

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

WILLIAM WHITFORD, et al.,

Plaintiffs,

v.

Case No. 15-CV-421-bbc

GERALD NICHOL, et al.,

Defendants.

DEFENDANTS' PROPOSED FINDINGS OF FACT

The defendants, Gerald Nichol, et al., by their attorneys, Wisconsin Attorney General Brad D. Schimel and Assistant Attorneys General Brian P. Keenan and Anthony D. Russomanno, and pursuant to the Court's October 15, 2015, Preliminary Pretrial Conference Order, offer the following findings of fact the defendants request the Court to find after trial:

HISTORY OF ELECTIONS IN WISCONSIN

1. The Government Accountability Board's official election results are authoritative for Wisconsin elections dating back to the year 2000.
2. For elections in years prior to 2000, the Wisconsin Blue Book's election results are authoritative.
3. The City of Milwaukee Election Commission maintains election results dating back to 1997 on its website. These results are authoritative for election results in the City of Milwaukee.

4. The following chart contains the number of seats won by Democratic, Republican and Independent candidates in the November general elections from 1972 to 2014. The party with the majority is listed in bold.

Year	Democrat	Republican	Independent
1972	62	37	
1974	63	36	
1976	66	33	
1978	60	39	
1980	59	40	
1982	59	40	
1984	52	47	
1986	54	45	
1988	56	43	
1990	58	41	
1992	52	47	
1994	48	51	
1996	47	52	
1998	44	55	
2000	43	56	
2002	41	58	
2004	39	60	
2006	47	52	
2008	52	46	1
2010	38	60	1
2012	39	60	
2014	36	63	

5. The Democrats won a majority of seats in the Wisconsin Assembly in each general election from 1972 through 1994.

6. The Republicans won a majority of seats in the Wisconsin Assembly in each general election from 1994 through 2014, with the exception of the 2008 election.

7. The Assembly map in place for the 1972, 1974, 1976, 1978 and 1980 plans was enacted by the Democratic Assembly and Republican Senate and signed by a Democratic Governor.

8. The Assembly map in place for the 1982 election was put in place by the federal court in *Wisconsin State AFL-CIO v. Elections Bd.*, 543 F. Supp. 630 (E.D. Wis. 1982).

9. The Assembly map in place for the 1982 election was amended and enacted by the Democratic Assembly and Democratic Senate and signed by a Democratic Governor and was then in place for the 1984, 1986, 1988 and 1990 elections.

10. The Assembly map in place for the 1992, 1994, 1996, 1998 and 2000 elections was drawn by the federal court in *Prosser v. Elections Board*, 793 F. Supp. 859 (W.D. Wis. 1992).

11. The Assembly map in place for the 2002, 2004, 2006, 2008 and 2010 elections was drawn by the federal court in *Baumgart v. Wendelberger*, No. 01-C-0121, 2002 WL 34127471, at *1 (E.D. Wis. May 30, 2002), *amended*, 2002 WL 34127473 (E.D. Wis. July 11, 2002).

12. Professor Jackman analyzed each Wisconsin Assembly election since 1972 and found that Wisconsin's *EG* has ranged from a high (most favorable to Democrats) of +2.48% in 1994 to a low (most favorable to Republicans) of -13.31% in 2012.

13. Disregarding results from the current plan, the lowest *EG* was -11.83% in 2006.

14. The most favorable *EG* towards Democrats notably occurred in 1994 when the Republicans gained control of the Assembly for the first time since the 1968 election.

15. Professor Jackman finds that “Wisconsin has recorded an unbroken run of negative *EG* estimates from 1998 to 2014.”

16. The last positive *EG* that Professor Jackman found in Wisconsin was the 2.48% from 1994.

17. With respect to the 2002 Plan, Professor Jackman calculated an average efficiency gap of -7.6%, with -4.0% as the most favorable year to Democrats and -11.8% as the most favorable year to Republicans.

18. In 1992, the Democrats’ seat share rounded to the nearest .25% was 52.5%. Given that Professor Jackman calculates an *EG* of -2%, the Democratic vote share was 52.25% because the implied seat share if the efficiency gap was zero is 54.5%

19. In 1994, the Democrats’ seat share rounded to the nearest 0.25% was 48.5%. Given that Professor Jackman calculates an *EG* of +2%, the Democratic vote share was 48.25% because the implied seat share if the efficiency gap was zero is 46.5%.

20. In 1996, the Democrats’ seat share rounded to the nearest 0.25% was 47.5%. Given that Professor Jackman calculates an *EG* of 0%, the Democratic vote

share was 48.75% because the implied seat share if the efficiency gap was zero is 47.5%.

21. In 1998, the Democrats' seat share rounded to the nearest 0.25% was 44.5%. Given that Professor Jackman calculates an *EG* of -7.5% , the Democratic vote share was 51% because the implied seat share if the efficiency gap was zero is 52%.

22. In 2000, the Democrats' seat share rounded to the nearest 0.25% was 43.5%. Given that Professor Jackman calculates an *EG* of -6% , the Democratic vote share was 49.75% because the implied seat share if the efficiency gap was zero is 49.5%.

23. In 2002, the Democrats' seat share rounded to the nearest 0.25% was 41.5%. Given that Professor Jackman calculates an *EG* of -7.5% , the Democratic vote share was 49.5% because the implied seat share if the efficiency gap was zero is 49%.

24. In 2004, the Democrats' seat share rounded to the nearest 0.25% was 40%. Given that Professor Jackman calculates an *EG* of -10% , the Democratic vote share was 50% because the implied seat share if the efficiency gap was zero is 50%.

25. In 2006, the Democrats' seat share rounded to the nearest 0.25% was 47.5%. Given that Professor Jackman calculates an *EG* of -12% , the Democratic vote share was 54.75% because the implied seat share if the efficiency gap was zero is 59.5%.

26. In 2008, the Democrats' seat share rounded to the nearest 0.25% was 53%. Given that Professor Jackman calculates an *EG* of -5%, the Democratic vote share was 54% because the implied seat share if the efficiency gap was zero is 58%.

27. In 2010, the Democrats' seat share rounded to the nearest 0.25% was 39%. Given that Professor Jackman calculates an *EG* of -4%, the Democratic vote share was 46.5% because the implied seat share if the efficiency gap was zero is 43%.

28. In 2012, Professor Jackman calculates that the Democrats' vote share was 51.4%. This yields an implied seat share of 52.8% if the efficiency gap was zero. The Democrats' actual seat share was 39.4%, yielding an efficiency gap of -13.4%.

29. In 2014, Professor Jackman calculates that the Democrats' vote share was 48.0%. This yields an implied seat share of 46.0% if the efficiency gap was zero. Their actual seat share was 36.4%, which yields an efficiency gap of -9.6%.

30. In 1988, Michael Dukakis, the Democratic candidate for President, won 1,126,794 votes in Wisconsin to Republican George H.W. Bush's 1,047,499 votes, winning 51.8% of the two-party vote.

31. In the presidential election nationwide, George H.W. Bush won 53.9% of the two-party vote and Dukakis won 46.1%.

32. The following chart shows the vote totals for Dukakis and Bush in each county in Wisconsin.

County	Dukakis Vote	Bush Vote	Two Party Total
Adams	3,598	3,258	6,856

County	Dukakis Vote	Bush Vote	Two Party Total
Ashland	4,526	2,926	7,452
Barron	8,951	8,527	17,478
Bayfield	4,323	3,095	7,418
Brown	41,788	43,625	85,413
Buffalo	3,481	2,783	6,264
Burnett	3,537	2,884	6,421
Calumet	6,481	8,107	14,588
Chippewa	11,447	9,757	21,204
Clark	6,642	6,296	12,938
Columbia	9,132	10,475	19,607
Crawford	3,608	3,238	6,846
Dane	105,414	69,143	174,557
Dodge	12,663	17,003	29,666
Door	5,425	6,907	12,332
Douglas	13,907	6,440	20,347
Dunn	9,205	7,273	16,478
Eau Claire	21,150	17,664	38,814
Florence	1,018	1,106	2,124
Fond du Lac	15,887	21,985	37,872
Forest	2,142	1,845	3,987
Grant	9,421	10,049	19,470
Green	5,153	6,636	11,789
Green Lake	3,033	5,205	8,238
Iowa	4,268	4,240	8,508
Iron	2,090	1,599	3,689
Jackson	3,924	3,555	7,479
Jefferson	11,816	14,309	26,125
Juneau	3,734	4,869	8,603
Kenosha	30,089	21,661	51,750
Kewaunee	4,786	4,330	9,116
La Crosse	22,204	21,548	43,752
Lafayette	3,521	3,665	7,186
Langlade	4,254	4,884	9,138
Lincoln	5,819	5,257	11,076
Manitowoc	19,680	16,020	35,700
Marathon	24,658	24,482	49,140

County	Dukakis Vote	Bush Vote	Two Party Total
Marinette	8,030	9,637	17,667
Marquette	2,463	3,059	5,522
Menominee	1,028	381	1,409
Milwaukee	268,287	168,363	436,650
Monroe	6,437	7,073	13,510
Oconto	6,549	7,084	13,633
Oneida	7,414	8,130	15,544
Outagamie	27,771	33,113	60,884
Ozaukee	12,661	22,899	35,560
Pepin	1,906	1,311	3,217
Pierce	8,659	6,045	14,704
Polk	8,981	6,866	15,847
Portage	16,317	12,057	28,374
Price	3,987	3,450	7,437
Racine	39,631	36,342	75,973
Richland	3,643	4,026	7,669
Rock	29,576	28,178	57,754
Rusk	3,888	3,063	6,951
St. Croix	11,392	9,960	21,352
Sauk	8,324	10,225	18,549
Sawyer	3,231	3,260	6,491
Shawano	6,587	8,362	14,949
Sheboygan	23,429	23,471	46,900
Taylor	3,785	4,254	8,039
Trempealeau	6,212	4,902	11,114
Vernon	5,754	5,226	10,980
Vilas	3,781	5,842	9,623
Walworth	12,203	18,259	30,462
Washburn	3,393	3,074	6,467
Washington	15,907	24,328	40,235
Waukesha	57,598	90,467	148,065
Waupaca	7,078	11,559	18,637
Waushara	3,535	4,953	8,488
Winnebago	28,508	35,085	63,593

County	Dukakis Vote	Bush Vote	Two Party Total
Wood	16,074	16,549	32,623
	1,126,794	1,047,499	2,174,293

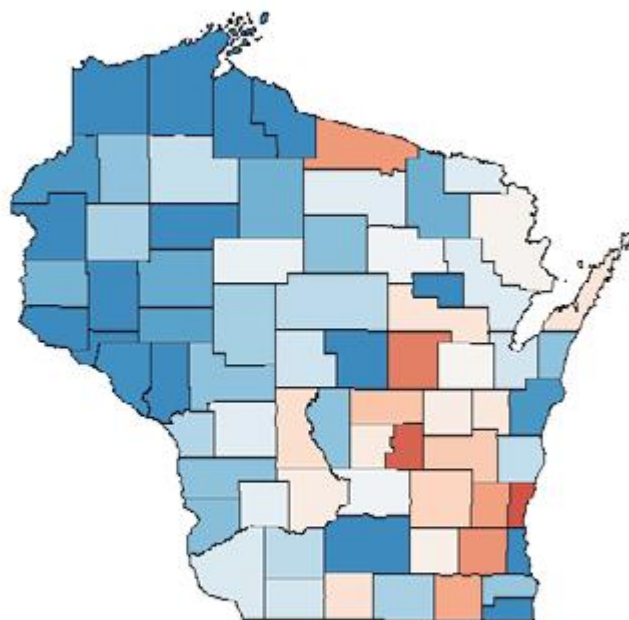
33. The following chart shows the vote totals and two-party vote percentages for Dukakis and Bush in Dane, Milwaukee and Rock Counties.

County	Dukakis Vote	Bush Vote	Two Party Total
Dane	105,414 (60.39%)	69,143 (39.61%)	174,557
Milwaukee	268,287 (61.44%)	168,363 (38.56%)	436,650
Rock	29,576 (51.21%)	28,178 (48.79%)	57,754

34. In 1988, the Democratic Party in Wisconsin had a broad geographic reach. It was strongest on the Menominee Indian Reservation (Partisan Index of 26.86), as is the case today. The other four most Democratic counties were Douglas (22.47 PI), Milwaukee (15.34 PI), Ashland (14.63) and Dane (14.3). Seventy-one percent of counties had Democratic leans, and the Democratic Party covered the entire Western portion of the State, particularly in the northwest. Republicans were relegated to suburban and rural counties in the southeast and east-central portions of the State.

35. The following map shows the PIs of each county in Wisconsin in 1988, with blue shading for counties with Democratic leans and red shading for counties with Republican leans, with darker shading for stronger leans.

Wisconsin County PI 1988



36. In 1992, Bill Clinton, the Democratic candidate for President, won 1,041,066 votes in Wisconsin to Republican George H.W. Bush's 930,855, winning 52.8% of the two-party vote share.

37. In the presidential election nationwide, Clinton won 53.5% of the two-party vote share to Bush's 46.5%.

38. The following chart shows the vote totals for Clinton and Bush in each county in Wisconsin.

County	Clinton Vote	Bush Vote	Two Party Total
Adams	3,539	2,465	6,004
Ashland	4,213	2,372	6,585
Barron	8,063	6,572	14,635
Bayfield	3,873	2,393	6,266
Brown	37,513	42,352	79,865
Buffalo	2,996	2,029	5,025
Burnett	3,172	2,340	5,512
Calumet	5,701	7,541	13,242
Chippewa	10,487	8,215	18,702
Clark	5,540	4,977	10,517
Columbia	9,348	9,099	18,447
Crawford	3,540	2,390	5,930
Dane	114,724	61,957	176,681
Dodge	11,438	14,971	26,409
Door	4,735	5,468	10,203
Douglas	12,319	5,679	17,998
Dunn	7,965	5,283	13,248
Eau Claire	21,221	15,915	37,136
Florence	978	942	1,920
Fond du Lac	13,757	19,785	33,542
Forest	1,904	1,393	3,297
Grant	8,914	7,678	16,592
Green	5,467	4,887	10,354
Green Lake	2,772	3,897	6,669
Iowa	4,467	3,288	7,755
Iron	1,762	1,273	3,035
Jackson	3,681	2,644	6,325
Jefferson	11,593	13,072	24,665
Juneau	4,177	4,051	8,228
Kenosha	27,341	19,854	47,195
Kewaunee	4,050	3,570	7,620
La Crosse	22,838	18,891	41,729
Lafayette	3,143	2,582	5,725
Langlade	3,630	3,890	7,520
Lincoln	5,297	4,321	9,618

County	Clinton Vote	Bush Vote	Two Party Total
Manitowoc	15,903	14,008	29,911
Marathon	21,482	20,948	42,430
Marinette	7,626	7,984	15,610
Marquette	2,533	2,322	4,855
Menominee	691	244	935
Milwaukee	235,521	151,314	386,835
Monroe	6,427	6,118	12,545
Oconto	5,898	5,720	11,618
Oneida	7,160	6,725	13,885
Outagamie	23,735	30,370	54,105
Ozaukee	11,879	22,805	34,684
Pepin	1,673	1,098	2,771
Pierce	7,824	4,844	12,668
Polk	7,746	5,446	13,192
Portage	15,553	10,914	26,467
Price	3,575	2,654	6,229
Racine	34,875	32,310	67,185
Richland	3,458	3,144	6,602
Rock	31,154	21,942	53,096
Rusk	3,376	2,430	3,376
St. Croix	10,281	8,114	10,281
Sauk	9,128	8,886	9,128
Sawyer	2,796	2,658	2,796
Shawano	6,062	7,253	13,315
Sheboygan	20,568	22,526	43,094
Taylor	3,305	3,415	6,720
Trempealeau	6,218	3,577	9,795
Vernon	5,673	4,072	9,745
Vilas	3,764	4,616	8,380
Walworth	11,825	15,727	27,552
Washburn	3,080	2,586	5,666
Washington	13,339	22,739	36,078
Waukesha	50,270	91,461	141,731
Waupaca	6,666	10,252	16,918

County	Clinton Vote	Bush Vote	Two Party Total
Waushara	3,402	4,045	7,447
Winnebago	27,234	33,709	60,943
Wood	13,208	13,843	27,051
	1,041,066	930,855	1,971,921

39. The following chart shows the vote totals and two-party vote percentages for Clinton and Bush in Dane, Milwaukee and Rock Counties.

County	Clinton Vote	Bush Vote	Two Party Total
Dane	114,724 (64.93%)	61,957 (35.07%)	176,681
Milwaukee	235,521 (60.88%)	151,314 (39.12%)	386,835
Rock	31,154 (58.67%)	21,942 (41.33%)	53,096

40. In 1996, Bill Clinton, the Democratic candidate for President, won 1,071,971 votes in Wisconsin to Republican Bob Dole's 845,029 votes, winning 55.9% of the two-party vote share.

41. In the presidential election nationwide, Clinton won 54.7% of the two-party vote to Dole's 45.3%.

42. The following chart shows the vote totals for Clinton and Dole in each county in Wisconsin.

County	Clinton Vote	Dole Vote	Two Party Total
Adams	4,119	2,450	6,569
Ashland	3,808	1,863	5,671
Barron	8,025	6,158	14,183

County	Clinton Vote	Dole Vote	Two Party Total
Bayfield	3,895	2,250	6,145
Brown	42,823	38,563	81,386
Buffalo	2,681	1,800	4,481
Burnett	3,625	2,452	6,077
Calumet	6,940	7,049	13,989
Chippewa	9,647	7,520	17,167
Clark	5,540	4,622	10,162
Columbia	10,336	8,377	18,713
Crawford	3,658	2,149	5,807
Dane	109,347	59,487	168,834
Dodge	12,625	12,890	25,515
Door	5,590	4,948	10,538
Douglas	10,976	5,167	16,143
Dunn	7,536	4,917	12,453
Eau Claire	20,298	13,900	34,198
Florence	869	927	1,796
Fond du Lac	15,542	16,488	32,030
Forest	2,092	1,166	3,258
Grant	9,203	7,021	16,224
Green	6,136	4,697	10,833
Green Lake	3,152	3,565	6,717
Iowa	4,690	2,866	7,556
Iron	1,725	1,260	2,985
Jackson	3,705	2,262	5,967
Jefferson	13,188	12,681	25,869
Juneau	4,331	3,226	7,557
Kenosha	27,964	18,296	46,260
Kewaunee	4,311	3,431	7,742
La Crosse	23,647	16,482	40,129
Lafayette	3,261	2,172	5,433
Langlade	4,074	3,206	7,280
Lincoln	6,166	4,076	10,242
Manitowoc	16,750	13,239	29,989
Marathon	24,012	19,874	43,886
Marinette	8,413	7,231	15,644
Marquette	2,859	2,208	5,067

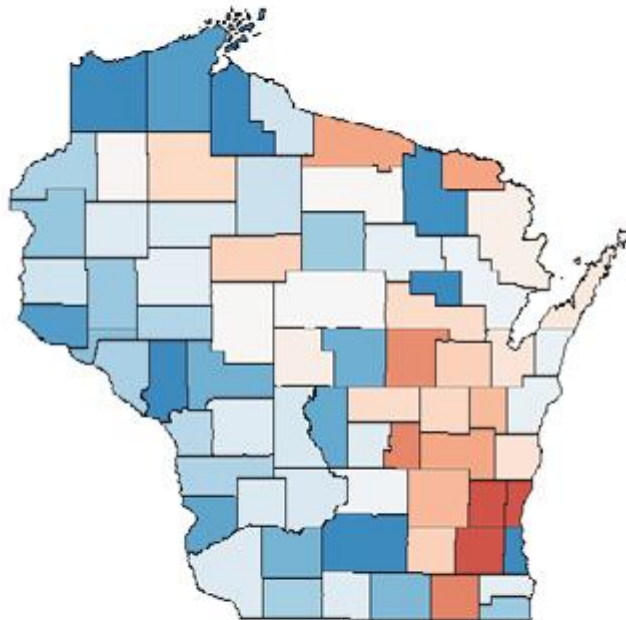
County	Clinton Vote	Dole Vote	Two Party Total
Menominee	992	230	1,222
Milwaukee	216,620	119,407	336,027
Monroe	6,924	5,299	12,223
Oconto	6,723	5,389	12,112
Oneida	7,619	6,339	13,958
Outagamie	28,815	27,758	56,573
Ozaukee	13,269	22,078	35,347
Pepin	1,585	1,007	2,592
Pierce	7,970	4,599	12,569
Polk	8,334	5,387	13,721
Portage	15,901	9,631	25,532
Price	3,523	2,545	6,068
Racine	38,567	30,107	68,674
Richland	3,502	2,642	6,144
Rock	32,450	20,096	52,546
Rusk	2941	2,219	2,941
St. Croix	11384	8,253	11,384
Sauk	9889	7,448	9,889
Sawyer	2773	2,603	2,773
Shawano	6,850	6,396	13,246
Sheboygan	22,022	20,067	42,089
Taylor	3,253	3,108	6,361
Trempealeau	5,848	3,035	8,883
Vernon	5,572	3,796	9,368
Vilas	4,226	4,496	8,722
Walworth	13,283	15,099	28,382
Washburn	3,231	2,703	5,934
Washington	17,154	25,829	42,983
Waukesha	57,354	91,729	149,083
Waupaca	7,800	8,679	16,479
Waushara	3,824	3,573	7,397
Winnebago	29,564	27,880	57,444
Wood	14,650	12,666	27,316
	1,071,971	845,029	1,917,000

43. Bill Clinton won Milwaukee, Dane and Rock Counties with 64% of the two-party vote and carried the rest of the state with 52% of the vote, a difference of twelve percentage points.

44. In 1996, forty-five counties (62.5%) had Democratic leans.

45. Below is a map showing the PIs of Wisconsin's counties in 1996.

Wisconsin County PI 1996



46. The following chart shows the vote totals and two-party vote percentages for Clinton and Dole in Dane, Milwaukee and Rock Counties.

County	Clinton Vote	Dole Vote	Two Party Total
Dane	109,347 (64.77%)	59,487 (35.23%)	168,834
Milwaukee	216,620 (64.47%)	119,407 (35.53%)	336,027
Rock	32,450 (61.75%)	20,096 (38.25%)	52,246

47. In 2000, Albert Gore, the Democratic candidate for President, won 1,242,987 votes in Wisconsin to Republican George W. Bush's 1,237,279 votes, winning 50.1% of the two-party vote.

48. In the presidential election nationwide, Gore won 50.27% of the two-party vote to Bush's 49.73%.

49. The following chart shows the vote totals for Gore and Bush in each county in Wisconsin, as well as a subtotal for votes in the City of Milwaukee.

County	Gore Vote	Bush Vote	Two Party Total
Adams	4,826	3,920	8,746
Ashland	4,356	3,038	7,394
Barron	8,928	9,848	18,776
Bayfield	4,427	3,266	7,693
Brown	49,096	54,258	103,354
Buffalo	3,237	3,038	6,275
Burnett	3,626	3,967	7,593
Calumet	8,202	10,837	19,039
Chippewa	12,102	12,835	24,937
Clark	5,931	7,461	13,392
Columbia	12,636	11,987	24,623

County	Gore Vote	Bush Vote	Two Party Total
Crawford	4,005	3,024	7,029
Dane	142,317	75,790	218,107
Dodge	14,580	21,684	36,264
Door	6,560	7,810	14,370
Douglas	13,593	6,930	20,523
Dunn	9,172	8,911	18,083
Eau Claire	24,078	20,921	44,999
Florence	816	1,528	2,344
Fond du Lac	18,181	26,548	44,729
Forest	2,158	2,404	4,562
Grant	10,691	10,240	20,931
Green	7,863	6,790	14,653
Green Lake	3,301	5,451	8,752
Iowa	5,842	4,221	10,063
Iron	1,620	1,734	3,354
Jackson	4,380	3,670	8,050
Jefferson	15,203	19,204	34,407
Juneau	4,813	4,910	9,723
Kenosha	32,429	28,891	61,320
Kewaunee	4,670	4,883	9,553
La Crosse	28,455	24,327	52,782
Lafayette	3,710	3,336	7,046
Langlade	4,199	5,125	9,324
Lincoln	6,664	6,727	13,391
Manitowoc	17,667	19,358	37,025
Marathon	26,546	28,883	55,429
Marinette	8,676	10,535	19,211
Marquette	3,437	3,522	6,959
Menominee	949	225	1,174
Milwaukee	252,329	163,491	415,820
<i>City of Milwaukee subtotal</i>	165,598	69,075	234,673
Monroe	7,460	8,217	15,677
Oconto	7,260	8,706	15,966

County	Gore Vote	Bush Vote	Two Party Total
Oneida	8,339	9,512	17,851
Outagamie	32,735	39,460	72,195
Ozaukee	15,030	31,155	46,185
Pepin	1,854	1,631	3,485
Pierce	8,559	8,169	16,728
Polk	8,961	9,557	18,518
Portage	17,942	13,214	31,156
Price	3,413	4,136	7,549
Racine	41,563	44,014	85,577
Richland	3,837	3,994	7,831
Rock	40,472	27,467	67,939
Rusk	3161	3,758	3,161
St. Croix	13077	15,240	13,077
Sauk	13035	11,586	13,035
Sawyer	3333	3,972	3,333
Shawano	7,335	9,548	16,883
Sheboygan	23,569	29,648	53,217
Taylor	3,254	5,278	8,532
Trempealeau	6,678	5,002	11,680
Vernon	6,577	5,684	12,261
Vilas	4,706	6,958	11,664
Walworth	15,492	22,982	38,474
Washburn	3,695	3,912	7,607
Washington	18,115	41,162	59,277
Waukesha	64,319	133,105	197,424
Waupaca	8,787	12,980	21,767
Waushara	4,239	5,571	9,810
Winnebago	33,983	38,330	72,313
Wood	15,936	17,803	33,739
	1,242,987	1,237,279	2,480,266

50. The following chart shows the vote totals and two-party vote percentages for Gore and Bush in Dane, Milwaukee and Rock Counties including a subtotal of votes in the City of Milwaukee.

County	Gore Vote	Bush Vote	Two Party Total
Dane	142,317 (65.25%)	75,790 (35.75%)	218,107
Milwaukee	252,329 (60.68%)	163,491 (39.32%)	415,820
<i>City of Milwaukee subtotal</i>	165,598 (70.57%)	69,075 (29.43%)	234,673
Rock	40,472 (59.57%)	27,467 (40.43%)	67,939

51. In 2004, John Kerry, the Democratic candidate for President, won 1,489,504 votes in Wisconsin to Republican George W. Bush's 1,478,120 votes, winning 50.2% of the two-party vote.

52. In the presidential election nationwide, Bush won 51.24% of the two-party vote to Kerry's 48.76%.

53. The following chart shows the vote totals for Kerry and Bush in each county in Wisconsin, along with a subtotal for votes in the City of Milwaukee.

County	Kerry Vote	Bush Vote	Two Party Total
Adams	5,447	4,890	10,337
Ashland	5,805	3,313	9,118
Barron	11,696	12,030	23,726
Bayfield	5,845	3,754	9,599
Brown	54,935	67,173	122,108
Buffalo	3,998	3,502	7,500

County	Kerry Vote	Bush Vote	Two Party Total
Burnett	4,499	4,743	9,242
Calumet	10,290	14,721	25,011
Chippewa	14,751	15,450	30,201
Clark	6,966	7,966	14,932
Columbia	14,300	14,956	29,256
Crawford	4,656	3,680	8,336
Dane	181,052	90,369	271,421
Dodge	16,690	27,201	43,891
Door	8,367	8,910	17,277
Douglas	16,537	8,448	24,985
Dunn	12,039	10,879	22,918
Eau Claire	30,068	24,653	54,721
Florence	993	1,703	2,696
Fond du Lac	19,216	33,291	52,507
Forest	2,509	2,608	5,117
Grant	12,864	12,208	25,072
Green	9,575	8,497	18,072
Green Lake	3,605	6,472	10,077
Iowa	7,122	5,348	12,470
Iron	1,956	1,884	3,840
Jackson	5,249	4,387	9,636
Jefferson	17,925	23,776	41,701
Juneau	5,734	6,473	12,207
Kenosha	40,107	35,587	75,694
Kewaunee	5,175	5,970	11,145
La Crosse	33,170	28,289	61,459
Lafayette	4,402	3,929	8,331
Langlade	4,751	6,235	10,986
Lincoln	7,484	8,024	15,508
Manitowoc	20,652	23,027	43,679
Marathon	30,899	36,394	67,293
Marinette	10,190	11,866	22,056
Marquette	3,785	4,604	8,389
Menominee	1,412	288	1,700
Milwaukee	297,653	180,287	477,940

County	Kerry Vote	Bush Vote	Two Party Total
<i>City of Milwaukee subtotal</i>	198,907	75,746	274,653
Monroe	8,973	10,375	19,348
Oconto	8,534	11,043	19,577
Oneida	10,464	11,351	21,815
Outagamie	40,169	48,903	89,072
Ozaukee	17,714	34,904	52,618
Pepin	2,181	1,853	4,034
Pierce	11,176	10,437	21,613
Polk	11,173	12,095	23,268
Portage	21,861	16,546	38,407
Price	4,349	4,312	8,661
Racine	48,229	52,456	100,685
Richland	4,501	4,836	9,337
Rock	46,598	33,151	79,749
Rusk	3820	3,985	3,820
St. Croix	18784	22,679	18,784
Sauk	15708	14,415	15,708
Sawyer	4411	4,951	4,411
Shawano	8,657	12,150	20,807
Sheboygan	27,608	34,458	62,066
Taylor	3,829	5,582	9,411
Trempealeau	8,075	5,878	13,953
Vernon	7,924	6,774	14,698
Vilas	5,713	8,155	13,868
Walworth	19,177	28,754	47,931
Washburn	4,705	4,762	9,467
Washington	21,234	50,641	71,875
Waukesha	73,626	154,926	228,552
Waupaca	10,792	15,941	26,733
Waushara	5,257	6,888	12,145
Winnebago	40,943	46,542	87,485
Wood	18,950	20,592	39,542
	1,489,504	1,478,120	2,967,624

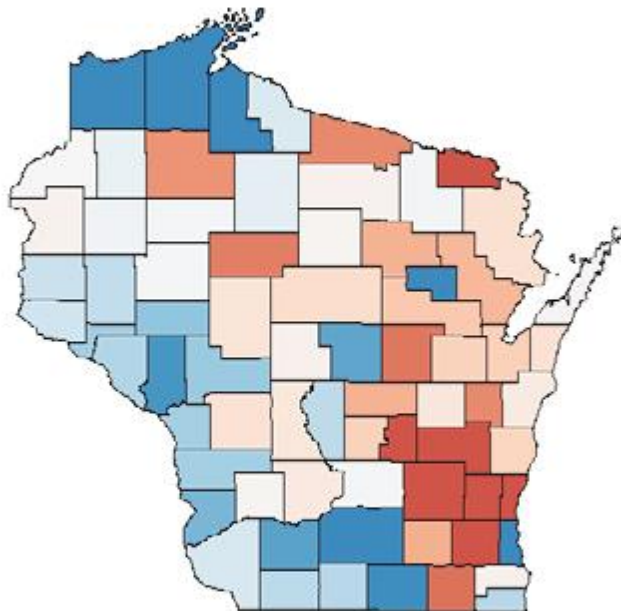
54. The following chart shows the vote totals and two-party vote percentages for Kerry and Bush in Dane, Milwaukee and Rock Counties including a subtotal of votes in the City of Milwaukee.

County	Kerry Vote	Bush Vote	Two Party Total
Dane	181,052 (66.71%)	90,369 (33.29%)	271,421
Milwaukee	297,653 (62.28%)	180,287 (37.72%)	477,940
<i>City of Milwaukee subtotal</i>	198,907 (72.42%)	75,746 (27.58%)	274,653
Rock	46,598 (58.43%)	33,151 (41.57%)	79,749

55. In 2004, Wisconsin was marginally more Democratic than the country as a whole, as it had been in 1996, but the political divisions were different than in 1996.

56. Below is a map showing the PIs of Wisconsin's counties in 2004.

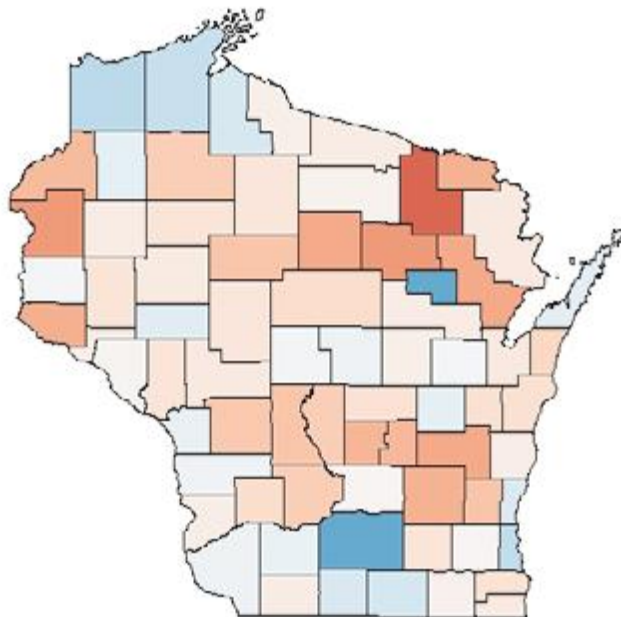
Wisconsin County PI 2004



57. The number of Democratic counties dropped to 33 (46% of the counties in the state). The most Democratic counties became more Democratic while the rest of the state became more Republican.

58. The map below shows that change in PI between 1996 and 2004, with red counties becoming more Republican and blue counties becoming more Democratic.

Wisconsin County PVI Change, 1996-2004



59. In 2008, Barack Obama, the Democratic candidate for President, won 1,677,211 votes in Wisconsin to Republican John McCain's 1,262,393 votes, winning 57.05% of the two-party vote.

60. In the presidential election nationwide, Obama won 53.69% of the two-party vote to McCain's 46.31%.

61. The following chart shows the vote totals for Obama and McCain in each county in Wisconsin including a subtotal of votes in the City of Milwaukee.

County	Obama Vote	McCain Vote	Two Party Total
Adams	5,806	3,974	9,780
Ashland	5,818	2,634	8,452
Barron	12,078	10,457	22,535
Bayfield	5,972	3,365	9,337
Brown	67,269	55,854	123,123
Buffalo	3,949	2,923	6,872
Burnett	4,337	4,200	8,537
Calumet	13,295	12,722	26,017
Chippewa	16,239	13,492	29,731
Clark	7,454	6,383	13,837
Columbia	16,661	12,193	28,854
Crawford	4,987	2,830	7,817
Dane	205,984	73,065	279,049
Dodge	19,183	23,015	42,198
Door	10,142	7,112	17,254
Douglas	15,830	7,835	23,665
Dunn	13,002	9,566	22,568
Eau Claire	33,146	20,959	54,105
Florence	1,134	1,512	2,646
Fond du Lac	23,463	28,164	51,627
Forest	2,673	1,963	4,636
Grant	14,875	9,068	23,943
Green	11,502	6,730	18,232
Green Lake	4,000	5,393	9,393
Iowa	7,987	3,829	11,816
Iron	1,914	1,464	3,378
Jackson	5,572	3,552	9,124
Jefferson	21,448	21,096	42,544
Juneau	6,186	5,148	11,334
Kenosha	45,836	31,609	77,445
Kewaunee	5,902	4,711	10,613
La Crosse	38,524	23,701	62,225
Lafayette	4,732	2,984	7,716
Langlade	5,182	5,081	10,263
Lincoln	8,424	6,519	14,943
Manitowoc	22,428	19,234	41,662

County	Obama Vote	McCain Vote	Two Party Total
Marathon	36,367	30,345	66,712
Marinette	11,195	9,726	20,921
Marquette	4,068	3,654	7,722
Menominee	1,257	185	1,442
Milwaukee	319,819	149,445	469,264
<i>City of Milwaukee subtotal</i>	213,436	57,665	271,101
Monroe	10,198	8,666	18,864
Oconto	9,927	8,755	18,682
Oneida	11,907	9,630	21,537
Outagamie	50,294	39,677	89,971
Ozaukee	20,579	37,172	57,751
Pepin	2,102	1,616	3,718
Pierce	11,803	9,812	21,615
Polk	10,876	11,282	22,158
Portage	24,817	13,810	38,627
Price	4,559	3,461	8,020
Racine	53,408	45,954	99,362
Richland	5,041	3,298	8,339
Rock	50,529	27,364	77,893
Rusk	3855	3,253	3,855
St. Croix	21177	22,837	21,177
Sauk	18617	11,562	18,617
Sawyer	4765	4,199	4,765
Shawano	10,259	9,538	19,797
Sheboygan	30,395	30,801	61,196
Taylor	4,563	4,586	9,149
Trempealeau	8,321	4,808	13,129
Vernon	8,463	5,367	13,830
Vilas	6,491	7,055	13,546
Walworth	24,177	25,485	49,662
Washburn	4,693	4,303	8,996
Washington	25,719	47,729	73,448

County	Obama Vote	McCain Vote	Two Party Total
Waukesha	85,339	145,152	230,491
Waupaca	12,952	12,232	25,184
Waushara	5,868	5,770	11,638
Winnebago	48,167	37,946	86,113
Wood	21,710	16,581	38,291
	1,677,211	1,267,393	2,944,604

62. The following chart shows the vote totals and two-party vote percentages for Obama and McCain in Dane, Milwaukee and Rock Counties including a subtotal of votes in the City of Milwaukee.

County	Obama Vote	McCain Vote	Two Party Total
Dane	205,984 (73.82%)	73,065 (26.18%)	279,049
Milwaukee	319,819 (68.15%)	149,445 (31.85%)	469,264
<i>City of Milwaukee subtotal</i>	213,436 (78.73%)	57,665 (21.27%)	271,101
Rock	50,529 (64.87%)	27,364 (35.13%)	77,893

63. In 2008, Democratic candidates for the Assembly ran about three points behind Obama in the statewide two-party vote.

64. In 2012, Barack Obama, the Democratic candidate for President, won 1,620,985 votes in Wisconsin to Republican Mitt Romney's 1,407,966 votes, winning 53.5% of the two-party vote.

65. In the presidential election nationwide, Obama won 51.96% of the two-party vote to Romney's 48.04%.

66. The following chart shows the vote totals for Obama and Romney in each county in Wisconsin along with a subtotal for the votes in the City of Milwaukee.

County	Obama Vote	Romney Vote	Two Party Total
Adams	5,542	4,644	10,186
Ashland	5,399	2,820	8,219
Barron	10,890	11,443	22,333
Bayfield	6,033	3,603	9,636
Brown	62,526	64,836	127,362
Buffalo	3,570	3,364	6,934
Burnett	3,986	4,550	8,536
Calumet	11,489	14,539	26,028
Chippewa	15,237	15,322	30,559
Clark	6,172	7,412	13,584
Columbia	17,175	13,026	30,201
Crawford	4,629	3,067	7,696
Dane	216,071	83,644	299,715
Dodge	18,762	25,211	43,973
Door	9,357	8,121	17,478
Douglas	14,863	7,705	22,568
Dunn	11,316	10,224	21,540
Eau Claire	30,666	23,256	53,922
Florence	953	1,645	2,598
Fond du Lac	22,379	30,355	52,734
Forest	2,425	2,172	4,597
Grant	13,594	10,255	23,849
Green	11,206	7,857	19,063
Green Lake	3,793	5,782	9,575
Iowa	8,105	4,287	12,392
Iron	1,784	1,790	3,574
Jackson	5,298	3,900	9,198

County	Obama Vote	Romney Vote	Two Party Total
Jefferson	20,158	23,517	43,675
Juneau	6,242	5,411	11,653
Kenosha	44,867	34,977	79,844
Kewaunee	5,153	5,747	10,900
La Crosse	36,693	25,751	62,444
Lafayette	4,536	3,314	7,850
Langlade	4,573	5,816	10,389
Lincoln	7,563	7,455	15,018
Manitowoc	20,403	21,604	42,007
Marathon	32,363	36,617	68,980
Marinette	9,882	10,619	20,501
Marquette	4,014	3,992	8,006
Menominee	1,191	179	1,370
Milwaukee	332,438	154,924	487,362
<i>City of Milwaukee subtotal</i>	227,384	56,553	283,937
Monroe	9,515	9,675	19,190
Oconto	8,865	10,741	19,606
Oneida	10,452	10,917	21,369
Outagamie	45,659	47,372	93,031
Ozaukee	19,159	36,077	55,236
Pepin	1,876	1,794	3,670
Pierce	10,235	10,397	20,632
Polk	10,073	12,094	22,167
Portage	22,075	16,615	38,690
Price	3,887	3,884	7,771
Racine	53,008	49,347	102,355
Richland	4,969	3,573	8,542
Rock	49,219	30,517	79,736
Rusk	3397	3,676	3,397
St. Croix	19910	25,503	19,910
Sauk	18736	12,838	18,736
Sawyer	4486	4,442	4,486
Shawano	9,000	11,022	20,022

County	Obama Vote	Romney Vote	Two Party Total
Sheboygan	27,918	34,072	61,990
Taylor	3,763	5,601	9,364
Trempealeau	7,605	5,707	13,312
Vernon	8,044	5,942	13,986
Vilas	5,951	7,749	13,700
Walworth	22,552	29,006	51,558
Washburn	4,447	4,699	9,146
Washington	23,166	54,765	77,931
Waukesha	78,779	162,798	241,577
Waupaca	11,578	14,002	25,580
Waushara	5,335	6,562	11,897
Winnebago	45,449	42,122	87,571
Wood	18,581	19,704	38,285
	1,620,985	1,407,966	3,028,951

67. In 2012, Obama won Milwaukee, Dane and Rock Counties with 69% of the two-party vote but won only 47% of the two-party vote in the rest of the state (to Mitt Romney's 53%), a difference of twenty-two percentage points.

68. The following chart shows the vote totals and two-party vote percentages for Obama and Romney in Dane, Milwaukee and Rock Counties including a subtotal of votes in the City of Milwaukee.

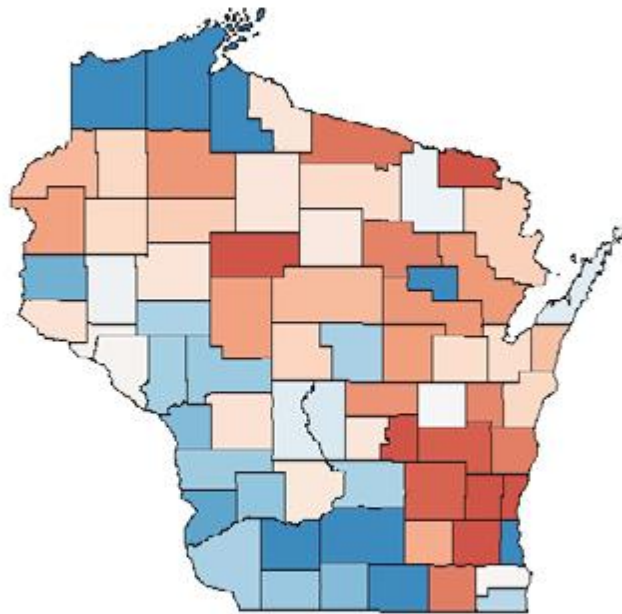
County	Obama Vote	Romney Vote	Two Party Total
Dane	216,071 (72.09%)	83,644 (27.91%)	299,715
Milwaukee	332,438 (68.21%)	154,924 (31.79%)	487,362
<i>City of Milwaukee</i>	227,384 (80.08%)	56,553 (19.92%)	283,937
<i>subtotal</i>			

Rock	49,219 (61.73%)	30,517 (38.27%)	79,736
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69. In 2012, Wisconsin was slightly more Democratic than the country as a whole, similar to what it was in 2004.

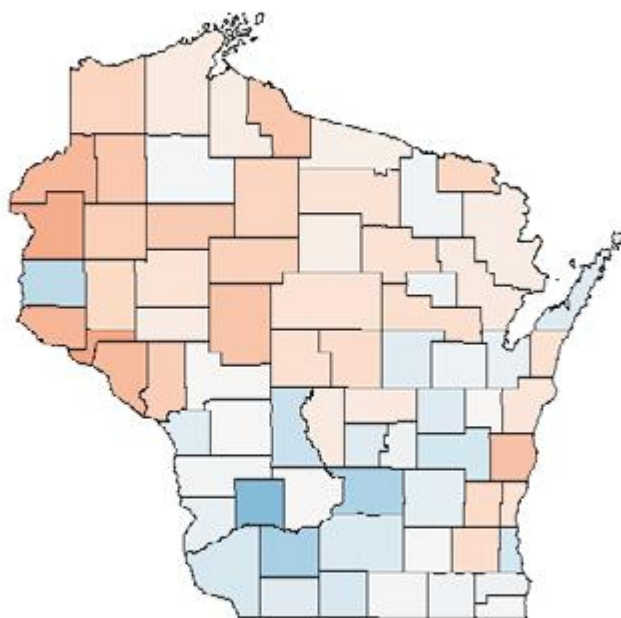
70. While the State’s overall political lean remained the same, there was significant change in the internal composition of the electorate. Only twenty-seven counties had a Democratic lean (37.5% of the counties in the state). This is shown in the map below showing the PIs of Wisconsin counties in 2012.

Wisconsin County PI 2012



71. From 2004 to 2012, Dane and Milwaukee counties became a few points more Democratic, as did counties in the southwest of the state. The rest of the state became more Republican which is shown in the map below showing the change in the PIs of Wisconsin counties from 2004 to 2012.

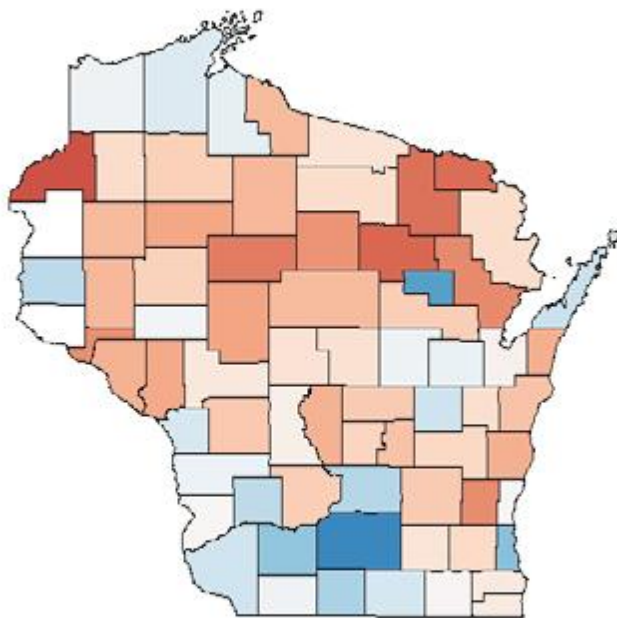
Wisconsin County PVI Change, 2004-2012



72. From 1996 to 2012, the Democratic Party gained strength in areas in which it was already strong (Dane County, Milwaukee County and the southwest portion of the state), but lost ground to the Republicans in the rest of the state. This

is shown in the map below which shows the change in the PIs of Wisconsin counties from 1996 to 2012.

Wisconsin County PVI Change, 1996-2012

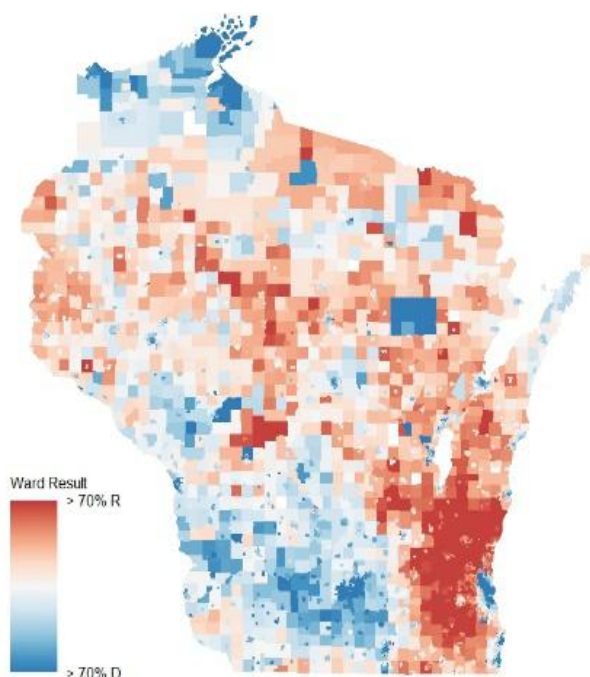


73. From 1996 to 2012, Democrats have become more concentrated in their strongholds, which has made it more difficult for the party to win seats in the Assembly.

74. Below is a map of Wisconsin showing the location of wards using Professor Mayer's baseline partisanship scores for the 2012 election, with

Democratic leaning wards in blue (darker for stronger leans) and Republican wards in red (darker for stronger leans).

Wisconsin Ward Election Results - 2012



75. Professor Goedert examined the partisanship of Wisconsin's wards by taking the vote for President Obama in 2012 and performing a uniform swing downwards of -3.5% to simulate an election where each party received 50% of the vote.

76. Below is a chart analyzing Wisconsin's wards in an evenly divided election. It shows the percentages of wards in the state for each decile of Democratic

vote share (0-10%, 10-20%, etc.), along with the percentage of population in the state that lives in the wards in each decile.

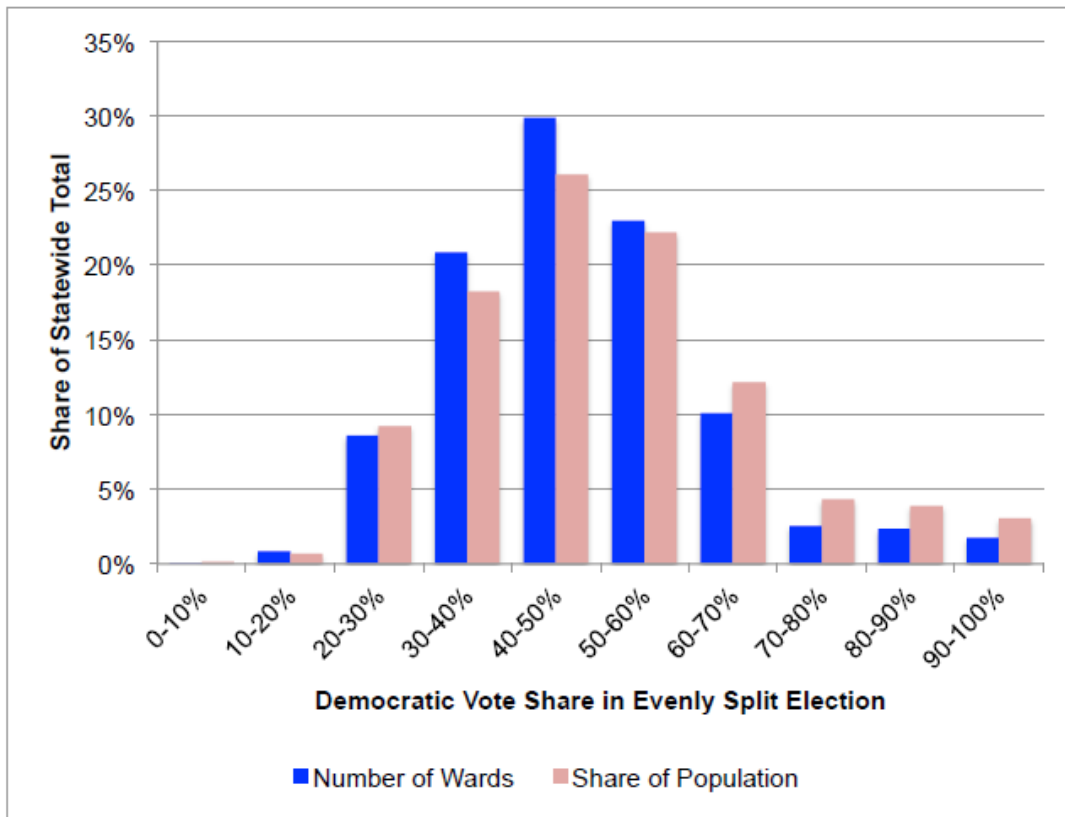


Figure 1. Wisconsin Ward Projections in Evenly Divided Statewide Election (Based on uniform swing from 2012 Presidential Election Results)

77. In the evenly divided election, Republicans would win 60.2% of wards, comprising 54.4% of the voting population. In fact, a majority of all wards in the state (50.8% of wards, comprising 44.3% of voting population) would be won by Republicans with less than 70% of the vote. In contrast, less than a third of wards would be won by Democrats with less than 70% of the vote.

78. There are many more wards comprising a much larger share of the population that were extremely Democratic. In the evenly balanced election, 4% of wards, comprising 7% of voting population, would be won by the Democrat with more 80% of the vote. Less than 1% of wards, comprising less than 1% of population, would be Republicans by a similarly huge margin.

79. The Republican Party in Wisconsin is not an entrenched minority party.

80. In the November 2010 election, Republican candidates won the Governor's office, a majority in the State Senate, and retook the majority in the Assembly.

81. In the November 2010 election, Scott Walker won the Governor's office with 52.25% of the total vote (52.9% of the two-party vote).

82. In the November 2010 election, Republicans won 60 seats in the Assembly.

83. Professor Jackman calculates that the Republican candidates for the Assembly won 53.5% of the statewide two-party vote share in the November 2010 election.

84. In the 2010 elections, the Republicans won seven of the districts that the plaintiffs list as Democratic districts in paragraphs 59 through 77 of the complaint, specifically Districts 2, 5, 26, 68, 72, 88, and 93, while an independent won one (District 25).

85. On June 5, 2012, Governor Walker survived a recall attempt with 53.08% of the vote (53.4% of the two-party vote).

86. In November 2012, President Obama won Wisconsin in the presidential election with 52.83% of the total vote (53.5% of the two-party vote).

87. Wisconsin's Democratic candidates for the Assembly ran about two points behind the President's vote share: Professor Jackman calculates that Democrats had a two-party vote share of 51.4%.

88. In November of 2014, the Republicans increased their control of the Assembly by winning 63 seats, equating to a 63.6% seat share.

89. Professor Jackman calculates that Republican candidates for the Assembly won 52% of the statewide two-party vote share in the November 2014 elections.

COMPARISON OF ACT 43 WITH PRIOR PLANS

90. The 1992 Assembly map entered by the *Prosser* court had an overall range of population deviation of 0.91 percent, with 48 districts below the ideal and 51 above the ideal. Only one district was more than a half point away from the ideal. In the Senate, the 1992 plan had an overall deviation range 0.52 percent with 15 districts above the ideal population and 18 below the ideal.

91. The 2002 Assembly map entered by the *Baumgart* court had an overall range of 1.59 percent deviation, with 47 districts above the ideal, 51 below the ideal, and one exactly apportioned district. In the Senate, the overall deviation range of the 2002 map was 0.98 percent with 15 districts above the ideal population, 17

below, and one perfectly apportioned. Of the 99 Assembly districts in 2002, 77 districts were within +/- 0.5 percent of the ideal population; in the Senate, 32 of 33 districts fell in this range.

92. Act 43 creates 99 Assembly districts with populations falling within a range of 0.76 percent (+0.39 percent to -0.37 percent) of the ideal population; 56 districts are above the ideal population, 41 are below the ideal, and two districts are perfectly apportioned. In the Senate, population variations fall within a range of 0.62 percent (+0.35 percent to -0.27 percent); 17 districts are above the ideal population, 14 are below the ideal, and two districts are perfectly apportioned.

93. The population deviation in Act 43 from the ideal for each Assembly and Senate district (using 2010 Census data) is described in the Appendix to Act 43 and Tables 2 and 3 to the pretrial report filed in the *Baldus* case on February 14, 2012.

94. A summary of population deviation in Assembly districts in Act 43, the 1992 plan, and the 2002 plan is in Table 4 of the pretrial report filed in the *Baldus* case on February 14, 2012.

95. Each state Senate district is composed of three entire state Assembly districts.

96. Changes in the Assembly districts will carry through to the Senate districts.

97. Assembly members serve two-year terms. Senators serve four-year, staggered terms with half elected in presidential years and the other half coincident with gubernatorial elections.

98. Redistricting results in shifts of voters among Senate districts in such a way that some voters will experience delayed voting or disenfranchisement. Following the redistricting after the 2010 census, voters who previously resided in even-numbered Senate districts (which vote in presidential years) but who are moved to odd-numbered Senate districts (which vote in midterm years) by redistricting would go six years between opportunities to vote for a state senator (from 2008 to 2014).

99. Only voters in even-numbered senate districts could vote for a senator in the 2012 regular election. Residents of odd-numbered senate districts were not able to vote in a regular senate election until 2014. The last regular senate election for even-numbered districts was in 2008; for odd-numbered districts, the last regular election was in 2010.

100. In 2011, Act 43 moved 299,704 persons (5.26 percent of all persons in Wisconsin according to the 2010 census) into new districts that result in similar delayed voting or disenfranchisement. The number of persons per district experiencing delayed voting or disenfranchisement ranged from a low of 133 to a high of 72,431, with an average for the 17 districts involved of 17,630 persons per district.

101. The 1992 Federal Court map for the Assembly split 72 municipalities.

102. In 2002, the Federal Court's Assembly map split 50 municipalities.

103. Act 43 splits 62 municipalities in the Assembly.

104. The 1992 Federal Court map split 47 counties in the Assembly.

105. In 2002, the Federal Court divided 51 counties in the Assembly.

106. Act 43 splits 58 counties in the Assembly.

107. Two widely-used measures of compactness applied to legislative districts are the Perimeter-to-Area measure and the Smallest Circle score.

108. Districting plans are often assessed in the context of total (average) plan compactness.

109. The Perimeter-to-Area measure compares the relative length of the perimeter of a district to its area. It represents the area of the district as the proportion of the area of a circle with the same perimeter. The score ranges from 0 to 1, with a value of 1 indicating perfect compactness. This score is achieved if a district is a circle. Most redistricting software generates this measure as the Polsby-Popper statistic.

110. Smallest Circle scores measure the space occupied by the district as a proportion of the space of the smallest encompassing circle, with values ranging from 0 to 1. A value of 1 indicates perfect compactness and is achieved if a district is a circle. This statistic is often termed the Reock measure by redistricting applications. Ernest C. Reock, Jr. 1961, "A Note: Measuring Compactness as a Requirement of Legislative Apportionment," *Midwest Journal of Political Science* 5: 70-74.

111. The average Smallest Circle score for the entire Assembly map in Act 43 is 0.39 (range from 0.20 to 0.61).

112. The average Smallest Circle score for the entire Assembly map drawn by the *Baumgart* court in 2002 was 0.41 (range from 0.18 to 0.63).

113. The average Perimeter To Area score for the Assembly map is .28 (range of .05 to .56).

114. The average Perimeter To Area score for the Assembly map drawn by the *Baumgart* court in 2002 was 0.29 (range of 0.06 to 0.58).

115. The following chart contains a summary of municipal splits, county splits and compactness scores for Act 43 and prior plans.

	Municipal Splits	County Splits	Reock (mean)	Polsby- Popper (mean)
1972 Plan		49		
1982 Plan		41		
1992 Plan	72	47		
2002 Plan	50	51	0.41	0.29
Act 43	62	58	0.39	0.28

116. The average Assembly compactness scores are marginally lower for Act 43 than for the 2002 court-crafted plan.

117. A list of the compactness scores of Act 43 and the *Baumgart* plan is contained in Table 21 of the *Baldus* pretrial report.

118. The Act 43 map contained ten pairings of incumbents when adopted. An additional pairing occurred when Rep. Chris Taylor (D) was elected to Assembly District 48 in a July 2011 special election.

119. Of the 11 Assembly pairings, three involve two Democrats, three involve two Republicans, and five involve bipartisan pairings. Until Rep. Taylor's election, more Republicans than Democrats were paired under Act 43.

PROFESSOR MAYER'S REPORT

120. One needs to assume that there were an equal number of votes cast in each district for the simplified method of calculating the efficiency gap to equate with the district-by-district calculation of the efficiency gap.

121. Professor Mayer only used the 2012 election results in his model; it does not rely on the results of any other elections.

122. Professor Mayer did not produce a model to predict the results of the 2014 Wisconsin Assembly elections either under Act 43 or his Demonstration Plan.

123. Professor Mayer's baseline partisanship model produces 1,454,117 statewide vote for Democratic candidates.

124. Professor Mayer's baseline partisanship model produces the following vote totals and two-party vote percentages in the following cities

City	Dem. Votes	Rep. Votes	Total
Milwaukee	193,940 (77.9%)	54,992 (22.1%)	248,932

Madison	109,466 (78.0%)	30,928 (22.0%)	140,394
Green Bay	23,403 (55.2%)	18,998 (44.8%)	42,402
Kenosha	26,515 (62.6%)	15,828 (37.4%)	42,342
Racine	22,614 (70.4%)	9,517 (29.6%)	32,131
Appleton	18,232 (51.6%)	17,129 (48.4%)	35,361
Waukesha	15,257 (37.6%)	25,273 (62.4%)	40,530
Oshkosh	17,364 (52.1%)	15,945 (47.9%)	33,309
Eau Claire	20,601 (59.2%)	14,202 (40.8%)	34,803
Janesville	20,208 (58.9%)	14,080 (41.1%)	34,288
La Crosse	17,554 (67.4%)	8,485 (32.6%)	26,039
Sheboygan	14,573 (56.5%)	11,215 (43.5%)	25,787
Beloit	11,440 (63.3%)	6,623 (36.7%)	18,062

125. Using Professor Mayer's baseline partisanship model, 20.87% of the Democratic statewide Assembly vote comes from the City of Milwaukee (which Democrats win with 77.9% of the two-party vote) and the City of Madison (which the Democrats win with 78.0% of the two-party vote).

126. Professor Mayer's baseline partisanship model does not show the actual wasted votes that were cast in the 2012 election. For example, in District 1 Mayer predicts that the Republican candidate would win 16,628 votes and the Democratic candidate would win 16,235 votes.

127. Professor Mayer's baseline partisanship model for District 1 generates 197 wasted votes for the Republicans and 16,235 wasted votes for the Democrats.

128. In the actual 2012 election, the Republican won with 16,993 votes and the Democrat lost with 16,124 votes.

129. In the actual election, there were 435 wasted votes for the Republicans and 16,124 wasted votes for the Democrats.

130. Professor Mayer's baseline partisanship model predicts five seats incorrectly (four predicted to be won by Democrats that were actually won by Republicans and one the other way).

131. In Professor Mayer's baseline partisanship model, the Democratic candidate would win District 50 with 12,467 votes to the Republican candidate's 12,326 votes.

132. In the actual 2012 election, the Republican candidate won District 50 with 12,842 votes to the Democratic candidate's 11,945 votes.

133. In Professor Mayer's baseline partisanship model, the Democratic candidate would win District 51 with 14,173 votes to the Republican candidate's 13,048 votes.

134. In the actual election, the Republican candidate won District 51 with 10,642 votes to the Democratic candidate's 10,577 votes.

135. In Professor Mayer's baseline partisanship model, the Democratic candidate would win District 68 with 13,663 votes to the Republican candidate's 13,005.

136. In the actual election, the Republican candidate won District 68 with 13,758 votes to the Democratic candidate's 12,482 votes.

137. In Professor Mayer's baseline partisanship model, the Republican candidate would win District 70 with 14,387 votes to the Democratic candidate's 12,211 votes.

138. In the actual election, the Democratic candidate won District 70 with 13,518 votes to the Republican candidate's 13,374.

139. In Professor Mayer's baseline partisanship model, the Democratic candidate would win District 72 with 14,294 votes to the Republican candidate's 13,895.

140. Republicans won 60 seats in the 2012 Assembly elections, yet Mayer's baseline partisanship model predicts only 57 Republican wins.

141. Professor Mayer does not correct his baseline partisanship model for what actually happened in the election; instead, he counts the wasted votes based on what his model predicts should have happened.

142. For his model, Professor Mayer admits that "the average absolute error in the vote margin is 1.49%."

143. Professor Mayer's baseline partisanship model of Act 43 contains 42 districts with at least a 50% Democratic baseline.

144. Professor Mayer's baseline partisanship model of Act 43 contains 17 seats that have a baseline between 50–55% Republican. These districts and

percentages are shown in the chart below, from the least Republican to the most Republican:

District	Mayer Baseline Rep. %
93	50.2%
1	50.6%
67	51.6%
29	52.2%
88	52.3%
4	52.3%
49	52.5%
27	52.7%
42	53.0%
26	53.3%
62	53.9%
31	54.1%
70	54.1%
40	54.2%
28	54.6%
30	54.7%
21	54.9%

THE PARTISAN SCORE USED BY LEGISLATIVE STAFF

145. The partisanship score used by legislative staff was an average of statewide races from 2004 through 2010 developed by Joseph Handrick, Tad Ottman, and Adam Foltz, not a regression model created by Professor R. Keith Gaddie.

146. The partisan score based on the average of statewide races from 2004 to 2010 was incorrect about the winner of seven races in the 2012 election. The following table summarizes predicted winners and actual winners in bold:

District	Statewide Average R%	Actual 2012 R%
49	49.59%	54.19%
51	46.23%	51.85%

68	49.38%	52.39%
70	50.73%	49.65%
75	52.18%	48.85%
94	51.91%	39.38%
96	46.40%	59.52%

147. The partisan score based on the average of statewide races from 2004 to 2010 was incorrect about the winner of six races in the 2014 election. The following table summarizes predicted winners and actual winners in bold:

District	Statewide Average R%	Actual 2014 R%
49	49.59%	61.38%
51	46.23%	47.48% ¹
68	49.23%	52.82%
85	48.38%	50.19%
94	51.91%	45.94%
96	46.40%	58.91%

THE DEMONSTRATION PLAN

148. In his baseline partisanship model, Mayer predicts that his Demonstration Plan would yield 51 Democratic seats and 48 Republican seats, which would still produce a gap of 62,414 wasted votes and a 2.20% efficiency gap in favor of Republicans.

149. There are eighteen districts in Mayer's Demonstration Plan that are 50%–55% Democratic under his baseline partisanship model assuming all seats were contested and no incumbents were running, including sixteen districts

¹ The Republican won in District 51 with less than 50% of the vote because an independent candidate won 5.25% of the vote. When calculated as a percentage of the two-party vote, the Republican won with 50.15%.

between 50%–53.4%. The following table shows these districts ordered from least Democratic to most Democratic.

Demonstration Plan District	Predicted Dem. Vote %
49	50.3%
92	50.5%
86	50.7%
96	51.5%
91	51.7%
81	51.8%
40	51.9%
42	51.9%
67	51.9%
71	52.1%
20	52.3%
29	52.3%
51	52.6%
64	52.8%
54	53.4%
57	53.4%
2	54.1%
45	54.6%

150. In the 2014 election environment, the statewide vote for Democratic candidates for the Assembly fell 3.4 percentage points, from 51.4% down to 48.0%.

151. Applying a uniform swing of 3.4 percentage points to Mayer’s baseline partisanship model results in Republicans winning 63 seats and Democrats winning 34 seats, the exact result seen in the actual 2014 elections.

152. In drafting the Demonstration Plan, Professor Mayer did not take into account the residences of the incumbents who had been elected in the 2010 Assembly elections.

153. The Demonstration Plan results in eleven more pairings of Republicans than Act 43 (Mayer calculates 50 Republican incumbent seats in Act 43

versus 39 in the Demonstration Plan) and one more pairing of Democrats (he calculates 23 Democratic incumbent seats in Act 43 versus 22 in the Demonstration Plan).

PROFESSOR JACKMAN'S REPORT

154. Wisconsin does not have equal turnout across Assembly districts.

155. In Wisconsin's 2012 Assembly elections, the turnout in individual districts varied from just over 8,000 votes in District 8 to over 37,000 votes in District 14.

156. In Wisconsin's 2014 elections, the turnout in individual districts varied from approximately 6,400 votes in District 8 to over 31,400 votes in District 23.

157. The presence of imputed vote totals leads to uncertainty in Professor Jackman's calculation of vote share, which "generates uncertainty in determining how far each point lies above or below the orange, zero efficiency gap benchmark."

158. Professor Jackman expresses his *EG* calculations as "point estimates" with lines indicating a 95% level of confidence.

159. Professor Jackman has less confidence in the "point estimate" of his *EG* as the number of uncontested seats increases.

160. Professor Jackman found that "[t]he distribution of *EG* measures trends in a pro-Republican direction through the 1990s, such that by the 2000s, *EG* measures were more likely to be negative (Republican efficiency over Democrats)."

161. This trend began in the 1990s, a decade in which Republicans had unified party control of districting in only two of the forty-one states in Jackman's dataset.

162. Professor Jackman plotted the efficiency gap of each plan in each year from lowest to highest (from most favorable to Republicans to least) and then overlaying estimates of the smoothed weighted quantiles (with blue lines showing the 25th percentile, 50th percentile, and 75th percentile plan).

163. The median efficiency gap has been negative (favorable to the Republicans) since the mid-1990s.

164. The most favorable median toward Democrats since 2000 was in 2010.

165. The 25th percentile has been below 5% since the mid-1990s and even approached 7% in 2004, 2010, and 2012.

166. The 75th percentile has been below 5% since the mid-1990s and has hovered between 1% and 2% since 2000.

167. Professor Jackman's calculation of the "the probability that a given efficiency gap number from a given election year is positive or negative" also shows a trend in favor of Republicans.

168. Professor Jackman finds that in every election year since 1996, more plans have had negative efficiency gaps than positive ones with the exception of 2010.

169. In 2010, Professor Jackman found that the proportion of plans having a positive efficiency gap was slightly more than 0.5.

170. In 2006, 75% of plans produced a negative efficiency gap while only 25% of plans produced a positive efficiency gap, with similar results in 2000 and 2012.

171. Since 1996, the year with the greatest proportion of efficiency gap measures favoring Democrats was 2010, in which there was a slightly more than a 50–50 probability of a plan being positive (favorable to Democrats).

172. In determining the threshold number for an efficiency gap in the first election under a plan, the key fact Professor Jackman considered was whether the *EG* would flip sign throughout the course of the plan; *i.e.* whether a plan would change from negative to positive or vice versa.

173. Professor Jackman’s analysis focuses on determining a threshold for the *EG* in the first election under a plan from which he could be confident that the sign of the plan would not change.

174. Professor Jackman chose to look at the first election in the plan because he “tried to put [himself] in the shoes of litigants” who would have to “intervene early before we’ve seen much data all from the plan, the election results the plan is throwing off.”

175. Professor Jackman first calculated the proportion of plans that produced an efficiency gap in excess of a particular threshold in the first election and then calculated the proportion of the plans in each subclass that produced an election with an efficiency gap of the opposite sign.

176. For all plans Professor Jackman studied since 1972, he finds that 36% of all plans produced an efficiency gap of 7% or greater in the first election: 18% on the positive side and 18% on the negative side.

177. For all plans Professor Jackman studied since 1991, 34% of all plans produced an efficiency gap greater than 7% in magnitude in the first election: 22% produced a gap of at least -7% and 12% percent produced a gap of at least +7%.

178. For all plans since 1972 that Professor Jackman studied, he finds that 18% of plans that had an *EG* of at least -7% in magnitude go on to produce an election with a positive *EG*.

179. For all plans Professor Jackman studied since 1991, he finds that 40% of plans that produce an *EG* of at least +7% in magnitude in the first election go on to produce an election with a negative *EG*.

180. For all plans Professor Jackman studied since 1991, he finds that 18% of plans that produce an *EG* of at least -7% in magnitude in the first election go on to produce an election with a positive *EG*.

181. For all plans Professor Jackman studied since 1991, he finds that 60% of plans that produce an *EG* of at least +7% in magnitude in the first election go on to produce an election with a negative *EG*.

182. With respect to plans from the 1990s to today, Professor Jackman finds that elections favoring Republicans in the first election in a plan are much more common than those favoring Democrats.

183. Professor Jackman finds that “we seldom see a plan in the 1990s or later that commence with a large–pro Democratic efficiency gap.”

184. In the 1990s and later, Professor Jackman finds that the probability the first election has an efficiency gap greater than +5% (favorable to Democrats) “is only about 11%.”

185. Negative efficiency gaps “are much more likely under the first election in post–1990 plans: almost 40% of plans open with $EG < -.05$ and about 20% of plans open with $EG < -.10$.”

186. Based on the discrepancy between the likelihood of sign change between negative and positive efficiency gaps, Professor Jackman concludes that “pro–Democratic efficiency gaps seem much more fleeting than pro–Republican efficiency gaps.”

187. Professor Jackman finds that a Democratic advantage in the efficiency gap is not as durable of a feature as a pro–Republican efficiency gap, a trend which becomes “even more pronounced in the analysis that focused on recent decades.”

188. To determine his confidence in a threshold efficiency gap, Professor Jackman set out to determine the proportion of plans that trip the threshold and “if left undisturbed, would go on to produce a sequence of EG measures that lie on the same side of zero as the threshold?”

189. Professor Jackman finds a 7% threshold acceptable because “at that threshold, 96 percent of plans are either not tripping that threshold or if they are, they’re continuing to produce efficiency gaps on that side of zero.”

190. Professor Jackman thinks this number is acceptable because these plans are unlikely to change sign and thus would be properly struck down by courts as constitutional violations.

191. Professor Jackman finds that “plans with at least one election” of an efficiency gap of 7% or greater “are reasonably common.”

192. Professor Jackman finds that an *EG* of 7% or greater “is not a particularly informative signal with respect to the other elections in the plan.”

193. Professor Jackman finds that 53% of plans since 1972 have one election with an *EG* of 7% or greater in magnitude, with 29% of plans having a gap of -7% or greater in magnitude and 25% of plans having a gap of $+7\%$ or greater in magnitude.

194. When looking at plans since 1991, 47% of plans have had at least one election with an *EG* greater than 7% in magnitude, with 38% of plans having an election with a gap of -7% or greater in magnitude and 19% of plans having an election with a gap of $+7\%$ or greater in magnitude.

195. Since 1972, 33% of plans have had an election with an *EG* of 10% or greater in magnitude, with 18% having an election with a gap of -10% and 15% having an election with a gap of $+10\%$.

196. When looking just at elections since 1991, 35% of plans have had an election with an *EG* of at least 10% in magnitude: 24% of plans have had an election with a gap of -10% and 11% of plans having an election with a gap of $+10\%$.

197. Jackman found that 17 of the 141 plans (12%) for which he could calculate three or more efficiency gaps were “*utterly unambiguous* with respect to the sign of the efficiency gap,” *i.e.*, that even the confidence level bar did not cross over to the other sign.

198. Of these seventeen plans, sixteen of them were favorable to the Republicans and only one was favorable to the Democrats.

199. When one considers whether one party controlled the districting process, only seven plans featured unified partisan control over the districting process.

200. One of the “utterly unambiguous” plans was the Wisconsin 2002 Plan put in place by the federal court in *Baumgart v. Wendelberger*, No. 01–C–0121, 2002 WL 34127471, at *1 (E.D. Wis. May 30, 2002), *amended*, 2002 WL 34127473 (E.D. Wis. July 11, 2002).

201. The sign of the efficiency gap does not necessarily correlate to control of the state legislature. In five of the seven plans enacted under unified party control, the party in control of the state house changed despite the fact that the efficiency gap remained the same sign.

202. Professor Jackman calculated *EGs* for the 2012 and 2014 elections for 39 states.

203. Fifty point estimates were negative (64.1%) while twenty-eight point estimates were positive (35.9%).

204. Eighteen states (46%) had point estimates for 2012 and 2014 that were both negative.

205. Included among this eighteen were Minnesota, Missouri, New York, and Kansas.

206. With respect to the entire country, Jackman found that “[t]he distribution of *EG* measures trends in a pro–Republican direction through the 1990s, such that by the 2000s, *EG* measures were more likely to be negative.”

207. The median plan has been negative since the mid–1990s and the 25th percentile has been below 5% since the mid–1990s and even approached 7% in 2004, 2010, and 2012.

208. Meanwhile the seventy–fifth percentile has only favored Democrats by 1%–2%.

209. In every election year since 1996, more plans have had negative efficiency gaps than positive ones with about 75% of plans producing a negative efficiency gap in 2000, 2006 and 2012.

210. In 2012, the Republicans won five seats (Districts 1, 26, 50, 72 and 93) with no more than 51.3% of the total vote.

211. The margin of victory across all of these races was about 3,200 votes, each less than 900 votes and one at only 109 votes (District 93).

212. For 2012 and 2014, Professor Jackman calculates that Illinois had one negative efficiency gap and one narrowly positive efficiency gap.

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