MARQUETTE UNIVERSITY
LAW SCHOOL POLL   A COMPREHENSIVE LOOK AT THE WISCONSIN VOTE

Methodology
Marquette Law School Poll
Milwaukee Area Project
October 9-17, 2017

The Marquette Law School Poll for the Milwaukee Area Project was conducted October 9-17, 2017. A total of 1200 adults were interviewed by a combination of landline and cell phone using random digit dialing (RDD). Interviews were completed with 460 (38%) landline respondents and 740 (62%) cell phone respondents. The data collection was managed by LHK Partners, Inc. with telephone interviews conducted by SHC Universal.

The geographic coverage of the sample was the five counties of the Milwaukee area: Milwaukee, Ozaukee, Racine, Washington and Waukasha.

The sample size is 1200 adults age 18 or older. The margin of error, including design effects due to post-stratification is ±3.5 percentage points for the full sample.

Regional subsamples and their margins of error are as follows:
City of Milwaukee, N=416, MOE=6.3
Suburban Milwaukee county, N=218, MOE=8.0
Ozaukee and Washington counties combined, N=152, MOE=9.7
Racine county, N=133, MOE=10.2
Waukesha county, N=281, MOE=7.0

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 demographic characteristics into line with the population values. In this sample the adult population values of age groups, education levels, geographic subregions of the Milwaukee area, race and sex were determined using the Census Bureau's American Community Survey, 5 Year estimates for 2015, the latest available.

A raking algorithm was used to simultaneously balance the weights so that the sample distribution closely approximates the known population distributions for age, education, geographic region, race, and sex. The population, raw sample size, unweighted and weighted percentages, as well as population parameters from the American Community Survey are shown in the table below.

Comparison of final weighted data to ACS parameters

Group		Wisconsin		
	Raw N	Unweighted	Weighted	Parameter
Sex				
Male	600	50	48	48
Female	600	50	52	52
Age				
18-29	129	11	21	21
30-39	143	12	17	17
40-49	143	12	16	16
50-59	228	19	18	19
60-69	284	24	15	15
70+	259	22	13	13
Age NA	14	1	1	
Education				
Less than high school	45	4	9	9
High school	218	18	27	28
Some college	275	23	21	21
Associates degree	117	10	9	9
College Graduate	295	25	21	21
Post-Graduate	245	20	12	12
Education NA	5	0	1	
Region				
City of Milwaukee	416	35	34	32
Suburban Milwaukee county	218	18	20	21
Ozaukee and Washington counties	152	13	12	13
Racine County	133	11	11	11
Waukesha County DMA	281	23	22	23
Race				
White	842	70	67	69
Black	152	13	16	16
Hispanic	59	5	10	10
Other	124	10	5	5

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. 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 adults age 18 or older in the five county Milwaukee area, including Milwaukee, Ozaukee, Racine, Washington and Waukesha counties.

6. The sample frame is a dual frame landline and cell telephone sample using a random digit dialing design. Sampling was stratified by region of the Milwaukee area to provide approximately proportional sample sizes for each region.

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. Adults, 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 five county Milwaukee area included in the sampling frame. Interviews in the cell phone sample were conducted with the person who answered the phone if they were registered voter, age 18 or over, and lived in one of the five counties included in the Milwaukee area.

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 five counties included in the Milwaukee area. The sample size is 1200. The margin of error, including design effects due to post-stratification is ±3.5 percentage points for the full sample.

    In this sample the population values of age groups, education levels, geographic region, race and sex were determined using data from the American Community Survey 5-year estimates for 2015, conducted by the U.S. Census Bureau, the most recent available.

    A raking algorithm was used to simultaneously balance the weights so that the sample distribution closely approximates the known population distributions for age, education, geographic region, race 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:

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

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

The design effects due to post-stratification for the sample is 1.54. That effect is 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 the Milwaukee area, with the margins of error corresponding to those reported above in item 11. When subsamples are reported the appropriate margin of error is also reported, as in item 11 above.

14. The survey was administered in English by telephone (landline and cell) using live interviewers. The data were collected October 9-17, 2017.

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

Sample Disposition and Response Rate Report

The table 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 4.1%.

Sample Disposition and Response Rate

Disposition	Description
1200	I=Completes
9152	R=Refusals and breakoffs
305	NC=Non-contact
574	O=Other
19993	OF=Out of sampling frame/business/not working
49562	UH=Unknown household (No answer, answering machine)
430	UO=Unknown Other
0.36	AAPOR's e=(I+R+NC+O)/(I+R+NC+O+OF)
4.1	AAPOR RR3=I/(I+R+NC+O+(e*(UH+UO)))*100