

Removing Politics From Local Remapping: A Path Towards Fair and Equitable Representation

An Analysis of 2021 Chicagoland County Board Redistricting and How We Can Do Better

Prepared by: Eli Brottman, CHANGE Illinois August 2025

Table of Contents

Intro	duction	3
I.	Partisanship assessment of 2021 maps	4
II.	Racial equity assessment of 2021 maps	16
III.		
IV.	Public input assessment of 2021 processes	22
V.		
VI.	Conclusion and recommendations	43
Worl	ks Cited	45
Appe	endix A: Current county board map political data	46
Appe	endix D: Hypothetical county board map political data	70
II. Racial equity assessment of 2021 mapsIII. Compactness assessment of 2021 mapsIV. Public input assessment of 2021 processes		89
Арре	endix F: Hypothetical county board map compactness data	101

Introduction

The purpose of this report is to inform the public and county officials about the 2021 redistricting process, including racial equity, partisan bias, compactness, and public input, for the 7-county Chicago Metropolitan Area: Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will Counties.

We examine each of these measures through a non-partisan lens. We also created 11 hypothetical maps to illustrate that the current district maps can be improved: one for each of the seven counties, plus one with single-member districts for each of the counties with multi-member districts (DuPage, Kendall, McHenry, and Will). These are just one example of how we could produce maps that are fairer and better aligned with redistricting reform principles we have championed; they are far from the only possible solution.

These redistricting reform principles are, in priority order:

- 1. Comply with the U.S. Constitution
- 2. Comply with the federal and state Voting Rights Act
- 3. Comprise and uphold a non-partisan process
- 4. Maximize voter choice, electoral candidacy, and competitiveness
- 5. Recognize and preserve communities of interest
- 6. Accurately include permanent residence of all Illinoisans
- 7. Comprise and uphold a transparent and accountable process
- 8. Provide for open, full, and meaningful public participation

In particular, incumbent residences were not considered in drawing these maps, and partisanship was only considered to the extent necessary to ensure the maps were as compliant as possible with the guidelines we outline in Section II of the report.

I. Partisanship assessment of 2021 maps

To assess partisanship, we use the Efficiency Gap¹, a metric that analyzes how many votes from each party are "wasted" to see if one party "wastes" more votes than the other. Wasted votes are those which did not impact the result of an election; for instance, if 100 votes are cast in an election, and the winning party receives 55 votes, then they waste 5 votes, while the losing party wastes all 45 votes cast. Votes are typically wasted through cracking and packing techniques in partisan gerrymanders, with the minority party's votes being wasted by losing many, relatively close seats. The majority party then wastes relatively few votes on those seats, also wasting fewer votes in the seats they lose due to packing of the minority party's voters.

The Efficiency Gap can be computed through the following formula:

seat margin $-2 \times vote margin$.

This formula tells us that the majority party is expected to win additional seats beyond 50% twice as fast as they win votes. For example, if they win 55% of the total vote in a region, they will be expected to win about 60% of the seats in a fair map.

When analyzing the Chicago Metro county board maps, we were mindful of the fact that partisanship at the top of the ticket often looks very different from the county level, with a skew toward the Democratic Party. With this in mind, we assessed the maps on the basis of past contested countywide election results in 2018 and 2020, as well as the 2018 Illinois Attorney General race. Results from prior to the 2021 remap were used, so the maps are evaluated on the basis of the data present when they were drawn, not on election results that the previous map makers did not have access to when drawing the maps.

For multi-member districts, we look at partisanship for the district, and then extrapolate accordingly for the total number of members from each party. This relies on an oversimplified assumption that each district will only elect members of one party, however it is the closest estimate we have, and is helpful when considering single-member district hypothetical maps for counties that currently have multi-member districts.

It has been established legally that maps with an Efficiency Gap that does not exceed 8% in magnitude is considered indicative of a balanced map in terms of partisanship².

We analyzed of partisanship of the county board maps (based on Democratic vote share), county by county, using four different metrics: 2018 Attorney General, 2018 Countywide Average, 2020

¹ https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12542&context=journal_articles

² https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12542&context=journal_articles

Countywide Average, and County Average (simple average of 2018 and 2020 Countywide averages)³. Ranges of fair seat values were computed using the 8% efficiency gap threshold in both directions. The specific computations are shown in Table 1.1.

Notably, Lake County skews unfairly Democratic in all four metrics, and Will County does in three out of four metrics. McHenry County skews unfairly Republican in all four metrics.

Table 1.1. Reasonable ranges of Democratic county board seats, based on four key metrics.⁴

County	Metric	% D	Total districts (seats)	% D seats with 0% Efficien cy Gap	D districts (seats) with 0% Efficien cy Gap	Min. D districts (seats)	Max. D districts (seats)	Current map D districts (seats)
Cook	2018 AG	73.71%	17	97.41%	16.56	15.20	17	16
Cook	2018 Avg	76.19%	17	100.00	17	16.04	17	17
Cook	2020 Avg	73.03%	17	96.06%	16.33	14.97	17	16
Cook	Co. Avg	74.61%	17	99.22%	16.87	15.51	17	16
DuPage	2018 AG	51.85%	6 (18)	53.70%	3.22 (9.67)	2.74 (8.23)	3.70 (11.11)	5 (15)
DuPage	2018 Avg	50.31%	6 (18)	50.62%	3.04 (9.11)	2.56 (7.67)	3.52 (10.55)	2 (6)
DuPage	2020 Avg	50.54%	6 (18)	51.09%	3.07 (9.20)	2.59 (7.76)	3.55 (10.64)	3 (9)

³ The percentage Democratic was calculated as follows: 2018 AG was based on the share of two-party votes cast for Democrats; 2018 (Countywide) Average was calculated by averaging Democrats' vote shares in all contested countywide races in 2018; 2020 (Countywide) Average was calculated by averaging Democrats' vote shares in all contested countywide races in 2020; County Average was calculated by taking a simple average of the 2018 Average and 2020 Average.

⁴ The countywide races considered were: Cook County: 2018 Assessor, 2020 Circuit Clerk; DuPage County: 2018 Clerk, 2018 County Board Chair, 2018 Sheriff, 2020 Auditor, 2020 Circuit Clerk, 2020 Coroner, 2020 Recorder; Kane County: 2018 Clerk, 2018 Sheriff, 2018 Treasurer, 2020 Auditor, 2020 Circuit Clerk, 2020 County Board Chair, 2020 Recorder, 2020 State's Attorney; Kendall County: 2018 Clerk, 2020 Circuit Clerk; Lake County: 2018 Clerk, 2018 Sheriff, 2018 Treasurer, 2020 Circuit Clerk, 2020 Coroner, 2020 Recorder, 2020 State's Attorney; McHenry County: 2018 Clerk, 2020 Circuit Clerk, 2020 County Board Chair; Will County: 2018 Clerk, 2018 Sheriff, 2018 Treasurer, 2020 Auditor, 2020 County CEO, 2020 Circuit Clerk, 2020 Coroner, 2020 Recorder.

DuPage	Co. Avg	50.43%	6 (18)	50.85%	3.05 (9.15)	2.57 (7.71)	3.53 (10.59)	3 (9)
Kendall	2018 AG	49.32%	2 (10)	48.65%	0.97 (4.86)	0.81 (4.06)	1.13 (5.66)	1 (5)
Kendall	2018 Avg	45.14%	2 (10)	40.28%	0.81 (4.03)	0.65 (3.23)	0.97 (4.83)	0 (0)
Kendall	2020 Avg	48.71%	2 (10)	47.42%	0.95 (4.74)	0.79 (3.94)	1.11 (5.54)	1 (5)
Kendall	Co. Avg	46.93%	2 (10)	43.85%	0.88 (4.39)	0.72 (3.59)	1.04 (5.19)	1 (5)
Kane	2018 AG	51.46%	24	52.92%	12.70	10.78	14.62	15
Kane	2018 Avg	49.60%	24	49.19%	11.81	9.89	13.73	12
Kane	2020 Avg	51.00%	24	52.00%	12.48	10.56	14.40	14
Kane	Co. Avg	50.30%	24	50.60%	12.14	10.22	14.06	12
Lake	2018 AG	55.11%	19	60.22%	11.44	9.92	12.96	14
Lake	2018 Avg	52.15%	19	54.30%	10.32	8.80	11.84	13
Lake	2020 Avg	55.47%	19	60.95%	11.58	10.06	13.10	15
Lake	Co. Avg	53.81%	19	57.62%	10.95	9.43	12.47	14
McHenr y	2018 AG	45.76%	9 (18)	41.52%	3.74 (7.47)	3.02 (6.03)	4.46 (8.91)	1 (2)
McHenr y	2018 Avg	45.44%	9 (18)	40.88%	3.68 (7.36)	2.96 (5.92)	4.40 (8.80)	1 (2)
McHenr y	2020 Avg	43.93%	9 (18)	37.85%	3.41 (6.81)	2.69 (5.37)	4.13 (8.25)	0 (0)
McHenr y	Co. Avg	44.68%	9 (18)	39.37%	3.54 (7.09)	2.82 (5.65)	4.26 (8.53)	1 (2)

Will	2018 AG	51.82%	11 (22)	53.63%	5.90 (11.80)	5.02 (10.04)	6.78 (13.56)	7 (14)
Will	2018 Avg	53.55%	11 (22)	57.11%	6.28 (12.56)	5.40 (10.80)	7.16 (14.32)	8 (16)
Will	2020 Avg	54.89%	11 (22)	59.78%	6.58 (13.15)	5.70 (11.39)	7.46 (14.91)	7 (14)
Will	Co. Avg	54.22%	11 (22)	58.44%	6.43 (12.86)	5.55 (11.10)	7.31 (14.62)	8 (16)

We also consider partisanship from the standpoint of how many districts were competitive, defined as between 46.50% and 53.50% Democratic, as is done in Princeton Gerrymandering Project⁵. This is shown, for the same four metrics in each county, in Table 1.2.

It should be noted, in particular, that there are few competitive districts in Lake and McHenry Counties, despite the partisan balance of the counties being fairly close.

Table 1.2. Partisan composition and competitiveness of current county board maps.

County	Metric	% D	Total districts	Strong D (53.51% -100.00 % D)	Lean D (50.00- 53.50% D)	Lean R (46.50- 49.99% D)	Strong R (0.00- 46.49% D)	Total competi tive
Cook	2018 AG	73.71%	17	15	1	1	0	2
Cook	2018 Avg	76.19%	17	16	1	0	0	1
Cook	2020 Avg	73.03%	17	15	1	1	0	2
Cook	Co. Avg	74.61%	17	16	1	0	0	1
DuPage	2018 AG	51.85%	6	1	4	1	0	5

⁵ https://gerrymander.princeton.edu/redistricting-report-card-methodology

•

DuPage	2018 Avg	50.31%	6	1	1	4	0	5
DuPage	2020 Avg	50.54%	6	1	2	3	0	5
DuPage	Co. Avg	50.43%	6	1	2	3	0	5
Kane	2018 AG	51.46%	24	11	4	3	6	7
Kane	2018 Avg	49.60%	24	9	3	5	7	8
Kane	2020 Avg	51.00%	24	10	4	4	6	8
Kane	Co. Avg	50.30%	24	10	2	6	6	8
Kendall	2018 AG	49.32%	2	0	1	0	1	1
Kendall	2018 Avg	45.14%	2	0	0	1	1	1
Kendall	2020 Avg	48.71%	2	0	1	0	1	1
Kendall	Co. Avg	46.93%	2	0	1	0	1	1
Lake	2018 AG	55.11%	19	13	1	2	3	3
Lake	2018 Avg	52.15%	19	7	6	1	5	7
Lake	2020 Avg	55.47%	19	13	2	1	3	3
Lake	Co. Avg	53.81%	19	12	2	1	4	3
McHenr y	2018 AG	45.76%	9	0	1	3	5	4
McHenr y	2018 Avg	45.44%	9	0	1	2	6	3
McHenr y	2020 Avg	43.93%	9	0	0	2	7	2

McHenr y	Co. Avg	44.68%	9	0	1	1	7	2
Will	2018 AG	51.82%	11	5	2	1	3	3
Will	2018 Avg	53.55%	11	5	3	1	2	4
Will	2020 Avg	54.89%	11	6	1	2	2	3
Will	Co. Avg	54.22%	11	6	2	1	2	3

The hypothetical maps generated attempted to produce partisan fairness that aligns with the guidelines stated above with the efficiency gap. We compare the results in this way, for all four metrics, in Table 1.3.

We can see that we made significant improvements in Lake County, and some improvements in Kane, McHenry, and Will Counties as well. Will County's geography naturally favors Democrats, while McHenry County's geography naturally favors Republicans. However, we made some improvements in both counties.

In DuPage County, the 6 district map appears more biased because with generating a Hispanic influence district, there was packing of Democrats into a couple districts. However, as will be seen in Table 1.4 later on, the Republican leaning districts are very competitive, hence not rendering any significant partisan advantage to either party.

Finally, we see that we came much closer to achieving partisan fairness with single-member districts. This aligns with single-member districts being better able to capture the diversity of communities (Section III explores racial equity specifically), as well as being smaller geographically.

Table 1.3. Comparing partisan composition of current and hypothetical county board maps.

County	Metric	Total districts (seats)	Min. D districts (seats)	Max. D districts (seats)	Current map D districts (seats)	Hypothetic al map D districts (seats)
Cook	2018 AG	17	15.20	17	16	16
Cook	2018 Avg	17	16.04	17	17	17
Cook	2020 Avg	17	14.97	17	16	16
Cook	Co. Avg	17	15.51	17	16	17
DuPage, 6 dist.	2018 AG	6 (18)	2.74 (8.23)	3.70 (11.11)	5 (15)	3 (9)
DuPage, 6 dist.	2018 Avg	6 (18)	2.56 (7.67)	3.52 (10.55)	2 (6)	2 (6)
DuPage, 6 dist.	2020 Avg	6 (18)	2.59 (7.76)	3.55 (10.64)	3 (9)	2 (6)
DuPage, 6 dist.	Co. Avg	6 (18)	2.57 (7.71)	3.53 (10.59)	3 (9)	2 (6)
DuPage, 18 dist.	2018 AG	18	8.23	11.11	N/A	11
DuPage, 18 dist.	2018 Avg	18	7.67	10.55	N/A	9
DuPage, 18 dist.	2020 Avg	18	7.76	10.64	N/A	10
DuPage, 18 dist.	Co. Avg	18	7.71	10.59	N/A	10
Kane	2018 AG	24	10.78	14.62	15	14
Kane	2018 Avg	24	9.89	13.73	12	11
Kane	2020 Avg	24	10.56	14.40	14	12
Kane	Co. Avg	24	10.22	14.06	12	12

Kendall, 2 dist.	2018 AG	2 (10)	0.81 (4.06)	1.13 (5.66)	1 (5)	1 (5)
Kendall, 2 dist.	2018 Avg	2 (10)	0.65 (3.23)	0.97 (4.83)	0 (0)	1 (5)
Kendall, 2 dist.	2020 Avg	2 (10)	0.79 (3.94)	1.11 (5.54)	1 (5)	1 (5)
Kendall, 2 dist.	Co. Avg	2 (10)	0.72 (3.59)	1.04 (5.19)	1 (5)	1 (5)
Kendall, 10 dist.	2018 AG	10	4.06	5.66	N/A	5
Kendall, 10 dist.	2018 Avg	10	3.23	4.83	N/A	3
Kendall, 10 dist.	2020 Avg	10	3.94	5.54	N/A	4
Kendall, 10 dist.	Co. Avg	10	3.59	5.19	N/A	4
Lake	2018 AG	19	9.92	12.96	14	12
Lake	2018 Avg	19	8.80	11.84	13	10
Lake	2020 Avg	19	10.06	13.10	15	13
Lake	Co. Avg	19	9.43	12.47	14	11
McHenry, 9 dist.	2018 AG	9 (18)	3.02 (6.03)	4.46 (8.91)	1 (2)	3 (6)
McHenry, 9 dist.	2018 Avg	9 (18)	2.96 (5.92)	4.40 (8.80)	1 (2)	2 (4)
McHenry, 9 dist.	2020 Avg	9 (18)	2.69 (5.37)	4.13 (8.25)	0 (0)	1 (2)
McHenry, 9 dist.	Co. Avg	9 (18)	2.82 (5.65)	4.26 (8.53)	1 (2)	1 (2)
McHenry, 18 dist.	2018 AG	18	6.03	8.91	N/A	7
McHenry, 18 dist.	2018 Avg	18	5.92	8.80	N/A	6

McHenry, 18 dist.	2020 Avg	18	5.37	8.25	N/A	3
McHenry, 18 dist.	Co. Avg	18	5.65	8.53	N/A	3
Will, 11 dist.	2018 AG	11 (22)	5.02 (10.04)	6.78 (13.56)	7 (14)	7 (14)
Will, 11 dist.	2018 Avg	11 (22)	5.40 (10.80)	7.16 (14.32)	8 (16)	7 (14)
Will, 11 dist.	2020 Avg	11 (22)	5.70 (11.39)	7.46 (14.91)	7 (14)	8 (16)
Will, 11 dist.	Co. Avg	11 (22)	5.55 (11.10)	7.31 (14.62)	8 (16)	8 (16)
Will, 22 dist.	2018 AG	22	10.04	13.56	N/A	12
Will, 22 dist.	2018 Avg	22	10.80	14.32	N/A	14
Will, 22 dist.	2020 Avg	22	11.39	14.91	N/A	15
Will, 22 dist.	Co. Avg	22	11.10	14.62	N/A	15

We similarly analyzed partisan composition and competitiveness of the hypothetical county board maps shown in Section VII. We see more competitive districts in Lake and McHenry Counties, while maintaining strong competition in DuPage, Kane, and, for the most part, Kendall Counties. There are fewer competitive districts in Will County, as when achieving racial equity (see section III), many Democrats were packed into those districts, and more rural, White areas skewed heavily Republican. This data is presented in Table 1.4.

Table 1.4. Partisan composition and competitiveness of hypothetical county board maps.

County	Metric	% D	Total districts	Strong D (53.51% -100.00 % D)	Lean D (50.00- 53.50% D)	Lean R (46.50- 49.99% D)	Strong R (0.00- 46.49% D)	Total competi tive
Cook	2018 AG	73.71%	17	15	1	1	0	2
Cook	2018 Avg	76.19%	17	17	0	0	0	0
Cook	2020 Avg	73.03%	17	15	1	1	0	2
Cook	Co. Avg	74.61%	17	16	1	0	0	1
DuPage, 6 dist.	2018 AG	51.85%	6	2	1	3	0	4
DuPage, 6 dist.	2018 Avg	50.31%	6	2	0	4	0	4
DuPage, 6 dist.	2020 Avg	50.54%	6	2	0	4	0	4
DuPage, 6 dist.	Co. Avg	50.43%	6	2	0	4	0	4
DuPage, 18 dist.	2018 AG	51.85%	18	7	4	6	1	10
DuPage, 18 dist.	2018 Avg	50.31%	18	4	5	6	3	11
DuPage, 18 dist.	2020 Avg	50.54%	18	4	6	6	2	12
DuPage, 18 dist.	Co. Avg	50.43%	18	4	6	6	2	12
Kane	2018 AG	51.46%	24	11	3	5	5	8
Kane	2018 Avg	49.60%	24	10	1	7	6	8

Kane	2020 Avg	51.00%	24	10	2	7	5	9
Kane	Co. Avg	50.30%	24	10	2	7	5	9
Kendall, 2 dist.	2018 AG	49.32%	2	1	0	0	1	0
Kendall, 2 dist.	2018 Avg	45.14%	2	0	1	0	1	1
Kendall, 2 dist.	2020 Avg	48.71%	2	1	0	0	1	0
Kendall, 2 dist.	Co. Avg	46.93%	2	1	0	0	1	0
Kendall, 10 dist.	2018 AG	49.32%	10	3	2	2	3	4
Kendall, 10 dist.	2018 Avg	45.14%	10	3	0	1	6	1
Kendall, 10 dist.	2020 Avg	48.71%	10	4	0	3	3	3
Kendall, 10 dist.	Co. Avg	46.93%	10	3	1	2	4	3
Lake	2018 AG	55.11%	19	10	2	4	3	6
Lake	2018 Avg	52.15%	19	8	2	5	4	7
Lake	2020 Avg	55.47%	19	11	2	2	4	4
Lake	Co. Avg	53.81%	19	9	2	5	3	7
McHenr y, 9 dist.	2018 AG	45.76%	9	0	3	2	4	5
McHenr y, 9 dist.	2018 Avg	45.44%	9	0	2	2	5	4
McHenr y, 9 dist.	2020 Avg	43.93%	9	0	1	2	6	3

McHenr y, 9 dist.	Co. Avg	44.68%	9	0	1	3	5	4
McHenr y, 18 dist.	2018 AG	45.76%	18	2	5	1	10	6
McHenr y, 18 dist.	2018 Avg	45.44%	18	1	5	1	11	6
McHenr y, 18 dist.	2020 Avg	43.93%	18	0	3	4	11	7
McHenr y, 18 dist.	Co. Avg	44.68%	18	1	2	4	11	6
Will, 11 dist.	2018 AG	51.82%	11	5	2	1	3	3
Will, 11 dist.	2018 Avg	53.55%	11	7	0	1	3	1
Will, 11 dist.	2020 Avg	54.89%	11	7	1	0	3	1
Will, 11 dist.	Co. Avg	54.22%	11	7	1	0	3	1
Will, 22 dist.	2018 AG	51.82%	22	10	2	2	8	4
Will, 22 dist.	2018 Avg	53.55%	22	11	3	1	7	4
Will, 22 dist.	2020 Avg	54.89%	22	13	2	0	7	2
Will, 22 dist.	Co. Avg	54.22%	22	11	4	0	7	4

II. Racial equity assessment of 2021 maps

The racial and ethnic diversity of each of the seven counties was considered, relative to the number of districts in their county board maps that are designed to give members of these communities the opportunity to nominate candidates of their choice. In general, we aim for proportional representation—meaning that the share of districts drawn to nominate candidates of choice of communities of color is proportional to their share of the population. This data is shown in Table 2.1.

Table 2.1. Minority voting age population in Chicago Metropolitan Area counties.

	% Minority VAP	% Hispanic	% Black	% Asian
Cook	56.51%	23.65%	23.61%	8.85%
DuPage	33.36%	13.48%	5.24%	13.41%
Kane	40.96%	29.17%	5.82%	4.87%
Kendall	32.26%	18.23%	8.21%	4.24%
Lake	39.00%	21.33%	7.49%	8.87%
McHenry	19.77%	12.59%	1.64%	3.45%
Will	36.56%	16.43%	12.27%	6.56%

Based on this data, we generated estimates of how many districts would ideally be drawn for each minority group, as well as for minority groups overall. That data is highlighted in Table 2.2.

Table 2.2. Target levels of minority county board district representation, based on district population.

	Total districts (seats)	Goal # minority districts (seats)	Goal # Hispanic districts (seats)	Goal # Black districts (seats)	Goal # Asian districts (seats)
Cook	17	10	4	4	2
DuPage	6 (18)	2 (6)	1 (2)	0 (1)	1 (2)
Kane	24	10	7	1	1
Kendall	2 (10)	1 (3)	0 (2)	0 (1)	0 (0)
Lake	19	7	4	1	2
McHenry	9 (18)	2 (4)	1 (2)	0 (0)	0 (1)
Will	11 (22)	4 (8)	2 (4)	1 (3)	1 (1)

Most counties fall significantly short on this front, especially DuPage, Kendall, Lake, McHenry, and Will Counties. This is partly due to the use of multi-member districts, which tend to dilute communities of color, as well as gerrymandering to protect incumbent politicians or partisan interests. Data on current representation is summarized in Table 2.3. Additionally, in Cook County, we see overrepresentation of the Black population and underrepresentation of the Hispanic population, with there being 2 more Black majority seats than Hispanic majority seats, despite the Black and Hispanic populations being nearly identical.

For the smaller populations, like Black and Asian populations in the counties outside Cook, it is often not feasible to achieve proportional representation, because of the populations being distributed throughout the counties, as opposed to segregated in clusters.

Table 2.3. Current levels of minority county board district representation, based on district majority (plurality) population.

	Total Districts	# Minority	# Hispanic	# Black	# Asian
Cook	17	9	3	5	0
DuPage	6	0	0	0	0
Kane	24	8	8	0	0
Kendall	2	0	0	0	0
Lake	19	5	3 (4)	0	0
McHenry	9	0	0	0	0
Will	11	2	0 (1)	0	0

We were able to make significant improvements on this in the proposed maps. In Cook County, we created an additional Hispanic majority VAP district, and an additional mixed majority minority district. While we lost one Black majority district, the overall representation is stronger. In DuPage County, a Hispanic influence district was created, with 37.45% Hispanic VAP. In Kane County, we preserved the 8 Hispanic-majority districts as they are in the current map, while creating an additional mixed majority minority district. In Lake County, we created an additional Hispanic plurality district. In McHenry County, we created a 30.80% Hispanic VAP district (the closest we could get), a significant improvement. Finally, in Will County, we created an additional mixed majority minority district.

Perhaps most significantly, the improvements were greater in the single-member district maps. The results are summarized in Table 2.4, and include: 4 mixed majority minority VAP districts in DuPage County, including one plurality Hispanic district and two districts over 40% Hispanic VAP; two districts with over 25% Asian VAP in DuPage County; several Kendall County districts with over 25% Hispanic VAP; a McHenry County district with over 40% Hispanic VAP; reaching the goal of 8 majority minority VAP districts in Will County. Not all of these are pluralities and majorities reflected in Table 2.4, but they are still critically important. The full demographic data for the hypothetical maps is found in Appendix E.

Table 2.4. Hypothetical map levels of minority county board district representation, based on district majority (plurality) population.

	Total Districts	# Minority	# Hispanic	# Black	# Asian
Cook	17	10	4	4	0
DuPage	6	0	0	0	0
DuPage	18	4	0 (1)	0	0
Kane	24	9	8	0	0
Kendall	2	0	0	0	0
Kendall	10	0	0	0	0
Lake	19	5	3 (5)	0	0
McHenry	9	0	0	0	0
McHenry	18	0	0	0	0
Will	11	3	0 (1)	0	0
Will	22	8	1	1	0

III. Compactness assessment of 2021 maps

We also consider the compactness of the county board maps, based on two metrics: the Reock and Polsby-Popper scores. They are defined as follows⁶:

The Reock score is calculated by taking the ratio of the area of the district to the area of the smallest circle that contains the entire district;

The Polsby-Popper score is calculated by taking the ratio of the area of the district to the area of the circle whose perimeter is that of the district.

The scores are always between 0 and 1; the larger they are, the more compact the districts are. We consider any scores below 0.25 to indicate districts that are not compact.

Table 3.1 summarizes the current state of compactness of the county board maps. In Cook, Lake, and Will Counties, a majority of districts had at least one compactness score under 0.25, with majorities having Polsby-Popper scores under 0.25 in all three counties.

Table 3.1. Compactness data for the current county board maps.

	Total Distri cts	Reock, Polsby- Popper >= 0.25	Min. Reock	Avg. Reock	Reock >= 0.25	Min. Polsby- Popper	Avg. Polsby- Popper	Polsby- Popper >= 0.25
Cook	17	3	0.1422	0.2773	9	0.0588	0.1817	4
DuPage	6	6	0.3641	0.4855	6	0.3934	0.4608	6
Kane	24	16	0.2100	0.3703	19	0.2224	0.3530	18
Kendall	2	2	0.4550	0.5407	2	0.5464	0.6142	2
Lake	19	7	0.1412	0.3713	15	0.1679	0.2630	8
McHenry	9	8	0.2744	0.3844	9	0.2080	0.3952	8
Will	11	5	0.2234	0.3448	9	0.1777	0.2878	5

In drawing hypothetical county board maps, we tried to minimize how many districts had compactness scores under 0.25. However, we also place racial equity as a higher priority; if it took drawing non-compact districts to achieve racial equity, we did.

_

⁶ https://gerrymander.princeton.edu/redistricting-report-card-methodology

The compactness data for the hypothetical maps is shown in Table 3.2. Significant improvements were made in Cook, Kane, Lake, and Will Counties, with some minor steps back in DuPage, Kendall and McHenry Counties, but only for the purposes of moving closer to racial equity. When looking at single-member districts, no such deficits existed in Kendall County. There were some setbacks in DuPage and McHenry, but only to the extent necessary to maximize racial equity, and in every map, at least half of districts are satisfactorily compact.

Table 3.2. Compactness data for hypothetical county board maps.

	Total Distric ts	Reock, Polsby- Popper >= 0.25	Min. Reock	Avg. Reock	Reock >= 0.25	Min. Polsby- Popper	Avg. Polsby- Popper	Polsby- Popper >= 0.25
Cook	17	9	0.1881	0.3640	13	0.1075	0.3032	9
DuPage	6	4	0.1592	0.3237	4	0.0964	0.3161	4
DuPage single member	18	9	0.1664	0.3022	14	0.1268	0.2499	9
Kane	24	20	0.2153	0.3962	21	0.2224	0.3828	22
Kendall	2	1	0.1783	0.3468	1	0.2231	0.3544	1
Kendall single member	10	10	0.2583	0.4031	10	0.2887	0.4332	10
Lake	19	18	0.2650	0.4071	19	0.1672	0.3714	18
McHenry	9	8	0.2570	0.4035	9	0.2107	0.3834	8
McHenry single member	18	13	0.1179	0.3683	15	0.1649	0.3534	14
Will	11	9	0.2048	0.3876	10	0.1963	0.3759	9
Will single member	22	18	0.1841	0.3734	20	0.1788	0.3758	19

IV. Public input assessment of 2021 processes

We examined the public input processes for the remaps for these counties, including how many opportunities they provided for public input to be taken, along with public participation in those opportunities. Information was obtained through FOIA requests to each of the seven counties, along with public information on their websites. None of the seven counties examined had adequate procedures and processes to ensure community feedback was solicited and actively sought out. We compare the counties' processes in the table below, and link to their webpages where they exist.

Table 4.1. Public input procedures in each county.

	Number of public meetings for comment	Number of participants in each meeting	Languages used	Map proposals presented to the public
Cook	*	*	*	*
DuPage	4 (1 before map released; 3 more within the week after)	5 in the first one; unknown in the others; over 125 online comments submitted	1	1
Kane ⁷	2 (5 additional informational meetings)	1 to 7 per hearing/meeting	1	3
Kendall	N/A	N/A	N/A	N/A (maps were not redrawn)
Lake ⁸	4	290 total registrants; 35 questions submitted and 38 speaking at one of the meetings; over 700 public comments received online/via phone	1	1

⁷ https://www.kanecountyil.gov/Pages/Redistricting.aspx

https://web.archive.org/web/20211220043101/https://www.lakecountyil.gov/4569/Reapportionment-Committee

McHenry	0 (some committee hearings took place)	N/A; 1 member of the public provided comment in one committee hearing	1	There were two 9-district maps and two 18-district maps in committees, but nothing through public meetings to our knowledge
Will	19 (numerous committee hearings took place)	N/A	1	At least 6 in committee hearings, but nothing through public hearings to our knowledge

Cook County

*Cook County has asked for multiple extensions to our FOIA requests and we have been unable to garner this information directly from them. We will update this report if we receive more information from them.

In January 2021, the Cook County Board of Commissioners established a redistricting ordinance, Resolution 21-1196¹⁰, dictating the formation of a Redistricting Committee, and such committee conducting at least three public hearings.

Three such hearings were held in June 2021, and the public was also given the chance to submit alternative maps. However, two of these three hearings were during the workday, and there was never a public-centered process to ask the community what their needs and desires were.

Ultimately, the committee of politicians recommended a map to the full board, which is not a community-centered process.

⁹ http://freepressnewspapers.com/content/will-county-residents-asked-weigh-new-district-map

Will County

The public was urged to provide feedback on two maps, one drawn by the County Executive (with 11 two-member districts) and one drawn by the bipartisan reapportionment committee¹¹. The map drawn by Will County Executive Jennifer Bertino-Tarrant, a Democrat, passed the Democratic-controlled board in a vote along party lines¹². It appears there may have been one public meeting, however no public meetings were indicated in response to our FOIA requests.

Bertino-Tarrant actually proposed a single-member district plan with 21 districts, with 6 majority minority districts¹³, later withdrawing this plan because it would require referendum approval from voters¹⁴.

https://www.chicagotribune.com/2021/07/18/will-county-board-focuses-on-keeping-municipalities-together-in-redistricting-remap/

¹¹ http://freepressnewspapers.com/content/will-county-residents-asked-weigh-new-district-map

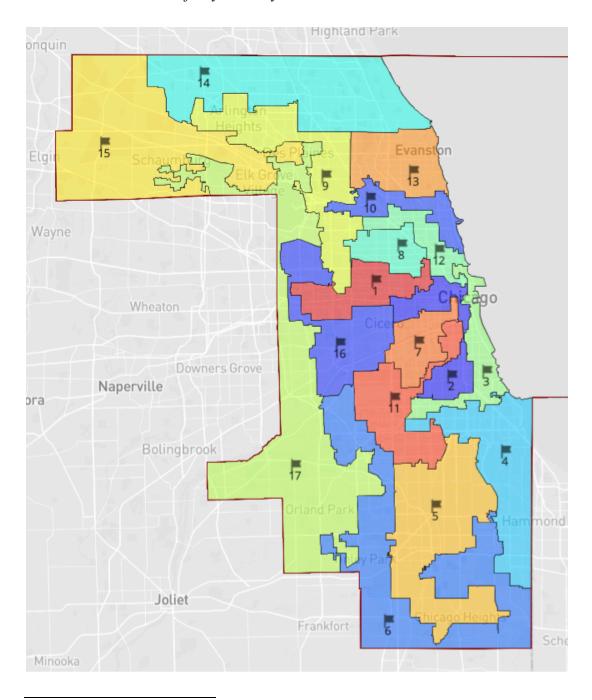
¹² https://www.chicagotribune.com/2021/11/03/democratic-map-for-will-county-board-approved-on-party-line-vote/

¹³ https://willcounty.gov/will-county-executive-bertino-tarrant-recommends-21-district-board

V. Current and hypothetical county board maps¹⁵

Cook County - current

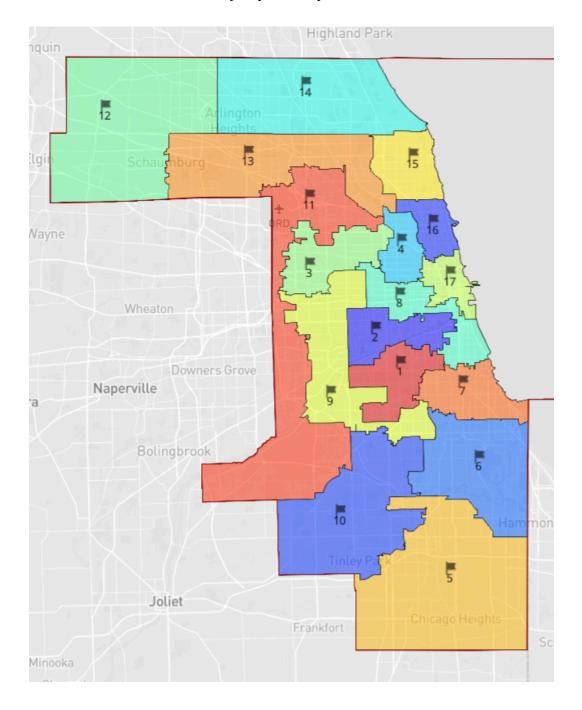
Districts 1, 2, 3, 4, and 5 are majority Black VAP. Districts 7, 8, and 16 are majority Hispanic VAP. District 11 is a mixed majority minority VAP.



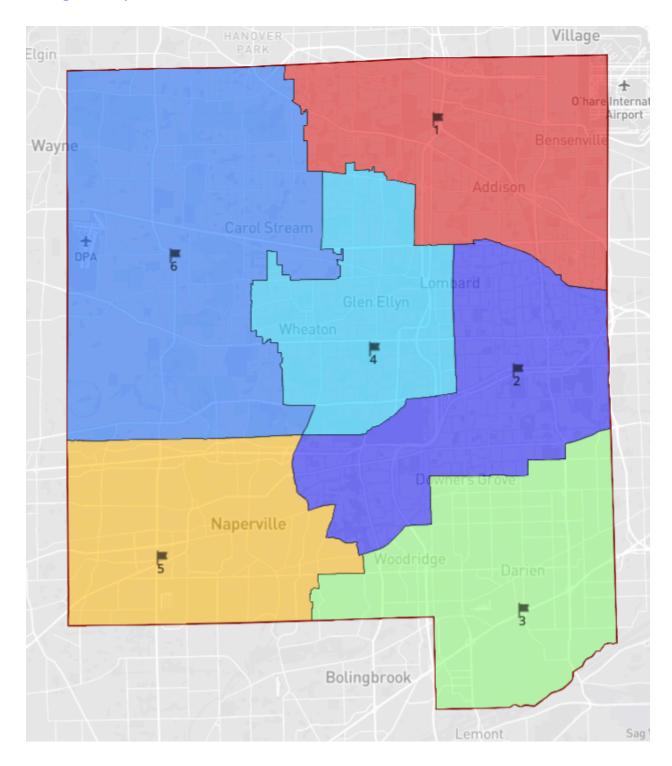
 $^{^{\}rm 15}$ Maps were drawn using Dave's Redistricting, www.davesredistricting.org.

Cook County – hypothetical

Districts 1, 2, 3, and 4 are majority Hispanic VAP. Districts 5, 6, 7, and 8 are majority Black VAP. Districts 9 and 15 are mixed majority minority VAP.



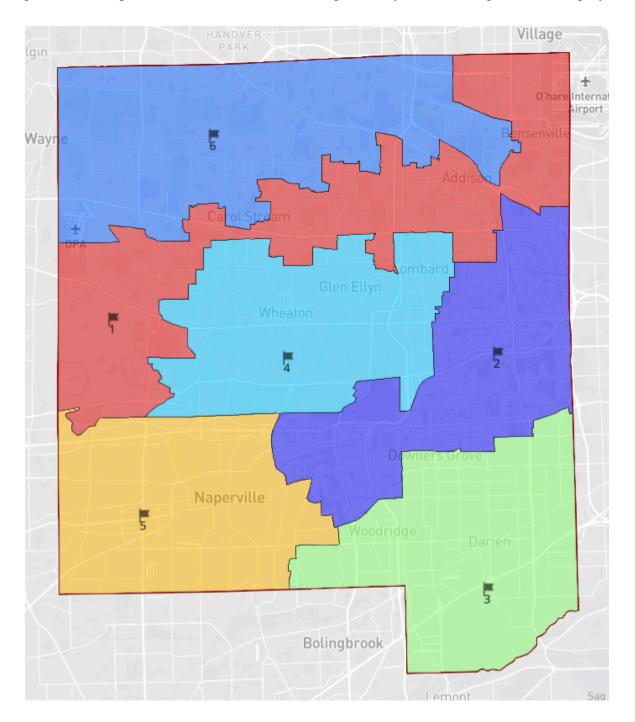
DuPage County - current



DuPage County – hypothetical 6 district

District 1 is mixed majority minority VAP. It is a Hispanic influence district, with 37.45% Hispanic VAP. In addition, the total population is plurality Hispanic (42.0%), followed by White (39.7%).

This map attempts to preserve Districts 2, 3, 4, and 5 from the current enacted map to the greatest extent possible, with Districts 1 and 6 significantly altered to improve racial equity.

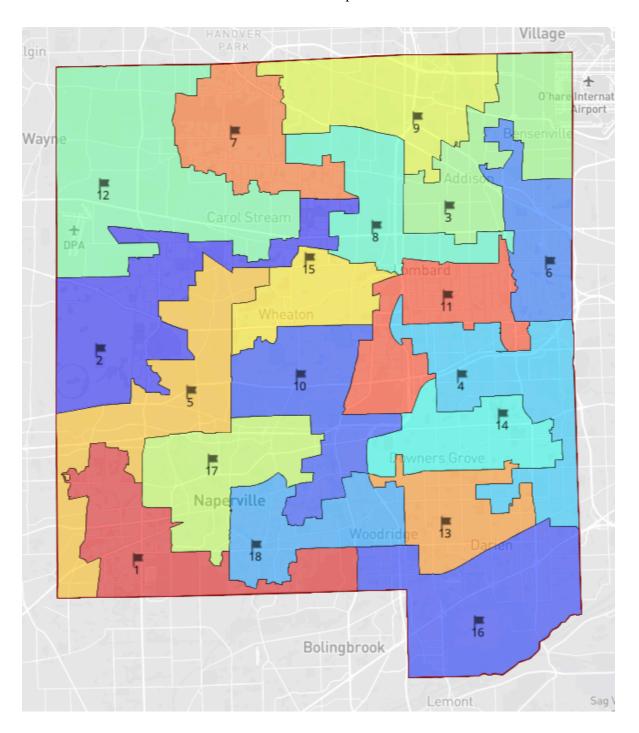


DuPage County – hypothetical 18 district

Districts 1, 2, 3, and 7 are mixed majority minority VAP.

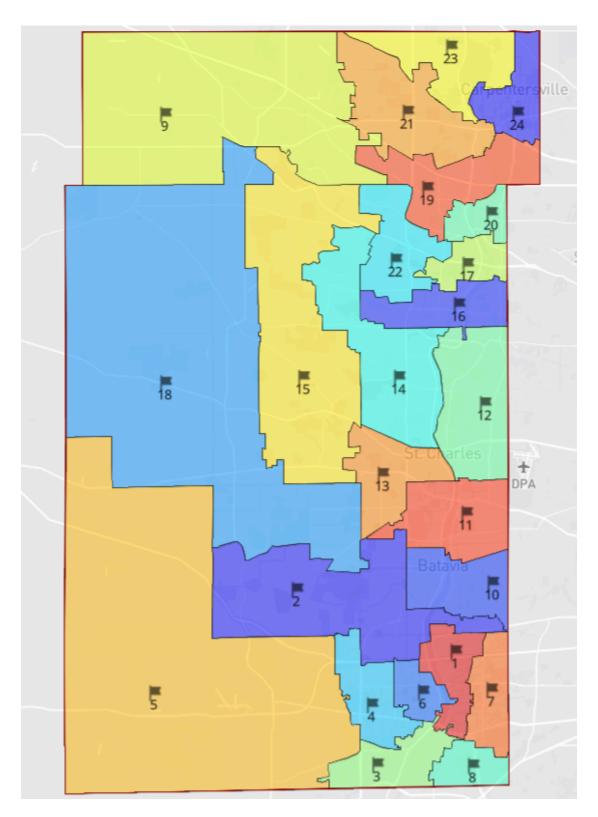
District 3 is plurality Hispanic VAP (45.6%), followed by White (44.0%). District 3 total population is majority Hispanic (51.0%) and District 2 is plurality Hispanic (44.6%), followed by White (39.0%).

Districts 1 and 4 were drawn to maximize Asian representation.



Kane County – current

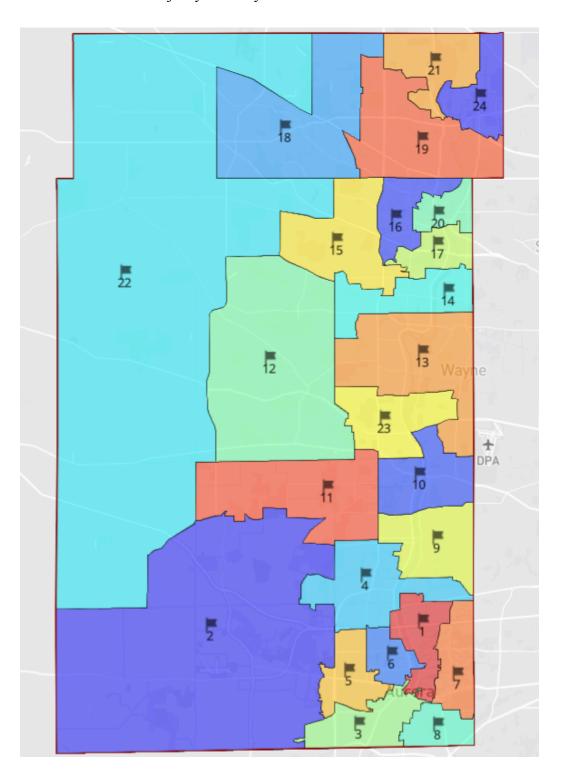
Districts 1, 3, 6, 7, 8, 17, 20, and 24 are majority Hispanic VAP.



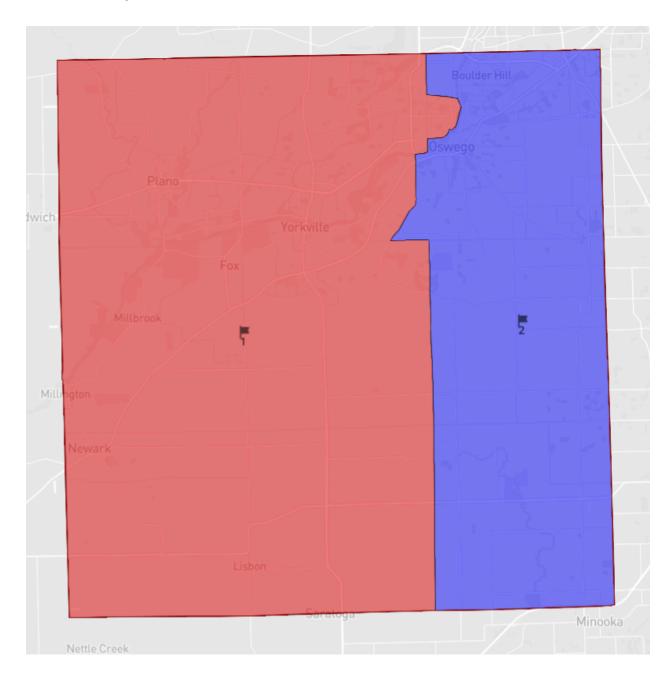
Kane County - hypothetical

Districts 1, 3, 6, 7, 8, 17, 20, and 24 are majority Hispanic VAP. These districts were preserved from the enacted map.

District 16 is mixed majority minority VAP.

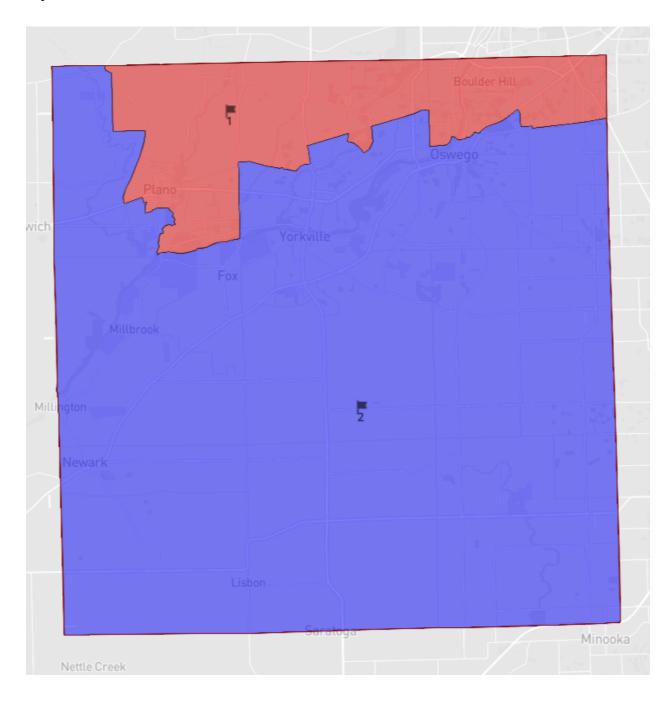


Kendall County – current



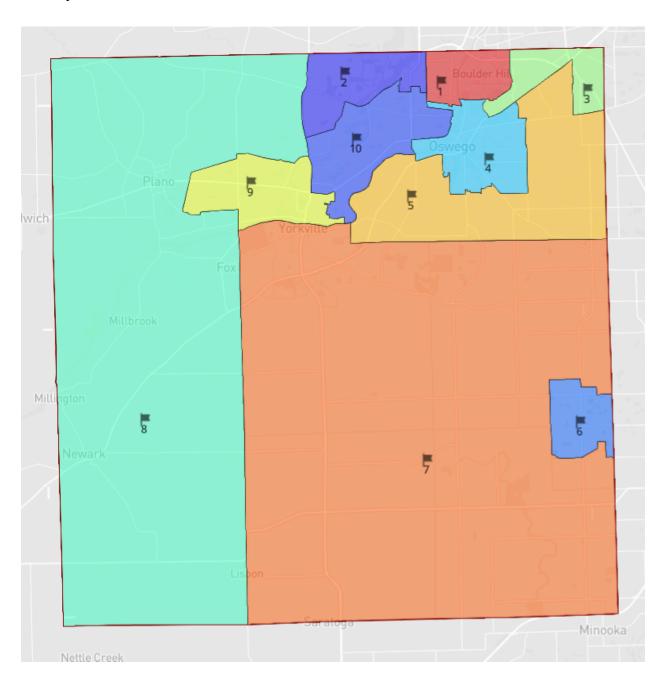
Kendall County – hypothetical 2 district

This map attempts to increase Hispanic representation in one district, however minimal improvements could be made due to the size of the districts.



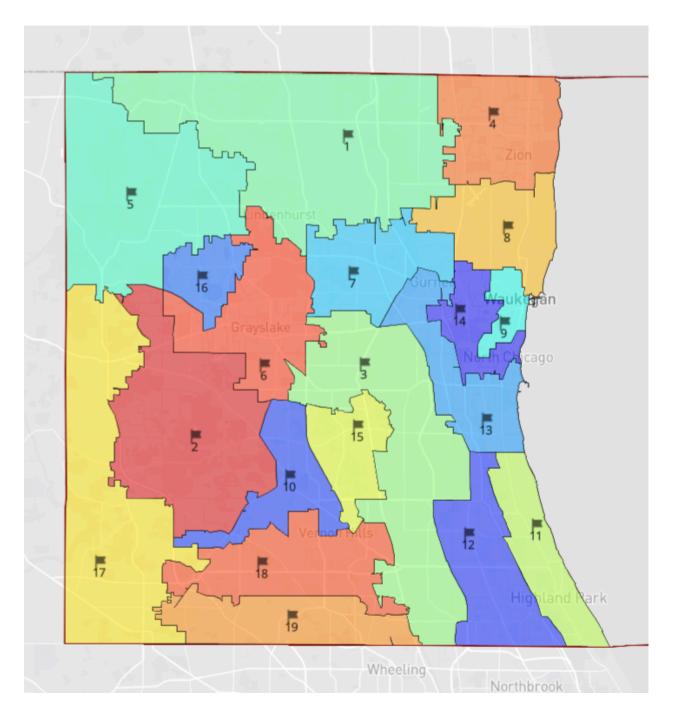
Kendall County – hypothetical 10 district

There are no majority minority districts, but several districts (1, 2, 3, and 6) with significant minority influence.



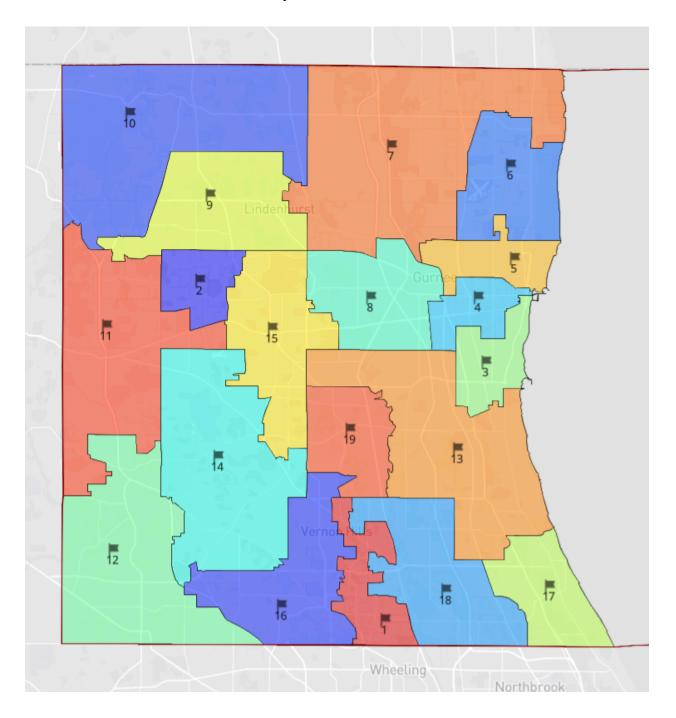
Lake County – current

Districts 9, 14, and 16 are majority Hispanic VAP. District 8 is plurality Hispanic VAP (49.0%), followed by White (29.9%). District 8 total population is majority Hispanic (54.2%).

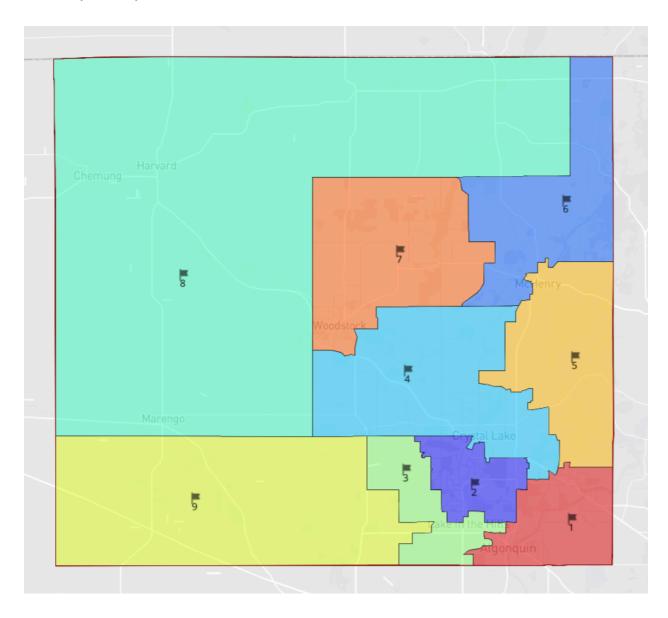


<u>Lake County – hypothetical</u>

Districts 2, 4, and 5 are majority Hispanic VAP. Districts 3 and 6 are mixed majority minority, plurality Hispanic VAP. District 1 is drawn to maximize Asian representation.

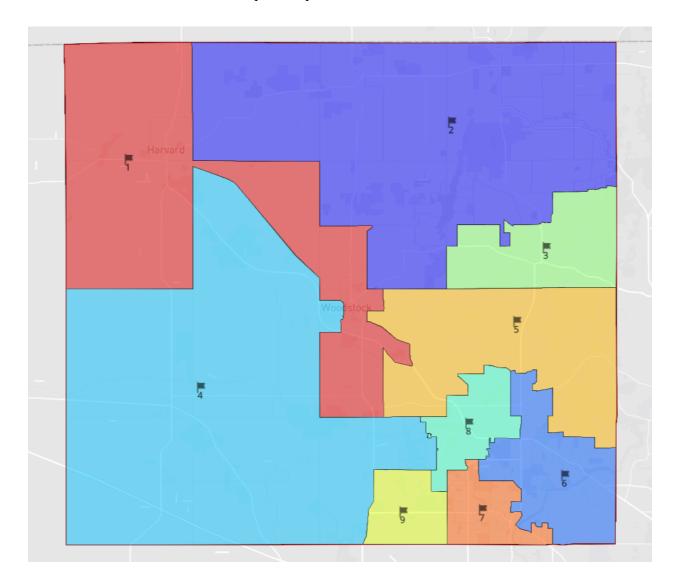


<u>McHenry County – current</u>



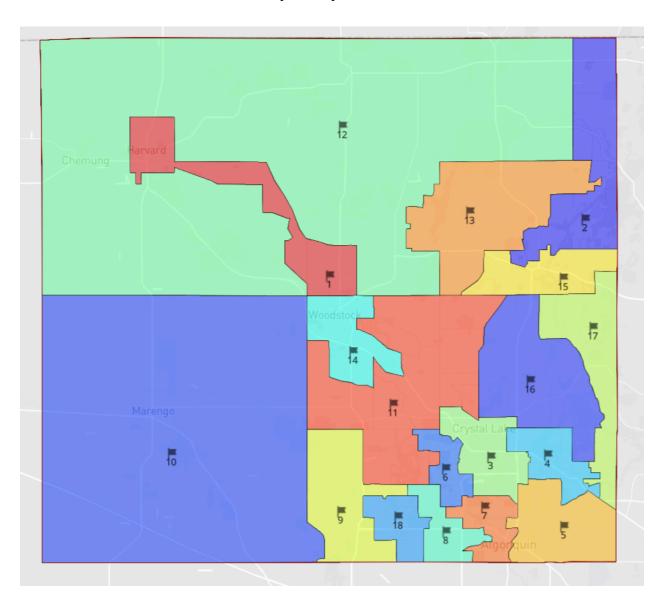
<u>McHenry County – hypothetical 9 district</u>

District 1 is drawn to maximize Hispanic representation.



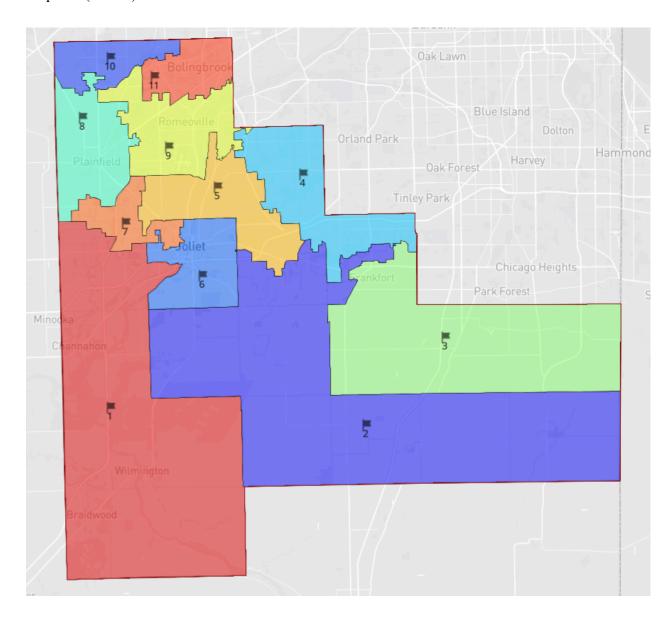
McHenry County - hypothetical 18 district

District 1 is drawn to maximize Hispanic representation, with over 40% Hispanic VAP. Districts 3 and 14 are also drawn to maximize Hispanic representation.



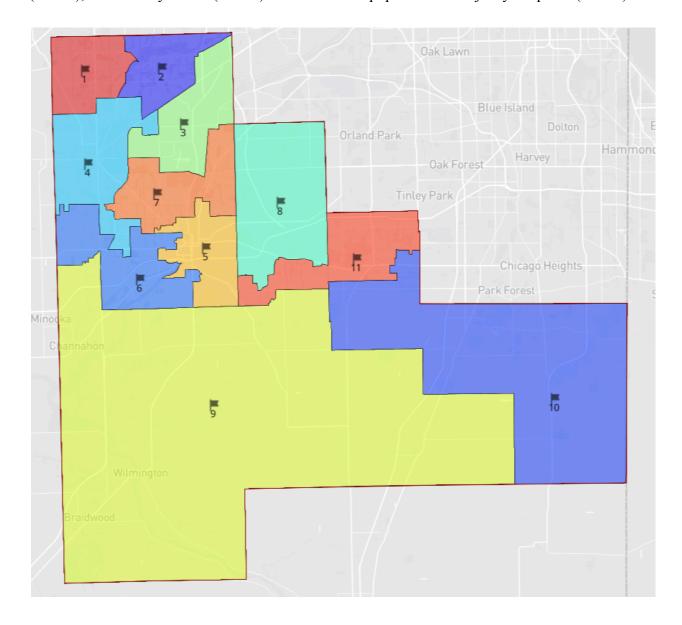
Will County - current

Districts 6 and 11 are mixed majority minority VAP. District 6 is plurality Hispanic VAP (45.1%), followed by White (26.8%) and Black (26.8%). District 6 total population is majority Hispanic (50.0%).



Will County - hypothetical 11 district

Districts 2, 3, and 5 are mixed majority minority VAP. District 5 is plurality Hispanic VAP (45.2%), followed by White (27.8%). District 5 total population is majority Hispanic (50.1%).

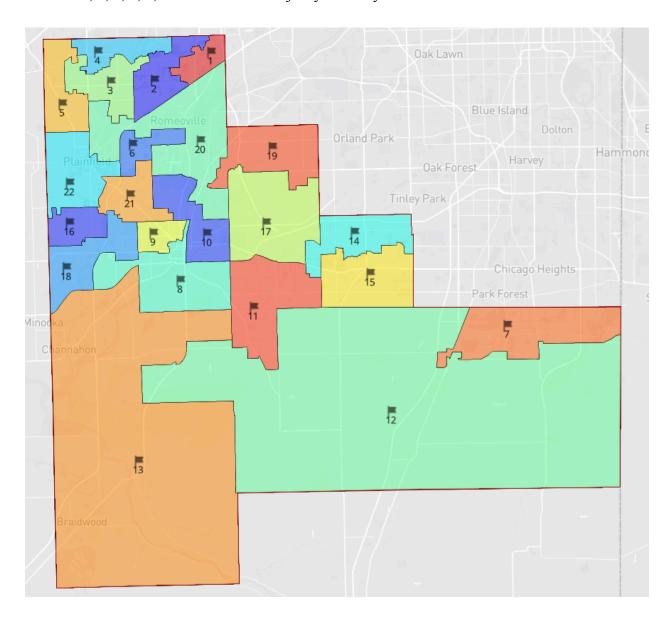


Will County - hypothetical 22 district

District 7 is majority Black VAP.

District 10 is majority Hispanic VAP.

Districts 1, 2, 3, 6, 8, and 9 are mixed majority minority VAP.



VI. Conclusion and recommendations

This report showed some of the significant challenges with partisan gerrymandering, lack of racial equity, lack of compactness, and lack of public input during the 2021 mapping process for the seven Chicago metro county board maps. We presented alternative maps that make significant improvements in all the key components listed above and were able to significantly improve county maps where there are currently multi-member districts by creating single-member districts. As mentioned previously, these hypothetical maps are strictly to showcase that improvements are possible. For any map to truly be considered a fair map, there must be a robust public input process.

Any redistricting process should not only include, but actively seek out, public input. The mapping process should be centered around racial equity and keeping communities together, without respect to where any elected officials or potential candidates live. The use of political data should be limited to ensuring compliance with the federal Voting Rights Act and ensuring partisan fairness.

Remapping reform should include many public hearings, to ensure that the diverse voices from different parts of each county are heard. The hearings should be conducted at a variety of times, days of the week, and locations, to maximize accessibility for everyone. Language access should be prioritized, as well. Hearings should also take place both before and after map proposals are released.

Models for independent redistricting that meet these goals exist and can be applied to many of the county boards' mapping processes. An independent commission structure, like the one used in the California state legislature¹⁶ or Michigan¹⁷, would be the ideal way to ensure maps are equitable and fair. Even at the local level, there are many models for reform from which to borrow best practices to combat partisan and racial gerrymandering.

Our organization helped launch and support the Chicago Advisory Redistricting Commission¹⁸ in 2021 to showcase a model of independent redistricting reform that worked for the City of Chicago. Through that process a 13-member independent commission was able to hold over 40 hearings and received over 500 submissions for public comments. The commission's work resulted in a map that protected communities of interest, neighborhood boundaries, and was equitable.

Furthermore, we strongly urge every county board to seriously consider how the structure of their map (single vs. multi-member districts, number of districts, etc.) impacts both partisan bias

¹⁶ https://wedrawthelines.ca.gov/

¹⁷ https://www.michigan.gov/micrc

¹⁸ https://chicagoswards.org/

and the ability for communities of color to nominate candidates of their choosing. In several counties, the racial and ethnic representation improved substantially when we drew hypothetical single-member district maps, and this should serve as a reminder of the potential harms of multi-member districts. While this change would require referendum approval from voters, we feel strongly that counties should consider putting it forward.

In Austin, Texas, an independent redistricting commission was adopted when the city changed their districts from at-large to single-member districts, to ensure the new districts were fair and equitable¹⁹. County boards with multi-member districts could use the reform efforts in Austin, TX as a guide for implementing meaningful reform.

We look forward to serving as a resource to counties hoping to reform their redistricting processes, and hope to see reforms that empower voters over the coming years, ahead of the 2031 redistricting.

¹⁹ https://www.austintexas.gov/icrc/about

Works Cited

DRA 2020. (2020). Davesredistricting.com. https://davesredistricting.com

Redistricting Report Card Methodology. (2023, November 8). Gerrymander.princeton.edu. https://gerrymander.princeton.edu/redistricting-report-card-methodology

Stephanopoulos, N., & Mcghee, E. (2015). Partisan Gerrymandering and the Efficiency Gap. https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12542&context=journal_articles

Appendix A: Current county board map political data

Cook

	2018 AG D	2018 AG R	2018 AG O	Assessor	2018 Assessor R		2020 Circ. Cl. R	2018 Avg D	2020 Avg D	County Avg D
Total	72.09%	25.72%	2.20%	76.19%	23.81%	73.03%	26.97%	76.19%	73.03%	74.61%
1	87.57%	10.72%	1.71%	90.92%	9.08%	88.88%	11.12%	90.92%	88.88%	89.90%
2	85.94%	12.12%	1.94%	88.93%	11.07%	85.54%	14.45%	88.93%	85.54%	87.24%
3	85.51%	12.88%	1.61%	88.89%	11.11%	86.50%	13.50%	88.89%	86.50%	87.70%
4	88.71%	9.68%	1.61%	91.38%	8.62%	89.93%	10.07%	91.38%	89.93%	90.66%
5	87.18%	11.20%	1.63%	89.88%	10.12%	87.79%	12.21%	89.88%	87.79%	88.84%
6	68.62%	29.09%	2.29%	72.58%	27.41%	68.67%	31.33%	72.58%	68.67%	70.63%
7	83.38%	13.75%	2.86%	88.52%	11.48%	87.37%	12.63%	88.52%	87.37%	87.95%
8	80.95%	16.29%	2.76%	85.72%	14.28%	83.77%	16.23%	85.72%	83.77%	84.75%
9	51.46%	46.10%	2.44%	56.06%	43.94%	52.88%	47.12%	56.06%	52.88%	54.47%
10	76.07%	21.67%	2.26%	80.69%	19.31%	77.51%	22.49%	80.69%	77.51%	79.10%
11	64.30%	33.01%	2.69%	71.30%	28.69%	65.37%	34.63%	71.30%	65.37%	68.34%
12	75.39%	22.13%	2.48%	79.87%	20.13%	77.35%	22.65%	79.87%	77.35%	78.61%
13	76.79%	21.33%	1.88%	81.29%	18.71%	77.21%	22.79%	81.29%	77.21%	79.25%
14	54.47%	43.53%	2.00%	58.60%	41.40%	57.45%	42.55%	58.60%	57.45%	58.03%
15	56.44%	40.86%	2.70%	59.60%	40.40%	57.79%	42.21%	59.60%	57.79%	58.70%
16	68.53%	28.56%	2.91%	73.54%	26.46%	72.07%	27.93%	73.54%	72.07%	72.81%
17	46.84%	50.83%	2.33%	52.09%	47.91%	48.53%	51.47%	52.09%	48.53%	50.31%

DuPage

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2018 CB Chair D	2018 CB Chair R	2018 Sheriff I	2018 Sheriff R
Total	50.61%	47.00%	2.39%	52.70%	47.30%	48.98	% 51.02%	49.3	25% 50.75%
1	49.35%	48.03%	2.62%	51.79%	48.21%	47.37	% 52.63%	48.2	28% 51.72%
2	50.65%	46.83%	2.52%	52.55%	47.45%	48.00	% 52.00%	49.0	50.93%
3	48.84%	48.91%	2.25%	51.37%	48.63%	47.52	% 52.48%	47.4	52.53%
4	50.42%	47.25%	2.33%	52.37%	47.63%	48.80	% 51.20%	48.9	93% 51.06%
5	54.07%	43.92%	2.02%	56.05%	43.95%	52.76	% 47.24%	53.3	29% 46.71%
6	50.30%	47.06%	2.65%	52.05%	47.94%	49.46	% 50.54%	48.4	12% 51.58%

	2020 Auditor D	2020 Auditor R	2020 Circ. O D	2020 Circ. Cl. R	2020 Coroner D	2020 Coroner R	2020 Recorde r D	2020 Recorde r R	2018 Avg D	2020 Avg D	County Avg D
Total	50.01%	49.99%	50.67	% 49.33%	49.18%	50.82%	52.31%	47.69%	50.31	6 50.54%	50.43%
1	47.57%	52.42%	47.53	% 52.47%	46.95%	53.05%	49.95%	50.05%	49.15	48.00%	48.57%
2	49.80%	50.20%	50.60	% 49.40%	49.31%	50.69%	52.22%	47.78%	49.87	5 0.48%	50.18%
3	47.87%	52.12%	49.24	% 50.76%	47.71%	52.28%	50.60%	49.40%	48.79	48.86%	48.82%
4	50.36%	49.64%	51.03	% 48.97%	49.02%	50.98%	52.41%	47.59%	50.03	6 50.71%	50.37%
5	54.77%	45.23%	55.51	% 44.49%	53.64%	46.36%	56.71%	43.29%	54.03	% 55.16%	54.60%
6	49.59%	50.41%	49.88	% 50.12%	48.29%	51.70%	51.87%	48.13%	49.98	49.91%	49.94%

Kane

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2018 Sheriff D	2018 Sheriff R	2018 Treasure r D	2018 Treasurer R	2020 Auditor D	2020 Auditor R
Total	50.11%	47.27%	2.62%	48.46%	51.54%	53.11%	46.89%	47.22%	52.78%	53.02%	46.98%
1	63.69%	32.67%	3.64%	64.05%	35.95%	67.43%	32.50%	62.90%	37.05%	68.90%	31.04%
2	46.53%	50.84%	2.62%	45.29%	54.71%	50.45%	49.55%	43.95%	56.05%	50.38%	49.60%
3	62.12%	35.24%	2.64%	60.80%	39.20%	66.77%	33.23%	61.48%	38.52%	67.15%	32.85%
4	56.94%	40.83%	2.23%	53.74%	46.26%	61.25%	38.73%	52.99%	46.98%	62.07%	37.93%
5	40.69%	56.34%	2.97%	39.44%	60.55%	50.24%	49.74%	38.01%	61.99%	42.83%	57.16%
6	72.23%	25.17%	2.60%	71.34%	28.66%	75.86%	24.14%	70.76%	29.24%	74.31%	25.62%
7	66.44%	31.25%	2.31%	66.37%	33.60%	71.09%	28.91%	65.95%	34.05%	71.61%	28.39%
8	69.14%	27.50%	3.36%	70.14%	29.83%	71.92%	27.99%	69.17%	30.83%	73.78%	26.20%
9	40.02%	57.63%	2.36%	38.10%	61.90%	42.91%	57.09%	37.37%	62.63%	43.13%	56.85%
10	49.68%	47.88%	2.44%	46.77%	53.19%	51.61%	48.39%	44.71%	55.28%	53.00%	47.00%
11	49.23%	47.79%	2.98%	45.92%	54.08%	49.77%	50.20%	44.16%	55.84%	51.76%	48.24%
12	43.25%	54.25%	2.50%	40.72%	59.28%	45.43%	54.57%	39.53%	60.47%	44.94%	55.04%
13	48.58%	49.18%	2.24%	46.49%	53.49%	51.43%	48.57%	44.88%	55.10%	50.01%	49.99%
14	40.27%	57.82%	1.91%	38.75%	61.25%	42.67%	57.33%	36.72%	63.25%	41.69%	58.27%
15	37.62%	60.12%	2.26%	36.73%	63.27%	40.65%	59.31%	35.02%	64.98%	40.23%	59.77%
16	52.00%	44.91%	3.09%	50.46%	49.49%	53.01%	46.97%	49.68%	50.31%	53.20%	46.79%
17	67.45%	29.39%	3.16%	67.66%	32.34%	69.59%	30.41%	66.47%	33.53%	71.24%	28.76%
18	39.13%	58.28%	2.59%	37.57%	62.38%	47.65%	52.29%	35.70%	64.22%	41.23%	58.77%
19	54.35%	42.90%	2.75%	52.26%	47.74%	55.29%	44.67%	51.69%	48.31%	56.50%	43.50%

20	66.99%	30.20%	2.81%	66.09%	33.89%	68.30%	31.68%	65.41%	34.57%	69.84%	30.16%
21	47.77%	49.75%	2.48%	45.86%	54.14%	48.59%	51.41%	44.79%	55.21%	49.40%	50.58%
22	50.09%	47.39%	2.52%	48.42%	51.58%	50.78%	49.18%	46.92%	53.08%	52.90%	47.08%
23	51.51%	45.71%	2.78%	50.13%	49.81%	52.26%	47.74%	49.32%	50.64%	53.28%	46.72%
24	62.21%	34.49%	3.30%	62.72%	37.28%	64.15%	35.85%	61.18%	38.82%	65.47%	34.49%

	2020 Cir. Cl.	2020 Cir. Cl.	2020 CB	2020 CB		2020 Recorder	2020 SA	2020 SA	2018 Avg	2020 Avg	County
	D	R	Chair D	Chair R	er D	R	D	R	D	D	Avg D
Total	51.47%	48.53%	50.45%	49.55%	48.47%	51.53%	51.59	% 48.41%	49.60%	51.00%	50.30%
1	68.95%	31.05%	66.08%	33.92%	64.93%	35.02%	67.65	% 32.28%	64.79%	67.30%	66.05%
2	48.66%	51.34%	47.30%	52.68%	45.42%	54.58%	48.33	% 51.67%	46.56%	48.02%	47.29%
3	66.71%	33.29%	64.00%	36.00%	63.37%	36.63%	66.14	% 33.86%	63.02%	65.47%	64.25%
4	60.21%	39.79%	57.27%	42.73%	55.55%	44.43%	59.12	% 40.87%	55.99%	58.84%	57.42%
5	41.59%	58.39%	40.56%	59.43%	39.00%	61.00%	42.10	% 57.90%	42.56%	41.22%	41.89%
6	74.60%	25.33%	71.92%	28.01%	72.14%	27.79%	73.73	% 26.18%	72.65%	73.34%	73.00%
7	71.91%	28.09%	68.90%	31.10%	68.53%	31.47%	70.53	% 29.47%	67.80%	70.30%	69.05%
8	73.72%	26.22%	70.70%	29.30%	71.27%	28.71%	72.61	% 27.39%	70.41%	72.42%	71.41%
9	41.19%	58.81%	40.32%	59.68%	38.63%	61.35%	41.09	% 58.89%	39.46%	40.87%	40.17%
10	51.19%	48.81%	51.13%	48.87%	46.69%	53.31%	49.61	% 50.39%	47.70%	50.32%	49.01%
11	49.84%	50.16%	49.67%	50.31%	46.10%	53.89%	49.76	% 50.22%	46.62%	49.43%	48.02%
12	43.71%	56.29%	44.37%	55.62%	41.03%	58.96%	44.40	% 55.59%	41.89%	43.69%	42.79%
13	48.21%	51.78%	47.83%	52.17%	45.05%	54.95%	48.53	% 51.47%	47.60%	47.93%	47.76%
14	40.19%	59.80%	39.50%	60.50%	37.09%	62.88%	40.41	% 59.58%	39.38%	39.78%	39.58%
15	38.46%	61.53%	38.23%	61.76%	35.77%	64.23%	40.11	% 59.87%	37.47%	38.56%	38.01%
16	50.27%	49.70%	49.92%	50.07%	48.16%	51.83%	51.90	48.08%	51.05%	50.69%	50.87%
17	69.06%	30.94%	68.97%	31.03%	67.81%	32.19%	70.26	% 29.74%	67.91%	69.47%	68.69%
18	39.33%	60.66%	38.59%	61.41%	36.10%	63.89%	39.76	% 60.24%	40.31%	39.00%	39.65%
19	54.16%	45.84%	53.10%	46.90%	51.82%	48.18%	55.05	% 44.95%	53.08%	54.13%	53.60%
20	68.60%	31.40%	67.38%	32.62%	66.10%	33.90%	69.50	% 30.50%	66.60%	68.28%	67.44%
21	47.49%	52.49%	46.73%	53.24%	44.67%	55.33%	47.90	% 52.10%	46.41%	47.24%	46.83%

22	50.48%	49.52%	49.52%	50.45%	48.21%	51.79%	51.42%	48.58%	48.71%	50.51%	49.61%
23	52.42%	47.57%	51.20%	48.80%	49.07%	50.91%	51.91%	48.08%	50.57%	51.58%	51.07%
24	64.47%	35.53%	62.88%	37.12%	61.70%	38.23%	64.85%	35.10%	62.68%	63.87%	63.28%

Kendall

	2018 AG D		2018 AG O	2018 Clerk D	2018 Clerk R	2020 Circ. Cl. D	2020 Circ. Cl. R	2018 Avg D	2020 Avg D	County Avg D
Total	47.86%	49.17%	2.97%	45.14%	54.86%	48.71%	51.29%	45.14%	48.71%	46.93%
1	44.84%	51.97%	3.19%	41.70%	58.30%	45.00%	55.00%	41.70%	45.00%	43.35%
2	50.89%	46.36%	2.75%	48.63%	51.37%	52.44%	47.56%	48.63%	52.44%	50.54%

Lake

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2018 Sheriff	2018 D Sheriff R	2018 Treasurer D	2018 Treasurer R
Total	53.77%	43.80%	2.43%	52.14%	47.86%	50.0	49.97%	54.289	6 45.72%
1	44.56%	52.41%	3.03%	43.18%	56.82%	41.1	7% 58.83%	46.399	53.60%
2	45.73%	51.69%	2.58%	44.36%	55.61%	41.3	11% 58.29%	47.699	6 52.26%
3	47.03%	50.88%	2.10%	44.84%	55.16%	41.5	58.42%	46.559	6 53.45%
4	54.79%	42.40%	2.81%	53.96%	46.00%	54.2	45.70%	57.509	6 42.49%
5	41.68%	54.77%	3.55%	41.28%	58.72%	38.6	61.37%	44.389	55.62%
6	54.40%	42.69%	2.91%	52.16%	47.82%	49.4	5% 50.51%	56.189	43.81%
7	53.86%	43.75%	2.39%	51.59%	48.41%	49.3	50.70%	55.529	44.48%
8	63.14%	34.30%	2.55%	61.65%	38.35%	61.9	38.10%	66.389	33.62%
9	81.00%	16.64%	2.36%	80.11%	19.89%	79.9	20.08%	84.219	6 15.79%
10	53.35%	43.94%	2.71%	53.06%	46.94%	49.6	50.35%	57.099	42.91%
11	62.84%	35.45%	1.71%	59.74%	40.26%	60.1	6% 39.83%	61.429	6 38.57%
12	60.82%	37.84%	1.33%	58.20%	41.80%	56.7	43.28%	57.219	42.79%
13	54.56%	43.05%	2.39%	51.74%	48.26%	51.2	48.77%	55.669	6 44.34%
14	80.66%	16.97%	2.37%	79.50%	20.48%	79.3	20.57%	83.489	6 16.49%
15	53.86%	43.80%	2.34%	52.43%	47.56%	46.1	0% 53.89%	54.889	45.10%
16	59.80%	36.31%	3.89%	60.35%	39.65%	57.1	4% 42.84%	63.069	6 36.94%
17	41.86%	55.55%	2.59%	40.55%	59.44%	38.6	61.39%	42.709	6 57.28%
18	51.37%	46.63%	1.99%	49.35%	50.61%	46.9	53.07%	48.979	51.03%
19	54.93%	43.19%	1.88%	53.34%	46.66%	51.2	48.78%	49.489	6 50.52%

	2020 Cir. Cl. D	2020 Cir. Cl. R	Corone	2020 Coroner R	2020 Record er D	2020 Recorder R	2020 SA D	2020 SA R	2018 Avg D	2020 Avg D	County Avg D
Total	56.63%	43.37%	53.02%	46.98%	60.16%	39.84%	52.08%	47.92%	52.15%	55.47%	53.81%
1	46.59%	53.41%	42.25%	57.73%	50.92%	49.08%	41.39%	58.57%	43.58%	45.29%	44.43%
2	48.76%	51.24%	46.29%	53.71%	52.48%	47.50%	44.90%	55.10%	44.59%	48.11%	46.35%
3	51.85%	48.15%	47.39%	52.61%	55.82%	44.18%	45.96%	54.03%	44.32%	50.26%	47.29%
4	58.99%	41.01%	55.95%	44.04%	64.51%	35.48%	55.44%	44.54%	55.25%	58.72%	56.98%
5	44.03%	55.97%	40.67%	59.33%	47.66%	52.33%	40.03%	59.97%	41.43%	43.10%	42.26%
6	57.32%	42.67%	53.29%	46.71%	61.14%	38.86%	52.57%	47.43%	52.60%	56.08%	54.34%
7	57.78%	42.21%	51.57%	48.40%	61.84%	38.13%	49.88%	50.12%	52.14%	55.27%	53.70%
8	65.23%	34.75%	61.22%	38.76%	72.38%	27.62%	59.02%	40.98%	63.31%	64.46%	63.89%
9	79.26%	20.74%	78.70%	21.30%	85.16%	14.80%	76.63%	23.30%	81.41%	79.94%	80.68%
10	56.27%	43.73%	54.46%	45.54%	60.01%	39.99%	53.33%	46.67%	53.27%	56.02%	54.64%
11	66.58%	33.42%	61.70%	38.29%	68.08%	31.91%	61.14%	38.86%	60.44%	64.38%	62.41%
12	65.36%	34.62%	58.25%	41.75%	66.48%	33.52%	58.74%	41.26%	57.38%	62.21%	59.79%
13	58.47%	41.50%	54.41%	45.57%	62.86%	37.14%	52.11%	47.81%	52.88%	56.96%	54.92%
14	77.46%	22.54%	76.65%	23.35%	83.36%	16.64%	75.73%	24.27%	80.76%	78.30%	79.53%
15	57.69%	42.31%	54.46%	45.53%	61.68%	38.32%	52.70%	47.30%	51.14%	56.63%	53.88%
16	59.58%	40.42%	60.39%	39.61%	64.91%	35.09%	60.31%	39.68%	60.18%	61.30%	60.74%
17	44.13%	55.87%	42.75%	57.25%	46.45%	53.55%	41.59%	58.36%	40.62%	43.73%	42.18%
18	54.50%	45.47%	50.28%	49.69%	55.89%	44.05%	50.08%	49.92%	48.41%	52.69%	50.55%
19	56.99%	43.01%	53.20%	46.80%	58.40%	41.60%	52.82%	47.18%	51.35%	55.35%	53.35%

McHenry

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	C	Circ.	2020 Circ. Cl. R	2020 CB Chair D	2020 CB Chair R	2018 Avg D	2020 Avg D	County Avg D
Total	44.41%	52.64%	2.95%	45.44%	54.56%	4	40.70%	59.30%	47.15%	52.85%	45.44%	43.93%	44.68%
1	46.15%	50.81%	3.04%	47.25%	52.75%	4	43.28%	56.72%	46.48%	53.52%	47.25%	44.88%	46.07%
2	50.69%	46.07%	3.24%	51.14%	48.86%	4	47.40%	52.60%	51.54%	48.46%	51.14%	49.47%	50.31%
3	45.36%	52.07%	2.57%	45.91%	54.09%	4	41.41%	58.59%	44.52%	55.48%	45.91%	42.97%	44.44%
4	45.17%	52.26%	2.57%	45.92%	54.08%	4	41.62%	58.38%	48.27%	51.73%	45.92%	44.95%	45.43%
5	42.89%	53.88%	3.24%	44.27%	55.73%	3	39.24%	60.76%	44.94%	55.06%	44.27%	42.09%	43.18%
6	39.00%	57.58%	3.42%	40.08%	59.92%	3	35.37%	64.63%	44.62%	55.38%	40.08%	40.00%	40.04%
7	48.29%	48.66%	3.05%	49.64%	50.36%	4	41.50%	58.50%	53.63%	46.37%	49.64%	47.57%	48.60%
8	38.16%	58.91%	2.94%	39.98%	60.02%	3	35.68%	64.32%	45.27%	54.73%	39.98%	40.48%	40.23%
9	43.78%	53.73%	2.49%	44.67%	55.33%	4	40.34%	59.66%	45.70%	54.30%	44.67%	43.02%	43.85%

Will

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk	2018 D Clerk R	2018 Sheriff D	2018 Sheriff R	2018 Treasur er D	2018 Treasure r R	2020 Auditor D	2020 Auditor R
Total	50.46%	46.92%	2.61%	51.39	% 48.61%	58.01%	41.99%	51.26%	48.74%	54.01%	45.99%
1	42.47%	54.32%	3.21%	42.95	% 57.05%	53.37%	46.63%	44.73%	55.27%	47.91%	52.09%
2	35.73%	61.60%	2.67%	36.58	% 63.42%	46.63%	53.37%	36.33%	63.66%	39.02%	60.98%
3	52.33%	45.22%	2.46%	53.80	% 46.19%	59.16%	40.83%	52.49%	47.51%	55.20%	44.80%
4	37.97%	59.54%	2.49%	39.05	% 60.92%	46.76%	53.22%	37.55%	62.45%	40.03%	59.96%
5	45.70%	51.35%	2.95%	47.04	% 52.96%	56.96%	43.04%	47.40%	52.59%	48.81%	51.18%
6	74.20%	23.31%	2.49%	74.51	% 25.49%	79.49%	20.51%	76.09%	23.87%	77.49%	22.51%
7	53.74%	43.46%	2.80%	54.16	% 45.81%	61.69%	38.31%	56.28%	43.72%	60.16%	39.84%
8	49.27%	48.06%	2.67%	49.70	% 50.30%	55.03%	44.97%	49.71%	50.29%	52.13%	47.86%
9	59.33%	38.07%	2.60%	60.67	% 39.33%	64.71%	35.26%	59.99%	40.00%	62.06%	37.93%
10	52.08%	46.08%	1.84%	52.51	% 47.49%	56.22%	43.78%	50.89%	49.11%	56.27%	43.73%
11	66.96%	30.44%	2.59%	68.78	% 31.22%	70.99%	29.01%	67.69%	32.31%	70.36%	29.64%

	2020	2020	2020 Cir. Cl.	2020 Cir. Cl.	2020 Coroner	2020 Coroner		2020 Recorde	2020 Recorde	201	8	2020	County
	CEO D	CEO R	D	R	D	R	1	r D	r R	Av	g D	Avg D	Avg D
Total	54.32%	45.68%	55.00%	45.00%	55.82%	43.89%		55.13%	44.87%	53	3.55%	54.86%	54.20%
1	49.13%	50.87%	48.44%	51.56%	48.24%	51.40%		50.16%	49.83%	47	7.02%	48.78%	47.90%
2	38.29%	61.71%	40.53%	59.45%	41.74%	58.01%		40.68%	59.32%	39	9.85%	40.05%	39.95%
3	55.35%	44.65%	56.62%	43.38%	57.70%	42.12%		56.64%	43.36%	55	5.15%	56.30%	55.73%
4	39.18%	60.82%	41.37%	58.63%	42.62%	57.03%		41.45%	58.55%	43	1.12%	40.93%	41.03%
5	48.70%	51.29%	49.96%	50.03%	50.71%	48.96%		50.56%	49.44%	50).47%	49.75%	50.11%
6	77.45%	22.55%	77.47%	22.53%	77.22%	22.54%		78.23%	21.76%	76	5.70%	77.57%	77.13%
7	59.96%	40.02%	59.33%	40.66%	59.59%	40.04%		60.57%	39.43%	51	7.38%	59.92%	58.65%
8	54.13%	45.86%	53.45%	46.55%	54.49%	45.22%		52.95%	47.05%	51	.48%	53.43%	52.46%
9	63.24%	36.76%	63.38%	36.62%	64.14%	35.65%		62.94%	37.05%	6.	1.79%	63.15%	62.47%
10	56.59%	43.41%	58.01%	41.99%	59.28%	40.42%		56.39%	43.61%	53	3.21%	57.31%	55.26%
11	71.23%	28.77%	71.58%	28.42%	72.53%	27.22%		70.94%	29.06%	69	9.15%	71.33%	70.24%

Appendix B: Current county board map demographic data

Cook

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
		9.97%		43.49%	56.51%	23.65%	23.61%	8.85%	2.18%	0.13%
1	294922	-4.96%	230328	25.63%	74.37%	18.11%	53.51%	3.13%	1.73%	0.11%
2	297484	-4.14%	235743	25.45%	74.55%	11.30%	52.20%	10.84%	1.38%	0.13%
3	320761	3.36%	269869	30.12%	69.88%	5.48%	55.07%	9.11%	1.09%	0.14%
4	295936	-4.64%	231645	9.46%	90.54%	16.29%	73.96%	0.56%	1.71%	0.09%
5	294835	-4.99%	224838	14.07%	85.93%	15.00%	69.83%	1.09%	1.62%	0.12%
6	295775	-4.69%	230445	50.76%	49.24%	11.96%	33.85%	2.70%	1.43%	0.09%
7	299292	-3.56%	223123	9.41%	90.59%	78.39%	6.84%	5.56%	6.04%	0.15%
8	311047	0.23%	244646	30.95%	69.05%	58.32%	6.71%	4.64%	4.29%	0.24%
9	325786	4.98%	258533	73.71%	26.29%	12.64%	2.36%	10.57%	1.22%	0.09%
10	325649	4.94%	279998	64.29%	35.71%	13.36%	8.58%	12.78%	1.61%	0.14%
11	296408	-4.48%	228192	44.31%	55.69%	34.55%	11.98%	8.78%	2.84%	0.09%
12	322359	3.88%	268949	64.53%	35.47%	19.08%	4.96%	10.53%	1.89%	0.16%
13	325582	4.92%	260829	50.75%	49.25%	13.05%	14.66%	20.75%	1.65%	0.18%
14	325005	4.73%	252033	69.83%	30.17%	12.32%	2.26%	14.54%	1.25%	0.10%
15	325764	4.97%	254292	53.22%	46.78%	21.20%	4.86%	19.99%	2.14%	0.12%
16	307470	-0.92%	231635	30.15%	69.85%	60.59%	6.67%	2.43%	4.54%	0.11%
17	311466	0.37%	247304	76.14%	23.86%	11.12%	3.91%	7.84%	1.26%	0.08%

DuPage

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		0.96%		66.64%	33.36%	13.48%	5.24%	13.41%	1.49%	0.12%
1	155082	-0.26%	121407	64.12%	35.88%	22.87%	3.14%	8.89%	1.99%	0.12%
2	155792	0.20%	123274	73.94%	26.06%	9.35%	4.64%	10.66%	1.28%	0.08%
3	156375	0.58%	122469	71.06%	28.94%	8.28%	6.16%	13.31%	1.10%	0.14%
4	155805	0.21%	120036	68.16%	31.84%	12.06%	5.10%	13.36%	1.50%	0.12%
5	154938	-0.35%	117505	62.07%	37.93%	8.67%	7.81%	20.25%	1.12%	0.14%
6	154885	-0.38%	119642	60.14%	39.86%	19.70%	4.63%	14.26%	1.93%	0.11%

Kane

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		5.01%		59.04%	40.96%	29.17%	5.82%	4.87%	2.75%	0.11%
1	20914	-2.82%	15572	28.78%	71.22%	60.70%	7.80%	2.47%	4.57%	0.12%
2	21296	-1.05%	16585	76.60%	23.40%	11.22%	5.02%	5.83%	1.38%	0.05%
3	20941	-2.70%	15276	30.83%	69.17%	58.58%	8.88%	1.42%	4.69%	0.20%
4	21340	-0.84%	16786	54.23%	45.77%	29.10%	12.00%	3.74%	2.22%	0.14%
5	21106	-1.93%	16193	80.30%	19.70%	10.86%	3.95%	3.15%	1.86%	0.09%
6	21413	-0.51%	15193	22.58%	77.42%	58.73%	14.11%	4.46%	3.84%	0.15%
7	21583	0.28%	16015	25.95%	74.05%	58.71%	11.92%	3.13%	4.00%	0.12%
8	21143	-1.76%	15187	25.72%	74.28%	58.85%	12.28%	3.12%	5.50%	0.06%
9	21880	1.66%	17788	85.16%	14.84%	8.77%	1.77%	2.99%	1.29%	0.10%
10	20989	-2.48%	15840	85.15%	14.85%	7.27%	2.92%	2.86%	1.19%	0.08%
11	21546	0.11%	16792	87.03%	12.97%	7.39%	1.36%	2.41%	1.30%	0.07%
12	21989	2.17%	17132	82.16%	17.84%	9.18%	1.62%	5.39%	1.50%	0.09%
13	20995	-2.45%	16192	79.94%	20.06%	10.91%	3.24%	4.30%	1.48%	0.05%
14	21726	0.95%	15908	79.04%	20.96%	7.07%	2.06%	10.23%	1.16%	0.13%
15	21753	1.07%	15631	80.65%	19.35%	9.06%	2.82%	5.89%	1.45%	0.10%
16	21800	1.29%	16682	62.71%	37.29%	21.80%	4.69%	9.40%	2.73%	0.08%
17	21743	1.03%	15980	27.84%	72.16%	58.71%	10.10%	3.02%	5.36%	0.25%
18	21090	-2.01%	15603	87.39%	12.61%	6.79%	1.40%	2.84%	1.43%	0.07%
19	21989	2.17%	17490	56.99%	43.01%	27.20%	7.08%	7.54%	2.88%	0.10%

20	21825	1.41%	15908	31.04%	68.96%	58.52%	7.24%	2.56%	5.20%	0.20%
21	21584	0.29%	16561	70.69%	29.31%	13.50%	3.68%	10.76%	1.62%	0.11%
22	21993	2.19%	16765	57.57%	42.43%	26.52%	5.23%	9.48%	2.76%	0.14%
23	21946	1.97%	16090	55.99%	44.01%	31.14%	5.43%	6.30%	2.65%	0.12%
24	21938	1.93%	15645	30.72%	69.28%	61.32%	4.65%	2.63%	4.63%	0.13%

Kendall

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		1.57%		67.74%	32.26%	18.23%	8.21%	4.24%	2.06%	0.11%
1	65416	-0.79%	47039	69.79%	30.21%	18.91%	6.94%	2.64%	2.14%	0.10%
2	66453	0.79%	46916	65.68%	34.32%	17.55%	9.49%	5.85%	1.98%	0.12%

Lake

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		8.21%		61.00%	39.00%	21.33%	7.49%	8.87%	2.22%	0.18%
1	38529	2.48%	29323	81.02%	18.98%	9.27%	3.27%	4.27%	1.73%	0.22%
2	38593	2.65%	29842	73.93%	26.07%	14.10%	2.61%	7.80%	1.71%	0.13%
3	37131	-1.24%	28827	80.91%	19.09%	5.00%	1.78%	10.88%	0.89%	0.11%
4	38062	1.24%	28561	40.47%	59.53%	28.82%	24.37%	4.77%	3.73%	0.24%
5	38370	2.06%	30714	82.63%	17.37%	9.86%	2.64%	2.73%	1.89%	0.21%
6	37649	0.14%	28701	69.54%	30.46%	15.61%	5.27%	8.15%	1.93%	0.10%
7	36711	-2.36%	28248	59.46%	40.54%	14.96%	10.02%	14.10%	1.78%	0.24%
8	36702	-2.38%	27519	29.90%	70.10%	49.04%	15.30%	4.67%	4.36%	0.25%
9	36240	-3.61%	26038	11.26%	88.74%	63.03%	23.65%	1.55%	5.30%	0.15%
10	37826	0.61%	28904	58.01%	41.99%	24.65%	2.46%	13.78%	2.12%	0.15%
11	36849	-1.99%	28616	79.40%	20.60%	12.60%	2.39%	4.37%	1.44%	0.12%
12	36862	-1.95%	27912	86.65%	13.35%	3.94%	1.43%	6.67%	0.53%	0.09%
13	36450	-3.05%	30492	54.30%	45.70%	17.43%	14.86%	12.36%	1.60%	0.52%
14	38999	3.73%	28306	12.33%	87.67%	60.43%	22.16%	4.68%	4.66%	0.20%
15	36467	-3.01%	27644	69.68%	30.32%	11.95%	2.47%	14.77%	1.33%	0.18%
16	39328	4.60%	28574	37.63%	62.37%	52.73%	4.80%	3.53%	4.63%	0.21%
17	38608	2.69%	29612	82.53%	17.47%	8.19%	1.92%	5.66%	1.40%	0.09%
18	36997	-1.60%	27431	69.14%	30.86%	5.96%	1.40%	22.37%	0.89%	0.11%
19	37969	0.99%	28773	71.99%	28.01%	3.90%	1.51%	21.60%	0.58%	0.09%

McHenry

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		4.81%		80.23%	19.77%	12.59%	1.64%	3.45%	1.89%	0.08%
1	33656	-2.36%	26558	82.97%	17.03%	10.39%	1.55%	3.42%	1.53%	0.10%
2	33776	-2.01%	25964	77.81%	22.19%	14.64%	2.00%	3.60%	2.12%	0.10%
3	35315	2.45%	26242	78.36%	21.64%	10.21%	2.38%	7.44%	1.47%	0.06%
4	35136	1.93%	27016	82.52%	17.48%	10.38%	1.80%	3.14%	1.58%	0.12%
5	35042	1.66%	27696	84.15%	15.85%	9.82%	1.13%	2.56%	1.90%	0.07%
6	34031	-1.27%	26685	85.16%	14.84%	9.71%	0.98%	1.72%	1.84%	0.08%
7	33886	-1.69%	26429	75.03%	24.97%	18.51%	1.96%	1.91%	2.77%	0.06%
8	34289	-0.52%	26508	76.29%	23.71%	19.42%	1.06%	1.09%	2.11%	0.08%
9	35098	1.82%	25779	79.44%	20.56%	10.40%	1.99%	6.32%	1.70%	0.07%

 $Will^{20}$

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		1.69%		63.44%	36.56%	16.43%	12.27%	6.56%	1.83%	0.08%
1	63284	0.35%	48779	77.76%	22.24%	11.72%	6.32%	2.01%	2.11%	0.07%
2	63308	0.39%	47043	87.89%	12.11%	6.07%	2.56%	1.66%	1.28%	0.06%
3	63137	0.12%	49515	60.42%	39.58%	7.98%	28.63%	1.69%	1.77%	0.05%
4	63617	0.88%	49268	87.85%	12.15%	5.99%	1.89%	2.95%	1.13%	0.03%
5	63440	0.60%	48804	75.36%	24.64%	13.51%	7.32%	2.16%	1.85%	0.03%
6	62550	-0.81%	45801	26.79%	73.21%	45.06%	26.77%	0.98%	3.02%	0.11%
7	62740	-0.51%	48203	64.33%	35.67%	21.42%	9.75%	3.08%	2.10%	0.10%
8	62655	-0.65%	45277	68.11%	31.89%	13.79%	7.98%	8.63%	1.66%	0.11%
9	62690	-0.59%	47240	51.30%	48.70%	24.27%	12.58%	10.88%	2.11%	0.11%
10	62976	-0.14%	45572	59.64%	40.36%	6.19%	6.11%	26.93%	0.90%	0.11%
11	63283	0.35%	47910	38.63%	61.37%	26.04%	21.79%	12.79%	2.27%	0.11%

²⁰ For the district containing Stateville Correctional Center, the population at Stateville was not included in the district population, consistent with its exclusion in the county board documents for the enacted current maps. Deviation calculations were adjusted accordingly, so that Stateville population is not figured into those calculations.

Appendix C: Current county board map compactness data

Cook

District	Reock	Polsby-Popper
1	0.2025	0.2005
2	0.2939	0.1166
3	0.1972	0.0869
4	0.2803	0.1947
5	0.4697	0.1686
6	0.2138	0.0619
7	0.3993	0.3137
8	0.3530	0.3302
9	0.2036	0.0961
10	0.1422	0.1159
11	0.3347	0.1534
12	0.1869	0.1447
13	0.4342	0.4588
14	0.1733	0.2544
15	0.2831	0.1425
16	0.3708	0.1912
17	0.1761	0.0588

DuPage

District	Reock	Polsby-Popper
1	0.3641	0.4689
2	0.3755	0.4050
3	0.4258	0.4867
4	0.6811	0.3934
5	0.4422	0.5475
6	0.6244	0.4631

Kane

D: 1 : 1	D 1	D 11 D
District	Reock	Polsby-Popper
1	0.4612	0.2462
2	0.2100	0.2257
3	0.2153	0.2224
4	0.3956	0.3005
5	0.4472	0.4747
6	0.4580	0.4348
7	0.4406	0.4593
8	0.3887	0.4765
9	0.3456	0.3436
10	0.4115	0.4678
11	0.3358	0.4281
12	0.5796	0.6172
13	0.4204	0.3758
14	0.3348	0.2910
15	0.3564	0.2412
16	0.2340	0.2997
17	0.3096	0.3172
18	0.3691	0.3408
19	0.2249	0.2340
20	0.4186	0.4294
21	0.3213	0.2440
22	0.5077	0.2855
23	0.2343	0.2661
24	0.4675	0.4513

Kendall

District	Reock	Polsby-Popper
1	0.6264	0.6820
2	0.4550	0.5464

Lake

District	Reock	Polsby-Popper
1	0.2579	0.1951
2	0.5039	0.2863
3	0.3126	0.1679
4	0.5933	0.3662
5	0.4960	0.3368
6	0.4713	0.1891
7	0.3882	0.2459
8	0.3993	0.3289
9	0.3802	0.2470
10	0.2405	0.1970
11	0.2387	0.3988
12	0.3751	0.3916
13	0.3034	0.1799
14	0.4565	0.1716
15	0.5133	0.3670
16	0.4576	0.3422
17	0.3181	0.2124
18	0.2084	0.1699
19	0.1412	0.2036

McHenry

District	Reock	Polsby-Popper
1	0.3625	0.4384
2	0.4210	0.3492
3	0.3109	0.2080
4	0.3649	0.3130
5	0.5314	0.4372
6	0.3221	0.3126
7	0.5212	0.5800
8	0.3514	0.4713
9	0.2744	0.4475

Will

District	Reock	Polsby-Popper
1	0.4259	0.4679
2	0.2234	0.2115
3	0.3067	0.4007
4	0.2500	0.2250
5	0.3047	0.2335
6	0.5042	0.3410
7	0.2623	0.1786
8	0.5284	0.2969
9	0.3344	0.1777
10	0.2467	0.2465
11	0.4065	0.3864

Appendix D: Hypothetical county board map political data

Cook

	2018 AG D	2018 AG R	2018 AG O		2018 Assessor R		2020 Circ. Cl. R	2018 Avg D	2020 Avg D	County Avg D
Total	72.09%	25.72%	2.20%	76.19%	23.81%	73.03%	26.97%			
1	73.69%	23.53%	2.78%	79.84%	20.16%	76.62%	23.38%	79.84%	76.62%	78.23%
2	79.36%	17.67%	2.97%	84.68%	15.32%	83.60%	16.40%	84.68%	83.60%	84.14%
3	70.59%	26.75%	2.66%	74.81%	25.19%	71.32%	28.68%	74.81%	71.32%	73.07%
4	83.77%	13.54%	2.69%	88.23%	11.77%	86.71%	13.29%	88.23%	86.71%	87.47%
5	83.63%	14.81%	1.56%	86.45%	13.55%	85.63%	14.37%	86.45%	85.63%	86.04%
6	89.71%	8.72%	1.57%	92.71%	7.29%	90.89%	9.11%	92.71%	90.89%	91.80%
7	93.75%	4.87%	1.38%	96.20%	3.80%	94.14%	5.86%	96.20%	94.14%	95.17%
8	90.55%	7.83%	1.62%	93.49%	6.51%	90.13%	9.87%	93.49%	90.13%	91.81%
9	73.47%	24.22%	2.32%	78.27%	21.73%	74.89%	25.11%	78.27%	74.89%	76.58%
10	48.62%	48.71%	2.67%	54.44%	45.56%	49.54%	50.46%	54.44%	49.54%	51.99%
11	50.34%	47.17%	2.50%	55.96%	44.04%	51.44%	48.56%	55.96%	51.44%	53.70%
12	53.93%	43.49%	2.58%	56.99%	43.01%	56.40%	43.60%	56.99%	56.40%	56.70%
13	54.98%	42.43%	2.59%	59.41%	40.59%	56.09%	43.91%	59.41%	56.09%	57.75%
14	54.46%	43.59%	1.95%	58.77%	41.23%	57.39%	42.61%	58.77%	57.39%	58.08%
15	79.30%	18.85%	1.84%	83.74%	16.26%	80.00%	20.00%	83.74%	80.00%	81.87%
16	80.51%	17.34%	2.15%	84.54%	15.46%	82.57%	17.43%	84.54%	82.57%	83.56%
17	73.65%	24.03%	2.32%	77.97%	22.03%	74.70%	25.30%	77.97%	74.70%	76.34%

DuPage 6

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2018 CB Chair D	2018 CB Chair R	2018 Sheriff D	2018 Sheriff R
Total	50.61%	47.00%	2.39%	52.70%	47.30%	48.98%	51.02%	49.25%	50.75%
1	57.35%	39.61%	3.04%	59.78%	40.22%	57.43%	42.57%	56.63%	43.37%
2	49.97%	47.63%	2.40%	51.84%	48.16%	46.63%	53.37%	48.31%	51.69%
3	48.86%	48.89%	2.25%	51.39%	48.61%	47.55%	52.45%	47.49%	52.51%
4	48.15%	49.50%	2.35%	49.86%	50.14%	46.07%	53.93%	46.18%	53.82%
5	54.06%	43.93%	2.01%	56.04%	43.96%	52.72%	47.28%	53.27%	46.73%
6	48.30%	49.16%	2.54%	50.49%	49.51%	47.44%	52.56%	46.98%	53.02%

	2020 Auditor	2020 Auditor	2020 Circ. Cl.	2020 Circ. Cl.		2020 Coroner	2020 Recorde	2020 Recorde	2018	2020	County
	D	R	D	R	D	R	r D	r R	Avg D	Avg D	Avg D
Total	50.01%	49.99%	50.67%	49.33%	49.18%	50.82%	52.31%	47.69%	50.31%	50.54%	50.43%
1	57.32%	42.68%	56.70%	43.30%	56.36%	43.64%	59.17%	40.83%	57.95%	57.39%	57.67%
2	48.91%	51.09%	49.74%	50.26%	48.52%	51.48%	51.36%	48.64%	48.93%	49.63%	49.28%
3	47.90%	52.10%	49.26%	50.74%	47.74%	52.26%	50.62%	49.38%	48.81%	48.88%	48.85%
4	47.58%	52.42%	48.27%	51.73%	45.97%	54.03%	49.74%	50.26%	47.37%	47.89%	47.63%
5	54.77%	45.23%	55.51%	44.49%	53.64%	46.36%	56.71%	43.29%	54.01%	55.16%	54.58%
6	46.38%	53.62%	46.89%	53.11%	45.62%	54.38%	48.91%	51.09%	48.30%	46.95%	47.63%

DuPage 18

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2018 CB Chair D	2018 CB Chair R	2018 Sheriff D	2018 Sheriff R
Total	50.61%	47.00%	2.39%	52.70%	47.30%	48.98%	51.02%	49.25%	50.75%
1	59.02%	38.86%	2.12%	61.35%	38.65%	58.81%	41.19%	58.94%	41.06%
2	54.87%	42.13%	3.01%	56.93%	43.07%	54.98%	45.02%	53.69%	46.31%
3	56.92%	40.19%	2.89%	59.91%	40.09%	57.18%	42.82%	56.72%	43.28%
4	46.88%	51.19%	1.94%	48.33%	51.67%	45.15%	54.85%	46.32%	53.68%
5	52.28%	45.07%	2.66%	53.88%	46.12%	51.05%	48.95%	49.91%	50.09%
6	48.29%	49.41%	2.30%	49.82%	50.18%	42.18%	57.82%	45.91%	54.09%
7	57.24%	40.19%	2.58%	59.50%	40.50%	56.81%	43.19%	56.42%	43.58%
8	53.47%	43.53%	3.00%	55.48%	44.52%	52.13%	47.87%	51.72%	48.28%
9	44.90%	52.48%	2.62%	47.42%	52.58%	44.00%	56.00%	44.09%	55.91%
10	48.51%	49.09%	2.41%	50.54%	49.46%	46.49%	53.51%	46.70%	53.30%
11	51.74%	45.60%	2.66%	53.21%	46.79%	47.95%	52.05%	49.97%	50.03%
12	46.74%	50.83%	2.43%	48.48%	51.52%	45.79%	54.21%	44.73%	55.27%
13	49.82%	47.82%	2.36%	52.71%	47.29%	48.35%	51.65%	48.05%	51.95%
14	48.78%	48.94%	2.27%	51.19%	48.81%	47.01%	52.99%	47.48%	52.52%
15	47.99%	50.07%	1.94%	49.73%	50.27%	46.85%	53.15%	46.83%	53.17%
16	50.11%	47.66%	2.23%	52.76%	47.24%	49.34%	50.66%	48.54%	51.46%
17	52.41%	45.46%	2.13%	54.52%	45.48%	50.99%	49.01%	51.51%	48.49%
18	49.85%	48.05%	2.10%	52.18%	47.82%	48.34%	51.66%	48.78%	51.22%

	2020 Auditor D	2020 Auditor R	2020 Circ. Cl. D	2020 Circ. Cl. R	2020 Coroner D	2020 Coroner R	2020 Recorde r D	2020 Recorde r R	2018 Avg	2020 Avg	County Avg
Total	50.01%	49.99%	50.67%	49.33%	49.18%	50.82%	52.31%	47.69%	50.31%	50.54%	50.43%
1	59.20%	40.80%	59.97%	40.03%	58.64%	41.36%	61.12%	38.88%	59.70%	59.73%	59.72%
2	55.48%	44.52%	55.11%	44.89%	54.02%	45.98%	57.24%	42.76%	55.20%	55.46%	55.33%
3	56.31%	43.69%	55.07%	44.93%	55.25%	44.75%	58.13%	41.87%	57.94%	56.19%	57.06%
4	46.45%	53.55%	47.76%	52.24%	46.61%	53.39%	48.87%	51.13%	46.60%	47.42%	47.01%
5	52.76%	47.24%	53.39%	46.61%	51.33%	48.67%	54.72%	45.28%	51.61%	53.05%	52.33%
6	46.67%	53.33%	46.86%	53.14%	46.56%	53.44%	49.33%	50.67%	45.97%	47.36%	46.66%
7	56.25%	43.75%	56.65%	43.35%	55.65%	44.35%	58.55%	41.45%	57.58%	56.78%	57.18%
8	52.37%	47.63%	52.32%	47.68%	51.62%	48.38%	54.63%	45.37%	53.11%	52.74%	52.92%
9	42.18%	57.82%	42.74%	57.26%	41.48%	58.52%	44.74%	55.26%	45.17%	42.79%	43.98%
10	47.77%	52.23%	48.97%	51.03%	46.79%	53.21%	50.25%	49.75%	47.91%	48.45%	48.18%
11	50.97%	49.03%	51.60%	48.40%	49.98%	50.02%	53.69%	46.31%	50.38%	51.56%	50.97%
12	45.33%	54.67%	45.78%	54.22%	44.33%	55.67%	47.80%	52.20%	46.33%	45.81%	46.07%
13	49.08%	50.92%	50.54%	49.46%	48.76%	51.24%	52.05%	47.95%	49.70%	50.11%	49.91%
14	47.28%	52.72%	48.69%	51.31%	46.87%	53.13%	49.68%	50.32%	48.56%	48.13%	48.35%
15	47.64%	52.36%	48.37%	51.63%	45.55%	54.45%	49.46%	50.54%	47.80%	47.76%	47.78%
16	49.12%	50.88%	50.06%	49.94%	48.95%	51.05%	51.72%	48.28%	50.21%	49.96%	50.09%
17	52.26%	47.74%	53.02%	46.98%	50.81%	49.19%	54.27%	45.73%	52.34%	52.59%	52.47%
18	50.26%	49.74%	51.12%	48.88%	49.11%	50.89%	52.12%	47.88%	49.77%	50.65%	50.21%

Kane

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2018 Sheriff D	2018 Sheriff R	2018 Treasure r D	2018 Treasurer R	2020 Auditor D	2020 Auditor R
Total	50.11%	47.27%	2.62%	48.46%	51.54%	53.11%	46.89%	47.22%	52.78%	53.02%	46.98%
1	63.69%	32.67%	3.64%	64.05%	35.95%	67.43%	32.50%	62.90%	37.05%	68.90%	31.04%
2	40.49%	56.72%	2.79%	39.48%	60.51%	49.84%	50.13%	38.00%	62.00%	43.04%	56.96%
3	62.12%	35.24%	2.64%	60.80%	39.20%	66.77%	33.23%	61.48%	38.52%	67.15%	32.85%
4	47.08%	50.34%	2.59%	45.59%	54.41%	50.61%	49.39%	43.96%	56.04%	50.68%	49.32%
5	57.26%	40.47%	2.27%	54.66%	45.34%	62.12%	37.88%	53.83%	46.15%	62.63%	37.37%
6	72.23%	25.17%	2.60%	71.34%	28.66%	75.86%	24.14%	70.76%	29.24%	74.31%	25.62%
7	66.44%	31.25%	2.31%	66.37%	33.60%	71.09%	28.91%	65.95%	34.05%	71.61%	28.39%
8	69.14%	27.50%	3.36%	70.14%	29.83%	71.92%	27.99%	69.17%	30.83%	73.78%	26.20%
9	50.99%	46.24%	2.78%	47.80%	52.18%	52.42%	47.56%	46.16%	53.82%	54.33%	45.66%
10	49.65%	47.44%	2.91%	46.64%	53.36%	50.90%	49.10%	44.72%	55.28%	51.96%	48.04%
11	41.32%	56.60%	2.08%	38.97%	61.00%	47.27%	52.68%	37.35%	62.62%	43.33%	56.67%
12	37.07%	60.46%	2.47%	35.82%	64.15%	40.62%	59.34%	33.64%	66.32%	39.21%	60.78%
13	40.04%	57.66%	2.29%	38.31%	61.69%	41.77%	58.23%	36.77%	63.23%	40.79%	59.21%
14	50.05%	46.93%	3.02%	48.61%	51.39%	51.30%	48.68%	47.70%	52.30%	51.54%	48.42%
15	48.14%	49.50%	2.36%	46.31%	53.69%	48.98%	51.02%	44.96%	55.03%	50.05%	49.95%
16	56.09%	41.33%	2.57%	53.41%	46.59%	56.47%	43.53%	52.57%	47.43%	59.36%	40.62%
17	67.45%	29.39%	3.16%	67.66%	32.34%	69.59%	30.41%	66.47%	33.53%	71.24%	28.76%
18	47.85%	49.43%	2.72%	47.39%	52.61%	50.83%	49.12%	46.82%	53.18%	48.67%	51.33%
19	48.28%	49.10%	2.63%	46.15%	53.85%	49.00%	50.99%	45.09%	54.91%	50.64%	49.33%

20	66.99%	30.20%	2.81%	66.09%	33.89%	68.30%	31.68%	65.41%	34.57%	69.84%	30.16%
21	52.44%	44.83%	2.73%	51.13%	48.79%	53.05%	46.95%	50.23%	49.69%	53.97%	46.03%
22	36.45%	61.04%	2.51%	34.58%	65.40%	40.77%	59.23%	33.76%	66.24%	39.51%	60.49%
23	47.57%	50.35%	2.08%	45.08%	54.92%	50.30%	49.70%	43.43%	56.57%	49.60%	50.40%
24	62.21%	34.49%	3.30%	62.72%	37.28%	64.15%	35.85%	61.18%	38.82%	65.47%	34.49%

	2020 Cir. Cl.	2020 Cir. Cl.	2020 CB	2020 CB	2020 Record	2020 Recorder	2020 SA	2020 SA	2018 Avg	2020 Avg	County
	D	R	Chair D	Chair R	er D	R	D	R	D	D	Avg D
Total	51.47%	48.53%	50.45%	49.55%	48.47%	51.53%	51.59	48.41%	49.60%	51.00%	50.30%
1	68.95%	31.05%	66.08%	33.92%	64.93%	35.02%	67.659	6 32.28%	64.79%	67.30%	66.05%
2	41.77%	58.21%	40.78%	59.22%	39.24%	60.76%	42.17	6 57.83%	42.44%	41.40%	41.92%
3	66.71%	33.29%	64.00%	36.00%	63.37%	36.63%	66.149	33.86%	63.02%	65.47%	64.25%
4	49.11%	50.89%	47.76%	52.22%	45.76%	54.24%	48.419	6 51.59%	46.72%	48.34%	47.53%
5	60.77%	39.23%	57.82%	42.18%	56.08%	43.91%	59.70	6 40.30%	56.87%	59.40%	58.14%
6	74.60%	25.33%	71.92%	28.01%	72.14%	27.79%	73.73	6 26.18%	72.65%	73.34%	73.00%
7	71.91%	28.09%	68.90%	31.10%	68.53%	31.47%	70.539	6 29.47%	67.80%	70.30%	69.05%
8	73.72%	26.22%	70.70%	29.30%	71.27%	28.71%	72.61	6 27.39%	70.41%	72.42%	71.41%
9	52.20%	47.79%	52.43%	47.56%	47.99%	51.99%	51.23	48.77%	48.79%	51.64%	50.21%
10	50.14%	49.86%	50.04%	49.96%	46.42%	53.58%	50.049	49.96%	47.42%	49.72%	48.57%
11	41.86%	58.13%	41.35%	58.65%	38.63%	61.36%	42.049	6 57.95%	41.20%	41.44%	41.32%
12	37.38%	62.62%	37.05%	62.92%	34.26%	65.73%	38.97	61.03%	36.69%	37.37%	37.03%
13	39.74%	60.26%	39.47%	60.53%	37.04%	62.96%	40.20	6 59.80%	38.95%	39.45%	39.20%
14	48.81%	51.19%	48.19%	51.81%	46.41%	53.59%	50.249	6 49.74%	49.20%	49.04%	49.12%
15	47.61%	52.37%	46.81%	53.18%	45.26%	54.71%	48.479	6 51.53%	46.75%	47.64%	47.20%
16	56.58%	43.41%	55.65%	44.35%	54.54%	45.43%	57.70	42.27%	54.15%	56.77%	55.46%
17	69.06%	30.94%	68.97%	31.03%	67.81%	32.19%	70.269	6 29.74%	67.91%	69.47%	68.69%
18	47.59%	52.39%	46.71%	53.29%	45.66%	54.34%	47.749	6 52.26%	48.35%	47.27%	47.81%
19	48.39%	51.58%	47.39%	52.55%	45.11%	54.89%	48.869	6 51.14%	46.75%	48.08%	47.41%
20	68.60%	31.40%	67.38%	32.62%	66.10%	33.90%	69.50	6 30.50%	66.60%	68.28%	67.44%
21	53.31%	46.69%	52.13%	47.87%	50.09%	49.91%	52.71	47.26%	51.47%	52.44%	51.96%

22	37.32%	62.68%	36.39%	63.57%	34.33%	65.65%	37.40%	62.58%	36.37	% 36.99%	36.68%
23	47.69%	52.31%	48.07%	6 51.93%	44.65%	55.35%	48.27%	51.73%	46.27	47.66%	46.96%
24	64.47%	35.53%	62.88%	6 37.12%	61.70%	38.23%	64.85%	35.10%	62.68	63.87%	63.28%

Kendall

	2018 AG D		2018 AG O	2018 Clerk D	2018 Clerk R	2020 Circ. Cl. D	2020 Circ. Cl. R	2018 Avg D	2020 Avg D	County Avg D
Total	47.86%	49.17%	2.97%	45.14%	54.86%	48.71%	51.29%	45.14%	48.71%	46.93%
1	54.13%	42.68%	3.19%	51.85%	48.15%	55.31%	44.69%	51.85%	55.31%	53.58%
2	42.24%	54.98%	2.78%	39.15%	60.85%	42.79%	57.21%	39.15%	42.79%	40.97%

Kendall 10 District

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2020 Circ. Cl D	2020 Circ. Cl. R	201 D	8 Avg	2020 Avg D	County Avg D
Total	47.86%	49.17%	2.97%	45.14%	54.86%	48.71	% 51.29%	4:	5.14%	48.71%	46.93%
1	51.36%	45.38%	3.26%	48.63%	51.37%	53.99	% 46.01%	48	8.63%	53.99%	51.31%
2	60.18%	36.45%	3.38%	58.65%	41.35%	58.90	% 41.10%	58	8.65%	58.90%	58.78%
3	56.53%	40.85%	2.62%	54.52%	45.48%	58.64	% 41.36%	54	4.52%	58.64%	56.58%
4	43.67%	53.67%	2.66%	40.37%	59.59%	47.16	% 52.84%	40	0.37%	47.16%	43.77%
5	47.68%	49.69%	2.63%	46.45%	53.55%	49.49	% 50.51%	40	6.45%	49.49%	47.97%
6	58.73%	38.54%	2.73%	57.72%	42.14%	56.38	% 43.58%	5′	7.72%	56.38%	57.05%
7	35.23%	62.07%	2.71%	31.14%	68.86%	35.96	% 64.04%	3	1.14%	35.96%	33.55%
8	36.67%	59.23%	4.11%	33.65%	66.35%	37.04	% 62.96%	33	3.65%	37.04%	35.35%
9	48.36%	48.16%	3.48%	45.56%	54.44%	48.29	% 51.71%	4:	5.56%	48.29%	46.93%
10	46.88%	50.74%	2.38%	43.03%	56.97%	45.78	% 54.20%	4.	3.03%	45.78%	44.41%

Lake

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2018 Sheriff D	2018 Sheriff R	2018 Treasurer D	2018 Treasurer R
Total	53.77%	43.80%	2.43%	52.14%	47.86%	50.03%	49.97%	54.28%	45.72%
1	62.57%	35.63%	1.80%	60.90%	39.09%	58.59%	41.41%	56.01%	43.99%
2	60.39%	35.46%	4.15%	61.18%	38.82%	58.10%	41.89%	63.91%	36.09%
3	87.00%	11.13%	1.87%	87.07%	12.93%	86.38%	13.62%	90.14%	9.86%
4	77.82%	19.45%	2.74%	76.71%	23.27%	76.71%	23.29%	80.96%	19.01%
5	71.68%	25.84%	2.48%	70.06%	29.92%	70.09%	29.91%	75.20%	24.75%
6	60.98%	36.31%	2.70%	59.83%	40.17%	60.51%	39.49%	64.01%	35.99%
7	48.50%	48.95%	2.55%	47.30%	52.67%	46.39%	53.59%	50.77%	49.21%
8	53.61%	44.00%	2.39%	51.13%	48.87%	48.50%	51.50%	54.94%	45.06%
9	47.95%	48.53%	3.52%	47.50%	52.50%	44.73%	55.27%	50.57%	49.43%
10	41.92%	54.86%	3.21%	40.68%	59.32%	38.54%	61.46%	44.03%	55.97%
11	47.39%	48.92%	3.69%	47.16%	52.84%	44.38%	55.62%	50.23%	49.76%
12	40.88%	56.98%	2.14%	39.02%	60.98%	37.20%	62.80%	40.93%	59.07%
13	40.24%	57.72%	2.03%	36.66%	63.34%	36.63%	63.37%	40.26%	59.74%
14	46.21%	51.34%	2.45%	44.96%	55.02%	42.03%	57.97%	48.28%	51.70%
15	53.41%	43.77%	2.82%	51.38%	48.60%	48.25%	51.75%	55.81%	44.18%
16	50.35%	47.70%	1.95%	48.77%	51.22%	46.32%	53.66%	48.50%	51.50%
17	72.23%	26.27%	1.50%	69.84%	30.16%	69.44%	30.56%	70.08%	29.90%
18	60.12%	38.31%	1.56%	57.45%	42.55%	55.33%	44.67%	56.21%	43.79%
19	51.50%	46.25%	2.25%	50.52%	49.48%	43.66%	56.34%	52.84%	47.16%

	2020 Cir. Cl. D	2020 Cir. Cl. R	Corone	2020 Coroner R	2020 Record er D	2020 Recorder R	2020 D	SA	2020 SA R		2020 Avg D	County Avg D
Total	56.63%	43.37%	53.02%	46.98%	60.16%	39.84%	52.	08%	47.92%			
1	64.93%	35.06%	59.90%	40.08%	65.46%	34.54%	60.)7%	39.91%	58.50%	62.59%	60.55%
2	60.06%	39.94%	61.63%	38.36%	65.58%	34.42%	61.	50%	38.39%	61.06%	62.22%	61.64%
3	82.93%	17.05%	82.74%	17.26%	87.47%	12.49%	81.	38%	18.10%	87.86%	83.76%	85.81%
4	75.33%	24.67%	75.06%	24.94%	81.67%	18.33%	73.	96%	26.04%	78.13%	76.51%	77.32%
5	71.89%	28.11%	69.24%	30.73%	78.54%	21.46%	66.	43%	33.57%	71.78%	71.53%	71.65%
6	63.99%	36.00%	60.90%	39.10%	70.32%	29.67%	59.	30%	40.19%	61.45%	63.75%	62.60%
7	53.49%	46.51%	48.09%	51.91%	58.64%	41.36%	47.	03%	52.97%	48.15%	51.81%	49.98%
8	57.11%	42.88%	50.91%	49.09%	61.57%	38.43%	49.	10%	50.89%	51.52%	54.67%	53.10%
9	50.45%	49.55%	46.79%	53.21%	54.21%	45.79%	46.	40%	53.60%	47.60%	49.46%	48.53%
10	42.73%	57.27%	39.38%	60.62%	46.89%	53.11%	38.	77%	61.23%	41.08%	41.94%	41.51%
11	49.10%	50.90%	47.48%	52.52%	51.81%	48.19%	46.	37%	53.62%	47.26%	48.69%	47.97%
12	43.42%	56.57%	41.88%	58.12%	45.97%	54.03%	40.	63%	59.37%	39.05%	42.98%	41.01%
13	44.96%	55.04%	42.12%	57.88%	48.96%	51.04%	39.	38%	60.62%	37.85%	43.86%	40.85%
14	49.35%	50.65%	46.61%	53.38%	53.09%	46.91%	45.	39%	54.60%	45.09%	48.61%	46.85%
15	56.91%	43.09%	52.69%	47.31%	60.85%	39.15%	51.	57%	48.33%	51.81%	55.53%	53.67%
16	53.26%	46.74%	50.21%	49.79%	55.38%	44.61%	49.	53%	50.36%	47.86%	52.12%	49.99%
17	76.10%	23.89%	69.69%	30.30%	76.54%	23.45%	70.	11%	29.89%	69.79%	73.11%	71.45%
18	64.80%	35.20%	57.66%	42.34%	66.14%	33.86%	58.	54%	41.46%	56.33%	61.79%	59.06%
19	55.78%	44.22%	52.91%	47.09%	60.45%	39.55%	50.	35%	49.15%	49.01%	55.00%	52.00%

McHenry

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	Circ.	2020 Circ. Cl. R	2020 CB Chair D	2020 CB Chair R	2018 Avg D	2020 Avg D	County Avg D
Total	44.41%	52.64%	2.95%	45.44%	54.56%	40.70%	59.30%	47.15%	52.85%	45.44%	43.93%	44.68%
1	50.29%	46.75%	2.96%	51.91%	48.09%	46.22%	53.78%	56.04%	43.96%	51.91%	51.13%	51.52%
2	37.73%	58.98%	3.29%	39.30%	60.70%	33.26%	66.74%	43.04%	56.96%	39.30%	38.15%	38.73%
3	40.32%	56.30%	3.39%	41.26%	58.74%	37.14%	62.86%	46.60%	53.40%	41.26%	41.87%	41.57%
4	39.92%	57.61%	2.47%	40.89%	59.11%	35.70%	64.30%	45.29%	54.71%	40.89%	40.50%	40.69%
5	42.30%	54.74%	2.97%	43.81%	56.19%	39.07%	60.93%	44.98%	55.02%	43.81%	42.03%	42.92%
6	45.35%	51.78%	2.87%	46.32%	53.68%	42.50%	57.50%	46.12%	53.88%	46.32%	44.31%	45.32%
7	49.11%	47.76%	3.14%	50.58%	49.42%	45.95%	54.05%	48.99%	51.01%	50.58%	47.47%	49.03%
8	48.80%	48.29%	2.91%	48.74%	51.26%	45.29%	54.71%	49.95%	50.05%	48.74%	47.62%	48.18%
9	48.35%	49.08%	2.57%	48.87%	51.13%	43.16%	56.84%	46.17%	53.83%	48.87%	44.67%	46.77%

McHenry 18 District

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	C	Circ.	2020 Circ. Cl. R	2020 CB Chair D	2020 CB Chair R	2018 Avg D	2020 Avg D	County Avg D
Total	44.41%	52.64%	2.95%	45.44%	54.56%	4	40.70%	59.30%	47.15%	52.85%	45.44%	43.93%	44.68%
1	49.07%	47.57%	3.36%	50.16%	49.84%	4	47.76%	52.22%	57.26%	42.73%	50.16%	52.51%	51.34%
2	36.19%	60.46%	3.35%	37.09%	62.91%	3	33.22%	66.78%	42.58%	57.42%	37.09%	37.90%	37.50%
3	52.66%	44.33%	3.01%	52.96%	47.04%	4	48.40%	51.55%	52.80%	47.20%	52.96%	50.60%	51.78%
4	49.06%	47.97%	2.97%	50.09%	49.89%		45.11%	54.89%	49.13%	50.86%	50.09%	47.12%	48.61%
5	44.72%	52.30%	2.98%	45.98%	54.02%	4	42.32%	57.68%	45.20%	54.80%	45.98%	43.76%	44.87%
6	49.12%	47.90%	2.99%	49.40%	50.57%	4	45.63%	54.37%	50.07%	49.92%	49.40%	47.85%	48.63%
7	50.06%	46.25%	3.69%	51.42%	48.58%	4	46.62%	53.38%	49.74%	50.26%	51.42%	48.18%	49.80%
8	43.68%	54.16%	2.16%	43.88%	56.09%	4	40.62%	59.38%	43.48%	56.52%	43.88%	42.05%	42.97%
9	45.83%	51.74%	2.43%	46.04%	53.96%	4	41.48%	58.52%	45.42%	54.58%	46.04%	43.45%	44.75%
10	36.55%	61.07%	2.38%	37.85%	62.15%	3	32.58%	67.42%	44.30%	55.70%	37.85%	38.44%	38.15%
11	40.67%	57.05%	2.28%	41.06%	58.94%	3	37.63%	62.34%	44.91%	55.06%	41.06%	41.27%	41.17%
12	36.87%	60.23%	2.91%	39.00%	60.94%	3	33.94%	66.06%	43.12%	56.88%	39.00%	38.53%	38.77%
13	39.56%	56.79%	3.65%	41.05%	58.95%	3	34.80%	65.20%	44.93%	55.07%	41.05%	39.87%	40.46%
14	54.76%	42.49%	2.75%	56.23%	43.77%	4	46.19%	53.81%	58.62%	41.38%	56.23%	52.41%	54.32%
15	42.71%	53.98%	3.31%	43.72%	56.28%	3	38.91%	61.09%	48.48%	51.52%	43.72%	43.70%	43.71%
16	42.57%	54.46%	2.97%	43.84%	56.16%	3	39.33%	60.67%	44.16%	55.82%	43.84%	41.75%	42.79%
17	43.30%	53.25%	3.45%	44.94%	55.06%	3	39.87%	60.13%	44.35%	55.65%	44.94%	42.11%	43.53%
18	50.54%	46.66%	2.80%	51.66%	48.34%	4	45.50%	54.50%	48.33%	51.67%	51.66%	46.92%	49.29%

Will

	2018 AG D	2018 AG R	2018 AG O	201 Cle	-	2018 Clerk R	2018 Sheriff D	2018 Sheriff R	Treasur	2018 Treasure r R	2020 Auditor D	2020 Auditor R
Total	50.46%	46.92%	2.61%	51.	39%	48.61%	58.01%	41.99%	51.26%	48.74%	54.01%	45.99%
1	53.38%	44.79%	1.83%	53.	.82%	46.18%	57.46%	42.54%	52.58%	47.42%	57.01%	42.99%
2	60.78%	36.95%	2.27%	61.	.98%	38.02%	64.75%	35.25%	60.46%	39.54%	64.87%	35.13%
3	65.47%	31.50%	3.04%	67.	20%	32.80%	70.12%	29.88%	66.67%	33.33%	66.74%	33.26%
4	46.96%	50.41%	2.63%	47.	.35%	52.65%	53.96%	46.04%	47.82%	52.17%	51.71%	48.28%
5	74.39%	23.01%	2.61%	74.	.87%	25.13%	79.65%	20.35%	76.56%	23.44%	77.66%	22.34%
6	54.84%	42.45%	2.71%	55.	.00%	45.00%	63.05%	36.95%	57.10%	42.90%	61.21%	38.79%
7	51.69%	45.31%	3.00%	53.	.07%	46.93%	61.92%	38.08%	54.00%	46.00%	56.12%	43.88%
8	36.76%	60.76%	2.47%	37.	.84%	62.16%	47.19%	52.81%	37.13%	62.87%	38.73%	61.27%
9	35.61%	61.10%	3.29%	36.	.34%	63.66%	47.63%	52.37%	37.31%	62.69%	39.10%	60.90%
10	52.15%	45.47%	2.37%	53.	.69%	46.31%	58.99%	41.01%	52.61%	47.39%	54.80%	45.20%
11	39.63%	57.72%	2.65%	40.	.63%	59.37%	48.15%	51.85%	39.03%	60.97%	42.51%	57.49%

			2020	2020	2020	2020	2020	2020			
	2020	2020	Cir. Cl.	Cir. Cl.	Coroner	Coroner	Recorde	Recorde	2018	2020	County
	CEO D	CEO R	D	R	D	R	r D	r R	Avg D	Avg D	Avg D
Total	54.32%	45.68%	55.00%	45.00%	55.82%	43.89%	55.13%	44.87%	53.55%	54.86%	54.20%
1	57.66%	42.34%	58.60%	41.40%	59.87%	39.87%	57.19%	42.80%	54.62%	58.07%	56.34%
2	65.50%	34.50%	66.27%	33.73%	67.40%	32.30%	65.33%	34.67%	62.40%	65.87%	64.14%
3	67.77%	32.23%	68.02%	31.98%	68.76%	31.03%	67.52%	32.48%	68.00%	67.76%	67.88%
4	53.36%	46.64%	52.45%	47.55%	53.24%	46.45%	52.46%	47.54%	49.71%	52.64%	51.18%
5	77.62%	22.38%	77.76%	22.24%	77.61%	22.14%	78.57%	21.43%	77.03%	77.84%	77.44%
6	61.35%	38.65%	60.72%	39.28%	60.70%	38.95%	61.83%	38.17%	58.38%	61.16%	59.77%
7	56.39%	43.61%	56.70%	43.30%	57.34%	42.35%	57.68%	42.32%	56.33%	56.85%	56.59%
8	38.12%	61.88%	40.00%	60.00%	41.23%	58.41%	40.36%	59.64%	40.72%	39.69%	40.20%
9	39.42%	60.58%	40.45%	59.55%	40.78%	58.90%	41.42%	58.58%	40.43%	40.23%	40.33%
10	55.01%	44.99%	56.12%	43.88%	57.55%	42.25%	56.43%	43.57%	55.10%	55.98%	55.54%
11	41.91%	58.09%	44.10%	55.90%	44.86%	54.88%	43.81%	56.19%	42.60%	43.44%	43.02%

Will 22 District

	2018 AG D	2018 AG R	2018 AG O	2018 Clerk D	2018 Clerk R	2018 Sheriff D	2018 Sheriff R	Treasure	2018 Treasurer R	Auditor	2020 Auditor R
Total	50.46%	46.92%	2.61%	51.39%	48.61%	58.01%	41.99%	51.26%	48.74%	54.01%	45.99%
1	68.32%	28.85%	2.83%	70.15%	6 29.85%	72.48%	27.52%	69.56%	30.44%	71.78%	28.22%
2	65.62%	31.93%	2.44%	67.42%	6 32.58%	69.63%	30.37%	66.00%	34.00%	69.10%	30.90%
3	55.82%	42.53%	1.65%	55.62%	6 44.38%	59.24%	40.76%	54.65%	45.35%	58.37%	41.63%
4	49.01%	49.04%	1.95%	49.32%	50.68%	53.28%	46.72%	47.56%	52.44%	53.61%	46.39%
5	53.69%	43.95%	2.36%	54.87%	6 45.13%	58.45%	41.55%	53.62%	46.38%	56.64%	43.36%
6	67.60%	29.54%	2.86%	69.33%	30.65%	71.97%	28.03%	68.92%	31.04%	67.50%	32.48%
7	67.35%	30.38%	2.27%	69.07%	6 30.92%	73.06%	26.94%	68.19%	31.81%	69.78%	30.22%
8	70.99%	26.48%	2.54%	70.79%	6 29.21%	76.25%	23.75%	73.08%	26.92%	74.50%	25.50%
9	60.31%	36.67%	3.02%	60.63%	6 39.37%	68.73%	31.27%	63.72%	36.28%	68.98%	31.02%
10	77.52%	19.98%	2.50%	78.39%	6 21.61%	82.23%	17.77%	78.94%	21.06%	78.48%	21.52%
11	38.71%	58.38%	2.91%	39.68%	60.32%	50.29%	49.71%	39.60%	60.40%	41.58%	58.42%
12	34.57%	62.64%	2.79%	35.70%	64.30%	45.10%	54.90%	35.27%	64.71%	37.81%	62.19%
13	36.10%	60.13%	3.77%	37.05%	62.95%	47.85%	52.15%	38.07%	61.93%	39.75%	60.25%
14	40.67%	56.71%	2.61%	41.95%	6 58.05%	48.28%	51.72%	40.11%	59.89%	42.60%	57.40%
15	39.07%	58.63%	2.30%	39.69%	60.31%	46.22%	53.78%	37.95%	62.05%	43.13%	56.87%
16	56.97%	40.23%	2.81%	58.54%	6 41.46%	63.77%	36.23%	58.57%	41.43%	59.49%	40.51%
17	37.66%	59.91%	2.43%	38.70%	61.30%	48.01%	51.99%	38.00%	62.00%	38.97%	61.03%
18	44.48%	53.05%	2.47%	43.96%	56.04%	55.50%	44.50%	47.59%	52.41%	54.01%	45.99%
19	37.40%	59.92%	2.68%	38.70%	61.30%	49.06%	50.94%	38.15%	61.85%	39.72%	60.28%

20	47.66%	49.43%	2.91%	48.80%	51.20%	56.71%	43.29%	48.30%	51.70%	52.06%	47.94%
21	50.96%	46.22%	2.82%	52.07%	47.91%	59.14%	40.82%	52.94%	47.04%	56.50%	43.48%
22	48.63%	48.59%	2.78%	49.03%	50.97%	55.22%	44.78%	49.40%	50.60%	51.27%	48.73%

	2020 CEO D	2020 CEO R	2020 Cir. Cl. D	2020 Cir. Cl. R	2020 Corone r D	2020 Coroner R	2020 Recorder D	2020 Recorder R	2018 Avg		2020 Avg D	County Avg D
Total	54.32%	45.68%	55.00%	45.00%	55.82%	43.89%	55.13%	44.87%	53.	55%	54.86%	54.20%
1	72.52%	27.48%	72.96%	27.04%	73.88%	25.87%	72.12%	27.88%	70.	73%	72.65%	71.69%
2	70.09%	29.91%	70.37%	29.63%	71.37%	28.35%	69.86%	30.14%	67.	68%	70.16%	68.92%
3	58.86%	41.14%	59.62%	40.38%	60.89%	38.86%	58.60%	41.40%	56.	50%	59.27%	57.89%
4	53.77%	46.23%	55.63%	44.37%	56.91%	42.75%	53.82%	46.18%	50.	05%	54.75%	52.40%
5	57.99%	42.01%	58.17%	41.83%	59.13%	40.63%	56.85%	43.15%	55.	65%	57.76%	56.70%
6	68.70%	31.30%	68.77%	31.23%	69.45%	30.31%	68.21%	31.79%	70.	07%	68.53%	69.30%
7	70.27%	29.73%	70.95%	29.05%	71.30%	28.52%	71.07%	28.92%	70	11%	70.67%	70.39%
8	74.31%	25.69%	74.51%	25.49%	74.23%	25.45%	75.16%	24.84%	73.	37%	74.54%	73.96%
9	67.73%	32.27%	67.30%	32.70%	67.52%	32.19%	69.09%	30.91%	64.	36%	68.12%	66.24%
10	79.05%	20.95%	79.26%	20.74%	79.34%	20.45%	79.94%	20.06%	79.	85%	79.21%	79.53%
11	40.84%	59.16%	43.30%	56.70%	43.69%	56.04%	42.92%	57.08%	43.	19%	42.47%	42.83%
12	37.55%	62.44%	39.35%	60.65%	41.71%	58.07%	40.06%	59.94%	38.	69%	39.30%	38.99%
13	40.83%	59.17%	41.43%	58.57%	40.98%	58.74%	42.75%	57.25%	40.	99%	41.15%	41.07%
14	42.04%	57.96%	44.03%	55.97%	44.84%	54.84%	43.95%	56.05%	43.	45%	43.49%	43.47%
15	42.51%	57.49%	44.89%	55.11%	45.81%	53.96%	44.22%	55.78%	41.	29%	44.11%	42.70%
16	60.30%	39.70%	59.53%	40.47%	60.35%	39.28%	59.96%	40.04%	60.	29%	59.93%	60.11%
17	38.76%	61.24%	40.21%	59.79%	41.28%	58.36%	40.54%	59.46%	41.	57%	39.95%	40.76%
18	54.48%	45.52%	52.65%	47.35%	52.28%	47.29%	55.12%	44.88%	49.	02%	53.71%	51.36%
19	38.61%	61.39%	40.88%	59.12%	42.70%	56.95%	41.72%	58.28%	41.	97%	40.73%	41.35%
20	52.76%	47.24%	53.51%	46.49%	54.19%	45.54%	53.44%	46.56%	51.	27%	53.19%	52.23%
21	57.77%	42.22%	56.98%	43.02%	57.42%	42.28%	57.91%	42.07%	54.	72%	57.32%	56.02%

22 53.56% 46.44% 52.55% 47.43% 53.79% 45.92% 52.38% 47.62% 51.22% 52.71% 51	22	2 53.56% 46.44%	52.55% 47.43%	53.79% 45.92%	52.38% 47.62%	51.22% 52.71% 51.96%
-----------------------------------------------------------------------------	----	-----------------	---------------	---------------	---------------	----------------------

Appendix E: Hypothetical county board map demographic data

Cook

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
		8.70%		43.49%	56.51%	23.65%	23.61%	8.85%	2.18%	0.13%
1	303024	-2.35%	222782	18.92%	81.08%	70.91%	7.83%	2.42%	5.17%	0.13%
2	312236	0.62%	236511	14.39%	85.61%	70.15%	7.15%	8.58%	5.70%	0.13%
3	298147	-3.92%	231527	36.40%	63.60%	50.18%	9.49%	4.25%	3.55%	0.15%
4	301751	-2.76%	240613	33.32%	66.68%	50.11%	9.86%	7.18%	3.74%	0.22%
5	312571	0.72%	239483	19.46%	80.54%	12.86%	66.36%	1.23%	1.57%	0.12%
6	307608	-0.88%	237891	8.75%	91.25%	16.68%	74.29%	0.48%	1.67%	0.10%
7	316217	1.90%	246257	6.63%	93.37%	7.56%	83.07%	3.15%	1.34%	0.12%
8	302987	-2.36%	235387	11.15%	88.85%	10.75%	70.38%	8.11%	1.33%	0.13%
9	299044	-3.64%	232951	49.84%	50.16%	19.92%	25.74%	3.85%	2.06%	0.11%
10	303034	-2.35%	239699	74.66%	25.34%	12.27%	8.15%	3.76%	1.37%	0.08%
11	315071	1.53%	248129	75.83%	24.17%	14.00%	3.42%	5.90%	1.39%	0.09%
12	320905	3.41%	249608	56.31%	43.69%	20.09%	4.58%	18.15%	2.06%	0.13%
13	321707	3.67%	257106	62.50%	37.50%	13.94%	3.12%	19.71%	1.49%	0.11%
14	306423	-1.26%	236800	73.30%	26.70%	9.87%	1.72%	14.08%	1.04%	0.10%
15	308740	-0.51%	248177	49.70%	50.30%	13.80%	15.93%	19.73%	1.78%	0.18%
16	320938	3.42%	276860	66.97%	33.03%	11.76%	8.54%	11.69%	1.49%	0.14%
17	325138	4.77%	292621	67.41%	32.59%	8.58%	8.39%	14.42%	1.01%	0.12%

DuPage 6 district

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		1.07%		66.64%	33.36%	13.48%	5.24%	13.41%	1.49%	0.12%
1	155367	-0.07%	118582	44.63%	55.37%	37.45%	5.75%	11.29%	2.92%	0.13%
2	154475	-0.65%	121424	75.89%	24.11%	7.91%	4.20%	10.65%	1.14%	0.08%
3	156140	0.42%	122304	71.06%	28.94%	8.28%	6.16%	13.30%	1.10%	0.14%
4	154988	-0.32%	120022	78.20%	21.80%	6.90%	4.18%	9.18%	1.22%	0.10%
5	155950	0.30%	118369	62.17%	37.83%	8.57%	7.77%	20.27%	1.12%	0.14%
6	155957	0.31%	123632	67.38%	32.62%	12.21%	3.43%	15.80%	1.44%	0.12%

DuPage 18 district

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		3.73%		66.64%	33.36%	13.48%	5.24%	13.41%	1.49%	0.12%
1	51672	-0.30%	38615	48.80%	51.20%	8.15%	9.22%	32.65%	1.06%	0.13%
2	51391	-0.84%	38473	43.76%	56.24%	40.26%	4.89%	10.07%	3.18%	0.13%
3	52339	0.99%	40155	44.03%	55.97%	45.58%	3.64%	5.98%	3.27%	0.10%
4	52297	0.91%	41662	59.36%	40.64%	8.85%	5.66%	24.93%	1.05%	0.16%
5	52394	1.09%	39679	65.84%	34.16%	12.59%	8.17%	12.14%	1.65%	0.13%
6	51790	-0.07%	39219	79.56%	20.44%	9.19%	2.54%	7.50%	1.14%	0.08%
7	52054	0.44%	40337	47.78%	52.22%	18.35%	5.97%	27.00%	1.74%	0.15%
8	52693	1.67%	40950	59.55%	40.45%	19.71%	6.06%	13.52%	2.03%	0.15%
9	50758	-2.06%	40847	75.84%	24.16%	11.62%	2.34%	9.09%	1.40%	0.12%
10	51424	-0.78%	40876	77.97%	22.03%	5.97%	5.02%	9.60%	0.98%	0.06%
11	52164	0.65%	41215	78.28%	21.72%	8.23%	4.42%	7.58%	1.30%	0.08%
12	51124	-1.36%	40243	70.31%	29.69%	9.88%	2.93%	15.46%	1.39%	0.08%
13	51723	-0.20%	41641	75.44%	24.56%	7.85%	5.55%	10.18%	1.02%	0.13%
14	52474	1.25%	39712	82.47%	17.53%	5.97%	2.71%	7.27%	1.19%	0.10%
15	51925	0.19%	39710	79.38%	20.62%	6.72%	5.13%	7.24%	1.09%	0.13%
16	51633	-0.37%	40913	65.96%	34.04%	10.69%	9.16%	13.09%	1.15%	0.15%
17	51420	-0.78%	39914	70.04%	29.96%	7.96%	5.99%	14.58%	1.11%	0.10%
18	51602	-0.43%	40172	73.70%	26.30%	6.35%	4.87%	13.73%	1.06%	0.15%

Kane

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		6.28%		59.04%	40.96%	29.17%	5.82%	4.87%	2.75%	0.11%
1	20914	-2.82%	15572	28.78%	71.22%	60.70%	7.80%	2.47%	4.57%	0.12%
2	20967	-2.58%	16100	80.55%	19.45%	10.50%	4.04%	3.22%	1.76%	0.10%
3	20941	-2.70%	15276	30.83%	69.17%	58.58%	8.88%	1.42%	4.69%	0.20%
4	22079	2.59%	16929	76.31%	23.69%	11.00%	5.23%	6.04%	1.38%	0.06%
5	21217	-1.42%	16776	53.98%	46.02%	29.52%	11.91%	3.67%	2.30%	0.12%
6	21413	-0.51%	15193	22.58%	77.42%	58.73%	14.11%	4.46%	3.84%	0.15%
7	21583	0.28%	16015	25.95%	74.05%	58.71%	11.92%	3.13%	4.00%	0.12%
8	21143	-1.76%	15187	25.72%	74.28%	58.85%	12.28%	3.12%	5.50%	0.06%
9	21105	-1.94%	16077	84.36%	15.64%	8.41%	2.99%	2.51%	1.29%	0.08%
10	21901	1.76%	17039	86.94%	13.06%	7.45%	1.09%	2.61%	1.47%	0.11%
11	22027	2.35%	16100	86.68%	13.32%	5.86%	2.13%	3.77%	1.08%	0.06%
12	21468	-0.25%	16255	87.09%	12.91%	5.23%	1.77%	4.23%	1.35%	0.04%
13	21918	1.84%	16362	78.39%	21.61%	8.99%	1.85%	9.01%	1.34%	0.06%
14	21043	-2.22%	16134	65.33%	34.67%	19.95%	4.48%	8.68%	2.73%	0.08%
15	21687	0.77%	16302	65.46%	34.54%	16.45%	4.20%	12.96%	1.66%	0.14%
16	22141	2.88%	17466	49.00%	51.00%	36.71%	7.93%	5.09%	3.90%	0.13%
17	21743	1.03%	15980	27.84%	72.16%	58.71%	10.10%	3.02%	5.36%	0.25%
18	21469	-0.25%	15362	68.14%	31.86%	16.37%	4.18%	10.09%	1.78%	0.21%
19	21586	0.30%	16966	71.64%	28.36%	14.15%	3.74%	9.09%	1.61%	0.07%

20	21825	1.41%	15908	31.04%	68.96%	58.52%	7.24%	2.56%	5.20%	0.20%
21	20790	-3.40%	15167	53.89%	46.11%	32.58%	5.60%	6.86%	2.69%	0.13%
22	21991	2.18%	17967	87.74%	12.26%	7.05%	1.37%	2.33%	1.29%	0.08%
23	21633	0.52%	17036	82.79%	17.21%	9.72%	2.15%	3.80%	1.37%	0.07%
24	21938	1.93%	15645	30.72%	69.28%	61.32%	4.65%	2.63%	4.63%	0.13%

Kendall

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		1.06%		67.74%	32.26%	18.23%	8.21%	4.24%	2.06%	0.11%
1	66285	0.53%	47253	60.57%	39.43%	23.55%	9.14%	5.25%	2.26%	0.10%
2	65584	-0.53%	46702	74.99%	25.01%	12.85%	7.28%	3.23%	1.85%	0.13%

Kendall 10 district

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		4.31%		67.74%	32.26%	18.23%	8.21%	4.24%	2.06%	0.11%
1	13367	1.37%	9988	59.88%	40.12%	29.71%	6.41%	2.16%	2.50%	0.05%
2	13064	-0.93%	8822	55.85%	44.15%	26.64%	11.35%	4.82%	2.66%	0.09%
3	13286	0.75%	9609	60.44%	39.56%	13.41%	12.98%	12.11%	1.34%	0.09%
4	13285	0.74%	9657	77.10%	22.90%	11.90%	4.98%	3.92%	2.12%	0.18%
5	12994	-1.46%	8766	70.85%	29.15%	12.81%	8.80%	6.51%	1.60%	0.09%
6	13306	0.90%	8931	58.17%	41.83%	21.14%	15.02%	4.62%	2.22%	0.15%
7	13423	1.79%	9814	82.59%	17.41%	9.96%	3.87%	1.68%	1.94%	0.18%
8	12855	-2.52%	9627	71.81%	28.19%	22.16%	2.87%	0.72%	2.67%	0.10%
9	13047	-1.06%	9335	66.40%	33.60%	20.57%	9.22%	2.64%	1.75%	0.14%
10	13242	0.42%	9406	72.91%	27.09%	14.19%	7.65%	3.60%	1.78%	0.06%

Lake

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		4.98%		61.00%	39.00%	21.33%	7.49%	8.87%	2.22%	0.18%
1	37414	-0.49%	27876	58.24%	41.76%	6.25%	1.99%	32.41%	0.87%	0.13%
2	37000	-1.59%	27135	36.96%	63.04%	53.43%	5.27%	3.10%	4.65%	0.22%
3	37780	0.49%	30051	25.25%	74.75%	39.10%	30.54%	4.75%	2.64%	0.54%
4	38047	1.20%	27737	12.67%	87.33%	65.48%	14.65%	6.78%	4.93%	0.18%
5	37485	-0.30%	27752	21.86%	78.14%	54.05%	18.55%	4.44%	5.49%	0.25%
6	38162	1.50%	28312	32.62%	67.38%	40.10%	22.43%	3.57%	4.26%	0.24%
7	36941	-1.74%	28249	57.03%	42.97%	18.91%	14.06%	8.29%	2.38%	0.17%
8	37153	-1.18%	29101	64.21%	35.79%	12.30%	8.19%	13.95%	1.64%	0.23%
9	37073	-1.39%	28221	72.55%	27.45%	15.90%	4.22%	5.44%	2.13%	0.15%
10	36749	-2.26%	28906	84.68%	15.32%	7.87%	2.41%	2.67%	1.81%	0.22%
11	37088	-1.35%	27773	73.36%	26.64%	14.46%	3.43%	6.79%	2.08%	0.18%
12	37990	1.05%	29820	83.18%	16.82%	8.65%	1.27%	5.47%	1.34%	0.07%
13	37411	-0.49%	28865	82.72%	17.28%	5.27%	1.97%	8.66%	0.85%	0.14%
14	38621	2.72%	29601	74.07%	25.93%	13.18%	1.80%	9.69%	1.50%	0.14%
15	38301	1.87%	29530	73.85%	26.15%	12.86%	3.69%	8.10%	1.53%	0.14%
16	37692	0.25%	28388	68.77%	31.23%	11.35%	1.88%	17.05%	1.11%	0.09%
17	37167	-1.14%	28600	79.93%	20.07%	12.41%	2.06%	4.33%	1.37%	0.09%
18	38020	1.13%	28983	82.14%	17.86%	4.01%	1.57%	11.09%	0.50%	0.07%
19	38248	1.73%	29137	70.22%	29.78%	14.12%	2.40%	12.09%	1.40%	0.18%

McHenry

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		4.57%		80.23%	19.77%	12.59%	1.64%	3.45%	1.89%	0.08%
1	33643	-2.40%	25314	62.80%	37.20%	30.80%	2.47%	2.00%	2.65%	0.07%
2	34951	1.40%	27544	87.73%	12.27%	7.46%	0.86%	1.15%	2.05%	0.06%
3	33612	-2.49%	26515	83.07%	16.93%	11.51%	1.07%	1.98%	1.97%	0.10%
4	34496	0.08%	26821	84.46%	15.54%	9.60%	1.33%	2.71%	1.74%	0.04%
5	35171	2.03%	27673	84.73%	15.27%	8.73%	1.13%	2.94%	1.83%	0.10%
6	34223	-0.72%	26716	83.62%	16.38%	9.92%	1.36%	3.38%	1.58%	0.11%
7	34318	-0.44%	26871	77.32%	22.68%	12.69%	2.56%	5.94%	1.67%	0.10%
8	35187	2.08%	26820	80.96%	19.04%	12.20%	1.70%	2.91%	1.85%	0.06%
9	34628	0.46%	24603	75.75%	24.25%	11.57%	2.45%	8.41%	1.70%	0.10%

McHenry 18 district

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		9.68%		80.23%	19.77%	12.59%	1.64%	3.45%	1.89%	0.08%
1	16447	-4.57%	12091	53.76%	46.24%	40.12%	2.41%	2.13%	2.85%	0.08%
2	18076	4.88%	14288	87.20%	12.80%	7.68%	1.06%	1.52%	1.71%	0.07%
3	17265	0.17%	13140	72.44%	27.56%	20.20%	2.30%	2.79%	2.69%	0.08%
4	17020	-1.25%	13132	82.52%	17.48%	11.29%	1.27%	3.14%	1.78%	0.11%
5	16576	-3.82%	13201	83.99%	16.01%	9.00%	1.62%	3.67%	1.35%	0.10%
6	16680	-3.22%	12900	83.61%	16.39%	9.27%	1.63%	3.53%	1.47%	0.05%
7	16599	-3.69%	13009	76.23%	23.77%	15.17%	2.62%	4.42%	2.02%	0.15%
8	16657	-3.35%	12481	78.74%	21.26%	8.08%	2.52%	9.04%	1.17%	0.05%
9	17474	1.39%	12611	79.74%	20.26%	10.24%	2.25%	6.33%	1.39%	0.03%
10	18002	4.45%	14270	84.81%	15.19%	10.83%	0.93%	1.36%	1.98%	0.06%
11	17516	1.63%	13385	86.05%	13.95%	6.72%	1.02%	3.83%	1.45%	0.12%
12	17863	3.64%	14184	86.13%	13.87%	9.32%	0.90%	1.03%	2.09%	0.06%
13	17206	-0.17%	13496	86.60%	13.40%	8.12%	0.73%	1.44%	2.44%	0.08%
14	16697	-3.12%	12916	71.14%	28.86%	21.91%	2.69%	2.01%	2.58%	0.04%
15	18116	5.11%	14223	81.41%	18.59%	13.47%	0.98%	1.95%	1.91%	0.08%
16	17505	1.57%	13670	87.38%	12.62%	5.90%	1.35%	3.41%	1.54%	0.11%
17	16935	-1.74%	13507	83.53%	16.47%	10.78%	1.04%	2.27%	1.89%	0.05%
18	17595	2.09%	12373	73.96%	26.04%	11.82%	2.79%	9.59%	1.75%	0.15%

 $Will^{21}$

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		4.40%		63.44%	36.56%	16.43%	12.27%	6.56%	1.83%	0.08%
1	62603	-0.73%	44860	57.28%	42.72%	7.16%	7.14%	27.42%	0.95%	0.11%
2	63073	0.02%	47312	47.18%	52.82%	17.40%	17.50%	17.03%	1.72%	0.09%
3	62617	-0.71%	46694	43.28%	56.72%	32.23%	15.74%	7.80%	2.62%	0.12%
4	65099	3.23%	48857	72.07%	27.93%	12.51%	7.41%	6.42%	1.68%	0.12%
5	62919	-0.23%	46072	27.82%	72.18%	45.23%	25.69%	0.95%	3.03%	0.10%
6	62554	-0.81%	47374	60.35%	39.65%	21.56%	13.74%	3.09%	1.97%	0.12%
7	63080	0.03%	49588	66.55%	33.45%	18.95%	9.32%	3.52%	2.28%	0.06%
8	62327	-1.17%	47130	88.42%	11.58%	6.64%	1.46%	2.08%	1.10%	0.03%
9	63523	0.73%	48444	87.99%	12.01%	6.33%	2.11%	1.04%	1.86%	0.07%
10	63430	0.58%	49174	59.75%	40.25%	8.19%	28.98%	1.78%	1.81%	0.06%
11	62455	-0.96%	47907	87.17%	12.83%	5.76%	2.77%	2.80%	1.16%	0.03%

For the district containing Stateville Correctional Center, the population at Stateville was not included in the district population, consistent with its exclusion in the county board documents for the enacted current maps. Deviation calculations were adjusted accordingly, so that Stateville population is not figured into those calculations.

Will 22 district²²

	Total population	Deviation	VAP	White	Minority	Hispanic	Black	Asian	Native	Pacific
Total		8.74%		63.44%	36.56%	16.43%	12.27%	6.56%	1.83%	0.08%
1	32641	3.52%	24477	35.49%	64.51%	32.68%	22.16%	8.93%	2.75%	0.14%
2	30290	-3.94%	23107	42.23%	57.77%	19.25%	21.28%	16.44%	1.81%	0.09%
3	32270	2.34%	22810	49.68%	50.32%	6.74%	8.74%	33.94%	0.75%	0.11%
4	31122	-1.30%	23067	66.60%	33.40%	4.73%	4.41%	22.87%	0.83%	0.10%
5	32426	2.84%	22859	62.26%	37.74%	10.51%	8.73%	17.48%	1.18%	0.14%
6	31018	-1.63%	22656	41.94%	58.06%	32.15%	15.97%	9.25%	2.41%	0.07%
7	30195	-4.24%	23489	39.02%	60.98%	8.67%	50.04%	1.19%	2.15%	0.06%
8	32791	4.00%	24645	36.72%	63.28%	30.30%	30.87%	1.44%	2.54%	0.07%
9	30992	-1.71%	23892	49.67%	50.33%	31.65%	15.80%	1.97%	2.21%	0.12%
10	32071	1.71%	22960	21.28%	78.72%	54.80%	22.51%	1.21%	3.55%	0.10%
11	31293	-0.75%	22882	89.75%	10.25%	5.70%	1.53%	1.28%	1.13%	0.05%
12	31995	1.47%	25414	82.59%	17.41%	8.10%	6.31%	1.00%	1.77%	0.08%
13	32371	2.66%	25463	88.78%	11.22%	6.10%	1.38%	0.74%	2.32%	0.05%
14	32555	3.25%	25355	86.33%	13.67%	5.94%	2.80%	3.50%	1.21%	0.04%
15	31617	0.27%	23761	83.28%	16.72%	5.45%	6.78%	3.22%	1.09%	0.03%
16	30075	-4.62%	21785	60.44%	39.56%	22.31%	11.73%	4.24%	1.98%	0.16%
17	32583	3.34%	23944	86.92%	13.08%	7.39%	2.03%	2.15%	1.20%	0.02%

For the district containing Stateville Correctional Center, the population at Stateville was not included in the district population, consistent with its exclusion in the county board documents for the enacted current maps. Deviation calculations were adjusted accordingly, so that Stateville population is not figured into those calculations.

18	30035	-4.74%	23761	75.01%	24.99%	13.14%	7.58%	2.65%	1.72%	0.05%
19	30485	-3.32%	23800	88.87%	11.13%	6.63%	0.82%	2.08%	1.29%	0.04%
20	32751	3.87%	26087	71.09%	28.91%	17.36%	6.31%	3.60%	2.11%	0.11%
21	31202	-1.04%	24618	65.44%	34.56%	19.50%	9.86%	3.62%	2.29%	0.04%
22	30902	-1.99%	22580	70.95%	29.05%	14.37%	7.56%	5.44%	1.99%	0.12%

Appendix F: Hypothetical county board map compactness data

Cook

District	Reock	Polsby-Popper
1	0.4084	0.2384
2	0.2941	0.2440
3	0.3068	0.1813
4	0.5045	0.3681
5	0.5466	0.4002
6	0.5038	0.4420
7	0.3093	0.2862
8	0.1881	0.1128
9	0.2488	0.1305
10	0.4353	0.2642
11	0.2052	0.1075
12	0.4661	0.5500
13	0.2027	0.2273
14	0.2777	0.4866
15	0.4814	0.5722
16	0.4001	0.3799
17	0.4093	0.1638

DuPage

District	Reock	Polsby-Popper
1	0.1592	0.0964
2	0.3217	0.2990
3	0.4309	0.4795
4	0.3500	0.2895
5	0.4372	0.4892
6	0.2431	0.2432

DuPage 18 District

District	Reock	Polsby-Popper
1	0.1664	0.1615
2	0.1724	0.1300
3	0.3403	0.1949
4	0.2652	0.1447
5	0.1834	0.1268
6	0.3525	0.2990
7	0.3248	0.3134
8	0.2026	0.1823
9	0.2806	0.2990
10	0.4662	0.2381
11	0.3069	0.1809
12	0.3954	0.2624
13	0.3262	0.2302
14	0.2768	0.3033
15	0.2809	0.3559
16	0.3920	0.4685
17	0.3847	0.3319
18	0.3216	0.2755

Kane

District	Reock	Polsby-Popper
1	0.4612	0.2462
2	0.4828	0.4154
3	0.2153	0.2224
4	0.2437	0.2632
5	0.4930	0.2833
6	0.4580	0.4348
7	0.4406	0.4593
8	0.3887	0.4765
9	0.4385	0.4808
10	0.4922	0.5011
11	0.3102	0.3400
12	0.5927	0.7127
13	0.4097	0.3849
14	0.2339	0.2775
15	0.4141	0.3794
16	0.3125	0.3176
17	0.3096	0.3172
18	0.3795	0.3681
19	0.3638	0.3505
20	0.4186	0.4294
21	0.4715	0.3477
22	0.3606	0.3310
23	0.3513	0.3976
24	0.4675	0.4513

Kendall

District	Reock	Polsby-Popper
1	0.1783	0.2231
2	0.5152	0.4857

Kendall 10 District

District	Reock	Polsby-Popper
1	0.4756	0.6239
2	0.3323	0.4254
3	0.2583	0.2887
4	0.4629	0.3210
5	0.2959	0.2935
6	0.5416	0.6064
7	0.5770	0.5771
8	0.4306	0.4789
9	0.2831	0.3715
10	0.3733	0.3453

Lake

District	Reock	Polsby-Popper
1	0.3054	0.1672
2	0.5171	0.5728
3	0.4108	0.3363
4	0.2844	0.2937
5	0.2650	0.2784
6	0.6109	0.4725
7	0.3684	0.3700
8	0.5119	0.5217
9	0.3081	0.4038
10	0.3779	0.4251
11	0.4166	0.3044
12	0.3864	0.3551
13	0.2965	0.2920
14	0.5640	0.3785
15	0.4979	0.3286
16	0.3508	0.2584
17	0.3676	0.5265
18	0.3280	0.3107
19	0.5677	0.4618

McHenry

District	Reock	Polsby-Popper
1	0.2570	0.2107
2	0.3540	0.4157
3	0.3438	0.4035
4	0.5032	0.4675
5	0.3496	0.3003
6	0.4572	0.3118
7	0.3706	0.3551
8	0.4196	0.3070
9	0.5762	0.6793

McHenry 18 District

District	Reock	Polsby-Popper
1	0.1179	0.1649
2	0.2653	0.2590
3	0.4223	0.3763
4	0.3088	0.2883
5	0.5176	0.5142
6	0.3643	0.3181
7	0.4595	0.2773
8	0.3262	0.2907
9	0.4498	0.3479
10	0.5703	0.7346
11	0.3974	0.2436
12	0.3205	0.2252
13	0.3238	0.3693
14	0.3857	0.3754
15	0.1949	0.3033
16	0.5064	0.5355
17	0.2319	0.2484
18	0.4663	0.4897

Will

District	Reock	Polsby-Popper
1	0.5307	0.6443
2	0.3075	0.3986
3	0.3555	0.4170
4	0.4472	0.2589
5	0.4948	0.2566
6	0.3328	0.1963
7	0.3313	0.3044
8	0.5984	0.6429
9	0.3563	0.4152
10	0.3043	0.3567
11	0.2048	0.2437

Will 22 District

District	Reock	Polsby-Popper
1	0.3551	0.3973
2	0.2775	0.2780
3	0.3730	0.2272
4	0.1947	0.2330
5	0.4283	0.4009
6	0.2788	0.3350
7	0.1841	0.2961
8	0.3002	0.2913
9	0.4135	0.5402
10	0.3313	0.3699
11	0.5513	0.5079
12	0.2638	0.3179
13	0.5893	0.4448
14	0.2834	0.3009
15	0.4811	0.5430
16	0.4670	0.5134
17	0.5983	0.5605
18	0.2962	0.3229
19	0.3204	0.3691
20	0.3142	0.1788
21	0.3998	0.3850
22	0.5140	0.4549