These are findings from Ipsos polling conducted for Thomson Reuters from October 13-20, 2014. State-specific sample details are below. The data are weighted to Colorado's current population voter data (CPS) by gender, age, education, ethnicity, and a political values scale. Ipsos' Likely Voter model (applied to Voting Intention questions only) uses a seven-item summated index, including questions on voter registration, past voting behavior, likelihood of voting in the upcoming election, and interest in following news about the campaign. 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.

COLORADO

A sample of 1,099 Likely Voters (LVs) age 18 and over in Colorado was interviewed online. Data below has a credibility interval of plus or minus 3.4 percentage points.

Q1. Generally speaking, would you say things in this country are heading in the right direction, or are they off on the wrong track?

Right direction	27%
Wrong track	67%
Don't know	6%

Q2. Generally speaking, would you say things in Colorado are heading in the right direction, or are they off on the wrong track?

Right direction	48%
Wrong track	48%
Don't know	4%

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

Yes	11%
No	89%

SENATE RACE:
Q4. For whom did you vote for Senate? *(ASKED OF THOSE WHO HAVE ALREADY VOTED, n=116)*
Q5. If the 2014 Senate election were held today and the candidates Republican Cory Gardner or Democrat Mark Udall, for whom would you vote? *(ASKED OF THOSE WHO HAVE NOT ALREADY VOTED, n=983)*

Cory Gardner (Republican)	47%
Mark Udall (Democrat)	45%
Didn't cast a vote in this race	*%
None / Other	4%
Don't know / Refused	4%

GUBERNATORIAL RACE:
Q6. For whom did you vote for Governor? *(ASKED OF THOSE WHO HAVE ALREADY VOTED, n=116)*
Q7. If the 2014 gubernatorial election were held today and the candidates Republican Bob Beauprez or Democrat John Hickenlooper, for whom would you vote? *(ASKED OF THOSE WHO HAVE NOT ALREADY VOTED, n=983)*

Bob Beauprez (Republican)	46%
John Hickenlooper (Democrat)	46%
Didn't cast a vote in this race	*%
None / Other	4%
Don't know / Refused	4%

CONGRESSIONAL RACE:

Q8. For whom did you vote for Congress in the district where you live? *(ASKED OF THOSE WHO HAVE ALREADY VOTED, n=116)*

Q9. Thinking about the elections in 2014, if the election for U.S. Congress were held today, would you vote for the Democratic candidate or the Republican candidate in your district where you live? *(ASKED OF THOSE WHO HAVE NOT ALREADY VOTED, n=983)*

Democratic candidate	42%
Republican candidate	44%
Candidate from another political party	5%
Didn't cast a vote in this race	*%
Don't know / Refused	9%

Q10. How familiar are you with the following public figures, taking into account all the ways you may have heard about them?

	Very familiar	Somewhat familiar	Not very familiar	Have heard of them, but that's it	Have not heard about them	*TOTAL FAMILIAR*	*TOTAL AWARE*
President Barack Obama	86%	14%	*%	*%	*%	*100%*	*100%*
Former Congressman Bob Beauprez	41%	46%	11%	1%	*%	*87%*	*100%*
Governor John Hickenlooper	72%	26%	2%	*%	*%	*98%*	*100%*
Congressman Cory Gardner	45%	46%	8%	1%	*%	*91%*	*100%*
Senator Mark Udall	60%	36%	4%	*%	*%	*96%*	*100%*

Q11. Would you say you are generally favorable or unfavorable towards these public figures? *(Asked of those aware of each person)*

	Very favorable	Somewhat favorable	Lean towards favorable	Lean towards unfavorable	Somewhat unfavorable	Very unfavorable	*TOTAL FAVORABLE*	*TOTAL UNFAVORABLE*
President Barack Obama	16%	18%	9%	6%	5%	47%	*43%*	*57%*
Former Congressman Bob Beauprez	13%	20%	18%	15%	10%	23%	*51%*	*49%*
Governor John Hickenlooper	22%	18%	13%	10%	16%	21%	*53%*	*47%*
Congressman Cory Gardner	18%	19%	14%	14%	10%	26%	*51%*	*49%*
Senator Mark Udall	16%	21%	12%	9%	11%	30%	*49%*	*51%*

Q12. What is the most important issue affecting how you plan to vote in the U.S. Senate election between Mark Udall and Cory Gardner? (Select one)

Economy generally	25%
Healthcare	15%
Morality	9%
Environment	6%
Coal and Energy issues	6%
Immigration	5%
Unemployment / lack of jobs	3%
Terrorism / terrorist attacks	2%
Education	2%
War / foreign conflicts	2%
Crime	1%
Other - WRITE IN	20%
Don't know	3%

Q13. Overall, do you approve or disapprove about the way Barack Obama is handling his job as President? Q13a. Is that strongly (approve/disapprove) or somewhat (approve/disapprove)? (*Asked of those who selected "approve" or "disapprove"*) Q2b. If you had to choose, do you lean more towards approve or disapprove? (*Asked of those who selected "don't know"*)

	All Likely Voters (LV)	Democrats (LV)	Republicans (LV)	Independents (LV)
Strongly approve	15%	40%	*%	6%
Somewhat approve	24%	45%	*%	26%
Lean towards approve	2%	3%	1%	3%
Lean towards disapprove	1%	1%	1%	1%
Somewhat disapprove	8%	6%	5%	12%
Strongly disapprove	50%	4%	93%	51%
Don't know	*%	*%	*%	1%
TOTAL APPROVE	*41%*	*88%*	*2%*	*36%*
TOTAL DISAPPROVE	*59%*	*12%*	*98%*	*63%*

Q14. When you think about America's energy needs, which of the following solutions come closest to your opinion?

Strong investment in renewable energy like wind and solar	23%
A mix of both, but with more investment in renewable than drilling	37%
A mix of both, but with more drilling than investment in renewables	25%
Strong focus on offshore drilling and allowing drilling in federal lands including wildlife reserves	13%
Unsure	3%

Q15. Do you believe global warming is happening?

Yes	61%
No	27%
Unsure	12%

(ASKED OF THOSE THAT SAID 'YES' AT Q15, n=688)

Q16. When you think about the planet and global warming, which of the following comes closest to your personal opinion? The planet has been getting warmer because of… REVERSE RESPONSE SCALE EXCEPT 'UNSURE'

Natural patterns in the earth's environment	4%
Mostly natural patterns but some impact from human activity	16%
Mostly human activity but some natural patterns in the earth's environment	52%
Human activity such as burning fossil fuels	27%
Unsure	1%

Q17. When you think about the planet and global warming, which of the following comes closest to your personal opinion:

The government should take aggressive steps to curb global warming by cutting carbon dioxide emissions and subsidizing clean energy sources like wind and solar	49%
The government should stay out of the energy marketplace	38%
Unsure	13%

Q18. Do you support or oppose the use of hydraulic fracturing (fracking) to tap natural gas reserves in your state?

Support	52%
Oppose	32%
Unsure	16%

Q19. When you think about immigration, which of the following solutions come closest to your opinion?

All illegal immigrants should be able to stay in the US legally	2%
Most illegal immigrants should be able to stay in the US, with some exceptions	34%
Most illegal immigrants should deported, with some exceptions	35%
All illegal immigrants should be deported	24%
Unsure	5%

Q20. How important is it that Congress address immigration in the next year?

Very important	62%
Somewhat important	31%
Not too important	6%
Not important at all	1%
TOTAL IMPORTANT	*94%*
TOTAL UNIMPORTANT	*6%*

Q21. When you think about abortion, which of the following is closest to your personal opinion?

Abortion should be illegal in all cases	7%
Abortion should be illegal in most cases	20%
Abortion should be legal in most cases	33%
Abortion should be legal in all cases	38%
Unsure	3%

Q22. Do you support or oppose the law allowing Colorado residents to buy small quantities of marijuana from state-regulated businesses?

Support	51%
Oppose	41%
Unsure	8%

Q23. Thinking about politics and government, do you consider yourself:

	All Likely Voters (LV)
Very conservative	15%
Moderately conservative	22%
Lean conservative	15%
Lean liberal	14%
Moderately liberal	21%
Very liberal	10%
Don't know/Refuse	5%

PARTY ID	All Likely Voters (LV)
Democrat	31%
Republican	31%
Independent	35%
None/Don't Know	3%

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

[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.*