Ipsos Poll conducted for Crain's Chicago Business, April 2013
Illinois PULSE Poll
NOTE: all results shown are percentages unless otherwise labeled.

These are findings from an Ipsos poll conducted from April 13 –17 2013. For the survey, a sample of 618 Illinois adults was interviewed online. Of these Illinois residents, 185 respondents live in Chicago, 247 live in Suburban Chicago, and 186 respondents live in the rest of the state. The precision of the Ipsos online polls are measured using a credibility interval. In this case, the poll has a credibility interval of plus or minus 4.5 percentage points for all respondents, with a credibility interval of plus or minus 7.1 for Suburban Chicago respondents and plus or minus 8.2 for Chicago and rest of state respondents. For more information about credibility intervals, please see the appendix.

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 a per cent. Where figures do not sum to 100, this is due to the effects of rounding. The data were weighted to the Illinois current population data by gender, age, education, ethnicity and region.

NATIONAL ISSUES

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

	July 2012	Aug. 2012	Sept. 2012	Nov. 2012	Feb. 2013	April 2013
Right direction	29%	28%	31%	47%	37%	29%
Wrong track	57%	57%	54%	43%	45%	50%
Don't know	15%	15%	15%	10%	18%	20%

APRIL 2013 – By Region	Chicago	Suburban	Rest of State
Right direction	43%	24%	23%
Wrong track	23%	62%	62%
Don't know	34%	14%	16%

2. Since the recession started in 2008, do you think the U.S. Congress has generally…

	July 2012	Aug. 2012	Sept. 2012	Nov. 2012	Feb. 2013	April 2013
Helped economy recover a great deal	1%	2%	3%	4%	4%	2%
Helped economy recover a fair amount	10%	8%	10%	10%	23%	13%
Helped economy recover only a little	5%	8%	10%	6%	22%	3%
Done only a little more harm than good to the economy	4%	6%	4%	5%	22%	6%
Done a fair amount more harm than good to the economy	35%	27%	28%	28%	23%	29%
Done a great deal more harm than good to the economy	29%	30%	30%	26%	4%	28%
Don't know	16%	20%	16%	21%	1%	20%
Helped the U.S. economy recover (NET)	**16%**	**18%**	**24%**	**20%**	**49%**	**19%**
Done more harm than good (NET)	**68%**	**63%**	**61%**	**59%**	**49%**	**62%**

April 2013 – By Region	Chicago	Suburban	Rest of State
Helped economy recover a great deal	5%	1%	2%
Helped economy recover a fair amount	29%	7%	5%
Helped economy recover only a little	2%	4%	3%
Done only a little more harm than good to the economy	5%	5%	7%
Done a fair amount more harm than good to the economy	26%	27%	32%
Done a great deal more harm than good to the economy	17%	31%	35%
Don't know	15%	26%	17%
Helped the U.S. economy recover (NET)	**36%**	**12%**	**10%**
Done more harm than good (NET)	**49%**	**63%**	**74%**

ILLINOIS ISSUES

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3. Generally speaking, would you say things in the state of Illinois are heading in the right direction, or are they off on the wrong track?

	May 2012	June 2012	July 2012	Aug. 2012	Sept. 2012	Nov. 2012	Feb. 2013	April 2013
Right direction	24%	21%	21%	25%	20%	26%	21%	20%
Wrong track	62%	62%	66%	61%	65%	60%	65%	69%
Don't know	15%	17%	13%	14%	15%	14%	14%	11%

APRIL 2013 – By Region	Chicago	Suburban	Rest of State
Right direction	36%	15%	9%
Wrong track	49%	74%	83%
Don't know	15%	11%	8%

4. In your opinion, what is the most important problem facing the state of Illinois today?

	May 2012	June 2012	July 2012	Aug. 2012	Sept. 2012	Nov. 2012	Feb. 2013	April 2013
Economy	37%	31%	28%	29%	30%	33%	31%	27%
Unemployment/lack of jobs	23%	28%	32%	30%	25%	27%	22%	24%
Crime	8%	7%	10%	12%	11%	6%	15%	13%
Healthcare	6%	6%	3%	5%	8%	5%	3%	5%
Education	5%	5%	8%	5%	7%	9%	4%	7%
Morality	3%	3%	3%	1%	1%	1%	2%	2%
Immigration	2%	1%	2%	3%	5%	3%	4%	2%
Energy issues	1%	2%	1%	2%	2%	4%	1%	3%
Terrorism/War	1%	1%	2%	0%	1%	0%	1%	1%
Other	12%	13%	10%	14%	12%	14%	17%	15%

APRIL 2013 – By Region	Chicago	Suburban	Rest of State
Economy	19%	27%	27%
Unemployment/lack of jobs	22%	25%	24%
Crime	23%	9%	9%
Healthcare	5%	3%	5%
Education	10%	5%	8%
Morality	2%	2%	4%
Immigration	4%	3%	0%
Energy issues	1%	6%	2%
Terrorism/War	2%	2%	1%
Other	15%	18%	14%

5. Overall, do you approve, disapprove or have mixed feelings about the way Pat Quinn is handling his job as Governor of Illinois?

	May 2012	June 2012	July 2012	Aug. 2012	Sept. 2012	Nov. 2012	Feb. 2013	April 2013
Strongly approve	5%	5%	4%	6%	8%	5%	6%	6%
Somewhat approve	5%	7%	5%	6%	6%	5%	7%	3%
Lean toward approve	9%	11%	11%	12%	7%	10%	7%	9%
Have mixed feelings	32%	24%	21%	18%	25%	25%	18%	23%
Lean toward disapprove	11%	13%	15%	14%	16%	12%	16%	15%
Somewhat disapprove	7%	7%	8%	9%	8%	9%	10%	8%
Strongly disapprove	25%	26%	28%	25%	22%	29%	26%	28%
Not sure	5%	7%	9%	11%	8%	5%	10%	8%
Total Approve	**20%**	**23%**	**20%**	**24%**	**21%**	**20%**	**20%**	**18%**
Total Disapprove	**43%**	**46%**	**44%**	**48%**	**46%**	**50%**	**52%**	**51%**

APRIL 2013 – By Region	Chicago	Suburban	Rest of State
Strongly approve	13%	2%	3%
Somewhat approve	6%	2%	2%
Lean toward approve	13%	8%	5%
Have mixed feelings	23%	26%	18%
Lean toward disapprove	13%	14%	19%
Somewhat disapprove	6%	9%	8%
Strongly disapprove	17%	31%	34%
Not sure	18%	4%	12%
Total Approve	**19%**	**23%**	**16%**
Total Disapprove	**37%**	**60%**	**54%**

6. Overall, do you approve, disapprove or have mixed feelings about the way Rahm Emanuel is handling his job as Mayor of Chicago?

	Sept. 2012	Feb. 2013	April 2013
Strongly approve	14%	6%	9%
Somewhat approve	15%	7%	7%
Lean toward approve	5%	6%	4%
Have mixed feelings	21%	21%	15%
Lean toward disapprove	8%	16%	7%
Somewhat disapprove	12%	9%	4%
Strongly disapprove	13%	25%	17%
Not sure	12%	10%	36%
Total Approve	**34%**	**19%**	**21%**
Total Disapprove	**33%**	**50%**	**28%**

April 2013 – By Region	Chicago	Suburban	Rest of State
Strongly approve	16%	7%	4%
Somewhat approve	5%	10%	6%
Lean toward approve	6%	4%	4%
Have mixed feelings	15%	15%	14%
Lean toward disapprove	5%	7%	7%
Somewhat disapprove	5%	4%	3%
Strongly disapprove	18%	16%	18%
Not sure	29%	37%	43%
Total Approve	**27%**	**21%**	**14%**
Total Disapprove	**28%**	**27%**	**29%**

7. Do you believe that corruption in Illinois is getting better, getting worse or has stayed the same?

	May 2012	June 2012	July 2012	Aug. 2012	Sept. 2012	Nov. 2012	Feb. 2013	April 2013
Getting much better	3%	3%	4%	5%	2%	4%	3%	5%
Getting a little better	25%	28%	28%	29%	26%	29%	24%	19%
Getting a little worse	20%	15%	17%	19%	18%	16%	18%	17%
Getting much worse	16%	17%	19%	17%	21%	18%	22%	24%
Stayed the same	36%	38%	33%	30%	33%	33%	33%	34%
Total Better	**28%**	**31%**	**32%**	**34%**	**28%**	**33%**	**27%**	**24%**
Total Worse	**36%**	**32%**	**36%**	**36%**	**39%**	**34%**	**40%**	**42%**

APRIL 2013 – By Region	Chicago	Suburban	Rest of State
Getting much better	11%	1%	4%
Getting a little better	23%	20%	15%
Getting a little worse	14%	17%	21%
Getting much worse	20%	28%	25%
Stayed the same	32%	34%	35%
Total Better	**34%**	**21%**	**19%**
Total Worse	**34%**	**45%**	**46%**

MONTHLY TOPICAL QUESTIONS – GAY MARRIAGE, IMMIGRATION, MINIMUM WAGE

8. The state of Illinois will hold the election for Governor in 2014.

If the 2014 Illinois Democratic Gubernatorial primary were held today, for whom of the following would you vote? (*Among Democrats and Independents, n=387)*

	April 2013
Pat Quinn, Governor of Illinois	15%
Lisa Madigan, Illinois Attorney General	30%
Other	4%
Wouldn't vote	12%
Don't know	39%

APRIL 2013 – By Region	Chicago	Suburban	Rest of State
Pat Quinn, Governor of Illinois	14%	20%	9%
Lisa Madigan, Illinois Attorney General	27%	27%	38%
Other	4%	4%	4%
Wouldn't vote	11%	14%	13%
Don't know	44%	36%	37%

If the 2014 Illinois Republican Gubernatorial primary were held today, for whom of the following would you vote? (*Among Republicans and Independents, n=233)*

	April 2013
Aaron Schock, United States Representative	5%
Bruce Rauner, Businessman	6%
Dan Rutherford, State Treasurer	12%
Bill Brady, State Senator	12%
Kirk Dillard, State Senator	4%
Other	1%
Wouldn't vote	9%
Don't know	49%

APRIL 2013- By Region	Chicago	Suburban	Rest of State
Aaron Schock, United States Representative	3%	4%	7%
Bruce Rauner, Businessman	9%	8%	2%
Dan Rutherford, State Treasurer	11%	9%	18%
Bill Brady, State Senator	14%	13%	11%
Kirk Dillard, State Senator	6%	4%	5%
Other	0%	1%	2%
Wouldn't vote	26%	6%	6%
Don't know	31%	55%	49%

9. Currently, government workers such as police officers, teachers, caregivers and other public servants employed by the state of Illinois receive a pension plan from the State. The following statements relate to the ongoing discussion about pension reform in Illinois. Please indicate which statement comes closer to your personal opinion.

	June 2012	April 2013
The state should continue to honor the current pension plan that is in place today even though it will mean continuing to overextend the budget.	26%	32%
The state should reform the current pension plan because it does not have the money to meet its existing and future pension obligations.	57%	52%
Don't know	17%	16%

JUNE 2012 – By Region	Chicago	Suburban	Rest of State
The state should continue to honor the current pension plan that is in place today even though it will mean continuing to overextend the budget.	30%	24%	25%
The state should reform the current pension plan because it does not have the money to meet its existing and future pension obligations.	51%	62%	58%
Don't know	20%	14%	17%

APRIL 2013 – By Region	Chicago	Suburban	Rest of State
The state should continue to honor the current pension plan that is in place today even though it will mean continuing to overextend the budget.	35%	24%	39%
The state should reform the current pension plan because it does not have the money to meet its existing and future pension obligations.	41%	63%	48%
Don't know	24%	13%	13%

Ipsos Public Affairs

10. Below are a range of proposed ideas for pension reform in Illinois. For each, please indicate whether you support or oppose the idea.

JUNE 2012	IL workers pay 3% more to keep current pension	Delay paying pensions to IL workers until age 67	IL workers to choose between 3% cut or waiving retirement health care
Strongly support	25%	20%	20%
Tend to support	32%	27%	20%
Tend to oppose	15%	20%	20%
Strongly oppose	11%	17%	22%
Unsure	18%	16%	18%
Total Support	**57%**	**47%**	**40%**
Total Oppose	**26%**	**37%**	**42%**

APRIL 2013	IL workers pay 3% more to keep current pension	Delay paying pensions to IL workers until age 67	IL workers to choose between 3% cut or waiving retirement health care
Strongly support	22%	18%	14%
Tend to support	30%	25%	24%
Tend to oppose	17%	22%	20%
Strongly oppose	13%	20%	24%
Unsure	18%	15%	18%
Total Support	**52%**	**43%**	**37%**
Total Oppose	**30%**	**42%**	**44%**

JUNE 2012 – By Region	IL workers pay 3% more to keep current pension			Delay paying pensions to IL workers until age 67			IL workers to choose between 3% cut or waiving retirement health care		
	Chi	Sub	Rest	Chi	Sub	Rest	Chi	Sub	Rest
Strongly support	24%	22%	29%	16%	19%	19%	25%	18%	18%
Tend to support	30%	33%	33%	21%	28%	24%	17%	22%	20%
Tend to oppose	15%	17%	11%	18%	22%	25%	18%	20%	23%
Strongly oppose	13%	11%	9%	24%	20%	17%	23%	23%	21%
Unsure	18%	17%	18%	21%	11%	16%	18%	17%	18%
Total Support	**54%**	**55%**	**62%**	**37%**	**47%**	**43%**	**42%**	**40%**	**38%**
Total Oppose	**28%**	**28%**	**20%**	**42%**	**42%**	**42%**	**41%**	**43%**	**44%**

APRIL 2013 – By Region	IL workers pay 3% more to keep current pension			Delay paying pensions to IL workers until age 67			IL workers to choose between 3% cut or waiving retirement health care		
	Chi	Sub	Rest	Chi	Sub	Rest	Chi	Sub	Rest
Strongly support	13%	26%	25%	19%	17%	25%	7%	16%	18%
Tend to support	31%	30%	28%	25%	30%	27%	22%	28%	20%
Tend to oppose	24%	14%	15%	20%	19%	20%	31%	15%	16%
Strongly oppose	8%	14%	16%	18%	18%	13%	18%	25%	29%
Unsure	24%	16%	16%	18%	17%	15%	23%	16%	16%
Total Support	**44%**	**56%**	**53%**	**44%**	**47%**	**52%**	**29%**	**44%**	**38%**
Total Oppose	**32%**	**28%**	**31%**	**38%**	**37%**	**33%**	**49%**	**40%**	**45%**

11. And who do you blame most for the pension situation in the state of Illinois?

	April 2013
Illinois Governor Pat Quinn	4%
Democratic legislators in the State Senate and House	8%
GOP legislators in the State Senate and House	7%
Labor Unions	7%
All of them	52%
None of them	4%
Unsure	16%

APRIL 2013- By Region	Chicago	Suburban	Rest of State
Illinois Governor Pat Quinn	2%	4%	8%
Democratic legislators in the State Senate and House	8%	10%	7%
GOP legislators in the State Senate and House	10%	6%	7%
Labor Unions	4%	9%	7%
All of them	51%	51%	55%
None of them	9%	2%	2%
Unsure	17%	18%	13%

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 $\pi(\theta/y)$. 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:

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

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

Analysis Domain	Sample size	Credibility intervals
All Illinois adults	600	4.7%
Chicago adults	180	8.5%
Suburban Chicago adults	240	7.4%
Rest of state Illinois adults	180	8.5%

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[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.*