Sanders, Pete Buttigieg, John Hickenlooper, Eric Swalwell, Marianne Williamson, and Andrew Yang? Yes, I saw some clips of the debate online	No	90%	89%	87%	91%	93%
	Yes	10%	11%	13%	9%	7%
	Total	2221	1973	909	800	189
Did you watch the Democratic primary debate on June 27th between Joe Biden, Michael Bennet, Kirsten Gillibrand, Kamala Harris, Bernie Sanders, Pete Buttigieg, John Hickenlooper, Eric Swalwell, Marianne Williamson, and Andrew Yang? No, but I read or heard coverage of the debate	No	79%	77%	79%	75%	79%
	Yes	21%	23%	21%	25%	21%
	Total	2221	1973	909	800	189
Did you watch the Democratic primary debate on June 27th between Joe Biden, Michael Bennet, Kirsten Gillibrand, Kamala Harris, Bernie Sanders, Pete Buttigieg, John Hickenlooper, Eric Swalwell, Marianne Williamson, and Andrew Yang? No, I have not seen any of the debate	No	58%	62%	70%	60%	43%
	Yes	42%	38%	30%	40%	57%
	Total	2221	1973	909	800	189



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Regardless of which candidate you happen to support, who do you think did the better job in the June 26th debate?	Cory Booker	5%	5%	6%	5%	4%
	Amy Klobuchar	5%	4%	5%	4%	2%
	Elizabeth Warren	32%	33%	43%	18%	30%
	Tulsi Gabbard	5%	5%	4%	8%	2%
	Tim Ryan	3%	4%	2%	7%	4%
	John Delaney	3%	3%	2%	4%	0%
	Beto O'Rourke	7%	7%	8%	6%	4%
	Julian Castro	6%	6%	8%	4%	7%
	Bill de Blasio	2%	2%	3%	1%	2%
	Jay Inslee	2%	2%	3%	1%	0%
	Don't know	30%	28%	17%	41%	46%
Total	839	788	448	279	43	
Regardless of which candidate you happen to support, who do you think did the better job in the June 27th debate?	Joe Biden	15%	15%	16%	14%	18%
	Michael Bennet	2%	2%	2%	2%	0%
	Kirsten Gillibrand	2%	2%	1%	2%	0%
	Kamala Harris	35%	35%	44%	21%	27%
	Bernie Sanders	10%	10%	13%	6%	12%
	Pete Buttigieg	6%	6%	6%	5%	12%
	John Hickenlooper	2%	2%	1%	4%	0%
	Eric Swalwell	2%	1%	2%	1%	0%
	Marianne Williamson	3%	3%	2%	4%	4%
	Andrew Yang	5%	5%	5%	6%	5%
	Don't know	19%	18%	6%	35%	23%
Total	830	784	450	269	46	
And has the debate changed your view of each candidate? Cory Booker :	Yes - more positive towards candidate	21%	21%	29%	10%	13%
	Yes - more negative towards candidate	17%	17%	10%	30%	8%
	No - has not changed my view	52%	54%	53%	53%	67%
	Don't know	9%	8%	8%	7%	12%
	Total	839	788	448	279	43



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And has the debate changed your view of each candidate? Amy Klobuchar:	Yes - more positive towards candidate	15%	15%	20%	9%	7%
	Yes - more negative towards candidate	13%	14%	9%	20%	15%
	No - has not changed my view	60%	61%	60%	61%	65%
	Don't know	13%	11%	11%	10%	14%
	Total	839	788	448	279	43
And has the debate changed your view of each candidate? Elizabeth Warren :	Yes - more positive towards candidate	32%	32%	45%	14%	13%
	Yes - more negative towards candidate	18%	19%	9%	35%	13%
	No - has not changed my view	43%	44%	42%	45%	65%
	Don't know	7%	5%	4%	6%	8%
	Total	839	788	448	279	43
And has the debate changed your view of each candidate? Tulsi Gabbard :	Yes - more positive towards candidate	14%	14%	16%	13%	4%
	Yes - more negative towards candidate	11%	12%	9%	16%	15%
	No - has not changed my view	61%	62%	63%	62%	61%
	Don't know	13%	12%	12%	10%	20%
	Total	839	788	448	279	43





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And has the debate changed your view of each candidate? Tim Ryan :	Yes - more positive towards candidate	11%	11%	12%	10%	4%
	Yes - more negative towards candidate	14%	15%	13%	19%	9%
	No - has not changed my view	61%	63%	62%	63%	71%
	Don't know	14%	12%	14%	8%	16%
	Total	839	788	448	279	43
And has the debate changed your view of each candidate? John Delaney :	Yes - more positive towards candidate	12%	12%	12%	15%	2%
	Yes - more negative towards candidate	10%	10%	7%	16%	6%
	No - has not changed my view	62%	64%	66%	57%	78%
	Don't know	16%	14%	14%	12%	14%
	Total	839	788	448	279	43
And has the debate changed your view of each candidate? Beto O'Rourke :	Yes - more positive towards candidate	16%	16%	21%	9%	14%
	Yes - more negative towards candidate	21%	22%	16%	33%	7%
	No - has not changed my view	55%	56%	57%	52%	66%
	Don't know	8%	6%	6%	6%	13%
	Total	839	788	448	279	43



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And has the debate changed your view of each candidate? Julian Castro :	Yes - more positive towards candidate	22%	22%	31%	12%	6%
	Yes - more negative towards candidate	16%	17%	12%	27%	11%
	No - has not changed my view	51%	52%	50%	52%	76%
	Don't know	11%	8%	7%	10%	7%
	Total	839	788	448	279	43
And has the debate changed your view of each candidate? Bill de Blasio :	Yes - more positive towards candidate	10%	11%	13%	9%	0%
	Yes - more negative towards candidate	20%	20%	14%	31%	6%
	No - has not changed my view	60%	61%	66%	51%	78%
	Don't know	10%	9%	7%	9%	16%
	Total	839	788	448	279	43
And has the debate changed your view of each candidate? Jay Inslee :	Yes - more positive towards candidate	11%	10%	13%	8%	2%
	Yes - more negative towards candidate	10%	11%	7%	16%	10%
	No - has not changed my view	63%	64%	64%	65%	64%
	Don't know	16%	15%	16%	11%	24%
	Total	839	788	448	279	43



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And has the debate changed your view of each candidate? Joe Biden :	Yes - more positive towards candidate	23%	24%	31%	13%	17%
	Yes - more negative towards candidate	25%	26%	21%	36%	16%
	No - has not changed my view	47%	47%	45%	48%	60%
	Don't know	4%	3%	2%	3%	8%
	Total	830	784	450	269	46
And has the debate changed your view of each candidate? Michael Bennet :	Yes - more positive towards candidate	12%	12%	15%	9%	0%
	Yes - more negative towards candidate	10%	10%	8%	16%	5%
	No - has not changed my view	62%	63%	61%	63%	75%
	Don't know	16%	15%	16%	12%	20%
	Total	830	784	450	269	46
And has the debate changed your view of each candidate? Kirsten Gillibrand :	Yes - more positive towards candidate	14%	13%	17%	9%	6%
	Yes - more negative towards candidate	18%	19%	14%	28%	20%
	No - has not changed my view	60%	60%	62%	57%	61%
	Don't know	9%	7%	7%	7%	12%
	Total	830	784	450	269	46



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And has the debate changed your view of each candidate? Kamala Harris :	Yes - more positive towards candidate	39%	39%	55%	17%	19%
	Yes - more negative towards candidate	19%	20%	9%	38%	14%
	No - has not changed my view	37%	38%	34%	40%	60%
	Don't know	5%	3%	2%	5%	7%
	Total	830	784	450	269	46
And has the debate changed your view of each candidate? Bernie Sanders :	Yes - more positive towards candidate	22%	22%	28%	11%	29%
	Yes - more negative towards candidate	23%	24%	16%	42%	7%
	No - has not changed my view	51%	51%	54%	45%	62%
	Don't know	3%	2%	2%	3%	2%
	Total	830	784	450	269	46
And has the debate changed your view of each candidate? Pete Buttigieg :	Yes - more positive towards candidate	25%	26%	32%	19%	11%
	Yes - more negative towards candidate	13%	14%	10%	21%	7%
	No - has not changed my view	53%	53%	49%	55%	71%
	Don't know	9%	7%	8%	5%	10%
	Total	830	784	450	269	46



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And has the debate changed your view of each candidate? John Hickenlooper :	Yes - more positive towards candidate	11%	12%	13%	12%	2%
	Yes - more negative towards candidate	12%	13%	9%	19%	7%
	No - has not changed my view	65%	65%	66%	60%	78%
	Don't know	12%	11%	12%	9%	12%
	Total	830	784	450	269	46
And has the debate changed your view of each candidate? Eric Swalwell :	Yes - more positive towards candidate	11%	10%	11%	9%	9%
	Yes - more negative towards candidate	13%	13%	10%	20%	10%
	No - has not changed my view	64%	64%	65%	63%	69%
	Don't know	13%	12%	14%	8%	12%
	Total	830	784	450	269	46
And has the debate changed your view of each candidate? Marianne Williamson :	Yes - more positive towards candidate	12%	12%	12%	13%	4%
	Yes - more negative towards candidate	18%	19%	19%	21%	14%
	No - has not changed my view	57%	57%	56%	57%	65%
	Don't know	13%	12%	13%	9%	18%
	Total	830	784	450	269	46



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And has the debate changed your view of each candidate? Andrew Yang :	Yes - more positive towards candidate	16%	16%	19%	12%	5%
	Yes - more negative towards candidate	15%	16%	14%	20%	11%
	No - has not changed my view	58%	58%	56%	61%	68%
	Don't know	11%	10%	10%	7%	17%
	Total	830	784	450	269	46
If the 2020 Democratic presidential primary election were held today, which of the following candidate traits would be the MOST important factor for you in deciding who to vote for?	Strong on immigration	4%	3%	3%	*	5%
	Strong on healthcare	11%	12%	12%	*	15%
	Strong on the environment	5%	4%	4%	*	4%
	Strong on the economy and job creation	10%	10%	11%	*	7%
	Can beat President Trump in the general election	36%	40%	45%	*	23%
	Strong progressive	5%	6%	7%	*	3%
	Can unify the Democratic Party	5%	6%	7%	*	1%
	Someone new and different	6%	6%	5%	*	11%
	Don't know	17%	12%	6%	*	31%
	Total	1314	1131	905	0	151



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And which of the following traits is the second most important factor for you in deciding who to vote for?	Strong on immigration	6%	6%	6%	*	5%
	Strong on healthcare	22%	23%	24%	*	17%
	Strong on the environment	11%	11%	11%	*	11%
	Strong on the economy and job creation	13%	13%	12%	*	26%
	Can beat President Trump in the general election	14%	13%	14%	*	9%
	Strong progressive	9%	9%	9%	*	8%
	Can unify the Democratic Party	13%	14%	15%	*	10%
	Someone new and different	8%	9%	8%	*	11%
	Don't know	3%	3%	2%	*	4%
	Total	1114	1005	851	0	111
For each of the following, please select the candidate from the list below you think is the best on that particular issue. Immigration :	Joe Biden	14%	15%	16%	*	9%
	Bernie Sanders	10%	11%	12%	*	7%
	Kamala Harris	11%	13%	14%	*	11%
	Elizabeth Warren	8%	9%	11%	*	1%
	Pete Buttigieg	2%	2%	3%	*	1%
	Beto O'Rourke	7%	7%	8%	*	6%
	Cory Booker	4%	4%	4%	*	3%
	Some other candidate	5%	5%	5%	*	5%
	Don't know	38%	34%	27%	*	56%
Total	1314	1131	905	0	151	



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For each of the following, please select the candidate from the list below you think is the best on that particular issue. Healthcare :	Joe Biden	16%	17%	19%	*	11%
	Bernie Sanders	21%	22%	24%	*	13%
	Kamala Harris	7%	8%	9%	*	6%
	Elizabeth Warren	13%	15%	17%	*	8%
	Pete Buttigieg	2%	2%	2%	*	0%
	Beto O'Rourke	2%	3%	3%	*	0%
	Cory Booker	3%	3%	3%	*	3%
	Some other candidate	3%	3%	2%	*	7%
	Don't know	33%	27%	20%	*	53%
	Total	1314	1131	905	0	151
For each of the following, please select the candidate from the list below you think is the best on that particular issue. The environment :	Joe Biden	13%	14%	16%	*	9%
	Bernie Sanders	14%	14%	16%	*	9%
	Kamala Harris	7%	8%	8%	*	6%
	Elizabeth Warren	11%	13%	15%	*	4%
	Pete Buttigieg	4%	4%	5%	*	1%
	Beto O'Rourke	4%	4%	4%	*	2%
	Cory Booker	3%	4%	4%	*	3%
	Some other candidate	6%	6%	6%	*	6%
	Don't know	38%	34%	27%	*	59%
	Total	1314	1131	905	0	151
For each of the following, please select the candidate from the list below you think is the best on that particular issue. The economy and jobs :	Joe Biden	18%	19%	21%	*	11%
	Bernie Sanders	16%	16%	18%	*	10%
	Kamala Harris	6%	7%	7%	*	7%
	Elizabeth Warren	13%	15%	17%	*	6%
	Pete Buttigieg	3%	3%	3%	*	1%
	Beto O'Rourke	3%	3%	3%	*	3%
	Cory Booker	3%	4%	4%	*	4%
	Some other candidate	4%	3%	2%	*	8%
	Don't know	35%	31%	24%	*	49%
	Total	1314	1131	905	0	151





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For each of the following, please select the candidate from the list below you think is the best on that particular issue. Most likely to beat President Trump in the general election :	Joe Biden	30%	32%	36%	*	19%
	Bernie Sanders	14%	14%	14%	*	11%
	Kamala Harris	7%	9%	10%	*	6%
	Elizabeth Warren	7%	8%	9%	*	2%
	Pete Buttigieg	2%	2%	3%	*	2%
	Beto O'Rourke	3%	3%	3%	*	2%
	Cory Booker	3%	3%	3%	*	3%
	Some other candidate	3%	3%	2%	*	9%
	Don't know	31%	26%	20%	*	46%
	Total	1314	1131	905	0	151
For each of the following, please select the candidate from the list below you think is the best on that particular issue. Strong progressive :	Joe Biden	12%	13%	15%	*	8%
	Bernie Sanders	19%	21%	22%	*	16%
	Kamala Harris	10%	11%	12%	*	8%
	Elizabeth Warren	12%	13%	15%	*	5%
	Pete Buttigieg	3%	3%	4%	*	0%
	Beto O'Rourke	4%	4%	4%	*	3%
	Cory Booker	3%	3%	3%	*	2%
	Some other candidate	3%	2%	1%		5%
	Don't know	35%	29%	22%		51%
	Total	1314	1131	905	0	151
For each of the following, please select the candidate from the list below you think is the best on that particular issue. Can unify the Democratic Party :	Joe Biden	22%	23%	26%	*	12%
	Bernie Sanders	12%	13%	14%	*	10%
	Kamala Harris	9%	11%	12%	*	7%
	Elizabeth Warren	9%	10%	12%	*	4%
	Pete Buttigieg	3%	3%	3%	*	3%
	Beto O'Rourke	3%	4%	5%	*	0%
	Cory Booker	3%	3%	4%	*	0%
	Some other candidate	3%	3%	2%	*	6%
	Don't know	35%	30%	23%	*	58%
	Total	1314	1131	905	0	151



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For each of the following, please select the candidate from the list below you think is the best on that particular issue. A new and different voice :	Joe Biden	8%	9%	11%	*	3%
	Bernie Sanders	10%	10%	10%	*	10%
	Kamala Harris	18%	21%	22%	*	14%
	Elizabeth Warren	9%	9%	11%	*	5%
	Pete Buttigieg	12%	13%	15%	*	9%
	Beto O'Rourke	6%	6%	7%	*	3%
	Cory Booker	4%	4%	5%	*	2%
	Some other candidate	4%	5%	3%	*	11%
	Don't know	27%	22%	16%	*	43%
	Total	1314	1131	905	0	151
As you may know, there are more than 20 candidates running for the Democratic presidential nomination. How much do you agree or disagree with the following statements? There are too many candidates running for the Democratic presidential nomination :	Strongly agree	42%	44%	40%	54%	32%
	Somewhat agree	29%	30%	34%	24%	34%
	Somewhat disagree	12%	12%	14%	10%	14%
	Strongly disagree	6%	7%	8%	5%	5%
	Don't know	11%	7%	5%	6%	15%
	Total	2221	1973	909	800	189
As you may know, there are more than 20 candidates running for the Democratic presidential nomination. How much do you agree or disagree with the following statements? Having several candidates allows the Democrats to choose the best candidate possible for presidential nomination :	Strongly agree	19%	21%	29%	12%	16%
	Somewhat agree	39%	39%	40%	38%	40%
	Somewhat disagree	18%	19%	17%	21%	21%
	Strongly disagree	12%	13%	9%	19%	7%
	Don't know	12%	9%	6%	9%	15%
	Total	2221	1973	909	800	189



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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