



## Methodology

### Marquette Law School Chicago Megacity Poll

### June 15-22, 2015

The Marquette Law School Poll of the Chicago megacity was conducted June 15-22, 2015. A total of 1872 adults over 18 years old were interviewed by a combination of landline and cell phone using random digit dialing (RDD). Interviews were completed with 1073 (57%) landline respondents and 799 (43%) cell phone respondents. The data collection was managed by LHK Partners, Inc. with telephone interviews conducted by SHC Universal.

The megacity region was defined by 21 counties in southeast Wisconsin, in the Chicago area of Illinois and in northwest Indiana. The Illinois counties are Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry and Will counties. In Indiana the counties are Jasper, Lake, LaPorte, Newton and Porter counties. The Wisconsin counties are Kenosha, Milwaukee, Ozaukee, Racine, Washington and Waukesha.

The sample was designed to be representative of the regions in each of the three states, allowing separate analysis by state and comparison of the three state components of the megacity region. The sample sizes are 600 in Illinois, 612 in Indiana and 660 in Wisconsin. The margin of errors, including design effects due to post-stratification for each state, are +/- 5.8 percentage points for Illinois, +/- 5.2 percentage points for Indiana and +/- 5.1 percentage points for Wisconsin.

#### Post-Stratification

Post-stratification, or weighting, compensates for patterns of non-response that shift sample characteristics from known population values. In telephone surveys it is common for potential respondents who are younger and have fewer years of formal education to exhibit higher rates of non-response resulting in these groups being under-represented in the sample. To compensate for these non-response effects the sample is weighted to bring sample characteristics into line with the population values. In this sample the population values of age groups, education levels, race, geographic area and sex were determined using the 2014 data release from the American Community Survey (ACS) conducted by the U.S. Census Bureau in each of the 21 counties in the megacity. A raking algorithm was used to simultaneously balance the weights so that the sample distribution closely approximates the known population distributions for age, education, race, geographic region, and sex. The population, raw sample size, unweighted and weighted percentages, as well as population parameters from the ACS are shown in the tables below.

Comparison of final weighted data to ACS parameters

Group	Raw N	Illinois		Parameter
		Unweighted	Weighted	
18-24	52	9	13	13
25-34	63	11	19	19
35-44	72	12	18	18
45-64	229	38	32	34
65 and over	173	29	15	15
Age NA	11	2	2	
Less than high school	19	3	14	14
High school	97	16	25	25
Some college	97	16	21	22
Associates degree	55	9	6	6
Bachelors degree	158	26	21	21
Post-graduate	166	28	12	12
Education NA	8	1	2	
Black	105	18	16	16
Hispanic	45	8	19	19
Other race	32	5	8	8
Non-Hispanic White	401	67	55	57
Race NA	17	3	3	
Urban core county	325	54	61	61
Inner suburb county	192	32	26	26
Outer suburb county	83	14	13	13
Male	305	51	48	48
Female	295	49	52	52

Comparison of final weighted data to ACS parameters (continued)

Group	Raw N	Indiana		Parameter
		Unweighted	Weighted	
18-24	45	7	12	12
25-34	49	8	17	17
35-44	83	14	17	17
45-64	236	39	36	37
65 and over	195	32	18	18
Age NA	4	1	1	
Less than high school	23	4	13	13
High school	177	29	37	37
Some college	120	20	24	24
Associates degree	67	11	8	8
Bachelors degree	106	17	12	12
Post-graduate	117	19	6	6
Education NA	2	1	1	
Black	83	14	16	16
Hispanic	49	8	11	11
Other race	29	5	2	2
Non-Hispanic White	433	71	68	71
Race NA	18	3	3	
Urban core county	322	53	60	60
Inner suburb county	290	47	40	40
Outer suburb county	NA	NA	NA	NA
Male	308	50	48	48
Female	304	50	52	52

Comparison of final weighted data to ACS parameters (continued)

Group	Raw N	Wisconsin		Parameter
		Unweighted	Weighted	
18-24	43	7	12	12
25-34	48	7	18	18
35-44	77	12	17	17
45-64	274	41	35	36
65 and over	213	32	17	17
Age NA	5	1	1	
Less than high school	27	4	11	11
High school	182	28	29	29
Some college	101	15	23	24
Associates degree	77	12	8	8
Bachelors degree	153	23	19	19
Post-graduate	115	17	9	9
Education NA	5	1	1	
Black	68	10	13	13
Hispanic	29	4	8	8
Other race	33	5	4	4
Non-Hispanic White	514	78	71	75
Race NA	16	2	3	
Urban core county	276	42	49	49
Inner suburb county	261	40	32	32
Outer suburb county	123	19	19	19
Male	328	50	48	48
Female	332	50	52	52

## AAPOR Transparency Initiative Information

The Marquette Law School Poll follows the guidelines for disclosure of the American Association for Public Opinion Research Transparency Initiative. For more information on the initiative see: <http://www.aapor.org/AAPORKentico/transparency.aspx>

1. The poll is sponsored by Marquette Law School.
2. The Marquette Law School Poll, under the direction of Prof. Charles Franklin, designed the survey instrument and sampling design. The data collection was administered by LHK Partners, Inc. with telephone interviews conducted by SHC Universal.
3. Funding for this study was provided by the Marquette Law School Alumni Annual Fund, the Patrick and Anna M. Cudahy Fund and by the Sheldon B. Lubar Fund for Public Policy Research at Marquette Law School. Their support is gratefully acknowledged.
4. The full survey instrument is available online at <https://law.marquette.edu/poll/results-data/>
5. The population surveyed consists of adult residents of the 21 county Chicago megacity region. The Illinois counties are Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry and Will counties. In Indiana the counties are Jasper, Lake, LaPorte, Newton and Porter counties. The Wisconsin counties are Kenosha, Milwaukee, Ozaukee, Racine, Washington and Waukesha.
6. The sample frame is a dual frame landline and cell telephone sample using a random digit dialing design. Sampling was stratified by state to provide approximately equal sample sizes for each state.
7. The sample was supplied by Marketing Systems Group (MSG).
8. The dual-frame random digit dial design was used to ensure that both cell phone and landlines and listed and unlisted numbers would be included in the sample. Adult respondents, age 18 and over, in the landline sample were selected using the “most recent birthday” method. Respondents were also screened to ensure they were current residents of the 21 counties included in the sampling frame. Interviews in the cell phone sample were conducted with the person who answer the phone if they were an adult age 18 or over and lived in one of the sample counties.
9. The sample is a probability design using a random digit dialed (RDD) dual-frame design of cell phone and landline numbers.
10. See 8 and 9 above.
11. The sample was designed to be representative of the counties in each of the three states, allowing separate analysis by state and comparison of the three state components of the megacity region. The sample sizes are 600 in Illinois, 612 in Indiana and 660 in Wisconsin. The margin of error, including design effects due to post-stratification for each state, are +/- 5.8 percentage points for Illinois, +/- 5.2 percentage points for Indiana and +/- 5.1 percentage points for Wisconsin.

In this sample the population values of age groups, education levels, race, geographic area and sex were determined using the 2014 data from the American Community Survey conducted by the U.S. Census Bureau in each of the 21 counties in the megacity. A raking algorithm was used to simultaneously balance the weights so that the sample distribution closely approximates the known population distributions for age, education, race, geographic region, and sex.

The design effect,  $deff$ , for a sample of size  $n$  and with each case having a weight,  $w_i$ , is calculated as:

$$deff = \frac{n \sum_{i=1}^n w_i^2}{\left( \sum_{i=1}^n w_i \right)^2}$$

Incorporating the design effect, the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left( \sqrt{deff} \times 1.96 \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}} \right)$$

where  $\hat{p}$  is the sample estimate and  $n$  is unweighted number of cases.

The design effects due to post-stratification for the state samples are 2.0 for Illinois, 1.65 for Indiana and 1.72 for Wisconsin. Those effects are included in the calculated margin of error reported above.

12. The design effect has been incorporated in the calculation of all reported margins of error.
13. Results reported reflect the full sample within each state, with the margins of error corresponding to those reported above in item 11.
14. The survey was administered in English by telephone (landline and cell) using live interviewers. The data were collected June 15-22, 2015.
15. Full results, including the complete instrument, topline results and crosstabs as well as this methodological report are available online at <https://law.marquette.edu/poll/results-data/>  
For further information contact the survey director, Prof. Charles Franklin at [Charles.franklin@marquette.edu](mailto:Charles.franklin@marquette.edu)

## Sample Disposition and Response Rate Report

Table 1 below presents the disposition of all sampled numbers that were ever dialed as part of this survey. The response rate is computed according to the AAPOR standard definition 3. In this survey the response rate was 6.1%.

Table 1: Sample Disposition and Response Rate

Disposition	Description
1872	I=Completes
7181	R=Refusals and breakoffs
42	NC=Non-contact
869	O=Other
15708	OF=Out of sampling frame/business/not working
49719	UH=Unknown household (No answer, answering machine)
3098	UO=Unknown Other
0.39	AAPOR's $e=(I+R+NC+O)/(I+R+NC+O+OF)$
6.1	AAPOR $RR3=I/(I+R+NC+O+(e*(UH+UO)))*100$