



Ipsos Poll Conducted for Reuters

Daily Election Tracking: 10.31.12

These are findings from an Ipsos poll conducted for Thomson Reuters from Oct. 27-31, 2012. For the survey, a sample of 5,012 American registered voters and 4,085 Likely Voters (all age 18 and over) was interviewed online. On October 29th, Ipsos began boosting sample in four swing states, which accounts for the increase in our overall sample size. The data collected in these states are included in our national sample, although weighted appropriately to reflect the population of each state relative to the national population. 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 3.0 percentage points for Registered Voters and 3.4 for Likely Voters. Likely voter model adjusted to include all respondents who have voted, as of 10.15.12. For more information about credibility intervals, please see the appendix.

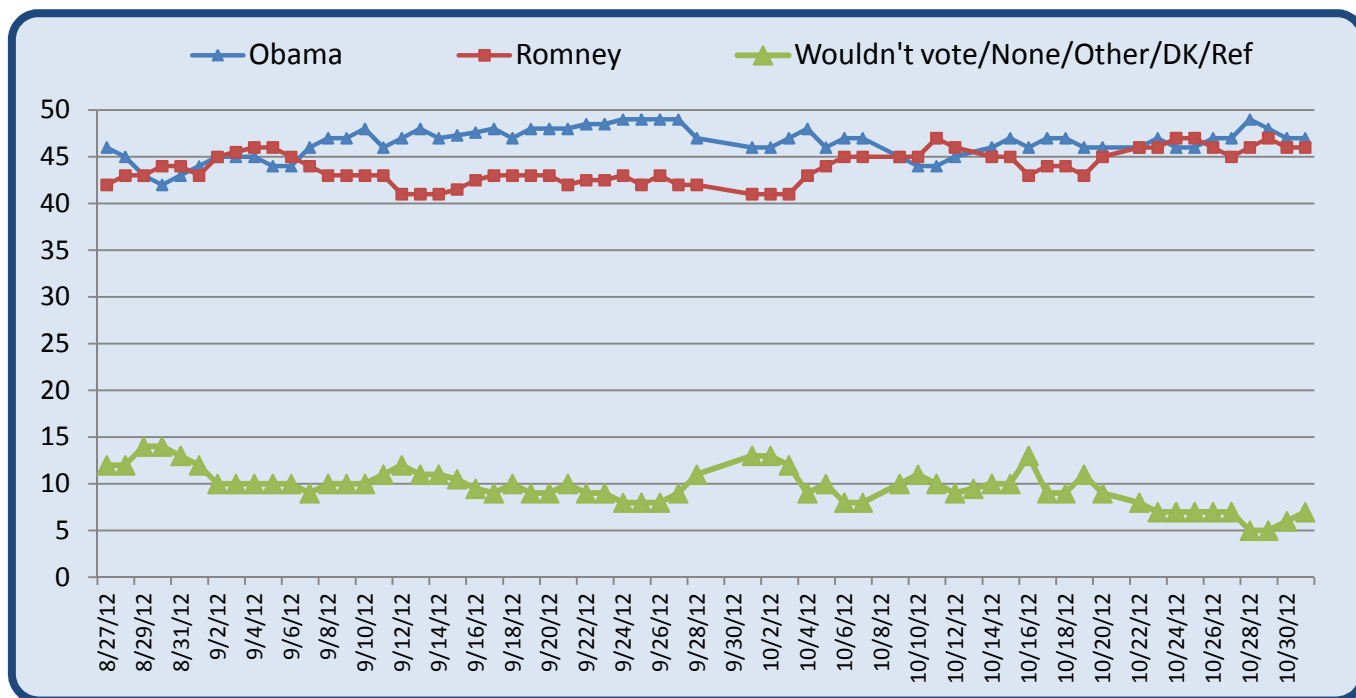
The data were weighted to the U.S. current population data by gender, age, education, and ethnicity. Statistical margins of error are not applicable to online polls. All sample surveys and polls may be subject to other sources of error, including, but not limited to coverage error and measurement error. 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.

VOTING INTENTION

Q1. If the 2012 Presidential Election were being held today and the candidates were [ROTATE] Barack Obama for president and Joe Biden for vice president, the Democrats, and Mitt Romney for president and Paul Ryan for vice president, the Republicans [END ROTATE], for whom would you vote?

	All LIKELY Voters (LV)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Barack Obama for president and Joe Biden for vice president, the Democrats	47%	47%	87%	8%	38%
Mitt Romney for president and Paul Ryan for vice president, the Republicans	46%	43%	7%	87%	30%
Wouldn't vote	*%	1%	1%	1%	4%
None / Other	3%	4%	1%	2%	14%
Don't know / Refused	4%	5%	4%	3%	14%

Obama & Romney Vote Share Daily Data: 2012 Conventions to present (Likely Voters only)





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OTHER VOTING QUESTIONS

[ASK IF OBAMA OR ROMNEY SELECTED IN Q1]

Q2. Have you definitely decided to vote for [INSERT RESPONSE FROM Q1], or is there a chance you might change your mind before you vote?

(n=4,517)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Definitely will vote for candidate	90%	92%	91%	74%
Could change my mind	10%	8%	9%	26%

Q3. Have you already voted in the upcoming November general election by going to an early voting location, or by mailing in an early voting or absentee ballot, or not?

	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Yes	24%	27%	23%	19%
No	76%	73%	77%	81%

[IF "Yes" at Q3, ASK Q4]

Q4. For whom did you vote for President?

(n=1,660 for All RVs; 785 for Ds; 699 for Rs)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Barack Obama for President and Joe Biden for Vice President,	53%	92%	10%	
Mitt Romney for President and Paul Ryan for Vice President,	41%	5%	87%	Base size too small to report data
Other	6%	3%	3%	

[IF "No" at Q3, ASK Q5]

Q5. And do you plan to vote at an early voting location or by mailing in an early voting or absentee ballot?

(n=3,352)	All Registered Voters (RV)	Democrats (RV)	Republicans (RV)	Independents (RV)
Yes – I plan to vote at an early voting location	16%	19%	14%	17%
Yes – I plan to mail in an early voting ballot	5%	5%	6%	3%
Yes – I plan to mail in an absentee ballot	4%	5%	3%	3%
No – I do not plan to vote early	74%	71%	77%	77%

PARTY ID	All Registered Voters (RV)
Strong Democrat	14%
Moderate Democrat	22%
Lean Democrat	8%
Lean Republican	8%
Moderate Republican	19%
Strong Republican	13%
Independent	13%
None of these	2%
DK	1%



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GENERAL QUESTIONS

Q6. Regardless of how you will vote, if you were to wager money, who would you pick to win the presidential race?

	<u>All Registered Voters (RV)</u>	<u>Democrats (RV)</u>	<u>Republicans (RV)</u>	<u>Independents (RV)</u>
Barack Obama for President and Joe Biden for Vice President,	52%	82%	22%	47%
Mitt Romney for President and Paul Ryan for Vice President,	30%	7%	60%	21%
Other	1%	1%	*%	5%
Don't know	16%	11%	18%	27%

Q7. Regardless of how you will vote, if you were to wager money, who would you pick to win the presidential race in your state?

	<u>All Registered Voters (RV)</u>	<u>Democrats (RV)</u>	<u>Republicans (RV)</u>	<u>Independents (RV)</u>
Barack Obama for President and Joe Biden for Vice President,	48%	71%	26%	43%
Mitt Romney for President and Paul Ryan for Vice President,	39%	20%	64%	34%
Other	1%	1%	*%	4%
Don't know	11%	9%	10%	19%



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Electoral College Projection

Ipsos' Electoral College model includes our own data, previous election outcome data, data from other pollsters, and aggregated poll data.

The most recent projection shows that Obama has a solid lead over Romney in 13 states, which represent 166 Electoral College votes. These are the 'Likely Obama' states. Romney has a solid lead over Obama in 16 states (119 EC votes), which are the 'Likely Romney' states. In these states, the projected winner has a lead of 7 or more in the polls (on average).

Some states are close but tend to 'lean' towards one candidate or the other. In our projection, these are the 'Lean Obama' (62 EC votes) or 'Lean Romney' (71 EC votes) states. In these states, the projected winner has a lead of between 3 and 6 in the polls (on average).

The remaining 9 states (representing 104 Electoral College votes) are too close to call. In these states, the two candidates are within 3 points of each other (on average).

IPSOS ELECTORAL COLLEGE PROJECTION

	# of states	# of Electoral College Votes
Likely Obama	13	166
Lean Obama (Toss-up)	6	62
Toss-up (Too close to call)	9	120
Lean Romney (Toss-up)	5	49
Likely Romney	18	141



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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., $Y|\theta \sim \text{Bin}(n, \theta)$, 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 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 ($\pi(\theta|y) \sim \beta(y+a, n-y+b)$), 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 . 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 . 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 weighting²

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

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

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