FILED 01-22-2024 CLERK OF WISCONSIN SUPREME COURT

No. 2023AP001399-OA

IN THE SUPREME COURT OF WISCONSIN

REBECCA CLARKE, RUBEN ANTHONY, TERRY DAWSON, DANA GLASSTEIN, ANN GROVES-LLOYD, CARL HUJET, JERRY IVERSON, TIA JOHNSON, ANGIE KIRST, SELIKA LAWTON, FABIAN MALDONADO, ANNEMARIE MCCLELLAN, JAMES MCNETT, BRITTANY MURIELLO, ELA JOOSTEN (PARI) SCHILS, NATHANIEL SLACK, MARY SMITH-JOHNSON, DENISE (DEE) SWEET, AND GABRIELLE YOUNG,

Petitioners,

GOVERNOR TONY EVERS, IN HIS OFFICIAL CAPACITY; NATHAN ATKINSON, STEPHEN JOSEPH WRIGHT, GARY KRENZ, SARAH J. HAMILTON, JEAN-LUC THIFFEAULT, SOMESH JHA, JOANNE KANE, AND LEAH DUDLEY,

Intervenors-Petitioners,

v.

WISCONSIN ELECTIONS COMMISSION; DON MILLIS, ROBERT F. SPINDELL, JR., MARK L. THOMSEN, ANN S. JACOBS, MARGE BOSTELMANN, AND JOSEPH J. CZARNEZKI, IN THEIR OFFICIAL CAPACITIES AS MEMBERS OF THE WISCONSIN ELECTIONS COMMISSION; MEAGAN WOLFE, IN HER OFFICIAL CAPACITY AS THE ADMINISTRATOR OF THE WISCONSIN ELECTIONS COMMISSION; SENATOR ANDRÉ JACQUE, SENATOR TIM CARPENTER, SENATOR ROB HUTTON, SENATOR CHRIS LARSON, SENATOR DEVIN LEMAHIEU, SENATOR STEPHEN L. NASS, SENATOR JOHN JAGLER, SENATOR MARK SPREITZER, SENATOR HOWARD L. MARKLEIN, SENATOR RACHAEL CABRAL-GUEVARA, SENATOR VAN H. WANGGAARD, SENATOR JESSE L. JAMES, SENATOR ROMAINE ROBERT QUINN, SENATOR DIANNE H. HESSELBEIN, SENATOR CORY TOMCZYK, SENATOR JEFF SMITH, AND SENATOR CHRIS KAPENGA, IN THEIR OFFICIAL CAPACITIES AS MEMBERS OF THE WISCONSIN SENATE,

Respondents,

WISCONSIN LEGISLATURE; BILLIE JOHNSON, CHRIS GOEBEL, ED PERKINS, ERIC O'KEEFE, JOE SANFELIPPO, TERRY MOULTON, ROBERT JENSEN, RON ZAHN, RUTH ELMER, AND RUTH STRECK,

Intervenors-Respondents.

APPENDIX TO RESPONSE REMEDIAL BRIEF
OF INTERVENOR-RESPONDENT WISCONSIN LEGISLATURE AND
RESPONDENTS SENATORS CABRAL-GUEVARA, HUTTON, JACQUE,
JAGLER, JAMES, KAPENGA, LEMAHIEU, MARKLEIN, NASS, QUINN,
TOMCZYK, AND WANGGAARD

Counsel Listed on Following Page

BELL GIFTOS ST. JOHN LLC

KEVIN M. ST. JOHN, SBN 1054815 5325 Wall Street, Suite 2200 Madison, WI 53718 608.216.7995 kstjohn@bellgiftos.com

CONSOVOY MCCARTHY PLLC

TAYLOR A.R. MEEHAN*
RACHAEL C. TUCKER*
DANIEL M. VITAGLIANO*
C'ZAR D. BERNSTEIN*
1600 Wilson Blvd., Suite 700
Arlington, VA 22209
703.243.9423
taylor@consovoymccarthy.com

LAWFAIR LLC

ADAM K. MORTARA, SBN 1038391 40 Burton Hills Blvd., Suite 200 Nashville, TN 37215 773.750.7154 mortara@lawfairllc.com

AUGUSTYN LAW LLC

JESSIE AUGUSTYN, SBN 1098680 1835 E. Edgewood Dr., Suite 105-478 Appleton, WI 54913 715.255.0817 jessie@augustynlaw.com

LEHOTSKY KELLER COHN LLP

SCOTT A. KELLER*
SHANNON GRAMMEL*
GABRIELA GONZALEZ-ARAIZA*
200 Massachusetts Avenue, NW
Suite 700
Washington, DC 20001
512.693.8350
scott@lkcfirm.com

LEHOTSKY KELLER COHN LLP

MATTHEW H. FREDERICK*
408 West 11th St., Fifth Floor
Austin, TX 78701
matt@lkcfirm.com

^{*} Admitted pro hac vice

TABLE OF CONTENTS

Response Report of Brian J. Gaines	4a
Response Report of Sean P. Trende	41a
Ex. A - WISE District Reports	108a
Core Constituency Reports	109a
Senate Disenfranchisement Reports	225a
Incumbent Pairing Reports	240a
County & Municipal Splits Reports	275a
Certification Regarding Appendix	301a

Export Report of Brian J. Gaines: Citizen Partisanship and Partisan Neutrality

January 19, 2024

Author: I am Brian J. Gaines, a Professor of Political Science at the University of Illinois Urbana-Champaign and the Honorable W. Russell Arrington Professor in State Politics for the University of Illinois system. I hold a BA (with honours) from the University of British Columbia (1988), and AM (1989) and PhD (1995) degrees from Stanford University. Most of my research deals with elections, electoral behavior, and electoral institutions, and I have published articles in numerous academic journals, including The American Journal of Political Science, The American Statistician, The Journal of Politics, Political Analysis, and Political Behavior. I am a past editor (2011-15) of American Politics Research and past co-editor (2010-13, with Wendy Cho and Jake Bowers) of the The Political Methodologist. I was on the staff of the Royal Commission for Electoral Boundaries that redrew the districts for the provincial legislature of British Columbia (the "Fisher Commission") in 1987 and 1988. I have offered expert testimony and/or supporting analysis in cases dealing with various aspects of election administration, including Susan C. Hileman v. Sharon McGinness and Louis Maze (Circuit Court of Alexander County, No. 2000-MR-24), Whitford v. Gill, Case o. 15-cv-421-jdp, 2018-19, American Women v. Missouri, 2020 (election administration), Circuit Ct. 20 AC-CC00333, and Johnson v. Wisconsin Elections Commission, 2021-22. I was compensated for preparing this report, at \$450 per hour. My compensation was in no way contingent on the opinions offered or the outcome of the case. The views expressed below are my own and not those of the University of Illinois.



Executive Summary

Counsel for the Wisconsin State Legislature asked me to opine on aspects of partisanship of individual Americans, how affect for parties relates to voting, and how partisanship aggregates from individuals to electorates, as formed by district electoral boundaries, with attention to possible standards for "partisan neutrality." Below, I advance the following points.

• Generally, understanding partisanship as a dichotomy, wherein Americans are either Democrats or Republicans, is a common, sometimes useful simplification, but also a significant distortion of how Americans relate to the major parties. Many are neither and some are, in degree, both.

- American ballots nearly always feature multiple partisan offices. Many voters support candidates from different parties on a single ballot. Assuming that Americans are all strict partisans, implicitly or explicitly, ignores countervailing evidence.
- Electorates, as aggregations of individuals, also have partisanship, but it can be less stable and predictable than the individual-level counterpart, because of variance across individuals in degree of attachment to parties and changes in composition of the electorates.
- The standard of neutrality, or fairness, to parties, when applied to parties in the electorate
 rather than to formal organizations or elected partisan officials, is more elastic and ambiguous, given the complexities of aggregating the fuzzier associations that apply to ordinary
 voters and major parties.
- Partisan neutrality in plurality-rule elections should not be construed to mean perfect or nearly perfect proportionality between vote shares and seat shares.
- Estimation of how a given electoral system—including, but not strictly limited to the electoral boundaries—translates votes into seats for each party is a difficult task, subject to much uncertainty and ambiguity, particularly when done prospectively.
- There is some public support for approximate seat-vote proportionality in election outcomes, but it is not clearly prioritized more highly than other, potentially competing criteria, including that maps should closely follow existing boundaries such as county and city lines to the extent possible.

1 The Nature of Partisanship

Modern American politics revolves around competition between two major parties, Republicans and Democrats. Individual Americans vary in their attitudes, attractions, and antipathies towards these parties. Some self-identify with one major party, and others do not. In popular jargon, the latter are termed "independents." Whether independent Americans, who see themselves as neither Republicans nor Democrats, constitute about one-third or only about one-tenth of the adult population is unclear, and depends on how one asks and interprets survey questions gauging partisanship.

The precise wording of survey items (that, is questions and options) varies, but a very popular approach, as developed by the American National Election Study series starting in 1952, is a series of nested questions, beginning with, "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an independent, or what?" Those answering "Republican" or "Democrat" are asked, as a follow-up, "Would you call yourself a strong (Republican/Democrat) or a not very strong (Republican/Democrat)?" Those who declare themselves independent, and sometimes those who name a different party, are asked, "Do you think of yourself as closer to the Republican or Democratic party?" This question design provides two alternative estimates of the proportions that are Republican, Democratic, and neither, or independent. The first question

¹The ordering of options is sometimes randomized or rotated, so that not all respondents get precisely the same wording. Capitalization of "independent" is not uncommon, but is misleading, as there is no formal party of that name to justify elevation to proper-noun status.

creates a three-way classification scheme. Combined, the questions create a seven-category classification, assumed to be ordered: strong Republican, not-strong Republican, independent closer to the Republican party, independent not closer to either party, independent closer to the Democratic Party, not-strong Democrat, strong Democrat. (Those respondents who decline to answer the first question, sometimes by disavowing any interest in politics, are usually ignored in analysis. Sometimes, those who respond to the "...or what?" cue are likewise set aside. Some respondents will answer the first question, but decline to answer the follow-up. Usually there are fairly few such respondents, but not none at all, and, again, they are mainly ignored in analysis.) The nickname "leaners" is often assigned to those who initially profess independence, but then acknowledge being closer to a major party, even though the questions make no mention of "leaning." Sometimes the strength follow-up is omitted, so that the larger classification scheme has only 5 categories. There are strong assumptions underlying this variable construction, that one cannot be both Republican and Democrat, in degrees, and that positive affect for one party equates with negative affect for the other. In countries with multi-party systems, those assumptions are far less natural. Indeed, in many other democracies, the whole notion that residents "identify" with parties is open to debate. Outside the United States, many scholars conceive of citizen-party interactions chiefly as a matter of voting behavior, and not deep-seated identity (e.g., Paparo, De Sio, and Brady 2020).

In a November 2023 Marquette Law School Poll of Wisconsin registered voters, for instance, when asked the first question, 34 percent chose Republican, 35 percent Democrat, 24 percent independent, and 8 percent volunteered some other answer, or declined to answer. Once the independents and others were asked, "Do you think of yourself as closer to the Republican Party or to the Democratic Party?", with no explicit options of "neither" or "both" offered, most relented and chose. They were almost equally divided, leading to a quite different portrait: 46 percent Democrat or Democratic leaner, 45 percent Republican or Republican leaner, 10 percent independent or other.²

The example is merely illustrative, but very typical. A sizable share of survey respondents who deny partisanship when asked only once can be nudged or cajoled into declaring a preference on a second query. In a lively debate over whether these leaning (or "closet" or "shy") partisans should be regarded as true partisans, most of the evidence in the affirmative consists of demonstrations that their other survey responses pertaining to parties, including vote reports, more closely resemble those of self-described partisans than those of twice-self-described independents (e.g. Keith et al. 1992, Magleby et al. 2011). Fiorina (2018) offers one rebuttal, based on panel data (repeat interviews with the same individuals). The partisan leaning expressed at the second prompt might reflect a short-term vote intention, rather than an ambivalent or reluctantly revealed deeper attachment. This distinction is important because at least since the publication of the highly influential The American Voter in 1960, most American political scientists have conceived of partisan identification as a long-term, slow-changing trait of potential voters, predictive of voting behavior, but not identical, and causally prior. So while political scientists will sometimes infer partisanship from voting behavior, the two are not regarded as identical, whether considering an individual ("micro-partisanship") or of a collection of individuals ("macro-partisanship"). The question of whether a small majority or a very large majority of Americans are partisans is, in part, bound up with the distinct question of how separate are attachments to parties and near-term voting plans or very recent vote history. Generally, a case can be made for two different answers to the question, "How many eligible voters are not partisan?" Whether one answers "30-40 percent" or "about 10 percent", a further qualification is "...with variation from place to place and from election to elec-

²Marquette Law School Poll, November 2-7, 2023.

tion." No one seriously proposes explicitly that all American eligible voters or even actual voters are partisans, even though that assumption lurks behind much work, and the equation of select votes with partisan identity is quite common.

There is, in turn, a large, ongoing academic debate on whether partisanship should be seen as an identity (akin to a religion, mother tongue, sexual orientation, nationality, or maybe even longstanding sports-team allegiance) or, instead, a short-term, comparative preference (as in, "right now, I would prefer pasta to beef" or "I've been running less and swimming more lately"). Those who devised the survey items discussed above generally took the former view. Revisionists later emphasized that data strongly adjudicating between these rival understandings are hard to come by. Some studies pushing the "identity" view emphasize novel findings on how partisan judgement sometimes shows up in non-political contexts, as when people report liking their neighborhood less when told that their neighbors are less like them in partisanship than they thought (Hui 2013), or express opposition to having their children marry someone from the other party (Iyengar et al. 2012). However, such findings often amount to demonstrating "some effect" rather than a perfect sorting, and they are also sometimes contradicted. For instance, other studies suggest that the importance people say they attach to "similar political views" in how they evaluate a possible spouse was negligible in 1939 and equally so in 2008 (Fiorina 2018, 61)). Despite many innovative studies exploring the breadth and depth of partisan attachments in recent decades, the quiddity of partisanship remains debated. It is plainly not a nearly immutable trait on par with race or sex, let alone age. There is no consensus that it is genuinely as strong or enduring as religious identification, although with both religion and party, the "none"s are an important category not to be overlooked. Insofar as there is evidence that the significance of partisanship for political actions has varied over time, there is little consensus on precisely why it waxes and wanes, and there is no reason to think that a period of increasingly intense partisan separation or polarization is ever irreversible. So, the argument that "this is an era of stronger partisanship" should not be confused with "...of perfect partisan sorting" and one should certainly not infer that present-day patterns will necessarily persist forever.

2 Parties and Partisans

Neutrality in regard to parties is not strictly identical to neutrality between individuals, some of whom have partisan persuasions. There are doubtless abundant important legal principles and distinctions regarding rights, as enjoyed by institutions or organizations like parties, and those belonging to individuals who constitute those organizations. My point hereafter is not to rehearse legal points, but to emphasize that a dichotomy in the party system need not be indicative of that exact same dichotomy within the electorate. An electorate that tends to split its vote about 55% for A and about 45% for B over a period of time will almost never consist of 55% died-in-wool supporters of party A and 45% rock-ribbed supporters of party B. There will be variations across distinct electoral contests, and probably even larger potential variations across unobserved, hypothetical contests. In that sense, the average or normal vote (Converse 1967) observed from a set of contests (over a small set of election years) can be highly conditional on such factors as kinds of competition taking place, turnout patterns, issues at play, demographic traits or geographic bases of candidates, spending levels, and even ballot and voting procedures. The same voters confronted by a different set of candidates, with slightly different electoral institutions, might have exhibited different patterns of partisanship. Voter behavior is indicative of partisanship, but

not only of partisanship, which is harder to measure and more amorphous.

Split-ticket voting, simultaneously supporting candidates from different parties in races for different offices, offers one glimpse of internal variance in partisanship as a categorical variable for individual voters. There are certainly some voters who pay scant attention to candidates, beyond which party they represent, and will back all Democrats or all Republicans. Other voters, attentive to candidate traits, will usually refrain from supporting candidates from one party, but will also decline to support *all* of the candidates from their preferred party. And other voters, perhaps even more attuned to aspects of candidates other than party, such as sex, likeability, record of helping constituents, etc., will, on a single ballot, support candidates from both major parties.

A quick comparison of outcomes from races that appeared on the same ballot confirms the point. Consider the 2022 contests for Governor and Lieutenant Governor and for U.S. Senator in Wisconsin. The Democratic pair of Tony Evers and Sara Rodriguez triumphed in the gubernatorial race, with about 51.2% of the vote. Meanwhile, the Democratic Senate candidate, Lieutenant Governor Mandela Barnes, took about 49.4% of the vote, narrowly losing to incumbent Republican Senator Ron Johnson. From the aggregate vote totals, one can tell that thousands of voters backed only one of the Democrats or only one of the Republicans. Usually, logical bounds on exactly how many ballots of each type could have gone into those vote totals are very uninformative, leaving the true degree of splitting unknown, and not easily estimated. With ballot images, however, the exact numbers of each possible combination of votes are observed.

Dane is one of the few counties, in Wisconsin or elsewhere, that makes a data set of ballot images publicly available for a period of time after each major election. These data record exact descriptions of the mixture of votes on each ballot, and so provide the necessary information to know how much splitting, and what variety, took place. In Dane, Senator Johnson's vote total was nearly 6,000 votes higher than that of the GOP gubernatorial ticket, Tim Michels and Roger Roth, while the Evers/Rodriguez slate won nearly 5,000 votes more than did then Lieutenant Governor Barnes, in his senate bid. From the ballot-image data, one can compute that ballots with votes for Democrats in both races constituted about 75.5% of the total, while straight Republican ballots were another 19.9%. Roughly 1% of the ballots had exactly one Democratic vote and no Republican votes. Around 0.5% were the mirror image, having one Republican vote and no Democratic votes. About 2.2% of the ballots had votes for both winners, Democrats Evers/Rodriguez in the gubernatorial column and Republican Johnson in the Senate race. Another 0.5% were ballots with votes cast for both losers, the Republicans Michels and Roth and the Democrat Barnes. Finally, about 0.2% of the ballots featured no votes for either major party, as they combined support for an independent gubernatorial slate, write-in votes, or abstentions.

Figure 1 shows a breakdown of ballots cast in Dane County in the 2022 election taking into account all of the partisan races. These data provide a finer, more detailed sense of voters' partisan loyalties than aggregate data, which are inherently ambiguous, or surveys, which generally do not cover the full panoply of offices on long American ballots, and also exhibit sampling and measurement error (Weisberg 2005). In 2022, voters in Dane County had the option to participate in as many as 10 statewide, county-wide or districted contests. A few races were uncontested by one major party, so depending on precinct, voters could cast 8, 9, or 10 Democratic votes and 7, 8, or 9 Republican votes, or could, instead, abstain, support a minor-party candidate, or write in an alternative choice.³

³There were five statewide contests, for U.S. Senator, the Governor-Lieutenant Governor slate, Attorney General, Treasurer, and Secretary of State. The two county-wide offices up were sheriff and clerk of the county court, the latter race featuring no Republican candidate. There were up to three districted contests. All of the voters in the county were in the

The figure classifies ballots according to whether or not they exhibit divided or limited partisan loyalties as follows. Voters who cast the maximum number of possible ballots (between 7 and 10, depending on location) for one party and none at all for the other major party are deemed "straight(-ticket)" partisans. The dark blue and dark red bars show what proportion of all 2022 Dane voters were straight Democrats (about 63%) or straight Republicans (about 12%), respectively. Voters who supported only candidates from one major party, but did not support all of them, are coded as "incomplete" partisans. The light blue bar shows that about 8% of the voters backed some Democrats, and no Republicans, without supporting all of the Democrats. The pink bars show that about 2% of the voters were, analogously, incomplete Republicans. Voters who supported at least one candidate from each party, and the very few who supported no Republicans or Democrats at all, are in the "split" category. The purple bar shows that they constituted about 16% of the voters, or roughly 50,000 individuals in this one county.

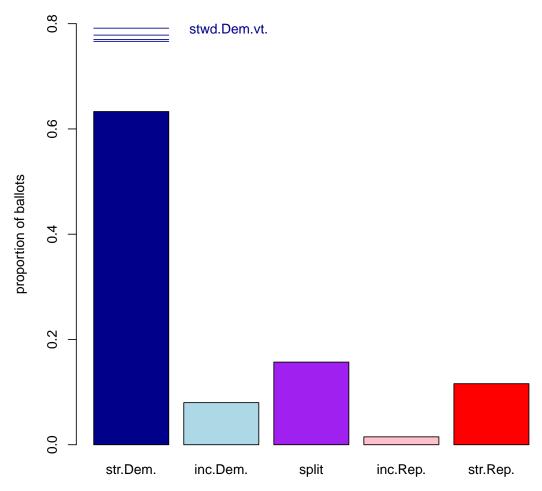
Dane County, home to the second largest city in the state, Madison, is a heavily Democratic jurisdiction, so it is little surprise that the dark blue bars towers over the others. But when one focuses on the normal vote of an electorate residing in a geographic entity, there is some tendency to under-appreciate the diversity of its composition. The dark blue lines above the straight-Democrat bar show the two-party vote share for the Democratic candidates in the contested statewide races, for U.S. Senator, Governor/Lieutenant Governor, Attorney General, Secretary of State, and Treasurer, all just under 80%. It is common to average vote totals of those sorts into an estimated normal vote, which is then taken to characterize the party leanings of the electorate, in a county, district, or smaller geographic region. This figure is a reminder that Democratic (and Republican) candidates accrue votes not only from utterly loyal Democrats (or Republicans), but from a substantial number of voters with mixed preferences, reservations about some of the candidates fielded by their preferred party, admiration for other-party candidates, or, in many cases, little or no sense of actually having a party of their own.

There is little reason to suspect that Dane sees unusually high splitting. Given its dramatic partisan skew, the converse is perhaps more likely. The gaps between aggregate votes determine maximum levels of straight voting, and in the contests for US Senator and Governor/Lieutenant Governor, broached above, Dane was on the low end for Wisconsin's counties. Its alphabetical neighbor Crawford County, for instance, saw more than twice as large a gap, with the Evers-Rodriguez ticket having outpolled Barnes by about 3.5 percentage points, versus roughly 1.5 points in Dane. A figure for one county in one year is merely illustrative, and opportunistic given the scarcity of ballot-image data sets. But the point is general: in a two-party system, normal voters do not come in only two types, however the normal vote is estimated.

second U.S. House district. Voters were in one of twelve distinct Assembly districts, three of which lacked a Republican candidate. Some voters were in one of three state Senate districts having a 2022 election, one of which lacked a Democratic candidate.

Figure 1: Straight- and Spit-Ticket Voting in Dane County, 2022





7-10 contests; 302,968 ballots

Voters who opt, on a single ballot, to support some candidates from different parties are obviously not assessing candidates only on the basis of party. And if it is something of a truism to note that politically engaged citizens become somewhat partisan in systems where competition is organized by parties, it is equally obvious that candidates can attract or repel votes in many, many ways beyond their party labels.

The point that contests most of which feature one Republican and one Democrat generate some degree of regularity in the two-party breakdown is notable, but there is also scope for misconstru-

ing those patterns as stronger, more stable attachments of the actual citizens doing the voting than is, in fact, lurking beneath.

3 From Votes to Seats

Political scientists often simplify the very large array of possible electoral rules into a simple dichotomy between proportional and plurality systems (e.g., Lijphart 2012). The former assign seats to parties in proportion to their vote shares, with various constraints, exceptions, and qualifications, so that seat shares are, by design, approximately proportional to vote shares. One common example of a constraint, that curtails exact proportionality, is that parties are often awarded seats only if their vote share surpasses some minimal threshold. Proportional assignment can be done for an entire polity, as is done for the parliament of Israel and the lower house in the parliament of the Netherlands, but more often it takes place in each of a number of multi-member districts. In the aggregation from district to national totals, some proportionality can be lost. Moreover, it transpires that there are many ways to do the necessary rounding to convert shares into integers, given a fixed number of seats (Balinksi and Young 1982). In turn, there are many different form of "proportional representation" (for short, "PR") electoral rules. Generally, however, PR produces roughly proportional vote and seat shares for at least a subset of parties.

In plurality systems, by contrast, seats are awarded individually, to whichever candidate(s) win(s) the most votes in a district, with no attention to other districts' results. In turn, there is no automatic relationship between votes and seats. For example, it is logically possible, though empirically vanishingly rare, for parties that almost exactly tie in votes to win 0 percent and 100 percent of the seats, respectively, even without differences in district vote totals. If each of 100 single-member districts saw a result of 10,001 for the candidate of party A and 9,999 for the candidate of party B, the resulting vote shares would be 50.005 % to A and 49.995 % to B, and the seat shares would be 0 % and 100 % to A and B. Generally, proportionality is not built into the system under most-votes-wins rules, and if it arises, it arises in some degree by accident.

There are many other ways to structure voting, beyond nation-wide PR and single-member-district plurality. Just the same, comparative political science quite often forces more complicated systems, involving cumulative or transferable votes, majority requirements, or blends of distinct rules in "mixed systems", into one or other category for simplicity in comparative analysis. For present purposes, the critical point is that some electoral systems are essentially designed to be highly proportional in vote shares and seat shares, and others are not. Single-member plurality competition, the most common electoral system in the US, is not a proportional method by design.

It follows that judging a map by whether the more successful party won a larger seat share than vote share is not an apt or sensible gauge of the fairness of the system when plurality rule obtains. A *very* large discrepancy in these shares can be a useful, crude diagnostic, in a qualitative sense, but there is not a common standard for how big a gap is too big to be reasonable, and mere comparison of shares ignores the myriad possible sources of disproportionality. The huge 50 % gap in the contrived, stylized example above is, in fact, not indicative of an unfair map, given that every race was essentially a tie, with party A candidates having won each seat by good fortune.⁴

⁴Getting 100 heads in 100 tosses of a fair coin is nearly, but not literally, impossible. The single most likely outcome of exactly 50 heads, meanwhile, is expected to happen less than ten percent of the time. An expectation of (rough) propor-

One answer to how a set of electoral districts in a plurality system can exhibit partisan neutrality begins, just the same, with the mathematical relationship between aggregate vote shares and seat shares for the parties, often called the vote-seat (or seat-vote) "curve" or "function." Fairness, on this logic, is not exact proportionality, but, rather, symmetry, such that the parties reap about the same share of seats from any given vote share. If both parties A and B can win about 60% of the seats with a 55% vote share, for example, the system could, on this logic, be judged as fair in that vote range. It would equally be fair or unbiased if they each won 65% of the seats from 55% of the votes, and it would also thereby be more sensitive or "responsive" to vote gaps. An implication is that exact 50-50 vote ties should result in something close to 50-50 seat ties, although what "close" means is not obvious, and symmetry is not exclusively about the seats shares (expected or observed) when vote shares are nearly identical. Because symmetry can be assessed at different vote shares, it is necessarily complicated.

An immediate difficulty in applying such logic is that there is never any guarantee that one will observe, in a few relatively proximate elections, different parties winning nearly the same vote share. And without an unrealistically large number of elections, the performance of the system will only ever be observed over a few possible vote shares. So, a typical method of making such comparisons, to evaluate symmetry, involves simulating unobserved outcomes. The project of representing the translation of vote-share vectors into seat-share vectors for a set of elections with a mathematical function is very old, dating from Edgeworth's pioneering work (1898). Writing down a theoretical function or a statistical model for an empirical function is easier when there are only two parties, not more than two. However, under plurality rule, estimation involves a number of tricky issues, even when done after-the-fact, from a set of observed election results (i.e. vote shares and seat shares for the parties) in a system dominated by two parties. Some of the key challenges include: (a) races uncontested by one major party will tend to make aggregate vote share noisy or distorted; (b) how to cope with some minor-party or independent candidates who garner non-trivial vote shares is not obvious; (c) when elections are staggered, so that not all seats are up at each election, interpretation of aggregates is necessarily conditional and more complicated; (d) turnout normally varies across districts so that aggregate vote shares differ from (unweighted) average vote shares, and some of the complications associated with more than two vote shares arise when the non-voter share is included; (e) over the lifetime of a 10-year electoral map, district populations diverge, so that even apart from different typical turnouts, districts can vary substantially in their contribution to the vote aggregate, but not to the seat aggregate; (f) whether vote shares are adjusted or modeled for such factors as incumbency advantage, party "tides," candidate quality, spending levels, and so on, can be quite consequential, but there is nothing like consensus on which variables should be employed, if any, to generate "normal" vote

All of the points above can be addressed with some assumptions. My claim is not that it is impossible to do analysis, but, rather, that the challenges are many, and that many different approaches, generating different findings, can all seem reasonable. For instance, many analyses tackle uncontested races by imputing for each contest lacking a Democrat or Republican a hypothetical district result for the unobserved contested race. This imputation can be done using prior elections or contests for other offices in the given district and same election, or both. In the simplest move, one swaps vote for presidential candidates or gubernatorial candidates for votes in the leg-

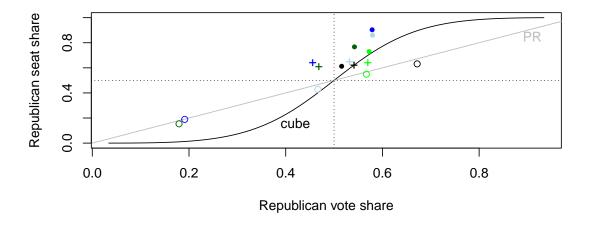
tionality is different from a realization thereof, and the uncertainty about the expected value is important. "We expect (but never guarantee) that about 94% of the time we will see between 41 and 59 heads" is a far more informative description than "we expect 50 heads," as the latter ignores large uncertainty.

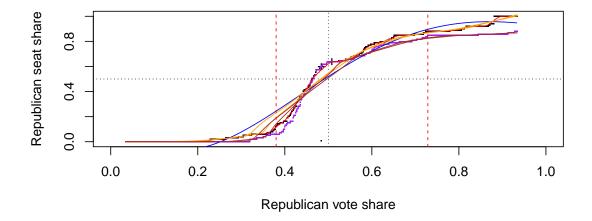
islative races of interest, as though they are equivalent. Of course, they are not, and demonstration of high correlation does not necessarily establish that they are somehow "close enough." There are many ways to try to solve the missing-data problem caused by absence of candidates, but all attempted solutions carry uncertainty associated with estimation of unknowns. That uncertainty will multiply in later stages of analysis. Very often, analysts simply ignore all such uncertainty, for simplicity. This is a point that will recur in brief discussion of some analysis in some other expert reports, below.

Beyond those uncertainties, any retrospective assessment of how a given electoral map translated votes into seats is inherently difficult because of limited data. In a typical American case, one observes at most five elections over a decennial apportionment period, with even fewer data points if there are any boundary alterations beyond the post-Census redistricting. Each election is essentially one observation of the vote-share, seat-share pair, and five is a very small number of data points for estimating even a simple linear function, let alone a more complicated function of the sort typically postulated to fit plurality elections. A common strategy for getting around the paucity of data is to generate a large number of hypothetical election results, from each observed data point or from some variety of average across the five observed cases. One such method is to assume a "uniform swing" and map out what seat shares would have obtained had a party gained (lost) exactly the same percentage points of vote in each district. There are, of course, many, many other ways to posit vote swings that produce unobserved, counter-factual or simulated vote-seat data points from a lone observed point. Any such model of swings rests on assumptions, that perhaps can be assessed as more or less plausible by comparisons of some kind, but cannot be verified as correct, as such, given that they are inherently counter-factual.

It is worth reiterating that a seat-vote analysis assesses not strictly the map, but an electoral system. With single-member districts and plurality rule, the electoral boundaries are extremely important, of course, but a host of other rules, governing ballot access for parties, ballot format, and election administration, broadly, are also important to outcomes.

Figure 2: Wisconsin Assembly Seat-Vote Functions





The top panel of Figure 2 shows, with crosses, the aggregate Republican vote and seat shares for the 2012-2020 elections. (Colors identify elections, with dark green for 2012, light green for 2014, light blue for 2016, dark blue for 2018 and black for 2020). The vote shares include the many races uncontested by one major party. At a glance, one sees much more variance in vote shares than in seat shares. How important are those races without competition? The solid and hollow circles separate races according to whether or not candidates from both major parties contested the seat. For instance, in 2012, 22 Democrats were elected without facing any Republican opponent,

while only 4 Republicans won seats without any Democratic opponent. Adding up the major-party votes across those 26 uncontested races, Republicans won about 18% of the vote, and won $\frac{4}{26}\approx 15\%$ of the seats. It happens that the uncontested vote and seat shares, marked with hollow circles, fall nearly on the diagonal, exact-proportionality line (marked "PR") in this period. The black curve shows the "cube rule," a theoretical prediction popularized by Kendall and Stuart's influential analysis of early Twentieth Century data from the UK and select US elections (1950), that predicts seats ratios equal to the third power of vote ratios. In this panel, the solid circles show shares for contested races, and some of these fall fairly close to the cube-rule function. It seems clear that what conclusion one draws about partisan symmetry or bias could depend on how the ambiguity of uncontested races is resolved.

The bottom panel shows a few possible seat-vote curves fitted to these data by the following steps. First, a model of district "normal vote" was estimated, using only the contested races. The model employed only one additional predictor variable, an indicator for whether each contest featured a Republican or Democratic incumbent, signed so that it estimated an identically sized vote-share advantage, using only full-term incumbents (and not special-election winners). The model was then:

$$V_{it} = \eta_i + \alpha_t + \beta I_{it} + \epsilon$$

where η_i are indicators for each district (district "fixed effects"), the α terms are election-year indicators (time fixed effects), V is the Republican two-party vote share in district i and election t, and I_{it} is an indicator of an incumbent running in district i, election t, positive for Republican incumbents and negative for Democratic incumbents. The ϵ term represents error or noise. The estimated incumbency advantage, $\hat{\beta}$ was about 2.5 percentage points. Those effects are effectively removed from the observed vote totals, so that the vote-seat mapping is intended to be free of a distinct incumbency effect. Six districts were never contested over those five cycles, with districts 10, 16, 18, 77, 78 never having seen a Republican and 59 never having hosted a Democratic candidate. For these districts, absent from model estimation, I imputed the appropriate least competitive district whose normal vote could be estimated from at least one contested race. The normal votes were weighted by average turnout in two ways. One version used 2012, before populations had drifted very much, and the second employed the whole period. Products of normal vote share for each district and vote-total weights produce an average Republican vote share for the map over the decade. The two crosses in the vicinity of (.5, .6) show those two estimated data points.

Two sets of small data points mark out the results of distinct uniform-swing simulations. To observe symmetry or asymmetry in the treatment of parties, one requires not the single data point reflecting average results, but a set of hypothetical outcomes. As the Republican vote share falls or rises from this decade average (the one based on the 2012 weights was used), assuming the same relative strength for the party across the districts, the seat share adjusts accordingly. A uniform percentage-point swing ceases to work (respect bounds) when any district bottoms out at 0 or tops off at 100 percent of the vote, without further adjustment. Thereafter, the swing can be conditionally uniform, for districts that have votes remaining to lose or gain. The vertical dashed lines mark the range of the uniform swing for this simulation, which can be viewed as the portion for which seat-share estimates are more internally consistent. The second set of hypothetical data points, in purple, allocates a shifting total Republican vote to each district to maintain each district's relative share of the total, and so does not face this zeroing-out challenge.

The red line fit over the first points is an extremely local locally weighted regression. Blue, brown, and orange lines are much smoother trend lines, fit to the same data, but with parameters chosen to produce much simpler shapes, treating more of the simulated variance in the data points

as noise. Rather than compute uncertainty intervals for predictions, I merely note the large variation across distinct predictions, all of which are estimates steeped in assumptions and uncertainty.

None of these estimates is meant to be in any way definitive. The point of the exercise is not to provide a single best answer to whether the 2012-20 Wisconsin Assembly map was or was not partisan neutral, nor to generate a score for its neutrality on some low-to-high scale. Rather, I wish primarily to emphasize that even after observing five elections, estimation of statistical parameters to capture bias or responsiveness of the map always entails many assumptions and much uncertainty. There is no shortage of statistical models for converting election data into estimates of relevant parameters (e.g., Gelman and King 1990, 1994) But there is not a consensus on the correct or best approach, and every approach both invokes strong assumptions and necessarily involves multiple sources of uncertainty, arising from statistical estimation and combination and comparison of statistically estimated quantities. Other analysts might estimate normal vote with a different, more complicated model including such measures as challenger quality, spending ratios, female-candidate effects, etc. There are countless ways to create hypothetical outcomes with swings, for instance so that they are proportional to observed inter-election swings rather than uniform. The best model for trend in those hypothetical data points is wide open to debate. And on, and on.

It might be appealing to equate partisan symmetry with a symmetrical vote-seat function, but the assessment of symmetry from complicated estimation is inherently fraught. The example above was based on retrospective analysis of observed returns, but assessing a map before elections have been held brings in yet another stage with inherent difficulty, projecting future results from past results. This is, again, a common task for psephologists, but also one that inherently involves assumptions and the possibility of error.

One "solution" to the myriad challenge of modelling is to assume away the need to model. The "efficiency gap," a somewhat popular measure of partisan fairness in recent years, is perhaps the prime example (Stephanopolous and McGhee 2015). Its creators begin with the premises that: (a) votes cast for a loser are "wasted"; (b) votes cast for a winner beyond the single vote that puts the winner ahead of the next closest loser are similarly "wasted." In turn, they devise a very simple statistic based only on party seat and vote shares, without models of simulated or hypothetical quantities, or adjustment for important conditions or relevant vote-generating factors. With only 2 parties and districts equal in voter population EG = S - 2V, where S is seat percentage minus 50% and V is vote percentage minus 50%. Quite contrary to intuition, a perfectly fair race is then any 75% to 25% outcome, given that the winning and losing parties waste identical 25% vote shares. If each of 100 districts ended up 75-25, the EG would be 0, regardless of whether party A won every seat, party B won every seat, or they split the seats in any ratio whatsoever.

Jackman (2015), acknowledging the huge challenges of constructing compelling and unique hypothetical data to measure symmetry, sees the simplicity of this statistic as its main virtue, freeing it of "the criticisms that stymied...partisan bias measures." But this gain is somewhat illusory. The simple arithmetic of the efficiency gap is essentially blind to geography, and divorced from any sense of natural baseline. Cho (2017) lays out some of the pathologies of the efficiency gap, with stylized examples and real data. She deduces that it measures neither bias nor responsiveness, is a poor choice for comparing jurisdictions, particularly if number of seats at play varies, and does not even work well for comparison over time in a given jurisdiction. In exact opposition to Jackman, she concludes that, "complex phenomena like partisan fairness, require nuanced multi-dimensional measures" and that "(f)or ensuring partisan fairness, the efficiency gap is too easily fooled" (2017, 36).

Expert reports in support of various maps (plans), addressing, in part, partisan fairness or symmetry have been submitted by Anthony E. Fairfax, Kenneth R. Mayer, Daryl DeFord, and Christopher Warshaw. Across these reports, one finds calculations and claims based on a variety of common and popular measures of partisan bias or fairness, including efficiency gap scores, declination values, and some calculations based on district normal votes and/or estimated seats-votes curves. It is not surprising that these experts employ those measures, but the sheer volume of calculation should not be seen as conclusive.

For instance, it is noteworthy that the inventor of the declination statistic proposed it, in part, because of misgivings about the efficiency gap, which, he notes "Unfortunately...reduces to proportional representation, an expectation that is not a constitutional right" (Warrington 2018, 39). Declination, however, is, like the efficiency gap, insensitive to whether partisan asymmetry arises by willful manipulation (gerrymandering) or from some other source, such as geographic clustering or compliance with contemporary interpretation of Voting Rights Act requirements. In addressing this concern, Warrington curiously pushes aside the conflation of distinct sources of asymmetry as a "constitutional issue," rather than a technical point about measurement. Knowing that asymmetries can arise many ways, he proposes measuring asymmetry without any effort to isolate that portion of it that is deliberately created, and then leave to courts the question of whether map makers should be required to match or offset natural differences in how parties fare, assuming that they should not, in any case, enhance them.

In turn, a demonstration that some particular map has better scores than another in *both* efficiency-gap and declination metrics does not really establish superiority in partisan fairness, insofar as both measures capture deliberate partisan bias rather poorly.

A striking point about the vote-seats analyses in the reports is that, for the most part, they make little mention of accumulated uncertainty in estimates and downplay assumptions involved. Thus, Mayer proposes that "the magnitude and direction of partisan symmetry can be read directly from the seats-votes curve" before comparing point estimates. That there are many, many ways to generate that curve is ignored. Fairfax's Tables 6 and 7 display the various statistics without any standard errors or confidence intervals and the accompanying description ignores uncertainty and assumptions altogether. The most interesting report in this regard is that of DeFord, who nods in the direction of uncertainty without quite acknowledging its extent. Thus, his Figure 6, contrasting a symmetrical function with a less symmetrical one derives from use of presidential vote as a proxy for legislative vote and a uniform swing, which he correctly describes as "one common approach" and not, say, "the best approach." The uniform swing is not, of course, the only way to model swings, and neither is the presidential vote the actual vote of interest. Figures 10 and 11 extend the analysis by swapping in other estimates of normal vote, none perfect but assumed to have somewhat different (unknown) flaws. None of the curves drawn is drawn with uncertainty, but the accumulation of distinct estimates creates a wider band, and simple visual inspection confirms that the sharp conclusion of his Figure 6 look fuzzier when one considers a larger set of ostensibly justifiable curves. If one asks only "Does the curve pass through the 50-50 point?" then his Figures 10 and 11 answer affirmatively for the plan DeFord defends, and negatively for the rival. But if one asks, "Could one choose a vote model and swing model to ensure that the 50-50 point is within the range of estimates in which one has confidence?" the figures hint that the answer might be yes, with a little determination. In the absence of actual confidence intervals on model predictions, one must guess how these might look. But the normal social-science practice of emphasizing intervals, rather than point estimates, would expand the region covered and endanger the conclusion that one map passes and one fails the 50-50 test.

A subsequent section of the report describes still further analysis, in which the author endeavors to separate out incumbency advantage and to model actual legislative vote in order to deal with the challenge of uncontestedness, and to acknowledge the otherwise neglected point that high correlations between district vote shares from different contests do not assure that vote shares are interchangeable. For the first time, the author also addresses uncertainty in estimation, by repeatedly drawing from the posited data-generating process to generate a set of distinct estimates. The resulting Figures 17 and 18 again suggest that symmetry around the 50-50 point is greater for the maps he recommends than for the rival map to which he compares them. Again, though, what also stands out in the contrast between the leftmost panels of his Figure 17 and the right-most panels of his Figure 18 is that uncertainty about the estimates dampens the contrast. And one can certainly write down models with many other factors beyond incumbency (e.g., spending levels, challenger quality), estimate uncertainty therein, then employ many different swing models, and generate uncertainty about those. Starting with a goal of covering 50-50 or not, one can make modeling choices to ensure the desired result.

Mayer's initial report estimates normal vote from a set of statewide election results, much like the analyses of other experts. His initial report says the analysis computes "party performance using the 2016 and 2020 presidential vote, the 2018 and 2022 U.S. Senate vote, and the 2018 and 2022 Governor and Attorney General vote" (2024a, 23). A second, "corrected" version of the report, replaces that text with the following: "party performance using the 2016 and 2020 presidential vote, the 2018 and 2022 U.S. Senate vote, and the 2022 Governor and Attorney General vote" (2024b, 23-24). Evidently, he decided on some basis to exclude the two state-office contests from 2018. One might assume, from the tone of all of the reports, that it hardly matters which elections one chooses as proxies for the actual legislative elections, because conclusions never change. But perusal of Table A7 from the two different reports shows that the estimated normal Democratic and Republican vote shares for Assembly districts thereby estimated change, sometimes by several percentage points. The two sets of estimates are very highly correlated, at 0.99. Many of the reports trumpet high correlations of that sort in support of the substitution of one for another. But, district by district, the seemingly innocuous change of choice of input data alters estimates a good deal. Estimated Democratic and Republican normal vote shares for the 14th district, for instance, changed from 54.3% D and 43.4% R (+11.1%) (2024a, 47) to 60.2% D to 38.2% R (+22%) (2024b, 47). The 42nd district, originally estimated as 38.9%D and 59.2%R (-20.3%) (2024a, 48) became 37.2% D and 61.8%r (-24.6%) (2024b, 48). The justification for reporting estimates to the tenth of a percentage point is hard to fathom when successive estimates from a slightly tweaked model can move so dramatically. Yet again, one cannot help but wonder about the full extent of uncertainty lurking at each stage of estimation in the analyses.⁵

Warshaw's analyses, like those of Mayer and DeFord, begins with models of normal vote estimated from statewide elections rather than those of primary interest, the actual contests for seats in the state legislature. Like Mayer, he employs many such contests and assures readers that "these statewide races are an excellent predictor of legislative races," elaborating that "presidential election results are nearly perfectly correlated with legislative results in recent years (see, for instance, Table 3 in Jacobson 2021)" (Warshaw 2024, 17). The citation is something of a stolen base,

⁵Having had only a few days to examine so many lengthy reports, I necessarily worked in haste, and could possibly have missed some other change made in the modelling done in the "corrected" report beyond the selection of which elections to use as proxies for actual legislative elections. Unless the corrections were of mistaken transcriptions, the point is the same. There are many ways to write down normal-vote models, and claims of extreme precision, stability and insensitivity to assumptions such as which data to use should not be taken seriously.

as the relevant table in the Jacobson article concerns not state legislative elections, but U.S. House elections. Like DeFord, Warshaw proceeds to further analysis, based on a black-box, but open-source, model implemented by PlanScore software. He notes of those estimates that they add "an additional element to the analysis—the "down ballot" dropoff effect for a given state (which is either neutral, Republican favoring, or Democratic favoring)" and so are "necessarily...different scores for the various partisan bias metrics than the composite results based solely upon prior statewide elections, reported above." Because the software allows the user to specify incumbency status, these secondary estimates also aim to remove incumbency advantage, as did the analysis I reported above. While Warshaw regards qualitative agreement between the distinct analyses on which is the better map as determinative, one might instead note, yet again, that "I calculated numbers to compare in two different ways" means "out of the thousands of ways one might have done."

Warshaw's report also introduces one other form of comparison, as he draws distributions of various statistics for a large set of past maps, not only from Wisconsin, but from other states. These should not be confused with distributions of possible values for present-day Wisconsin, covering the population of feasible maps, as discussed immediately below. Whether the comparison underlying them is sensible or informative depends, in part, on whether the statistics are sensitive to the range of differences across states, such as how distinct are urban, suburban, and rural areas in voting habits, and how the urban, suburban, and rural populations differ in size. Cho's evaluation of the efficiency gap (2017) noted that it has built-in a sensitivity to jurisdiction size that makes it a poor choice for comparing different legislative chambers. While Warshaw proposes that consistency across distinct statistics establishes "a particularly robust conclusion" (2024, 16), when measures share a flaw, such as inattention to a suitable baseline, agreement between them reveals little.

One final measure is a count of competitive districts, which, arguably, is an interesting criterion, but not really a measure of fairness to parties at all. It too depends on estimation, a point obscured in the reports. One should not be impressed by agreement of a set of statistics, all of which are steeped in assumptions and sidestep or ignore the great difficulties in measuring an elusive trait.

Yet another route for evaluating maps in recent decades has been to situate a given map in a distribution of many possible maps, so that its comparative extremity (or absence thereof) can be determined. Three important points arise. First, despite much technological progress since the first venture into computer-assisted generation of large numbers of maps by Nagel (1965), the fundamental goal of constructing all possible maps remains unsolved. The Holy Grail for redistricting analysis is characterization of the full distribution of possible maps, for a given quality. The building blocks for electoral maps are the smallest division for which population data are made available, such as census blocks. In most large-scale cases, like states, with thousands of block groups, the number of possible maps is astronomical—not merely large, but so large that brute force computation is fundamentally impractical even with very fast super computers. Most of the debate about using powerful computers to construct maps turns on whether there is a feasible way to produce a very large set of maps that is plausibly or demonstrably a random sample from the unknown complete distribution. Random samples are extremely useful, but not quite as informative as actual distributions, because they generate probabilistic claims, rather than deterministic ones. Moreover, and more importantly, it is not yet resolved whether anyone can prove that an estimate of the unknown true distribution of maps is, truly, random (see, e.g., Cho and Liu 2019, Cho and Rubinstein-Salzedo 2019).

Second, even if the huge technical problem of constructing distributions were somehow solved, debates would not thereby end. Ultimately, choosing maps is inherently about prioritizing some criteria over others. With the at-present-only-hypothetical ability to consult the full set of possible maps, one could promote a given map as, say, "the most partisan-neutral map possible, according to measure X of neutrality, among all maps that also have k districts which are expected to be competitive by model Y, and j districts that are more than p percent likely to return at least q African American representatives, and that alter none of the prior districts by more than w percent in metric C." Such claims could be verified, which is not the case now. But there is not a single best algorithm for electoral map-making because the choices of which qualities to emphasize, what thresholds appeal, and, in most cases, even how to measure them are all political rather than merely technical.

Powerful computers have made it far easier to draw large numbers of maps. They have probably made it a little easier to concoct maps with express political purposes, that is, to gerrymander in some fashion. They have not, and could never, "solve" the problems of redistricting.

A third point about any analysis grounded in estimated distributions of the full set of possible values (assuming a satisfactory metric) applies in particular to partisan neutrality. If, in a rather blue or red state, it is possible to draw a perfectly purple map, is it neutral to do so? The whole notion of institutions being neutral to parties is surely conditional on the context. Neutral more naturally means engaging in equal treatment rather than equitable treatment. As noted above, Warrington's defense of the declination statistic is that one should measure asymmetry in party performance, without worrying about its source. But if the source is, in some degree natural (human geography) or conditional from pursuit of other criteria, the asymmetry is probably less objectionable.

And, finally, to return to where I began, the most important rights in regard to political institutions are enjoyed by individuals, not electorates.

4 Voter Preferences On Mapping Criteria and Map Types

Voters in fact seem to embrace multiple criteria for what constitutes a good map, which might bear on how important partisan neutrality should be among a set of criteria that can possibly be in tension

Surveys about redistricting, preferred process or outcomes, are scarce, because many public-opinion researchers regard the topic as too arcane for all but the most highly politically engaged. However, in both a 2020 national survey and a 2023 Illinois-only survey, respondents were asked to rank a set of possible criteria for electoral maps. The 2020 questions were part of that year's Co-operative Election Study, fielded in October 2020 by YouGov, to a representative sample of 1,000 adult Americans responding online. The March 2023 survey was commissioned by CHANGE Illinois, and again fielded by YouGov, with 1,000 Illinois registered voters who reported an intention to vote in 2024 as respondents.

The precise wording of the particular questions was, "After each decennial census is completed, all states redraw the districts they use for elections to the state legislature, and all states with more than one U.S. Representative redraw their U.S. House districts. Every state requires its districts to have nearly identical populations, but there are many other criteria for what constitutes

a fair or good set of districts (an "electoral map'). Please rank in importance the following goals for making a new map, from highest (most important to you) to lowest (least important)." The goals they were asked to rank, which were randomly ordered, were the following (with nicknames that did not appear in the surveys shown in parentheses).

- Districts should take relatively simple shapes. (compactness)
- Boundaries should follow existing country and city lines as much as possible. (congruence)
- As many districts as possible should be about equally balanced between Democrat and Republican voters, for competitive elections. (competitiveness)
- The overall percentage of seats won by each major party should be about the same as its overall percentage of the total vote. (party proportionality)
- Towns and neighborhoods that have a lot in common should be put in the same district, as much as possible. (communities (of interest))
- The proportion of legislators that is Black should be about the same as the proportion of the population that is Black.(Black proportionality)
- The proportion of legislators that is Spanish-speaking should be about the same as the proportion of the population that is Spanish-speaking. (Latino proportionality)
- New maps should resemble prior maps as much as possible, for continuity. (continuity, 2023 survey only)

In both surveys, at least 5% of respondents picked each possible rank for each criterion, so it would be fair to say that there is not a powerful consensus on which should prevail. In the national sample in 2020, party proportionality and congruence with other boundaries had the highest priority (lowest mean ranking, where lower numbers signify higher importance, i.e. top or first-place ranking versus bottom or seventh-place ranking). They were ranked first by 19% and 22% respectively, and the mean rankings for these criteria were 3.41 and 3.43, below 3.67 for compactness in third place and 3.76 for competition in fourth place. Communities of interest and racial proportionality lagged further still behind, the latter not being priorities even of those respondents from the particular racial group (Gaines 2021).

Responses from Illinois registered voters in 2023 were broadly similar, with congruence edging out party proportionality for top spot, but those two plus compactness and competition being statistically indistinguishable, and prioritized more highly than racial proportionality, communities of interest, or continuity. (In the 2023 Illinois data, one difference from the 2020 national data was a higher priority for Black proportionality among Black respondents.)

Notwithstanding the points made above about the great difficulty in ascertaining whether any given map would be comparatively neutral in its seat-awarding performance, given various unobserved vote-share scenarios, the public seems to have some affinity for approximate proportionality. These survey items, it should further be noted, did not present the criteria as being in tension, possibly or necessarily. And even though "continuity" had the second highest (that is, worst) ranking in the Illinois study, its appeal is perhaps subtle, and difficult to separate from "communities of interest" and congruence (which, when implemented, creates continuity).

Individuals residing in newly drawn districts with little resemblance to their prior districts can face somewhat higher costs of mobilizing for political action. Empirical studies confirm that

boundary shifts can lower public familiarity with candidates and, in turn, induce abstention and disengagement (e.g., Hayes and McKee 2009, 2012; Winburn and Wagner 2010). On the flip side, congruence between electoral boundaries and pre-existing county and municipal boundaries somewhat reduces transaction costs for individual political participation.

Voting is necessarily a costly activity. Even in the absence of poll taxes or other obstacles to voting, citizens who opt to express their political preferences on ballots incur opportunity costs, particularly if they devote time to evaluation of candidates in advance of voting. For a variety of reasons, these costs tend to be higher in the United States, where elections are comparatively frequent and ballots are comparatively long, providing many choices across a variety of offices. Much public debate on election administration relates to how best to reduce voting costs, without negatively affecting other desirable features in elections, particularly integrity and security, but also efficiency and economy for administrators. Across a range of logistical issues, continuity is recognized as a benefit for voters. Changes in location of in-person voting sites, for instance, whether motivated by population shifts, cost reduction, or even public-health emergency, are understood to impose costs on citizens (Vasiligambros, Levine, and Rebala 2020). Likewise, such discontinuities as changes in voting procedure and/or mode clearly impose costs on voters and, accordingly, are justifiable primarily if they are also expected to deliver tangible benefits in ease, security, or another identifiable goal for elections.

Somewhat less noticed is that changes in electoral districts can also increase the costs of voting. Indeed, much political engagement, such as campaigning and participating in other "grassroots" political activity, is potentially disrupted by redrawing of boundaries, which shuffle individuals into new blocs and can thereby demolish the justification for cooperation across individuals or groups. This point is complicated by the fact that the multiplicity of electoral offices in the United States ensures that given individuals will normally reside in many electoral districts, for seats in the U.S. House, state legislative chambers, municipal or county offices, and so on. Nearly all discussion of district and map traits is done office by office, ignoring that complexity in representation, just as much work on partisanship ignores the signs that it exerts force differently for different elective offices. It could be that Americans, with many levels of government and individual representatives to petition, are unusually adept at shifts in definitions of electorates and the composition of affected people. All the same, disruption of boundaries seems far more likely to hamper than to assist citizen organization.

That ordinary voters hold a variety of views on what makes a good electoral map is not widely appreciated. A further finding from these studies is that those who describe themselves as strong partisans do not, overwhelmingly, prefer maps that are expected to display asymmetry that favors their own party in how they convert votes into seats (Gaines and Kuklinski 2010, Gaines 2021). Partisans, even strong ones, do not fully match parties in the single-mindedness of their interests. Partisan neutrality, as applied to electorates, is both somewhat popular and quite nebulous.

Data Sources

Dane County Audit Data. 2022. from countyofdane.sharefile.com accessed January 2024.

Wisconsin Legislative Technology Services Bureau. 2017. "2012-2020 WI Election Data with 2011 Wards." accessed December 2018 from LTSB website

Wisconsin Elections Commission. Amended Percentage Results-11.6.12 President and All Offices accessed December 2018 via elections.wi.gov

Wisconsin Elections Commission. *Statewide Summary Election Results for All Offices* 11-14-2014. accessed December 2018 via elections.wi.gov

Wisconsin Elections Commission. 2016 Fall General Election Results: Statewode Results All Offices (post-Presidential recount) accessed December 2018 via elections.wi.gov

Wisconsin Elections Commission. *Statewide Summary 2018 General Election Results*. accessed December 2018 via elections.wi.gov

Other References

- Balinski, Michel L. and H. Peyton Young. 1982. Fair Representation: Meeting the Ideal of One Man, One Vote. New Haven, CT: Yale University Press.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960 [1980]. *The American Voter*. Chicago, IL: University of Chicago Press / Midway Reprints.
- Cho, Wendy K. Tam. 2017. "Measuring Partisan Fairness: How Well Does the Efficiency Gap Guard Against Sophisticated As Well as Simple-Minded Modes of Partisan Discrimination?" *University of Pennsylvania Law Review Online* 166.
- Cho, Wendy K. Tam & Yan Y. Liu. 2018. "Sampling from Complicated and Unknown Distributions: Monte Carlo and Markov Chain Monte Carlo Methods for Redistricting." *Physica A: Statistical Mechanics and its Application* 506: 170-178.
- Cho, Wendy K. Tam & Simon Rubinstein-Salzedo. 2019. Understanding Significance Tests From a Non-Mixing Markov Chain for Partisan Gerrymandering Claims. *Statistics and Public Policy* 6,1: 44-49.
- Converse, Philip E. 1967. "The Concept of a Normal Vote." In *Elections and the Political Order*. Angus Campbell et al. New York, NY: John Wiley and Sons, Inc., 9-39.
- DeFord, Daryl R. 2024. "Expert Report of Professor Daryl R. DeFord On the Wright Petitioners' Proposed Remedial Map."
- Edgeworth, F.Y. 1898. "Applications of the Theory of Probability." *Journal of the Royal Statistical Society* 51: 534.
- Fairfax, Anthony F. 2023. "Expert Report of Anthony E. Fairfax on the Development of Remedial State Legislative Districting Plans for the State of Wisconsin."
- Fiorina, Morris P. 2018. *Unstable Majorities: Polarization, Party Sorting & Political Stalemate*. Stanford, CA: Hoover Institution Press.
- Gaines, Brian J. 2021. "Public Preferences on Redistricting, Revisited." *Illinois Issues* accessible at .
- Gaines, Brian J. & James H. Kuklinski. 2010. "To Gerrymander or Not? What Kind of Electoral Districts Does the Public Want?" *Illinois Issues* 36(9): 30-33.

- Gelman, Andrew and Gary King. 1990. "Estimating the Consequences of Electoral Redistricting." *Journal of the American Statistical Assocition* 85: 274-82.
- Gelman, Andrew and Gary King. 1994. "Enhancing Democracy Through Legislative Redistricting." *American Political Science Review* 88(3): 541-559.
- Hayes, Danny and Seth C. McKee. 2009. "The Participatory Effects of Redistricting." *American Journal of Political Science* 53(4): 1006-1023.
- Hayes, Danny and Seth C. McKee. 2012. "The Intersection of Redistricting, Race, and Participation." *American Journal of Political Science* 56(1): 115-130.
- Hui, Iris. 2013. "Who is Your Preferred Neighbor? Partisan Residential Preferences and Neighborhood Satisfaction." *American Politics Research* 41(6): 997-1021.
- Iyengar, Shanto, Gaurav Sood, and Yphtach Lelkes. 2012. "Affect, Not Ideology: A Social Identity Perspective on Polarization." *Public Opinion Quarterly* 76(3): 405-31.
- Jackman, Simon. 2015. "Assessing the Current Wisconsin State Redistricting Plan." Case: 3:15-cv-00421-bbc, Document 62.
- Jacobson, Gary C. 2021. "The Presidential and Congressional Elections of 2020: A National Referendum on the Trump Presidency." *Political Science Quarterly.* 136(1): 11-45.
- Keith, Bruce E., David B. Magleby, Candice J. Nelson, Elizabeth Orr, Mark C. Westlye, and Raymond E. Wolfinger. 1992. *The Myth of the Independent Voter*. Berkeley, CA: University of California Press.
- Kendall, M.G. and A. Stuart. 1950. "The Law of the Cubic Proportion in Election Results." *British Journal of Sociology* 1(3): 183-196.
- Lijphart, Arend. 2012. *Patterns of Democracy*, 2nd Ed. New Haven, CT and London: Yale University Press.
- Magleby, David B., Candice J. Nelson, and Mark C. Westlye. 2011. "The Myth of the Independent Voter Revisited." In *Facing the Challenge of Democracy*, Paul M. Snidermand and Benjamin Highton, eds. Princeton, NJ and Oxford, UK: Princeton University Press, 238-263.
- Mayer, Kenneth. 2024a. "Expert Report of Kenneth R. Mayer, PhD, In Support of the Remedial Maps Proposed by the Democratic Senator Respondents."
- Mayer, Kenneth. 2024b. "Corrected Expert Report of Kenneth R. Mayer, PhD, In Support of the Remedial Maps Proposed by the Democratic Senator Respondents."
- Nagel, Stuart S. 1965. "Simplified Bipartisan Computer Redistricting." *Stanford Law Review* 17(5): 863-899.
- Paparo, Aldo, Lorenzo De Sio, & David W. Brady. 2020. "PTV Gap: A New Measure of Party Identification Yielding Monotonic Partisan Attitudes and Supporting Comparative Analysis." *Electoral Studies* 63.
- Stephanopolous, Nicholas O. & Eric M. McGhee. 2015. "Partisan Gerrymandering and the Efficiency Gap." *University of Chicago Law Review* 82(2): 831-900.
- Vasilogambros, Matt, Carrie Levine, and Pratheek Rebala. 2020. "National Data Release Sheds Light On Past Polling Place Changes." *Stateline*. Accessed at , December 26, 2021.

- Warrington, Gregory S. 2018. "Quantifying Gerrymandering Using the Vote Distribution." *Election Law Journal: Rules, Politics, and Policy:* 39-57.
- Warshaw, Christopher. 2024. "Evaluation of the Clarke Legislative Plans in Wisconsin."
- Weisberg, Herbert F. 2005. *The Total Survey Error Approach: A Guide to the New Science of Survey Research.* Chicago, IL: University of Chicago Press.
- Winburn, Jonathan and Michael W. Wagner. 2010. "Carving Voters Out: Redistricting's Influence on Political Information, Turnout, and Voting Behavior." *Political Research Quarterly* 63(2): 373-386.

2024

BRIAN JOHN GAINES

Department of Political Science University of Illinois at Urbana-Champaign 420 David Kinley Hall, MC-713 1407 W. Gregory Dr. Urbana, Illinois 61801

fax: 217-244-5712

Institute of Government & Public Affairs University of Illinois 1007 W. Nevada St. Urbana, Illinois 61801-3812

fax: 217-244-4817

http://www.pol.illinois.edu/people/bjgaines http://igpa.uillinois.edu/expert/brian-j-gaines

217-333-4367; 650-283-2214 bjgaines@illinois.edu

Education

Ph.D., Stanford University (1995)

Incumbency Advantage and the Personal Vote in the Anglo-Atlantic Democracies (Douglas Rivers, John Ferejohn, David Brady, Geoffrey Garrett)

A.M., Stanford University (1989)

B.A. (Honours), University of British Columbia (1988)

Academic Appointments

Department of Political Science, University of Illinois at Urbana-Champaign Professor (2011-); Associate Professor (2001-11); Assistant Professor (1995-2001)

Institute of Government and Public Affairs, University of Illinois

Honorable W. Russell Arrington Professor in State Politics (2023-),

Senior Scholar (2020-22); Professor (2011-19); Associate Professor (2003-11)

European Union Center, University of Illinois (2005-)

Cline Center for Democracy, University of Illinois

Merriam Professorial Scholar (2012-14)

Hoover Institution

W. Glenn Campbell and Rita Ricardo-Campbell National Fellow and Arch W. Shaw National Fellow (2011-13)

Katholieke Universiteit Leuven, Belgium

Visiting Scholar, Department of Management, Strategy, and Innovation (summer 2019);

Visiting Scholar, Department of Applied Economics (summers 1997, 1999)

School of International Relations and Public Affairs, Fudan University, Shanghai, China Guest Instructor, (summer 2002)

Research Interests

elections, electoral institutions and laws, public opinion, survey methods, political behaviour, statistical methods, legislatures, game theory

Gaines, p. 2/15

Teaching Experience

Undergraduate

- 1. Introduction to Political Science
- 2. Introduction to Rational-Choice Analysis of American Politics
- 3. Introduction to Political Research (Statistics for Political Science)
- 4. Introduction to American Government
- 5. Political Behavior
- 6. Elections and Electoral Behaviour
- 7. Government and Politics of the United Kingdom
- 8. State Government in the United States

Graduate

- 1. Statistical Methods in Political Science I (Introduction)
- 2. Statistical Methods in Political Science II (Regression)
- 3. Statistical Methods in Political Science III (Topics)
- 4. Game Theory I: Introduction
- 5. Game Theory II: Advances and Applications
- 6. Panel Data Analysis*
- 7. Contemporary Theories of Voting Behaviour
- 8. Research Practicum in Civic Leadership (MA)
- 9. Research Design

Faculty, CIC British Parliamentary Internship Programme, 1997–2011

Supervised internships and research projects for students from U. Illinois, U. Michigan, U. Wisconsin, and Purdue (select years) in London, mostly in the UK House of Commons

University of Illinois Political Science Graduate Student Top Mentor Award, 2003, 2007

Publications

Articles in Peer-Reviewed Journals

- A31. Survey Design, Order Effects, and Causal Mediation Analysis (with Stephen Chaudoin and Avital Livny). *Journal of Politics* 83, 4 (October 2021): 1851-1856.
- A30. Conclusion: Prospects for Analysing Committees in Comparative Perspective (with Mark Goodwin, Stephen Holden Bates, and Gisela Sin). *Journal of Legislative Studies* 25, 3 (September 2019): 434-441.
- A29. A Bouncy House? UK Select Committee Newsworthiness, 2005-18 (with Mark Goodwin, Stephen Holden Bates, and Gisela Sin). *Journal of Legislative Studies* 25, 3 (September 2019): 409-433. DOI: 10.1080/13572334.2019.1662612
- A28. The Study of Legislative Committees (with Mark Goodwin, Stephen Holden Bates, and Gisela Sin). *Journal of Legislative Studies* 25, 3 (September 2019): 331-339.
- A27. The Myth of the Bipartisan National Popular Vote Plan (with Jillian Evans). *The Forum* 17, 2 (July 2019): 345-373. DOI: 10/1515/for-2019-0020
- A26. Flat is Fair: American Public Opinion on Taxes and the Myth of Egalitarianism. *The Independent Review* 22, 1 (Summer 2017): 93-104.
- A25. Absentee and Early Voting: Weighing the Costs of Convenience (with Barry C. Burden). *Election Law Journal* 14, 1 (March 2015): 32-37. DOI: 0.1089/elj.2014.0270

^{*} Interactive live-video course to U. Illinois, U. Minnesota, Ohio State U., and U. Wisconsin

Gaines, p. 3/15

- A24. More on Measuring Two-Party Competition (with Rein Taagepera). *Journal of Elections, Public Opinion, and Parties* 24, 3 (August 2014): 386-392. DOI: 10.1080/17457289.2014.913597
- A23. How To Operationalize Two-Partyness (with Rein Taagepera). *Journal of Elections, Public Opinion, and Parties* 23, 4 (November 2013): 387-404. DOI: 10.1080/17457289.2013.770398
- A22. Is Four Twice as Nice as Two? A Natural Experiment on Electoral Effects of Legislative Term Length (with Timothy P. Nokken and Collin Groebe). *State Politics and Policy Quarterly* 12, 1 (March 2012): 43-57. DOI: 10.1177/1532440011433588
- A21. Experimental Estimation of Heterogeneous Treatment Effects Related to Self-Selection (with James H. Kuklinski). *American Journal of Political Science* 55, 3 (July 2011): 724-736. DOI: 10.1111/j.1540-5907.2011.00518.x
- A20. Apportionment Matters: Fair Representation in the House and Electoral College (with Jeffery A. Jenkins). *Perspectives on Politics* 7, 4 (December 2009): 847-855. DOI: 10.1017/S1537592709991848
- A19. The Effect of Local Political Context on How Americans Vote (with Joshua J. Dyck and Daron R. Shaw). *American Politics Research* 37, 6 (November 2009): 1088-1115. DOI: 10.1177/1532673X09332932
- A18. Typing Together? Clustering of Ideological Types in Online Social Networks (with Jeffery J. Mondak). *Journal of Information Technology and Politics* 6, 3-4 (July-December 2009): 216-231. DOI: 10.1080/19331680903031531
- A17. Interpreting Iraq: Partisanship and the Meaning of Facts (with James H. Kuklinski, Paul J. Quirk, Buddy Peyton, and Jay Verkuilen). *Journal of Politics* 69, 4 (November 2007): 957-974. DOI: 10.1111/j.1468-2508.2007.00601.x
- A16. Breaking the (Benford) Law: Statistical Fraud Detection and Campaign Finance (with Wendy K. Tam Cho). *The American Statistician* 61, 3 (August 2007): 218-223. DOI: 10.1198/000313007X223496
- A15. The Logic of the Survey Experiment Reexamined (with James H. Kuklinski and Paul J. Quirk). *Political Analysis* 15, 1 (Winter 2007): 1-20. DOI: 10.1093/pan/mpl008
- A14. On California's 1920 Alien Land Law: The Psychology and Economics of Racial Discrimination (with Wendy K. Tam Cho). *State Politics and Policy Quarterly* 4, 3 (Fall 2004): 271-293. DOI: 10.1177/153244000400400302
- A13. Another Look at Connections Across German Elections (with Christophe Crombez). *Journal of Theoretical Politics* 16, 3 (July 2004): 289-319. DOI: 10.1177/0951629804043204
- A12. The Limits of Ecological Inference: The Case of Split-Ticket Voting (with Wendy K. Tam Cho). *American Journal of Political Science* 48, 1 (January 2004): 152-171. DOI: 10.1111/j.0092-5853.2004.00062.x
- A11. Where's the Rally? Approval and Trust of the President, Cabinet, Congress, and Government Since September 11. *PS: Political Science and Politics* 35, 3 (September 2002): 530-536. DOI: 10.1017/S1049096502000793
- A10. Actions *Do* Speak Louder than Words: Deterring Plagiarism with the Use of Plagiarism-Detection Software (with Bear Braumoeller). *PS: Political Science and Politics* 34, 4 (December 2001): 835-839. DOI: 10.1017/S1049096501000786
- A9. Popular Myths about Popular Vote-Electoral College Splits. *PS: Political Science and Politics* 34, 1 (March 2001): 70-75. DOI: 10.1017/S1049096501000105
- A8. A Further Look at Universalism and Partisanship in Congressional Roll-Call Voting (with Brian R. Sala). *Political Analysis* 8, 4R (Autumn 2000): 399.
- A7. From Duverger to Cox, and Beyond: The State-of-the-Art in Electoral Law Studies. *Japanese Journal of Political Science* 1, 1 (May 2000): 151–156.
- A6. Duverger's Law and the Meaning of Canadian Exceptionalism. *Comparative Political Studies* 40, 1 (October 1999): 836–862. DOI: 10.1177/0010414099032007004

Gaines, p. 4/15

- A5. The Impersonal Vote? Constituency Service and Incumbency Advantage in British Elections, 1950–92. *Legislative Studies Quarterly* 23, 2 (May 1998): 167–195.
- A4. Where To Count Parties. *Electoral Studies* 16, 1 (March 1997): 49–58. DOI: 10.1016/S0261-3794(96)00056-XA3.
- A3. The Perils of Presidential Support: How the Republicans Took the House in 1994 (with David Brady, John Cogan, and Douglas Rivers). *Political Behavior* 18, 4 (December 1996): 345–367. DOI: 10.1007/BF01499093
- A2. The Calculus of Dissent: Party Discipline in the British Labour Government of 1974–1979 (with Geoffrey Garrett). *Political Behavior* 15, 2 (June 1993): 113–136. DOI: 10.1007/BF00993850
- A1. The Fallacy of Democratic Elitism: Elite Competition and Commitment to Civil Liberties (with Paul M. Sniderman, Joseph F. Fletcher, Peter H. Russell, and Philip E. Tetlock). *British Journal of Political Science* 21, 3 (July 1991): 349–370. DOI: 10.1017/S0007123400006190

Book Chapters

- C15. How Motivation Influences Political Decision Making (with Benjamin Kantack). In *Oxford Encyclopedia of Political Decision Making*. David P. Redlawsk, ed. Oxford: Oxford University Press, 2020. DOI: 10.1093/acrefore/9780190228637.013.1017
- C14. Taxes and the Myth of Egalitarianism. In *In All Fairness: Equality, Liberty and the Quest for Human Dignity*. Robert M. Whaples, Michael C. Munger, and Christopher J. Coyne, eds. Oakland, CA: Independent Institute, 2019, 183-196. Reprinted from *The Independent Review*.
- C13. A Possible Next Frontier in Political Communication Research: Merging the Old with the New (with James H. Kuklinski). In *Oxford Handbook of American Public Opinion and the Media*. Robert Y. Shapiro and Lawrence R. Jacobs, eds. Oxford: Oxford University Press, 2011, 43-58. DOI:10.1093/oxfordhb/9780199545636.003.0003
- C12. Treatment Effects (with James H. Kuklinski). In *Cambridge Handbook of Experimental Political Science*, James N. Druckman, Donald P. Green, James H. Kuklinski, and Arthur Lupia, eds. Cambridge, UK: Cambridge, 2011, 445-458.
- C11. Compact Risk: Some Downsides to Establishing National Plurality Presidential Elections. In *Electoral College Reform: Challenges and Possibilities*, Gary Bugh, ed. Farnham, UK: Ashgate, 2010, 113-126.
- C10. Does the United Kingdom Obey Duverger's Law? In *Duverger's Law of Plurality Voting: The Logic of Party Competition in Canada, India, the United Kingdom and the United States,* Bernard Grofman, André Blais, and Shaun Bowler, eds. New York, NY: Springer, 2009, 115-134. DOI: 10.1007/978-0-387-09720-6_8
- C9. The Logic of the Survey Experiment Reexamined (with James H. Kuklinski and Paul J. Quirk). In *Selecting Research Methods*, W. Paul Vogt, ed. London, UK: Sage, 2008. Reprinted from *Political Analysis*.
- C8. International Perspectives on Democracy in the Twenty-First Century (with Peter F. Nardulli). In *International Perspectives on Contemporary Democracy*, Peter F. Nardulli, ed. Champaign, IL: University of Illinois Press, 2008, 1-10.
- C7. Democracy Challenged: Demography, Technology and Democratic Possibilities (with Peter F. Nardulli). In *Domestic Perspectives on Contemporary Democracy*, Peter F. Nardulli, ed. Champaign, IL: University of Illinois Press, 2008, 1-8.
- C6. Gubernatorial Incapacity and Succession Provisions (with Brian D. Roberts). In *The Book of the States* 2005 (Vol. 37), Keon S. Chi, ed. Lexington, KY: Council of State Governments, 2005, 208–214.

Gaines, p. 5/15

- C5. Candidates, Donors, and Voters in California's Blanket Primary Elections (with Wendy K. Tam Cho). In *Voting at the Political Fault Line: California's Experiment with the Blanket Primary*, Bruce E. Cain and Elisabeth R. Gerber, eds. Berkeley, CA: University of California Press / Institute of Governmental Studies, 2002, 171–191.
- C4. Crossover Voting Before the Blanket: Primaries Versus Parties in California History (with Wendy K. Tam Cho). In *Voting at the Political Fault Line: California's Experiment with the Blanket Primary*, Bruce E. Cain and Elisabeth R. Gerber, eds. Berkeley, CA: University of California Press / Institute of Governmental Studies, 2002, 12–35.
- C3. A House Discarded? Evaluating the Case for a Unicameral California Legislature (with David W. Brady). In *Constitutional Reform in California: Making State Government More Effective and Responsive*, Bruce E. Cain and Roger G. Noll, eds. Berkeley, CA: Institute of Governmental Studies Press, 1995, 195–238.
- C2. The Fallacy of Democratic Elitism: Elite Competition and Commitment to Civil Liberties (with Paul M. Sniderman, Joseph F. Fletcher, Peter H. Russell, and Philip E. Tetlock). In *The Puzzles of Power*, Michael Howlett and David Laycock, eds. Toronto: Copp Clark Longman, 1994 (1st ed.), 1998 (2nd ed.), 107–128. Reprinted from the *British Journal of Political Science*.
- C1. The Personal Vote in Canada (with John Ferejohn). In Representation, Integration and Political Parties in Canada, Herman Bakvis, ed. vol. 14 of the research studies of the Royal Commission on Electoral Reform and Party Financing. Toronto: Dundurn Press, 1991, 275–302.
- Op Eds, Commentaries, and Newspaper Articles
- N93. And They're Off... News-Gazette, Wednesday January 17, 2024: A-1.
- N92. GOP Has Edge in Congress As Election Season Unfolds. *Wisconsin State Journal*, Friday December 29, 2023 (and many other Lee Enterprises papers).
- N91. Lamenting When Polarization Takes a Turn for the Ugly. *News-Gazette*, Tuesday September 26, 2023: A-4.
- N90. In GOP Race, Momentum is Not with the Challengers. *News-Gazette*, Tuesday September 12, 2023: A-5.
- N89. Big 10: How to Depolarize America, Part 2. News-Gazette, Sunday July 9, 2023.
- N88. For Now, It's Still Trump vs. DeSantis. News-Gazette, Tuesday June 6, 2023: A-1.
- N87. Biden's In. What's Next? News-Gazette, Wednesday April 26, 2023: A-1.
- N86. Two Images of Jimmy Carter. News-Gazette, Saturday-Sunday March 4-5, 2023: D-1.
- N85. One Reason to Abandon Ranked-Choice Elections. Juneau Empire, Friday February 10, 2023.
- N84. Too Much Selection, Too Little Election: Legislators Not Always People's Choice. *News-Gazette*, Tuesday December 20, 2022: A-4.
- N83. Big Buildup to 2024 Republican National Convention Will be Anything but Conventional. *News-Gazette*, Tuesday November 22, 2022: A-4.
- N82. Early Results Could Determine Scale of Red Wave. *News-Gazette*, Tuesday November 8, 2022: A-4.
- N81. Remote Court Proceedings Are Promising, But Not Risk Free (with Jason Mazzone).) *Austin American-Statesman*, Sunday November 6, 2022: 21A.
- N80. Courts and the Housing Market (with Jason Mazzone, Matt Mettler, and Robin Fretwell Wilson). *News-Gazette*, Tuesday October 4, 2022.
- N79. By Now, We're Used to this Type of Partisan Gerrymandering. *News-Gazette*, Saturday October 16, 2021: A-1, A-10.
- N78. Pritzker's Electoral Fate... News-Gazette, Tuesday July 27, 2021: A-5.

Gaines, p. 6/15

- N77. Come Together. News-Gazette, Wednesday January 20, 2021: A-1.
- N76. Democratic Victories Might Prove a Mixed Blessing. News-Gazette, Tuesday January 5, 2021
- N75. When, Exactly, Will the Winner Win? News-Gazette, Thursday November 5, 2020: A-4.
- N74. And Away We Go.... News-Gazette, Tuesday November 3, 2020: A-1.
- N73. Debate Night: Here's What You'll Hear. News-Gazette, Thursday October 22, 2020: A-1.
- N72. Now It's Running Mates' Turn To Take Debate Stage. *News-Gazette*, Wednesday October 7, 2020: A-1.
- N71. Presidential Debate No. 1: What's in Store. News-Gazette, Tuesday September 29, 2020: A-1.
- N70. Eye on the Election. *News-Gazette*, Tuesday September 1, 2020: B-2.
- N69. Is Biden's Pick the Difference-Maker? *News-Gazette*, Friday August 14, 2020: A-1.
- N68. Fair or Not? Voters' Faith in the System Matters Most (with Kent Redfield and Christopher Mooney). *News-Gazette*, Tuesday June 23, 2020: B-2.
- N67. Illinois Must Start Now to Prevent A November Election Disaster (with Kent Redfield and Christopher Z. Mooney). *Crain's Chicago Business*, Tuesday April 7, 2020.
- N66. And Then There Were Two... News-Gazette, Sunday March 15, 2020: A-8.
- N65. It's Judgment Day. News-Gazette, Tuesday March 3, 2020: A-1.
- N64. Can Anyone Beat Bernie? *News-Gazette*, Tuesday February 25, 2020: A-1.
- N63. Bloomberg to Hit Vegas Stage. News-Gazette, Wednesday February 19, 2020: A-1.
- N62. Talking Points. News-Gazette, Friday February 7, 2020: A-3.
- N61. Rules of the Road. News-Gazette, Sunday February 2, 2020: C-4.
- N60. The Election. News-Gazette, Tuesday January 21, 2020: A-1.
- N59. Final Chance to Impress. *News-Gazette*, Tuesday January 14, 2020: A-1.
- N58. 'Twas the Night of Debate 6. News-Gazette, Thursday December 19, 2019: A-1.
- N57. Checking In: How Could A Trump Trial Play Out on the Campaign Trail? *News Gazette*, Wednesday December 11, 2019: A-1.
- N56. It's Round 5 for 10 Dems. News-Gazette, Wednesday November 20, 2019: A-1.
- N55. Round 4: 12 Dems to Share Stage. News-Gazette, Tuesday October 15, 2019: A-1.
- N54. Biden Blunders, Race for No. 2 Debate Storylines. *News-Gazette*, Thursday September 12, 2019: A-1.
- N53. Dems Debate Week is Here. News-Gazette, Monday June 24, 2019: A-1.
- N52. State Still Needs A Proper Gubernatorial-Incapacity Law. *The Southern*, Monday January 24, 2019 (also *News-Gazette*, Sunday January 27, 2019: C-5.)
- N51. In Focus. News-Gazette, Wednesday January 2, 2019: A-1.
- N50. Fearless Forecast. News-Gazette, Sunday October 14, 2018: A-5.
- N49. No Time for A Coup: Incivility is Not Inability. *State Journal-Register*, Friday September 21, 2018 (also *News-Gazette*, Sunday September 23, 2018: C-6.)
- N48. Little Momentum for NPVIC (with Jillian Evans). News-Gazette, Sunday June 3, 2018: C-6.
- N47. Anderson: A Prophetic, Kindred Spirit. News-Gazette, Wednesday December 6, 2017: B-1.
- N46. Be Careful What You Wish for on Electoral-College Reform. *Peoria Journal-Star*, Wednesday November 23, 2016 (also *Southern Illinoisan* and *News-Gazette*, Sunday November 27: C-3, *State Journal-Register*, Tuesday December 6).
- N45. Just a Heartbeat Away.... *News-Gazette*, Monday October 3, 2016: A-1.
- N44. Ask the Expert: 55 Days Away. News-Gazette, Wednesday September 14, 2016: A-1.

Gaines, p. 7/15

- N43. Turnaround Agenda? News-Gazette, Wednesday August 10, 1016: A-1.
- N42. Independent Map Amendment Would Not Harm Racial Representation. *Chicago Tribune*, Tuesday June 28, 2016 (also *Barrington Courier-Review*).
- N41. They're Still Berning. News-Gazette, Tuesday June 7, 2016: A-1.
- N40. Shoring Up the Base. News-Gazette, Monday May 23, 2016: A-1.
- N39. That's the Ticket, News-Gazette, Tuesday April 26, 2016: A-1.
- N38. Primary Concerns, News-Gazette, Tuesday March 15, 2016: A-1.
- N37. 6-Step Plan for Dumping Trump. News-Gazette, Tuesday March 1, 2016: A-1.
- N36. Another Shot at Spotlight. *News-Gazette*, Saturday February 6, 2016: A-1.
- N35. Nomination Nod. News-Gazette, Sunday January 24, 2016: A-3.
- N34. More to Say. News-Gazette, Tuesday November 10, 2015: A-3.
- N33. No Bid for Biden. News-Gazette, Thursday October 22, 2015: A-1
- N32. Obstacles in Her Way. News-Gazette, Tuesday October 13, 2015: A-1.
- N31. Now Hear This. News-Gazette, Wednesday September 16, 2015: A-1.
- N30. Republicans Up for Debate. News Gazette. Thursday August 6, 2015: A-1.
- N29. Packed House. News-Gazette, Wednesday June 10, 2015: A-1.
- N28. Scouting the Field. *News-Gazette*, Tuesday April 14, 2015: A-1.
- N27. Prepare for the Inevitable Now, Not Later: Legislature Should Avoid the Next Crisis by Improving Laws on Orderly Succession. *Dixon Telegraph*/Sauk Valley Media, Saturday December 20, 2014: A-6. (also as Illinois Needs A Succession Law, *News-Gazette*, Tuesday December 23, 2014; Illinois Must Draft Orderly Succession Rules, *State Journal-Register*, Thursday January 1, 2015).
- N26. Why Illinois (Still) Needs Redistricting Reform. *Crain's Chicago Business*. Thursday October 9, 2014. (also in *News Gazette* (Sunday October 5: C-3), *State Journal-Register* (Thursday October 2), Sauk Valley Media (Friday October 3: A-6)).
- N25. The Case of the Vanishing Millionaire's Tax. *Chicago Sun Times*, Friday April 11, 2014 (also in *State Journal-Register* (Monday April 15), *News Gazette* (Tuesday April 16)).
- N24. Public of Two Minds on Millionaire's Tax. Herald Review, Friday April 11, 2014.
- N23. A Few Pointers on Political Polls. *Chicago Sun Times*, Sunday September 9, 2012 (also in *News Gazette*, *Quad Cities Dispatch-Argus*, *State Journal-Register*, and *Peoria Journal-Star*)
- N22. Marathons More than Runs, They're Glue that Binds Us. *News-Gazette*, Wednesday May 2, 2012: A-4.
- N21. What's a 'Fair' Tax for the Mega Millionaires? (with Douglas Rivers). *Wall Street Journal*, Wednesday April 11, 2012: A-13.
- N20. Incumbent State Senators Leaving Nothing to Chance? *News-Gazette*, Sunday February 5, 2012: C-2.
- N19. National Popular Vote Compact Has Serious Flaws. *San Jose Mercury News*, Monday August 29, 2011: A-9.
- N18. Transparent Redistricting Still Possible (with James H. Kuklinski). *Daily Herald*, Monday August 2, 2010.
- N17. Transparent Redistricting in Illinois is Still Possible (with James H. Kuklinski). *News-Gazette*, Sunday August 1, 2010, C-1, C-5.
- N16. Transparent Remap Effort Must be Goal (with James H. Kuklinski). *Springfield State Journal-Register*, Sunday August 1, 2010.

Gaines, p. 8/15

- N15. Absentee Voting Bill Is a Good Candidate for a Veto (with James H. Kuklinski). *News-Gazette*, Sunday May 24, 2009, C-3.
- N14. Leave Blagojevich Case to Legislature, Not Courts (with Brian D. Roberts). *News-Gazette*, Wednesday December 17, 2008, A-6.
- N13. Giving Democracy the Old College Try. *The Public I,* August/September 2008: 5.
- N12. Pay No Attention to Popular Vote. News-Gazette, Friday May 16, 2008, A-9.
- N11. Media Gloss Over Delegate Count, Focus on 'Winners'. *Peoria Journal-Star*, Sunday February 3, 2008.
- N10. Look Past the Headlines to See the Real Primary Picture. *Springfield State Journal-Register*, Tuesday January 15, 2008.
- N9. The Misleading Media Fixation on Primary 'Winners'. *News-Gazette*, Sunday January 13, 2008: B-3.
- N8. Mob Rule or People Power? Kankakee Daily Journal, Sunday November 25, 2007.
- N7. Voters Have Brains—Let Them Use Them for Recalls. *Springfield State Journal-Register*, Wednesday September 5, 2007.
- N6. Recall Would Allow Illinoisans to Flex Their Democratic Muscle. *Peoria Journal-Star*, Sunday September 2, 2007. Excerpted in A Matter of Opinion: Should Illinoisans get the recall option? *Illinois Issues* 33, 10 (October 2007): 12.
- N5. Land of Lincoln Should Embrace More Democracy. *News-Gazette*, Sunday September 2, 2007: B-1, B-4.
- N4. Line of Succession is Blurry in Illinois. News-Gazette, Sunday April 22, 2007: B-4.
- N3. Some Pros and Cons of Making Decisions by Referenda. The Public I, October 2006: 7.
- N2. Sharon Situation Ought to be Wake-Up Call for Illinois. *Springfield State Journal-Register*, Wednesday January 18, 2006: 7.
- N1. Was Illinois Out of Step in the Midterm Elections? *The Public I*, December 2-January 3, 2002: 6-7.
- Other (Magazine Articles, Policy Briefs, Reviews, Encyclopedia Entries, Blog Posts, etc.)
- O56. Eviction Expectations in the Aftermath of the Pandemic Moratoria (with Jason Mazzone, Matthew Mettler, and Robin Fretwell Wilson). *Policy Spotlight* (December 2023): University of Illinois Institute of Government and Public Affairs.
- O55. Texas' Movement to Online Court is Sensible, But More Study Should Follow (with Robin Fretwell Wilson, Matt Mettler, and Jason Mazzone). *Voice for the Defence* (June 2023): 20-22.
- O54. What Message Did Voters Send this Midterm Election? University of Illinois News Bureau, November 17, 2022.
- O53. <u>Race and Eviction During the Pandemic</u> (with Jason Mazzone, Matthew Mettler, and Robin Fretwell Wilson). *Policy Spotlight* (October 2022): University of Illinois Institute of Government and Public Affairs.
- O52. The Impact of the COVID-19 Pandemic on State Court Proceedings: Five Key Findings (with Jason Mazzone, Matthew Mettler, Robin Fretwell Wilson, and Andrea Miller). *Policy*

Gaines, p. 9/15

- Spotlight (May 2022): University of Illinois Institute of Government and Public Affairs / National Center for State Courts.
- O51. I<u>s the New Illinois State Legislative District Map Fair?</u> University of Illinois News Bureau, August 27, 2021.
- O50. Public Preferences on Redistricting, Revisited. Illinois Issues (May 2021).
- O49. After 2020: On Politics. LAS News Spring 2021, Urbana, IL: University of Illinois, p. 17.
- O48. <u>Pandemic Stress Indicator: Expert Panel Survey Reports</u> (May-December 2020). Urbana, IL: University of Illinois Institute of Government and Public Affairs.
- O47. Ongoing Expert Advice on Pandemic Policies. Policy Spotlight (September 2020). Urbana, IL: University of Illinois Institute of Government and Public Affairs.
- O46. <u>In Person or By Mail? What to Consider in Choosing How to Vote</u>. University of Illinois News Bureau, September 14, 2020.
- O45. <u>COVID-19 and the Election: What Can We Expect?</u> University of Illinois College of Liberal Arts and Sciences web news, August 21, 2020.
- O44. How Will Illinois' Push for Mail-In Balloting Affect Voter Confidence in the November 2020 Election? (with Kent Redfield and Christopher Z. Mooney). *Policy Spotlight* (July 2020). Urbana, IL: University of Illinois Institute of Government and Public Affairs.
- O43. The Pandemic on Main Street: As State Restrictions Relax, Local Leaders Face Tough Choices (with Robin Fretwell Wilson, Don Fullerton, J. Fred Giertz, Sage Kim, Kent Redfield and Julian Reif). *Illinois Issues* (May 2020).
- O42. What Policymakers Should Know about the Fiscal Impact of COVID-19 on Illinois (with 25 others). (Economic & Fiscal Impact Group Report; No. 1). Institute of Government and Public Affairs, University of Illinois, April 9, 2020.
- O41. When Select Committees Speak, Do Newspapers Listen? (with Mark Goodwin, Stephen Holden Bates, and Gisela Sin) *LSE Democratic Audit*, October 8, 2019
- O40. <u>Can the Anti-Pelosi Faction Change the US House? History Lessons for House Democrats</u> (with Gisela Sin). *Vox*, Nov. 19, 2018
- O39. Polling and the Election: What to Believe? UI News Bureau, Oct. 29, 2018.
- O38. Review of Read My Lips: Why Americans Are Proud to Pay Taxes by Vanessa S. Williamson. The Independent Review 22, 4 (Spring 2018).
- O37. <u>How Could So Many Be So Wrong Predicting the Presidential Election?</u> UI News Bureau, Nov. 11, 2016.
- O36. Race for the Senate 2016: Key Issues in Illinois. Brookings Institution. Wednesday, October 26, 2016.
- O35. Europe and the Death Penalty. Defining Ideas, Hoover Institution, February 2016.
- O34. <u>Supreme Court Oks Redistricting Commissions</u>. <u>But Do They Produce Fairer Maps?</u> UI News Bureau, June 20, 2015.
- O33. What Next Now that Scotland has Said 'No' to Independence? UI News Bureau, Sept. 22, 2014.
- O32. <u>Public Opinion and Political Viability of the Budget Tools</u>. The Illinois Budget Policy Toolbox. Urbana, IL: Institute of Government and Public Affairs, March 25, 2014.
- O31. <u>Administration of Absentee Ballot Programs</u> (with Barry C. Burden). White Paper prepared for Presidential Commission on Election Administration, July 2013.
- O30. Revisiting Redistricting: Who Should be Afraid of Partisan Mapmaking? (with James H. Kuklinski and Christopher Z. Mooney). *Illinois Report* 2013. Urbana and Chicago, IL: University of Illinois Institute of Government and Public Affairs, 70-80.
- O29. The Electoral College: Is That Any Way to Run an Election? UI News Bureau, Oct. 29, 2012.

Gaines, p. 10/15

- O28. Foreword. *Identity Politics as An Alternative to Conservatism and Social Democracy: The Emergence of Neo-Volkism in Advanced Western Societies*. Alan Arwine and Lawrence Mayer. Lewiston, NY: Edward Mellen Press (2011): v-x.
- O27. What Does 'Fair' Mean When It Comes to Redistricting? UI News Bureau, June 1, 2011.
- O26. What Is Fair Redistricting? In Rethinking Redistricting: A Discussion About the Future of Legislative Mapping in Illinois. Urbana-Champaign, Chicago, and Springfield, IL: Institute of Government and Public Affairs 2011, 6-10.
- O25. What Does the Public Know about Redistricting? What Does the Public Want from Redistricting? (with James H. Kuklinski). In *Rethinking Redistricting: A Discussion About the Future of Legislative Mapping in Illinois*. Urbana-Champaign, Chicago, and Springfield, IL: Institute of Government and Public Affairs 2011, 11-17.
- O24. <u>Picking the President by Popular Plurality? Prospects and Partisan Politics</u> (with Neil Baer). *Policy Forum* 23, 2 (January 2011). University of Illinois Institute of Government and Public Affairs.
- O23. Where the Midterm Election is Headed, and Why. UI News Bureau, Oct. 19, 2010.
- O22. To Gerrymander or Not? What Kind of Electoral Districts Does the Public Want? (with James H. Kuklinski). *Illinois Issues* 36, 9 (September 2010): 30-33.
- O21. Will New Limits on Campaign Donations Clean Up Illinois Politics? UI News Bureau, Dec. 22, 2009. https://news.illinois.edu/view/6367/198723
- O20. Some Implications of the 2008 Presidential Election: Three Brief Observations (with James H. Kuklinski and Christopher Z. Mooney). *Illinois Report* 2009. Urbana and Chicago, IL: University of Illinois Institute of Government and Public Affairs, 127-136.
- O19. Sizing Up President Obama's First 100 Days (with Bill Bernhard). UI News Bureau, Apr. 22, 2009.
- O18. "Apportionment" and "Malapportionment" in *Political Encyclopedia of US States and Regions*. Washington, DC: CQ Press (2009), 671-672 and 866-867, respectively.
- O17. Wall Street Weakly, or How and When Obama Won the Presidential Race. *Policy Forum* 21, 1 (December 2008). University of Illinois Institute of Government and Public Affairs.
- O16. Meanwhile North of the Border... Illinois International Review 8 (Fall 2008): 5.
- O15. <u>How Significant is the 'Post-Convention Bounce' and What's to be Made of All Those Election Polls?</u> UI News Bureau, Aug. 26, 2008.
- O14. <u>Poll: Most Still Undecided about Constitutional Convention for Illinois</u>. UI News Bureau, Apr. 15, 2008.
- O13. No Marks for Civility: Nastiness is Part of Politics, Past and Present (with Brianna K. Lawrence). *Illinois Issues* 34, 5 (May 2008): 28-30.
- O12. Keep Them Separated? Illinois Issues 34, 1 (January 2008): 19-21.
- O11. "Alternative Vote" and "Ballots" in *International Encyclopedia of Social Sciences*, 2nd Ed., William A. Darity Jr., ed. Detroit, MI: Macmillan Reference USA (2008): 643-645 and 242-243 (respectively).
- O10. Long Odds for Sale of the Illinois Lottery? (with James H. Kuklinski). *Policy Forum* 19, 3 (March 2007). University of Illinois Institute of Government and Public Affairs.
- O9. Elect, Indict, Repeat: Will Democracy, Illinois Style, Ever Change? *Illinois Issues* 33, 1 (January 2007): 24-26.
- O8. "Conservatism", "Dobson, James", "Heritage Foundation", "Liberalism", "Tea Party Movement" in *World Book Encyclopedia* 2005-: 227-28, online only, online only, 991-92, online only (respectively).

Gaines, p. 11/15

- O7. Gubernatorial Incapacity: A Review of Succession Provisions. *Spectrum: The Journal of State Government* 8, 4 (Winter 2005): 699-701.
- O6. Review of Why the Electoral College is Bad for America by George C. Edwards III. Rhetoric and Public Affairs 8, 4 (Winter 2005): 699-701.
- O5. Review of *Why Americans Split Their Tickets: Campaigns, Competition, and Divided Government* by Barry C. Burden and David C. Kimball (with Wendy K. Tam Cho). *Party Politics* 10, 2 (January 2004): 241-243.
- O4. An Accident Waiting to Happen? Legal Provisions on Incapacity of American Governors. *Policy Forum* 16, 4 (2003). University of Illinois Institute of Government and Public Affairs.
- O3. On Partisan Fairness. In *Redistricting Illinois* 2001, Paul J Quirk, ed. Urbana-Champaign, IL: Institute of Government and Public Affairs/University of Illinois, 6-12. Reprinted in *Policy News* 14, 2 (2001): 3-12.
- O2. Who Guards the Guardians? *Public Choice* 106, 1–2 (January 2001). (back-cover comment)
- O1. A Jury of One's Peers. Public Choice 96, 1-2 (July 1998). (back-cover comment)

Works in Progress

- W1. Fair Taxes: A Public-Opinion Approach (monograph)
- W2. Trueling for Dollars: Some Theory and Empirics on High-Stakes Decision Making
- W3. Showing Your Colors: Some Predictors of Behavioral Patriotism or Political Exhibitionism (with Zachary Elkins)
- W4. Party Strategies Under Cumulative Voting (with Jillian Evans)
- W5. Outcomes of (Small) Selections with Random Voting
- W6. Benford's Laws and the Census
- W7. The Health and Wealth of Nations: Effects of Cross-National and Internal Inequality (with Lloyd Gruber)
- W8. The Strange, Connected Cases of the Disappearing Discharge Reform and the Vanishing Speaker (with Gisela Sin)
- W9. Placebos as Diagnostics for Intervention Variables in Panel Analyses (with Gina Reynolds)
- W10. Life-or-Death Framing of Public-Health Policy in a Pandemic (with Cara Wong)

Professional Activities

Editorial

Co-Editor (with David Merriman), UI Institute of Government & Public Affairs *Policy Spotlights*, 2022-23

Editor, American Politics Research, 2011-2015

Co-Editor (with Jake Bowers and Wendy Cho), The Political Methodologist, 2010-2013

Editor, UI Institute of Government & Public Affairs Policy Forum, 2006-08, 2009-11

Editorial Advisory Board, Canadian Journal of Political Science, 2007-2010

Editorial Board, American Politics Research, 2010-2011, 2015-

Gaines, p. 12/15

Reviewing

Manuscript reviewer:

American Journal of Political Science American Political Science Review American Politics Research American Sociological Review British Journal of Political Science Canadian Journal of Political Science Canadian Political Science Review Comparative Political Studies

Comparative Politics Economics Bulletin Election Law Journal Electoral Studies

European Journal of Political Research

Government and Opposition

International Journal of Press/Politics
Int'l Journal of Public Opinion Research
International Political Science Review
Japanese Journal of Political Science
Journal of Computer-Mediated Comm'n
Journal of Econ. & Management Strategy
Journal of Elections, Pub. Opinion & Parties

Journal of Elections, Fuo. Opinion & Furl. Journal of Empirical Legal Studies Journal of Experimental Political Science Journal of Info. Technology & Politics

Journal of Legislative Studies Journal of Mathematical Psychology

Journal of Policy History

Journal of Political Science Education

Journal of Politics

Journal of Pub. Admin. Research & Theory

Journal of Public Policy

Journal of Theoretical Politics Legislative Studies Quarterly

New England Journal of Political Science

Party Politics
Political Analysis
Political Behavior
Political Communication
Political Psychology
Political Research Quarterly
Political Science Quarterly

Political Studies Politics & Gender

PS: Political Science and Politics

Public Choice

Public Opinion Quarterly
Publius: Journal of Federalism
Quarterly Journal of Political Science

Regional Studies Research & Politics

Revue of Economics & Statistics Revista Internacional de Sociología Sankhya B, Indian Journal of Statistics

Science

Social Science Computer Review

Social Science Quarterly Social Science Research Social Science Journal

Sociological Methods and Research Southeastern Political Review State Politics and Policy Quarterly

World Politics

Addison Wesley, BRIDGE, Cambridge University Press, Columbia University Press, Congressional Quarterly Press, Houghton-Mifflin, McGraw-Hill, Ohio State University Press, Prentice-Hall, Routledge, Sage, Thomson/Wadsworth; AACU (STIRS), Austrian Science Fund, National Science Foundation, TESS, University of Illinois Research Board

Promotion and tenure reviewer, external evaluator or examiner:

Boston University; Georgia State University; Hertie School; Old Dominion University; Texas Tech University; University of British Columbia; University of California-Riverside; University of Houston; University of North Texas; Washington University

Consulting

Consultant (expert witness) on Johnson v. Wisconsin Elections Commission, 2021-22

Member, Champaign County Redistricting Advisory Group, 2021

Consultant (expert witness) on *American Women v. Missouri*, 2020 (election administration), Circuit Ct. 20 AC-CC00333

Consultant (expert witness) on *Whitford v. Gill,* Case o. 15-cv-421-jdp (partisan redistricting), 2018-19

Consultant to Center for Strategic Initiatives, 2012-15

Gaines, p. 13/15

Consultant to Presidential Commission on Election Administration, 2013

Consultant on *Gustafson*, et al., v. *Illinois State Board of Elections*, et al., David H. Coar, N.D. Ill. 1:06-cv-1159 (challenge to administration of early voting process), 2006

Consultant to Polimetrix, 2003-05

Consultant (expert witness) on Susan C. Hileman v. Sharon McGinness and Louis Maze, Circuit Court of Alexander County, No. 2000-MR-24 (successful election contest on grounds of vote fraud), 2001

Consultant to Corcoran, California (performed and analyzed public opinion survey), 1994 (with Douglas Rivers)

Consultant to Tulare, California (drew school-district boundaries), 1994 (with Douglas Rivers)

Consultant to Canadian Royal Commission on Electoral Reform and Party Financing, 1990-91 (with John Ferejohn)

Staff, British Columbia Ministry of Crown Lands, 1989

Researcher, British Columbia Royal Commission on Electoral Boundaries, 1987-88

Department, College, and University Service

UI Political Science Department Placement Director, 2003-10

UI Political Science Department Interim Director of Graduate Studies, 1999

UI Political Science Department Advisory Committee, 2002-03, 2003-04, 2006-07, 2007-08, 2009-10, 2015-16, 2017-18, 2019-20

UI Institute of Government & Public Affairs Faculty Advisory Committee, 2005-06, 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2012-13, 2013-14, 2014-15

UI College of Liberal Arts and Sciences Committee on Admission & Academic Standards, 2003-06

UI College of Liberal Arts and Science Honors Council, 2005-07

UI College of Liberal Arts and Science Prestigious Scholarship Committee, 2009

UI Truman Scholarship Campus Review Committee, 2016-19

UI College of Liberal Arts and Science Courses and Curriculum Committee, 2017-19

Saint John's Catholic Newman Center at UI Leadership Council, 2008-11

UI Senate Associate Parliamentarian, 2013-23

UI College of Liberal Arts and Sciences Parliamentarian, 2015-24

UI European Union Center Executive Committee, 2020-22

Select Grants

Dirksen Congressional Center, 1996, \$2,500

UI CC Initiative/EU (with B. Murray), 2003, \$32,000

MIT Election Data and Science Lab, New Initiatives 2017, \$5,000

BRIDGE (with S. Bates, M. Goodwin, G. Sin), 2017, \$9,000 + £8,500

UI Chancellor's Grant (with R. F. Wilson and J. Mazzone), 2021, \$100,000

Gaines, p. 14/15

Doctoral Students (PhD Year; Current Position)

Mauricio Bugarin (PhD in Economics, 1997; Professor, Brasilia)

Jeffery Jenkins (1999; Professor, University of Southern California)

Timothy Nokken (1999; Associate Professor and Chair, Texas Tech University)

David Paul (2001; VP, Skagit Valley College, Washington House of Representatives (10th district))

Jennifer Jerit (2002; Professor, Stonybrook University)

William Cunion (2003; Dean of Academic Affairs, Cuyahoga Community College)

David Darmofal (2003; Professor, University of South Carolina)

Oana Armeanu (2005; Associate Professor and Chair, University of Southern Indiana)

Philip Habel (2006; Professor and Chair, University of South Alabama)

Rebecca Harris (2006; Professor, Washington and Lee University)

Michael Lewkowicz (2006; Associate Professor, Georgia Gwinnett College)*

Seden Akcinaroglu (2008; Associate Professor, Binghamton University)

Florin Fesnic (2008; Researcher, Babeş-Bolyai University)*

Dona-Gene (Mitchell) Barton (2008; Associate Professor, University of Nebraska)

James Melton (2009; Melton Seed & Service)

Nathaniel Swigger (2009; Associate Professor, Ohio State University at Newark)

Sergio Wals (2009; Associate Professor, University of Nebraska)

Daniel Pemstein (2010; Professor, North Dakota State University)

Brian D. Roberts (2010; Professor, Principia College)*

Steve Meserve (2011; Associate Professor, Northern Arizona University)

Dashiell E.A. Fryer (PhD in Math, 2011; Associate Professor, San Jose State University)

Jason Coronel (2012; Associate Professor, Ohio State University)

Aya Kachi (2012; Associate Professor, University of Basel)

Matthew Hayes (2012; Associate Professor, Washington University)

Melinda (Molly) Ritchie (2015; Assistant Professor, Ohio State University)

Evangeline (Gina) Reynolds (2016; Assistant Professor and Data Manager, United States Military Academy)

Paul F. Testa (2016; Assistant Professor, Brown University)

Gaines, p. 15/15

David Bowden (2017; Statistician, US Equal Employment Opportunity Commission)

Benjamin Kantack (2017; Assistant Professor, Lycoming College)

Wenshuo (Nini/Natalia) Zhang (2017; Data Scientist, Apple)*

Amanda Burke (2019; Research Data Specialist, California Department of Justice)

Quinn Waeiss (2019; Program Director, Stanford Center for Advanced Study in the Behavioral Sciences)*

Jillian Evans (2019; Head of Research, Sister District Project)*

Luke Plutowski (2020; Senior Statistician, LAPOP)

Ekrem Baser (2020; postdoc, Syracuse University)

Julian Scheirer (2020; Analytics Consultant, Kaiser Permanente)

Alice Iannantuoni (2020; postdoc, University of Geneva)

Wei Zhong (2021; postdoc, New York University)*

Bernard Brennan (2021; Assistant Professor, Johnson & Wales University)

Nuole (Lula) Chen (2021; Research Scientist, Massachusetts Institute of Technology GOV/LAB)

Navida Chun-Han Wang (2022; Instructor, University of South Carolina)

Yuan-Ning Chu (2022; Data Scientist, Apple)

Tolgahan Dilgin (2023; Statistical Services Manager, Princeton University)

Justin Pierce (2023; Advanced Research Analyst, Qualtrics)

current: Rebeca Agosto Rosa, Jinwon Lee, Jing Li, Jair Moreira

^{*} principal advisor/dissertation chair

IN THE SUPREME COURT OF WISCONSIN

REBECCA CLARKE, et al.,

No. 2023AP001399-OA

Plaintiffs,

GOVERNOR TONY EVERS, in his official capacity, et al.,

Intervenor-Plaintiffs.

v.

WISCONSIN ELECTION COM-MISSION, et al.,

Defendants,

and,

WISCONSIN LEGISLATURE, et al.,

Intervenor-Defendants.

RESPONSE REPORT OF SEAN P. TRENDE, Ph.D.

Table of Contents

T	Inti	oduction and Executive Summary	1
2	Mo	vement of individuals from even- to odd-numbered districts	1
3	Par	tisanship and Proposed Maps: Senate	2
	3.1	SMC Ensembles	2
	3.2	Gerrychain Ensembles	10
	3.3	Qualitative Examination of Maps	22
	3.4	Gerrymandering Index	27
4	Par	tisanship and Proposed Maps: Assembly	29
	4.1	SMC Ensembles	29
	4.2	Gerrychain Ensembles	35
	4.3	Qualitative Examination of Maps	45
	4.4	Gerrymandering Index	54
5	at is a fair map?	54	
	5.1	How do you properly measure partisanship?	55
	5.2	How important is competition?	58
	5.3	How should we define a fair map?	60
	5.4	What is the role of partisanship in an single-member district system?	64

Movement of individuals from even- to odd-numbered districts — 1

1 Introduction and Executive Summary

In this report, I was asked to evaluate the various maps submitted for this Court's consideration. Because of the relatively short turn-around, I was not able to offer a point-by-point rebuttal to all expert reports. In the course of evaluating these maps, I received WISE-District reports run by legislative staff for each proposed plan. They are attached to this response report as Exhibit A.

In summary, this report concludes:

- The various proposed maps move large numbers of individuals from even-numbered senate districts to odd-numbered districts;
- The various proposed maps appear to be drawn with indicia of partisan intent;
- The various proposed maps offer up competing normative visions of what constitutes a fair map.

2 Movement of individuals from even- to odd-numbered districts

First, I was asked to examine how many individuals were moved from an evennumbered Senate district to an odd-numbered Senate district. I was then asked to examine the partisanship of the individuals who were moved.

To accomplish this, I filtered the total set of Wisconsin census blocks to include only those that were placed into an even district under the existing plan. I was then able to impose a second filter on that subset of blocks, narrowing the grouping further to include only those who were also placed into an odd district under each of the various proposed remedial maps.

I then was able to utilize a shapefile from the Redistricting Data Hub that projects Wisconsin's votes to the Census Block level (this is the same data used in my initial report). I could then calculate the number of votes cast in these moved blocks for each candidate in the presidential elections, as well as the 2022 gubernatorial race (Other elections could easily be calculated from the data). Those numbers are reported below for each map.

Thus, for example, the Clarke map shifts 697,154 individuals from an even-numbered district to an odd-numbered district. Of those individuals, 233,064 voted for former President Donald Trump, while 170,944 voted for President Joe Biden. Thus, 57.69% of the voters in these census blocks voted for former President Trump. 56.36% voted for Tim Michels in the 2022 gubernatorial election.

Figure 1: Movement of residents and voters from even- to odd-numbered districts, by plan

Proposed Map	Population Shifted	Trump Vote Shifted	Biden vote shifted	R Voters, 2022 Gov., Shifted	D Voters, 2022 Gov., Shifted	Trump %	R Gov. 22
Clarke	697,154	233,064	170,944	186,910	144,666	57.69%	56.37%
Governor	671,543	209,801	172,467	167,775	146,013	54.88%	53.47%
Johnson	431,396	110,220	119,143	85,840	100,414	48.05%	46.09%
Senate Dems	600,979	168,089	159,983	131,665	133,303	51.24%	49.69%
Wright	750,208	270,360	162,907	218,319	137,984	62.40%	61.27%
Legislature	141	24	57	24	64	29.86%	27.30%

3 Partisanship and Proposed Maps: Senate

3.1 SMC Ensembles

In my initial Report, I described how I utilized the Sequential Monte Carlo (SMC) technique to create randomly generated maps to explore the political geography of Wisconsin and to look at what sorts of outcomes we might expect from a draw of Wisconsin's maps without respect to politics.

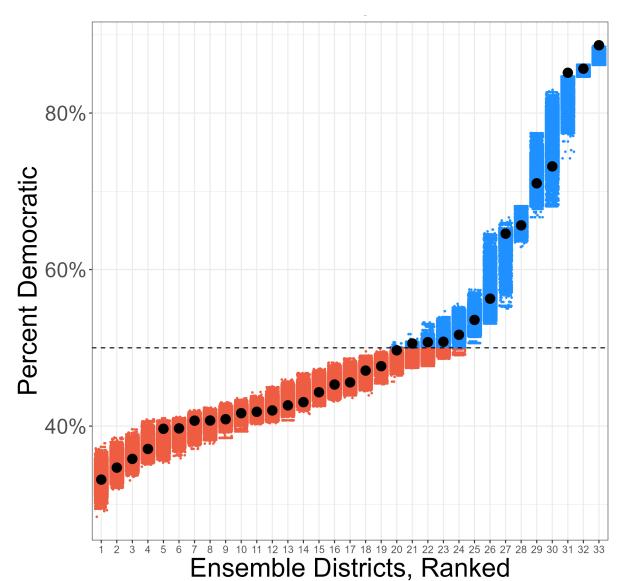
Because we now have actual maps to view, we can examine how closely these maps hew to Wisconsin's natural political geography. To do this, I simply calculate the partisan

vote share in each district for each plan, and then plot the values against the simulations produced in the previous report. Thus, we can get a sense of the role partial played in the drawing of each map.

We can start, for example, with the Johnson Map. We plot 50,000 dots for each district, so in a 99 – district map we are plotting close to 5,000,000 dots. Needless to say, this requires a lot of computational time, even from a very fast computer. Because of this, I only employ President Joe Biden's vote share as a measure of partisanship for the simulations, although other metrics could be produced with some minor tweaks to the code.

We can first examine the Johnson plaintiffs' maps:

Figure 2: Johnson Sen. Map, vs. Ensemble, SMC



The most Republican district is denoted by a black dot in the left column, the second-most Republican district is denoted by a black dot in the second-left column, and so forth. As you can see, the Johnson map closely resembles maps drawn without respect to politics, but with respect for population equality, Milwaukee's VRA districts, county boundaries, and compactness. Almost all of the dots fall within the ranges you would expect. There is some work toward Democrats' benefit near the 50%-50% mark, but overall there is no clear pattern that would suggest a map is being drawn overall to

benefit one party or the other.

Likewise, the Legislature's map mostly falls within the boundaries of what we would expect from a politics-free map, though there is some work toward Republicans' benefit near the 50%-50% mark. Overall this is a map that does not excessively benefit one party or another, but rather reflects the natural partisan sorting in the state.

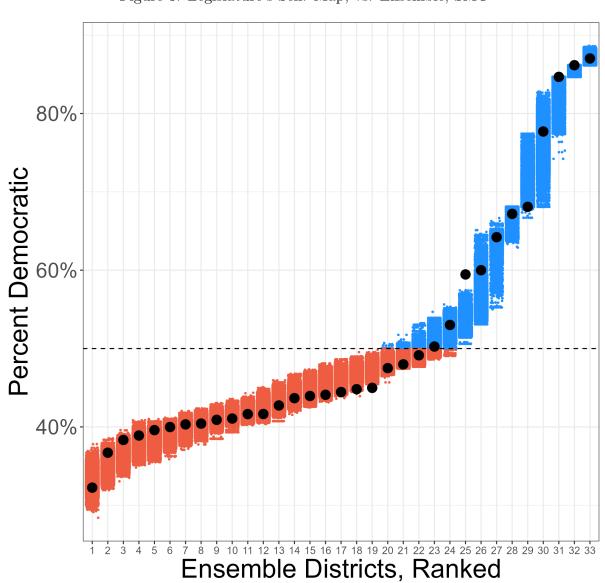


Figure 3: Legislature's Sen. Map, vs. Ensemble, SMC

The remaining maps, on the other hand, show significant deviations from what

we would expect from maps drawn free of partisanship. All of them show Republican vote shares pushed down toward the bottom of their expected ranges when we would expect heavily Republican districts. This represents the packing of Republican voters into districts.

By artificially increasing the Republican vote share in these districts, Democratic voters are freed up to create more Democratic-leaning districts. This is how all of the remaining maps, save for the Clarke Map, are able to create 17 senate districts carried by Joe Biden: By fighting Wisconsin's political geography.

Figure 4: Clarke Sen. Map, vs. Ensemble, SMC

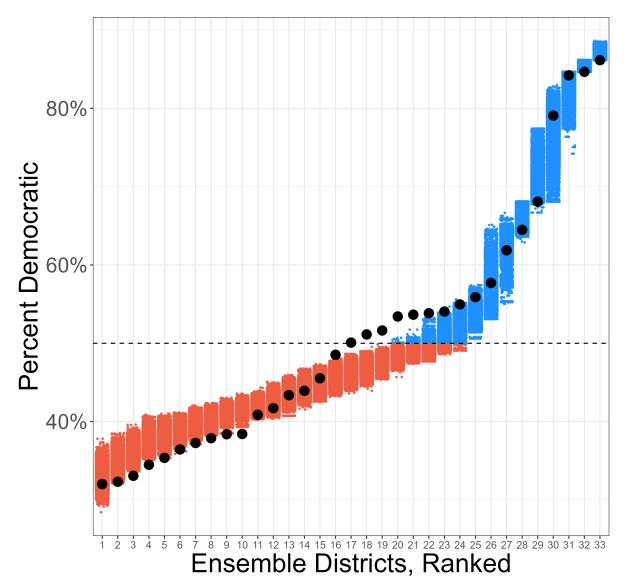


Figure 5: Governor's Sen. Map, vs. Ensemble, SMC

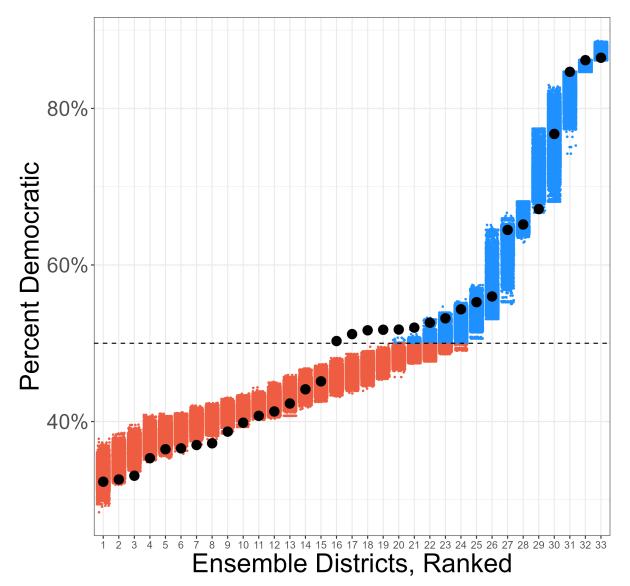


Figure 6: Senate Democrats' Sen. Map, vs. Ensemble, SMC

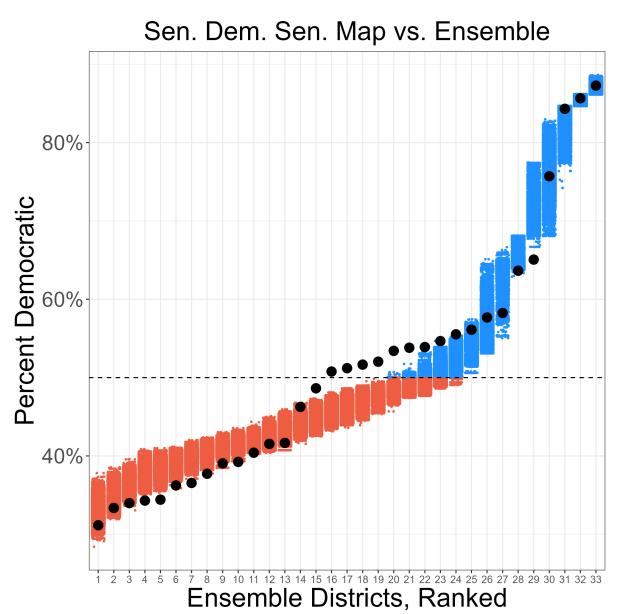
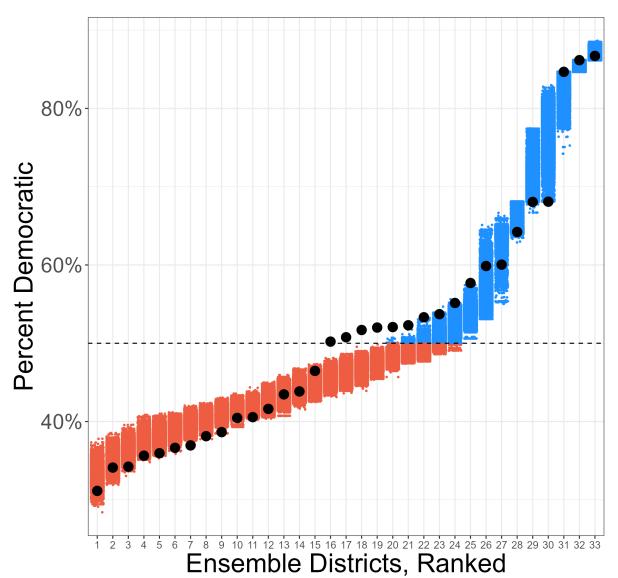


Figure 7: Wright Sen. Map, vs. Ensemble, SMC



3.2 Gerrychain Ensembles

As an additional robustness check, I've run a separate set of simulations using a different technique. I could not have run this for the initial report, because it typically utilizes existing districts as its starting point. This technique, known as recombination, is maintained by the Metric Geometry and Gerrymandering Group and was developed by Daryl DeFord, Moon Duchin and Justin Solomon. See, e.g., https://github.com/mggg/GerryChain. See also Daryl DeFord, Moon Duchin, and Justin Solomon, Recombination:

A Family of Markov Chains for Redistricting, available at https://hdsr.mitpress.mit.edu/pub/1ds8ptxu/release/5.

The concept behind this technique is that gerrymanders are fragile. If the boundaries are altered much, the partisanship of the district is altered significantly. Think of it this way: if a line on a map perfectly separates Republican precincts from Democratic precincts into Districts A and B, then swapping out precincts randomly between Districts A and B should result in the Republican vote share in A and the Democratic vote share in B dropping quickly.

In other words, there are only so many ways to draw a gerrymander, but many ways to draw a map that reflects the state's geography. Or, if you prefer, there are only so many ways to create a tidy room, but it doesn't take much to make it messy. If you move a bunch of clothes in an otherwise-clean room randomly, it's unlikely you'll have a clean room in the end. However, randomly moving around clothing in a messy room isn't likely to create a clean room; its "messiness" should remain fairly stable.

Likewise, moving around precincts randomly in a map that reflects the state's geography is more likely to create more maps that reflect the state's geography than it is to create a gerrymander randomly. Gerrymandering is typically an intentional process, and multiple random perturbations of gerrymandered districts shouldn't create a map that is also gerrymandered.

Gerrychain takes a proposed map, and begins moving precincts around by splitting districts and then recombining them into new districts. If the map was drawn without respect to politics (in other words, it was messy) then recombining the districts (moving around random items of clothing in the room) shouldn't alter the politics of the districts that much. If, however, the districts were artificially sorted by politics, shifting the districts should result quickly in a map with very different politics.

You can see the results below for the senate maps (Gerrychain utilizes boxplots to show the ensemble distribution rather than dotplots). The red dots represent the various proposed maps. These use presidential vote share to reflect district partial partial partial votes. again, the Johnson map looks like a map drawn without respect to partisanship; while it helps Democrats a bit around the 50-50 mark, it does so within the bounds of politics-neutral maps. The legislature's map has stronger deviations than the Johnson map, but they are still fairly subtle. The other maps maps, however (I was unable to make the Clarke map converge consistently), all contain substantial deviations from what a neutral draw would look like, particularly near the 50-50 line.

Note that, because I wanted to freeze VRA districts drawn in response to *Baldus*, however defined in a particular map, in place, the Senate simulations only have 30 districts and the Assembly simulations only have 90 districts. Also, via a quirk of GerryChain, District 1 is represented as District 0; District 16 is therefore the district that determines control for the Senate, while District 49 determines control for the House.

This is true if you use 2020 presidential data to measure partisanship.

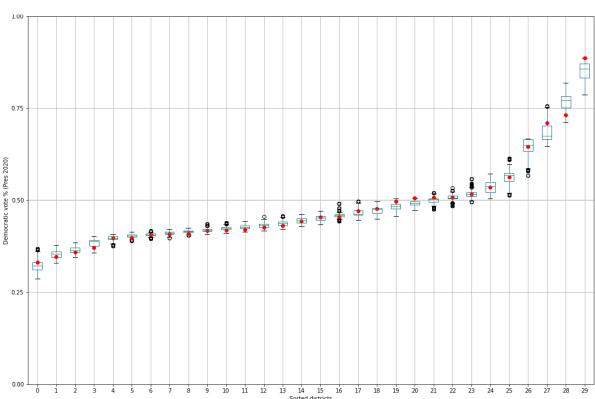


Figure 8: Johnson Sen. Map, vs. Ensemble, Pres. Vote Share, Recombination Method

Figure 9: Legislature's Sen. Map, vs. Ensemble, Pres. Vote Share, Recombination Method

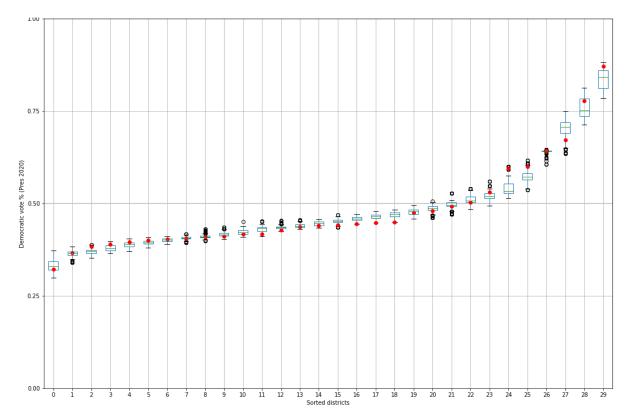


Figure 10: Clarke's Sen. Map, vs. Ensemble, Pres. Vote Share, Recombination Method

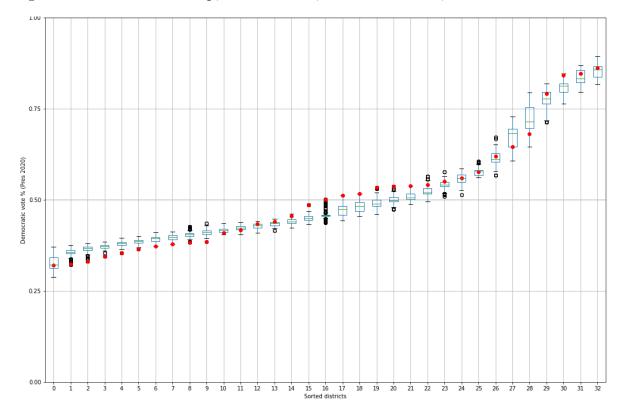


Figure 11: Governor's Sen. Map, vs. Ensemble, Pres. Vote Share, Recombination Method

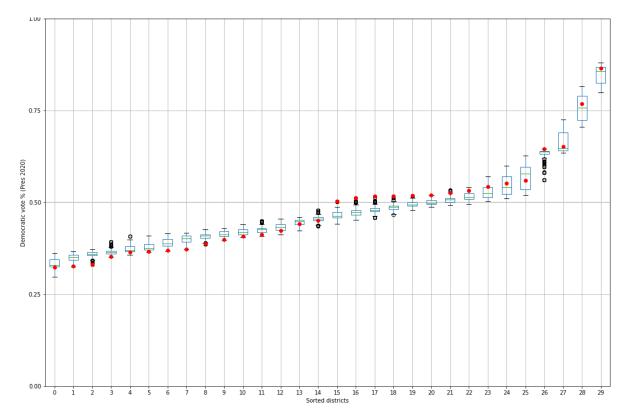


Figure 12: Senate Democrats' Sen. Map, vs. Ensemble, Pres. Vote Share, Recombination Method

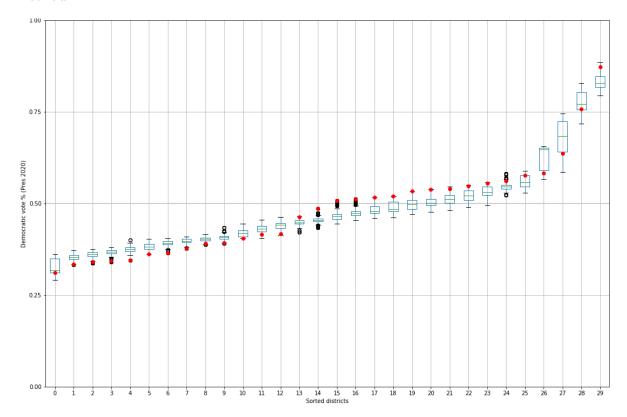
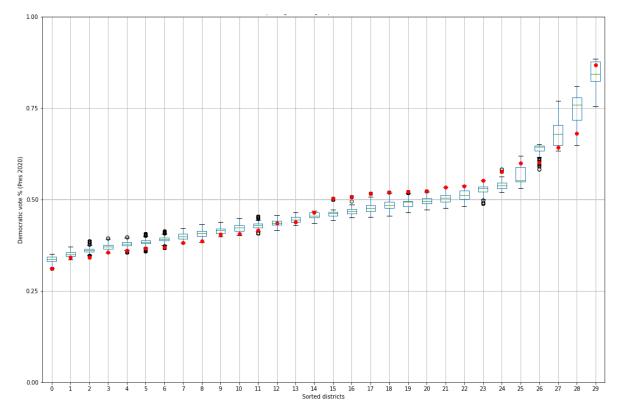
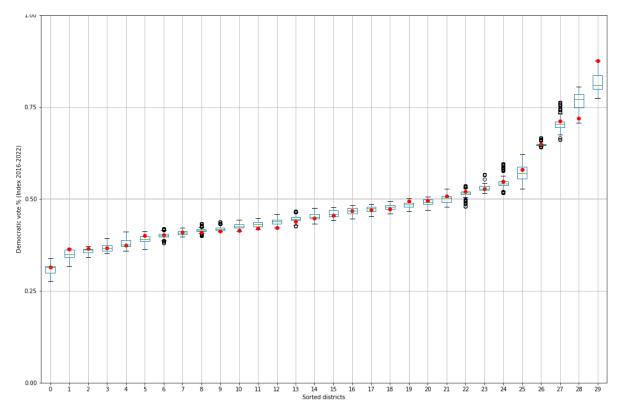


Figure 13: Wright Sen. Map, vs. Ensemble, Pres. Vote Share, Recombination Method



This is also true if you utilize the index of statewide races to measure partisanship.

Figure 14: Johnson Sen. Map, vs. Ensemble, Index, Recombination Method



Page 61 of 301

Figure 15: Legislature's Sen. Map, vs. Ensemble, Index, Recombination Method

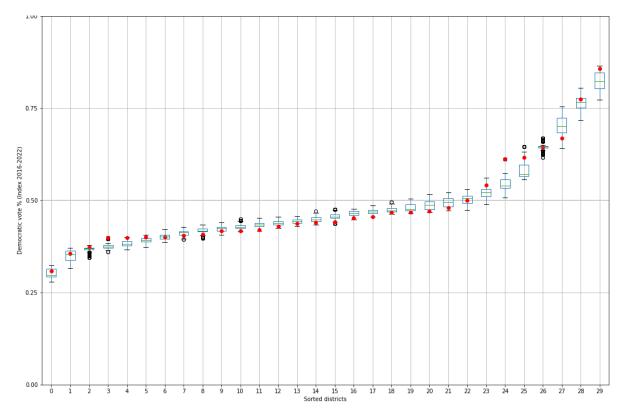
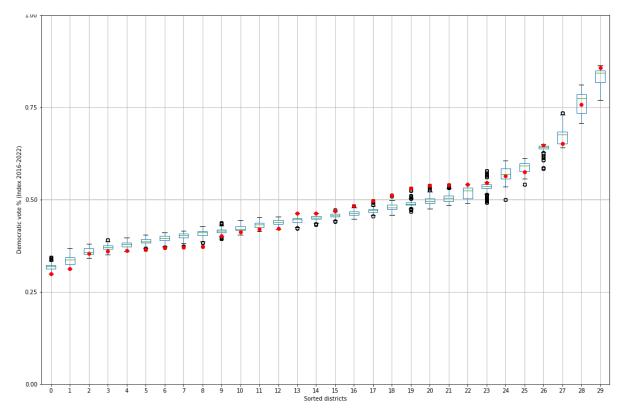
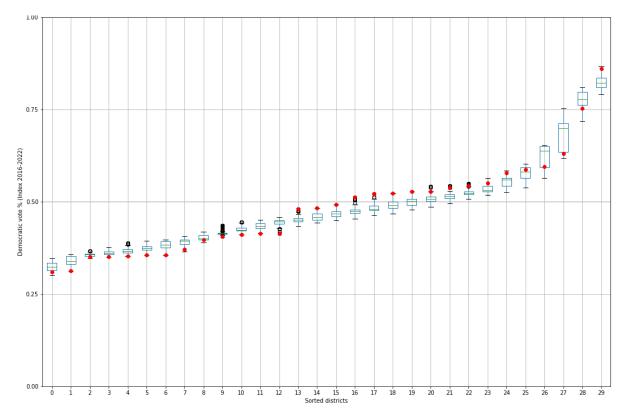


Figure 16: Governor's Sen. Map, vs. Ensemble, Index, Recombination Method



Page 63 of 301

Figure 17: Senate Democrats' Sen. Map, vs. Ensemble, Index, Recombination Method



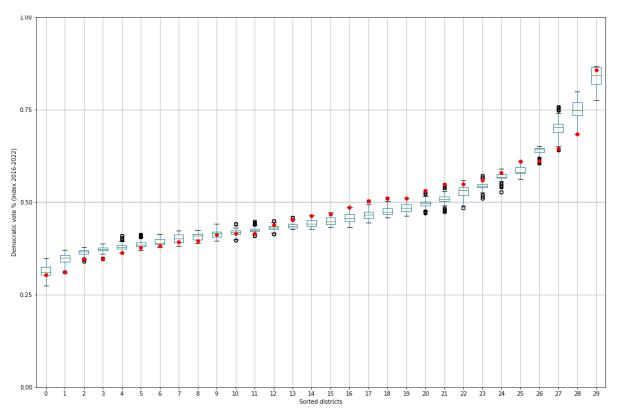


Figure 18: Wright Sen. Map, vs. Ensemble, Index, Recombination Method

3.3 Qualitative Examination of Maps

The proposed maps typically accomplish strong scores on the traditional redistricting criteria cited by this Court by drawing reasonably configured, compact districts in heavily Republican areas, where the configuration does not matter much (i.e., a Republican district will be drawn no matter what). The maps then make select choices that would not flow naturally from the state's political geography in an attempt to create more Democratic districts; these choices are then hidden in statewide summary statistics by the naturally occurring Republican and Democratic districts elsewhere in the map.

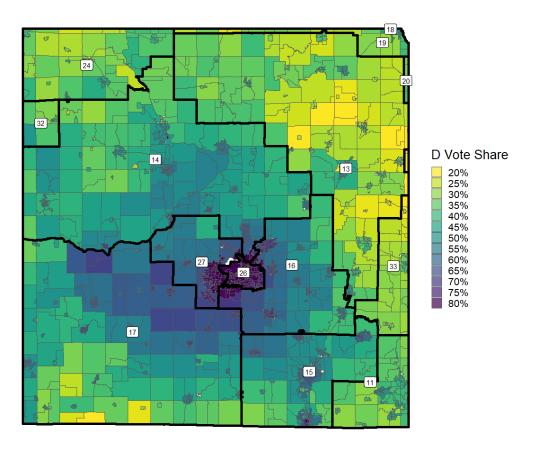
To get a sense of how this is accomplished, consider the Governor's Senate Map. The following map shows the area around Madison, Wisconsin, with the precincts shaded by vote share. As with the 2022 map, it creates three heavily Democratic districts around Madison, and an additional Democratic district around Janesville. It then, however,

creates an additional Democratic-leaning district to the north of the city. As drawn, this district gives Biden 51.2% of the vote to Trump's 47.2%. While the district is generally compact (though it does split four counties), one may note the arm reaching into the City of Madison. That arm gave Joe Biden 65% of the vote; without it, Donald Trump narrowly won the district.

Moreover, had some of that population from Madison instead been used to repair the county splits in Columbia and Adams counties, leaving a smaller split in Dane County, Donald Trump would have carried the district handily. These "tweaks" appear all over the map and create the above pattern that reflects the "DNA of a gerrymander." See also Gregory Herschlag et al, "Quantifying Gerrymandering in North Carolina: Supplemental Appendix." 7 Statistics and Public Policy 30 (2020) (referring to this pattern as the "signature of gerrymandering").

Page 66 of 301

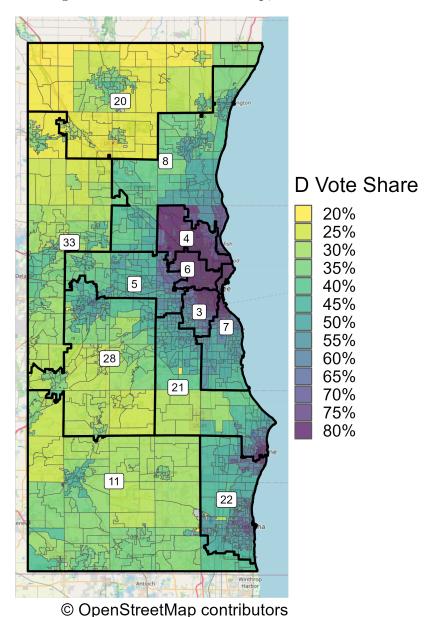
Figure 19: Governor's Sen. Map, Madison Area



© OpenStreetMap contributors

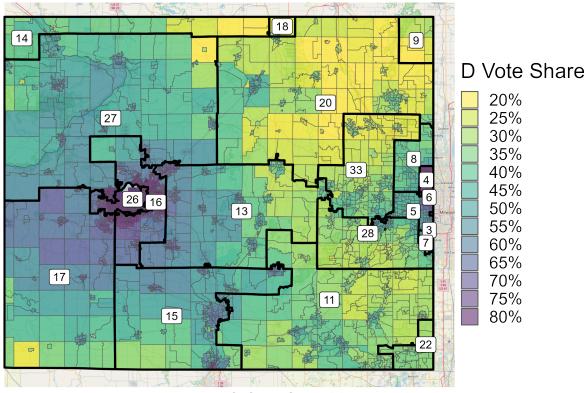
We see similar choices in southeastern Wisconsin. For example, in the Milwaukee area, District 8 carefully avoids the more heavily Republican precincts in Ozaukee and Washington counties, creating a marginally Democratic district in the process (the Senate Democratic map employs basically the same approach to this district). Likewise, the 21st bifurcates Racine, traversing lightly populated, heavily rural areas, before moving into the inner suburbs of Milwaukee, and even taking in a portion of the city itself. The Wright map takes a similar approach, albeit with a more heavily distorted district.

Figure 20: Governor's Sen. Map, Milwaukee Area



Likewise, the Senate Democrats' map creates an additional marginally Democratic district east of Madison by taking heavily Democratic places like Sun Prairie and Stoughton, and stretching those districts eastward, away from the city, into more Republican Jefferson County, and then over to Waukesha county. District 27 "fracks" Dane County (splitting it more than once) by sending an arm into overwhelmingly Democratic Middleton, and then a second arm into Democratic portions of northeastern Dane.

Figure 21: Senate Democrats' Sen. Map, Milwaukee

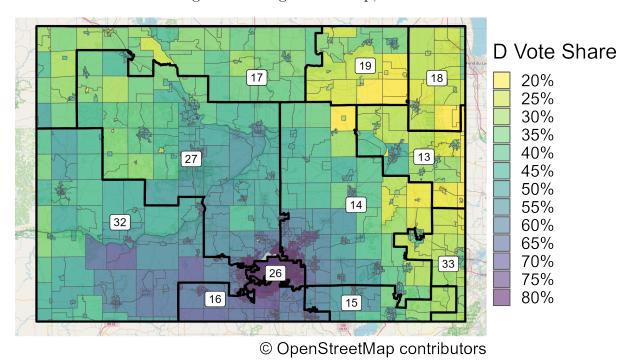


© OpenStreetMap contributors

The Wright map takes a similar approach, dipping into the City of Madison itself to make District 14 a Democratic district before extending out into the Republican countryside. District 27 is even more extreme, taking in large portions of northern Dane County (including a part of the City of Madison) before extending out into the countryside. District 32 also reaches well into Madison, before extending to the southwest corner of the state.

Page 69 of 301

Figure 22: Wright Sen. Map, Milwaukee



3.4 Gerrymandering Index

Of course, eyeballing deviations on dotplots may not answer the question "how much overall gerrymandering is too much?" To do this in a more rigorous manner, I have typically employed the "gerrymandering index," proposed by Bangia et al (2017) and endorsed by McCartan & Imai in their initial paper setting forth the algorithm used to generate the districts in this report. See Cory McCartan & Kosuke Imai, "Sequential Monte Carlo for Sampling Balanced and Compact Redistricting Plans," at 25, available at https://arxiv.org/pdf/2008.06131.pdf.

It is conceptually similar to the idea of root mean squared error (used throughout statistics). To calculate the index, we take each of the 50,000 simulated maps and rank the districts from most heavily Democratic to least heavily Democratic. We then average Democratic vote shares across ranks. This tells us, generally speaking, what percentage of the Democratic vote share we would expect the most heavily Democratic district to have in a map drawn without respect to politics, what we would expect the second-most

heavily District to have, and so forth.

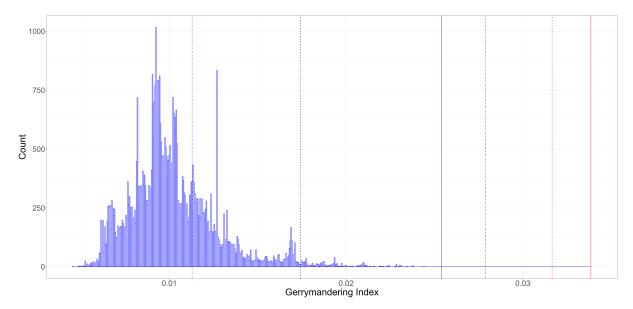
Of course, some areas might be conducive to a wide range of partisan outcomes depending how the map is drawn. Other areas, like downtown Madison, are so heavily Democratic that the districts that are drawn there are likely to vary very little in their partisan makeup. Put differently, we might be very surprised, due to simple geography, if a map's most Democratic district varies from that average by more than a few points; we might be less surprised if some districts in the middle of the distribution exhibited more variability.

To help account for this, we then calculate the deviations in each plan in the ensemble from the mean for each "bin." To make this less abstract: the most heavily Democratic district in the ensemble, on average, gives the Democrats around 90% of the vote. A district in the ensemble whose most heavily Democratic district was 92% Democratic would have a deviation of 2% for that rank, while one whose most heavily Democratic district was 97% Democratic would have a deviation of 7%, and so forth. To emphasize large deviations (and to make them all positively signed) these values are then squared. These values are then added together to give us a sense of how far the map deviates overall from the ensemble mean in each district.

In simplified terms, this gives us the total deviation from the ensemble for all the districts in the plan, while giving more weight to particularly large misses. The square root is then taken, which effectively puts everything back on a percentage scale. This gives us a weighted average deviation from the mean for each plan in the ensemble. We can then engage in a similar exercise for the various proposed maps.

In the following histogram, I've plotted the distribution of gerrymandering indices for the ensembles. I've also denoted the values of the gerrymandering indices for the various proposed plans with vertical lines.

Figure 23: Gerrymandering indices of ensemble, versus proposed State Senate maps. Blue dashed line = Johnson Map; Black dashed line = Legislature's Map; Solid blue line = Governor's Map; Black dotted line = Clarke Map; Red dashed line = Wright Map; Solid red line = Senate Dems' Map



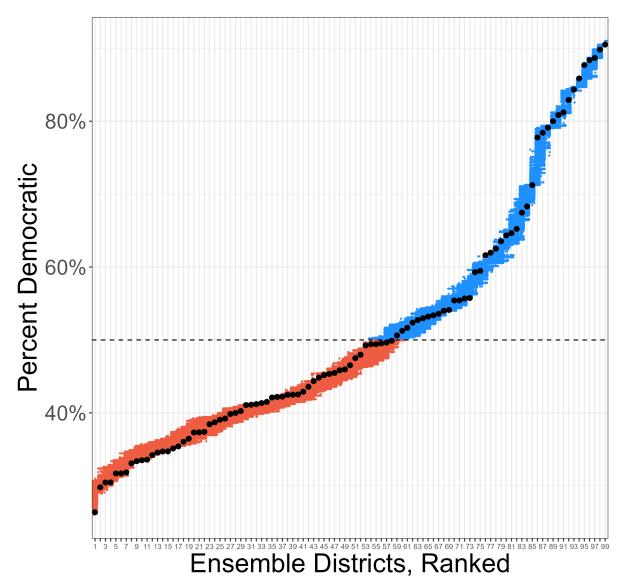
The Johnson map falls almost in the center of the distribution for a map drawn without respect to politics, while the Legislature's map falls within the range of that distribution, although it is further on the tails. The remaining maps – the Governor's Plan, the Clarke Plan, the Wright Plan, and the Senate Democrats' Plan – all deviate substantially from what we would expect to see in a politics-neutral map.

4 Partisanship and Proposed Maps: Assembly

4.1 SMC Ensembles

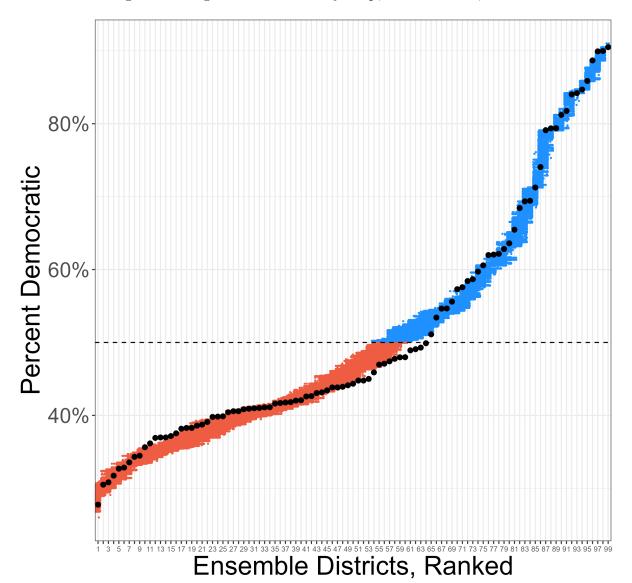
The Assembly maps exhibit the same basic pattern. The Johnson Map again appears to be a map drawn without respect to politics, with districts following the expected results from a politics-free map closely.

Figure 24: Johnson Assembly Map, vs. Ensemble, SMC



Likewise, the Legislature's Assembly map hews closely to what we would expect from a politics-free map, with some benefit for Republicans near the 50-50 line.

Figure 25: Legislature's Assembly Map, vs. Ensemble, SMC



The remaining four maps, on the other hand, all deviate substantially from what we would expect from politics-free maps. They do so generally by pushing the Democratic vote share downward in heavily Republican areas and moderately Democratic areas, freeing up Democratic voters to push into otherwise-swing or modestly Republican districts.

Figure 26: Clarke Assembly Map, vs. Ensemble, SMC

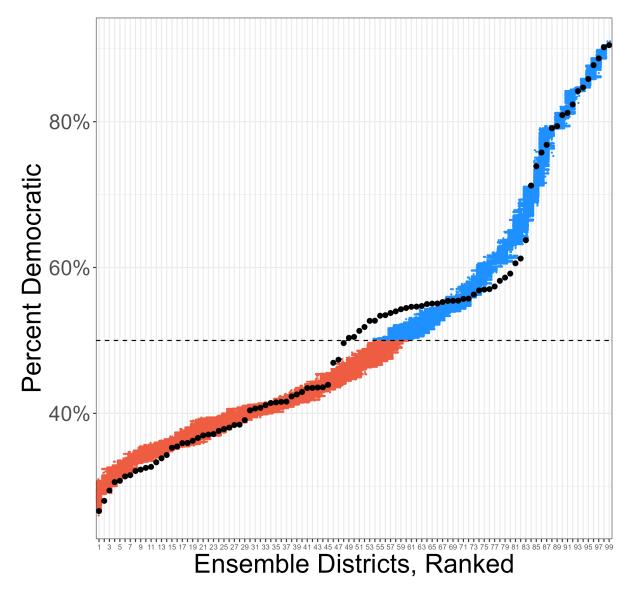


Figure 27: Governor's Assembly Map, vs. Ensemble, SMC

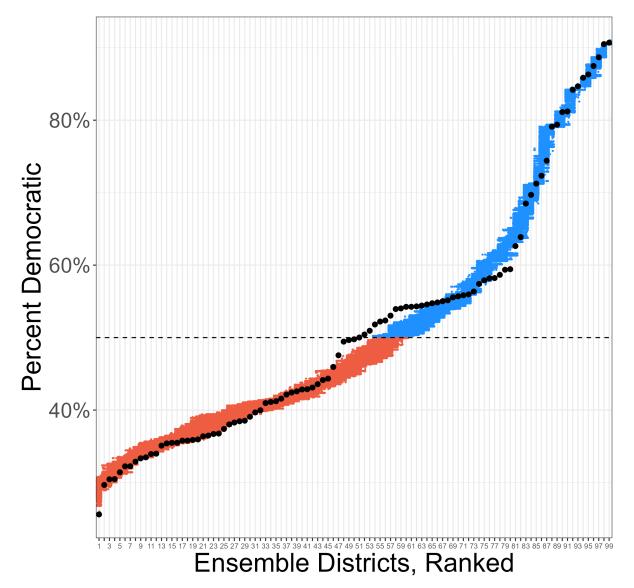


Figure 28: Senate Democrats' Assembly Map, vs. Ensemble, SMC

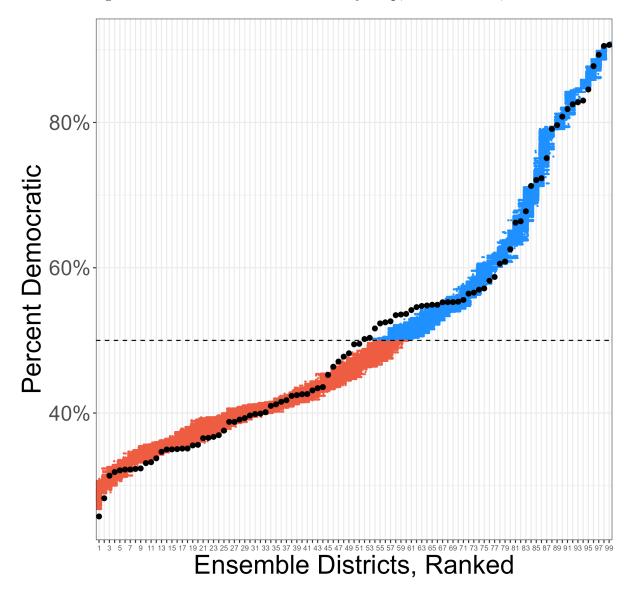
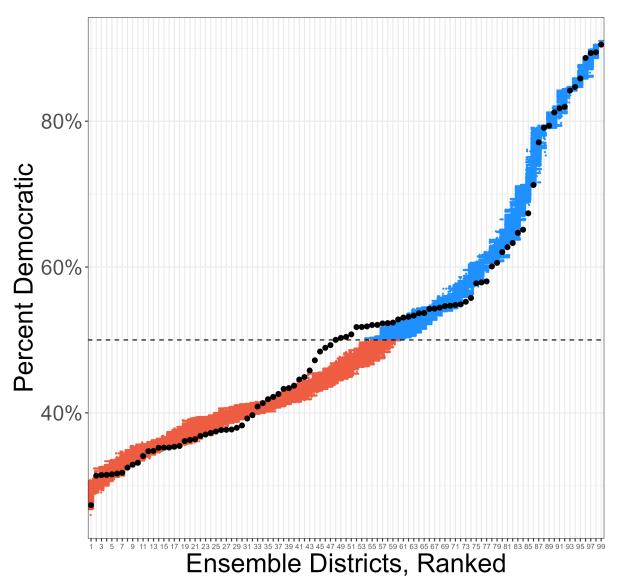


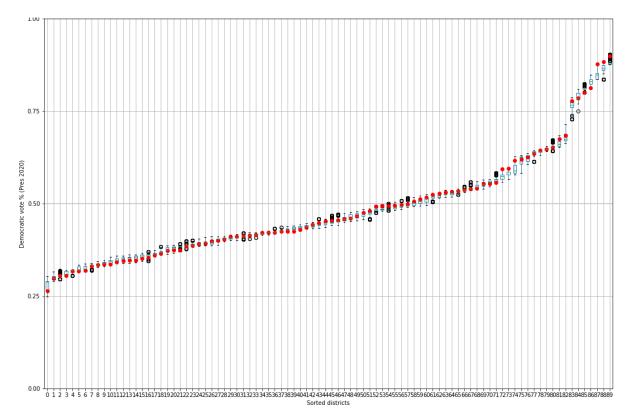
Figure 29: Wright Assembly Map, vs. Ensemble, SMC



4.2 Gerrychain Ensembles

Once again, I employ the Gerrychain Ensembles and find that the Johnson Map hews closely to the underlying political geography of the state, the Legislature's map deviates somewhat, and the other maps deviate heavily. This is true if you use 2020 presidential data to measure partisanship.

Figure 30: Johnson Assembly Map, vs. Ensemble, Pres. Vote Share, Recombination Method



Page 79 of 301

Figure 31: Legislature's Assembly Map, vs. Ensemble, Pres. Vote Share, Recombination Method

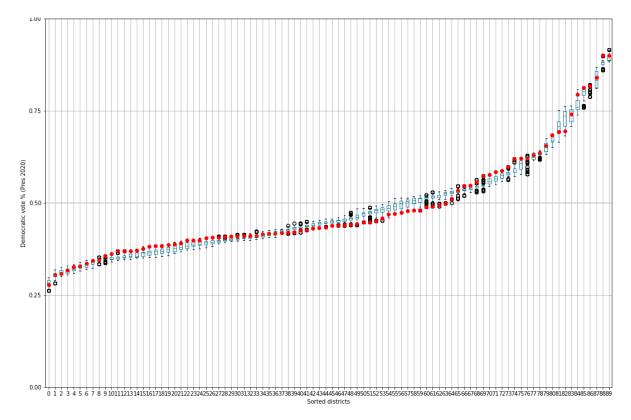


Figure 32: Governor's Assembly Map, vs. Ensemble, Pres. Vote Share, Recombination Method

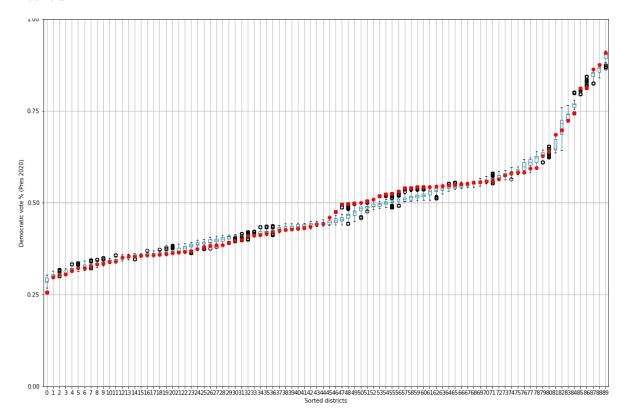


Figure 33: Senate Democrats' Assembly Map, vs. Ensemble, Pres. Vote Share, Recombination Method

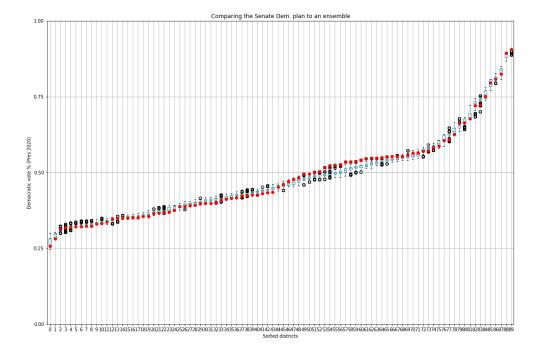
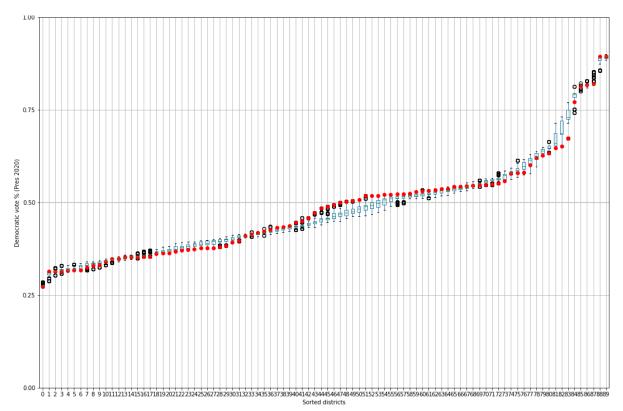


Figure 34: Wright Sen. Assembly vs. Ensemble, Pres. Vote Share, Recombination Method



This is also true if you utilize the index of statewide races to measure partisanship.

Figure 35: Johnson Assembly Map, vs. Ensemble, Index, Recombination Method

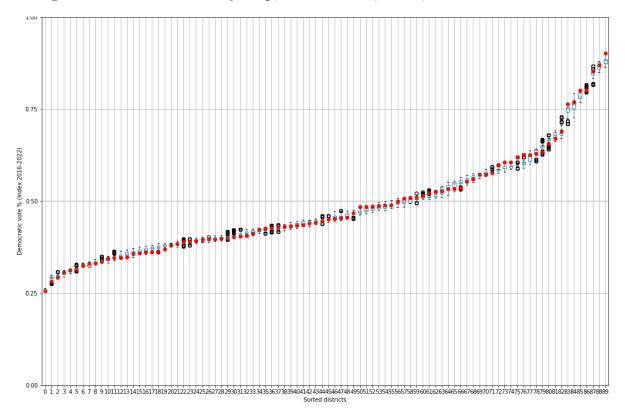


Figure 36: Legislature's Assembly Map, vs. Ensemble, Index, Recombination Method

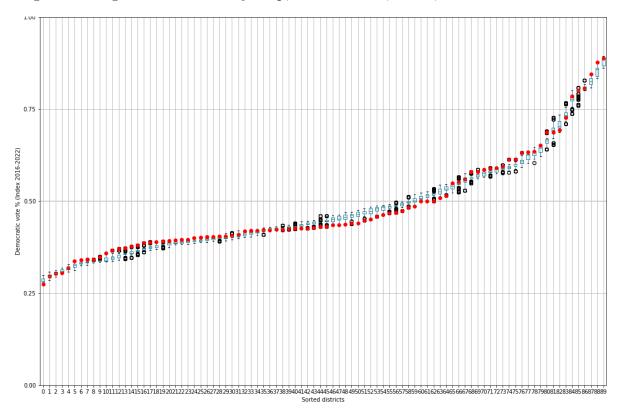


Figure 37: Governor's Assembly Map, vs. Ensemble, Index, Recombination Method

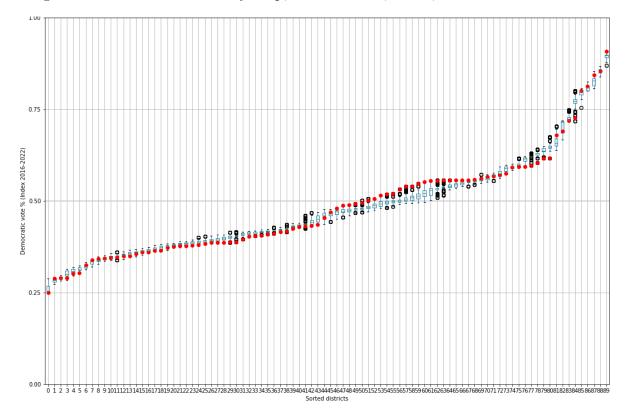


Figure 38: Senate Democrats' Assembly Map, vs. Ensemble, Index, Recombination Method

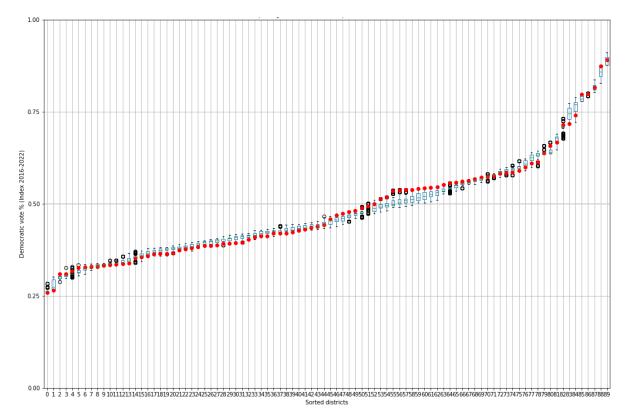
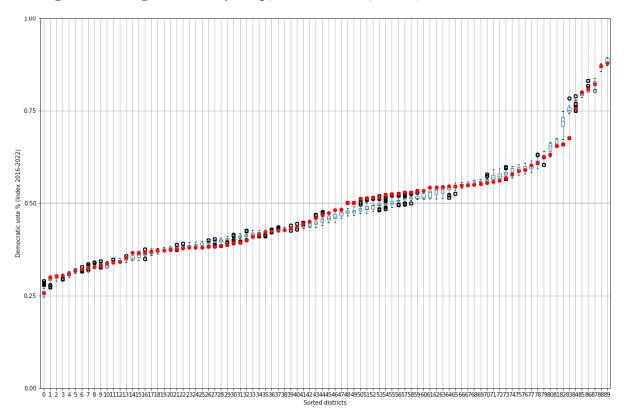


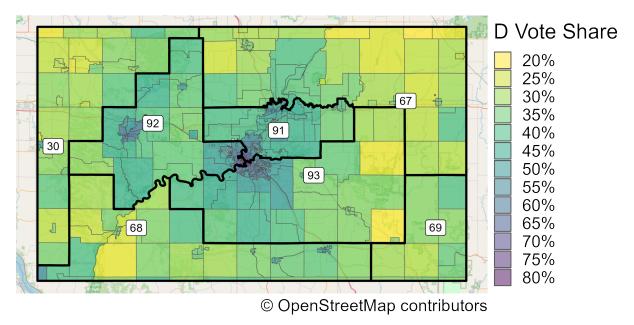
Figure 39: Wright Assembly Map, vs. Ensemble, Index, Recombination Method



4.3 Qualitative Examination of Maps

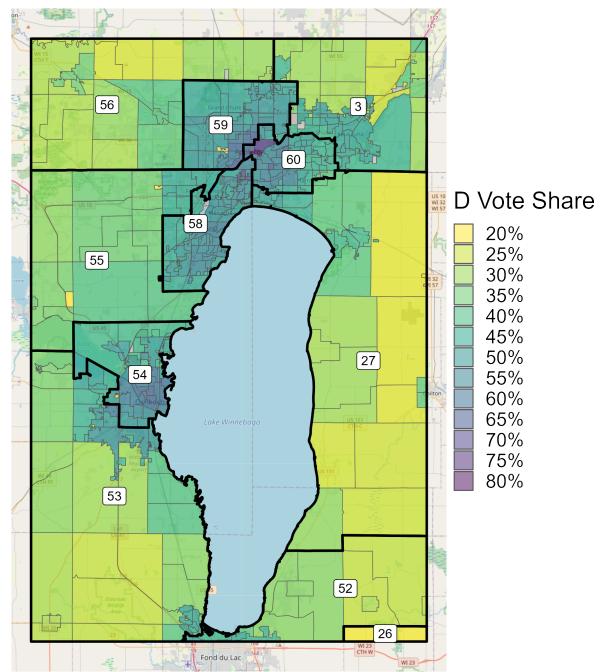
Again, we can see how certain changes are made that might only be suggested for partisan purposes. While most of the submitted maps create an additional Democratic or Democratic-leaning district around Eau Claire, the Wright map splits the city three ways, creating three Democratic-leaning districts.

Figure 40: Wright Assembly Map, Eau Claire Area



Likewise, most maps create a new Democratic-leaning district between Oshkosh and Appleton by creating a new district running north-south along the shores of Lake Winnebago. The Wright and Clarke maps, on the other hand, go one further by splitting Appleton three ways to try to squeeze in an additional Democratic-leaning district (both are similar in their approach; only the Wright map is shown below).

Figure 41: Wright Assembly Map, Lake Winnebago Area

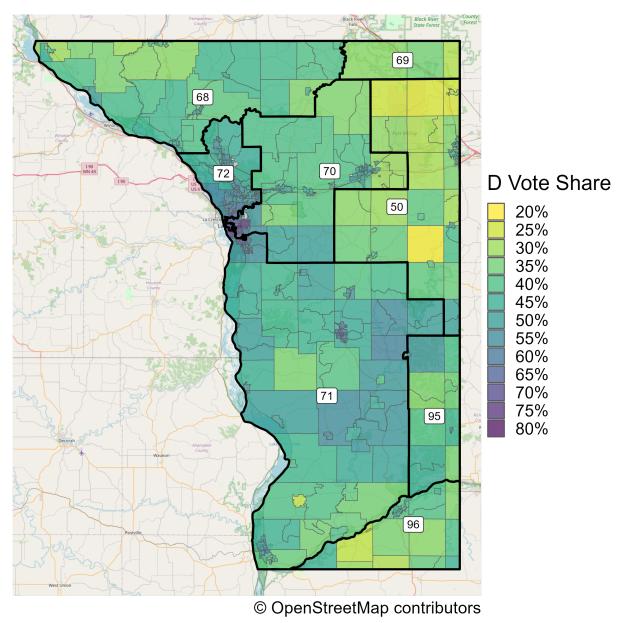


© OpenStreetMap contributors

While the City of Lacrosse remains intact in the Legislature's map, most of the alternate maps create an additional Democratic district by splitting it. The Wright map, on the other hand, splits it three ways, in an attempt to create three Democratic districts

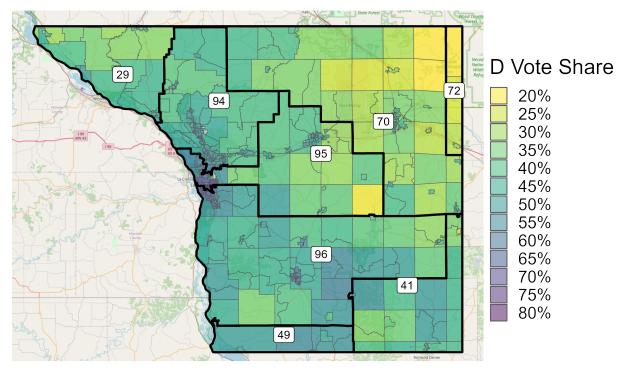
in the region.





The governor's map likewise splits the city three ways, extending districts out into the rural countryside to create (barely) three districts carried by President Biden.

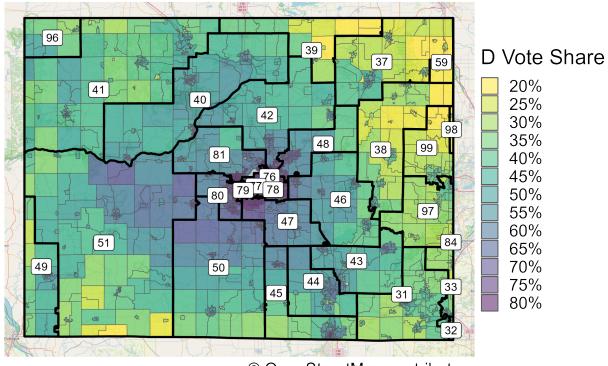
Figure 43: Governor's Assembly Map, LaCrosse Area



© OpenStreetMap contributors

This leaves the two areas of greatest Democratic concentration: Madison and Milwaukee. In Madison, almost all of the submitted maps attempt to increase Democratic performance by employing a "pinwheel" concept (or, if one prefers, a "pizzamander") by splitting the core of Dane County among multiple districts and then drawing wedge-like lines into the more heavily Republican exurbs and countryside. The Enacted Map creates 12 Democratic-leaning districts here. The Governor's Map expands that to 16. While some of this would fall within the natural variance of the map, moves such as splitting Janesville – which can almost support an entire district on its own – in half are harder to justify as neutral moves. District 46 pairs Cottage Grove with Republican-leaning areas in suburban and rural areas of Dane and Jefferson counties, while District 42 mimics the heavily Democratic "arm" into Madison discussed above for the Senate map.

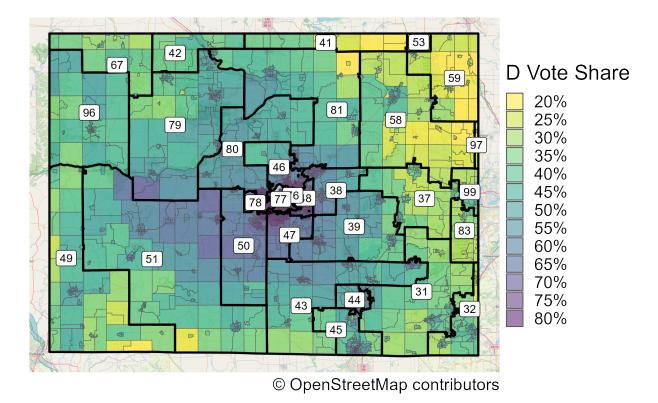
Figure 44: Governor's Assembly Map, Madison Area



© OpenStreetMap contributors

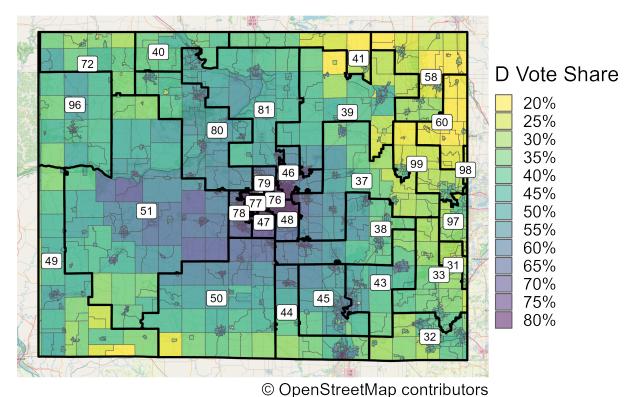
Senate Democrats likewise create 16 districts, using the same technique of pairing Madison and its inner suburbs with rural areas further out from the core. This time, however, they split Janesville three ways. District 43 wraps around the area, joining a heavily Democratic city in Jefferson and Walworth counties (Whitewater) with more Republican areas to the west of Janesville.

Figure 45: Senate Democrats' Assembly Map, Madison Area



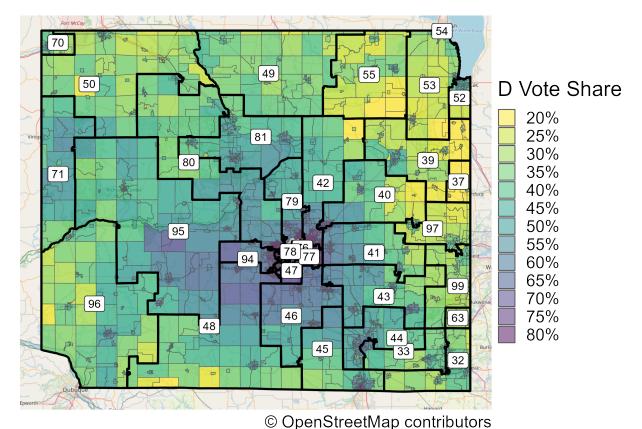
The Clarke Map increases that number to 17. It heavily relies upon the "pinwheel" technique, in a series of districts that start with District 80 and move counterclockwise around Madison to District 44. It too splits Janesville in half, but also splits Sun Prairie in half to push District 39 to lean Democratic. District 37 also snakes its way out of Dane County to soak up heavily Republican areas near the Jefferson County/Waukesha County border.

Figure 46: Clarke Assembly Map, Madison Area



The Wright Map increases the number of Democratic districts to 18. Witness in particular District 80, which slithers from Middleton past the Wisconsin Dells to Juneau County. Or District 40, which takes the City of Juneau and extends the district it contains almost to the Iowa state line (this is an excellent example of how relying upon statewide compactness methods can conceal grotesque individual districts). The City of Sun Prairie is split in half, forming the Northern Tier of a series of stacked districts descending to the east of Madison, all of which achieve marginal Democratic status by taking heavily Democratic areas of the core of Dane County and extending them into the exurban and rural areas between Madison and Milwaukee. In the process, Jefferson County (which doesn't have sufficient population to support two districts) is split five ways. Walworth County, which also does not have sufficient population to support two districts, is split among six (it voted for Trump by 20 points).

Figure 47: Clarke Assembly Map, Madison Area



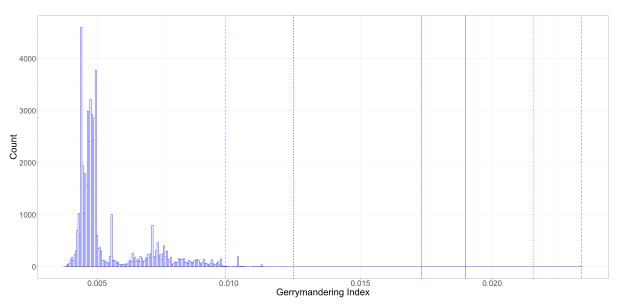
The maps make various other adjustments that gain seats for Democrats here and there. Most of these pay at least some fealty to natural political boundaries. For example, all of the maps add a Democratic-leaning seat by the way that they split the City of Green Bay. But Green Bay has to be split. They all split Racine in half, adding an additional Democratic district based in that area. With that said, the only truly questionable split remaining is the design of Districts 20 and 63 in Milwaukee counties. The Senate Democrats and the Wright Map maintain the east-west division of those precincts, which creates two compact districts. Both the Governor's Map and the Clarke Map opt for a north-south split, extending the district containing Republican-leaning Oak Creek well into the city boundaries, past the airport. This creates an extra Democratic-leaning district, but does so at the expense of compactness.

4.4 Gerrymandering Index

I've summarized the data for the Assembly Maps in the gerrymandering indices below.

From left-to-right, the Johnson Map falls within the range of the ensembles, although it is out on a tail. The Legislature's map is next, falling just beyond the gerry-mandering index for an ensemble plan. The remaining four maps, however, are pushed much further out, with (in order) the Senate Democrats' map, the Governor's Map, the Wright Map, and the Clarke map all appearing as substantial outliers sitting multiple standard deviations from the mean.

Figure 48: Gerrymandering indices of ensemble, versus proposed State Senate maps. Blue dashed line = Johnson Map; Black dashed line = Legislature's Map; Solid red line = Senate Dems' Map; Solid blue line = Governor's Map; Red dashed line = Wright Map; Black dotted line = Clarke Map



5 What is a fair map?

5.1 How do you properly measure partisanship?

When the efficiency gap was first proposed, it was intended as a retrospective metric. That is, after elections had been held on a map, one could look at the races that were held, and evaluate efficiency on the basis of who had won actual seats. See Nicholas O. Stephanopoulos and Eric. M. McGhee, Partisan Gerrymandering and the Efficiency Gap, 82 U. of Chi. L. Rev. 831 (2015). This presented problems, however, as the metric was especially sensitive to outcomes at the 50%-50% margin. If a Democrat received 50,001 out of 100,000 votes, that district would waste a single Democratic vote. But if the Democrat received 49,999 votes, the district would waste 99,999 votes. Given the inherent noise involved with actual elections, this posed problems for the stability of the efficiency gap. It also raised other issues, such as how uncontested elections should be dealt with.

This cycle, analysts have been more interested in utilizing a prospective efficiency gap. That is, the fairness of a map is evaluated before actual elections are held under the lines. Instead, elections from previous cycles, typically on a statewide basis, are used to evaluate the partisanship of a district. Some analysts examine individual races, while others utilize composites (that is, combinations of various races). This avoids the noise in evaluating an efficiency gap, and also eliminates concerns over imputation of uncontested elections.

However, it raises a different set of thorny questions. First and foremost among these is: "Which elections should we use to evaluate the map?" There are often multiple races available for evaluation, and which race(s) are selected can have a significant impact on the evaluation of the plan.

This issue became visible when Dr. Kenneth Mayer submitted his corrected expert report on Jan. 16, 2024. In this report, he seems to have eliminated two elections from his composite, resulting in a shift in some of his partisan fairness metrics (the reasons for this shift are obscure). We can see this by comparing Table 6 from his initial report with Table 6 from his corrected report.

Figure 49: Mayer Table 6, Initial and Corrected Reports

Table 6 - Summary of Measures of Partisan Neutrality													
	Dem Seats at 50- 50 vote	Dem Seats at Baseline (50.5%)	Dem Vote Share to Obtain Majority	ote re to otain Comp. Seats		Votes Bias	Global Symmetry	Efficiency Gap	Mean- Median	Declination			
Assembly	45	47	52.2%	20	4.6%	2.2%	4.6%	4.5%	3.0%	10.3°			
Senate	16	17	51.2%	10	3.3%	1.2%	2.7%	2.7%	0.9%	6.6°			

Table 6 - Summary of Measures of Partisan Neutrality													
	Dem Seats at 50-50 vote Dem (51.2%)		Dem Vote Share to Obtain Majority	ce to cain Comp.		Votes Bias	Global Symmetry	Efficiency Gap	Mean- Median	Declination			
Assembly	45	47	52.0%	16	4.1%	2.0%	3.2%	4.0%	2.3%	10.2°			
Senate	16	18	50.6%	9	1.8%	0.6%	2.6%	0.8%	-0.52%	4.5°			

This shift is difficult to object to since there is, to my knowledge, no agreed upon scientifically justified method for selecting races to place in an index. This raises the question: What would happen with other selections of races? I have data for 13 statewide races in Wisconsin: 2016 and 2020 presidential; 2016, 2018, and 2022 senatorial; 2018 and 2022 gubernatorial, secretary of state, attorney general and treasurer. This yields 8,191 combinations of races that could be selected.

I've evaluated the Governor's map under all of these combinations. As it turns out, the elections selected are very important in determining how the partisanship of the underlying map appears. Note that I did not evaluate the Seats Bias or Votes Bias, since those are simply restatements of other metrics.

As you can see, depending on the metric selected, the map is either a heavy Republican gerrymander or has a modest Democratic lean. It produces between 13 and

18 Democratic seats. Reverting those seats to a 50%-50% mean yields between 14 and 17 Democratic seats. Democrats would have to win between 46.8% of the vote and 54.3% of the vote. It would create between 5 and 18 competitive seats. The efficiency gap would range from -.142 (an extreme Republican gerrymander under every attempt to interpret the efficiency of which I am aware) to 0.019 (a modest pro-Democratic lean). The meanmedian gap ranges between -0.038 and 0.008 (no one, to my knowledge, has attempted to set a threshold for a gerrymander under this metric). The declination ranges from between -0.205 to 0.047.

We could also exclude the less likely options, and focus only on the central 95% of race selections. In reality, justifying this would be difficult to do, since there are combinations that are probably more likely to be selected (such as 2020 presidential) that might land on a tail and that we would want to remain in consideration. Regardless, even restricting ourselves to the central 95% yields a wide range of possible outcomes.

Figure 50: Range of Outcomes, Partisan Fairness Metrics, Varying By Races Selected to Measure Partisanship (Governor's Map)

Metric	Minimum Value	Lower 95%	Upper 95%	Maximum Value
D Seats	13	15	17	18
D Seats @ 50%	14	15	15	17
D % Needed for Majority	46.8%	49.5%	52.9%	54.3%
Competitive Seats	5	7	13	18
Efficiency Gap	-0.142	-0.097	-0.028	0.019
Mean-Median	-0.038	-0.032	-0.003	0.008
Declination	-0.205	-0.166	-0.035	0.047

This is because, in the real world, candidates do matter. Perhaps less so than in

the past, but the political coalition put together by one candidate will not necessarily resemble the political coalition of another candidate. It is even more difficult to know how districts will perform without knowing which statewide candidate they are most likely to resemble. The endeavor is fraught. Note that this is less important for the simulation approach to redistricting, since a map drawn without respect to politics definitionally should resemble a politics-neutral ensemble regardless of which race is used to evaluate partisanship.

5.2 How important is competition?

Many of the reports filed in support of maps trumpet the number of competitive districts produced. Left unanswered is the question: How important are competitive districts?

This may seem like a spurious question. But there is actually a cottage industry in the political science devoted to the question of whether competitive districts actually improve representation. E.g., Thomas Brunell, Redistricting and Representation: Why Competitive Elections are Bad for America (2008); Justin Buchler, "Competition, Representation, and Redistricting: The Case Against Competitive Congressional Districts," 17 Jrnl. Theoretical Pol. 431 (2005).

But this Court need not wade into that philosophical thicket. The practical problem with competitive districts is that making them a goal can make maps hyperresponsive. To see what I mean, imagine that the Assembly map were drawn such that every seat went for Joe Biden by a little less than a point, matching his statewide vote total. In a neutral year, Republicans might flip some of those seats, but Democrats would be well-positioned to win a strong majority. Now, imagine a year like 2018. Say that Democrats won 54% of the vote statewide. That would likely translate to them coming close to sweeping all of the seats in the chamber. On the other hand, in a year like 2022 where Republicans won the statewide vote by 8 points, Republicans would be in a strong

position to win almost all of seats in the legislature. ¹

To see what I mean by this, examine the following table. Let us leverage Dr. DeFord's analysis suggesting that President Biden's vote share is reflective of state legislative outcomes in Wisconsin. Since the 2020 presidential election in Wisconsin was close to 50-50, assuming DeFord's analysis is true, it would approximate a 50-50 Assembly election outcome. We can then take Joe Biden's vote share in the seats in the Governor's map and nudge the results sequentially by a half point toward Republicans (1% net), and then a half point toward Democrats.

Figure 51: Range of Outcomes, Partisan Fairness Metrics, Varying By Races Selected to Measure Partisanship (Governor's Map)

R+10%	R+9%	R+8%	R+7%	R+6%	R+5%	R+4%	R+3%	R+2%	R+1%	0	D+1%	D+2%	D+3%	D+4%	D+5%	D+6%	D +7%	D+8%	D+9%	D+10%
33	36	41	42	43	43	45	46	46	47	49	51	52	52	52	53	53	53	53	54	54

As you can see, as things move toward Democrats, their position in the Assembly only gradually improves. But as things move toward Republicans, Democrats quickly fall off of a cliff. A year like 2022, where Republicans were winning the popular vote by near double-digits, could result in supermajorities in the legislature. Why this degree of hyper-responsiveness would be at all desirable is left unanswered. A similar analysis in the Senate is complicated by the fact that Senate seats are spread out over two cycles but regardless, we would see similar results. Republicans winning the statewide popular vote by eight points would place Democrats in a worse position than they are today; they would win only ten seats. An 8-point win in the other direction, however, yields only 18 Democratic seats.

¹Republicans' margin was probably larger; they had more uncontested seats, which result in neither party being awarded any votes. Seehttps://www.nytimes.com/interactive/2022/11/08/us/elections/results-wisconsin.html?action=click&pgtype=Article&state=default&module=election-results&context=election_recirc®ion=StateNavMenu. Since most of these seats have heavy partisan leans, including actual elections here would probably tilt the vote total further toward Republicans.

5.3 How should we define a fair map?

This also raises a related question: Which metric, if any, should be employed? Partisan fairness metrics are relatively new, are still evolving, and have a history of overpromising what they can deliver to courts. When the efficiency gap was first proposed, for example, it suggested "[u]nder circumstances that are very common in U.S. elections, it is unnecessary to sum the wasted votes in each individual district—a process that can be somewhat cumbersome. Instead, if we assume that all districts are equal in population (which is constitutionally required), and that there are only two parties (which is typical in single-member district systems), then the computation reduces through simple algebra to something quite straightforward Efficiency Gap = Seat Margin – (2 x Vote Margin)." Stephanopoulos and McGhee, at 17. Of course, it was never quite that simple, since uncontested seats had to be imputed, a complex endeavor whose outcomes can depend on the technique employed.

More importantly, the algebra was *not* straightforward. It was later discovered that the proof of this equivalence only held true when turnout was equivalent across districts, which of course is almost never the case. Eric McGhee, "Measuring Efficiency in Redistricting", 16 Election L.J. 417 (2017). Some have attempted to "save" the simpler format as a "turnout-adjusted" efficiency gap; regardless of one's view of the merits of this, the existence of two sometimes-competing versions of the efficiency gap is not encouraging.

Even more distressing, the efficiency gap was represented as being closely related to partisan symmetry and creating symmetry with an efficiency gap of zero. See Complaint, Gill v. Whitford, Case No. 15-CV-421-bbc, available at https://vhdshf2oms2wcnsvk7sdv3so.blob.core.windows.net/thearp-media/documents/Complaint_7.8.15.pdf. However, as has recently been demonstrated (after the attempt to utilize the metric as part of a federal constitutional standard failed), this assertion was also false. See Jonathan Katz, Gary King, and Elizabeth Rosenblatt, 12 American Political Science Rev. 114 (2020) ("Stephanopoulos and McGhee (2015) introduce the efficiency gap and

claim it is "a new measure of partisan [a] symmetry" (quote repeated on pages 831, 834, 838, 849, and 899). We prove that this claim is false, and also convey the intuition and productive uses of the measure.") ("The article then claims that partisan symmetry is satisfied when these wasted votes are equally divided between the parties. We show this claim is incorrect.") ("The claim that "a party can win more than half the seats with half the votes only by exacerbating the efficiency gap in its favor" (p. 856) is also untrue.").

Even beyond these problems, the fragility of the efficiency gap led to a need to add an additional layer of complex analysis. Some have tried "perturbing" vote shares – that is assuming a uniform swing in election results and exploring the potential outcomes as vote shares are moved in various directions. This adds the assumption that districts swing evenly across elections (that is, all move 2% toward Republicans or 3% toward Democrats at the same time). While this may be a decent approximation, it is only an approximation.

PlanScore is another attempt to rectify this problem, by using Bayesian Hierarchical Modeling to predict election outcomes in districts on the basis of the 2012 and 2016 presidential elections (but see *supra* Part III.a). It then samples outcomes from the posterior output to simulate a variety of electoral outcomes, and calculate the various efficiency gaps that are created. PlanScore is still relatively new, and will probably need multiple "real world" runs to have confidence in it.

I prefer simulations to partisan fairness metrics, given that it most precisely mimics the purpose of a single member district system of elections (see *infra* Part III.d) and can be used to detect when traditional principles are subverted to the pursuit of particular partisan outcomes. But even this approach can have issues. The initial method for simulating election outcomes proposed by Chen & Rodden appears not to sample uniformly from the distribution of available plans. This means that outcomes utilizing this technique may not actually yield samples of what a map drawn without respect to politics would yield. Fifeld et al., "The Essential Role of Empirical Validation in Legislative Redistricting Simulation," 7 Statistics and Public Policy 52 (2020).

In other words, when seeking a fair map, the Court would have to choose among a variety of metrics, all of which are potentially sensitive to the choice of elections used to evaluate the metric, and most of which are relatively new and may later prove to be problematic.

Even beyond that, those metrics will raise important normative questions about what a fair map is. If a state has a "baseline" efficiency gap of -0.06, a gerrymander is defined at -0.075, and a party draws a map with an efficiency gap of -0.08, is that a gerrymander? Or should we account for the baseline level of distortion created by geography? If a competing party draws a map with an efficiency gap of -0.03, which is the fairer map: the one closer to zero, or the one closer to what a map drawn without any partisan intent would look like?

For that matter, if a competing party draws a map with an efficiency gap of 0.04, which is fairer? Drawing the latter map would put the state closer to a hypothetical zero efficiency gap (however we interpret that), but it would likely take quite a bit of reliance on political data to generate that outcome and would flip the benefitted party. The -0.08 map could probably be drawn accidentally without respect to political outcomes, but would cross the technical gerrymandering threshold. If there is only one way to draw a map with an efficiency gap of -0.04, and that is the friendliest map to Democrats possible in a state, must that map then be drawn? Is a neutral map one that is drawn with zero respect to politics? Or is it one drawn that zeroes out partisan imbalance (however defined).

All of these are defensible outcomes – at least from a non-legal point of view – depending upon the normative assumptions under which one operates. It's just important to be aware that these types of choices are lurking under the seemingly straightforward surface of the partisan fairness ocean. It is also important to acknowledge that they tie in with legal concepts. A strong reliance on partisan fairness metrics standing alone would mean that the court is directing the Special Masters to remedy not only intentional gerrymandering, but also gerrymandering that occurs naturally. If not, a 0.00 mean-median

map is entirely irrelevant in a state with a substantial natural partisan skew. Moreover, emphasizing "partisan fairness neutrality", instead of "natural geography neutrality", reflects a choice to diminish, if not eliminate, any intent requirement from gerrymandering causes of action.

As a final note, Dr. DeFord asserts that there exists "[a] strong consensus in favor of the normative value of symmetry metrics among political scientists." It is not at all clear what basis Dr. DeFord - who is not a political scientist - has for this assertion. I'm not aware of any public opinion polling among political scientists that might warrant such a conclusion, and the amount of effort directed toward developing redistricting simulations (including by Dr. DeFord) is at the very least indicative of a belief among some that a state's underlying political geography is important. The various symmetry metrics certainly have their critics among political scientists and others. See Katz, King and Rosenblatt, supra (criticizing mean-median, efficiency gap, and lopsided margins metrics, among others); Christopher P. Chambers, et al., "Flaws in the Efficiency Gap," 33 Jrnl. of Law & Pol. 1 (2017); Wendy K. Tam Cho, "Measuring Partisan Fairness: How Well Does the Efficiency gap Guard against Sophisticated as Well as Simple-Minded Modes of Partisan Discrimination," 166 U. of Penn. L.Rev. Online, 17 (2017); Kristopher Tapp, "Measuring Political Gerrymandering," (2018), available at arXiv:1801.02541; Barry Burden & Corwin Smidt, "Evaluating Legislative Districts Using Measures of Partisan Bias and Simulations," 10 Sage Open (2020) (2020); Gregory S. Warrington, "A Comparison of Partisan-Gerrymandering Measures," 18 Elect. L.J. 262 (2019).

Assuming such a consensus does exist, it is irrelevant here. While political scientists may have opinions as to how these various hypotheticals ought to play out, the truth is that political science expertise yields no specialized insight as to what the "proper" normative outcome is. Nor does the scope of that expertise include ultimate insight as to how fairness in a legal setting should be defined. Political science can explore the *implications* of various choices, but the ultimate choice is ultimately a question for courts or

for legislatures. I am unconvinced that there are particularly good answers to the questions posed a few paragraphs earlier, and could argue most of them either way. It is just important to acknowledge that situations like those described above will arise – indeed this litigation directly raises the question of what to do in a state where politics-neutral maps have Republican leans across a variety of operationalizations – and will have to be answered if partisan fairness is employed as a standard.

5.4 What is the role of partisanship in an single-member district system?

Finally, all of this raises the question of whether partisan fairness metrics even have a place in a system of district-based elections. After all there is a system of politics, employed throughout the world, that heightens the importance of partisanship: Proportional representation, or "PR." The people of Wisconsin, for better or for worse, have opted for district-based representation. That would suggest intrinsically that there are other legitimate concerns than partisan fairness and may even suggest that partisan outcomes are not a concern of our electoral system (I should note that the simulations in the first report demonstrate that it is relatively straightforward to draw maps with far fewer county and location splits than any of the parties' submitted maps create). As a learned scholar of elections once put it: "[T]he very reason for drawing geographic districts is to capture something unique about each particular place—to enable each distinct locality to have its voice heard (and its interests advanced) in the legislature. Under this conception of representation, concerns about statewide seats and votes are largely irrelevant. What matters, instead, is that each district make sense (because it corresponds to a territorial community), not that the consolidated votes in all the districts across the state bear some relationship to the seats controlled statewide by each party." Nicholas Stephanopoulos, "Redistricting and the Territorial Community," 160 U. of Penn. L.Rev. 1379, 1404 (2012).

\ s \ Sean P. Trende

Sean P. Trende

Exhibit A

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
1				
	1	CORE	59,444	48,427
		Other Subtotal	0	0
		District Total	59,444	48,427
2		CODE	14.024	11 200
		CORE	14,821	11,299
		OTHER	13,515	
		OTHER	5,380	4,291
		OTHER	18,555	14,071
	5	OTHER	7,712	5,845
		Other Subtotal	45,162	33,913
		District Total	59,983	45,212
3				
	3	CORE	37,994	28,318
	59	OTHER	9,247	7,374
	25	OTHER	11,932	9,291
		Other Subtotal	21,179	16,665
		District Total	59,173	44,983
4				
	4	CORE	18,466	14,065
	89	OTHER	34,569	26,741
	36	OTHER	7,061	5,474
		Other Subtotal	41,630	32,215
		District Total	60,096	46,280
5				
	5	CORE	46,867	35,726
	2	OTHER	6,590	4,894
	56	OTHER	316	218
	6	OTHER	5,303	4,085
		Other Subtotal	12,209	9,197
		District Total	59,076	44,923
6				
	6	CORE	34,686	27,045
	36	OTHER	17,927	13,606
	35	OTHER	698	582
	40	OTHER	5,877	4,617
		Other Subtotal	24,502	18,805
		District Total	59,188	45,850

	COIVIPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
7				
		CORE	45,685	35,093
	84	OTHER	13,415	10,948
		Other Subtotal	13,415	10,948
		District Total	59,100	46,041
8				
	8	CORE	59,362	40,439
		Other Subtotal	0	0
		District Total	59,362	40,439
9		District Total	33,302	10, 133
		CORE	59,571	42,238
		Other Subtotal	0	0
		District Total	59,571	42,238
10		District Total	33,371	.2,230
10		CORE	59,503	45,220
	10		33,303	13,220
		Other Subtotal	0	0
		District Total	59,503	45,220
11				
	11	CORE	59,565	41,166
		Other Subtetal	0	0
		Other Subtotal	0	0
43		District Total	59,565	41,166
12		0005	50.054	12.610
	12	CORE	59,351	42,610
		Other Subtotal	0	0
		District Total	59,351	42,610
13				·
	13	CORE	31,009	23,857
		OTHER	28,878	22,526
			-,	,
		Other Subtotal	28,878	22,526
		District Total	59,887	46,383
14				·
		CORE	30,731	24,624
		OTHER	13,918	11,236
		OTHER	14,814	11,955
	15	<u>-</u>	± 1,0±4	11,555
		Other Subtotal	28,732	23,191
		District Total	59,463	47,815
			35,.30	,0_0

D. (CTD. (CT	COMPARE		2522212	5556546
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
15				
		CORE	0	0
		OTHER	28,542	22,252
	98	OTHER	30,869	24,508
		Other Subtotal	59,411	46,760
		District Total	59,411	46,760
16				
	16	CORE	59,714	45,615
		Other Subtotal	0	0
		District Total	59,714	45,615
17		District Total	35,714	43,013
17		CORE	E0 42E	42.760
	17	CORE	59,435	43,760
		Other Subtotal	0	0
		District Total	59,435	43,760
18				
	18	CORE	59,346	43,972
		Other Subtotal	0	0
		District Total	59,346	43,972
19				
	19	CORE	59,320	55,412
		Other Subtotal	0	0
		District Total	59,320	55,412
20				
	20	CORE	38,405	31,677
	21	OTHER	20,795	16,486
		Other Subtotal	20,795	16,486
		District Total	59,200	48,163
21				
	21	CORE	36,497	28,505
	82	OTHER	1,703	1,312
	20	OTHER	21,143	16,609
		Other Subtotal	22,846	17,921
		District Total	59,343	46,426
22				
	22	CORE	0	0
	60	OTHER	32,174	24,964
	24	OTHER	24,631	19,256

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	23	OTHER	2,362	1,684
		Other Subtotal	59,167	-
		District Total	59,167	45,904
23		CORE	F7 024	42.020
		CORE	57,021	43,828
	24	OTHER	2,076	1,928
		Other Subtotal	2,076	1,928
		District Total	59,097	45,756
24		District Total	39,097	43,730
27		CORE	32,328	25,361
		OTHER	27,530	
	22	OTTLK	27,550	21,437
		Other Subtotal	27,530	21,457
		District Total	59,858	-
25			22,222	.0,010
		CORE	42,148	33,476
		OTHER	4,520	
		OTHER	12,943	
			,	ŕ
		Other Subtotal	17,463	13,933
		District Total	59,611	47,409
26				
	26	CORE	34,818	26,864
	27	OTHER	24,399	18,595
		Other Subtotal	24,399	18,595
		District Total	59,217	45,459
27				
		CORE	30,808	
		OTHER	12,313	
	26	OTHER	16,937	13,465
		Other C. brand	20.250	22.400
		Other Subtotal	29,250	
20		District Total	60,058	47,890
28		CORE	16,831	12,599
		OTHER	21,476	
		OTHER	6,311	
		OTHER	15,010	
	30	OTTIEN.	13,010	11,002
		Other Subtotal	42,797	32,007
		District Total	59,628	
			30,020	,550

	COMPARE				
DISTRICT	DISTRICT (2022))	NOTES	PERSONS	PERSONS18
29					
			CORE	0	0
			OTHER	35,529	27,178
	g	93	OTHER	24,454	18,970
			Other Subtetal	E0 002	46 140
			Other Subtotal	59,983	46,148
20			District Total	59,983	46,148
30			CORE	44.552	24.067
			CORE	44,553	34,067
	5	13	OTHER	14,761	12,088
			Other Subtotal	14,761	12,088
			District Total	59,314	46,155
31			District Total	33,314	40,133
51		31	CORE	26,007	20,021
			OTHER	33,174	26,583
	_	,_	OTTLEN	33,171	20,303
			Other Subtotal	33,174	26,583
			District Total	59,181	46,604
32					·
	3	32	CORE	13,411	10,248
	ϵ	51	OTHER	44,229	34,592
	ϵ	54	OTHER	1,341	957
			Other Subtotal	45,570	35,549
			District Total	58,981	45,797
33					
	3	33	CORE	0	0
	ϵ	53	OTHER	33,631	26,605
	8	33	OTHER	11,034	8,788
	3	32	OTHER	12,971	10,432
	3	31	OTHER	2,123	1,710
			Other Subtotal	59,759	47,535
			District Total	59,759	47,535
34					
	3	34	CORE	59,520	49,742
				=	=
			Other Subtotal	0	0
			District Total	59,520	49,742
35			CODE	F2 002	42.502
			CORE	53,883	43,593
			OTHER	1,784	1,379
	8	56	OTHER	4,224	3,405

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	6,008	4,784
		District Total	59,891	48,377
36				
		CORE	34,453	28,454
		OTHER	22,771	17,973
	35	OTHER	2,791	2,544
		Other Subtotal	25,562	20,517
		District Total	60,015	48,971
37	•			
	37	CORE	0	0
	42	OTHER	8,102	6,668
	39	OTHER	35,380	27,799
	53	OTHER	12,717	10,444
	52	OTHER	3,410	2,668
		Other Subtotal	59,609	47,579
		District Total	59,609	47,579
38	3			
	38	CORE	8,295	6,529
	37	OTHER	27,564	21,238
	39	OTHER	14,244	11,402
	33	OTHER	9,144	7,222
		Other Subtotal	50,952	39,862
		District Total	59,247	46,391
39				
	39	CORE	491	378
	41	OTHER	27,470	22,515
	42	OTHER	25,513	19,757
	52	OTHER	3,146	2,454
	53	OTHER	3,176	2,459
		Other Subtotal	59,305	47,185
		District Total	59,796	47,563
40)			
	40	CORE	0	0
	81	OTHER	31,324	24,569
	42	OTHER	9,329	7,481
	41	OTHER	11,843	9,471
	51	OTHER	6,233	4,967
	50	OTHER	749	580

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	59,478	47,068
		District Total	59,478	47,068
41				
	41	CORE	14,166	11,486
	50	OTHER	34,241	26,424
	49	OTHER	5,934	4,559
	51	OTHER	5,331	3,997
		Other Subtotal	45,506	34,980
		District Total	59,672	46,466
42				
	42	CORE	16,638	13,128
	37	OTHER	20,292	15,287
	39	OTHER	4,270	3,280
	81	OTHER	3,694	2,863
	79	OTHER	6,018	4,400
	46	OTHER	2,392	2,076
	48	OTHER	5,897	4,692
	47	OTHER	0	0
		Other Subtotal	42,563	32,598
		District Total	59,201	45,726
43				
	43	CORE	9,525	7,333
	33	OTHER	21,409	17,075
	44	OTHER	12,473	9,643
	31	OTHER	15,821	13,483
		Other Subtotal	49,703	40,201
		District Total	59,228	47,534
44				
		CORE	47,268	36,692
	43	OTHER	10,399	8,315
	33	OTHER	975	651
		OTHER	823	666
	45	OTHER	291	236
		Other Subtotal	12,488	9,868
		District Total	59,756	46,560
45				
		CORE	44,781	33,518
	31	OTHER	14,820	11,872
		Other Subtotal	14,820	11,872

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	59,601	45,390
46			,	,
		CORE	11,087	8,194
		OTHER	985	756
		OTHER	26,019	20,018
		OTHER	5	2
	33	OTHER	21,135	16,710
		Other Subtotal	48,144	37,486
		District Total	59,231	45,680
47				
	47	CORE	28,003	21,551
	43	OTHER	26,073	20,819
		OTHER	4,911	4,301
	33	O T T L T	.,511	.,551
		Other Subtotal	30,984	25,120
		District Total		
40		DISTRICT TOTAL	58,987	46,671
48				
		CORE	5,949	4,716
		OTHER	7,276	5,543
	46	OTHER	45,841	34,579
	47	OTHER	29	17
		Other Subtotal	53,146	40,139
		District Total	59,095	44,855
49			,	·
		CORE	43,245	34,346
		OTHER	16,339	13,001
	30	OTTLK	10,333	13,001
		Other Subtotal	16 220	12 001
			16,339	13,001
		District Total	59,584	47,347
50			_	_
		CORE	0	0
	80	OTHER	14,851	11,538
	43	OTHER	12,703	9,208
	45	OTHER	14,620	11,378
	51	OTHER	16,850	13,274
		Other Subtotal	59,024	45,398
		District Total	59,024	45,398
51			33,021	.5,550
J1		CORE	31,251	23,934
		OTHER	7,732	5,991
	80	OTHER	9,973	7,423

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	49	OTHER	10,529	7,891
		Other Subtotal	28,234	21,305
		District Total	59,485	45,239
52		0005		
		CORE	0	0
		OTHER	31,112	24,350
		OTHER	24,358	18,741
		OTHER	3,179	2,437
	55	OTHER	1,451	1,213
		Other Subtotal	60,100	46,741
		District Total	60,100	46,741
53			•	,
	53	CORE	0	0
	57	OTHER	28,305	22,211
	55	OTHER	31,021	23,503
		Other Subtotal	59,326	45,714
		District Total	59,326	45,714
54				
		CORE	49,180	40,387
		OTHER	9,248	7,692
	55	OTHER	868	735
		Other Subtotal	10,116	8,427
		District Total	59,296	48,814
55		District Total	33,230	40,014
		CORE	26,197	20,860
		OTHER	23,474	18,233
		OTHER	10,428	8,281
			·	
		Other Subtotal	33,902	26,514
		District Total	60,099	47,374
56				
		CORE	32,053	24,099
		OTHER	14,688	11,118
	40	OTHER	13,136	10,288
		Other Subtotal	27,824	21,406
		District Total	59,877	45,505
57		District Total	33,017	+5,505
		CORE	0	0
		OTHER	17,364	14,190
	, _		,00.	= .,=50

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	56	OTHER	2,869	2,189
	71	OTHER	3,207	2,527
	40	OTHER	32,312	26,142
		OTHER	1,006	799
	53	OTHER	2,884	2,272
		Other Subtotal	59,642	48,119
F.0		District Total	59,642	48,119
58		CORE	40.000	20 024
		OTHER	49,809 9,264	38,834 7,332
	00	OTHER	3,204	7,332
		Other Subtotal	9,264	7,332
		District Total	59,073	46,166
59			,	
	59	CORE	21,637	17,059
	39	OTHER	2,344	1,864
	52	OTHER	1,884	1,468
	60	OTHER	17,896	14,141
	26	OTHER	7,885	6,282
	58	OTHER	8,143	6,554
		Other Subtotal	38,152	30,309
60		District Total	59,789	47,368
60		CORE	0	0
		CORE OTHER	0 E1 120	40.221
		OTHER	51,139 8,126	40,331 6,339
	55	OTTEN	0,120	0,333
		Other Subtotal	59,265	46,670
		District Total	59,265	46,670
61			•	·
	61	CORE	0	0
	82	OTHER	13,240	10,084
	84	OTHER	46,121	37,461
	15	OTHER	0	0
		Other Subtotal	59,361	47,545
		District Total	59,361	47,545
62		CODE	24.042	10.001
		CORE	21,843	16,891
	66	OTHER	38,272	27,704
		Other Subtotal	38,272	27,704
		Janes Japiolai	30,212	27,704

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	60,115	44,595
63				
	63	CORE	0	0
	82	OTHER	32,776	26,150
	21	OTHER	2,300	1,817
	62	OTHER	24,632	19,816
		Other Subtotal	59,708	47,783
		District Total	59,708	47,783
64				
		CORE	43,193	34,385
	65	OTHER	13,863	9,751
	61	OTHER	3,034	2,589
			46.00=	40.040
		Other Subtotal	16,897	12,340
		District Total	60,090	46,725
65		0005	45 500	24.662
		CORE	45,502	34,662
		OTHER	2,447	1,941
	61	OTHER	12,146	9,859
		Other Subtetal	14 502	11 000
		Other Subtotal	14,593	11,800
66		District Total	60,095	46,462
00		CORE	21,093	15,783
		OTHER		9,363
		OTHER	12,381	•
	03	OTHER	25,903	21,174
		Other Subtotal	38,284	30,537
		District Total	59,377	46,320
67		District rotar	33,377	10,320
		CORE	2,834	2,130
		OTHER	46,686	36,829
		OTHER	10,542	8,162
			,	,
		Other Subtotal	57,228	44,991
		District Total	60,062	47,121
68				
	68	CORE	0	0
	67	OTHER	22,344	17,458
	74	OTHER	14,054	11,566
	87	OTHER	23,504	18,326
		Other Subtotal	59,902	47,350

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	59,902	47,350
69				
	69	CORE	22,319	16,312
	68	OTHER	20,283	14,529
	67	OTHER	1,013	726
	87	OTHER	16,337	12,404
		Other Subtotal	37,633	27,659
		District Total	59,952	43,971
70				
		CORE	18,792	14,572
		OTHER	8,452	6,820
		OTHER	11,065	8,275
		OTHER	13,320	
	96	OTHER	7,765	5,666
		Other C. brand	40.603	24 404
		Other Subtotal	40,602	31,491
71		District Total	59,394	46,063
/1		CORE	FA 100	42.016
		OTHER	54,188	43,816
		OTHER	1,160	892
	70	OTHER	4,115	3,286
		Other Subtotal	5,275	4,178
		District Total	59,463	47,994
72		District rotal	33,403	47,554
, <u> </u>		CORE	41,000	32,980
		OTHER	4,946	4,111
		OTHER	8,039	6,463
		OTHER	5,757	4,527
	, 0	O	3,737	1,327
		Other Subtotal	18,742	15,101
		District Total	59,742	48,081
73				
	73	CORE	36,559	29,226
	74	OTHER	23,294	18,889
		Other Subtotal	23,294	18,889
		District Total	59,853	48,115
74				
	74	CORE	22,239	18,438
	73	OTHER	7,827	6,675
	87	OTHER	16,250	13,138
	75	OTHER	12,652	10,180

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	NOTES PERSONS PERSO	
		Other Subtotal	36,729	29,993
		District Total	58,968	48,431
75				
	75	CORE	78	56
	73	OTHER	15,081	12,363
	28	OTHER	42,912	33,992
	29	OTHER	1,987	1,519
		Other Subtotal	59,980	47,874
		District Total	60,058	47,930
76				
	76	CORE	32,459	29,894
	47	OTHER	1,436	1,194
	48	OTHER	25,247	20,105
		Other Subtotal	26,683	21,299
		District Total	59,142	51,193
77				
	77	CORE	31,659	26,844
	76	OTHER	27,205	25,231
	47	OTHER	1,133	940
		Other Subtotal	28,338	26,171
		District Total	59,997	53,015
78				
	78	CORE	0	0
	47	OTHER	28,982	22,783
	48	OTHER	19,226	15,495
	77	OTHER	11,617	9,090
		Other Subtotal	59,825	47,368
		District Total	59,825	47,368
79				
		CORE	11,742	9,755
		OTHER	16,085	13,277
		OTHER	32,172	25,793
	80	OTHER	0	0
	47	OTHER	3	2
		Other Subtotal	48,260	
		District Total	60,002	48,827
80				
	80	CORE	23,489	17,285

COMPARE DISTRICT DISTRICT (2022) NOTES **PERSONS** PERSONS18

81	OTHER	4,104	3,071
78	OTHER	27,552	22,247
79	OTHER	4,460	3,195
47	OTHER	0	0
	Other Subtotal	36,116	28,513
	District Total	59,605	45,798
81			
81	CORE	12,864	10,108
79	OTHER	37,467	28,918
48	OTHER	3,378	2,922
80	OTHER	6,331	4,730
		•	•
	Other Subtotal	47,176	36,570
	District Total	60,040	46,678
82			
82	CORE	0	0
98	OTHER	28,047	22,444
97	OTHER	30,934	23,807
		•	•
	Other Subtotal	58,981	46,251
	District Total	58,981	46,251
83			•
83	CORE	4,483	3,617
82	OTHER	716	569
15	OTHER	44,562	35,766
98	OTHER	490	378
	OTHER	9,316	7,397
	Other Subtotal	55,084	44,110
	District Total	59,567	47,727
84			
84	CORE	0	0
62	OTHER	12,950	10,230
83	OTHER	35,339	27,366
82	OTHER	10,929	8,315
	Other Subtotal	59,218	45,911
	District Total	59,218	45,911
85			
85	CORE	42,812	33,470
86	OTHER	16,298	12,500
	Other Subtotal	16,298	12,500
			-

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	59,110	45,970
86				
	86	CORE	14,868	11,721
	87	OTHER	3,320	2,487
	69	OTHER	28,576	22,245
	70	OTHER	12,698	9,773
		Other Subtotal	44,594	34,505
		District Total	59,462	46,226
87				
	87	CORE	0	0
	85	OTHER	15,076	11,928
	35	OTHER	2,186	1,697
	86	OTHER	24,318	18,849
	71	OTHER	2,052	1,609
	70	OTHER	3,085	2,418
	6	OTHER	4,777	3,761
	40	OTHER	7,993	6,359
		Other Subtotal	59,487	46,621
		District Total	59,487	46,621
88				
	88	CORE	20,289	15,991
		OTHER	14,156	11,341
	2	OTHER	25,410	19,795
		Other Subtotal	39,566	31,136
		District Total	59,855	47,127
89				
		CORE	1,988	1,514
		OTHER	27,014	21,188
		OTHER	4,795	3,828
	90	OTHER	25,900	19,923
			F7 700	44.000
		Other Subtotal	57,709	44,939
0.0		District Total	59,697	46,453
90		CORE	22.042	24.020
		CORE	33,813	24,929
	88	OTHER	25,738	19,937
		Other Subtotal	25 720	10 027
		District Total	25,738 50 551	19,937
91		DISTRICT TOTAL	59,551	44,866
91		CORE	23,968	18,971
	91	CONL	23,908	10,9/1

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	68	OTHER	31,799	24,164
	67	OTHER	3,454	2,687
	92	OTHER	427	334
	93	OTHER	424	321
		Other Subtotal	36,104	27,506
		District Total	60,072	46,477
92				
		CORE	0	0
		OTHER	27,250	21,162
		OTHER	6,197	
	29	OTHER	25,499	20,716
		Other Subtotal	58,946	
		District Total	58,946	46,728
93				
		CORE	13,743	10,581
		OTHER	6,395	4,841
		OTHER	35,445	29,290
		OTHER	2,696	2,118
	68	OTHER	1,143	866
			45.670	27.445
		Other Subtotal	45,679	
0.4		District Total	59,422	47,696
94		CODE	FO 000	27.050
		CORE	50,080	37,850
		OTHER OTHER	3,077 6,108	2,393
	92	OTHER	6,106	4,777
		Other Subtotal	9,185	7,170
		District Total	59,265	45,020
95		District Total	39,203	43,020
33		CORE	31,711	27,210
		OTHER	5,038	
		OTHER	14,989	11,241
		OTHER	8,067	5,773
	30	0111211	3,007	3,7,73
		Other Subtotal	28,094	20,923
		District Total	59,805	48,133
96				
		CORE	27,141	20,179
		OTHER	4,476	3,504
		OTHER	24,691	20,488
		OTHER	3,107	2,193
			,	,

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	32,274	
		District Total	59,415	46,364
97				
		CORE	19,414	
	38	OTHER	1,981	1,630
	33	OTHER	6,928	5,601
	99	OTHER	21,902	17,313
	83	OTHER	8,750	6,779
		Other Subtotal	39,561	31,323
		District Total	58,975	46,726
98				
	98	CORE	0	0
	22	OTHER	31,936	24,938
	24	OTHER	668	541
	59	OTHER	16,543	12,645
	58	OTHER	1,655	1,367
	99	OTHER	9,033	6,635
			·	·
		Other Subtotal	59,835	46,126
		District Total	59,835	46,126
99				
	99	CORE	28,742	22,401
	37	OTHER	4,250	3,403
	59	OTHER	9	8
	39	OTHER	2,708	2,170
	38	OTHER	23,323	17,727
		Other Subtotal	30,290	23,308
		District Total	59,032	45,709

COMPARE SENATE

Table		COIVIPARE SENATE			
1 CORE 130,814 102,115 2 OTHER 7,712 5,845 20 OTHER 9,247 7,374 30 OTHER 13,515 9,706 9 OTHER 17,312 13,582 Other Subtotal 47,786 36,507 District Total 178,600 138,622 2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 5 Other Subtotal 78,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 44,787 35,744			NOTES	PERSONS	PERSONS18
2 OTHER 7,712 5,845 20 OTHER 9,247 7,374 30 OTHER 13,515 9,706 9 OTHER 17,312 13,582 Other Subtotal 47,786 36,507 District Total 178,600 138,622 2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 5 Other Subtotal 0 0 District Total 178,419 128,996 5 Other Subtotal 73,918 11,236 33 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 47,8761 140,958	1				
20 OTHER 9,247 7,374 30 OTHER 13,515 9,706 9 OTHER 17,312 13,582 Other Subtotal 47,786 36,507 District Total 178,600 138,622 2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 47,876 35,744 District Total 47,876 140,958					
30 OTHER 13,515 9,706 9 OTHER 17,312 13,582 Other Subtotal 47,786 36,507 District Total 178,600 138,622 2 2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 47,876 35,744					
9 OTHER 17,312 13,582 Other Subtotal 47,786 36,507 District Total 178,600 138,622 2 2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 5 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 478,761 140,958					
Other Subtotal 47,786 36,507 District Total 178,600 138,622 2 2 2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 4 CORE 178,419 128,996 5 Other Subtotal 0 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 3 3 OTHER 13,918 11,236 3 OTHER 13,918 11,236 3 3 3 3 744 <t< th=""><th></th><th>30</th><th>OTHER</th><th>13,515</th><th>9,706</th></t<>		30	OTHER	13,515	9,706
District Total 178,600 138,622 2 2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958		9	OTHER	17,312	13,582
District Total 178,600 138,622 2 2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958			Other Subtotal	47.786	36.507
2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958					
2 CORE 105,322 80,921 19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958	2		2.000000		
19 OTHER 316 218 14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958	_		CORF	105.322	80.921
14 OTHER 5,877 4,617 1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958					
1 OTHER 6,590 4,894 12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958					
12 OTHER 25,686 19,662 30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958					
30 OTHER 34,569 26,741 Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958					
Other Subtotal 73,038 56,132 District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958					
District Total 178,360 137,053 3 CORE 164,618 117,770 28 OTHER 13,415 10,948 Other Subtotal 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958		30	OTTEN	34,303	20,741
3 CORE 164,618 117,770 28 OTHER 13,415 10,948 Other Subtotal 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958			Other Subtotal	73,038	56,132
3 CORE 164,618 117,770 28 OTHER 13,415 10,948 Other Subtotal 13,415 10,948 District Total 178,033 128,718 4 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958			District Total	178,360	137,053
28 OTHER 13,415 10,948 Other Subtotal 13,415 10,948 District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958	3				
Other Subtotal 13,415 10,948 District Total 178,033 128,718 4 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958		3	CORE	164,618	117,770
District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958		28	OTHER	13,415	10,948
District Total 178,033 128,718 4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958			Other Subtotal	13 <i>4</i> 15	10 948
4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958					
4 CORE 178,419 128,996 Other Subtotal 0 0 District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958	4		2.0000	5,555	
Other Subtotal 0 0 District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958			CORE	178.419	128.996
District Total 178,419 128,996 5 5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958				,	
5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958			Other Subtotal	0	0
5 CORE 133,974 105,214 3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958			District Total	178,419	128,996
3 OTHER 13,918 11,236 33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958	5				
33 OTHER 30,869 24,508 Other Subtotal 44,787 35,744 District Total 178,761 140,958		5	CORE	133,974	105,214
Other Subtotal 44,787 35,744 District Total 178,761 140,958		3	OTHER	13,918	11,236
District Total 178,761 140,958		33	OTHER	30,869	24,508
District Total 178,761 140,958			Oth an College tal	44.707	25.744
·					
6			District Total	1/8,/61	140,958
C CODE 170 405 122 247	Ь		CODE	170 405	422.247
6 CORE 178,495 133,347		0	CORE	178,495	133,347
Other Subtotal 0 0			Other Subtotal	0	0
District Total 178,495 133,347					
7	7				
7 CORE 176,160 148,689			CORE	176,160	148,689

COMPARE SENATE			
SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
28	OTHER	1,703	1,312
	Other Subtotal	1,703	1,312
	District Total	177,863	150,001
8			
	CORE	145,948	113,514
20	OTHER	32,174	24,964
	Other Cultivated	22.474	24.064
	Other Subtotal	32,174	24,964
•	District Total	178,122	138,478
9	CORE	452.620	120 216
	CORE	153,630	120,316
	OTHER	12,313	10,023
1	OTHER	12,943	10,419
	Other Subtotal	25,256	20,442
	District Total	178,886	140,758
10			
10	CORE	97,870	73,736
31	OTHER	81,055	63,173
	Other Subtotal	81,055	63,173
	District Total	178,925	136,909
11			
11	CORE	87,686	68,994
22	OTHER	1,341	957
28	OTHER	11,034	8,788
21	OTHER	77,860	61,197
		22.225	70.040
	Other Subtotal	90,235	70,942
12	District Total	177,921	139,936
12	CORE	150.647	124 222
	OTHER	150,647	124,333 4,784
	OTHER	6,008 22,771	•
30	OTHER	22,771	17,973
	Other Subtotal	28,779	22,757
	District Total	179,426	147,090
13			
13	CORE	85,974	67,346
11	OTHER	9,144	7,222
18	OTHER	22,449	18,025
14	OTHER	61,085	48,940

COMPARE SENATE

COMPARE SENATE			
SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	Other Subtotal	92,678	74,187
	District Total	178,652	141,533
14			
14	CORE	51,976	41,566
16	OTHER	8,289	6,768
13	OTHER	24,562	18,567
27	OTHER	41,036	31,832
	OTHER	52,488	40,527
		5_, .55	,
	Other Subtotal	126,375	97,694
	District Total	178,351	139,260
15	District rotar	170,331	133,200
	CORE	124,737	95,737
	OTHER	53,848	43,747
1,	LOTHER	33,646	43,747
	Other Cubtetal	F2 040	42 747
	Other Subtotal	53,848	43,747
46	District Total	178,585	139,484
16	CORE	00.044	50.050
	CORE	90,914	69,059
	OTHER	4,911	4,301
	OTHER	21,135	16,710
	OTHER	27,058	21,575
13	3 OTHER	33,295	25,561
	Other Subtotal	86,399	68,147
	District Total	177,313	137,206
17			
17	CORE	101,875	79,445
32	OTHER	16,339	13,001
15	OTHER	27,323	20,586
27	OTHER	32,556	24,952
	Other Subtotal	76,218	58,539
	District Total	178,093	137,984
18			
18	CORE	58,428	48,079
1	OTHER	3,179	2,437
19	OTHER	117,115	90,753
		,	•
	Other Subtotal	120,294	93,190
	District Total	178,722	141,269
19		5,,	,
	CORE	61,119	47,148
	OTHER	14,688	11,118
2	. OTTLIN	14,000	11,110

COMPARE SENATE

COMPARE SENATE				
SENATE DISTRICT DISTRICT (2022)		NOTES	PERSONS	PERSONS18
	24	OTHER	20,571	16,717
	18	OTHER	36,786	28,786
	14	OTHER	46,454	37,229
		Other Subtotal	118,499	93,850
		District Total	179,618	140,998
20				·
	20	CORE	106,749	83,920
		OTHER	2,344	1,864
		OTHER	7,885	6,282
		OTHER	61,149	48,138
	10	OTTIEN	01,143	40,130
		Other Subtotal	71,378	56,284
		District Total	178,127	140,204
21			,	·
	21	CORE	46,475	36,707
	5	OTHER	0	0
		OTHER	2,300	1,817
		OTHER	38,272	27,704
		OTHER	92,137	73,695
	20	OTTIER	92,137	73,033
		Other Subtotal	132,709	103,216
		District Total	179,184	139,923
22			,	,
	22	CORE	138,479	105,885
	21	OTHER	41,083	33,622
		Other Subtotal	41,083	33,622
		District Total	179,562	139,507
23				
	23	CORE	68,793	51,155
	10	OTHER	10,542	8,162
	29	OTHER	39,841	30,730
		OTHER	60,740	48,395
		· · · · · · · · · · · · · · · · · · ·	33,7.13	.0,000
		Other Subtotal	111,123	87,287
		District Total	179,916	138,442
24				
	24	CORE	125,012	100,073
	14	OTHER	4,946	4,111
	32	OTHER	7,765	5,666
		OTHER	8,452	6,820
		OTHER	11,065	8,275
		OTHER	21,359	17,193
	-,	CITIEN	21,333	17,133

COMPARE SENAT	E		
SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	Other Subtotal	53,587	42,065
	District Total	178,599	142,138
25			
2	5 CORE	117,730	95,827
2	9 OTHER	16,250	13,138
1	0 OTHER	44,899	35,511
	Other Subtotal	61,149	48,649
	District Total	178,879	144,476
26			·
2	6 CORE	102,940	91,059
	6 OTHER	76,024	60,517
		, 0,02	00,01
	Other Subtotal	76,024	60,517
	District Total	178,964	151,576
27			
2	7 CORE	100,457	77,062
1	6 OTHER	3,381	2,924
2	6 OTHER	75,809	61,317
	Other Subtotal	79,190	64,241
28	District Total	179,647	141,303
	8 CORE	E1 467	20.967
		51,467	39,867
2	1 OTHER	12,950	10,230
	5 OTHER	44,562	35,766
3	3 OTHER	68,787	54,026
	Other Subtotal	126,299	100,022
	District Total	177,766	139,889
29			
2	9 CORE	116,692	90,955
1	2 OTHER	2,186	1,697
	2 OTHER	4,777	3,761
1	4 OTHER	7,993	6,359
	4 OTHER	17,835	13,800
	3 OTHER	28,576	22,245
	Other Subtotal	61,367	47,862
	District Total	178,059	138,817
30			
3	0 CORE	107,728	82,294
	1 OTHER	25,410	19,795

COMPARE SENATE			
SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
2	OTHER	45,965	36,357
	Other Subtotal	71,375	56,152
	District Total	179,103	138,446
31			
31	CORE	80,402	64,338
10	OTHER	25,499	20,716
23	OTHER	72,539	55,847
	Other Subtotal	98,038	76,563
	District Total	178,440	140,901
32			
32	CORE	154,281	121,306
17	OTHER	3,107	2,193
31	OTHER	6,108	4,777
24	OTHER	14,989	11,241
	Other Subtotal	24,204	18,211
	District Total	178,485	139,517
33			
	CORE	79,091	61,752
11	OTHER	6,928	5,601
	OTHER	8,750	6,779
	OTHER	18,207	14,020
	OTHER	32,262	24,930
8	OTHER	32,604	25,479
	Other Subtotal	98,751	76,809
	District Total	177,842	138,561

SENATE DEMOCRATS CORE CONSTITUENCY - ASSEMBLY

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
1				
	1	CORE	59,444	48,427
		Other Subtotal	0	0
•		District Total	59,444	48,427
2		CORE	0.050	6.002
		CORE OTHER	8,958	6,993
		OTHER	16,465 7,917	12,111
		OTHER	12,757	
		OTHER		10,019 6,202
		OTHER	7,843 5,844	
	27	OTHER	3,644	4,575
		Other Subtotal	50,826	38,884
		District Total	59,784	45,877
3				
	3	CORE	32,471	24,067
	59	OTHER	9,425	7,509
	5	OTHER	18,144	14,108
		Other Subtotal	27,569	21,617
		District Total	60,040	45,684
4		CORE	2.002	2.452
		CORE	2,803	2,153
		OTHER	34,569	26,741
		OTHER	6,661	
	36	OTHER	15,410	11,968
		Other Subtotal	56,640	43,664
		District Total	59,443	45,817
5	i			,
	5	CORE	32,830	24,652
	4	OTHER	12,805	9,683
	2	OTHER	12,063	8,884
	3	OTHER	1,962	1,509
		Other Subtotal	26,830	20,076
		District Total	59,660	44,728
6				
		CORE	40,592	31,453
		OTHER	2,869	2,189
		OTHER	10,769	8,394
		OTHER	1,932	1,502
	36	OTHER	3,520	2,843

COMPARE DISTRICT **DISTRICT (2022) NOTES PERSONS** PERSONS18 Other Subtotal 19,090 14,928 **District Total** 59,682 46,381 7 7 CORE 22,744 17,463 84 OTHER 34,580 27,900 9 OTHER 2,030 1,524 Other Subtotal 36,610 29,424 **District Total** 59,354 46,887 8 8 CORE 40,439 59,362 Other Subtotal 0 0 **District Total** 59,362 40,439 9 9 CORE 57,541 40,714 20 OTHER 1,726 1,390 7 OTHER 27 14 Other Subtotal 1,753 1,404 **District Total** 59,294 42,118 10 10 CORE 42,334 31,783 11 OTHER 8,459 6,157 17 OTHER 2,887 1,982 19 OTHER 2,603 2,423 16 OTHER 3,059 2,710 Other Subtotal 17,008 13,272 **District Total** 59,342 45,055 11 11 CORE 29,508 43,096 23 OTHER 12,538 9,930 12 OTHER 1,267 1,571 17 OTHER 1,814 1,328 Other Subtotal 15,923 12,525 **District Total** 59,019 42,033 12 12 CORE 34,954 49,629 11 OTHER 8,010 5,501 17 OTHER 970 1,350

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	9,360	6,471
		District Total	58,989	41,425
13			,	,
		CORE	41,442	32,094
		OTHER	4,088	3,204
		OTHER	7,841	6,429
		OTHER	5,729	4,786
	97	OTHER	5,729	4,760
		Other Subtotal	17,658	14,419
		District Total	59,100	46,513
14				
	14	CORE	25,097	19,645
	17	OTHER	4,085	3,299
	7	OTHER	1,513	1,372
	18	OTHER	10,428	8,383
	13	OTHER	18,109	14,015
			,	,
		Other Subtotal	34,135	27,069
		District Total	59,232	46,714
15				
	15	CORE	14,814	11,955
	84	OTHER	1,697	1,506
	7	OTHER	14,059	11,077
	14	OTHER	28,504	22,844
			·	·
		Other Subtotal	44,260	35,427
		District Total	59,074	47,382
16		District rotal	33,074	47,302
10		CORE	55,710	42,299
		OTHER	3,310	2,345
	10	OTHER	3,310	2,343
		Other Subtotal	3,310	2,345
		District Total	59,020	44,644
17				
	17	CORE	46,955	34,452
	18	OTHER	2,096	1,469
	12	OTHER	8,151	6,389
	14	OTHER	1,920	1,457
				•
		Other Subtotal	12,167	9,315
		District Total	59,122	43,767
18				
	18	CORE	46,822	34,120
		OTHER	2,344	1,729
	1,	J=	_,5 17	-,, 23

COMPARE DISTRICT (2022) NOTES DISTRICT **PERSONS** PERSONS18 945 606 16 OTHER 7 OTHER 9,123 7,265 Other Subtotal 12,412 9,600 **District Total** 59,234 43,720 19 19 CORE 54,012 50,751 20 OTHER 5,053 4,213 4,213 Other Subtotal 5,053 **District Total** 59,065 54,964 20 20 CORE 50,227 40,709 82 OTHER 1,703 1,312 19 OTHER 974 832 7 OTHER 6,864 4,917 Other Subtotal 9,541 7,061 **District Total** 47,770 59,768 21 21 CORE 0 0 82 OTHER 31,327 24,298 84 OTHER 23,259 19,003 7 OTHER 5,273 4,221 Other Subtotal 59,859 47,522 47,522 **District Total** 59,859 22 22 CORE 27,530 21,457 24 OTHER 32,022 25,263 Other Subtotal 32,022 25,263 59,552 46,720 **District Total** 23 23 CORE 40,196 30,376 19 OTHER 1,731 1,406 10 OTHER 13,859 11,092 24 OTHER 4,131 3,567 Other Subtotal 19,721 16,065 46,441 **District Total** 59,917 24 24 CORE 23,550 18,256

60 OTHER

29,239

22,758

SENATE DEMOCRATS CORE CONSTITUENCY - ASSEMBLY

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	23	OTHER	6,649	5,206
		Other Subtotal	35,888	27,964
		District Total	59,438	46,220
25				
	25	CORE	46,703	37,039
	2	OTHER	13,333	10,735
		Other Subtotal	13,333	10,735
		District Total	60,036	47,774
26				
		CORE	34,818	26,864
	27	OTHER	25,278	19,319
		Other Subtotal	25,278	19,319
		District Total	60,096	46,183
27				
		CORE	28,605	22,617
		OTHER	6,056	5,125
	26	OTHER	24,822	19,747
			20.070	24.072
		Other Subtotal	30,878	24,872
20		District Total	59,483	47,489
28		CORE	40.202	24 567
		CORE OTHER	40,202	31,567
		OTHER	11,216	9,103
		OTHER	4,260 4,291	3,223 3,252
	30	OTHER	4,231	3,232
		Other Subtotal	19,767	15,578
		District Total	59,969	47,145
29		2.000000	22,233	.,,
		CORE	29,745	22,526
		OTHER	1,496	1,155
	93	OTHER	1,992	1,581
	30	OTHER	12,534	9,103
		OTHER	13,812	10,403
			,	,
		Other Subtotal	29,834	22,242
		District Total	59,579	44,768
30				
	30	CORE	42,738	32,714
	93	OTHER	16,879	13,620

SENATE DEMOCRATS CORE CONSTITUENCY - ASSEMBLY

COMPARE	
DISTRICT DISTRICT (2022) NOTES PERSONS PERSON	S18
Other Subtotal 16,879 13	,620
District Total 59,617 46	,334
31	
31 CORE 29,594 22	,935
33 OTHER 8,763 6	,872
32 OTHER 19,178 15	,023
83 OTHER 2,355 1	,911
01/205 (4) 414 20 205 22	006
	,806
	,741
32 0005	752
	,752
	,533
	,013
31 OTHER 2,743 2	,205
Other Subtotal 21,238 16	,751
District Total 59,738 47	,503
33	
33 CORE 0	0
61 OTHER 1,422 1	,172
32 OTHER 603	473
63 OTHER 33,631 26	,605
62 OTHER 16,876 13	,391
83 OTHER 7,022 5	,485
	,126
	,126
34	
	,090
	,523
35 OTHER 1,372 1	,172
Other Subtotal 3,231 2	,695
·	,785
35	,
	,405
·	,933
•	,311
•	,269
•	,400
0 OTHER 3,002 Z	,400
Other Subtotal 19,509 14	,913
District Total 59,719 47	,318

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
36				
		CORE	32,594	26,931
		OTHER	22,771	17,973
	35	OTHER	4,533	4,069
		Other Subtotal	27,304	22,042
		District Total	59,898	48,973
37				
	37	CORE	22,926	17,563
	38	OTHER	22,924	17,765
	33	OTHER	12,090	9,616
	99	OTHER	1,340	1,086
		Other Subtotal	36,354	28,467
		District Total	59,280	46,030
38				
	38	CORE	8,623	6,620
		OTHER	51,230	38,024
		OTHER	5	2
		Other Subtotal	51,235	38,026
		District Total	59,858	44,646
39				, ,
		CORE	0	0
		OTHER	22,178	17,525
		OTHER	16,529	12,701
		OTHER	21,135	16,710
			,	,
		Other Subtotal	59,842	46,936
		District Total	59,842	46,936
40				10,000
	40	CORE	47,893	38,488
	6	OTHER	5,965	4,801
		OTHER	1,876	1,556
		OTHER	1,261	1,028
		OTHER	2,997	2,442
	33	3111 <u>2</u> 11	2,337	2, 2
		Other Subtotal	12,099	9,827
		District Total	59,992	48,315
41			23,332	.5,515
		CORE	25,055	20,268
		OTHER	22,797	17,816
		OTHER	11,202	9,250
		OTHER	656	524
	40	STILL	050	324

SENATE DEMOCRATS CORE CONSTITUENCY - ASSEMBLY

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	34,655	27,590
		District Total	59,710	47,858
42	2			
	42	CORE	0	0
	41	OTHER	13,132	11,095
	72	OTHER	17,358	14,340
	50	OTHER	18,272	14,758
	71	OTHER	6,194	4,906
	70	OTHER	5,025	3,927
		Other Subtotal	59,981	49,026
		District Total	59,981	49,026
43	3			
		CORE	12,312	9,563
		OTHER	22,101	17,029
		OTHER	12,752	
	31	OTHER	12,398	10,707
		Other Subtotal	47,251	38,037
		District Total	59,563	47,600
44	1			
	44	CORE	50,875	39,534
	33	OTHER	4,851	3,760
	31	OTHER	39	33
	43	OTHER	3,677	2,941
		Other Subtotal	8,567	6,734
		District Total	59,442	46,268
45	5			
	45	CORE	32,242	23,949
	31	OTHER	14,820	11,872
	44	OTHER	8,866	6,801
	43	OTHER	3,935	3,144
		Other Subtotal	27,621	21,817
		District Total	59,863	45,766
46	5			
	46	CORE	2,392	2,076
	79	OTHER	23,605	17,602
	81	OTHER	3,717	2,840
	37	OTHER	3,069	2,210
	48	OTHER	25,965	20,575
	76	OTHER	318	279

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	56,674	43,506
		District Total	59,066	45,582
47				
	47	CORE	28,003	21,551
	43	OTHER	17,583	13,258
	80	OTHER	8,036	6,743
	78	OTHER	5,509	4,116
		Other Subtotal	31,128	24,117
		District Total	59,131	45,668
48				
	48	CORE	25,175	20,316
		OTHER	24,628	19,329
		OTHER	5,698	
		OTHER	3,557	2,661
		· · · · · · · · · · · · · · · · · · ·	0,001	_,===
		Other Subtotal	33,883	26,739
		District Total	59,058	47,055
49		District rotar	33,030	17,033
-13		CORE	53,774	42,237
		OTHER	6,160	4,570
	31	OTTIEN	0,100	7,570
		Other Subtotal	6,160	4,570
		District Total	59,934	46,807
50		District rotal	33,334	40,807
30		CORE	0	0
		OTHER	27,491	20,723
		OTHER	4,104	3,071
			•	
		OTHER OTHER	23,043 4,809	18,115
	45	OTHER	4,609	3,725
		Other Cubtetal	FO 447	45 624
		Other Subtotal	59,447	45,634
51		District Total	59,447	45,634
21		CODE	41.624	22.250
		CORE	41,624	32,358
		OTHER OTHER	5,402	4,157
			11,679	8,748
	45	OTHER	540	429
		Other Colored	47.604	42.224
		Other Subtotal	17,621	13,334
		District Total	59,245	45,692
52				
	52	CORE	51,139	40,331

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	53	OTHER	8,126	6,339
		Other Subtotal	8,126	6,339
		District Total	59,265	46,670
53		0005	24.074	26.476
		CORE	34,071	26,476
		OTHER	1,399	1,107
		OTHER OTHER	14,862	11,537 986
		OTHER	1,217	
	54	OTHER	7,898	6,677
		Other Subtotal	25,376	20,307
		District Total	59,447	46,783
54			,	,
	54	CORE	0	0
	56	OTHER	45,178	34,313
	6	OTHER	3,174	2,400
	5	OTHER	1,673	1,309
	55	OTHER	9,789	8,094
		Other Subtotal	59,814	46,116
		District Total	59,814	46,116
55				
		CORE	31,889	24,238
		OTHER	0	0
	57	OTHER	27,868	21,849
		Other Subtotal	27,868	21,849
		District Total	59,757	46,087
56		District Total	33,737	40,007
		CORE	0	0
		OTHER	51,710	41,991
		OTHER	8,372	6,957
		Other Subtotal	60,082	48,948
		District Total	60,082	48,948
57				
		CORE	30,332	23,726
	3	OTHER	17,378	13,273
	56	OTHER	11,549	8,745
		Oth on Carlet at a la	20.027	22.040
		Other Subtotal	28,927	22,018
FO	•	District Total	59,259	45,744
58				

SENATE DEMOCRATS CORE CONSTITUENCY - ASSEMBLY

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	58	CORE	0	0
	42	OTHER	7,207	5,928
		OTHER	11,020	8,771
		OTHER	37,098	29,357
		OTHER	9	8
	38	OTHER	3,929	2,979
		Other Subtotal	59,263	47,043
		District Total	59,263	47,043
59				
	59	CORE	19,873	15,620
	39	OTHER	17,578	13,878
	42	OTHER	895	740
		OTHER	7,795	6,639
	52	OTHER	7,041	5,483
	58	OTHER	6,332	5,182
		Other Subtotal	39,641	31,922
		District Total	59,514	47,542
60				
	60	CORE	25,466	20,121
	58	OTHER	33,636	26,295
		Other Subtotal	33,636	26,295
		District Total	59,102	46,416
61				
	61	CORE	0	0
	62	OTHER	26,283	20,865
	66	OTHER	32,969	24,077
		Other Subtotal	59,252	44,942
		District Total	59,252	44,942
62				
	62	CORE	16,266	12,681
	63	OTHER	22,588	18,348
	66	OTHER	18,631	13,432
	64	OTHER	2,104	1,467
		Other Subtotal	43,323	33,247
		District Total	59,589	45,928
63				
	63	CORE	0	0
	20	OTHER	2,542	1,974
	21	OTHER	57,292	44,991

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	59,834	46,965
		District Total	59,834	46,965
64			,	,
		CORE	38,424	30,903
		OTHER	12,756	9,138
		OTHER	174	152
		OTHER	7,765	5,978
	00	OTTLEN	7,703	3,370
		Other Subtotal	20,695	15,268
		District Total	59,119	46,171
65				
	65	CORE	46,609	35,275
	64	OTHER	3,285	2,687
	61	OTHER	9,307	7,374
		Other Subtotal	12,592	10,061
		District Total	59,201	45,336
66				
	66	CORE	0	0
	61	OTHER	38,912	30,809
		OTHER	15,549	11,589
		OTHER	1,275	1,015
		OTHER	3,315	2,826
			5,5 =5	_,
		Other Subtotal	59,051	46,239
		District Total	59,051	46,239
67	•			,
		CORE	0	0
		OTHER	17,923	13,696
		OTHER	25,486	19,298
		OTHER	16,426	
		OTHER	158	114
	31	OTTEN	130	111
		Other Subtotal	59,993	44,823
		District Total	59,993	44,823
68				·
	68	CORE	997	764
	92	OTHER	55,142	41,979
	93	OTHER	792	650
	70	OTHER	2,527	1,986
	96	OTHER	447	368
		Other Subtotal	58,908	44,983

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	59,905	45,747
69			•	·
		CORE	38,150	29,902
		OTHER	686	
		OTHER		
			13,109	
		OTHER	733	
	86	OTHER	7,069	5,655
		Other Subtotal	21,597	16,910
		District Total	59,747	46,812
70		2.000000	25,7 1.7	. 0,022
, ,		CORE	0	0
		OTHER	50,536	39,563
		OTHER	9,044	6,958
	80	OTHER	3,044	0,336
		Other Subtotal	59,580	46,521
		District Total	59,580	46,521
71				
	71	CORE	53,253	43,046
	70	OTHER	6,238	4,944
		Other Subtotal	6,238	4,944
		District Total	59,491	47,990
72		2.000000	23, .22	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		CORE	29,088	22,916
		OTHER	22,603	
		OTHER	358	
		OTHER		
	70	OTHER	7,051	5,486
		Other Subtotal	30,012	23,139
		District Total	59,100	
73				
	73	CORE	44,531	36,062
	74	OTHER	14,512	11,984
			,-	,
		Other Subtotal	14,512	11,984
		District Total	59,043	48,046
74				
	74	CORE	31,021	25,343
	87	OTHER	14,855	11,943
	34	OTHER	3,552	2,652
	75	OTHER	8,872	
	73	OTHER	908	

COMPARE

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	28,187	22,456
		District Total	59,208	•
75		2.000000	23,233	,
,,		CORE	50,544	39,967
		OTHER	25	
		OTHER	2,812	
	28	OTHER	5,729	4,621
		Other Subtotal	8,566	6,975
		District Total	59,110	46,942
76				
	76	CORE	49,948	46,181
	48	OTHER	8,557	7,039
		OTHER	654	
	.,	O T T L T	03.	330
		Other Subtotal	9,211	7,595
		District Total		
77	,	District Total	59,159	53,776
77		CODE	42.772	26.606
		CORE	43,772	36,696
		OTHER	9,398	
	47	OTHER	6,298	5,049
	79	OTHER	0	0
		Other Subtotal	15,696	13,714
		District Total	59,468	50,410
78				
	78	CORE	31,172	25,809
	77	OTHER	12,032	
		OTHER	10,798	8,401
		OTHER	5,205	
		OTHER	3,203	2
	7,	OTTLEN	3	2
		Other Cubtetal	20 020	21 001
		Other Subtotal	28,038	
70		District Total	59,210	47,800
79		0005		
		CORE	0	
		OTHER	30,385	23,811
		OTHER	8,454	
	41	OTHER	6,345	5,047
	50	OTHER	14,900	11,462
		Other Subtotal	60,084	46,920
		District Total	60,084	46,920
80				
- 50				

SENATE DEMOCRATS CORE CONSTITUENCY - ASSEMBLY

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	80	CORE	7,144	5,329
	42	OTHER	16,099	12,716
	81	OTHER	14,615	11,514
	79	OTHER	21,674	17,613
		Other Subtotal	52,388	41,843
		District Total	59,532	47,172
81				
	81	CORE	1,495	1,209
	42	OTHER	12,584	9,834
	37	OTHER	22,367	16,927
	39	OTHER	4,761	3,658
	41	OTHER	14,899	11,972
	79	OTHER	3,610	2,652
		Other Subtotal	58,221	45,043
		District Total	59,716	46,252
82				
	82	CORE	26,334	20,820
	21	OTHER	2,300	1,817
	83	OTHER	22,344	17,607
		OTHER	6,941	5,152
	15	OTHER	1,592	1,262
			,	,
		Other Subtotal	33,177	25,838
		District Total	59,511	46,658
83				
	83	CORE	18,984	14,534
	97	OTHER	30,158	23,651
	99	OTHER	4,263	3,371
	98	OTHER	6,510	5,073
		Other Subtotal	40,931	32,095
		District Total	59,915	46,629
84				
	84	CORE	0	0
	15	OTHER	42,970	34,504
	97	OTHER	16,177	12,488
	98	OTHER	490	378
		Other Subtotal	59,637	47,370
		District Total	59,637	47,370
85				
	85	CORE	0	0

COMPARE

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	67	OTHER	24,924	19,335
	68	OTHER	28,710	21,249
	92	OTHER	1,205	928
		OTHER	3,791	
		OTHER	905	650
		Other Subtotal	59,535	45,009
		District Total	59,535	45,009
86	•			
	86	CORE	19,381	15,179
	69	OTHER	21,197	15,475
	68	OTHER	8,265	5,670
	87	OTHER	10,300	7,718
	35	OTHER	949	717
		Other Subtotal	40,711	29,580
		District Total	60,092	44,759
87				
	87	CORE	33,351	26,044
	35	OTHER	12,494	10,053
	74	OTHER	14,054	11,566
		Other Subtotal	26,548	21,619
		District Total	59,899	47,663
88				
	88	CORE	0	0
	4	OTHER	25,086	19,766
	90	OTHER	32,761	24,628
	89	OTHER	1,988	1,514
		Other Subtotal	59,835	45,908
		District Total	59,835	45,908
89				
	89	CORE	0	0
	4	OTHER	18,942	14,992
	5	OTHER	4,795	3,828
	88	OTHER	10,646	8,415
	2	OTHER	25,410	19,795
		Other Subtotal	59,793	47,030
		District Total	59,793	47,030
90				
	90	CORE	26,952	20,224
	88	OTHER	32,431	25,108

SENATE DEMOCRATS CORE CONSTITUENCY - ASSEMBLY

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	32,431	25,108
		District Total	59,383	45,332
91				
		CORE	33,170	27,027
		OTHER	20,448	15,984
		OTHER	2,308	
	93	OTHER	3,224	2,474
		Other Subtotal	25,980	20,266
		District Total	59,150	47,293
92				
		CORE	0	0
		OTHER	30,838	23,965
		OTHER	316	263
		OTHER	1,964	
	91	OTHER	26,243	21,234
		Other Subtotal	59,361	47,031
		District Total	59,361	47,031
93				
	93	CORE	31,051	24,156
	29	OTHER	25,499	20,716
	92	OTHER	3,177	2,498
		Other Subtotal	28,676	23,214
		District Total	59,727	47,370
94			,	,
	94	CORE	43,573	33,058
	95	OTHER	16,337	13,330
		Other Subtotal	16,337	13,330
		District Total	59,910	46,388
95				
		CORE	43,142	36,761
	94	OTHER	16,021	12,205
		Other Subtotal	16,021	12,205
		District Total	59,163	48,966
96				
		CORE	41,706	31,936
		OTHER	5,934	
		OTHER	3,269	
	50	OTHER	8,361	6,474

SENATE DEMOCRATS CORE CONSTITUENCY - ASSEMBLY

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	17,564	13,563
		District Total	59,270	45,499
97		2.00.100.100.	23,27	.5, .55
		CORE	0	0
		OTHER	17,198	13,639
		OTHER	16,543	12,645
		OTHER	19,639	15,278
		OTHER	4,629	3,558
		OTHER	1,925	1,413
	33	OTTEN	1,323	1,113
		Other Subtotal	59,934	46,533
		District Total	59,934	46,533
98				
	98	CORE	44,565	35,450
	22	OTHER	14,738	11,299
	97	OTHER	659	530
		Other Subtotal	15,397	11,829
		District Total	59,962	47,279
99				
	99	CORE	52,149	40,479
	38	OTHER	7,613	5,839
		Other Subtotal	7,613	5,839
		District Total	59,762	46,318

SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
1	2.01 (2022)		1 21100110	
	1	CORE	108,790	85,464
	30	OTHER	16,465	12,111
	20	OTHER	17,268	13,711
	2	OTHER	18,144	14,108
	9	OTHER	18,601	14,594
		Other Subtotal	70,478	54,524
		District Total	179,268	139,988
2				
	2	CORE	97,623	74,398
		OTHER	2,869	2,189
		OTHER	10,769	•
		OTHER	14,025	10,393
		OTHER	18,930	14,811
	30	OTHER	34,569	26,741
			04.460	52 - 52
		Other Subtotal	•	62,528
2		District Total	178,785	136,926
3	2	CORE	141 704	100 154
		CORE OTHER	141,704 1,726	100,154 1,390
		OTHER	34,580	27,900
	20	OTHER	34,360	27,900
		Other Subtotal	36,306	29,290
		District Total	178,010	129,444
4		2.0000	2.0,020	,
	4	CORE	153,099	109,170
	7	OTHER	2,603	2,423
	6	OTHER	9,110	6,990
	8	OTHER	12,538	9,930
		Other Subtotal	24,251	19,343
		District Total	177,350	128,513
5				
		CORE	132,054	103,757
		OTHER	1,697	1,506
		OTHER	13,570	11,215
		OTHER	14,513	11,682
	3	OTHER	15,572	12,449
				00.055
		Other Subtotal	•	36,852
		District Total	177,406	140,609
6				

COMPARE SENATE SENATE DISTRICT DISTRICT (2022) **PERSONS** PERSONS18 **NOTES** 6 CORE 154,872 114,675 5 OTHER 1,920 1,457 3 OTHER 9,123 7,265 4 OTHER 11,461 8,734 Other Subtotal 22,504 17,456 177,376 132,131 **District Total** 7 7 CORE 110,266 96,505 3 OTHER 12,137 9,138 28 OTHER 56,289 44,613 Other Subtotal 68,426 53,751 **District Total** 178,692 150,256 8 8 CORE 134,078 104,125 7 OTHER 1,731 1,406 4 OTHER 13,859 11,092 20 OTHER 29,239 22,758 44,829 Other Subtotal 35,256 **District Total** 178,907 139,381 9 9 CORE 160,226 125,586 20 OTHER 6,056 5,125 1 OTHER 13,333 10,735 Other Subtotal 19,389 15,860 **District Total** 179,615 141,446 10 10 CORE 147,582 112,788 23 OTHER 1,496 1,155 25 OTHER 11,216 9,103 31 OTHER 18,871 15,201 Other Subtotal 31,583 25,459 179,165 138,247 **District Total** 11 99,381 11 CORE 78,260 28 OTHER 18,278 14,409 21 OTHER 61,523 48,701 79,801 Other Subtotal 63,110 **District Total** 179,182 141,370

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
12				
	12	CORE	142,594	117,459
	2	OTHER	3,062	2,400
	29	OTHER	10,389	8,244
	30	OTHER	22,771	17,973
			,	•
		Other Subtotal	36,222	28,617
		District Total	178,816	146,076
13		District Total	170,010	140,070
13		CORE	71 002	E4 640
			71,002	54,649
		OTHER	1,340	1,086
		OTHER	22,178	17,525
		OTHER	33,225	26,326
	16	OTHER	51,235	38,026
		Other Subtotal	107,978	82,963
		District Total	178,980	137,612
14				
	14	CORE	109,533	88,191
	18	OTHER	1,261	1,028
	19	OTHER	2,997	
		OTHER	5,965	4,801
		OTHER	18,272	14,758
		OTHER	41,655	33,979
	24	OTTL	41,033	33,373
		Other Subtotal	70,150	57,008
			•	•
45		District Total	179,683	145,199
15		0005	121.000	400.064
		CORE	134,008	102,961
	11	OTHER	44,860	36,673
		Other Subtotal	-	36,673
		District Total	178,868	139,634
16				
	16	CORE	111,861	88,596
	13	OTHER	3,069	2,210
	26	OTHER	9,384	7,056
	15	OTHER	17,583	13,258
	27	OTHER	35,358	27,185
			, = = =	,
		Other Subtotal	65,394	49,709
		District Total	177,255	138,305
17		District rotar	177,233	130,303
		CORE	101 550	79,165
	17	CORE	101,558	79,105

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	15	OTHER	5,349	4,154
	26	OTHER	23,043	18,115
	27	OTHER	48,676	36,699
		Other Subtotal	77,068	58,968
		District Total	178,626	138,133
18				
	18	CORE	102,633	80,930
	2	OTHER	4,847	3,709
	19	OTHER	71,046	54,930
		Other Subtotal	75,893	58,639
		District Total	178,526	139,569
19				
	19	CORE	101,638	78,558
	1	OTHER	17,378	13,273
	18	OTHER	60,082	48,948
		Other Subtotal	77,460	62,221
		District Total	179,098	140,779
20				
	20	CORE	85,316	67,226
	14	OTHER	8,102	6,668
	18	OTHER	14,836	12,122
	13	OTHER	69,625	54,985
		Other Subtotal	92,563	73,775
		District Total	177,879	141,001
21				
	21	CORE	65,137	51,894
	22	OTHER	53,704	38,976
	7	OTHER	59,834	46,965
		Other Subtotal	113,538	85,941
		District Total	178,675	137,835
22				
	22	CORE	124,388	95,570
	11	OTHER	1,275	1,015
	21	OTHER	51,708	41,161
		Other Subtotal	52,983	42,176
		District Total	177,371	137,746
23				
	23	CORE	39,833	31,145

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	29	OTHER	7,069	5,655
	32	OTHER	17,606	12,683
	17	OTHER	18,081	13,810
	24	OTHER	41,122	31,460
	31	OTHER	55,934	42,629
		Other Subtotal	139,812	106,237
		District Total	179,645	137,382
24				
		CORE	95,630	76,392
	29	OTHER	82,541	64,174
		Other Subtotal	82,541	64,174
		District Total	178,171	140,566
25				
	25	CORE	153,200	123,553
	23	OTHER	25	18
	12	OTHER	3,552	2,652
	10	OTHER	5,729	4,621
	29	OTHER	14,855	11,943
		Other Subtotal	•	19,234
		District Total	177,361	142,787
26				107.007
		CORE	146,322	127,205
		OTHER	15,512	12,646
	27	OTHER	16,003	12,135
		Other Subtotal	31,515	24,781
		District Total	177,837	151,986
27				
	27	CORE	78,923	62,128
	17	OTHER	23,354	18,062
	13	OTHER	27,128	20,585
	14	OTHER	49,927	39,569
		Other Subtotal	100,409	78,216
		District Total	179,332	140,344
28				
	28	CORE	67,662	52,961
		OTHER	2,300	1,817
		OTHER	44,562	35,766
		OTHER	64,539	50,113

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	111,401	87,696
		District Total	179,063	140,657
29				
	29	CORE	63,937	49,591
	31	OTHER	4,996	3,775
	12	OTHER	13,443	10,770
	25	OTHER	14,054	11,566
	23	OTHER	83,096	61,729
		Other Subtotal	115,589	87,840
		District Total	179,526	137,431
30				
	30	CORE	104,778	79,889
	1	OTHER	25,410	19,795
	2	OTHER	48,823	38,586
		Other Subtotal	74,233	58,381
		District Total	179,011	138,270
31				
	31	CORE	98,829	78,958
	10	OTHER	25,499	20,716
	23	OTHER	53,910	42,020
		Other Subtotal	79,409	62,736
		District Total	178,238	141,694
32				
	32	CORE	160,779	127,290
	17	OTHER	17,564	13,563
		Other Subtotal	17,564	13,563
		District Total	178,343	140,853
33				
	33	CORE	99,298	77,872
	13	OTHER	7,613	5,839
	8	OTHER	31,936	24,938
	20	OTHER	40,811	31,481
		Other Subtotal	80,360	62,258
		District Total	179,658	140,130

COMPARE			
DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
1			
	1 CORE	59,444	48,427
	Other Subto	tal 0	0
	District Total	59,444	48,427
2			
	2 CORE	12,943	10,419
2	5 OTHER	46,735	37,194
	Other Subto	tal 46,735	37,194
	District Total	59,678	47,613
3			
	3 CORE	10,902	8,128
8	8 OTHER	5,015	3,785
	2 OTHER	7,789	6,084
5	9 OTHER	17,373	13,816
2	5 OTHER	12,725	9,864
2	7 OTHER	5,844	4,575
	Other Subto	tal 48,746	38,124
	District Total	59,648	46,252
4			
	4 CORE	0	0
5	6 OTHER	36,803	28,297
5	7 OTHER	8,330	6,295
5	5 OTHER	7,972	6,613
	3 OTHER	6,571	4,979
	Other Subto	tal 59,676	46,184
	District Total	59,676	46,184
5			
	5 CORE	37,857	28,885
	2 OTHER	7,316	5,415
	3 OTHER	10,308	7,806
5	6 OTHER	4,130	3,197
	Other Subto	tal 21,754	16,418
	District Total	•	45,303
6			
	6 CORE	5,303	4,085
	4 OTHER	23,979	18,561
	5 OTHER	19,884	15,136
8	9 OTHER	4,342	3,526
	2 OTHER	6,306	4,694

DISTRICT	COMPARE DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	54,511	41,917
		District Total	59,814	
7				
	7	7 CORE	59,576	46,315
		Other Subtotal	0	0
		District Total	59,576	46,315
8				
	8	3 CORE	59,362	40,439
		Other Subtotal	0	0
		District Total	59,362	40,439
9				12.222
		OTHER	59,571	42,238
	•	7 OTHER	27	14
		Other Subtotal	27	14
		District Total	59,598	42,252
10		CORE	50 502	45.220
	10) CORE	59,503	45,220
		Other Subtotal	0	0
4.4		District Total	59,503	45,220
11		LCORE	E0 E6E	41 166
	1.	L CORE	59,565	41,166
		Other Subtotal	0	0
12	•	District Total	59,565	41,166
12		2 CORE	59,351	42,610
		2 OTHER	0	42,010
		- OTTIEN	Ü	Ū
		Other Subtotal	0	0
		District Total	59,351	42,610
13				
	13	3 CORE	19,828	15,502
	98	3 OTHER	38,795	31,115
	97	7 OTHER	1,126	983
		Other Subtotal	39,921	32,098
		District Total	59,749	
14				
	14	1 CORE	0	0

	COMPARE				
DISTRICT	DISTRICT (2022)		NOTES	PERSONS	PERSONS18
	8	33	OTHER	8,957	7,101
	g	97	OTHER	39,124	30,221
	g	98	OTHER	7,232	5,671
	1	L5	OTHER	4,111	3,243
			Other Subtotal	59,424	
			District Total	59,424	46,236
15		_	CORE	40.454	22.522
			CORE	40,451	32,523
			OTHER	2,964	2,390
			OTHER	7,720	6,151
	č	53	OTHER	8,378	6,685
			Other Subtotal	19,062	15,226
			District Total	59,513	47,749
16					
	1	۱6	CORE	59,714	45,615
			Other Subtotal	0	0
			District Total	59,714	45,615
17					
	1	L7	CORE	59,435	43,760
				_	_
			Other Subtotal	0	0
			District Total	59,435	43,760
18			CORE	50.246	42.072
		Lŏ	CORE	59,346	43,972
			Other Subtotal	0	0
			District Total	59,346	43,972
19			District rotar	33,310	13,372
		۱9	CORE	59,320	55,412
				,	•
			Other Subtotal	0	0
			District Total	59,320	55,412
20					
	2	20	CORE	20,741	16,444
	8	34	OTHER	2,048	1,820
	2	21	OTHER	36,497	28,505
			Other Subtotal	38,545	30,325
			District Total	59,286	46,769
21					
	2	21	CORE	20,795	16,486

	COMPARE				
DISTRICT	DISTRICT (2022)		NOTES	PERSONS	PERSONS18
		20	OTHER	38,807	31,842
			Other Subtotal	38,807	31,842
22			District Total	59,602	48,328
22		22	CODE	24 200	10.007
			CORE OTHER	24,388	18,997
		24	OTHER	35,297	27,666
			Other Subtotal	35,297	27,666
			District Total	59,685	46,663
23			District Total	33,003	40,003
		23	CORE	55,268	42,380
			OTHER	4,131	3,567
				,	,
			Other Subtotal	4,131	3,567
			District Total	59,399	45,947
24					
		24	CORE	20,275	15,853
		60	OTHER	34,980	27,176
		23	OTHER	4,115	3,132
			Other Subtotal	39,095	30,308
			District Total	59,370	46,161
25				_	
			CORE	0	0
			OTHER	24,983	18,923
		26	OTHER	34,818	26,864
			Other Subtotal	59,801	45,787
			District Total	59,801	45,787
26			District Total	33,001	43,767
		26	CORE	0	0
			OTHER	5,427	4,192
			OTHER	14,303	11,453
			OTHER	39,968	31,477
			Other Subtotal	59,698	47,122
			District Total	59,698	47,122
27					
			CORE	28,449	22,648
			OTHER	4,357	3,406
			OTHER	24,822	19,747
		59	OTHER	2,148	1,728

	COMPARE					
DISTRICT	DISTRICT (2022)		NOTES	PERSONS	PERSON	S18
			Other Subtotal	31,327	24	,881
			District Total	59,776	47	,529
28						
			CORE	42,912		,992
	7	3	OTHER	16,526	13	,642
			Other Subtotal	16,526		,642
2.2			District Total	59,438	47	,634
29		_	0005	20.445	4.5	100
			CORE	20,415		,190
			OTHER	3,005		,294
			OTHER	19,188		,218
	2	8	OTHER	16,831	12	,599
			Other Subtotal	39,024	29	,111
			District Total	59,439		,301
30	1		2.506060	23, 133		,00=
		0	CORE	40,375	30	,851
	9	3	OTHER	19,094		,397
			Other Subtotal	19,094	15	,397
			District Total	59,469	46	,248
31						
	3	1	CORE	0		0
			OTHER	12,950		,230
			OTHER	36,715		,421
	8	2	OTHER	9,617	7	,272
			Other Subtotal	59,282		,923
22			District Total	59,282	45	,923
32		2	CORE	E2 2E4	42	222
			CORE OTHER	53,354 6,334		,222 ,872
	3	_	OTTIER	0,334	4	,072
			Other Subtotal	6,334	4	,872
			District Total	59,688		,094
33				,		
	3	3	CORE	5,885	4	,743
	6	3	OTHER	25,579	20	,350
	3	1	OTHER	22,684	17	,595
	3	2	OTHER	2,811	2	,328
	8	3	OTHER	2,355	1	,911
			Other Subtotal	53,429	42	,184

	COMPARE				
DISTRICT	DISTRICT (2022)		NOTES	PERSONS	PERSONS18
			District Total	59,314	46,927
34					
		34	CORE	59,520	49,742
			Other Subtotal	0	0
25			District Total	59,520	49,742
35		25	CORE	40.076	40 419
			OTHER	49,976 9,363	40,418 7,019
		30	OTHER	3,303	7,019
			Other Subtotal	9,363	7,019
			District Total	59,339	47,437
36			2.0000	22,223	.,,
		36	CORE	32,838	27,095
			OTHER	22,771	17,973
		35	OTHER	3,835	3,487
			Other Subtotal	26,606	21,460
			District Total	59,444	48,555
37					
			CORE	9,498	7,457
			OTHER	1,768	1,542
			OTHER	26,407	20,581
			OTHER	14,050	10,638
			OTHER	4,856	3,920
		43	OTHER	3,078	2,596
			Other Cubtetal	FO 1FO	20 277
			Other Subtotal District Total	50,159 59,657	39,277 46,734
38			District Total	39,037	40,734
30		38	CORE	9,888	7,596
			OTHER	19,100	14,929
			OTHER	30,279	23,932
				,	,
			Other Subtotal	49,379	38,861
			District Total	59,267	46,457
39					
		39	CORE	29,240	22,917
			OTHER	5,229	3,901
		37	OTHER	6,163	4,639
		46	OTHER	18,697	13,757
					_
			Other Subtotal	30,089	22,297
			District Total	59,329	45,214

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
40			45.400	10.150
		CORE	15,403	12,452
		OTHER	13,739	11,603
		OTHER	10,203	8,560
		OTHER	13,750	11,158
	/1	OTHER	6,194	4,906
		Other Subtotal	43,886	36,227
		District Total	59,289	48,679
41		CORE	24.040	10.460
		OTHER	24,049 16,636	19,469 13,160
		OTHER	15,207	12,527
		OTHER	3,447	2,900
	40	OTTLK	3,447	2,300
		Other Subtotal	35,290	28,587
		District Total	59,339	48,056
42				
		CORE	9,177	7,382
		OTHER	1,399	1,107
		OTHER	4,285	3,533
		OTHER	1,006	799
		OTHER	27,082	21,069
		OTHER	7,326	5,713
	54	OTHER	9,521	7,626
		Other Subtotal	50,619	39,847
		District Total	59,796	47,229
43				
		CORE	0	0
		OTHER	23,427	18,584
		OTHER	14,972	12,780
	44	OTHER	21,170	16,403
		Other Subtotal	59,569	47,767
		District Total	59,569	47,767
44				
		CORE	0	0
		OTHER	44,781	33,518
	31	OTHER	14,820	11,872
		Other Subtotal	59,601	45,390
		District Total	59,601	45,390
45				,

	COMPARE				
DISTRICT	DISTRICT (2022)		NOTES	PERSONS	PERSONS18
		45	CORE	291	236
		43	OTHER	19,924	15,648
		44	OTHER	38,571	29,932
		31	OTHER	784	633
			Other Subtotal	59,279	
			District Total	59,570	46,449
46		4.0	CORE	26 572	20.454
			CORE	26,573	
			OTHER	782	
			OTHER	3,395	
			OTHER OTHER	24,903 318	
			OTHER		
		3/	OTHER	3,339	2,489
			Other Subtotal	32,737	25,853
			District Total	59,310	
47	•		District Foto:	33,323	10,507
		47	CORE	27,213	20,990
		80	OTHER	4,911	
		77	OTHER	8,951	
		78	OTHER	18,263	14,075
			Other Subtotal	32,125	25,338
			District Total	59,338	46,328
48					
			CORE	6,231	
			OTHER	29,083	
			OTHER	4,880	4,050
		77	OTHER	19,279	15,624
				52.242	42.266
			Other Subtotal	53,242	
49			District Total	59,473	47,487
43		10	CORE	53,774	42,237
			OTHER	5,758	
		71	OTTIER	3,730	4,237
			Other Subtotal	5,758	4,297
			District Total	59,532	
50					_
		50	CORE	0	0
		80	OTHER	11,308	8,744
		43	OTHER	12,703	9,208
		45	OTHER	14,620	11,378

	COMPARE				
DISTRICT	DISTRICT (2022)		NOTES	PERSONS	PERSONS18
		51	OTHER	20,937	16,464
			Other Subtotal	59,568	45,794
			District Total	59,568	45,794
51		Г1	CODE	20.701	22.004
			CORE OTHER	29,701 13,839	22,881
			OTHER	-	10,650
			OTHER	15,010 749	11,418 580
		30	OTHER	743	360
			Other Subtotal	29,598	22,648
			District Total	59,299	45,529
52					
		52	CORE	0	0
		54	OTHER	50,087	41,042
		53	OTHER	9,248	7,692
			Other Subtotal	59,335	48,734
			District Total	59,335	48,734
53					
			CORE	0	0
			OTHER	2,311	1,724
			OTHER	24,227	19,075
		55	OTHER	32,790	24,958
			Other Subtotal	59,328	45,757
			District Total	59,328	45,757
54				,	,
		54	CORE	0	0
		3	OTHER	29,636	22,189
		57	OTHER	26,860	21,191
		56	OTHER	3,107	2,483
			Other Subtotal	59,603	45,863
			District Total	59,603	45,863
55			CODE	11 440	0.027
			CORE OTHER	11,449	9,027
			OTHER	14,688 15,556	11,118 11,270
			OTHER	17,822	14,024
		40	OTTILIN	17,022	14,024
			Other Subtotal	48,066	36,412
			District Total	59,515	45,439
56	i				

	COMPARE				
DISTRICT	DISTRICT (2022)		NOTES	PERSONS	PERSONS18
		56	CORE	0	0
		35	OTHER	4,798	3,794
		85	OTHER	7,729	6,065
		86	OTHER	1,611	1,311
		36	OTHER	1,803	1,376
		6	OTHER	25,482	20,048
		40	OTHER	18,361	14,497
			Other Subtotal	59,784	47,091
			District Total	59,784	47,091
57	1			·	·
		57	CORE	0	0
		6	OTHER	13,981	10,758
		89	OTHER	30,227	23,215
		36	OTHER	15,437	12,044
			Other Subtotal	59,645	46,017
			District Total	59,645	46,017
58			District Foto:	33,6 .3	10,017
		58	CORE	0	0
			OTHER	20,648	16,402
			OTHER	3,867	3,010
			OTHER	15,169	12,339
			OTHER	12,603	10,297
			OTHER	7,041	5,483
			OTHER	451	365
			Other Subtotal	59,779	47,896
			District Total	59,779	47,896
59					
		59	CORE	0	0
		52	OTHER	51,139	40,331
		53	OTHER	8,126	6,339
			Other Subtotal	59,265	46,670
			District Total	59,265	46,670
60			0005	:	
			CORE	5,694	4,402
			OTHER	2,663	2,122
			OTHER	22,198	17,076
			OTHER	9,549	7,574
		58	OTHER	19,639	15,278
			Other Subtotal	54,049	42,050

DISTRICT	COMPARE DISTRICT (2022)	NOTES	PERSONS	PERSONS18
DISTRICT	DISTRICT (2022)	District Total	59,743	46,452
61		District Total	33,743	40,432
01		CORE	47.069	27.077
			47,068	37,077
		OTHER	3,391	2,713
		OTHER	1,284	1,052
	63	OTHER	8,052	6,255
		Other Subtotal	12,727	10,020
		District Total	59,795	47,097
62				
	62	CORE	0	0
	65	OTHER	47,586	36,185
	64	OTHER	2,447	1,941
		OTHER	9,307	7,374
	-			
		Other Subtotal	59,340	
		District Total	59,340	45,500
63				
	63	CORE	0	0
	82	OTHER	33,580	26,716
	21	OTHER	2,300	1,817
	62	OTHER	23,605	18,873
		Other Subtotal	59,485	47,406
		District Total	59,485	47,406
64		2.0000	55, 155	,
		· CORE	44,534	35,342
		OTHER	11,779	8,228
		OTHER	3,034	2,589
	01	OTTLK	3,034	2,363
		Other Subtotal	14,813	10 017
				10,817
6.5		District Total	59,347	46,159
65		CODE	0	
		CORE	0	0
		OTHER	19,186	14,920
		OTHER	12,095	9,716
	66	OTHER	28,242	20,666
		Other Subtotal	59,523	45,302
		District Total	59,523	45,302
66	j	2.50.700 10001	33,323	13,302
	66	CORE	31,123	22,821
	64	OTHER	12,381	9,363
	63	OTHER	13,808	11,458

DISTRICT	COMPARE DISTRICT (2022)		NOTES	PERSONS	PERSONS18
DISTRICT	• •	ຂວ	OTHER	2,400	1,862
		J Z	OTTLK	2,400	1,802
			Other Subtotal	28,589	22,683
			District Total	59,712	45,504
67					
	6	67	CORE	14,734	11,401
	8	37	OTHER	39,056	30,169
	3	35	OTHER	949	717
	3	36	OTHER	4,618	3,634
			Other Subtotal	44,623	34,520
			District Total	59,357	45,921
68					
	6	68	CORE	19,678	14,094
	ϵ	59	OTHER	24,805	18,334
	8	37	OTHER	4,105	3,048
	3	36	OTHER	10,789	8,395
			Other Subtotal	39,699	29,777
			District Total	59,377	43,871
69					
	ϵ	69	CORE	26,090	20,223
	5	50	OTHER	4,222	3,355
	8	36	OTHER	8,647	6,901
	7	70	OTHER	13,870	10,772
	7	72	OTHER	6,822	5,419
			Other Subtotal	33,561	26,447
			District Total	59,651	46,670
70					
			CORE	8,985	6,958
			OTHER	13,099	9,481
			OTHER	1,826	1,329
			OTHER	22,872	17,151
			OTHER	3,791	2,847
			OTHER	8,452	6,820
	Ğ	96	OTHER	733	600
			Other Subtotal	50,773	38,228
			District Total	59,758	45,186
71					
			CORE	0	0
			OTHER	36,652	28,254
	g	93	OTHER	22,880	17,885

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	59,532	46,139
		District Total	59,532	46,139
72				
	72	CORE	0	0
	50	OTHER	18,223	13,941
	96	OTHER	16,525	11,780
	70	OTHER	24,796	18,855
		Other Subtotal	59,544	44,576
		District Total	59,544	44,576
73				
	73	CORE	38,970	31,190
	74	OTHER	20,384	16,992
		Other Subtotal	20,384	16,992
		District Total	59,354	48,182
74				
	74	CORE	39,203	31,901
	87	OTHER	16,250	13,138
	75	OTHER	1,585	1,303
	73	OTHER	2,667	2,296
		Other Subtotal	20,502	16,737
		District Total	59,705	48,638
75				
	75	CORE	57,831	45,762
	67	OTHER	562	416
	73	OTHER	1,304	1,136
		Other Subtotal	1,866	1,552
		District Total	59,697	47,314
76				
		CORE	53,828	
	48	OTHER	5,744	4,746
		Other Subtotal	5,744	4,746
		District Total	59,572	54,896
77				
		CORE	31,131	26,625
		OTHER	19,377	15,855
		OTHER	8,984	7,410
		OTHER	0	0
	47	OTHER	88	69

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	28,449	23,334
		District Total	59,580	49,959
78		0005	22.004	10.110
		CORE	22,084	18,110
		OTHER	13,139	10,184
		OTHER	24,418	17,945
	47	OTHER	3	2
		Oth on Culptotal	27.500	20 121
		Other Subtotal	37,560	
79		District Total	59,644	46,241
/9		CORE	31,546	24 274
		OTHER	•	24,274
		OTHER	5,518 17,963	4,696
		OTHER	654	14,262 556
		OTHER	3,908	2,869
	60	OTHER	3,906	2,809
		Other Subtotal	28,043	22,383
		District Total	59,589	46,657
80		District Total	33,363	40,037
30		CORE	0	0
		OTHER	6,471	5,108
		OTHER	38,680	30,280
		OTHER	14,151	10,882
	30	OTTIEN	11,131	10,002
		Other Subtotal	59,302	46,270
		District Total	59,302	46,270
81				,
		CORE	7,199	5,672
		OTHER	18,202	14,473
		OTHER	20,637	16,511
		OTHER	10,787	7,993
	79	OTHER	2,623	1,834
		Other Subtotal	52,249	40,811
		District Total	59,448	46,483
82				
	82	CORE	0	0
	14	OTHER	18,289	14,075
	13	OTHER	39,723	30,607
	22	OTHER	1,787	1,424
		Other Subtotal	59,799	46,106

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	59,799	46,106
83				
		CORE	0	0
		OTHER	13,468	11,381
		OTHER	31,346	25,054
	15	OTHER	14,814	11,955
		Other Subtotal	59,628	48,390
		District Total	59,628	48,390
84				·
	84	CORE	36,300	29,057
	82	OTHER	13,203	10,052
	14	OTHER	9,974	8,021
		Other Subtotal	23,177	18,073
		District Total	59,477	47,130
85			·	·
	85	CORE	50,536	39,563
	86	OTHER	8,876	6,790
		Other Subtotal	8,876	6,790
		District Total	59,412	46,353
86				,
	86	CORE	25,167	19,444
	85	OTHER	1,407	1,149
	70	OTHER	4,585	3,528
	71	OTHER	1,070	884
		OTHER	27,292	21,556
		Other Cubtetal	24.254	27 117
		Other Subtotal District Total	34,354 59,521	27,117 46,561
87		District rotal	39,321	40,301
07		CORE	0	0
		OTHER	52,183	42,162
		OTHER		
	70	OTHER	7,200	5,704
		Other Subtotal	59,383	47,866
		District Total	59,383	47,866
88				
	88	CORE	27,997	21,598
	90	OTHER	31,746	23,364
		Other Subtotal	31,746	23,364
		District Total	59,743	44,962
			22,1	,

COMPARE				
DISTRICT DISTRICT (2022)		NOTES	PERSONS	PERSONS18
89				
	89	CORE	1,988	1,514
	4	OTHER	29,725	23,282
	90	OTHER	27,967	21,488
		Other Subtotal	57,692	44,770
		District Total	59,680	46,284
90	00	0005		
		CORE	0	0
		OTHER	5,932	4,751
		OTHER	1,633	1,378
		OTHER	26,530	20,251
	2	OTHER	25,410	19,795
		Other Subtotal	59,505	46,175
		District Total	59,505	46,175
91				·
	91	CORE	27,120	23,057
	93	OTHER	7,125	5,541
	29	OTHER	22,617	18,660
	67	OTHER	2,696	2,118
		Other Subtotal	32,438	26,319
		District Total	59,558	49,376
92				
	92	CORE	0	0
	68	OTHER	20,448	15,984
	91	OTHER	32,293	25,204
	67	OTHER	3,454	2,687
	93	OTHER	3,224	2,474
		Other Subtotal	59,419	46,349
		District Total	59,419	46,349
93				
	93	CORE	574	459
	67	OTHER	36,319	28,330
	68	OTHER	6,197	4,850
	29	OTHER	16,472	12,615
		Other Subtotal	58,988	45,795
		District Total	59,562	46,254
94				
	94	CORE	18,161	13,835
	95	OTHER	41,158	35,168

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	41,158	•
		District Total	59,319	49,003
95				
	95	CORE	18,321	14,923
	94	OTHER	41,433	31,428
		Other Subtotal	41,433	31,428
		District Total	59,754	46,351
96				
	96	CORE	42,054	32,239
	49	OTHER	5,934	4,559
	51	. OTHER	3,269	2,530
	50	OTHER .	8,361	6,474
		Other Subtotal	17,564	13,563
		District Total	59,618	45,802
97	•			
	97	' CORE	19,414	15,403
	99	OTHER	23,749	18,757
	83	OTHER	3,201	2,432
	98	3 OTHER	13,379	10,544
		Other Subtotal	40,329	31,733
		District Total	59,743	47,136
98				
	98	CORE	0	0
	22	OTHER	33,291	25,974
	99	OTHER	26,422	19,984
		Other Subtotal	59,713	45,958
		District Total	59,713	45,958
99				
	99	CORE	9,506	7,608
	37	OTHER	26,932	20,771
	38	3 OTHER	23,323	17,727
		Other Subtotal	50,255	38,498
		District Total	59,761	46,106

	COMPARE SENATE			
SENATE DISTRICT		NOTES	PERSONS	PERSONS18
1				
		CORE	91,078	73,058
		OTHER	5,015	3,785
		OTHER	17,373	13,816
	9	OTHER	65,304	51,633
		Other Subtotal	87,692	69,234
		District Total	178,770	142,292
2				66.66
		CORE	87,023	66,667
		OTHER	4,342	3,526
		OTHER	30,501	22,894
	19	OTHER	57,235	44,402
		Other Subtotal	92,078	70,822
		District Total	179,101	137,489
3		District Total	173,101	137,483
J		CORE	178,536	129,006
	3	COKE	176,550	123,000
		Other Subtotal	0	0
		District Total	178,536	129,006
4			•	,
	4	CORE	178,419	128,996
	8	OTHER	0	0
		Other Subtotal	0	0
		District Total	178,419	128,996
5				
	5	CORE	64,390	51,268
	28	OTHER	28,019	22,327
	33	OTHER	86,277	67,990
		Other Subtotal	114,296	90,317
		District Total	178,686	141,585
6				
	6	CORE	178,495	133,347
		Other Subtotal	0	0
		District Total		
7		District Total	178,495	133,347
		CORE	176,160	148,689
		OTHER	2,048	1,820
	20	O THEN	2,0-10	1,020
		Other Subtotal	2,048	1,820
		District Total	178,208	150,509
		50.100 10001	1,0,200	130,303

	COMPARE SENATE			
SENATE DISTRICT		NOTES	PERSONS	PERSONS18
8				
		CORE	143,474	111,595
	20	OTHER	34,980	27,176
		Other Subtotal	34,980	27,176
		District Total	178,454	138,771
9				
	9	CORE	113,072	88,182
	20	OTHER	66,203	52,256
		Other Subtotal	66,203	52,256
		District Total	179,275	140,438
10			-, -	, , , ,
		CORE	139,721	106,850
		OTHER	16,526	13,642
		OTHER	22,099	17,691
	31	OTTIEN	22,033	17,031
		Other Subtotal	38,625	31,333
		District Total		
11		DISTRICT TOTAL	178,346	138,183
11		CODE	04.000	74 760
		CORE	91,068	71,760
		OTHER	38,529	30,580
	28	OTHER	48,687	37,604
		Other Subtotal	87,216	68,184
		District Total	178,284	139,944
12				
		CORE	155,532	127,761
	30	OTHER	22,771	17,973
		Other Subtotal	22,771	17,973
		District Total	178,303	145,734
13				
	13	CORE	81,196	63,190
	14	OTHER	5,229	3,901
	15	OTHER	22,178	17,525
	11	OTHER	30,279	23,932
	16	OTHER	39,371	29,857
		Other Subtotal	97,057	75,215
		District Total	178,253	138,405
14				
		CORE	87,742	71,298
		OTHER	7,326	5,713
		OTHER	13,750	11,158
	1,	J	13,730	11,130

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	24	OTHER	31,604	25,993
	18	OTHER	38,002	29,802
				-,
		Other Subtotal	90,682	72,666
		District Total	178,424	143,964
15		District Total	170,424	143,304
13		CORE	124,737	95,737
		OTHER		-
	11	OTHER	54,003	43,869
		Oth on Culptotal	F4 002	42.000
		Other Subtotal	54,003	43,869
		District Total	178,740	139,606
16				
		CORE	114,785	89,776
		OTHER	3,339	2,489
		OTHER	4,880	4,050
	27	OTHER	8,306	6,867
	26	OTHER	46,811	36,940
		Other Subtotal	63,336	50,346
		District Total	178,121	140,122
17				
	17	CORE	110,919	86,459
	15	OTHER	27,323	20,586
	27	OTHER	40,157	30,812
			,	,
		Other Subtotal	67,480	51,398
		District Total	178,399	137,857
18		2.0000	27 0,000	201,001
		CORE	59,335	48,734
		OTHER	31,947	23,913
		OTHER	86,984	67,707
	13	OTTIEN	00,501	07,707
		Other Subtotal	118,931	91,620
		District Total	178,266	140,354
19		District Total	178,200	140,334
19		CORE	27,005	20,297
		OTHER		
		OTHER	9,340	7,376
			22,038	17,214
		OTHER	30,227	23,215
		OTHER	36,183	28,521
	2	OTHER	54,151	41,924
		Other Subtotal	151,939	118,250
		District Total	178,944	138,547
20				

CO	ΝЛ	D	Λ	P	F	CI	ΕN	4	١٦	ΓF
LU	IVI		-	и	_	J	_ '	4,	٠.	_

	COMPARE SENATE			
SENATE DISTRICT		NOTES	PERSONS	PERSONS18
	20	CORE	60,134	47,053
	9	OTHER	451	365
	14	OTHER	3,867	3,010
	13	OTHER	32,860	26,098
	18	OTHER	81,475	64,492
		Other Subtotal	118,653	93,965
		District Total	178,787	141,018
21				
		CORE	89,316	70,631
		OTHER	2,300	1,817
		OTHER	3,391	2,713
		OTHER	33,580	26,716
		OTHER		
	22	OTHER	50,033	38,126
		Other Subtotal	89,304	69,372
		District Total	178,620	140,003
22				
	22	CORE	128,059	96,420
	21	OTHER	50,523	40,545
				-,-
		Other Subtotal	50,523	40,545
		District Total	178,582	136,965
23			·	
	23	CORE	85,307	64,052
	12	OTHER	949	717
	17	OTHER	4,222	3,355
	24	OTHER	20,692	16,191
	29	OTHER	67,215	52,147
			,	,
		Other Subtotal	93,078	72,410
		District Total	178,385	136,462
24				
	24	CORE	33,781	25,813
	32	OTHER	17,258	12,380
	17	OTHER	18,223	13,941
		OTHER	23,377	17,630
		OTHER	86,195	66,137
	31	OTTLEN	00,133	00,137
		Other Subtotal	145,053	110,088
		District Total	178,834	135,901
25				
	25	CORE	161,944	130,580
		OTHER	562	416
		OTHER	16,250	13,138
			-,	-,

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	16,812	13,554
		District Total	178,756	144,134
26				
		CORE	126,420	110,740
		OTHER	5,835	4,817
	27	OTHER	46,541	35,539
		Other Subtotal	52,376	40,356
		District Total	178,796	151,096
27			,	,
	27	CORE	83,956	64,929
		OTHER	5,518	4,696
	13	OTHER	10,787	7,993
		OTHER	14,151	10,882
		OTHER	18,617	14,818
		OTHER	45,310	36,092
	14			
		Other Subtotal	94,383	74,481
		District Total	178,339	139,410
28				
	28	CORE	62,971	50,490
	8	OTHER	1,787	1,424
	5	OTHER	114,146	89,712
		Other Subtotal	115,933	91,136
		District Total	178,904	141,626
29				
	29	CORE	85,986	66,946
		OTHER	92,330	73,834
		Other Subtotal	92,330	73,834
		District Total	178,316	140,780
30				
		CORE	116,228	88,215
	1	OTHER	25,410	19,795
	2	OTHER	37,290	29,411
		Other Subtotal	62,700	49,206
		District Total	178,928	137,421
31			-,	, _
		CORE	70,336	56,735
		OTHER	39,089	31,275
		OTHER	69,114	53,969
	23	OTTILIN	05,114	23,303

SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	Other Subtotal	108,203	85,244
	District Total	178,539	141,979
32			
3	2 CORE	161,127	127,593
1	7 OTHER	17,564	13,563
	Other Subtotal	17,564	13,563
	District Total	178,691	141,156
33			
3	3 CORE	92,470	72,296
2	8 OTHER	3,201	2,432
	8 OTHER	33,291	25,974
1	3 OTHER	50,255	38,498
	Other Subtotal	86,747	66,904
	District Total	179,217	139,200

COMPARE

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
1				
	1	CORE	59,444	48,427
				·
		Other Subtotal	0	0
		District Total	59,444	48,427
2		District Total	33,444	40,427
		CODE	47.407	42.046
		CORE	17,407	13,946
	25	OTHER	42,566	33,933
		Other Subtotal	42,566	33,933
		District Total	59,973	47,879
3				
	3	CORE	6,698	5,079
	2	OTHER	12,878	9,584
		OTHER	1,557	1,256
		OTHER	316	218
		OTHER	37,857	28,885
	3	OTHER	37,637	20,003
			F2 C00	20.042
		Other Subtotal	52,608	39,943
		District Total	59,306	45,022
4				
	4	CORE	0	0
	36	OTHER	24,605	20,345
	89	OTHER	31,164	24,598
	35	OTHER	3,489	3,126
		Other Subtotal	59,258	48,069
		District Total	59,258	48,069
5				,
		CORE	19,585	15,012
		OTHER	31,221	23,726
		OTHER	1,323	
				1,090
		OTHER	4,069	3,082
	6	OTHER	2,791	2,164
		Other Subtotal	39,404	30,062
		District Total	58,989	45,074
6				
	6	CORE	24,013	18,479
	89	OTHER	21,834	16,590
	36	OTHER	14,177	11,066
			,	,
		Other Subtotal	36,011	27,656
		District Total	60,024	46,135
7		2.50	55,624	10,100
•				

.....

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	7	CORE	59,603	46,329
		Other Subtotal	0	0
•		District Total	59,603	46,329
8		CORE	E0 262	40.420
	٥	CORE	59,362	40,439
		Other Subtotal	0	0
		District Total	59,362	40,439
9		District rotar	33,302	40,433
		CORE	59,571	42,238
	_		,-	,
		Other Subtotal	0	0
		District Total	59,571	42,238
10				
	10	CORE	59,503	45,220
		Other Subtotal	0	0
		District Total	59,503	45,220
11			-0 -6-	
	11	CORE	59,565	41,166
		Other Subtotal	0	0
		District Total	59,565	0 41,166
12		District Total	33,303	41,100
		CORE	59,351	42,610
			,	,
		Other Subtotal	0	0
		District Total	59,351	42,610
13				
		CORE	5,472	4,676
		OTHER	30,227	
	97	OTHER	24,309	19,122
		Other Colored	54.526	42.424
		Other Subtotal District Total	54,536	•
14		DISTRICT TOTAL	60,008	48,110
14		CORE	28,878	22,526
		OTHER	27,360	
		OTHER	3,722	2,887
			-, - ==	,
		Other Subtotal	31,082	23,941
		District Total	59,960	
15				
	15	CORE	4,847	3,973

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	14	OTHER	28,147	22,422
	13	OTHER	26,719	20,379
		Other Subtotal	54,866	42,801
		District Total	59,713	46,774
16				
	16	CORE	59,714	45,615
		Other Subtotal	0	0
		District Total	59,714	45,615
17				
	17	CORE	59,435	43,760
		Other Subtotal	0	0
		District Total	59,435	43,760
18				
	18	CORE	59,346	43,972
		Other Subtotal	0	0
		District Total	59,346	43,972
19				
	19	CORE	59,320	55,412
		Other Subtotal	0	0
		District Total	59,320	55,412
20			-0-10	10.006
	20	CORE	59,548	48,286
		Other Collete tel	0	0
		Other Subtotal	0	40.206
21		District Total	59,548	48,286
21		CORE	59,592	46,808
	21	CORL	39,392	40,808
		Other Subtotal	0	0
		District Total	59,592	46,808
22		District Total	33,332	40,000
		CORE	23,808	18,570
		OTHER	35,297	27,666
	24	EII	55,257	27,000
		Other Subtotal	35,297	27,666
		District Total	59,105	46,236
23				-,==
		CORE	56,285	43,071
		OTHER	2,989	2,230
			,	,

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	2,989	2,230
		District Total	59,274	45,301
24				
	24	CORE	21,417	17,190
	60	OTHER	34,656	26,842
	23	OTHER	3,098	2,441
		Other Subtotal	37,754	29,283
		District Total	59,171	46,473
25				
	25	CORE	0	0
	27	OTHER	24,347	18,612
	26	OTHER	34,818	26,864
			•	•
		Other Subtotal	59,165	45,476
		District Total	59,165	45,476
26				
	26	CORE	24,822	19,747
	59	OTHER	16,169	12,924
	27	OTHER	18,869	14,636
		Other Subtotal	35,038	27,560
		District Total	59,860	47,307
27				
	27	CORE	16,511	13,263
	3	OTHER	14,618	10,851
	59	OTHER	12,946	10,431
	25	OTHER	15,337	11,869
		Other Subtotal	42,901	33,151
		District Total	59,412	46,414
28				
	28	CORE	45,900	35,498
	29	OTHER	4,529	3,441
	30	OTHER	9,038	6,581
		Other Subtotal	13,567	10,022
		District Total	59,467	45,520
29				
		CORE	0	0
	93	OTHER	14,761	12,088
	30	OTHER	44,862	34,205
		Other Subtotal	59,623	46,293
		District Total	59,623	46,293

COMPARE

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
30				
	3	0 CORE	5,663	4,283
	7	5 OTHER	2,678	2,061
	2	9 OTHER	24,421	18,332
	6	7 OTHER	1,101	844
	9	3 OTHER	25,285	19,631
		Other Subtotal	53,485	40,868
		District Total	59,148	•
31		2.505050	33,2 .6	,
-		1 CORE	0	0
		1 OTHER	46,781	36,918
		4 OTHER	1,338	954
		2 OTHER	•	
			3,391	2,713
	Ь	3 OTHER	8,052	6,255
			50.563	46.040
		Other Subtotal	59,562	
		District Total	59,562	46,840
32				
		2 CORE	39,434	31,426
		1 OTHER	9,594	7,533
	3	1 OTHER	10,769	8,193
		Other Subtotal	20,363	15,726
		District Total	59,797	47,152
33				
	3	3 CORE	2,606	2,125
	3	1 OTHER	15,712	12,176
	4	4 OTHER	25,028	19,389
	3	2 OTHER	16,731	13,124
		Other Subtotal	57,471	44,689
		District Total	60,077	46,814
34			, -	-,-
		4 CORE	25,317	20,851
		6 OTHER	13,737	
		5 OTHER	20,535	
	3	JOHLK	20,333	10,550
		Other Subtotal	34,272	27,740
25		District Total	59,589	48,591
35		F CORF	20.445	22.047
		5 CORE	28,415	
		7 OTHER	15,896	
		9 OTHER	1,391	1,003
	7	4 OTHER	14,054	11,566

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	31,341	24,553
		District Total	59,756	47,570
36				
	36	CORE	0	0
	74	OTHER	23,426	18,816
	34	OTHER	34,203	28,891
	35	OTHER	1,372	1,172
		Other Subtotal	59,001	48,879
		District Total	59,001	48,879
37				
	37	CORE	0	0
	59	OTHER	20,016	15,370
	39	OTHER	3,843	3,069
	58	OTHER	19,639	15,278
	60	OTHER	4,629	3,558
	22	OTHER	11,739	9,265
		Other Subtotal	59,866	46,540
		District Total	59,866	46,540
38				
	38	CORE	0	0
	60	OTHER	20,049	16,037
	58	OTHER	39,968	31,477
		Other Subtotal	60,017	47,514
		District Total	60,017	47,514
39				
	39	CORE	48,312	38,141
	42	OTHER	7,207	5,928
	59	OTHER	3,904	3,081
		Other Subtotal	11,111	9,009
		District Total	59,423	47,150
40				
	40	CORE	0	0
	37	OTHER	31,888	24,420
	39	OTHER	4,304	3,323
	46	OTHER	23,157	17,033
		Other Subtotal	59,349	44,776
		District Total	59,349	44,776
41				
	41	CORE	0	0

DISTRICT DISTRICT (2022) NOTES PERSONS PERSONS18 46 OTHER 20,908 15,606 38 OTHER 29,301 22,528 47 OTHER 5 2 33 OTHER 9,144 7,222 Other Subtotal 59,358 45,358 District Total 59,358 45,358 42 CORE 11,872 9,132 39 OTHER 2,022 1,593 46 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 15,219 11,963 76 OTHER 15,219 11,963 76 OTHER 15,219 17 43 OTHER 29 17 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 3,080
38 OTHER 29,301 22,528 47 OTHER 5 2 33 OTHER 9,144 7,222 Other Subtotal 59,358 45,358 District Total 59,358 45,358 42 42 CORE 11,872 9,132 39 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
47 OTHER 5 2 33 OTHER 9,144 7,222 Other Subtotal 59,358 45,358 District Total 59,358 45,358 42 42 CORE 11,872 9,132 39 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
Other Subtotal 59,358 45,358 District Total 59,358 45,358 42 42 CORE 11,872 9,132 39 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
Other Subtotal 59,358 45,358 District Total 59,358 45,358 42 42 CORE 11,872 9,132 39 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
District Total 59,358 45,358 42 42 CORE 11,872 9,132 39 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
42 CORE 11,872 9,132 39 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
42 CORE 11,872 9,132 39 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
39 OTHER 2,022 1,593 46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
46 OTHER 15,255 12,210 79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
79 OTHER 6,018 4,400 37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
37 OTHER 8,898 6,548 48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
48 OTHER 15,219 11,963 76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
76 OTHER 318 279 47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
47 OTHER 29 17 Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
Other Subtotal 47,759 37,010 District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
District Total 59,631 46,142 43 43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
43 CORE 14,672 11,527 38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
38 OTHER 3,080 2,434 33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
33 OTHER 29,029 23,380 31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
31 OTHER 13,154 11,365 Other Subtotal 45,263 37,179 District Total 59,935 48,706
Other Subtotal 45,263 37,179 District Total 59,935 48,706
District Total 59,935 48,706
·
44
44 CORE 34,713 26,946
33 OTHER 15,873 12,183
43 OTHER 6,658 5,316
31 OTHER 2,667 2,118
Other Subtotal 25,198 19,617
District Total 59,911 46,563
45
45 CORE 40,539 30,418
31 OTHER 14,820 11,872
43 OTHER 3,741 2,999
Other Subtotal 18,561 14,871
District Total 59,100 45,289
46
46 CORE 0 0
80 OTHER 6,680 5,232

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	43	OTHER	34,614	26,589
	47	OTHER	1,423	1,072
	45	OTHER	16,852	12,895
		Other Subtotal	59,569	45,788
		District Total	59,569	45,788
47				
	47	CORE	28,829	22,322
	80	OTHER	4,911	4,301
	77	OTHER	5,522	4,212
	78	OTHER	20,636	16,094
		Other Subtotal	31,069	24,607
		District Total	59,898	46,929
48				
		CORE	0	0
		OTHER	1,847	1,431
		OTHER	27,314	20,124
		OTHER	2,301	1,819
	51	OTHER	27,715	21,524
		Other Subtotal	59,177	44,898
		District Total	59,177	44,898
49				
		CORE	0	0
		OTHER	22,489	18,726
		OTHER	22,385	18,361
		OTHER	4,495	3,494
		OTHER	4,352	3,404
	40	OTHER	5,497	4,583
		Oth an Colletatal	50 240	40.560
		Other Subtotal	59,218	48,568
50		District Total	59,218	48,568
50		CORE	17 500	13,894
		OTHER	17,500 3,025	2,726
		OTHER		
			16,718	11,985
		OTHER	21,412	16,606
	69	OTHER	406	318
		Other Subtotal	41,561	31,635
		District Total	59,061	45,529
51		District Total	33,001	+3,323
J1		CORE	0	0
		OTHER	5,369	4,209
	30	- · · · · = · · ·	3,303	1,203

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	69	OTHER	4,405	3,400
	70	OTHER	12,698	9,773
	71	OTHER	2,912	2,386
	72	OTHER	34,114	26,975
		Other Subtotal	59,498	46,743
		District Total	59,498 59,498	46,743
52		District Total	33,436	40,743
	52	CORE	53,336	41,975
	59	OTHER	6,714	5,303
		Other Subtotal	6,714	5,303
		District Total	60,050	47,278
53				
		CORE	40,797	32,237
		OTHER	895	740
		OTHER	956	767
		OTHER	6,243	4,946
	54	OTHER	10,149	8,027
		Other Subtotal	18,243	14,480
		District Total	59,040	46,717
54				
	54	CORE	49,459	40,641
	53	OTHER	10,086	8,324
		Other Subtotal	10,086	8,324
		District Total	59,545	48,965
55				
	55	CORE	17,486	13,704
	42	OTHER	18,302	14,322
	41	OTHER	13,958	11,212
	40	OTHER	919	738
	53	OTHER	8,742	6,878
		Other Subtotal	41,921	33,150
		District Total	59,407	46,854
56		District Total	33,407	40,034
	56	CORE	19,320	14,220
	6	OTHER	21,258	16,251
	40	OTHER	15,416	12,151
	5	OTHER	1,932	1,502
	55	OTHER	1,203	1,029
		Other Subtotal	39,809	30,933

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	59,129	45,153
57				
	57	CORE	0	0
	35	OTHER	3,803	3,000
	36	OTHER	6,922	4,973
	6	OTHER	11,392	9,115
	40	OTHER	37,486	29,934
		Other Subtotal	59,603	47,022
		District Total	59,603	47,022
58				
	58	CORE	0	0
	57	OTHER	26,285	20,652
	55	OTHER	32,876	24,965
		Other Subtotal	59,161	45,617
		District Total	59,161	45,617
59				
	59	CORE	0	0
	57	OTHER	16,919	12,852
	56	OTHER	34,663	26,725
	55	OTHER	7,972	6,613
		Other Subtotal	59,554	46,190
		District Total	59,554	46,190
60				
	60	CORE	0	0
	3	OTHER	38,412	28,896
	57	OTHER	16,213	13,057
	56	OTHER	5,297	4,084
		Other Subtotal	59,922	46,037
		District Total	59,922	46,037
61				
		CORE	0	0
	84	OTHER	3,652	3,066
	15	OTHER	47,561	38,219
	82	OTHER	6,120	4,657
	83	OTHER	2,550	2,068
		Other Subtotal	59,883	48,010
		District Total	59,883	48,010
62				
		CORE	0	0
	83	OTHER	29,397	22,818

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	82	OTHER	5,525	4,227
	97	OTHER	15,941	12,082
	98	OTHER	5,027	3,961
	15	OTHER	4,111	3,243
		Other Subtotal	60,001	46,331
		District Total	60,001	46,331
63				
	63	CORE	25,579	20,350
	62	OTHER	15,618	12,405
	83	OTHER	18,278	14,409
		Other Subtotal	33,896	26,814
		District Total	59,475	47,164
64				
		CORE	40,585	32,407
	65	OTHER	5,756	4,395
	61	OTHER	3,034	2,589
	63	OTHER	10,357	8,597
		Other Subtotal	19,147	15,581
		District Total	59,732	47,988
65				
		CORE	53,609	40,018
	64	OTHER	6,212	4,818
		Other Subtotal	6 212	1 010
		District Total	6,212 59,821	4,818 44,836
66		District rotal	33,621	44,630
00		CORE	16,079	12,200
		OTHER	17,052	13,308
		OTHER	11,227	8,467
		OTHER	15,546	12,577
		· · · · · · · · · · · · · · · · · · ·	_5,5 . 5	,_,
		Other Subtotal	43,825	34,352
		District Total	59,904	46,552
67			,	·
	67	CORE	24,949	19,353
	75	OTHER	4,723	3,818
	68	OTHER	15,710	11,271
	69	OTHER	6,961	5,032
	87	OTHER	6,997	5,251
		Other Subtotal	34,391	25,372
		District Total	59,340	44,725

MBLY

2023AP001399 Appendix to Response Brief of Wiscon WRIGHT CORE CONS					-
		COMPARE			
	DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	68				
		68	CORE	0	0
		92	OTHER	54,236	41,379
		93	OTHER	5,139	4,005
			Other Subtotal	59,375	45,384
			District Total	59,375	45,384
	69				
		69	CORE	45,158	34,912
		68	OTHER	4,573	3,258
		92	OTHER	4,083	3,098
		70	OTHER	1,628	1,321
		86	OTHER	4,018	3,291
			Other Subtotal	14,302	10,968
			District Total	59,460	45,880
	70				
		70	CORE	16,498	12,413
		0.4	OTLIED	17 0 1 2	12 611

		Other Subtotal	59,375	45,384
		District Total	59,375	45,384
69				
	69	CORE	45,158	34,912
	68	OTHER	4,573	3,258
	92	OTHER	4,083	3,098
	70	OTHER	1,628	1,321
	86	OTHER	4,018	3,291
		Other Subtotal	14,302	10,968
		District Total	59,460	45,880
70				
	70	CORE	16,498	12,413
	94	OTHER	17,843	13,611
	95	OTHER	22,989	19,644
	96	OTHER	1,697	1,199
		Other Subtotal	42,529	34,454
		District Total	59,027	46,867
71				
	71	CORE	0	0
	96	OTHER	40,897	31,435
	95	OTHER	17,586	14,629
	94	OTHER	1,516	1,194
		Other Subtotal	59,999	47,258
		District Total	59,999	47,258
72				
	72	CORE	0	0
	95	OTHER	18,904	15,818
	94	OTHER	40,235	30,458
		Other Subtotal	59,139	46,276
		District Total	59,139	46,276
73				
	73	CORE	20,497	17,074
	75	OTHER	24,757	19,708
	28	OTHER	13,843	11,093
		Other Subtotal	38,600	30,801
			1902	

COMPARE

	COIVIPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	59,097	47,875
74				
	74	CORE	20,283	16,925
		OTHER	38,970	31,190
	73	OTTLK	36,370	31,190
				24.422
		Other Subtotal	38,970	31,190
		District Total	59,253	48,115
75				
	75	CORE	27,258	21,478
	87	OTHER	30,438	24,440
	74	OTHER	1,824	1,586
		· · · · · · · · · · · · · · · · · · ·	_,=	_,===
		Other Subtotal	32,262	26,026
				•
		District Total	59,520	47,504
76				
		CORE	57,390	53,203
	47	OTHER	654	556
	48	OTHER	1,368	1,066
		Other Subtotal	2,022	1,622
		District Total	59,412	54,825
77		District Fotor	33,112	31,623
,,,	77	CORE	6.005	4 070
		CORE	6,095	4,878
		OTHER	27,112	21,283
	48	OTHER	26,515	21,705
		Other Subtotal	53,627	42,988
		District Total	59,722	47,866
78				
	78	CORE	12,054	10,149
		OTHER	44,349	37,491
		OTHER	3,427	2,694
		OTHER	0,427	_
			_	0
	47	OTHER	88	69
		Other Subtotal	47,864	40,254
		District Total	59,918	50,403
79				
	79	CORE	21,197	15,854
	42	OTHER	13,208	10,420
		OTHER	5,228	3,934
		OTHER		
			1,956	1,643
		OTHER	16,595	13,196
	81	OTHER	1,666	1,251

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	38,653	30,444
		District Total	59,850	46,298
80				
	80	CORE	8,009	5,949
	81	OTHER	12,876	10,076
	79	OTHER	16,270	13,064
		OTHER	20,496	15,978
		OTHER	2,062	1,467
	-		_,-,	_,
		Other Subtotal	51,704	40,585
		District Total	59,713	46,534
81			33,120	,
		CORE	19,481	15,382
		OTHER	22,984	18,444
		OTHER	3,603	2,998
		OTHER	13,099	10,044
	30	0111211	13,033	10,0
		Other Subtotal	39,686	31,486
		District Total	59,167	46,868
82				,
		CORE	41,278	32,626
		OTHER	7,720	6,151
		OTHER	9,990	7,995
	<u>-</u>	· · · · · · · · · · · · · · · · · · ·	3,555	,,,,,
		Other Subtotal	17,710	14,146
		District Total	58,988	46,772
83			22,222	
	83	CORE	0	0
		OTHER	16,765	13,229
		OTHER	43,286	31,287
			-,	- , -
		Other Subtotal	60,051	44,516
		District Total	60,051	44,516
84			,	•
		CORE	48,164	39,192
		OTHER	6,441	4,920
		OTHER	2,857	2,286
		OTHER	2,584	2,202
			_,	_,
		Other Subtotal	11,882	9,408
		District Total	60,046	48,600
85				,
		CORE	50,536	39,563
		OTHER	949	717
		OTHER	827	671
	3,		5_,	J. <u>-</u>

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	86	OTHER	6,804	5,386
		Other Subtotal	8,580	6,774
		District Total	59,116	46,337
86				
		CORE	43,517	33,589
		OTHER	5,253	4,009
		OTHER	9,136	7,214
		OTHER	1,026	712
	35	OTHER	995	794
			46.440	42.720
		Other Subtotal	16,410	
07		District Total	59,927	46,318
87		CORE	0	0
		OTHER	52,183	42,162
		OTHER	7,200	5,704
	70	OTHER	7,200	3,704
		Other Subtotal	59,383	47,866
		District Total	59,383	47,866
88		District rotar	33,303	47,000
00		CORE	31,545	24,036
		OTHER	2,964	2,394
		OTHER	25,410	19,795
			-,	.,
		Other Subtotal	28,374	22,189
		District Total	59,919	46,225
89				
	89	CORE	0	0
	4	OTHER	14,156	11,341
	88	OTHER	27,997	21,598
	90	OTHER	16,906	12,721
		Other Subtotal	59,059	
		District Total	59,059	45,660
90				
		CORE	42,807	32,131
		OTHER	11,295	
	89	OTHER	5,007	3,950
		Othor Calabara	46 202	42.000
		Other Subtotal	16,302	13,083
01		District Total	59,109	45,214
91		CORE	16 005	12.262
		CORE	16,805	13,363
	68	OTHER	12,179	9,474

COMPARE

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	67	OTHER	30,450	23,655
		Other Subtotal	42,629	33,129
		District Total	59,434	46,492
92				
	92	CORE	0	0
	29	OTHER	30,554	24,692
	93	OTHER	3,734	2,872
	67	OTHER	3,091	2,429
		OTHER	22,005	18,526
			,	-,-
		Other Subtotal	59,384	48,519
		District Total	59,384	48,519
93		2.000000	22,23	. 5,5 _5
	93	CORE	10,774	8,301
		OTHER	26,960	20,406
		OTHER	1,205	928
		OTHER	20,603	16,372
	<u> </u>	· · · · · · · · · · · · · · · · · · ·	_0,000	_0,0 / _
		Other Subtotal	48,768	37,706
		District Total	59,542	46,007
94		District Foto:	33,3 .2	10,007
		CORE	0	0
		OTHER	4,104	3,071
		OTHER	11,293	8,623
		OTHER	3,395	2,630
		OTHER	27,034	21,797
		OTHER	12,775	10,256
		OTHER	1,451	1,168
	.,	OTTIEN	1, 131	1,100
		Other Subtotal	60,052	47,545
		District Total	60,052	47,545
95		District Foto:	33,332	17,3 13
		CORE	0	0
		OTHER	19,744	15,391
		OTHER	24,670	19,331
		OTHER	1,348	1,048
		OTHER	5,934	4,559
		OTHER	8,361	6,474
	30	OTTILIN	0,301	0,474
		Other Subtotal	60,057	46,803
		District Total	60,057	46,803
96		District Total	00,037	40,603
- 30		CORE	0	0
		OTHER	53,774	42,237
	49	OHILK	33,774	42,23/

COMPARE

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	51	OTHER	5,218	3,850
		Other Subtotal	58,992	46,087
		District Total	58,992	46,087
97				
	97	CORE	0	0
	37	OTHER	13,368	10,569
	38	OTHER	25,256	19,312
	99	OTHER	17,110	13,619
	22	OTHER	3,825	3,040
		Other Subtotal	59,559	46,540
		District Total	59,559	46,540
98				
	98	CORE	24,152	19,057
	99	OTHER	19,344	14,402
	22	OTHER	16,372	12,633
		Other Subtotal	35,716	27,035
		District Total	59,868	46,092
99				
	99	CORE	23,223	18,328
	38	OTHER	1,981	1,630
	33	OTHER	2,939	2,349
	31	OTHER	2,472	2,028
	97	OTHER	19,414	15,403
	83	OTHER	9,381	7,255
		Other Subtotal	36,187	28,665
		District Total	59,410	46,993

COMPARE SENATE			
SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
1			
	CORE	96,427	77,036
	OTHER	316	218
2	OTHER	37,857	28,885
9	OTHER	44,123	35,189
	Other Subtotal	82,296	64,292
	District Total	178,723	141,328
2			
2	CORE	77,610	59,381
1	OTHER	4,069	3,082
12	OTHER	42,271	34,537
30	OTHER	54,321	42,278
	Other Subtotal	100,661	79,897
	District Total	178,271	139,278
3		·	·
3	CORE	178,536	129,006
		,	ŕ
	Other Subtotal	0	0
	District Total	178,536	129,006
4		-,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4	CORE	178,419	128,996
		,	,
	Other Subtotal	0	0
	District Total	178,419	128,996
5	District Fotal	170,113	120,330
	CORE	121,423	95,030
	OTHER	3,722	2,887
	OTHER	54,536	43,434
	•	2 .,222	.5, .5 .
	Other Subtotal	58,258	46,321
	District Total	179,681	141,351
6		- 7	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	CORE	178,495	133,347
		-,	, -
	Other Subtotal	0	0
	District Total	178,495	133,347
7			
	CORE	178,460	150,506
·	-	, . • •	2 2 / 2 3 0
	Other Subtotal	0	0
	District Total	178,460	150,506
8	District Total	1,0,400	130,300

COMPARE SENAT			
SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	8 CORE	142,894	111,168
2	0 OTHER	34,656	26,842
	Other Subtota	34,656	26,842
	District Total	177,550	138,010
9			
	9 CORE	134,704	104,991
	1 OTHER	14,618	10,851
2	0 OTHER	29,115	23,355
	Other Subtota	43,733	34,206
	District Total	178,437	139,197
10			
1	0 CORE	134,413	102,340
2	3 OTHER	1,101	844
2	5 OTHER	2,678	2,061
3	1 OTHER	40,046	31,719
	Other Subtota	43,825	34,624
	District Total	178,238	136,964
11			
1	1 CORE	88,643	69,757
2	2 OTHER	1,338	954
1	5 OTHER	25,028	19,389
2	1 OTHER	64,427	50,706
	Other Subtota	90,793	71,049
	District Total	179,436	140,806
12			
1	2 CORE	123,579	101,671
2	3 OTHER	1,391	1,003
2	9 OTHER	15,896	11,984
2	5 OTHER	37,480	30,382
	Other Subtota	54,767	43,369
	District Total	178,346	145,040
13			
	3 CORE	52,155	41,210
	4 OTHER	7,207	
	8 OTHER	11,739	9,265
2	0 OTHER	108,205	84,801
	Other Subtota	•	99,994
	District Total	179,306	141,204

COMPARE SENAT			
SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
14			
1	.4 CORE	11,872	9,132
2	6 OTHER	318	279
2	7 OTHER	6,018	4,400
1	.1 OTHER	9,144	7,222
1	.6 OTHER	74,573	56,831
1	.3 OTHER	76,413	58,412
	Other Cultivated	166.466	127 144
	Other Subtotal	-	127,144
	District Total	178,338	136,276
15			
	.5 CORE	100,323	77,206
	.3 OTHER	3,080	2,434
1	.1 OTHER	75,543	60,918
	Other Subtotal	78,623	63,352
	District Total	178,946	140,558
16		-,-	
1	.6 CORE	30,252	23,394
2	6 OTHER	26,158	20,306
1	.7 OTHER	27,715	21,524
2	7 OTHER	40,752	31,088
1	.5 OTHER	53,767	41,303
	Other Subtotal	•	114,221
	District Total	178,644	137,615
17			
1	.7 CORE	17,500	13,894
2	3 OTHER	4,811	3,718
2	9 OTHER	5,369	4,209
3	2 OTHER	16,718	11,985
1	.4 OTHER	32,481	26,803
2	4 OTHER	100,898	80,231
	Other Subtotal	160,277	126,946
		-	
18	District Total	177,777	140,840
	.8 CORE	170,070	136,150
	4 OTHER	895	740
	.3 OTHER	956	767
	OTHER	6,714	
2	O UTIEN	0,714	5,303
	Other Subtotal	8,565	6,810
	District Total	178,635	142,960

SENATE DISTRICT (2022) NOTES PERSONS PERSONS18 19
19 CORE 38,009 28,953 18 OTHER 8,742 6,878 12 OTHER 10,725 7,973 2 OTHER 34,582 26,868 14 OTHER 86,081 68,357 Other Subtotal 140,130 110,076 District Total 178,139 139,029 20 20 CORE 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071
18 OTHER 8,742 6,878 12 OTHER 10,725 7,973 2 OTHER 34,582 26,868 14 OTHER 86,081 68,357 Other Subtotal 140,130 110,076 District Total 178,139 139,029 20 20 CORE 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071
12 OTHER 10,725 7,973 2 OTHER 34,582 26,868 14 OTHER 86,081 68,357 Other Subtotal 140,130 110,076 District Total 178,139 139,029 20 20 CORE 0 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071
2 OTHER 34,582 26,868 14 OTHER 86,081 68,357 Other Subtotal 140,130 110,076 District Total 178,139 139,029 20 20 CORE 0 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071
14 OTHER 86,081 68,357 Other Subtotal 140,130 110,076 District Total 178,139 139,029 20 20 CORE 0 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071
Other Subtotal 140,130 110,076 District Total 178,139 139,029 20 20 CORE 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071
District Total 178,139 139,029 20 CORE 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 District Total 178,637 137,844 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 55,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
District Total 178,139 139,029 20 CORE 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 District Total 178,637 137,844 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 55,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
20 CORE 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
20 CORE 0 0 1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071
1 OTHER 38,412 28,896 19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
19 OTHER 140,225 108,948 Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
Other Subtotal 178,637 137,844 District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
District Total 178,637 137,844 21 21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
21 CORE 41,197 32,755 33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
33 OTHER 20,968 16,043 5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
5 OTHER 51,672 41,462 28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
28 OTHER 65,522 51,245 Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
Other Subtotal 138,162 108,750 District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
District Total 179,359 141,505 22 22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
22 CORE 133,468 102,305 21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
21 OTHER 45,989 37,071 Other Subtotal 45,989 37,071
Other Subtotal 45,989 37,071
•
•
B1.1.T.1
District Total 179,457 139,376
23
23 CORE 97,351 73,826
24 OTHER 1,628 1,321
25 OTHER 4,723 3,818
29 OTHER 11,015 8,542
31 OTHER 63,458 48,482
Other Subtotal 80,824 62,163
District Total 178,175 135,989
24
24 CORE 16,498 12,413
32 OTHER 161,667 127,988
•
Other Subtotal 161,667 127,988

WRIGHT CORE CONSTITUENCY - SENATE

CO	MDM	DE	CEN	NATE	
LU	IVIP	\nE	3EI	WAIL	

CONFARE SENA		NOTES	PERSONS	PERSONS18
SENATE DISTRICT DISTRICT (2022)				
25		District Total	178,165	140,401
25	25	CORE	422 500	407.064
		CORE	133,589	107,961
		OTHER	13,843	11,093
	29	OTHER	30,438	24,440
		Other Subtotal	44,281	35,533
		District Total	177,870	143,494
26				
	26	CORE	119,888	105,721
	27	OTHER	3,427	2,694
	16	OTHER	55,737	44,679
		Other Subtotal	59,164	47,373
		District Total	179,052	153,094
27				
	27	CORE	79,499	61,576
	26	OTHER	1,956	1,643
	13	OTHER	5,228	3,934
		OTHER	16,595	13,196
		OTHER	35,657	27,489
		OTHER	39,795	31,862
		O T T L T	33,733	01,002
		Other Subtotal	99,231	78,124
		District Total	178,730	139,700
28		District rotar	170,730	133,700
20	28	CORE	103,603	82,889
		OTHER	5,441	4,488
		OTHER	26,755	21,224
		OTHER	43,286	31,287
	22	OTTLIK	+3,200	31,207
		Other Subtotal	75,482	56,999
		District Total	179,085	139,888
29		District rotar	175,085	133,888
25	20	CORE	116,073	90,432
		OTHER	1,026	712
		OTHER	1,944	1,511
	24	OTHER	59,383	47,866
		Other Subtetal	62.252	EU 000
		Other Subtotal	62,353	50,089
20		District Total	178,426	140,521
30		0005	40.405	0.1.10
		CORE	124,262	94,436
	1	OTHER	25,410	19,795

SENATE DISTRICT DISTRICT (2022)	NOTES	PERSONS	PERSONS18
2	OTHER	28,415	22,868
	Other Subtotal	53,825	42,663
	District Total	178,087	137,099
31			50.050
	CORE	75,126	60,362
	OTHER	30,554	24,692
23	OTHER	72,680	55,964
	Other Subtotal	103,234	80,656
	District Total	178,360	141,018
32			
32	CORE	0	0
16	OTHER	1,451	1,168
26	OTHER	30,429	24,427
	OTHER	49,264	38,389
17	OTHER	97,957	76,451
	Other Subtotal	179,101	140,435
	District Total	179,101	140,435
33			
33	CORE	103,243	80,809
11	OTHER	5,411	4,377
28	OTHER	9,381	7,255
8	OTHER	20,197	15,673
13	OTHER	40,605	31,511
	Other Subtotal	75,594	58,816
	District Total	178,837	139,625

	COMPARE			
DISTRICT		NOTES	PERSONS	PERSONS18
1	, ,			
	1	CORE	55,787	45,456
	88	OTHER	3,970	2,959
		Other Subtotal	3,970	2,959
		District Total	59,757	48,415
2				
		CORE	39,115	30,257
		OTHER	1,544	1,228
		OTHER	11,640	8,518
		OTHER	6,750	5,200
	3	OTHER	773	598
		Oth Cht - t - l	20.707	45 544
		Other Subtotal	20,707	15,544
3		District Total	59,822	45,801
3		CORE	37,994	28,318
		OTHER	9,247	7,374
		OTHER	6,382	4,962
		OTHER	5,844	4,502
	27	OTTEN	3,044	4,373
		Other Subtotal	21,473	16,911
		District Total	59,467	45,229
4			,	,
	4	CORE	10,137	7,523
	5	OTHER	22,938	17,313
	56	OTHER	16,767	12,249
	6	OTHER	9,787	7,420
		Other Subtotal	49,492	36,982
		District Total	59,629	44,505
5				
		CORE	31,641	24,258
		OTHER	7,316	5,415
		OTHER	18,953	14,372
	56	OTHER	1,840	1,386
		Other Subtotal	28,109	21,173
		District Total	59,750	45,431
6		District Total	33,730	+3,431
0		CORE	40,761	31,836
		OTHER	3,803	3,000
		OTHER	6,187	4,923
	30	071120	0,107	1,525

40 OTHER

6,854

8,784

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	•	
		District Total	59,535	46,613
7		0005	22.050	40.670
		CORE	23,868	
		OTHER	13,884	•
		OTHER	16,171	•
	15	OTHER	5,402	4,374
		Other Subtotal	35,457	28,392
		District Total	59,325	47,071
8				
	8	CORE	59,362	40,439
		Other Subtotal	0	0
		District Total	59,362	_
9		District Total	33,302	.0, .03
		CORE	59,571	42,238
		OTHER	27	
		Other Subtotal	27	14
		District Total	59,598	42,252
10			•	,
	10	CORE	59,503	45,220
		Other Subtotal	0	0
		District Total	59,503	45,220
11		District rotar	33,303	13,220
		CORE	59,565	41,166
			55,555	,
		Other Subtotal	0	0
		District Total	59,565	41,166
12				·
	12	CORE	54,925	39,030
		OTHER	4,513	
			•	,
		Other Subtotal	4,513	3,403
		District Total	59,438	
13				
	13	CORE	47,941	37,061
	22	OTHER	11,434	8,454
		Other Subtotal	11,434	8,454
		District Total	59,375	45,515

COMPA	R	Е
-------	---	---

D. 16-2-	COIVIPARE	\	DED	DEDCC
DISTRICT	DISTRICT (2022	NOTES	PERSONS	PERSONS18
14	_		04.40=	0.4.005
		4 CORE	31,105	24,306
		7 OTHER	4,447	3,812
		8 OTHER	10,428	8,383
	1	3 OTHER	11,610	9,048
	1	2 OTHER	1,757	1,464
		Other Subtota	l 28,242	22,707
		District Total	59,347	47,013
15				
	1	5 CORE	45,298	36,496
	1	4 OTHER	8,193	6,610
	8	2 OTHER	3,559	2,784
	8	3 OTHER	2,550	2,068
		Other Subtota	l 14,302	11,462
		District Total	59,600	47,958
16				
	1	6 CORE	59,714	45,615
		Other Subtota	l 0	0
		District Total	59,714	45,615
17		District rotar	33,711	.5,615
	1	7 CORE	54,922	40,357
		2 OTHER	1,098	849
		8 OTHER	3,642	2,892
	-	o o men	3,042	2,032
		Other Subtota	l 4,740	3,741
		District Total	59,662	44,098
18		District rotar	33,002	,055
	1	8 CORE	45,276	32,697
		7 OTHER	10,055	7,837
		4 OTHER	4,140	3,297
	-	· Omen	1,110	3,237
		Other Subtota	l 14,195	11,134
		District Total	59,471	43,831
19				
	1	9 CORE	59,320	55,412
		Other Subtota	I 0	0
		District Total	59,320	55,412
20		2.55.756.7564	33,320	33,112
	2	0 CORE	53,223	43,398
		7 OTHER	6,246	4,449
		/ UTILIN	0,240	4,449

DISTRICT DISTRICT (2022) NOTES PERSONS PERSONS18 Other Subtotal District Total 6,246 4,449 59,469 47,847 21 CORE 57,292 44,991 20 OTHER 2,542 1,974 District Total 59,834 46,965 22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal District Total 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267 24 OTHER 2,076 1,928
District Total 59,469 47,847 21 21 CORE 57,292 44,991 20 OTHER 2,542 1,974 Other Subtotal 2,542 1,974 District Total 59,834 46,965 22 22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
21 CORE 57,292 44,991 20 OTHER 2,542 1,974 Other Subtotal 2,542 1,974 District Total 59,834 46,965 22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
21 CORE 57,292 44,991 20 OTHER 2,542 1,974 Other Subtotal 2,542 1,974 District Total 59,834 46,965 22 22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
20 OTHER 2,542 1,974 Other Subtotal 2,542 1,974 District Total 59,834 46,965 22 22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
Other Subtotal 2,542 1,974 District Total 59,834 46,965 22 22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
District Total 59,834 46,965 22 22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
22 CORE 32,468 25,636 24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
24 OTHER 17,774 14,022 99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
99 OTHER 9,033 6,635 Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
Other Subtotal 26,807 20,657 District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
District Total 59,275 46,293 23 CORE 55,719 42,546 12 OTHER 1,571 1,267
23 CORE 55,719 42,546 12 OTHER 1,571 1,267
23 CORE 55,719 42,546 12 OTHER 1,571 1,267
12 OTHER 1,571 1,267
•
24 OTHER 2,076 1,928
Other Subtotal 3,647 3,195
District Total 59,366 45,741
24
24 CORE 23,404 18,160
23 OTHER 3,664 2,966
58 OTHER 15,961 12,444
60 OTHER 4,629 3,558
22 OTHER 11,739 9,265
Other Subtotal 35,993 28,233
District Total 59,397 46,393
25
25 CORE 46,328 36,896
2 OTHER 13,333 10,735
Other Subtotal 13,333 10,735
District Total 59,661 47,631
26
26 CORE 23,306 17,929
27 OTHER 36,496 28,018
Other Subtotal 36,496 28,018
District Total 59,802 45,947

CON	IPARE
-----	-------

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
27				
	27	CORE	17,387	13,918
	26	OTHER	36,334	28,682
	59	OTHER	5,951	5,020
		Other Subtotal	42,285	33,702
		District Total	59,672	47,620
28				
	28	CORE	34,285	27,356
	75	OTHER	2,564	1,993
	73	OTHER	16,526	13,642
	29	OTHER	6,313	4,743
			•	ŕ
		Other Subtotal	25,403	20,378
		District Total	59,688	47,734
29			•	,
	29	CORE	14,982	11,117
		OTHER	25,458	19,235
		OTHER	19,188	14,218
	30	O T T L T	13,100	1.,210
		Other Subtotal	44,646	33,453
		District Total	59,628	44,570
30		District Total	33,020	77,570
30	30	CORE	40,375	30,851
		OTHER	19,094	15,397
	33	O T T L T	13,03 .	13,037
		Other Subtotal	19,094	15,397
		District Total	59,469	46,248
31		District Total	33,403	70,270
31	31	CORE	16,834	14,266
		OTHER	40,072	31,748
		OTHER	2,551	1,878
		OTTLEN	2,331	1,070
		Other Subtotal	42,623	33,626
		District Total	59,457	47,892
32		District Total	33,437	47,032
- J2	27	CORE	51,384	40,897
		OTHER	8,221	6,220
	31	O I I I I I	0,221	0,220
		Other Subtotal	8,221	6,220
		District Total	59,605	47,117
33		District Total	39,003	4/,11/
33	22	CORE	Ε 00Ε	4,743
			5,885	
	83	OTHER	16,583	13,135

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	31	OTHER	18,896	14,728
	97	OTHER	14,687	11,745
	99	OTHER	3,653	2,867
		Other Subtotal	•	42,475
		District Total	59,704	47,218
34				
		CORE	58,229	48,627
	35	OTHER	1,372	1,172
		Other Subtotal	1,372	1,172
		District Total	59,601	49,799
35		2.000000	55,552	.5,755
	35	CORE	24,024	19,716
		OTHER	17,796	13,404
	89	OTHER	16,315	12,788
	34	OTHER	1,291	1,115
		Other Subtotal	35,402	27,307
		District Total	59,426	47,023
36				
	36	CORE	35,458	29,207
	89	OTHER	23,863	18,798
		Other Subtotal	•	18,798
		District Total	59,321	48,005
37				
		CORE	22,926	17,563
		OTHER	2,069	1,598
		OTHER	25,691	19,927
	33	OTHER	8,811	7,024
		Other Subtotal	36,571	28,549
		District Total	59,497	46,112
38		District Total	33, 137	10,111
		CORE	0	0
	42	OTHER	29,141	22,881
	81	OTHER	4,432	3,579
	37	OTHER	6,166	4,805
	39	OTHER	4,761	3,658
	41	OTHER	14,899	11,972
		Other Subtotal	59,399	46,895
		District Total	59,399	46,895

COMP	ARE
------	-----

DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		NOTES	PERSONS	PERSONSIO
39		CODE	42 227	22.452
		CORE	42,327	33,453
		OTHER	6,770	5,368
		OTHER	6,749	5,597
	38	OTHER	3,492	2,681
		Other Subtotal	17,011	13,646
		District Total	59,338	47,099
40				
	40	CORE	41,090	32,766
	6	OTHER	8,906	6,753
	71	OTHER	8,631	6,750
	72	OTHER	873	664
		Other Subtotal	18,410	14,167
		District Total	59,500	46,933
41				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		CORE	25,055	20,268
		OTHER	10,648	8,164
		OTHER	623	510
		OTHER	6,416	5,321
		OTHER	17,011	13,870
	72	OTHER	17,011	13,670
		Other Subtotal	24.609	27.065
			•	27,865
40		District Total	59,753	48,133
42		CODE	0	
		CORE	0	0
		OTHER	13,132	11,095
		OTHER	14,348	11,972
		OTHER	26,714	21,383
	70	OTHER	5,255	4,123
		Other Subtotal	59,449	48,573
		District Total	59,449	48,573
43				
	43	CORE	3,959	3,004
	80	OTHER	12,795	9,934
	45	OTHER	25,940	19,960
	51	OTHER	16,850	13,274
		Other Subtotal	55,585	43,168
		District Total	59,544	46,172
44				
		CORE	51,184	39,824
			5 = , = 5 1	22,021

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	33	OTHER	4,823	3,744
	31	OTHER	39	33
	43	OTHER	3,677	2,941
		Other Subtotal	•	6,718
		District Total	59,723	46,542
45				
		CORE	33,752	25,172
		OTHER	15,604	12,505
		OTHER	6,006	4,633
	43	OTHER	3,935	3,144
		Other Subtotal	25,545	20,282
		District Total	59,297	45,454
46				
	46	CORE	45,270	34,211
	37	OTHER	5,144	3,850
	79	OTHER	579	463
	48	OTHER	3,670	2,795
	38	OTHER	5,131	3,939
	47	OTHER	0	0
		Other Subtotal	•	11,047
		District Total	59,794	45,258
47				
		CORE	2,152	1,516
		OTHER	11,087	8,194
	43	OTHER	46,045	35,744
		Other Subtotal	57,132	43,938
		District Total	59,284	45,454
48		2.00.100.1000.	30,20	.5, .5 .
		CORE	22,686	18,444
		OTHER	28,246	22,309
		OTHER	2,963	2,444
	77	OTHER	5,891	4,509
			·	·
		Other Subtotal	37,100	29,262
		District Total	59,786	47,706
49				
	49	CORE	52,354	41,156
	96	OTHER	7,451	6,104
		Other C. L	7 45 4	6.40:
		Other Subtotal	7,451	6,104

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	59,805	47,260
50				
		CORE	18,750	14,479
		OTHER	33,633	26,323
		OTHER	6,345	5,047
		OTHER	883	643
	31	OTTIER	883	043
		Other Subtotal	40.961	22.012
		District Total	•	32,013
F.4		DISTRICT TOTAL	59,611	46,492
51		CODE	27.404	20.004
		CORE	37,484	28,901
		OTHER	9,735	7,579
		OTHER	9,973	7,423
	49	OTHER	1,420	1,081
	50	OTHER	749	580
		Other Subtotal	21,877	16,663
		District Total	59,361	45,564
52				
	52	CORE	51,139	40,331
	53	OTHER	8,126	6,339
		Other Subtotal	8,126	6,339
		District Total	59,265	46,670
53		2131110110101	33,233	10,070
33		CORE	31,220	24,848
		OTHER	1,787	1,473
		OTHER	13,044	
				10,392
		OTHER	6,556	5,122
		OTHER	2,869	2,189
		OTHER	3,028	2,465
	55	OTHER	1,203	1,029
		Other Subtotal	•	22,670
		District Total	59,707	47,518
54				
	54	CORE	48,233	39,566
	53	OTHER	11,135	8,627
		Other Subtotal	11,135	8,627
		District Total	59,368	48,193
55				
	55	CORE	11,449	9,027
		OTHER	2,008	1,538
	•		.,	.,

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	57	OTHER	41,384	32,175
	56	OTHER	4,802	3,556
		Other Subtotal	48,194	37,269
		District Total	59,643	46,296
56				
	56	CORE	0	0
	55	OTHER	38,913	29,642
	54	OTHER	11,375	9,102
	53	OTHER	9,144	7,625
		Other Subtotal	59,432	46,369
		District Total	59,432	46,369
57				
		CORE	18,033	14,386
		OTHER	33,318	25,867
	55	OTHER	7,972	6,613
		Other Subtotal	•	32,480
		District Total	59,323	46,866
58				
		CORE	3,678	2,834
		OTHER	2,663	2,122
		OTHER	10,562	8,309
		OTHER	36,764	28,623
		OTHER	1,884	
	22	OTHER	3,825	3,040
		Other Subtotal	,	43,562
		District Total	59,376	46,396
59		CORE	7 707	6.002
		CORE	7,787	6,092
		OTHER	11,495	9,240
	58	OTHER	39,968	31,477
		Other Cubtetal	E1 462	40.717
		Other Subtotal	51,463	40,717
60		District Total	59,250	46,809
60		CORE	43,210	33,639
		OTHER		
	24	OTHER	16,449	12,976
		Other Subtotal	16,449	12,976
		District Total	59,659	46,615
61		District Total	33,033	40,013
01				

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	61	CORE	0	0
	62	OTHER	9,139	7,033
	66	OTHER	46,717	33,841
	64	OTHER	3,965	2,881
		Other Subtotal		43,755
63		District Total	59,821	43,755
62		CORE	27 226	20.674
		OTHER	37,336 14.750	29,674
		OTHER	14,750	11,872
	00	OTHER	7,304	5,517
		Other Subtotal	22,054	17,389
		District Total	59,390	47,063
63			·	
	63	CORE	33,631	26,605
	61	OTHER	12,103	9,459
	32	OTHER	8,172	6,366
	83	OTHER	5,542	4,269
		Other Subtotal	25,817	20,094
		District Total	59,448	46,699
64				
	64	CORE	40,022	31,272
	61	OTHER	3,034	2,589
		OTHER	11,153	9,302
	66	OTHER	5,344	4,129
		Other C. brand	40.524	46.020
		Other Subtotal	-,	16,020
65		District Total	59,553	47,292
03		CORE	47,935	35,550
		OTHER	11,587	9,595
	04	OTTLK	11,507	3,333
		Other Subtotal	11,587	9,595
		District Total	59,522	45,145
66			•	·
	66	CORE	0	0
	61	OTHER	44,272	34,992
	65	OTHER	11,430	8,863
	64	OTHER	3,788	2,898
		Other Subtotal	59,490	46,753
		District Total	59,490	46,753

COMPA	R	Е
-------	---	---

DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
67				
		CORE	46,883	36,349
		OTHER	825	628
	68	OTHER	11,745	8,892
		Other Subtotal	12,570	9,520
		District Total	59,453	45,869
68				
	68	CORE	29,171	22,259
	92	OTHER	5,943	4,512
	93	OTHER	7,807	5,971
	67	OTHER	3,454	2,687
	91	OTHER	4,673	3,655
	69	OTHER	8,452	6,820
		Other Subtotal	30,329	23,645
		District Total	59,500	45,904
69				
	69	CORE	0	0
	92	OTHER	6,327	4,691
	70	OTHER	37,113	28,410
	96	OTHER	15,832	11,439
		Other Subtotal	59,272	44,540
		District Total	59,272	44,540
70			·	,
	70	CORE	1,596	1,221
	68	OTHER	18,506	13,258
	69	OTHER	33,371	24,693
	87	OTHER	5,104	3,882
	86	OTHER	1,063	815
		Other Subtotal	58,044	42,648
		District Total	59,640	43,869
71				
	71	CORE	50,193	40,692
	70	OTHER	9,095	7,149
		Other Subtotal	9,095	7,149
		District Total	59,288	47,841
72				
		CORE	27,292	21,556
		OTHER	9,229	7,396
	69	OTHER	17,524	13,864

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	70	OTHER	5,415	4,154
		Other Subtotal	32,168	25,414
		District Total	59,460	46,970
73				
		CORE	38,970	31,190
	74	OTHER	20,689	17,156
		Other Subtotal	•	17,156
		District Total	59,659	48,346
74		CORE	24.044	20.474
		CORE	24,844	20,171
		OTHER	4,285	3,373
	87	OTHER	30,438	24,440
		Othor Cubtet-1	24 722	27 042
		Other Subtotal District Total	•	27,813
75		District Total	59,567	47,984
/5		CORE	EE 220	42.026
		OTHER	55,338 3,971	43,926 3,432
	73	OTTIER	3,971	3,432
		Other Subtotal	3,971	3,432
		District Total	59,309	47,358
76		District Total	33,303	17,556
		CORE	0	0
		OTHER	26,295	21,005
		OTHER	20,339	
		OTHER	8,984	7,410
		OTHER	3,838	3,007
			,	-,
		Other Subtotal	59,456	47,497
		District Total	59,456	47,497
77				
	77	CORE	27,175	23,697
	76	OTHER	32,603	30,411
	79	OTHER	0	0
		Other Subtotal	32,603	30,411
		District Total	59,778	54,108
78				
		CORE	0	0
		OTHER	29,685	23,544
		OTHER	27,061	24,714
	79	OTHER	2,127	1,807

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	47	OTHER	654	556
	46	OTHER	0	0
		Other Subtotal	59,527	50,621
		District Total	59,527	50,621
79				
	79	CORE	0	0
	47	OTHER	24,698	19,099
	80	OTHER	20,888	16,052
	78	OTHER	14,060	11,031
		Other Subtotal	59,646	46,182
		District Total	59,646	46,182
80				
	80	CORE	12,349	9,063
	79	OTHER	21,837	17,382
	78	OTHER	25,325	20,934
	47	OTHER	3	2
		Other Subtotal	47,165	38,318
		District Total	59,514	47,381
81				
	81	CORE	11,918	9,121
	80	OTHER	3,550	2,805
	37	OTHER	14,126	10,482
	79	OTHER	26,160	19,206
	48	OTHER	3,656	3,147
		Other Subtotal	47,492	35,640
		District Total	59,410	44,761
82				
	82	CORE	1,703	1,312
	7	OTHER	14,960	11,538
	84	OTHER	34,578	28,422
	20	OTHER	3,783	2,914
	15	OTHER	4,565	3,608
		Other Subtotal	57,886	46,482
		District Total	59,589	47,794
83				
	83	CORE	34,931	27,078
	62	OTHER	12,950	10,230
	97	OTHER	3,829	2,972
		OTHER	8,086	6,100
			•	•

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	24,865	19,302
		District Total	59,796	46,380
84				
		CORE	11,074	8,906
		OTHER	46,016	36,234
	21	OTHER	2,300	1,817
		Other Subtotal	48,316	38,051
		District Total	59,390	46,957
85				
	85	CORE	44,596	34,849
	35	OTHER	5,462	4,379
	87	OTHER	2,708	2,076
	86	OTHER	6,804	5,386
		Other Subtotal	14,974	11,841
		District Total	59,570	46,690
86			,	,
	86	CORE	42,612	32,878
	85	OTHER	15,076	11,928
	35	OTHER	683	527
	70	OTHER	962	760
		Other Subtotal	16,721	13,215
		District Total	59,333	46,093
87				
	87	CORE	21,161	15,957
	35	OTHER	24,214	19,622
	74	OTHER	14,054	11,566
		Other Subtotal	38,268	31,188
		District Total	59,429	47,145
88				
	88	CORE	20,324	15,736
	4	OTHER	26,352	21,122
	5	OTHER	3,251	2,600
	90	OTHER	9,731	7,182
		Othor Cultist-1	20.224	20.004
		Other Subtotal	•	30,904
00		District Total	59,658	46,640
89		CORE	10.150	14.642
		CORE	19,150	14,642
	90	OTHER	17,449	13,685

JOHNSON CORE CONSTITUENCY - ASSEMBLY

	COMPARE			
DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	4	OTHER	23,147	17,949
		Other Subtotal	40,596	31,634
		District Total	59,746	46,276
90				·
	90	CORE	32,533	23,985
	1	OTHER	3,657	2,971
	88	OTHER	23,608	18,421
		Other Subtotal	27,265	21,392
		District Total	59,798	45,377
91				
	91	CORE	54,740	44,606
	93	OTHER	1,964	1,569
	67	OTHER	2,696	2,118
		Other Subtotal	4,660	3,687
		District Total	59,400	48,293
92				
	92	CORE	47,254	36,202
	93	OTHER	12,453	9,738
		Other Subtotal	12,453	9,738
		District Total	59,707	45,940
93				
	93	CORE	18,375	14,222
	75	OTHER	689	518
	67	OTHER	2,273	1,754
	29	OTHER	38,209	30,605
		Other Subtotal	41,171	32,877
		District Total	59,546	47,099
94				
	94	CORE	51,278	38,820
	95	OTHER	8,101	6,307
		Other Subtotal	8,101	6,307
		District Total	59,379	45,127
95				
	95	CORE	51,378	43,784
	94	OTHER	8,316	6,443
		Other Subtotal	8,316	6,443
		District Total	59,694	50,227

JOHNSON CORE CONSTITUENCY - ASSEMBLY

COMPARE

DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
96				
	96	CORE	36,029	27,076
	49	OTHER	5,934	4,559
	51	OTHER	4,448	3,354
	50	OTHER	13,243	9,948
		Other Subtotal	23,625	17,861
		District Total	59,654	44,937
97		2.0000	30,00 .	,
		CORE	40,250	31,204
	98	OTHER	15,394	12,212
	15	OTHER	4,111	3,243
		Other Subtotal	19,505	15,455
		District Total	59,755	46,659
98				
		CORE	0	0
		OTHER	1,587	1,281
		OTHER	25,304	19,357
		OTHER	31,711	24,800
	97	OTHER	898	686
		Other Subtotal	59,500	46,124
		District Total	59,500	46,124
99			•	·
	99	CORE	15,280	12,047
	98	OTHER	44,012	35,118
		Other Subtotal	44,012	35,118
		District Total	59,292	47,165

		IATE

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
1				
	1	CORE	133,669	104,629
	2	OTHER	1,544	1,228
	20	OTHER	9,247	7,374
	30	OTHER	15,610	11,477
	9	OTHER	18,976	14,737
		Other Subtotal	45,377	34,816
		District Total	179,046	139,445
2			,	•
		CORE	115,264	88,350
		OTHER	8,784	6,854
		OTHER	9,990	7,923
		OTHER	18,607	13,635
		OTHER	26,269	19,787
	_	OTTL	20,203	13,707
		Other Subtotal	63,650	48,199
		District Total	178,914	136,549
3		District Total	170,914	130,349
3		CORE	142 020	101 270
			142,828	101,370
		OTHER	13,884	11,081
	5	OTHER	21,573	17,311
		Other Colored	25.457	20 202
		Other Subtotal	35,457	28,392
		District Total	178,285	129,762
4			4=0.000	10= 116
		CORE	173,993	125,416
	6	OTHER	4,513	3,403
		Other Subtotal	4,513	3,403
		District Total	178,506	128,819
5				
		CORE	144,147	113,521
		OTHER	1,757	
	3	OTHER	4,447	3,812
	28	OTHER	6,109	4,852
	6	OTHER	10,428	8,383
	8	OTHER	11,434	8,454
		Other Subtotal	34,175	26,965
		District Total	178,322	140,486
6				
	6	CORE	163,554	121,561
	4	OTHER	1,098	849

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	5	OTHER	4,140	3,297
	3	OTHER	10,055	7,837
		Other Subtotal	15,293	11,983
		District Total	15,295	133,544
7	,	District Total	170,047	133,344
,		CORE	172,377	145,775
		OTHER	6,246	4,449
		· · · · · · · · · · · · · · · · · · ·	3,2 .3	.,
		Other Subtotal	6,246	4,449
		District Total	178,623	150,224
8				
	8	CORE	146,844	114,523
	4	OTHER	1,571	1,267
	33	OTHER	9,033	6,635
	20	OTHER	20,590	16,002
		Other Subtotal	31,194	23,904
		District Total	178,038	138,427
9		District Total	178,038	138,427
,		CORE	159,851	125,443
		OTHER	5,951	5,020
		OTHER	13,333	10,735
			-,	-,
		Other Subtotal	19,284	15,755
		District Total	179,135	141,198
10				
	10	CORE	140,601	107,520
	25	OTHER	19,090	15,635
	31	OTHER	19,094	15,397
		Other Subtotal	38,184	31,032
		District Total	178,785	138,552
11				
	11	CORE	141,292	112,602
	15	OTHER	2,551	1,878
	28	OTHER	16,583	13,135
	33	OTHER	18,340	14,612
		Other Subtotal	37,474	29,625
		District Total	178,766	142,227
12				
		CORE	138,170	113,241
	30	OTHER	40,178	31,586

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	40,178	31,586
		District Total	178,348	144,827
13				
		CORE	112,133	87,455
	15	OTHER	2,069	1,598
	27	OTHER	4,432	3,579
	11	OTHER	8,811	7,024
	14	OTHER	50,789	40,450
		Other Subtotal	66,101	52,651
		District Total	178,234	140,106
14				
		CORE	96,341	77,614
		OTHER	8,906	6,753
		OTHER	26,714	21,383
	24	OTHER	46,741	37,889
		Other Subtotal	82,361	66,025
		District Total	178,702	143,639
15				·
	15	CORE	128,453	98,678
	27	OTHER	12,795	9,934
	17	OTHER	16,850	13,274
	11	OTHER	20,466	16,282
		Other Subtotal	50,111	39,490
		District Total	178,564	138,168
16	•			
	16	CORE	116,074	89,913
	27	OTHER	579	463
	26	OTHER	5,891	4,509
	13	OTHER	10,275	7,789
	15	OTHER	46,045	35,744
		Other Subtotal	62,790	48,505
		District Total	178,864	138,418
17				
		CORE	111,640	86,840
	14	OTHER	6,345	5,047
	32	OTHER	7,451	6,104
	27	OTHER	53,341	41,325
		Other Subtotal	67,137	52,476

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		District Total	178,777	139,316
18				
	18	CORE	156,409	124,833
	13	OTHER	1,787	1,473
	19	OTHER	4,072	3,218
	14	OTHER	16,072	12,857
		Other Subtotal	21,931	17,548
		District Total	178,340	142,381
19				
	19	CORE	155,871	121,266
	1	OTHER	2,008	1,538
	18	OTHER	20,519	16,727
		Other Subtotal	22,527	18,265
		District Total	178,398	139,531
20				
		CORE	142,902	111,905
		OTHER	1,884	1,468
	13	OTHER	13,225	10,431
	8	OTHER	20,274	16,016
		Other Subtotal	35,383	27,915
		District Total	178,285	139,820
21				
		CORE	106,959	84,643
	28	OTHER	5,542	4,269
	11	OTHER	8,172	6,366
	22	OTHER	57,986	42,239
		Other Subtotal	71,700	52,874
		District Total	178,659	137,517
22				
		CORE	120,106	92,307
	21	OTHER	58,459	46,883
		Other Subtotal	58,459	46,883
		District Total	178,565	139,190
23		CORE	00 70-	77.00-
		CORE	99,705	77,007
		OTHER	825	628
		OTHER	15,832	11,439
		OTHER	24,750	18,829
	24	OTHER	37,113	28,410

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
		Other Subtotal	78,520	59,306
		District Total	178,225	136,313
24				
	24	CORE	93,591	74,772
		OTHER	15,396	12,093
	23	OTHER	69,401	51,815
		Other Subtotal	84,797	63,908
		District Total	178,388	138,680
25				
	25	CORE	143,812	115,875
	23	OTHER	4,285	3,373
	29	OTHER	30,438	24,440
		Other Subtotal	34,723	27,813
		District Total	178,535	143,688
26			,	•
	26	CORE	133,473	115,902
	27	OTHER	11,111	9,217
	16	OTHER	34,177	27,107
		Other Subtotal	45,288	36,324
		District Total	178,761	152,226
27				·
	27	CORE	96,702	73,629
	13	OTHER	14,126	10,482
	16	OTHER	28,357	22,248
	26	OTHER	39,385	31,965
		Other Subtotal	81,868	64,695
		District Total	178,570	138,324
28			,	
	28	CORE	136,388	108,052
	33	OTHER	3,829	2,972
	5	OTHER	4,565	3,608
	7	OTHER	6,083	4,731
	21	OTHER	12,950	10,230
	3	OTHER	14,960	11,538
		Other Subtotal	42,387	33,079
		District Total	178,775	141,131
29		CORE	132,957	103,074
	23	COME	132,337	103,074

	COMPARE SENATE			
SENATE DISTRICT	DISTRICT (2022)	NOTES	PERSONS	PERSONS18
	24	OTHER	962	760
	25	OTHER	14,054	11,566
	12	OTHER	30,359	24,528
		Other Subtotal	45,375	36,854
		District Total	178,332	139,928
30		District rotar	170,332	133,320
	30	CORE	122,795	93,651
	1	OTHER	3,657	2,971
	2	OTHER	52,750	41,671
		Other Subtotal	56,407	44,642
		District Total	179,202	138,293
31		District Total	179,202	130,293
31		CORE	134,786	106,337
		OTHER	689	518
		OTHER	4,969	3,872
		OTHER	38,209	30,605
	10	OTHER	36,209	30,003
		Other Subtotal	43,867	34,995
		District Total	178,653	141,332
32				
	32	CORE	155,102	122,430
	17	OTHER	23,625	17,861
		Oth on Cubtotal	22.625	17.061
		Other Subtotal	23,625	17,861
22		District Total	178,727	140,291
33		CORE	1/7 5/5	116.067
		CORE	147,545	116,067
		OTHER	4,111	3,243
	13	OTHER	26,891	20,638
		Other Subtotal	31,002	23,881
		District Total	178,547	139,948

GOVERNOR SENATE DISENFRANCHISEMENT

Disenfranchised = FROM: EVEN, TO: ODD

Displayed By New Senate District (Odd

Displayed By New Senate	Dist			_
SEN (WI_AD_Remedial)	_	SEN (2022)	2	Persons
	1		2	7,712
	1		20	9,247
	1	0.1	30	13,515
		Subtotal (SEN 1):		30,474
	3		28	13,415
		Subtotal (SEN 3):		13,415
	7		28	1,703
		Subtotal (SEN 7):		1,703
	9		20	12,313
		Subtotal (SEN 9):		12,313
	11		22	1,341
	11		28	11,034
		Subtotal (SEN 11):		12,375
	13		18	22,449
	13		14	61,085
		Subtotal (SEN 13):		83,534
	17		32	16,339
		Subtotal (SEN 17):		16,339
	19		2	14,688
	19		24	20,571
	19		18	36,786
	19		14	46,454
		Subtotal (SEN 19):		118,499
	21		22	38,272
	21		28	92,137
		Subtotal (SEN 21):		130,409
	23		10	10,542
		Subtotal (SEN 23):		10,542
	25		10	44,899
		Subtotal (SEN 25):		44,899
	27		16	3,381
	27		26	75,809

GOVERNOR SENATE DISENFRANCHISEMENT

	Subtotal (SEN 27):		79,190
29		12	2,186
29		2	4,777
29		14	7,993
29		24	17,835
	Subtotal (SEN 29):		32,791
	(======================================		,
31		10	25,499
	Subtotal (SEN 31):		25,499
33		28	8,750
33		20	18,207
33		8	32,604
	Subtotal (SEN 33):		59,561
	Total Disenfranchised:		671,543
Displayed By 2022 Senate Dis	trict (Even)		
SEN (2022)	SEN (WI_AD_Remedial)		Persons
2	SEN (WI_AD_Nemedial)	1	7,712
2		19	14,688
2		29	4,777
2	Subtatal (2022 SEN 2)	29	
	Subtotal (2022 SEN 2):		27,177
20		1	9,247
20		9	12,313
20		33	18,207
	Subtotal (2022 SEN 20):		39,767
30		1	13,515
	Subtotal (2022 SEN 30):		13,515
28		3	13,415
28		7	1,703
28		11	11,034
28		21	92,137
28		33	8,750
20	Subtotal (2022 SEN 28):	55	127,039
	222 2014 201.		127,000
22		11	1,341
22		21	38,272
	Subtotal (2022 SEN 22):		39,613
18		13	22,449
10		13	, ++3

GOVERNOR SENATE DISENFRANCHISEMENT

18	Subtotal (2022 SEN 18):	19	36,786 59,235
14 14 14	Subtotal (2022 SEN 14):	13 19 29	61,085 46,454 7,993 115,532
32	Subtotal (2022 SEN 32):	17	16,339 16,339
24 24	Subtotal (2022 SEN 24):	19 29	20,571 17,835 38,406
10 10 10	Subtotal (2022 SEN 10):	23 25 31	10,542 44,899 25,499 80,940
16	Subtotal (2022 SEN 16):	27	3,381 3,381
26	Subtotal (2022 SEN 26):	27	75,809 75,809
12	Subtotal (2022 SEN 12):	29	2,186 2,186
8	Subtotal (2022 SEN 8):	33	32,604 32,604
	Total Disenfranchised:		671,543

SENATE DEMOCRATS SENATE DISENFRANCHISEMENT

Disenfranchised = FROM: EVEN, TO: ODD

Displayed by New Sellate District (Odd)	Displayed	By New Senate District ((Odd)	
---	-----------	--------------------------	-------	--

Displayed By New Senate	Dist			D
SEN (Senate_Democrats)	_	SEN (2022)	20	Persons
	1		30	16,465
	1		20	17,268
	1		2	18,144
		Subtotal (SEN 1):		51,877
	3		28	34,580
		Subtotal (SEN 3):		34,580
	5		28	1,697
	5		6	14,513
		Subtotal (SEN 5):		16,210
	7		28	56,289
		Subtotal (SEN 7):		56,289
	9		20	6,056
		Subtotal (SEN 9):		6,056
	11		28	18,278
		Subtotal (SEN 11):		18,278
	13		16	51,235
		Subtotal (SEN 13):		51,235
	17		26	23,043
		Subtotal (SEN 17):		23,043
	19		18	60,082
	13	Subtotal (SEN 19):	10	60,082
		Subtotal (SEIV 13).		00,002
	21		22	53,704
		Subtotal (SEN 21):		53,704
	23		32	17,606
	23		24	41,122
		Subtotal (SEN 23):		58,728
	25		12	3,552
	25		10	5,729
		Subtotal (SEN 25):		9,281
	27		14	49,927
		Subtotal (SEN 27):		49,927

SENATE DEMOCRATS SENATE DISENFRANCHISEMENT

29		12	13,443
	Subtotal (SEN 29):		13,443
31	C (CEN 24)	10	25,499
	Subtotal (SEN 31):		25,499
33		8	31,936
33		20	40,811
	Subtotal (SEN 33):		72,747
	Total Discussus abised.		600.070
	Total Disenfranchised:		600,979
Displayed By 2022 Senate Dis	trict (Even)		
SEN (2022)	SEN (Senate_Democrats)		Persons
30		1	16,465
	Subtotal (2022 SEN 30):		16,465
20		1	17,268
20		9	6,056
20		33	40,811
	Subtotal (2022 SEN 20):		64,135
	,		,
2		1	18,144
	Subtotal (2022 SEN 2):		18,144
28		3	24 590
28		5 5	34,580 1,697
28		7	56,289
28		11	18,278
	Subtotal (2022 SEN 28):		110,844
6		5	14,513
	Subtotal (2022 SEN 6):		14,513
16		13	51,235
10	Subtotal (2022 SEN 16):	13	51,235
	(2022 02.11 20).		0-,-00
26		17	23,043
	Subtotal (2022 SEN 26):		23,043
18	C. http://2003.0534.403	19	60,082
	Subtotal (2022 SEN 18):		60,082
22		21	53,704
22			33,704

SENATE DEMOCRATS SENATE DISENFRANCHISEMENT

	Subtotal (2022 SEN 22):		53,704
32	Subtotal (2022 SEN 32):	23	17,606 17,606
24	Subtotal (2022 SEN 24):	23	41,122 41,122
12 12	Subtotal (2022 SEN 12):	25 29	3,552 13,443 16,995
10 10		25 31	5,729 25,499
	Subtotal (2022 SEN 10):		31,228
14	Subtotal (2022 SEN 14):	27	49,927 49,927
8	Subtotal (2022 SEN 8):	33	31,936 31,936
	Total Disenfranchised:		600,979

CLARKE SENATE DISENFRANCHISEMENT

Disenfranchised = FROM: EVEN, TO: ODD

Displayed By Ne	w Senate District (Odd)
-----------------	-------------------------

Displayed By New Senate	e Dist			
SEN (Clarke_Asm)		SEN (2022)	F	Persons
	1		30	5,015
	1		20	17,373
		Subtotal (SEN 1):		22,388
	5		28	28,019
		Subtotal (SEN 5):		28,019
	7		28	2,048
		Subtotal (SEN 7):		2,048
	^		20	66.202
	9		20	66,203
		Subtotal (SEN 9):		66,203
	11		28	48,687
	11	Subtotal (SEN 11):	20	48,687
		Subtotal (SEN 11).		40,007
	13		14	5,229
	13		16	39,371
		Subtotal (SEN 13):		44,600
		,		,
	19		12	22,038
	19		30	30,227
	19		14	36,183
	19		2	54,151
		Subtotal (SEN 19):		142,599
	21		28	33,580
	21		22	50,033
		Subtotal (SEN 21):		83,613
	23		12	949
	23		24	20,692
		Subtotal (SEN 23):		21,641
	27		26	F F10
	27		26	5,518
	27		16	18,617
	27		14	45,310
		Subtotal (SEN 27):		69,445
	29		24	92,330
	23	Subtotal (SEN 29):	∠→	92,330
		343total (321 4 23).		32,330
	31		10	39,089
			-	-,

CLARKE SENATE DISENFRANCHISEMENT

		Subtotal (SEN 31):		39,089
<u> </u>	33		28	3,201
3	33		8	33,291
		Subtotal (SEN 33):		36,492
		Total Disenfranchised:		697,154
Displayed By 2022 Senate D	Dist	trict (Even)		
SEN (2022)		SEN (Clarke_Asm)		Persons
3	30		1	5,015
3	30		19	30,227
		Subtotal (2022 SEN 30):		35,242
2	20		1	17,373
	20		9	66,203
		Subtotal (2022 SEN 20):		83,576
2	28		5	28,019
	28		7	2,048
	28		11	48,687
	28		21	33,580
	28		33	3,201
		Subtotal (2022 SEN 28):		115,535
2	14		13	5,229
	14		19	36,183
-	14		27	45,310
		Subtotal (2022 SEN 14):		86,722
<u>.</u>	16		13	39,371
·	16		27	18,617
		Subtotal (2022 SEN 16):		57,988
-	12		19	22,038
	12		23	949
		Subtotal (2022 SEN 12):		22,987
	2		19	54,151
		Subtotal (2022 SEN 2):		54,151
	22		21	50,033
		Subtotal (2022 SEN 22):		50,033
2	24		23	20,692

CLARKE SENATE DISENFRANCHISEMENT

697,154

24 Subtotal (2022 SEN 24):	29	92,330 113,022
26 Subtotal (2022 SEN 26):	27	5,518 5,518
10 Subtotal (2022 SEN 10):	31	39,089 39,089
8 Subtotal (2022 SEN 8):	33	33,291 33,291

Total Disenfranchised:

WRIGHT SENATE DISENFRANCHISEMENT

Disenfranchised = FROM: EVEN, TO: ODD

,		
Displayed By New Senate District (Odd)		
SEN (Atkinson_Wright_Asm) SEN (2022)	F	Persons
1	2	37,857
Subtotal (SEN 1):		37,857
_		
5	8	3,722
Subtotal (SEN 5):		3,722
9	20	20 115
	20	29,115
Subtotal (SEN 9):		29,115
11	22	1,338
Subtotal (SEN 11):		1,338
Subtotal (SEN 11).		1,556
13	14	7,207
13	8	11,739
13	20	108,205
Subtotal (SEN 13):		127,151
•		

17

27

27

27

29

Subtotal (SEN 27):

32

16,718

26

16

14

12

1,956

16,595

39,795

58,346

1,944

WRIGHT SENATE DISENFRANCHISEMENT

29	24	59,383
Subtotal (SEN 29):		61,327
31	10	30,554
Subtotal (SEN 31):		30,554
33	28	9,381
33	8	20,197
Subtotal (SEN 33):		29,578

Total Disenfranchised: 750,208

D. I. I. 2000 C. I. D. I.				
Displayed By 2022 Senate District (Even) SEN (2022) SEN (Atkinson_Wright_Asm) Persons				
2	1 2 1 (Atkinson_wright_Asin)	37,857		
2	19	34,582		
	Subtotal (2022 SEN 2):	72,439		
	,	·		
8	5	3,722		
8	13	11,739		
8	33	20,197		
	Subtotal (2022 SEN 8):	35,658		
20	9	29,115		
20	13	108,205		
	Subtotal (2022 SEN 20):	137,320		
22	11	1,338		
	Subtotal (2022 SEN 22):	1,338		
14	13	7,207		
14	17	32,481		
14	19	86,081		
14	27	39,795		
	Subtotal (2022 SEN 14):	165,564		
32	17	16,718		
	Subtotal (2022 SEN 32):	16,718		
24	17	100,898		
24	23	1,628		
24	29	59,383		
	Subtotal (2022 SEN 24):	161,909		
18	19	8,742		

WRIGHT SENATE DISENFRANCHISEMENT

	Subtotal (2022 SEN 18):		8,742
12 12	Subtotal (2022 SEN 12):	19 29	10,725 1,944 12,669
28 28	Subtotal (2022 SEN 28):	21 33	65,522 9,381 74,903
10 10	Subtotal (2022 SEN 10):	25 31	13,843 30,554 44,397
26	Subtotal (2022 SEN 26):	27	1,956 1,956
16	Subtotal (2022 SEN 16):	27	16,595 16,595
	Total Disenfranchised:		750,208

JOHNSON SENATE DISENFRANCHISEMENT

Disenfranchised = FROM: EVEN, TO: ODD

Displayed B	y New Senate [District (Odd)
-------------	----------------	----------------

Displayed By New Senate D	ist			
SEN (Johnson_Assembly)		SEN (2022)		Persons
	1		2	1,544
	1		20	9,247
	1		30	15,610
		Subtotal (SEN 1):		26,401
	3		28	13,884
		Subtotal (SEN 3):		13,884
	5		4	1,757
	5		28	6,109
	5		6	10,428
	5		8	11,434
		Subtotal (SEN 5):		29,728
	9		20	5,951
		Subtotal (SEN 9):		5,951
1	11		28	16,583
		Subtotal (SEN 11):		16,583
1	13		14	50,789
		Subtotal (SEN 13):		50,789
<u>-</u>	17		14	6,345
2	17		32	7,451
		Subtotal (SEN 17):		13,796
2	19		18	20,519
		Subtotal (SEN 19):		20,519
2	21		28	5,542
2	21		22	57,986
		Subtotal (SEN 21):		63,528
2	23		32	15,832
2	23		24	37,113
		Subtotal (SEN 23):		52,945
2	27		16	28,357
2	27		26	39,385
		Subtotal (SEN 27):		67,742
2	29		24	962

JOHNSON SENATE DISENFRANCHISEMENT

	29		12	30,359
		Subtotal (SEN 29):		31,321
	31		10	38,209
		Subtotal (SEN 31):		38,209
		Total Disenfranchised:		431,396
Displayed By 2022 Senate	Dis			
SEN (2022)		SEN (Johnson_Assembly)		Persons
	2		1	1,544
		Subtotal (2022 SEN 2):		1,544
	20		1	9,247
	20		9	5,951
		Subtotal (2022 SEN 20):		15,198
	30		1	15,610
		Subtotal (2022 SEN 30):		15,610
	28		3	13,884
	28		5	6,109
	28		11	16,583
	28		21	5,542
		Subtotal (2022 SEN 28):		42,118
	4		5	1,757
		Subtotal (2022 SEN 4):		1,757
	6		5	10,428
		Subtotal (2022 SEN 6):		10,428
				10,120
	8		5	11,434
		Subtotal (2022 SEN 8):		11,434
	14		13	50,789
	14		17	6,345
	14	Cubtotal (2022 CEN 44)	Τ/	
		Subtotal (2022 SEN 14):		57,134
	32		17	7,451
	32		23	15,832
		Subtotal (2022 SEN 32):		23,283
	18		19	20,519
		6 1 1/2022 651 40)		20.540

20,519

Subtotal (2022 SEN 18):

JOHNSON SENATE DISENFRANCHISEMENT

431,396

22 Subtotal (2022 SEN 22):	21	57,986 57,986
24 24 Subtotal (2022 SEN 24):	23 29	37,113 962 38,075
16 Subtotal (2022 SEN 16):	27	28,357 28,357
26 Subtotal (2022 SEN 26):	27	39,385 39,385
12 Subtotal (2022 SEN 12):	29	30,359 30,359
10 Subtotal (2022 SEN 10):	31	38,209 38,209

Total Disenfranchised:

District: 19

District: 20

19

20

1

1

GOVERNOR INCUMBENT PAIRINGS - ASSEMBLY

			Elected			
	Count	District	District	Name	Party	House
District: 1	1	1	1	Representative Joel Kitchens	Republican	Assembly
District: 2	2	2	88	Representative John Macco	Republican	Assembly
		2	2	Representative Shae A. Sortwell	Republican	Assembly
District: 3	2	3	3	Representative Ron Tusler	Republican	Assembly
		3	59	Representative Ty A. Bodden	Republican	Assembly
District: 4	2	4	4	Representative David Steffen	Republican	Assembly
		4	89	Representative Elijah R. Behnke	Republican	Assembly
District: 5	1	5	5	Representative Joy L. Goeben	Republican	Assembly
District: 6	1	6	6	Representative Peter A. Schmidt	Republican	Assembly
District: 7	2	7	84	Representative Bob G. Donovan	Republican	Assembly
		7	7	Representative Daniel Riemer	Democrat	Assembly
District: 8	1	8	8	Representative Sylvia Ortiz-Velez	Democrat	Assembly
District: 9	1	9	9	Representative Marisabel Cabrera	Democrat	Assembly
District: 10	1	10	10	Representative Darrin B. Madison	Democrat	Assembly
District: 11	1	11	11	Representative Dora E. Drake	Democrat	Assembly
District: 12	1	12	12	Representative LaKeshia Myers	Democrat	Assembly
District: 13	2	13	14	Representative Robyn Vining	Democrat	Assembly
		13	13	Representative Tom A. Michalski	Republican	Assembly
District: 14	0					
District: 15	1	15	98	Representative Adam Neylon	Republican	Assembly
District: 16	1	16	16	Representative Kalan Haywood	Democrat	Assembly
District: 17	1	17	17	Representative Supreme Moore Om	n Democrat	Assembly
District: 18	1	18	18	Representative Evan Goyke	Democrat	Assembly

19 Representative Ryan M. Clancy

20 Representative Christine Sinicki

Democrat Assembly

Democrat Assembly

	Count	District	Elected	Nama	Down	Havea
District: 21	Count 1	District 21	District 21	Representative Jessie Rodriguez	Party Republican	House Assembly
District: 22	1	22	24	Representative Paul Melotik	Republican	Assembly
District: 23	1	23	23	Representative Deb Andraca	Democrat	Assembly
District: 24	1	24	22	Representative Janel Brandtjen	Republican	Assembly
District: 25	2	25 25		Representative Amy E. Binsfeld Representative Paul Tittl	Republican Republican	•
District: 26	0					
District: 27	1	27	26	Representative Terry Katsma	Republican	Assembly
District: 28	0					
District: 29	1	29	92	Representative Treig E. Pronschinsl	« Republican	Assembly
District: 30	1	30	30	Representative Shannon Zimmerm	a Republican	Assembly
District: 31	1	31	31	Representative Ellen L. Schutt	Republican	Assembly
District: 32	2	32 32		Representative Amanda M. Nedwe Representative Tyler August	s Republican Republican	•
District: 33	1	33	63	Representative Robin Vos	Republican	Assembly
District: 34	1	34	34	Representative Rob Swearingen	Republican	Assembly
District: 35	1	35	35	Representative Calvin T. Callahan	Republican	Assembly
District: 36	1	36	36	Representative Jeffrey Mursau	Republican	Assembly
District: 37	1	37	39	Representative Mark Born	Republican	Assembly
District: 38	0					
District: 39	1	39	41	Representative Alex A. Dallman	Republican	Assembly
District: 40	1	40	81	Representative Dave Considine	Democrat	Assembly
District: 41	1	41	50	Representative Tony Kurtz	Republican	Assembly
District: 42	2	42	42	Representative Jon Plumer	Republican	Assembly

	- 1				
 e	~	П	ρ	~	
	_	Ľ		u	

	Count	District 42	District 37	Name Representative William Penterman	Party Republican	House Assembly
District: 43	0					
District: 44	1	44	44	Representative Sue S. Conley	Democrat	Assembly
District: 45	1	45	45	Representative Clinton M. Andersor	n Democrat	Assembly
District: 46	1	46	46	Representative Melissa Ratcliff	Democrat	Assembly
District: 47	1	47	47	Representative Jimmy Anderson	Democrat	Assembly
District: 48	1	48	48	Representative Samba Baldeh	Democrat	Assembly
District: 49	1	49	49	Representative Travis Tranel	Republican	Assembly
District: 50	1	50	43	Representative Jenna Jacobson	Democrat	Assembly
District: 51	1	51	51	Representative Todd Novak	Republican	Assembly
District: 52	1	52	57	Representative Lee Snodgrass	Democrat	Assembly
District: 53	0					
District: 54	1	54	54	Representative Lori A. Palmeri	Democrat	Assembly
District: 55	2	55 55		Representative Michael Schraa Representative Nate L. Gustafson	Republican Republican	•
District: 56	1	56	56	Representative David Murphy	Republican	Assembly
District: 57	1	57	40	Representative Kevin Petersen	Republican	Assembly
District: 58	1	58	58	Representative Rick Gundrum	Republican	Assembly
District: 59	1	59	60	Representative Robert Brooks	Republican	Assembly
District: 60	1	60	52	Representative Jerry L. O'Connor	Republican	Assembly
District: 61	0	l				
District: 62	1	62	62	Representative Robert Wittke	Republican	Assembly
District: 63	0	ı				

	- 1				
 le	~	П	Δ.	n	
	_	Ľ		u	

			Elected			
	Count	District	District	Name	Party	House
District: 64	1	64	64	Representative Tip McGuire	Democrat	Assembly
					_	
District: 65	1	65	65	Representative Tod Ohnstad	Democrat	Assembly
District: CC	1	CC	cc	Danuarantativa Cuata Navibavan	Damaanat	٠ . ا ما محمد ۵
District: 66	1	66	00	Representative Greta Neubauer	Democrat	Assembly
District: 67	1	67	75	Representative David Armstrong	Republican	Accombly
District. 07		07	73	Representative David Armstrong	Republican	Assembly
District: 68	2	68	87	Representative James Edming	Republican	Assembly
2.50.100.00	_	68		Representative Rob Summerfield	Republican	-
						, , , , , , , , , , , , , , , , , , , ,
District: 69	0					
District: 70	1	70	70	Representative Nancy VanderMeer	Republican	Assembly
District: 71	1	71	71	Representative Katrina Shankland	Democrat	Assembly
District: 72	1	72	72	Representative Scott Krug	Republican	Assembly
District: 73	1	73	73	Representative Angie Sapik	Republican	Assembly
District: 74	1	74	74	Representative Chanz J. Green	Republican	Assembly
District: 75	1	75	20	Depresentative Cae Magnefici	Donublican	A seembly
District: 75	1	75	20	Representative Gae Magnafici	Republican	Assembly
District: 76	1	76	76	Representative Francesca Hong	Democrat	Assembly
District. 70	_	70	70	Representative Francesca Hong	Democrat	Assembly
District: 77	0					
2.0000						
District: 78	1	78	77	Representative Shelia Stubbs	Democrat	Assembly
				·		•
District: 79	1	79	78	Representative Lisa Subeck	Democrat	Assembly
District: 80	2	80	79	Representative Alex R. Joers	Democrat	Assembly
		80	80	Representative Mike Bare	Democrat	Assembly
District: 81	0					
District: 82	1	82	97	Representative Scott Allen	Republican	Assembly
District CC		22	4 =	Danis and the Control of the Control	Dan III	A == 1 - 1
District: 83	1	83	15	Representative Dave G. Maxey	Republican	Assembly
District: 84	2	84	02	Paprocontative Church Wichgara	Popublicas	Accombly
טואנו וננ: 84	2	84 84		Representative Chuck Wichgers Representative Nik P. Rettinger	Republican Republican	•
		04	03	nepresentative wik P. Rettinger	rehaniicali	Assembly

District: 85	Count 0	District	Elected District	Name	Party	House
District: 86	2	86 86		Representative Donna M. Rozar Representative John Spiros	Republican Republican	•
District: 87	1	87	85	Representative Patrick Snyder	Republican	Assembly
District: 88	0					
District: 89	0					
District: 90	1	90	90	Representative Kristina M. Shelton	Democrat	Assembly
District: 91	2	91 91		Representative Jodi Emerson Representative Karen R. Hurd	Democrat Republican	Assembly Assembly
District: 92	1	92	29	Representative Clint P. Moses	Republican	Assembly
District: 93	1	93	93	Representative Warren Petryk	Republican	Assembly
District: 94	1	94	94	Representative Steve Doyle	Democrat	Assembly
District: 95	1	95	95	Representative Jill Billings	Democrat	Assembly
District: 96	1	96	96	Representative Loren Oldenburg	Republican	Assembly
District: 97	2	97 97		Representative Cindi Duchow Representative Scott L. Johnson	Republican Republican	•
District: 98	0					
District: 99	1	99	38	Representative Barbara Dittrich	Republican	Assembly

GOVERNOR INCUMBENT PAIRINGS - SENATE

			Elected				
Canata District, 1	Count	District	District	Name		Party	House
Senate District: 1	0						
Senate District: 2	0						
Senate District: 3	1	3	3	Senator	Tim Carpenter	Democrat	Senate
Senate District: 4	1	4	4	Senator	Lena C. Taylor	Democrat	Senate
Senate District: 5	1	5	5	Senator	Rob Hutton	Republican	Senate
Senate District: 6	1	6	6	Senator	LaTonya Johnson	Democrat	Senate
Senate District: 7	1	7	7	Senator	Chris Larson	Democrat	Senate
Senate District: 8	2	8	20	Senator	Duey Stroebel	Republican	Senate
		8			Daniel Knodl	Republican	
Senate District: 9	1	9	9	Senator	Devin LeMahieu	Republican	Senate
Senate District: 10	1	10	10	Senator	Rob Stafsholt	Republican	Senate
Senate District: 11	1	11	11	Senator	Steve L. Nass	Republican	Senate
Senate District: 12	1	12	12	Senator	Mary Felzkowski	Republican	Senate
Senate District: 13	2	13	13	Senator	John Jagler	Republican	Senate
		13	14	Senator	Joan Ballweg	Republican	Senate
Senate District: 14	1	14	17	Senator	Howard L. Marklein	Republican	Senate
Senate District: 15	1	15	15	Senator	Mark Spreitzer	Democrat	Senate
Senate District: 16	0						
Senate District: 17	0						
Senate District: 18	0						
Senate District: 19	1	19	19	Senator	Rachael Cabral-Guevar	Republican	Senate
Senate District: 20	1	20	18	Senator	Dan Feyen	Republican	Senate
Senate District: 21	2	21 21			Van H. Wanggaard Julian Bradley	Republican Republican	

GOVERNOR INCUMBENT PAIRINGS - SENATE

Elected	ł
---------	---

			Elected			
	Count	District	District	Name	Party	House
Senate District: 22	1	22	22	Senator Robert W. Wirch	Democrat	Senate
Senate District: 23	1	23	25	Senator Romaine Robert Quinr	Republican	Senate
202	_					00.10.00
Senate District: 24	1	24	24	Senator Patrick Testin	Republican	Sonato
Senate District. 24	1	24	24	Seliator Fatrick Testill	Republican	Jenate
6 . 5						
Senate District: 25	0					
Senate District: 26	2	26	16	Senator Melissa Agard	Democrat	Senate
		26	26	Senator Kelda Roys	Democrat	Senate
Senate District: 27	1	27	27	Senator Dianne H. Hesselbein	Democrat	Senate
Senate District: 28	0					
202	·					
Senate District: 29	1	29	20	Senator Cory Tomczyk	Republican	Sanata
Seriate District. 25	1	23	23	Senator cory romezyk	Republican	Seriate
C	2	20	4	Constant Andrews	D Idda.	C
Senate District: 30	3	30		Senator Andre Jacque	Republican	
		30		Senator Robert L. Cowles	Republican	
		30	30	Senator Eric Wimberger	Republican	Senate
Senate District: 31	2	31	23	Senator Jesse L. James	Republican	Senate
		31	31	Senator Jeff Smith	Democrat	Senate
Senate District: 32	1	32	32	Senator Brad Pfaff	Democrat	Senate
Schale District. 32	_	32	32	Schator Brad Flair	Democrat	Jenate
Conata District: 22	4	22	22	Constar Chris Kananga	Donublican	Canata
Senate District: 33	1	33	33	Senator Chris Kapenga	Republican	senate

Elected

			Elected			
District: 1	Count		District		Party	House
District: 1	1	. 1	1	Representative Joel Kitchens	Republican	Assembly
District: 2	2	2 2	88	Representative John Macco	Republican	Assembly
		2	2	Representative Shae A. Sortwell	Republican	Assembly
5:					5 LI:	
District: 3	2	: 3 3		Representative Ron Tusler Representative Ty A. Bodden	Republican Republican	•
		3	39	Representative by A. Bouden	Republican	Assembly
District: 4	1	. 4	89	Representative Elijah R. Behnke	Republican	Assembly
District: 5	2			Representative David Steffen	Republican	•
		5	5	Representative Joy L. Goeben	Republican	Assembly
District: 6	1	. 6	6	Representative Peter A. Schmidt	Republican	Assembly
District: 7	1	. 7	7	Representative Daniel Riemer	Democrat	Assembly
District: 8	1	. 8	8	Representative Sylvia Ortiz-Velez	Democrat	Assembly
District. 0	-	. 0	0	Representative Sylvia Ortiz Velez	Democrat	Assembly
District: 9	1	. 9	9	Representative Marisabel Cabrera	Democrat	Assembly
					_	
District: 10	1	. 10	10	Representative Darrin B. Madison	Democrat	Assembly
District: 11	1	. 11	11	Representative Dora E. Drake	Democrat	Assembly
District: 12	1	. 12	12	Representative LaKeshia Myers	Democrat	Assembly
District: 13	C	1				
District. 13		•				
District: 14	2	. 14	14	Representative Robyn Vining	Democrat	Assembly
		14	13	Representative Tom A. Michalski	Republican	Assembly
District: 15	C	1				
District. 15		,				
District: 16	1	. 16	16	Representative Kalan Haywood	Democrat	Assembly
					_	
District: 17	1	. 17	17	Representative Supreme Moore Omokuno	Democrat	Assembly
District: 18	1	. 18	18	Representative Evan Goyke	Democrat	Assembly
				,		,
District: 19	1	. 19	19	Representative Ryan M. Clancy	Democrat	Assembly
District: 20	1	. 20	20	Representative Christine Sinicki	Democrat	Assembly
טוטנווננ. 20	L	. 20	20	representative emistine sinicki	Democrat	Assembly
District: 21	1	. 21	84	Representative Bob G. Donovan	Republican	Assembly

	Elected		Elected			
	Count	District	District	Name	Party	House
District: 22	1	22	22	Representative Janel Brandtjen	Republican	Assembly
District: 23	1	23	23	Representative Deb Andraca	Democrat	Assembly
District: 24	1	24	24	Representative Paul Melotik	Republican	Assembly
District: 25	1	25	25	Representative Paul Tittl	Republican	Assembly
District: 26	0					
District: 27	2	27	27	Representative Amy E. Binsfeld	Republican	Assembly
		27		Representative Terry Katsma	Republican	•
District: 28	1	28	28	Representative Gae Magnafici	Republican	
District: 29	0					
District: 30	1	30	30	Representative Shannon Zimmerman	Republican	Assembly
District: 31	2	31	31	Representative Ellen L. Schutt	Republican	Assembly
		31		Representative Scott L. Johnson	Republican	•
					-	
District: 32	1	32	32	Representative Tyler August	Republican	Assembly
District: 33	1	33	63	Representative Robin Vos	Republican	Assembly
District: 34	1	34	34	Representative Rob Swearingen	Republican	Assembly
District: 35	0					
District: 36	1	36	36	Representative Jeffrey Mursau	Republican	Assembly
District: 37	0					
District: 38	1	38	46	Representative Melissa Ratcliff	Democrat	Assembly
District: 39	0					
District: 40	1	40	40	Representative Kevin Petersen	Republican	Assembly
District: 41	1	41	41	Representative Alex A. Dallman	Republican	Assembly
District: 42	1	42	72	Representative Scott Krug	Republican	Assembly

		E	lected			
District: 43	Count 0	District D	istrict	Name	Party	House
District: 44	1	44	44	Representative Sue S. Conley	Democrat	Assembly
District: 45	1	45	45	Representative Clinton M. Anderson	Democrat	Assembly
District: 46	0					
District: 47	2	47 47		Representative Jenna Jacobson Representative Jimmy Anderson	Democrat Democrat	Assembly Assembly
District: 48	1	48	48	Representative Samba Baldeh	Democrat	Assembly
District: 49	1	49	49	Representative Travis Tranel	Republican	Assembly
District: 50	1	50	80	Representative Mike Bare	Democrat	Assembly
District: 51	1	51	51	Representative Todd Novak	Republican	Assembly
District: 52	1	52	52	Representative Jerry L. O'Connor	Republican	Assembly
District: 53	2	53 53		Representative Michael Schraa Representative Nate L. Gustafson	Republican Republican	•
District: 54	1	54	56	Representative David Murphy	Republican	Assembly
District: 55	0					
District: 56	1	56	54	Representative Lori A. Palmeri	Democrat	Assembly
District: 57	1	57	57	Representative Lee Snodgrass	Democrat	Assembly
District: 58	1	58	39	Representative Mark Born	Republican	Assembly
District: 59	0					
District: 60	1	60	60	Representative Robert Brooks	Republican	Assembly
District: 61	2	61 61		Representative Greta Neubauer Representative Robert Wittke	Democrat Republican	Assembly Assembly
District: 62	0					
District: 63	1	63	21	Representative Jessie Rodriguez	Republican	Assembly

			Elected			
	Count	District	District	Name	Party	House
District: 64	2	64	64	Representative Tip McGuire	Democrat	Assembly
		64	65	Representative Tod Ohnstad	Democrat	Assembly
District: 65	0					
District: 66	1	66	61	Representative Amanda M. Nedweski	Republican	Assembly
District: 67	1	67	50	Representative Tony Kurtz	Republican	Assembly
District: 68	1	68	92	Representative Treig E. Pronschinske	Republican	Assembly
District: 69	3	69		Representative Donna M. Rozar	Republican	•
		69	86	Representative John Spiros	Republican	Assembly
		69	70	Representative Nancy VanderMeer	Republican	Assembly
District: 70	1	70	85	Representative Patrick Snyder	Republican	Assembly
District: 71	1	71	71	Representative Katrina Shankland	Democrat	Assembly
District: 72	0					
District: 73	1	73	73	Representative Angie Sapik	Republican	Assembly
District: 74	1	74	74	Representative Chanz J. Green	Republican	Assembly
District: 75	1	75	75	Representative David Armstrong	Republican	Assembly
District: 76	1	76	76	Representative Francesca Hong	Democrat	Assembly
District: 77	1	77	77	Representative Shelia Stubbs	Democrat	Assembly
District: 78	2	78	79	Representative Alex R. Joers	Democrat	Assembly
		78	78	Representative Lisa Subeck	Democrat	Assembly
				·		·
District: 79	0					
District: 80	1	80	42	Representative Jon Plumer	Republican	Assembly
				•	'	,
District: 81	2	81	81	Representative Dave Considine	Democrat	Assembly
		81		Representative William Penterman	Republican	•
District: 82	2	82	82	Representative Chuck Wichgers	Republican	Assembly
	_	82		Representative Scott Allen	Republican	•
		02	57	p. cochiacite ocote / men	cpubliculi	. 1000111019
District: 83	1	83	83	Representative Nik P. Rettinger	Republican	Assembly
טוטנו וכנ. טט	_	03	03	representative wik i . Nettinger	Republican	, toocinoiy

	Elected		Elected			
	Count	District	District	Name	Party	House
District: 84	1	84	15	Representative Dave G. Maxey	Republican	Assembly
District: 85	2	85	68	Representative Karen R. Hurd	Republican	Assembly
		85	67	Representative Rob Summerfield	Republican	Assembly
District: 86	0					
District: 87	2	. 87	35	Representative Calvin T. Callahan	Republican	Assembly
		87	87	Representative James Edming	Republican	Assembly
District: 88	0					
District: 89	0					
D: 1 : 1 00	4	00	00	December 1 Kitalian M. Challen	5	A la l
District: 90	1	90	90	Representative Kristina M. Shelton	Democrat	Assembly
District: 91	2	91	91	Representative Jodi Emerson	Democrat	Assembly
		91	93	Representative Warren Petryk	Republican	Assembly
District: 92	0					
District: 93	1	93	29	Representative Clint P. Moses	Republican	Assembly
District: 94	1	94	94	Representative Steve Doyle	Democrat	Assembly
District: 95	1	95	95	Representative Jill Billings	Democrat	Assembly
District: 96	1	96	96	Representative Loren Oldenburg	Republican	Assembly
District: 97	1	97	58	Representative Rick Gundrum	Republican	Assembly
District: 98	1	98	98	Representative Adam Neylon	Republican	Assembly
District: 99	2	99	38	Representative Barbara Dittrich	Republican	Assembly
		99	99	Representative Cindi Duchow	Republican	Assembly

SENATE DEMOCRATS INCUMBENT PAIRINGS - SENATE

	Count Di	ctrict	Elected	Nama	Dortu	House
Senate District: 1	Count Di 0	strict	District	Name	Party	House
Senate District: 2	0					
Senate District: 3	1	3	3	Senator Tim Carpenter	Democrat	Senate
Senate District: 4	1	4	4	Senator Lena C. Taylor	Democrat	Senate
Senate District: 5	1	5	5	Senator Rob Hutton	Republican	Senate
Senate District: 6	1	6	6	Senator LaTonya Johnson	Democrat	Senate
Senate District: 7	2	7 7		Senator Chris Larson Senator Julian Bradley	Democrat Republican	Senate Senate
Senate District: 8	1	8	8	Senator Daniel Knodl	Republican	Senate
Senate District: 9	1	9	9	Senator Devin LeMahieu	Republican	Senate
Senate District: 10	1	10	10	Senator Rob Stafsholt	Republican	Senate
Senate District: 11	1	11	11	Senator Steve L. Nass	Republican	Senate
Senate District: 12	1	12	12	Senator Mary Felzkowski	Republican	Senate
Senate District: 13	1	13	13	Senator John Jagler	Republican	Senate
Senate District: 14	1	14	14	Senator Joan Ballweg	Republican	Senate
Senate District: 15	1	15	15	Senator Mark Spreitzer	Democrat	Senate
Senate District: 16	1	16	16	Senator Melissa Agard	Democrat	Senate
Senate District: 17	0					
Senate District: 18	2	18 18		Senator Dan Feyen Senator Rachael Cabral-Guev	Republican vara Republican	Senate Senate
Senate District: 19	0					
Senate District: 20	1	20	20	Senator Duey Stroebel	Republican	Senate
Senate District: 21	1	21	21	Senator Van H. Wanggaard	Republican	Senate
Senate District: 22	1	22	22	Senator Robert W. Wirch	Democrat	Senate

Appendix to Response Brief of Wisconsin Legislature a...Filed 01-22-2024 SENATE DEMOCRATS INCUMBENT PAIRINGS - SENATE

	Count	District	Elected District	Name	Party	House
Senate District: 23	0	1				
Senate District: 24	1	24	24	Senator Patrick Testin	Republican	Senate
Senate District: 25	1	25	25	Senator Romaine Robert Quinn	Republican	Senate
Senate District: 26	1	. 26	26	Senator Kelda Roys	Democrat	Senate
Senate District: 27	2	. 27 27		Senator Howard L. Marklein Senator Dianne H. Hesselbein	Republican Democrat	Senate Senate
Senate District: 28	0	1				
Senate District: 29	1	29	29	Senator Cory Tomczyk	Republican	Senate
Senate District: 30	3	30 30 30	1	Senator Robert L. Cowles Senator Andre Jacque Senator Eric Wimberger	Republican Republican Republican	Senate Senate Senate
Senate District: 31	2	31		Senator Jesse L. James Senator Jeff Smith	Republican Democrat	Senate Senate
Senate District: 32	1	. 32	32	Senator Brad Pfaff	Democrat	Senate
Senate District: 33	1	. 33	33	Senator Chris Kapenga	Republican	Senate

			Elected			
	Count	District	District	Name	Party	House
District: 1	1	1	1	Representative Joel Kitchens	Republican	Assembly
District: 2	1	2	25	Representative Paul Tittl	Republican	Assembly
District: 3	2	3		Representative Shae A. Sortwell Representative Ty A. Bodden	Republican Republican	Assembly Assembly
District: 4	0					
District: 5	0					
District: 6	2	6 6		Representative David Steffen Representative Joy L. Goeben	Republican Republican	Assembly Assembly
District: 7	1	7	7	Representative Daniel Riemer	Democrat	Assembly
District: 8	1	8	8	Representative Sylvia Ortiz-Velez	Democrat	Assembly
District: 9	1	9	9	Representative Marisabel Cabrera	Democrat	Assembly
District: 10	1	10	10	Representative Darrin B. Madison	Democrat	Assembly
District: 11	1	11	11	Representative Dora E. Drake	Democrat	Assembly
District: 12	1	12	12	Representative LaKeshia Myers	Democrat	Assembly
District: 13	1	13	98	Representative Adam Neylon	Republican	Assembly
District: 14	1	14	97	Representative Scott Allen	Republican	Assembly
District: 15	1	15	15	Representative Dave G. Maxey	Republican	Assembly
District: 16	1	16	16	Representative Kalan Haywood	Democrat	Assembly
District: 17	1	17	17	Representative Supreme Moore Omokun	c Democrat	Assembly
District: 18	1	18	18	Representative Evan Goyke	Democrat	Assembly
District: 19	1	19	19	Representative Ryan M. Clancy	Democrat	Assembly
District: 20	2	20 20		Representative Bob G. Donovan Representative Jessie Rodriguez	Republican Republican	Assembly Assembly
District: 21	1	21	20	Representative Christine Sinicki	Democrat	Assembly

			Elected			
	Count I	District	District	Name	Party	House
District: 22	1	22	22	Representative Janel Brandtjen	Republican	Assembly
District: 23	1	23	23	Representative Deb Andraca	Democrat	Assembly
District: 24	1	24	24	Representative Paul Melotik	Republican	Assembly
District: 25	0					
District: 26	1	26	60	Representative Robert Brooks	Republican	Assembly
District: 27	2	27	27	Representative Amy E. Binsfeld	Republican	Assembly
D1301100. 27	_	27		Representative Terry Katsma	Republican	Assembly
District: 28	1	28	28	Representative Gae Magnafici	Republican	Assembly
District: 29	0					
District: 30	1	30	30	Representative Shannon Zimmerman	Republican	Assembly
District: 31	2	31	82	Representative Chuck Wichgers	Republican	Assembly
		31		Representative Nik P. Rettinger	Republican	Assembly
District: 32	2	32	31	Representative Ellen L. Schutt	Republican	Assembly
		32		Representative Tyler August	Republican	Assembly
District: 33	1	33	63	Representative Robin Vos	Republican	Assembly
District: 34	1	34	34	Representative Rob Swearingen	Republican	Assembly
District: 35	1	35	35	Representative Calvin T. Callahan	Republican	Assembly
District: 36	1	36	36	Representative Jeffrey Mursau	Republican	Assembly
District: 37	2	37	46	Representative Melissa Ratcliff	Democrat	Assembly
District. 37	_	37		Representative William Penterman	Republican	Assembly
District: 38	0					
District: 39	1	39	39	Representative Mark Born	Republican	Assembly
District: 40	2	40	40	Representative Kevin Petersen	Republican	Assembly
טוטנו וכנ. 40	۷	40		Representative Scott Krug	Republican	Assembly
		40	12	nepresentative scott Ring	Republican	7.53CITIDIY
District: 41	1	41	41	Representative Alex A. Dallman	Republican	Assembly

			Elected			
	Count		District		Party	House
District: 42	1	42	53	Representative Michael Schraa	Republican	Assembly
District: 43	2	43	33	Representative Scott L. Johnson	Republican	Assembly
District. 45	_	43		Representative Sue S. Conley	Democrat	Assembly
		.5		nepresentative suc si come,	Democrat	7.050111.019
District: 44	1	44	45	Representative Clinton M. Anderson	Democrat	Assembly
District: 45	0					
District: 46	1	46	48	Representative Samba Baldeh	Democrat	Assembly
D: 1.1.1.1.1.1.7	4	47	47	Decree de la Contraction de la	D	A l. l
District: 47	1	47	47	Representative Jimmy Anderson	Democrat	Assembly
District: 48	1	48	77	Representative Shelia Stubbs	Democrat	Assembly
District. 40	1	40	//	Representative Sheha Stubbs	Democrat	Assembly
District: 49	1	49	49	Representative Travis Tranel	Republican	Assembly
2.50505	_					, 1000,
District: 50	1	50	43	Representative Jenna Jacobson	Democrat	Assembly
District: 51	1	51	51	Representative Todd Novak	Republican	Assembly
District: 52	1	52	54	Representative Lori A. Palmeri	Democrat	Assembly
	_					
District: 53	0					
District: E4	2	Ε.Λ	E 7	Paprocontative Lee Spedgrass	Domocrat	Assambly
District: 54	2	54 54		Representative Lee Snodgrass Representative Ron Tusler	Democrat Republican	Assembly Assembly
		54	3	representative roll rusier	Kepublicali	Assembly
District: 55	2	55	56	Representative David Murphy	Republican	Assembly
51501160133	_	55		Representative Nate L. Gustafson	Republican	•
				.,		,
District: 56	0					
District: 57	2	57	89	Representative Elijah R. Behnke	Republican	Assembly
		57	6	Representative Peter A. Schmidt	Republican	Assembly
District: 58	0					
District: FO	1	Ε0.	F2	Donnes atative learned O'Conner	Donublican	A a a a a la la .
District: 59	1	59	52	Representative Jerry L. O'Connor	Republican	Assembly
District: 60	1	60	5.2	Representative Rick Gundrum	Republican	Assembly
D13t11ct. 00	1	00	30	Representative nick dunarum	Republican	, toscillory
District: 61	1	61	61	Representative Amanda M. Nedweski	Republican	Assembly
					•	,
District: 62	1	62	65	Representative Tod Ohnstad	Democrat	Assembly

	Count	District	Elected District	Name	Party	House
District: 63	0				·	
District: 64	1	64	64	Representative Tip McGuire	Democrat	Assembly
District: 65	1	65	62	Representative Robert Wittke	Republican	Assembly
District: 66	1	66	66	Representative Greta Neubauer	Democrat	Assembly
District: 67	2	67 67		Representative James Edming Representative Rob Summerfield	Republican Republican	Assembly Assembly
District: 68	0					
District: 69	2	69 69		Representative Donna M. Rozar Representative John Spiros	Republican Republican	Assembly Assembly
District: 70	2	70 70		Representative Karen R. Hurd Representative Nancy VanderMeer	Republican Republican	Assembly Assembly
District: 71	1	71	92	Representative Treig E. Pronschinske	Republican	Assembly
District: 72	1	72	50	Representative Tony Kurtz	Republican	Assembly
District: 73	2	73 73		Representative Angie Sapik Representative Chanz J. Green	Republican Republican	Assembly Assembly
District: 74	0					
District: 75	1	75	75	Representative David Armstrong	Republican	Assembly
District: 76	1	76	76	Representative Francesca Hong	Democrat	Assembly
District: 77	0					
District: 78	3	78 78 78	78	Representative Alex R. Joers Representative Lisa Subeck Representative Mike Bare	Democrat Democrat Democrat	Assembly Assembly Assembly
District: 79	0					
District: 80	1	80	42	Representative Jon Plumer	Republican	Assembly
District: 81	1	81	81	Representative Dave Considine	Democrat	Assembly

District: 98

District: 99

0

1

99

CLARKE INCUMBENT PAIRINGS - ASSEMBLY

			Elected			
District: 82	Count D	istrict [82	14	Representative Robyn Vining	Party Democrat	House Assembly
		82	13	Representative Tom A. Michalski	Republican	Assembly
District: 83	0					
District: 84	0					
District: 85	1	85	85	Representative Patrick Snyder	Republican	Assembly
District: 86	0					
District: 87	1	87	71	Representative Katrina Shankland	Democrat	Assembly
District: 88	0					
District: 89	1	89	90	Representative Kristina M. Shelton	Democrat	Assembly
District: 90	1	90	88	Representative John Macco	Republican	Assembly
District: 91	1	91	29	Representative Clint P. Moses	Republican	Assembly
District: 92	2	92		Representative Jodi Emerson	Democrat	Assembly
		92	93	Representative Warren Petryk	Republican	Assembly
District: 93	0					
District: 94	1	94	95	Representative Jill Billings	Democrat	Assembly
District: 95	1	95	94	Representative Steve Doyle	Democrat	Assembly
District: 96	1	96	96	Representative Loren Oldenburg	Republican	Assembly
District: 97	1	97	99	Representative Cindi Duchow	Republican	Assembly

38 Representative Barbara Dittrich

Republican Assembly

CLARKE INCUMBENT PAIRINGS - SENATE

	Count	District	Elected District	Name	Party	House
Senate District: 1	0					
Senate District: 2	0					
Senate District: 3	1	3	3	Senator Tim Carpenter	Democrat	Senate
Senate District: 4	1	4	4	Senator Lena C. Taylor	Democrat	Senate
Senate District: 5	1	5	5	Senator Rob Hutton	Republican	Senate
Senate District: 6	1	6	6	Senator LaTonya Johnson	Democrat	Senate
Senate District: 7	1	7	7	Senator Chris Larson	Democrat	Senate
Senate District: 8	2	8	8	Senator Daniel Knodl	Republican	Senate
		8	20	Senator Duey Stroebel	Republican	Senate
Senate District: 9	1	9	9	Senator Devin LeMahieu	Republican	Senate
Senate District: 10	1	10	10	Senator Rob Stafsholt	Republican	Senate
Senate District: 11	1	11	11	Senator Steve L. Nass	Republican	Senate
Senate District: 12	1	12	12	Senator Mary Felzkowski	Republican	Senate
Senate District: 13	0					
Senate District: 14	1	14	14	Senator Joan Ballweg	Republican	Senate
Senate District: 15	1	15	15	Senator Mark Spreitzer	Democrat	Senate
Senate District: 16	0					
Senate District: 17	1	17	17	Senator Howard L. Marklein	Republican	Senate
Senate District: 18	0					
Senate District: 19	1	19	19	Senator Rachael Cabral-Guevara	Republican	Senate
Senate District: 20	1	20	18	Senator Dan Feyen	Republican	Senate
Senate District: 21	1	21	28	Senator Julian Bradley	Republican	Senate
Senate District: 22	2	22	22	Senator Robert W. Wirch	Democrat	Senate

CLARKE INCUMBENT PAIRINGS - SENATE

			Elected			
	Count		District		Party	House
		22	21	Senator Van H. Wanggaard	Republican	Senate
Senate District: 23	0					
Senate District: 24	0					
Senate District: 25	1	25	25	Senator Romaine Robert Quinn	Republican	Senate
Senate District: 26	1	26	26	Senator Kelda Roys	Democrat	Senate
Senate District: 27	2	27	16	Senator Melissa Agard	Democrat	Senate
		27		Senator Dianne H. Hesselbein	Democrat	Senate
Senate District: 28	0					
Senate District: 29	2			Senator Cory Tomczyk	Republican	Senate
		29	24	Senator Patrick Testin	Republican	Senate
Senate District: 30	3	30	30	Senator Eric Wimberger	Republican	Senate
Seriate Bistricti So	J	30		Senator Robert L. Cowles	Republican	Senate
		30		Senator Andre Jacque	Republican	Senate
				·	·	
Senate District: 31	2	31	31	Senator Jeff Smith	Democrat	Senate
		31	23	Senator Jesse L. James	Republican	Senate
Senate District: 32	1	32	32	Senator Brad Pfaff	Democrat	Senate
	_	<u>.</u> -	<u>.</u> -			
Senate District: 33	2			Senator Chris Kapenga	Republican	Senate
		33	13	Senator John Jagler	Republican	Senate

			Elected			
District: 1	Count 1	District 1	District 1	Name Representative Joel Kitchens	Party Republican	House Assembly
District: 2	2	2		Representative Paul Tittl Representative Shae A. Sortwell	Republican Republican	•
District: 3	0					
District: 4	2	4		Representative Elijah R. Behnke Representative Jeffrey Mursau	Republican Republican	•
District: 5	1	5	5	Representative Joy L. Goeben	Republican	Assembly
District: 6	1	6	6	Representative Peter A. Schmidt	Republican	Assembly
District: 7	1	7	7	Representative Daniel Riemer	Democrat	Assembly
District: 8	1	8	8	Representative Sylvia Ortiz-Velez	Democrat	Assembly
District: 9	1	9	9	Representative Marisabel Cabrera	Democrat	Assembly
District: 10	1	10	10	Representative Darrin B. Madison	Democrat	Assembly
District: 11	1	11	11	Representative Dora E. Drake	Democrat	Assembly
District: 12	1	12	12	Representative LaKeshia Myers	Democrat	Assembly
District: 13	0					
District: 14	2	14 14		Representative Robyn Vining Representative Tom A. Michalski	Democrat Republican	•
District: 15	0					
District: 16	1	16	16	Representative Kalan Haywood	Democrat	Assembly
District: 17	1	17	17	Representative Supreme Moore Omokun	Democrat	Assembly
District: 18	1	18	18	Representative Evan Goyke	Democrat	Assembly
District: 19	1	19	19	Representative Ryan M. Clancy	Democrat	Assembly
District: 20	1	20	20	Representative Christine Sinicki	Democrat	Assembly
District: 21	1	21	21	Representative Jessie Rodriguez	Republican	Assembly

			Elected			
	Count	District	District	Name	Party	House
District: 22	1	22	22	Representative Janel Brandtjen	Republican	Assembly
District: 23	1	23	23	Representative Deb Andraca	Democrat	Assembly
District: 24	1	24	24	Representative Paul Melotik	Republican	Assembly
District: 25	0					
District: 26	1	26	26	Representative Terry Katsma	Republican	Assembly
District: 27	3	27 27 27	3	Representative Amy E. Binsfeld Representative Ron Tusler Representative Ty A. Bodden	Republican Republican Republican	Assembly
District: 28	1	28	28	Representative Gae Magnafici	Republican	Assembly
District: 29	0					
District: 30	1	30	30	Representative Shannon Zimmerman	Republican	Assembly
District: 31	1	31	61	Representative Amanda M. Nedweski	Republican	Assembly
District: 32	2	32 32		Representative Ellen L. Schutt Representative Tyler August	Republican Republican	•
District: 33	1	33	44	Representative Sue S. Conley	Democrat	Assembly
District: 34	1	34	34	Representative Rob Swearingen	Republican	Assembly
District: 35	1	35	35	Representative Calvin T. Callahan	Republican	Assembly
District: 36	0					
District: 37	1	37	58	Representative Rick Gundrum	Republican	Assembly
District: 38	1	38	60	Representative Robert Brooks	Republican	Assembly
District: 39	1	39	39	Representative Mark Born	Republican	Assembly
District: 40	1	40	37	Representative William Penterman	Republican	Assembly
District: 41	1	41	46	Representative Melissa Ratcliff	Democrat	Assembly

			Elected			
	Count	District	District	Name	Party	House
District: 42	1	42	48	Representative Samba Baldeh	Democrat	Assembly
District: 43	1	43	33	Representative Scott L. Johnson	Republican	Assembly
District: 44	0					
District: 45	1	45	45	Representative Clinton M. Anderson	Democrat	Assembly
District: 46	1	46	43	Representative Jenna Jacobson	Democrat	Assembly
District: 47	1	47	47	Representative Jimmy Anderson	Democrat	Assembly
District: 48	1	48	80	Representative Mike Bare	Democrat	Assembly
District: 49	0					
District: 50	2	50 50		Representative Nancy VanderMeer Representative Scott Krug	Republican Republican	•
District: 51	0					
District: 52	1	52	52	Representative Jerry L. O'Connor	Republican	Assembly
District: 53	1	53	53	Representative Michael Schraa	Republican	Assembly
District: 54	1	54	54	Representative Lori A. Palmeri	Democrat	Assembly
District: 55	2	55 55		Representative Alex A. Dallman Representative Nate L. Gustafson	Republican Republican	•
District: 56	1	56	56	Representative David Murphy	Republican	Assembly
District: 57	1	57	40	Representative Kevin Petersen	Republican	Assembly
District: 58	0					
District: 59	0					
District: 60	1	60	57	Representative Lee Snodgrass	Democrat	Assembly
District: 61	2	61 61		Representative Chuck Wichgers Representative Dave G. Maxey	Republican Republican	•
District: 62	2	62	83	Representative Nik P. Rettinger	Republican	Assembly

			Elected			
	Count	District	District	Name	Party	House
		62	97	Representative Scott Allen	Republican	Assembly
District: 63	1	63	63	Representative Robin Vos	Republican	Assembly
District: 64	2	64	64	Representative Tip McGuire	Democrat	Assembly
		64	65	Representative Tod Ohnstad	Democrat	Assembly
District: 65	0					
District: 66	0					
District: 67	1	67	67	Representative Rob Summerfield	Republican	Assembly
District: 68	1	68	92	Representative Treig E. Pronschinske	Republican	Assembly
District: 69	2	69	69	Representative Donna M. Rozar	Republican	Assembly
		69	86	Representative John Spiros	Republican	Assembly
District: 70	1	70	95	Representative Jill Billings	Democrat	Assembly
District: 71	1	71	96	Representative Loren Oldenburg	Republican	Assembly
District: 72	1	72	94	Representative Steve Doyle	Democrat	Assembly
District: 73	0					
District: 74	2	74	73	Representative Angie Sapik	Republican	Assembly
		74	74	Representative Chanz J. Green	Republican	Assembly
District: 75	2	75	75	Representative David Armstrong	Republican	Assembly
		75	87	Representative James Edming	Republican	Assembly
District: 76	1	76	76	Representative Francesca Hong	Democrat	Assembly
District: 77	1	77	77	Representative Shelia Stubbs	Democrat	Assembly
District: 78	0					
District: 79	1	79	42	Representative Jon Plumer	Republican	Assembly
District: 80	1	80	50	Representative Tony Kurtz	Republican	Assembly
District: 81	1	81	81	Representative Dave Considine	Democrat	Assembly

			Elected			
Dist.: -1. 02	Count	District	District	Name	Party	House
District: 82	0					
District: 83	2	83	66	Representative Greta Neubauer	Democrat	Assembly
		83	62	Representative Robert Wittke	Republican	Assembly
District: 84	1	84	84	Representative Bob G. Donovan	Republican	Assembly
District: 85	1	85	85	Representative Patrick Snyder	Republican	Assembly
District: 86	0					
District: 87	1	87	71	Representative Katrina Shankland	Democrat	Assembly
District: 88	1	88	88	Representative John Macco	Republican	Assembly
District: 89	0					
District: 90	2	90	4	Representative David Steffen	Republican	Assembly
		90	90	Representative Kristina M. Shelton	Democrat	Assembly
District: 91	1	91	91	Representative Jodi Emerson	Democrat	Assembly
District: 92	1	92	29	Representative Clint P. Moses	Republican	Assembly
District: 93	2	93	68	Representative Karen R. Hurd	Republican	Assembly
		93	93	Representative Warren Petryk	Republican	Assembly
District: 94	2	94	70	Representative Alex R. Joers	Democrat	Assembly
District. 54	2	94		Representative Lisa Subeck	Democrat	•
District: 95	1	95	51	Representative Todd Novak	Republican	Assembly
District: 96	1	96	49	Representative Travis Tranel	Republican	Assembly
District: 97	1	97	38	Representative Barbara Dittrich	Republican	Assembly
District: 98	1	98	98	Representative Adam Neylon	Republican	Assembly
District: 99	1	99	99	Representative Cindi Duchow	Republican	Assembly

WRIGHT INCUMBENT PAIRINGS - SENATE

	Count	District	Elected District	Name		Party	House
Senate District: 1	0					·	
Senate District: 2	0						
Senate District: 3	1	3	3	Senator	Tim Carpenter	Democrat	Senate
Senate District: 4	1	4	4	Senator	Lena C. Taylor	Democrat	Senate
Senate District: 5	1	5	5	Senator	Rob Hutton	Republican	Senate
Senate District: 6	1	6	6	Senator	LaTonya Johnson	Democrat	Senate
Senate District: 7	1	7	7	Senator	Chris Larson	Democrat	Senate
Senate District: 8	2	8			Daniel Knodl Duey Stroebel	Republican Republican	Senate Senate
Senate District: 9	1	9	9	Senator	Devin LeMahieu	Republican	Senate
Senate District: 10	1	10	10	Senator	Rob Stafsholt	Republican	Senate
Senate District: 11	0						
Senate District: 12	1	12	12	Senator	Mary Felzkowski	Republican	Senate
Senate District: 13	0						
Senate District: 14	1	14	13	Senator	John Jagler	Republican	Senate
Senate District: 15	1	15	15	Senator	Mark Spreitzer	Democrat	Senate
Senate District: 16	0						
Senate District: 17	0						
Senate District: 18	1	18	18	Senator	Dan Feyen	Republican	Senate
Senate District: 19	2	19 19			Joan Ballweg Rachael Cabral-Guevara	Republican Republican	Senate Senate
Senate District: 20	0						
Senate District: 21	0						
Senate District: 22	2	22	22	Senator	Robert W. Wirch	Democrat	Senate

WRIGHT INCUMBENT PAIRINGS - SENATE

 lecte	n

	Count	District	District	Name	Party	House
	Count	22		Senator Van H. Wanggaard	Republican	Senate
Senate District: 23	0					
Senate District: 24	1	24	32	Senator Brad Pfaff	Democrat	Senate
Senate District: 25	1	25	25	Senator Romaine Robert Quinn	Republican	Senate
Senate District: 26	1	26	26	Senator Kelda Roys	Democrat	Senate
Senate District: 27	2			Senator Melissa Agard	Democrat	Senate
		27	27	Senator Dianne H. Hesselbein	Democrat	Senate
Senate District: 28	1	28	28	Senator Julian Bradley	Republican	Senate
Senate District: 29	2			Senator Cory Tomczyk	Republican	Senate
		29	24	Senator Patrick Testin	Republican	Senate
	_					
Senate District: 30	3			Senator Andre Jacque	Republican	Senate
		30		Senator Robert L. Cowles	Republican	Senate
		30	30	Senator Eric Wimberger	Republican	Senate
6 . 5	•	24	22			
Senate District: 31	2			Senator Jesse L. James	Republican	Senate
		31	31	Senator Jeff Smith	Democrat	Senate
Carrata Diatriata 22	1	22	47	Country Howard L. Maulilein	Danieliaan	C + -
Senate District: 32	1	32	1/	Senator Howard L. Marklein	Republican	Senate
Senate District: 33	2	33	11	Senator Steve L. Nass	Republican	Senate
Senate District. 55	2	33			•	
		33	33	Senator Chris Kapenga	Republican	Senate

			Elected			
	Count	District			Party	House
District: 1	1	1	1	Representative Joel Kitchens	Republican	Assembly
District: 2	2	2	88	Representative John Macco	Republican	Δssemhly
District. 2	2	2		Representative Shae A. Sortwell	Republican	•
		_	_	Nepresentative shae / II soremen	перавнеан	7.000111017
District: 3	2	3	3	Representative Ron Tusler	Republican	Assembly
		3	59	Representative Ty A. Bodden	Republican	Assembly
District: 4	2			Representative David Murphy	Republican	•
		4	5	Representative Joy L. Goeben	Republican	Assembly
District: 5	0					
טואנווננ. א	U					
District: 6	1	6	6	Representative Peter A. Schmidt	Republican	Assembly
				•	•	,
District: 7	0					
District: 8	1	8	8	Representative Sylvia Ortiz-Velez	Democrat	Assembly
District O	4	0	0	Become deller Markel Colore	D	A l. l
District: 9	1	9	9	Representative Marisabel Cabrera	Democrat	Assembly
District: 10	1	10	10	Representative Darrin B. Madison	Democrat	Assembly
213011001 20	_	10	10	Nepresentative Barrin Brimadison	Democrat	7.000111017
District: 11	1	11	11	Representative Dora E. Drake	Democrat	Assembly
District: 12	1	12	12	Representative LaKeshia Myers	Democrat	Assembly
District: 13	1	13	22	Representative Janel Brandtjen	Republican	Assembly
District: 14	2	14	1./	Representative Robyn Vining	Democrat	Assembly
DISTRICT. 14	2	14		Representative Tom A. Michalski	Republican	•
			13	Representative form / N. Whendiski	перавнеан	Assembly
District: 15	2	15	82	Representative Chuck Wichgers	Republican	Assembly
		15	15	Representative Dave G. Maxey	Republican	Assembly
District: 16	1	16	16	Representative Kalan Haywood	Democrat	Assembly
5		47	47			
District: 17	1	17	17	Representative Supreme Moore Omokung	Democrat	Assembly
District: 18	1	18	18	Representative Evan Goyke	Democrat	Assembly
3.50.100. 10	_	10	10		2000.00	. ISSETTION
District: 19	1	19	19	Representative Ryan M. Clancy	Democrat	Assembly
				•		-
District: 20	1	20	20	Representative Christine Sinicki	Democrat	Assembly

JOHNSON INCUMBENT PAIRINGS - ASSEMBLY

	Count I	Ele District Dis	cted trict Na	me	Party	House
District: 21	1	21	21 Re	presentative Jessie Rodriguez	Republican	Assembly
District: 22	0					
District: 23	1	23	23 Re	presentative Deb Andraca	Democrat	Assembly
District: 24	1	24	58 Re	presentative Rick Gundrum	Republican	Assembly
District: 25	1	25	25 Re	presentative Paul Tittl	Republican	Assembly
District: 26	1	26	27 Re	presentative Amy E. Binsfeld	Republican	Assembly
District: 27	1	27	26 Re	presentative Terry Katsma	Republican	Assembly
District: 28	0					
District: 29	1	29	28 Re	presentative Gae Magnafici	Republican	Assembly
District: 30	1	30	30 Re	presentative Shannon Zimmerman	Republican	Assembly
District: 31	1	31	33 Re	presentative Scott L. Johnson	Republican	Assembly
District: 32	2	32 32		presentative Ellen L. Schutt presentative Tyler August	Republican Republican	•
District: 33	0					
District: 34	1	34	34 Re	presentative Rob Swearingen	Republican	Assembly
District: 35	1	35	89 Re	presentative Elijah R. Behnke	Republican	Assembly
District: 36	1	36	36 Re	presentative Jeffrey Mursau	Republican	Assembly
District: 37	0					
District: 38	3	38 38 38	42 Re	presentative Dave Considine presentative Jon Plumer presentative William Penterman	Democrat Republican Republican	Assembly Assembly Assembly
District: 39	1	39	39 Re	presentative Mark Born	Republican	Assembly
District: 40	1	40	40 Re	presentative Kevin Petersen	Republican	Assembly
District: 41	1	41	41 Re	presentative Alex A. Dallman	Republican	Assembly

Elected

			Elected			
	Count		District		Party	House
District: 42	2			Representative Scott Krug	Republican	-
		42	50	Representative Tony Kurtz	Republican	Assembly
	_					
District: 43	()				
51.1.44						
District: 44	1	L 44	44	Representative Sue S. Conley	Democrat	Assembly
D: 1.2.1.45		4.5	45	Decree dati a Clinta M. Andrew	D	A l. l
District: 45	1	L 45	45	Representative Clinton M. Anderson	Democrat	Assembly
District, 16		16	40	Danracantativa Camba Daldah	Domocrat	A ccombb.
District: 46	1	46	48	Representative Samba Baldeh	Democrat	Assembly
District: 47	2	2 47	12	Representative Jenna Jacobson	Democrat	Assembly
District. 47	2	47		Representative Melissa Ratcliff	Democrat	Assembly
		47	40	representative idensia ratciiii	Democrat	Assembly
District: 48	1	48	77	Representative Shelia Stubbs	Democrat	Assembly
District. 40	_	0	,,	Representative shella stubbs	Democrat	Assembly
District: 49	1	49	49	Representative Travis Tranel	Republican	Assembly
District. 15	-	. 13	13	Representative Travis Trailer	перавлеан	Assembly
District: 50	C)				
2.000000						
District: 51	1	51	51	Representative Todd Novak	Republican	Assembly
						,
District: 52	1	52	52	Representative Jerry L. O'Connor	Republican	Assembly
				•	'	,
District: 53	1	53	53	Representative Michael Schraa	Republican	Assembly
				·	·	
District: 54	1	54	54	Representative Lori A. Palmeri	Democrat	Assembly
District: 55	1	55	55	Representative Nate L. Gustafson	Republican	Assembly
District: 56	()				
District: 57	1	57	57	Representative Lee Snodgrass	Democrat	Assembly
District: 58	()				
District: 59	()				
District: 60	2			Representative Paul Melotik	Republican	Assembly
		60	60	Representative Robert Brooks	Republican	Assembly
District: 61	1	61	66	Representative Greta Neubauer	Democrat	Assembly
			_			
District: 62	1	62	62	Representative Robert Wittke	Republican	Assembly

Elected

			Elected			
	Count	District	District	Name	Party	House
District: 63	1	63	63	Representative Robin Vos	Republican	Assembly
District: 64	C)				
District. CE	2	C.F.	C 4	Danuary tating Tip McCuins	D t	A - - -
District: 65	2			Representative Tip McGuire	Democrat	Assembly
		65	65	Representative Tod Ohnstad	Democrat	Assembly
District: 66	1	. 66	61	Representative Amanda M. Nedweski	Republican	Accomply
District. 00	1	. 00	01	Representative Amanda W. Nedweski	Republican	Assembly
District: 67	1	. 67	67	Representative Rob Summerfield	Republican	Assembly
2.0000.07	_					, 10001111011
District: 68	2	68	68	Representative Karen R. Hurd	Republican	Assembly
		68	93	Representative Warren Petryk	Republican	Assembly
District: 69	1	. 69	70	Representative Nancy VanderMeer	Republican	Assembly
District: 70	C					
Diatriat, 71	1	71	71	Donuscoutative Katuine Charles ad	Downsonst	برا ما محمد م
District: 71	1	. 71	/1	Representative Katrina Shankland	Democrat	Assembly
District: 72	2	72	69	Representative Donna M. Rozar	Republican	Assembly
District. 72	_	72		Representative John Spiros	Republican	•
		72	80	Representative John Spiros	Republican	Assembly
District: 73	2	73	73	Representative Angie Sapik	Republican	Assembly
		73		Representative Chanz J. Green	Republican	•
				·	·	•
District: 74	1	. 74	87	Representative James Edming	Republican	Assembly
District: 75	1	. 75	75	Representative David Armstrong	Republican	Assembly
District: 76	C					
District, 77	0					
District: 77	C	1				
District: 78	1	. 78	76	Representative Francesca Hong	Democrat	Assembly
District. 70	_	, , ,	70	Representative Francesca Hong	Democrat	7133C11101y
District: 79	2	. 79	47	Representative Jimmy Anderson	Democrat	Assembly
		79		Representative Mike Bare	Democrat	Assembly
						,
District: 80	2	80	79	Representative Alex R. Joers	Democrat	Assembly
		80	78	Representative Lisa Subeck	Democrat	Assembly
District: 81	C)				
District: 82	2	82	84	Representative Bob G. Donovan	Republican	Assembly

JOHNSON INCUMBENT PAIRINGS - ASSEMBLY

			Elected				
	Count	District	District	Name		Party	House
		82	7	Representative	Daniel Riemer	Democrat	Assembly
District: 83	1	83	83	Representative	Nik P. Rettinger	Republican	Assembly
District: 84	0						
District: 85	0						
District: 86	1	86	85	Representative	Patrick Snyder	Republican	Assembly
District: 87	1	87	35	Representative	Calvin T. Callahan	Republican	Assembly
District: 88	1	88	90	Representative	Kristina M. Shelton	Democrat	Assembly
District: 89	1	89	4	Representative	David Steffen	Republican	Assembly
District: 90	0						
District: 91	1	91	91	Representative	Jodi Emerson	Democrat	Assembly
District: 92	1	92	92	Representative	Treig E. Pronschinske	Republican	Assembly
District: 93	1	93	29	Representative	Clint P. Moses	Republican	Assembly
District: 94	1	94	94	Representative	Steve Doyle	Democrat	Assembly
District: 95	1	95	95	Representative	Jill Billings	Democrat	Assembly
District: 96	1	96	96	Representative	Loren Oldenburg	Republican	Assembly
District: 97	1	97	97	Representative	Scott Allen	Republican	Assembly
District: 98	1	98	38	Representative	Barbara Dittrich	Republican	Assembly
District: 99	2	99 99		Representative Representative	•	Republican Republican	Assembly Assembly

JOHNSON INCUMBENT PAIRINGS - SENATE

Senate District: 1	Count 1	District 1		Name Senator Andre Jacque	Party Republican	House Senate
Senate District: 2	0					
Senate District: 3	0					
Senate District: 4	1	4	4	Senator Lena C. Taylor	Democrat	Senate
Senate District: 5	1	5	5	Senator Rob Hutton	Republican	Senate
Senate District: 6	1	6	6	Senator LaTonya Johnson	Democrat	Senate
Senate District: 7	1	7	7	Senator Chris Larson	Democrat	Senate
Senate District: 8	1	8	8	Senator Daniel Knodl	Republican	Senate
Senate District: 9	1	9	9	Senator Devin LeMahieu	Republican	Senate
Senate District: 10	1	10	10	Senator Rob Stafsholt	Republican	Senate
Senate District: 11	1	11	11	Senator Steve L. Nass	Republican	Senate
Senate District: 12	1	12	12	Senator Mary Felzkowski	Republican	Senate
Senate District: 13	1	13	13	Senator John Jagler	Republican	Senate
Senate District: 14	1	14	14	Senator Joan Ballweg	Republican	Senate
Senate District: 15	1	15	15	Senator Mark Spreitzer	Democrat	Senate
Senate District: 16	0					
Senate District: 17	1	17	17	Senator Howard L. Marklein	Republican	Senate
Senate District: 18	1	18	18	Senator Dan Feyen	Republican	Senate
Senate District: 19	1	19	19	Senator Rachael Cabral-Guevara	Republican	Senate
Senate District: 20	1	20	20	Senator Duey Stroebel	Republican	Senate
Senate District: 21	1	21	21	Senator Van H. Wanggaard	Republican	Senate
Senate District: 22	1	22	22	Senator Robert W. Wirch	Democrat	Senate

JOHNSON INCUMBENT PAIRINGS - SENATE

	Count	District	Elected District	Name	Party	House
Senate District: 23	1	23	23	Senator Jesse L. James	Republican	Senate
Senate District: 24	1	24	24	Senator Patrick Testin	Republican	Senate
Senate District: 25	1	25	25	Senator Romaine Robert Quinn	Republican	Senate
Senate District: 26	2	26 26		Senator Kelda Roys Senator Melissa Agard	Democrat Democrat	Senate Senate
Senate District: 27	1	27	27	Senator Dianne H. Hesselbein	Democrat	Senate
Senate District: 28	2	28 28		Senator Tim Carpenter Senator Julian Bradley	Democrat Republican	Senate Senate
Senate District: 29	1	29	29	Senator Cory Tomczyk	Republican	Senate
Senate District: 30	2	30 30		Senator Robert L. Cowles Senator Eric Wimberger	Republican Republican	
Senate District: 31	1	31	31	Senator Jeff Smith	Democrat	Senate
Senate District: 32	1	32	32	Senator Brad Pfaff	Democrat	Senate
Senate District: 33	1	33	33	Senator Chris Kapenga	Republican	Senate

GOVERNOR POLITICAL SUBDIVISION SPLITS - ASSEMBLY

Split Geography	DISTRICT	DISTRICT: {Persons}	{suos						
COUNTIES: Adams Ashland	45 Split 39; 41; 57; 71; 72 73; 74	39: {3,421} 73: {10,452}	41: {4,761} 74: {5,575}	57: {353}	71: {287}	72: {11,832}			
Bayfield Brown	73; 74 1: 2: 4: 5: 6: 88: 89: 90	73: {11,784} 1: {8.815}	74: {4,436}	4: {35.628}	5: {16.517}	6: {6.441}	88: {59,855}	89: {59,697}	90: {59,551}
Burnett	74; 75	74: {1,445}	75: {15,081}						
Calumet	3; 27	3: {52,095}	27: {347}						
Chippewa	67; 68; 69; 91; 92	67: {1,313} 27: {4E8}	68: {22,344}	69: {5,422}	91: {3,771}	92: {33,447}			
Coldinola	37, 39, 40, 41, 42 42: 43: 46: 47: 48: 50:		39. {3,207.}	40. [22,007]	41. [3,030]	42. {29,102}	50. {21 846}	51. {10.472}	76. {59 142}
2	51; 76; 77; 78; 79; 80; 81		78: {59,825}	79: {60,002}	80: {59,605}	81: {60,040}	. (* ±,040)	110,17,2	. 0. [37,12]
Dodge	37; 38; 42; 48; 59; 99	37: {50,819}	38: {27,134}	42: {0}	48: {2,132}	59: {2,344}	99: {6,967}		
Douglas	73; 74	73: {37,617}	74: {6,678}						
Dunn	28; 67; 92; 93	28: {3,507}	67: {12,038}	92: {25,499}	93: {4,396}				
Eau Claire	91; 93	91: {56,301}	93: {49,409}						
Fond du Lac	27; 37; 39; 59; 60	27: {8,126}	37: {8,332}	39: {17,747}	59: {10,684}	60: {59,265}			
Grant	49; 51	49: {43,245}	51: {8,693}						
Jefferson	38; 43; 46; 97; 99	38: {32,113}	43: {3,905}	46: {34,851}	97: {8,909}	99: {5,122}			
Juneau	41; 70; 72		70: {13,320}	72: {8,039}					
Kenosha	32; 64; 65	32: {48,966}	64: {60,090}	65: {60,095}					
La Crosse	94; 95; 96	94: {53,157}	95: {38,460}	96: {29,167}					
Manitowoc	2; 3; 25; 27	2: {12,253}	3: {7,078}	25: {56,531}	27: {5,497}				
Marathon	35; 69; 85; 86; 87	35: {7,952}	69: {9,274}	85: {59,110}	86: {22,269}	87: {39,408}			
Milwaukee	7; 8; 9; 10; 11; 12; 13; 14;	7: {59,100}	8: {59,362}	9: {59,571}	10: {59,503}	11: {59,565}	12: {59,351}	13: {33,975}	14: {59,463}
	16; 17; 18; 19; 20; 21; 23; 61 · 63	16: {59,714} 63: {35,076}	17: {59,435}	18: {59,346}	19: {59,320}	20: {59,200}	21: {59,343}	23: {38,804}	61: {59,361}
	01,00	(5,5,5,5)		3					
Monroe	70; 95; 96	70: {24,929}	95: {21,345}	96: {0}					
Oconto	4; 6; 35; 36	4: {24,468}	6: {9,047}	35: {1,044}	36: {4,406}				
Oneida	34; 35	34: {36,473}	35: {1,372}	[012 [03]	[00100]	[3. [4.038]	[60.00]	[60,004]	[3,60]
Outagailile	2, 4, 3, 32, 33, 33, 30, 37,	2. [23,434]	לטן ילר	J. 142,333 J	32. [00,100]	J3. [4,076]	JJ. 10,7215	JO. 149,0045	رد٥٥٠٤١ . اد
Ozaukee	22; 23; 36; 39	22: {50,600}	25. {20,295}	20: [95]	39. {14,231 <i>}</i>				
Pierce	28; 29; 30	28: {4,901}	29: {20,313}	50: {10,958}	, r				
Portage	57; /1; 86; 8/	57: {3,207}	/1: {59,1/6}	86: {2,857}	87: {5,137}				
Racine	33; 62; 63; 66; 84	33: {33,631}	62: {60,115}	63: {24,632}	66: {59,377}	84: {19,972}			
Rock	31; 43; 44; 45; 50	31: {4,123}	43: {40,122}	44: {59,756}	45: {59,601}	50: {85}			
Sauk	40; 41	40: {36,811}	41: {28,952}						
Shawano	6; 35; 87	6: {32,301}	35: {1,617}	87: {6,963}					
Sheboygan	25; 26; 27; 59	25: {3,080}	26: {59,217}	27: {46,088}	59: {9,649}				
St. Croix	28; 30	28: {51,160}	30: {42,376}						
Taylor	68; 69	68: {9,316}	69: {10,597}						

275

GOVERNOR POLITICAL SUBDIVISION SPLITS - ASSEMBLY

98: {25,405}				81: {5,505}			16: {59,714}	
97: {50,066}				80: {32,012}			14: {9,187}	
84: {39,024}				79: {59,999}			12: {56,023} 61: {15,583}	
84: {222} 98: {34,430} 83: {59,567}		90: {59,551}		78: {40,146}			11: {59,565} 21: {21,143}	
43: {15,055} 59: {22,861} 82: {58,981} 87: {7,979}		89: {42,706}		77: {56,783} 79: {3}			10: {32,287} 20: {11,040} 18: {10,428}	
94: {6,108} 96: {30,248} 33: {26,128} 58: {58,980} 24: {41,669} 57: {25,896}		88: {2,259}		76: {56,338} 78: {4,534} 78: {5,681} 81: {774}	65: {47,949} 96: {22,176}	61: {19,464}	9: {55,457} 19: {59,320} 14: {2,227}	
sons} 93: {5,617} 49: {226} 32: {10,015} 24: {18,189} 15: {59,411} 56: {10,793} 57: {24,433} 53: {5,248}	86: {34,336}	4: {2,858} 88: {1,150} 88: {945} 92: {254}	47: {1,084} 78: {840} 48: {2,686} 48: {7}	48: {10,768} 77: {1,045} 47: {3,305} 80: {6,018} 93: {35,451} 93: {3 943}	46: {851} 46: {716} 64: {50,696} 65: {12,146} 95: {27,427}	53: {1,,136} 86: {2,005} 23: {10,936} 63: {35,076} 21: {1,703}	8: {59,362} 18: {48,918} 13: {33,975}	
DISTRICT: {Persons} 29: {19,035} 93: 41: {240} 49: 31: {55,058} 32: 22: {2,301} 24: 13: {25,912} 15: 99: {46,943} 6: {7,144} 56: 39: {87} 57:	72: {39,871}	1: {21} 2: {7,670} 2: {830} 68: {2,983}	46: {385} 76: {782} 42: {579} 46: {7,296}	42: {8,289} 76: {654} 46: {5} 79: {0} 91: {31,787} 91: {3 719}	38: {531} 38: {1,351} 32: {1,341} 32: {9,104} 94: {3,077}	94. {400} 85: {575} 12: {1,571} 61: {1,740} 7: {16,636}	7: {30,188} 17: {59,435} 12: {1,757}	
DISTRICT 29; 93; 94 41; 49; 96 31; 32; 33; 43; 84 22; 24; 58; 59; 98 13; 15; 24; 82; 83; 84; 97; 98; 99 6; 56; 57; 87 39; 57	72; 86 51 Split	1; 4; 88; 89; 90 2; 88 2; 88 68; 92	40, 47 76; 78 42; 48 46; 48	42; 48; 76; 77; 78; 79; 80; 81 76; 77; 78; 79 46; 47; 78 79; 80; 81 91; 93 91: 93	38; 46 38; 46 32; 64; 65 32; 65 94; 95; 96	94, 95 85; 86 12; 23 61; 63 7; 21; 61	7; 8; 9; 10; 11; 12; 14; 16; 17; 18; 19; 20; 21; 61 12; 13; 14; 18	
Split Geography Trempealeau Vernon Walworth Washington Waukesha Waushara	Wood	Brown, Green Bay - C Brown, Ledgeview - T Brown, Rockland - T Chippewa, Eagle Point - T	Dane, Albion - 1 Dane, Blooming Grove - T Dane, Burke - T Dane, Cottage Grove - V	Dane, Madison - C Dane, Madison - T Dane, McFarland - V Dane, Middleton - T Eau Claire, Eau Claire - C	Jefferson, Aztalan - T Jefferson, Aztalan - T Jefferson, Jefferson - T Kenosha, Kenosha - C Kenosha, Pleasant Prairie - V La Crosse, La Crosse - C	Marathon, Stettin - T Milwaukee, Brown Deer - V Milwaukee, Franklin - C Milwaukee, Greenfield - C	Milwaukee, Milwaukee - C Milwaukee, Wauwatosa - C	

	61: {0}	53: {4,078} 56: {5,665}		56: {10,079}											98: {668}						83: {8,978}				
suos}	14: {48,049}	52: {52,840}	52: {29}	55: {6,521}	5: {9,377}	23: {16,899}	63: {20,706}	66: {23,970}	66: {27,978}	44: {48,294}	26: {5,804}	33: {678}	33: {7,798}	33: {847}	24: {18,189}	98: {2,581}	59: {5,400}	15: {22,065}	97: {5,587}	84: {19,833}	82: {55,463}	83: {4,939}	55: {11,449}	55: {10,827}	55. {901}
DISTRICT: {Persons}	7: {12,276}	5: {316}	2: {6,828}	52: {7,231}	2: {7,712}	22: {8,243}	62: {4,655}	62: {3,762}	62: {49,838}	43: {17,321}	25: {2,332}	31: {4,712}	32: {479}	31: {1,840}	22: {2,060}	58: {819}	58: {26,352}	13: {19,399}	84: {2,194}	83: {5,199}	15: {6,717}	82: {3,518}	53: {7,525}	54: {55,989}	54. {868}
DISTRICT	7; 14; 61	5; 52; 53; 56	2; 52	52; 55; 56	2; 5	22; 23	62; 63	62; 66	62; 66	43; 44	25; 26	31; 33	32; 33	31; 33	22; 24; 98	58; 98	58; 59	13; 15	84; 97	83; 84	15; 82; 83	82; 83	53; 55	54; 55	54.55
Split Geography	Milwaukee, West Allis - C	Outagamie, Appleton - C	Outagamie, Buchanan - T	Outagamie, Grand Chute - T	Outagamie, Kaukauna - C	Ozaukee, Mequon - C	Racine, Caledonia - V	Racine, Mount Pleasant - V	Racine, Racine - C	Rock, Janesville - C	Sheboygan, Sheboygan - T	Walworth, Geneva - T	Walworth, Lake Geneva - C	Walworth, Linn - T	Washington, Germantown - V	Washington, Hartford - T	Washington, West Bend - C	Waukesha, Brookfield - C	Waukesha, Mukwonago - T	Waukesha, Muskego - C	Waukesha, Waukesha - C	Waukesha, Waukesha - T	Winnebago, Fox Crossing - V	Winnebago, Oshkosh - C	Winnehago Vinland - T

96 Split

Total Split:

2772

GOVERNOR POLITICAL SUBDIVISION SPLITS - SENATE

9
15
30: {179,103}
16: {140,330}
16: {2,132}
31: {29,895}
20: {69,949}
16: {34,851}
29: {120,787}
5: {93,438}
18: {64,178}
29: {7,994}
22: {59,377}
17: {85}
29: {6,963}
32: {6,108}
32: {30,248}
28: {222}
33: {34,430}
28: {157,572}
29: {7,979}
19: {56,462}

30: {104,516}

2: {2,858} 30: {1,150}

1: {21} 1: {7,670}

30 Split 1; 2; 30 1; 30

> Brown, Green Bay - C Brown, Ledgeview - T

													21: {15,583}															
													7: {91,503}															
				27: {97,516}									6: {168,067}															
				26: {153,267} 27: {97,516}								21: {19,464}	5: {9,187}	6: {10,428}	21: {0}	19: {5,665}												
ICT: {Persons}	30: {945}	31: {254}	16: {2,686}	16: {10,768}	27: {3}	26: {5,681}	16: {851}	16: {716}	22: {98,645}	22: {12,146}	8: {10,936}	7: {1,703}	4: {147,875}	5: {36,202}	5: {48,049}	18: {56,918}	18: {29}	19: {16,600}	2: {9,377}	22: {23,970}	22: {27,978}	33: {668}	33: {2,581}	33: {5,587}	28: {64,441}	19: {11,449}	19: {10,827}	19: {901}
SENATE DISTRICT: {Persons}	1: {830}	23: {2,983}	14: {579}	14: {8,289}	26: {6,233}	16: {3,310}	13: {531}	13: {1,351}	11: {1,341}	11: {9,104}	4: {1,571}	3: {16,636}	3: {145,007}	4: {1,757}	3: {12,276}	2: {316}	1: {6,828}	18: {7,231}	1: {7,712}	21: {3,762}	21: {49,838}	8: {20,249}	20: {819}	28: {2,194}	5: {6,717}	18: {7,525}	18: {55,989}	18: {868}
SENATE DISTRICT	1;30	23; 31	14; 16	14; 16; 26; 27	26; 27	16; 26	13; 16	13; 16	11; 22	11; 22	4;8	3; 7; 21	3; 4; 5; 6; 7; 21	4;5;6	3; 5; 21	2; 18; 19	1;18	18; 19	1;2	21; 22	21; 22	8;33	20; 33	28; 33	5; 28	18; 19	18; 19	18; 19
Split Geography	Brown, Rockland - T	Chippewa, Eagle Point - T	Dane, Burke - T	Dane, Madison - C	Dane, Madison - T	Dane, McFarland - V	Jefferson, Aztalan - T	Jefferson, Jefferson - T	Kenosha, Kenosha - C	Kenosha, Pleasant Prairie - V	Milwaukee, Brown Deer - V	Milwaukee, Greenfield - C	Milwaukee, Milwaukee - C	Milwaukee, Wauwatosa - C	Milwaukee, West Allis - C	Outagamie, Appleton - C	Outagamie, Buchanan - T	Outagamie, Grand Chute - T	Outagamie, Kaukauna - C	Racine, Mount Pleasant - V	Racine, Racine - C	Washington, Germantown - V	Washington, Hartford - T	Waukesha, Mukwonago - T	Waukesha, Waukesha - C	Winnebago, Fox Crossing - V	Winnebago, Oshkosh - C	Winnebago, Vinland - T

63 Split

Total Split:

279

Split Geography	DISTRICT	DISTRICT: {Persons}	sons}						
COUNTIES: Ashland Bayfield	51 Split 73; 74 73: 74	73: {428}	74: {15,599}						
Brown	1; 2; 4; 5; 88; 89; 90	73. {6,739.} 1: {8,815}	74. [7,401] 2: {19,713}	4: {26,406}	5: {34,795}	88: {59,835}	89: {59,793}	90: {59,383}	
Burnett	28; 73; 75	28: {11,216}	73: {2,498}	75: {2,812}					
Calumet	2; 3; 5; 55; 57	2: {18,133}	3: {20,110}	5: {0}	55: {0}	57: {14,199}			
Chippewa	85; 92	85: {38,985}	92: {27,312}	,					
Clark	68; 69; 85; 86	68: {546}	69: {10,074}	85: {6,377}	86: {17,662}				
Columbia	58; 80; 81	58: {458}	80: {18,127}	81: {39,905}					
Dane	38; 39; 43; 46; 47; 48; 50; 38: {56,366} 51; 76; 77; 78; 80; 81 76: {59,159}); 38: {56,366} 76: {59,159}	39: {29,350} 77: {59,468}	43: {146} 78: {59,210}	46: {59,066} 80: {39,631}	47: {58,633} 81: {19,811}	48: {59,058}	50: {50,397}	51: {11,209}
Dodge	37: 58: 59: 81	37: {8.252}	58: {54.876}	59: {26.268}	81: {0}				
Dunn	29; 93	29: {14,780}	93: {30,660}						
Eau Claire	68; 85; 91; 92	68: {1,243}	85: {13,268}	91: {59,150}	92: {32,049}				
Fond du Lac	2; 3; 27; 41; 52; 53; 59	2: {1,671}	3: {5,966}	27: {489}	41: {12,149}	52: {59,265}	53: {8,773}	59: {15,841}	
Forest	34; 36	34: {1,859}	36: {7,320}						
Green	43; 47; 50; 51	43: {9,186}	47: {498}	50: {9,050}	51: {18,359}				
lowa	49; 51; 79	49: {146}	51: {20,916}	79: {2,647}					
Jackson	68; 69	68: {11,890}	69: {9,255}						
Jefferson	31; 37; 38; 39; 43; 58	31: {5,222}	37: {39,100}	38: {3,492}	39: {30,492}	43: {2,665}	58: {3,929}		
Juneau	42; 67	42: {15,485}	67: {11,233}						
Kenosha	32; 33; 64; 65; 66	32: {11,112}	33: {2,025}	64: {48,156}	65: {59,201}	66: {48,657}			
La Crosse	67; 94; 95	67: {1,711}	94: {59,910}	95: {59,163}					
Lafayette	49; 51	49: {7,850}	51: {8,761}						
Lincoln	35; 87	35: {15,921}	87: {12,494}						
Manitowoc	2; 25; 27	2: {19,883}	25: {60,036}	27: {1,440}					
Marathon	35; 69; 70; 72; 86	35: {11,398}	69: {2,884}	70: {59,580}	72: {22,961}	86: {41,190}			
Milwaukee	7; 8; 9; 10; 11; 12; 13; 14; 7: {59,354}	1; 7: {59,354}	8: {59,362}	9: {59,294}	10: {59,342}	11: {59,019}	12: {58,989}	13: {6,303}	14: {44,005}
	15; 16; 17; 18; 19; 20;	15: {59,074}	16: {59,020}	17: {59,122}	18: {59,234}	19: {59,065}	20: {59,768}	21: {59,859}	23: {41,856}
	21; 23; 63; 82	63: {59,834}	82: {16,989}						
Monroe	62; 68; 69	67: {38,427}	68: {2,149}	69: {5,698}					
Oconto	4;36	4: {32,817}	36: {6,148}						
Outagamie	3; 5; 6; 54; 55; 57	3: {33,964}	5: {24,865}	6: {23,961}	54: {57,997}	55: {4,858}	57: {45,060}		
Ozaukee	23; 24; 60	23: {18,061}	24: {56,163}	60: {17,279}					
Pierce	29; 30; 93	29: {1,418}	30: {19,056}	93: {21,738}					
Polk	28; 75	28: {39,170}	75: {5,807}						
Portage	42; 71; 72	42: {7,067}	71: {59,491}	72: {3,819}					
Racine	33; 61; 62; 64; 66	33: {57,529}	61: {59,252}	62: {59,589}	64: {10,963}	66: {10,394}			
Rock	31; 43; 44; 45	31: {9,214}	43: {35,168}	44: {59,442}	45: {59,863}				
Sauk	42; 67; 79; 80; 96	42: {2,791}	67: {3,741}	79: {57,437}	80: {1,774}	96: {20}			

84: {59,637} 97: {3,559}		78: {51,833} 80: {5,404}
} } } 83: {59,915}	~:	} 77: {53,170}
97: {56,375} 82: {42,522}	56: {60,082}	76: {57,137}
40: {4,712} 93: {11} 43: {12,398} 60: {41,823} 37: {11,928}	55: {54,899}	50: {23,043}
35: {8,654} 27: {57,554} 30: {40,561} 87: {17,768} 33: {0} 75: {3,780} 59: {17,405} 22: {41,669}	42: {3,933} 54: {1,817} 72: {32,320}	90: {4,434} 90: {54,949} 48: {908} 48: {42,942} 78: {3} 48: {5,681}
ersons} 87: {1,395} 6: {27,295} 26: {60,096} 29: {43,381} 86: {1,240} 96: {25,833} 74: {3,552} 32: {48,626} 74: {9,780} 24: {3,275} 14: {15,227} 99: {59,762}	40: {43,386} 41: {12,951} 53: {50,674} 69: {31,836}	89: {6,746} 89: {7,721} 88: {52,425} 5: {12,805} 89: {1,150} 57: {1,304} 57: {2,895} 3: {0} 92: {316} 46: {579} 47: {5,509} 77: {5,579} 47: {5,509} 77: {5,7395} 80: {1,587} 77: {719} 81: {6,925} 92: {27,395} 39: {851} 58: {3,929} 39: {851} 58: {3,929} 39: {765} 43: {2,665}
DISTRICT: {Persons} 74: {16,679} 87: 4 : {220} 6: {22: {384} 26: {28: {9,583} 29: {85: {905}} 86: {67: {4,881} 96: {34: {19,495} 74: 31: {45,454} 32: {73: {3,063} 74: 22: {17,883} 24: {13: {52,797} 14: 98: {59,962} 99:	6: {8,426} 40: {7,636} 40: {4,258} 42: {10,051}	88: {7,410} 2: {3,780} 1: {21} 4: {7,145} 2: {7,670} 55: {0} 3: {9,523} 2: {1,248} 85: {5,881} 38: {1,778} 46: {3,069} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 76: {654} 38: {5} 77: {6191} 37: {6191} 37: {6135} 31: {603}
DISTRICT 74; 87 4; 6; 35; 40 2; 26; 27 28; 29; 30; 93 85; 86; 87 67; 96 34; 74 31; 32; 33; 43 73; 74; 75 22; 24; 59; 60; 97 13; 14; 22; 37; 82; 83; 84; 97; 98; 99	6; 40 40; 41; 42 40; 53; 54; 55; 56 42; 69; 72	67 Split 88; 89 88; 7,410} 2; 89; 90 2; {3,780} 1; 88; 90 1; {2,1} 4; 5 4; 5 2; 89 2; {7,670} 55; 57 3; {9,523} 2; 3 2; {1,248} 85; 92 85; {5,881} 38; 46; 48 85; 92 46; 31 46; 31 46; 41; 48; 50; 76; 77; 78; 46; {654} 38; 47; 78 76; {654} 38; 47; 48 38; 47 48; 77 48; 77 48; 77 48; 77 48; 77 48; 77 48; 77 48; 77 48; 71 49; 139,843 37; 39 37; 431} 37; 39 31; 43 31; 43
Split Geography Sawyer Shawano Sheboygan St. Croix Taylor Vernon Vilas Walworth Washburn Washington	Waupaca Waushara Winnebago Wood	CTVS: Brown, Allouez - V Brown, Bellevue - V Brown, Green Bay - C Brown, Ledgeview - T Calumet, Appleton - C Calumet, Harrison - V Calumet, Hilbert - V Calumet, Hilbert - V Chippewa, Lafayette - T Dane, Burke - T Dane, Burke - T Dane, Madison - C Dane, Madison - C Dane, Madison - T Dane, Middleton - T Dane, Middleton - T Dane, Windsor - V Eau Claire, Eau Claire - C Jefferson, Aztalan - T Jefferson, Jefferson - T Jefferson, Jefferson - T

15: {1,539}		
14: {5,598} 63: {2,542}		
12: {58,989} 23: {1,731}		
11: {44,910} 20: {30,700}	98: {20,425}	
21: {17,458} 10: {45,985} 19: {59,065}	66: {4,510}	98: {647}
66: {7,916} 66: {1,275} 20: {1,703} 9: {55,180} 18: {59,234}	17: {3,677} 57: {45,031} 57: {29} 54: {892} 66: {5,374} 64: {8,036} 45: {8,866}	84: {3,347} 55: {7,525}
sons} 65. {49,894} 66. {11,943} 66. {3,414} 33. {603} 95: {40,627} 86. {2,185} 72: {7,074} 82: {16,989} 15: {1,697} 8: {59,362} 17: {55,445}	14: {38,407} 15: {55,838} 69: {1,021} 55: {4,858} 5: {1,962} 5: {1,962} 5: {1,204} 60: {2,935} 24: {10,475} 60: {2,927} 60: {2,927} 62: {4,292} 64: {2,927} 62: {4,292} 63: {4,292} 64: {2,927} 60: {4,292} 60: {4,292} 60: {3,275} 60: {6} 83: {6,996} 99: {7,777} 99: {7,613} 99: {7,777} 99: {7,777}	83: {2,193} 54: {1,817} 55: {14,044}
DISTRICT: {Persons} 64: {42,176} 65: 65: {9,307} 66: 64: {4,988} 66: 32: {1,513} 33: 94: {12,053} 95: 70: {8,649} 72: 21: {19,827} 82: 7: {16,945} 15: 7: {37,922} 8: {4,55,75,722} 8: {4,55,75,722} 8: {4,55,75,722} 8: {4,55,75,722} 8: {4,55,75,722} 8: {4,55,75,722} 8: {4,55,75,722} 8: {4,55,722}		82: {2,270} 53: {9,632} 53: {1,217}
DISTRICT 64; 65; 66 65; 66 64; 66 32; 33; 66 94; 95 70; 86 70; 72 21; 82 7; 15; 20; 21 7; 18; 19; 10; 11; 15; 16; 17; 18; 19; 20; 23; 63	13; 14; 17 7; 15 67; 69 54; 55; 57 3; 5; 54 3; 5; 54 24; 60 23; 24 61; 62 62; 64; 66 61; 62; 64; 66 61; 62; 64; 66 61; 62; 64; 66 13; 44; 45 26; 27 31; 43 31; 43 74; 75 59; 60 12; 24 59; 60 13; 14 97; 98; 99 82; 83 37; 99 83; 99 83; 99	82; 83; 84; 98 53; 54; 55 53; 55
Split Geography Kenosha, Kenosha - C Kenosha, Pleasant Prairie - V Kenosha, Somers - V Kenosha, Wheatland - T La Crosse, La Crosse - C Marathon, Stettin - T Marathon, Stettin - C Milwaukee, Franklin - C Milwaukee, Greenfield - C Milwaukee, Greenfield - C	Milwaukee, Wauwatosa - C 13; 14 Milwaukee, West Allis - C 7; 15 Monroe, La Grange - T 67; 69 Outagamie, Buchanan - T 3; 5; 55 Outagamie, Freedom - T 5; 54 Outagamie, Little Chute - V 3; 5; 55 Ozaukee, Mequon - C 23; 24 Racine, Racine - C 23; 24 Racine, Racine - C 61; 62 Racine, Racine - C 73; 34 Walworth, Lafayette - T 31; 32 Walworth, Whitewater - T 31; 31 Washington, Beaver Brook - T 74; 75 Washington, Bernantown - V 22; 24 Washington, Germantown - V 22; 24 Washington, Germantown - V 22; 24 Washington, Germantown - V 22; 24 Waukesha, Brookfield - C 13; 14 Waukesha, Lisbon - T 59; 60 Waukesha, Oconomowoc - C 37; 99 Waukesha, Oconomowoc - C 37; 99 Waukesha, Summit - V 83; 99 Waukesha, Summit - V 83; 99	Waukesha, Waukesha - T Winnebago, Fox Crossing - V Winnebago, Menasha - C

56: {58,558} 56: {1,524} 55: {868} 72: {34}

53: {8,258} 53: {915} 53: {901} 42: {5,026}

53; 56 53; 56 53; 55 42; 72

Winnebago, Oshkosh - C Winnebago, Oshkosh - T Winnebago, Vinland - T

Wood, Saratoga - T

118 Split

Total Split:

DISTRICT: {Persons}

DISTRICT

Split Geography

•	v
C	っ
o	٥
C	S

42 Split 1; 2; 30	1: {28,528}	2: {61,201}	30: {179,011}					
10; 25	10: {11,216}	25: {5,310}						
1; 2; 19	1: {38,243}	2: {0}	19: {14,199}					
29; 31	29: {38,985}	31: {27,312}						
23; 29	23: {10,620}	29: {24,039}						
20; 27	20: {458}	27: {58,032}						
13; 15; 16; 17; 26; 27	13: {85,716}	15: {146}	16: {176,757}	17: {61,606}	26: {177,837}	27: {59,442}		
13; 20; 27	13: {8,252}	20: {81,144}	27: {0}					
10; 31	10: {14,780}	31: {30,660}						
23; 29; 31	23: {1,243}	29: {13,268}	31: {91,199}					
1; 9; 14; 18; 20	1: {7,637}	9: {489}	14: {12,149}	18: {68,038}	20: {15,841}			
15; 16; 17	15: {9,186}	16: {498}	17: {27,409}					
17; 27	17: {21,062}	27: {2,647}						
11; 13; 15; 20	11: {5,222}	13: {73,084}	15: {2,665}	20: {3,929}				
14; 23	14: {15,485}	23: {11,233}						
11; 22	11: {13,137}	22: {156,014}						
23; 32	23: {1,711}	32: {119,073}						
12; 29	12: {15,921}	29: {12,494}						
1;9	1: {19,883}	9: {61,476}						
12; 23; 24; 29	12: {11,398}	23: {2,884}	24: {82,541}	29: {41,190}				
3; 4; 5; 6; 7; 8; 21; 28	3: {178,010}	4: {177,350}	5: {109,382}	6: {177,376}	7: {178,692}	8: {41,856}	21: {59,834}	28: {16,989}
2; 12	2: {32,817}	12: {6,148}						
1; 2; 18; 19	1: {33,964}	2: {48,826}	18: {57,997}	19: {49,918}				
8; 20	8: {74,224}	20: {17,279}						
10; 31	10: {20,474}	31: {21,738}						
10; 25	10: {39,170}	25: {5,807}						
14; 24	14: {7,067}	24: {63,310}						
11; 21; 22	11: {57,529}	21: {118,841}	22: {21,357}					
11; 15	11: {9,214}	15: {154,473}						
14; 23; 27; 32	14: {2,791}	23: {3,741}	27: {59,211}	32: {20}				
25; 29	25: {16,679}	29: {1,395}						
2; 12; 14	2: {27,515}	12: {8,654}	14: {4,712}					
1;9	1: {384}	9: {117,650}						
10; 31	10: {93,525}	31: {11}						
23; 32	23: {4,881}	32: {25,833}						
12; 25	12: {19,495}	25: {3,552}						
11; 15	11: {94,080}	15: {12,398}						
8; 20; 33	8: {21,158}	20: {59,228}	33: {56,375}					
5; 8; 13; 28; 33	5: {68,024}	8: {41,669}	13: {11,928}	28: {162,074}	33: {123,283}			

	21:{2,542}
	8: {1,731}
	7: {89,765}
	5,404}
19: {114,981} 24: {32,320}	26: {162,140} 7: {19,161} 5: {7,137} 19: {29} 18: {892} 33: {20,425}
SENATE DISTRICT: {Persons} 14: {4,258} 18: {52,491} 14: {10,051} 23: {31,836}	30: {12,155} 30: {107,374} 30: {1,150} 19: {2,895} 31: {316} 16: {1,487} 27: {7,742} 17: {23,043} 16: {8,986} 27: {1,587} 26: {719} 27: {6,925} 29: {2,185} 29: {2,185} 29: {2,185} 29: {2,185} 29: {1,697} 4: {149,884} 6: {3,677} 5: {5,5,838} 19: {49,889} 2: {1,692} 19: {49,889} 2: {1,644} 20: {2,935} 22: {1,204} 20: {2,935} 22: {1,777} 33: {7,777} 33: {7,777} 33: {6,77} 33: {6,777} 33: {6,777} 33: {6,736} 33: {7,777} 33: {6,736} 33: {7,777} 33: {6,736} 33: {7,725}
SENATE DISTR 14: {4,258} 14: {10,051}	1: {3,780} 1: {7,670} 1: {9,523} 29: {5,881} 13: {1,778} 16: {3,069} 16: {7,9253} 13: {5} 16: {7,905} 16: {7,905} 16: {1,829} 11: {2,116} 24: {395} 11: {2,116} 24: {395} 11: {2,116} 24: {395} 11: {4,866} 2: {4,4710} 3: {4,487} 11: {9,523} 8: {3,227} 11: {9,523} 8: {3,227} 11: {9,523} 11: {9,523} 11: {9,523} 11: {9,523} 11: {1,972} 11: {1,972} 11: {1,972} 11: {1,449} 11: {1,4449} 13: {1,059} 13: {1,059} 13: {1,059} 13: {1,059} 13: {1,059} 13: {1,1449} 18: {1,217}
SENATE DISTRICT 14; 18; 19 14; 23; 24	42 Split 1; 30 1; 30 1; 30 1; 19 29; 31 13; 16 16; 27 16; 26 16; 27 16; 26 16; 27 16; 26 16; 27 16; 26 16; 27 17; 26 17; 28 24; 29 7; 28 3; 5; 6 3; 5; 6 3; 5; 6 3; 5; 6 1; 2; 18 3; 5; 6 3; 5; 7; 8; 21 5; 6 3; 5; 7; 8; 21 1; 2; 18 3; 5; 7 1; 2; 18 2; 18 3; 5; 7 1; 2; 18 2; 18 3; 5; 7 3; 5; 6; 7; 8; 21 1; 2; 18 3; 5; 7 1; 2; 18 2; 18 3; 5; 6 3; 5; 7 1; 1; 15 1; 1; 15 1; 1; 15 1; 1; 15 1; 2; 18 3; 20 2; 22 2; 22 2; 22 2; 22 2; 22 2; 22 2; 22 2; 23 3; 33 2; 28; 33
Split Geography Winnebago Wood	Brown, Bellevue - V Brown, Green Bay - C Brown, Ledgeview - T Calumet, Harrison - V Chippewa, Lafayette - T Dane, Burke - T Dane, Madison - C Dane, Midleton - T Dane, Middleton - T Dane, Middleton - T Dane, Middleton - T Jefferson, Ixonia - T Jefferson, Whitewater - C Kenosha, Wheatland - T Milwaukee, Franklin - C Milwaukee, Franklin - C Milwaukee, Mauwatosa - C Milwaukee, Mulison - C Outagamie, Appleton - C Outagamie, Buchanan - T Outagamie, Raukauna - C Outagamie, Ereedom - T Outagamie, Kaukauna - C Walweshe, Cedarburg - T Racine, Mount Pleasant - V Racine, Mount Pleasant - V Racine, Mount Pleasant - V Racine, Mount Summit - V Waukesha, Oconomowoc - T Waukesha, Oconomowoc - T Waukesha, Waukesha - T Winnebago, Fox Crossing - V

SENATE DISTRICT: {Persons}	19: {58,558}	19: {1,524}	19: {868}	24: {34}	
SENATE DISTI	18: {8,258}	18: {915}	18: {901}	14: {5,026}	
SENATE DISTRICT	18; 19	18; 19	18; 19	14; 24	
Split Geography	Winnebago, Oshkosh - C	Winnebago, Oshkosh - T	Winnebago, Vinland - T	Wood, Saratoga - T	

84 Split

Total Split:

CLARKE POLITICAL SUBDIVISION SPLITS - ASSEMBLY

COUNTIES: 44.9pt 73,14.5pt 71,12.5ds 71,12.5ds 71,12.5ds 81,12.5ds 90,13.5ds 9	Split Geography	DISTRICT	DISTRICT: {Persons}	{suos.						
a 57.53.45 a. 1.43.5.6.57.88 a. 9.9 b. 1.88.51.5 3.6.7.04 a. 5.7.04 b. 6.6.80.00 b. 77.19.26 b. 88.6.90 b. 1.88.51.5 3.6.7.04 b. 6.7.04 b. 6.7.04 b. 77.104 b. 87.104	COUNTIES: Bayfield	44 Split 73; 74	73: {15,059}	74: {1,161}						
a 35.53.54 31.7477 \$1 (43.247) \$1 (43.247	Brown	1; 3; 5; 6; 57; 88; 89; 90	1: {8,815}	3: {6,704}	5: {7,032}	6: {48,000}	57: {19,261}	88: {59,743}	89: {29,680}	90: {29,505}
8 97.39 40.41.80 81	Calumet Chippewa	3; 5; 53; 54 67: 68: 70: 75: 93	3: {24,577} 67: {14.734}	5: {4,912} 68: {3.804}	53: {2,311} 70: {6.202}	54: {20,642} 75: {537}	93: {41.020}			
a 37, 39, 40, 41, 80, 81 37, (6, 166) 39, (8, 71) 40, (807) 41, (4, 68) 80, (8, 49) 81, (3, 38) 83, (3, 47) a 37, 39, 41, 58, 09, 61 31, 76, 77, 78, 79, 62 31, 76, 77, 78, 79, 62 31, 76, 77, 78, 79, 62 31, 76, 77, 78, 79, 62 31, 76, 77, 78, 79, 62 31, 76, 77, 78, 79, 62 31, 76, 77, 78, 79, 62 31, 76, 77, 78, 79, 62 31, 76, 77, 78, 79, 78, 78, 78, 78, 78, 78, 78, 78, 78, 78	Clark	68; 69	68: {32,283}	69: {2,376}						
37, 38, 39, 45, 46, 47, 48, 50, 37, 136, 75, 38, (19,100) 39, (23,144) 46; (146) 46; (95,329) 47; (95,339) 48; (59,47) 41; (55,30) 47; (59,329) 80; (83,10) 47; (59,339) 48; (59,47) 41; (55,30) 47; (59,329) 47; (59,329) 80; (83,10) 47; (59,339) 48; (59,47) 41; (55,30) 41; (59,49) 41	Columbia	37; 39; 40; 41; 80; 81	37: {6,166}	39: {8,771}	40: {607}	41: {458}	80: {8,499}	81: {33,989}		
e 70, 139, 41, 58, 60, 99 37, (2,635) 38; (7,7414) 41; (5,530) 58; (29,138) 60; (12,221) 99; (12,258) e 70, 131, 92 70; (137,79) 71; (732) 71; (732) 71; (13,780) 92; (59,149) 91; (12,738) 1 33, 75, 42, 28; 59 38; (13,719) 71; (732) 31; (13,780) 92; (59,187) 59; (13,196) 31; (13,780) 92; (59,187) 93; (13,196) 33; (13,196) 33; (13,196) 33; (13,196) 33; (13,196) 33; (13,196) 33; (13,196) 33; (13,196) 33; (13,196) 34;	Dane	37; 38; 39; 45; 46; 47; 48; 50; 51; 76; 77; 78; 79; 80; 81	37: { 51: {	38: {19,100} 76: {59,572}	39: {23,144} 77: {59,580}	45: {146} 78: {59,644}	46: {59,310} 79: {59,589}	47: {59,338} 80: {8,810}	48: {59,473} 81: {17,127}	50: {18,303}
e 70,71,91,91,92	Dodge	37; 39; 41; 58; 60; 99	37: {2,635}	39: {27,414}	41: {5,530}	58: {29,338}	60: {12,221}	99: {12,258}		
e 70; 71; 91; 92 70; (13,719) 71; (792) 91; (31,780) 92; (59,419) 93; (49,42) 93; (49,42) 93; (41,46) 70; (11,4104) 38; (40,146) 70; (11,4104) 38; (40,146) 70; (11,4104) 38; (40,146) 70; (41,4104) 7	Dunn	91; 93	91: {27,778}	93: {17,662}						
14. 12. 12. 12. 12. 12. 12. 12. 12. 12. 12	Eau Claire	70; 71; 91; 92	70: {13,719}	71: {792}	91: {31,780}	92: {59,419}				
49:50; 51 49:50; 51 40:69; 72	Fond du Lac	3; 26; 42; 58; 59	3: {8,126}	26: {0}	42: {10,576}	58: {26,187}	59: {59,265}			
33.37, 38, 43, 99 33. (5,885) 37. (14,104) 38. (40,167) 39. (19,768) 39. (14,222) 32. (15,6448) 39. (19,768) 49. (15,6448) 50. (14,711) 49. (59,340) 49. (15,9340) 49. (15,9340) 49. (19,936) 49. (19,936) 49. (10,949) 50. (11,711) 49. (19,438) 50. (19,349) 50. (10,446) 50. (10,649) 50. (10,64	lowa	49; 50; 51	49: {146}	50: {194}	51: {23,369}					
40, 69, 72 40; 10,963 69; (4,222) 72; (11,533) e 73, 61; 62, 64 32; 63, 64; 69, 347; 70; (11,533) e 70, 49; 65, 64 32; 65 67; 64, 65, 64; 69, 347; 70; 64, 65, 65, 65, 65, 65, 65, 65, 65, 65, 65	Jefferson	33; 37; 38; 43; 99	33: {5,885}	37: {14,104}	38: {40,167}	43: {4,948}	99: {19,796}			
a. S. G.	Juneau	40; 69; 72	40: {10,963}	69: {4,222}	72: {11,533}					
e 70; 94; 95 70; (1,711) 94; (59,319) 95; (59,754) 95; (59,754) 95; (59,754) 95; (59,754) 95; (50,754) 95; (50,754) 95; (50,754) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7448) 95; (31,7440) 95; (31,7440) 95; (31,748) 95; (31,748) 95; (31,7440) 95; (31,748) 95; (Kenosha	32; 61; 62; 64	32: {5}	61: {50,459}	62: {59,340}	64: {59,347}				
e 49; 50; 51 49; 74,48 50; 13,893 51; 15,270 1 2; 3; 27 2; 16,968 8; 86 6; 86; 86; 86; 86; 86; 86; 86;	La Crosse	70; 94; 95	70: {1,711}	94: {59,319}	95: {59,754}					
Fig. 27. 3.27 Light Sign Sign Sign Sign Sign Sign Sign Sign	Lafayette	49; 50; 51	49: {7,448}	50: {3,893}	51: {5,270}					
Fee 77.8 (5) 68, 6) 85, 86 86, 86, 86, 86, 86, 86, 86, 86, 86,	Manitowoc	2; 3; 27	2: {59,678}	3: {20,241}	27: {1,440}					
ee 7; 8; 9; 10; 11; 12; 15; 16; 7; {99,576} 8; {93,62} 9; {91,59328} 10; {95,563} 11; {95,602} 23; {93,21} 15; {8,656} 83; 83; 84 83; 84 83; 84 83; 84 83; 84 83; 84 83; 84 83; 84, 89, 10; 11; 12; 15; 16; 7; {93,47} 83; 84 83; 84; 84 83; 84 84 84 85; 84 84 84 84 84 84 84 84	Marathon	56; 67; 68; 69; 85; 86	56: {10,349}	67: {10,522}	68: {23,290}	(2,866)	85: {59,412}	86: {26,574}		
17; 18; 19; 20; 21; 23; 63; 82; 17; {99,435} 18; {99,320} 20; {99,286} 21; {99,602} 23; {38,804} 63; {35,880} 83; 84 84; 84 8	Milwaukee	7; 8; 9; 10; 11; 12; 15; 16;		8: {59,362}	9: {59,598}	10: {59,503}	11: {59,565}	12: {59,351}	15: {8,656}	16: {59,714}
70, 72, 96 35, 36, 57 36, 58, 36, 57 36, 38, 38, 55 36, 57 37, 58, 38, 38, 38, 38, 38, 38, 38, 38, 38, 3		17; 18; 19; 20; 21; 23; 63; 82; 83; 84		18: {59,346} 84: {59,477}	19: {59,320}	20: {59,286}	21: {59,602}	23: {38,804}	63: {35,880}	82: {23,386}
35, 36, 57 35, 58, 57 36, 58, 58 36, 58, 58 37, 59, 50 38, 58, 58 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 57 38, 58, 58 38, 58 38, 58, 58 38,	Monroe	96 . 22 . 02	70. {6.379}	72: {39,895}	{U} .96					
34; 35 34; 36,473 35; 4,372 36; 4,372 36; 4,343 37; 4,372 36; 4,367 37; 4,367 37; 4,367 37; 4,367 37; 4,367 37; 4,367 37; 4,367 37; 4,367 37; 4,367 37; 4,467 44; 45; 50 32; 4,467 44; 45; 50 32; 4,467 44; 45; 60 40; 4,1793 31; 4,467 44; 45; 60 40; 4,1793 37; 4,467 44; 45; 60 40; 4,1793 37; 4,1467 44; 45; 60 40; 4,1793 37; 4,1467 44; 45; 60 40; 4,1793 31; 4,1467 44; 45; 60 40; 4,1793 31; 4,1467 44; 45; 60 40; 4,1793 31; 4,1467 44; 45; 60 40; 4,1793 31; 4,1467 44; 45; 60 40; 4,1793 31; 4,1467 44; 45; 60 40; 4,1793 31; 4,1467 44; 45; 60 40; 4,1793 31; 4,1467 44; 45; 60 40; 4,1793 40; 4,1793 40; 4,1793 40; 4,1793 40; 4,1793 40;	Oconto	35: 36: 57	35: {5.806}	36: {3.835}	57: {29.324}					
nie 4; 5; 6; 54; 55 4: {59,676} 5: {47,667} 6: {11,814} 54: {38,961} 55: {32,587} 23; 24; 26; 27; 60 23: {20,595} 24: {59,370} 26: {6,116} 27: {4,357} 60: {1,065} 29; 30; 71 29: {2,994} 30: {21,271} 71: {17,947} 60: {1,065} 28; 29; 75 28: {42,912} 29: {1,987} 75: {78} 40; 86; 87 40: {7,067} 86: {3,927} 87: {59,383} 31; 33; 61; 63; 65; 66 31: {19,972} 33: {25,579} 61: {9,336} 63: {23,605} 65: {59,523} 40; 51; 72; 80; 81; 96 40: {2,791} 51: {9,044} 72: {3,583} 80: {41,993} 81: {8,332} 56; 57 56: 57 56: {29,821} 57: {11,060} 72: {3,583} 93: {80: {41,993} 81: {8,332} an 25; 27; 58 25: {59,801} 27: {53,979} 58: {4,254} 72: {53,979} 58: {4,254} 59; 30; 93 29: {54,458} 30: {30,188} 93: {80: {41,993} 81: {8,332} 72: {96 72: {4,533} 96: {26,181} 72: {4,254} 72: {4,254}	Oneida	34; 35	34: {36,473}	35: {1,372}						
23; 24; 26; 27; 60 23; 20; 20; 50 24; 59,370 26; (5,116) 27; (4,357) 60; (1,065) 29; 30; 71 28; 29; 75 28; (2,994) 30; (21,271) 71; (17,947) 60; (1,065) 40; 86; 87 40; 7,067) 86; (3,927) 87; (59,383) 87; (59,383) 63; (23,605) 65; (59,523) 31; 33; 61; 63; 65; 66 31; (19,972) 33; (25,579) 61; (9,336) 63; (3,924) 50; (85) 40; 51; 72; 80; 81; 96 40; (2,791) 51; (9,044) 72; (3,583) 80; (41,993) 81; (8,332) an 25; 27; 58 25; (29,821) 27; (53,979) 58; (4,254) 58; (4,254) 58; (4,254) an 25; 27; 58 29; (54,458) 30; (38,198) 93; (880) 81; (8,332) aleau 70; 71 70; (10,602) 71; (20,158) 93; (80) 81; (4,254)	Outagamie	4; 5; 6; 54; 55	4: {59,676}	5: {47,667}	6: {11,814}	54: {38,961}	55: {32,587}			
29; 30; 71 29: {2,994} 30: {21,271} 71: {17,947} 28; 29; 75 28; 29; 75 28: {42,912} 29: {1,987} 75: {78} 40; 86; 87 40: {7,067} 86: {3,927} 87: {59,383} 40; 86; 87 40: {7,067} 86: {3,927} 87: {59,383} 41; 33; 61; 63; 65; 66 31: {19,972} 33: {25,579} 61: {9,336} 63: {23,605} 65: {59,523} 82; 43; 44; 45; 50 32: {3,110} 43: {41,467} 44: {59,601} 45: {59,424} 50: {85} 40; 51; 72; 80; 81; 96 40: {2,791} 51: {9,044} 72: {3,583} 80: {41,993} 81: {8,332} an 25; 27; 58 25: {59,801} 27: {53,979} 58: {4,254} 27: {59,801} 27: {59,801} 27: {53,979} 58: {4,254} 30: {33,1880} 30: {31,20,602} 71: {20,158} 72: {4,533} 96: {26,181}	Ozaukee	23; 24; 26; 27; 60	23: {20,595}	24: {59,370}	26: {6,116}	27: {4,357}	60: {1,065}			
28; 29; 75 40; 86; 87 40; 86; 87 40; 86; 87 40; 86; 87 31; 33; 61; 63; 65; 66 31; {19,972} 32; {1,987} 32; {3,927} 31; 33; 61; 63; 65; 66 31; {19,972} 32; {25,579} 40; 51; 72; 80; 81; 96 40; {2,791} 51; {9,044} 72; {3,583} 80; {41,993} 81; {8,332} an 25; 27; 58 25; {59,801} 27; {53,979} 58; {4,254} 30; {33,106} 70; {10,602} 71; {20,158} 72; {4,533} 96; {26,181}	Pierce	29; 30; 71	29: {2,994}	30: {21,271}	71: {17,947}					
40; 86; 87 40; 86; 87 40; 7,067 86; 3,927 87; 59,383 61; 9,336 63; 23,605 65; 5523 31; 33, 61; 63; 65; 66 31; 19,972 33; 25,579 61; 9,336 63; 23,605 65; 573 40; 51; 72; 80; 81; 96 40; 2,791 51; 9,044 72; 3,583 80; 41,993 81; 8,332 an 25; 27; 58 25; 27; 58 25; 27; 44,58 30; 38,198 93; 880} ileau 70; 71 70; 11,0602 71; 20,158 71; 20,158 72; 96 72; 44,533 96; 26,181	Polk	28; 29; 75	28: {42,912}	29: {1,987}	75: {78}					
31; 33; 61; 63; 65; 66 31; {19,972} 32; 43; 44; 45; 50 32; {3,110} 40; 51; 72; 80; 81; 96 40; {2,791} 51; {9,044} 72; {3,583} 80; {41,993} 81; {8,332}	Portage	40; 86; 87		86: {3,927}	87: {59,383}					
32; 43; 44; 45; 50 32: {3,110} 43: {41,467} 44: {59,601} 45: {59,424} 50: {85} and b) 51; 72; 80; 81; 96 40: {2,791} 51: {9,044} 72: {3,583} 80: {41,993} 81: {8,332} and b) 56; 57 56: {29,821} 57: {11,060} 56; 57 50 55: {59,801} 27: {3,5979} 58: {4,254} 50: {40,244} 72: {3,583} 80: {41,993} 81: {8,332} and b) 70; 71 70: {10,602} 71: {20,158} 93: {880} 93: {80} 93:	Racine	31; 33; 61; 63; 65; 66	31: {19,972}	33: {25,579}	61: {9,336}	63: {23,605}	65: {59,523}	66: {59,712}		
40; 51; 72; 80; 81; 96 40: {2,791} 51: {9,044} 72: {3,583} 80: {41,993} 81: {8,332} ano 56; 57 56: {29,821} 57: {11,060} 81: {8,332} oygan 25; 27; 58 25: {59,801} 27: {53,979} 58: {4,254} oix 29; 30; 93 29: {54,458} 30: {38,198} 93: {880} on 70; 71 70: {10,602} 71: {20,158} on 72: 96 72: {4,533} 96: {26,181}	Rock	32; 43; 44; 45; 50	32: {3,110}	43: {41,467}	44: {59,601}	45: {59,424}	50: {85}			
56; 57 56; {29,821} 57; {11,060} 25; 27; 58 25; {59,801} 27; {53,979} 29; 30; 93 29; {54,458} 30; {38,198} 30 70; 71 70; {10,602} 71; {20,158} 72; 96 72; {4,533} 96; {26,181}	Sauk	40; 51; 72; 80; 81; 96	40: {2,791}	51: {9,044}	72: {3,583}	80: {41,993}	81: {8,332}	96: {20}		
25; 27; 58 25; {59,801} 27: {53,979} 29; 30; 93 29; 30; 93 29; {54,458} 30: {38,198} 30 (37,11) 70: {10,602} 71: {20,158} 72; 96 72: {4,533} 96: {26,181}	Shawano	56; 57	56: {29,821}	57: {11,060}						
c 29; 30; 93 29; {54,458} 30; {38,198} aleau 70; 71 70: {10,602} 71: {20,158} 72: {4,533} 96: {26,181}	Sheboygan	25; 27; 58	25: {59,801}	27: {53,979}	58: {4,254}					
aleau 70; 71 70: {10,602} 72; 96 72: {4,533}	St. Croix	29; 30; 93	29: {54,458}	30: {38,198}	93: {880}					
72; 96 72: {4,533}	Trempealeau	70; 71	70: {10,602}	71: {20,158}						
	Vernon	72; 96	72: {4,533}	96: {26,181}						

287a

CLARKE POLITICAL SUBDIVISION SPLITS - ASSEMBLY

97: {59,743}			79: {24,240}	17: {59,435}	
82: {36,413}			78: {29,302}	16: {59,714}	
31: {30,409}			77: {57,411}	12: {56,023}	
22: {38,527}			76: {59,572}	11: {59,565} 84: {19,733}	
43: {13,154} 98: {15,564} 15: {50,857}	56: {19,614} 55: {11,449}	90: {2,107}	48: {33,343} 79: {654}	84: {14,916} 10: {32,287} 21: {11,442}	83: {12,816}
33: {27,850} 60: {46,457} 14: {59,424}	55: {15,479} 42: {3,975} 53: {57,017}	89: {45,524}	47: {27,214} 78: {3}	83: {13,468} 9: {55,484} 20: {20,741}	82: {23,386} 84: {9,974} 54: {33,117}
32: {56,573} 75: {12,371} 26: {53,582} 13: {59,749} 99: {27,707}	42: {1,316} 41: {18,741} 52: {59,335} 86: {29,020}	90: {5,458} 88: {59,743} 54: {8,993} 54: {8,642} 46: {782}	46: {29,440} 48: {3,064} 79: {14,257} 78: {6,792} 46: {17,270} 81: {2,599} 92: {40,112} 64: {49,953}	62: {9,307} 95: {14,037} 85: {575} 86: {7,422} 23: {10,936} 63: {35,880} 20: {2,048} 8: {59,362} 19: {59,320}	18: {10,428} 83: {33,344} 5: {508} 54: {5,844} 5: {749}
! -	40: {15,403} 40: {1,804} 42: {43,929} 69: {45,187}	6: {11,533} 1: {21} 53: {2,311} 3: {3,776} 37: {269} 37: {7.296}	37: 47: 78: 77: 39: 46: 91:	61: {11,943} 94: {38,643} 67: {2,005} 85: {8,301} 12: {1,571} 15: {936} 7: {7,371} 7: {35,198} 18: {48,918}	12: {1,757} 7: {17,007} 4: {29,274} 5: {1,013} 4: {6,571}
DISTRICT 31; 32; 33; 43 31; 74; 75 22; 26; 60; 98 22; 26; 60; 98 12; 13; 14; 15; 22; 31; 82; 97; 12: 98; 99	40; 42; 55; 56 40; 41; 42 42; 52; 53; 55 69; 86	43 Split 6; 90 1; 88; 89; 90 53; 54 3; 54 37; 46; 48		61; 62 94; 95 67; 85 85; 86 12; 23 15; 63 7; 20; 83; 84 7; 8; 9; 10; 11; 12; 16; 17; 18; 19; 20; 21; 84	12; 18; 82; 83 7; 83; 84 4; 5; 54 5; 54 4; 5
Split Geography Walworth Washburn Washington Waukesha	Waupaca Waushara Winnebago Wood	CTVs: Brown, Ashwaubenon - V Brown, Green Bay - C Calumet, Appleton - C Calumet, Harrison - V Dane, Blooming Grove - T Dane, Cottage Grove - V	Dane, Madison - C Dane, Madison - T Dane, Middleton - C Dane, Sun Prairie - C Dane, Windsor - V Eau Claire, Eau Claire - C	Kenosha, Pleasant Prairie - V La Crosse, La Crosse - C Marathon, Stettin - T Marathon, Weston - V Milwaukee, Brown Deer - V Milwaukee, Greenfield - C Milwaukee, Greenfield - C	Milwaukee, Wauwatosa - C Milwaukee, West Allis - C Outagamie, Appleton - C Outagamie, Buchanan - T Outagamie, Kimberly - V

Split Geography	DISTRICT	DISTRICT: {Persons}	ons}	
Ozaukee, Cedarburg - T	24; 60	24: {5,097}	60: {1,065}	
Ozaukee, Mequon - C	23; 24	23: {17,201}	24: {7,941}	
Racine, Caledonia - V	63; 65	63: {20,963}	65: {4,398}	
Racine, Mount Pleasant - V	65; 66	65: {15,857}	66: {11,875}	
Racine, Racine - C	65; 66	65: {37,408}	66: {40,408}	
Racine, Raymond - V	61; 63	61: {1,284}	63: {2,642}	
Rock, Janesville - C	43; 45	43: {27,032}	45: {38,583}	
Sheboygan, Sheboygan - T	25; 27	25: {4,193}	27: {3,943}	
Walworth, Geneva - T	32; 33	32: {2,579}	33: {2,811}	
Waukesha, Brookfield - C	13; 82	13: {13,351}	82: {28,113}	
Waukesha, Merton - T	66;86	98: {7,888}	99: {389}	
Waukesha, Mukwonago - T	31; 97	31: {2,194}	97: {5,587}	
Waukesha, Muskego - C	15; 31	15: {10,406}	31: {14,626}	
Waukesha, Waukesha - C	13; 14; 97	13: {15,769}	14: {42,010}	97: {13,379}
Winnebago, Fox Crossing - V	53; 55	53: {7,525}	55: {11,449}	
Winnebago, Oshkosh - C	42; 52	42: {9,920}	52: {56,896}	
Total Split:	87 Split			

CLARKE POLITICAL SUBDIVISION SPLITS - SENATE

Split Geography	SENATE DISTRICT	SENATE DISTRICT: {Persons}	ICT: {Persons}						
COUNTIES:	34 Split								
Brown	1; 2; 19; 30	1: {15,519}	2: {55,032}	19: {19,261}	30: {178,928}				
Calumet	1; 2; 18	1: {24,577}	2: {4,912}	18: {22,953}					
Chippewa	23; 24; 25; 31	23: {18,538}	24: {6,202}	25: {537}	31: {41,020}				
Columbia	13; 14; 27	13: {14,937}	14: {1,065}	27: {42,488}					
Dane	13; 15; 16; 17; 26; 27	13: {78,996}	15: {146}	16: {178,121}	17: {39,919}	26: {178,796}	27: {85,526}		
Dodge	13; 14; 20; 33	13: {30,049}	14: {5,530}	20: {41,559}	33: {12,258}				
Eau Claire	24; 31	24: {14,511}	31: {91,199}						
Fond du Lac	1; 9; 14; 20	1: {8,126}	6): {0}	14: {10,576}	20: {85,452}				
Jefferson	11; 13; 15; 33	11: {5,885}	13: {54,271}	15: {4,948}	33: {19,796}				
Juneau	14; 23; 24	14: {10,963}	23: {4,222}	24: {11,533}					
Kenosha	11; 21; 22	11: {5}	21: {109,799}	22: {59,347}					
La Crosse	24; 32	24: {1,711}	32: {119,073}						
Manitowoc	1; 9	1: {79,919}	9: {1,440}						
Marathon	19; 23; 29	19: {10,349}	23: {41,678}	29: {85,986}					
Milwaukee	3; 4; 5; 6; 7; 8; 21; 28	3: {178,536}	4: {178,419}	5: {8,656}	6: {178,495}	7: {178,208}	8: {38,804}	21: {35,880}	28: {142,491}
Monroe	24; 32	24: {46,274}	32: {0}						
Oconto	12; 19	12: {9,641}	19: {29,324}						
Outagamie	2; 18; 19	2: {119,157}	18: {38,961}	19: {32,587}					
Ozaukee	8; 9; 20	8: {79,965}	9: {10,473}	20: {1,065}					
Pierce	10; 24	10: {24,265}	24: {17,947}						
Polk	10; 25	10: {44,899}	25: {78}						
Portage	14; 29	14: {7,067}	29: {63,310}						
Racine	11; 21; 22	11: {45,551}	21: {32,941}	22: {119,235}					
Rock	11; 15; 17	11: {3,110}	15: {160,492}	17: {85}					
Sauk	14; 17; 24; 27; 32	14: {2,791}	17: {9,044}	24: {3,583}	27: {50,325}	32: {20}			
Sheboygan	9; 20	9: {113,780}	20: {4,254}						
St. Croix	10; 31	10: {92,656}	31: {880}						
Vernon	24; 32	24: {4,533}	32: {26,181}						
Walworth	11; 15	11: {93,324}	15: {13,154}						
Washington	8; 9; 20; 33	8: {21,158}	9: {53,582}	20: {46,457}	33: {15,564}				
Waukesha	4; 5; 8; 11; 28; 33	4: {0}	5: {170,030}	8: {38,527}	11: {30,409}	28: {36,413}	33: {131,599}		
Waupaca	14; 19	14: {16,719}	19: {35,093}						
Winnebago	14; 18; 19	14: {43,929}	18: {116,352}	19: {11,449}					
Wood	23; 29	23: {45,187}	29: {29,020}						
CTVs:	28 Split								
Brown Ashwallhenon - V	2.30	2. {11 533}	30. {5.458}						
Brown Green Bay - C	2, 30 1·30	2. [11,033] 1. {21}	30. {3,438}						
Calumet Harrison - V	1.18	1. {2 + J	18: {8 6/12}						
Dane Blooming Grove - T	13.16	13. {2,7,79}	16. {1,353}						
	21 (21		(5)						

			28: {19,733}			
27: {24,240}			7: {91,503}			
26: {146,285} 27: {24,240} 27: {654}		28: {28.384}	6: {168,067} 28: {36,202}			
ICT: {Persons} 16: {7} 16: {89,997} 26: {3}	27: {14,257} 16: {17,270} 27: {2,599} 22: {49,953}	29: {5/5} 8: {10,936} 21: {35,880} 7: {2.048}	4: {147,875} 6: {10,428}	28: {43,318} 18: {33,117} 18: {5,844} 20: {1,065}	22: {4,398} 28: {28,113} 33: {5,587}	11: {14,626} 33: {13,379} 19: {11,449} 18: {56,896}
SENATE DISTRICT: {Persons} 13: {7,296} 16: {7} 13: {9,318} 16: {89,997} 16: {5,579} 26: {3}	26: {7,570} 13: {18,697} 16: {6,155} 21: {50,033}	23: {2,005} 4: {1,571} 5: {936} 3: {7,371}	3: {150,044} 4: {1,757}	3: {17,007} 2: {29,782} 2: {1,013} 8: {5,097}	21: {20,963} 5: {13,351} 11: {2,194}	5: {10,406} 5: {57,779} 18: {7,525} 14: {9,920}
SENATE DISTRICT 13; 16 13; 16; 26; 27 16; 26; 27 26: 27	26; 27 13; 16 16; 27 21; 22	23; 29 4; 8 5; 21 3: 7: 28	3; 4; 6; 7; 28 4; 6; 28	3; 28 2; 18 2; 18 8; 20	21; 22 5; 28 11; 33	5; 11 5; 33 18; 19 14; 18
Split Geography Dane, Cottage Grove - V Dane, Madison - C Dane, Madison - T	Dane, Middleton - C Dane, Sun Prairie - C Dane, Windsor - V Kenosha, Kenosha - C	Marathon, Stettin - I Milwaukee, Brown Deer - V Milwaukee, Franklin - C Milwaukee. Greenfield - C	Milwaukee, Milwaukee - C Milwaukee, Wauwatosa - C	Milwaukee, West Allis - C Outagamie, Appleton - C Outagamie, Buchanan - T Ozaukee, Cedarburg - T	Racine, Caledonia - V Waukesha, Brookfield - C Waukesha, Mukwonago - T	Waukesha, Muskego - C 5; 11 Waukesha, Waukesha - C 5; 33 Winnebago, Fox Crossing - V 18; 19 Winnebago, Oshkosh - C 14; 18

Total Split:

291

WRIGHT POLITICAL SUBDIVISION SPLITS - ASSEMBLY

Split Geography	DISTRICT	DISTRICT: {Persons}	sons}						
COUNTIES:	47 Split		[] ()	2					
Adams	49; 50; 81	49: {15,893}	50: {3,025}	81: {1,/36}	,				
Barron	30; 67; 73; 75	30: {2,678}	67: {4,748}	73: {12,027}	75: {27,258}				
Bayfield	36; 74	36: {1,262}	74: {14,958}						
Brown	1; 3; 5; 6; 88; 89; 90	1: {8,815}	3: {10,958}	5: {54,410}	6: {16,470}	88: {59,919}	89: {59,059}	90: {59,109}	
Calumet	3; 27; 60	3: {4,912}	27: {29,066}	60: {18,464}					
Chippewa	67; 91; 93	67: {29,333}	91: {35,823}	93: {1,141}					
Clark	67; 69	67: {16,972}	69: {17,687}						
Columbia	39; 40; 42; 79; 80; 81	39: {458}	40: {8,905}	42: {13,894}	79: {13,208}	80: {2,028}	81: {19,997}		
Dane	40; 41; 42; 43; 46; 47; 48; 76; 77;	40: {28,301}	41: {30,235}	42: {45,737}	43: {8,274}	46: {41,637}	47: {59,898}	48: {24,533}	76: {59,412}
	78; 79; 80; 94; 95	77: {59,722}	78: {59,918}	79: {46,642}	80: {32,298}	94: {60,052}	95: {4,845}		
Dodge	37; 39; 40; 53; 97	37: {3,852}	39: {55,061}	40: {14,582}	53: {9,646}	97: {6,255}			
Dunn	30; 68; 92; 93	30: {8,756}	(866) :89	92: {34,683}	93: {1,003}				
Eau Claire	91; 92; 93	91: {23,611}	92: {24,701}	93: {57,398}					
Fond du Lac	26; 27; 39; 52; 53; 55	26: {7,078}	27: {1,412}	39: {1,722}	52: {60,050}	53: {21,743}	55: {12,149}		
Green	45; 46; 48	45: {3,189}	46: {10,125}	48: {23,779}					
lowa	95; 96	95: {21,488}	96: {2,221}						
Jackson	68; 69	68: {6,982}	69: {14,163}						
Jefferson	40; 41; 43; 97; 99	40: {7,561}	41: {29,123}	43: {29,128}	97: {14,168}	99: {4,920}			
Juneau	50; 80; 81	50: {14,393}	80: {12,321}	81: {4}					
Kenosha	31; 32; 64; 65	31: {51,510}	32: {9,599}	64: {48,221}	65: {59,821}				
La Crosse	70; 71; 72	70: {42,543}	71: {19,102}	72: {59,139}					
Lafayette	48; 95; 96	48: {10,865}	95: {913}	96: {4,833}					
Manitowoc	2; 3; 27	2: {59,973}	3: {3,966}	27: {17,420}					
Marathon	35; 51; 57; 67; 69; 85; 86	35: {4,371}	51: {3,804}	57: {14}	67: {1,290}	69: {9,491}	85: {59,116}	86: {59,927}	
Milwaukee	7; 8; 9; 10; 11; 12; 14; 15;	7: {59,603}	8: {59,362}	9: {59,571}	10: {59,503}	11: {59,565}	12: {59,351}	14: {33,975}	15: {32,994}
	16; 17; 18; 19; 20; 21; 23; 61;		17: {59,435}	18: {59,346}	19: {59,320}	20: {59,548}	21: {59,592}	23: {38,804}	61: {10,762}
	82; 84	82: {48,998}	84: {60,046}						
Monroe	50; 70	50: {29,790}	70: {16,484}						
Oconto	4; 6; 34; 57	4: {17,386}	6: {19,671}	34: {1,044}	57: {864}				
Oneida	34; 36	34: {25,317}	36: {12,528}						
Outagamie	3; 5; 56; 58; 59; 60	3: {39,470}	5: {4,579}	56: {43,586}	58: {2,058}	59: {59,554}	60: {41,458}		
Ozaukee	23; 24; 38	23: {20,470}	24: {59,171}	38: {11,862}					
Pierce	29; 30	29: {14,761}	30: {27,451}						
Polk	28; 73	28: {31,056}	73: {13,921}						
Portage	49; 51; 87	49: {5,225}	51: {5,769}	87: {59,383}					
Racine	31; 63; 64; 66; 82; 83	31: {8,052}	63: {48,219}	64: {11,511}	66: {59,904}	82: {9,990}	83: {60,051}		
Rock	32; 33; 43; 44; 45; 46		33: {29,470}	43: {9,379}	44: {58,010}	45: {55,911}	46: {7,807}		
Sauk	80; 81; 95	80: {13,066}	81: {37,430}	95: {15,267}					

WRIGHT POLITICAL SUBDIVISION SPLITS - ASSEMBLY

97: {35,311} 98: {59,868}		94: {43,204}
99: {2,472} 97: {3,825} 62: {60,001} 97: {		79: {20,678} 94: {
÷ ÷	3}	
63: {11,256} 39: {2,182} 61: {49,121}	58: {57,103}	78: {57,749}
44: {1,901} 38: {48,155} 22: {37,947}	56: {1,203}	90: {46,902}
27: {11,514} 30: {20,263} 95: {240} 43: {13,154} 37: {56,014} 15: {26,719}	55: {26,228} 69: {18,119}	90: {6,229} 89: {44,903} 89: {1,451} 77: {7,563} 94: {4,340} 42: {5,387} 93: {24,974} 72: {59,821} 72: {14,620}
sons} 25: {16,998} 26: {47,355} 29: {44,862} 67: {6,997} 71: {24,784} 33: {30,607} 26: {5,427} 14: {25,985}	57: {37,472} 55: {2,012} 54: {59,545} 51: {49,925}	88: {2,964} 5: {15,569} 90: {5,978} 5: {4,069} 60: {11,304} 60: {7,160} 79: {5,228} 47: {26,158} 76: {654} 40: {1,423} 80: {2,452} 41: {7,423} 92: {2,005} 92: {2,005} 92: {2,005} 71: {15,884} 72: {406} 71: {15,884} 72: {406} 71: {3,218} 83: {10,936} 83: {3,166} 84: {38,827} 71: {15,884} 72: {406} 71: {3,218} 83: {10,936} 83: {10,936} 83: {34,516}
DISTRICT: {Persons} 6: {23,883} 57: 25: {59,165} 26: 28: {28,411} 29: 35: {12,916} 67: 50: {5,690} 71: 32: {47,088} 33: 22: {21,158} 26: 13: {60,008} 14: 99: {52,018}	56: {14,340} 49: {22,508} 53: {27,651} 50: {6,163}	5: {7,798} 1: {21} 5: {13,972} 3: {2,237} 27: {0} 27: {5,258} 42: {5,583} 42: {2,748} 42: {2,748} 41: {5} 78: {0} 40: {23,157} 48: {10,661} 49: {20,259} 52: {2,323} 41: {1,351} 40: {7,561} 31: {1,338} 70: {22,176} 71: {1,571} 71: {1,571} 71: {1,571}
DISTRICT 6; 57 25; 26; 27 28; 29; 30 35; 67 50; 71; 95 32; 33; 44; 63; 99 22; 26; 37; 38; 39; 97 13; 14; 15; 22; 61; 62; 97; 98; 99	56; 57 49; 55 53; 54; 55; 56; 58 50; 51; 69	52 Split 5; 88; 90 1; 5; 89; 90 5; 90 3; 5 27; 60 42; 79 42; 79 42; 79 42; 77 78; 80; 94 40; 41; 42 40; 41; 42 40; 97 91; 92; 93 52; 53 40; 97 91; 92; 93 52; 53 40; 97 91; 92; 93 70; 71; 72 70; 72 70; 71 70; 71
Split Geography Shawano Sheboygan St. Croix Taylor Vernon Walworth Washington	Waupaca Waushara Winnebago Wood	Brown, Ashwaubenon - V Brown, Green Bay - C Brown, Howard - V Brown, Lawrence - T Calumet, Appleton - C Calumet, Appleton - C Calumet, Harrison - V Dane, DeForest - V Dane, Madison - T Dane, Madison - T Dane, Mildleton - T Dane, Sun Prairie - C Dane, Watertown - C Eau Claire, Eau Claire - C Fond du Lac, Fond du Lac - T Jefferson, Jefferson - T Jefferson, Watertown - C Kenosha, Kenosha - C La Crosse, La Crosse - C La Crosse, La Crosse - C La Crosse, Aledby - T Milwaukee, Brown Deer - V Milwaukee, Franklin - C

WRIGHT POLITICAL SUBDIVISION SPLITS - ASSEMBLY

Split Geography Milwaukee, Greendale - V Milwaukee, Greenfield - C	DISTRICT 82; 84 7; 61; 84	DISTRICT: {Persons} 82: {6,762} 84: 7: {7,371} 61:	sons} 84: {8,092} 61: {3,652}	84: {26,780}					
Milwaukee, Milwaukee - C	7; 8; 9; 10; 11; 12; 16; 17; 18; 19; 20; 84	7: {35,225} 18: {48,918}	8: {59,362} 19: {59,320}	9: {55,457} 20: {32,183}	10: {32,287} 84: {19,733}	11: {59,565}	12: {56,023}	16: {59,714}	17: {59,435}
Milwaukee, Wauwatosa - C	12; 14; 15; 18	12: {1,757}	14: {33,975}	15: {2,227}	18: {10,428}				
Milwaukee, West Allis - C	7; 15; 61; 84	7: {17,007}	15: {30,767}	61: {7,110}	84: {5,441}				
Outagamie, Appleton - C	3; 56; 58; 59; 60	3: {316}	56: {142}	58: {2,058}	59: {35,723}	60: {24,660}			
Outagamie, Buchanan - T	3; 60	3: {1,013}	60: {5,844}						
Ozaukee, Mequon - C	23; 24	23: {17,076}	24: {8,066}						
Ozaukee, Saukville - V	24; 38	24: {2,482}	38: {1,776}						
Racine, Caledonia - V	63; 66; 82; 83	63: {600}	66: {5,078}	82: {8,132}	83: {11,551}				
Racine, Mount Pleasant - V	64; 66	64: {4,592}	66: {23,140}						
Racine, Racine - C	66; 83	66: {31,176}	83: {46,640}						
Racine, Raymond - V	63; 82	63: {2,068}	82: {1,858}						
Rock, Janesville - C	33; 44	33: {27,673}	44: {37,942}						
Sheboygan, Sheboygan - T	25; 26	25: {5,752}	26: {2,384}						
Walworth, Elkhorn - C	32; 33	32: {3,497}	33: {6,750}						
Waukesha, Brookfield - C	14; 15	14: {15,750}	15: {25,714}						
Waukesha, Brookfield - T	13; 15	13: {5,472}	15: {1,005}						
Waukesha, Menomonee Falls - \ 14; 22	. \ 14; 22	14: {1,935}	22: {36,592}						
Waukesha, Merton - T	97; 98	97: {7,467}	98: {810}						
Waukesha, Mukwonago - T	62; 99	62: {1,563}	99: {6,218}						
Waukesha, Muskego - C	61; 62	61: {8,670}	62: {16,362}						
Waukesha, Waukesha - C	13; 62	13: {53,708}	62: {17,450}						
Waukesha, Waukesha - T	13; 62	13: {828}	62: {7,629}						
Winnebago, Algoma - T	53; 54	53: {5,973}	54: {893}						
Winnebago, Fox Crossing - V	55; 58	55: {9,594}	58: {9,380}						
Winnebago, Oshkosh - C	53; 54	53: {10,603}	54: {56,213}						

Total Split:

												762} 28: {109,044}																		
												21: {10,762}																		
			32: {64.897}									8: {38,804}																		
			27: {78.940}								29: {119,043}	7: {178,460}																		
			26: {179.052}	33: {6,255}	19: {12,149}						23: {10,781}	6: {178,495}			20: {103,070}				28: {70,041}						33: {2,472}	33: {3,825}	33: {147,197}			
	25: {39,285}	30: {178,087} 20: {18,464}	27: {35,233}	18: {9,646}	18: {81,793}	33.510 0881					19: {14}	5: {66,969}		19: {864}	19: {43,586}				22: {71,415}	16: {7,807}				32: {240}	21: {11,256}	13: {106,351}	21: {109,122}		20: {57,103}	
ICT: {Persons}	27: {1,736} 23: {4,748} 25: {14 958}	2: {70,880} 9: {29,066}	31: {36,964} 14: {22,799} 15: {8,274}	14: {14,582}	13: {1,722}	16: {33,904}	27: {12,325}	22: {108,042}	32: {5,746}	9: {17,420}	17: {3,804}	4: {178,419}	24: {16,484}	12: {1,044}	2: {4,579}	13: {11,862}	25: {13,921}	29: {59,383}	21: {48,219}	15: {123,300}	32: {15,267}	19: {16,998}	23: {6,997}	24: {24,784}	15: {15,055}	9: {5,427}	8: {37,947}	19: {2,012}	19: {27,431}	23: {18,119}
SENATE DISTRICT: {Persons}	17: {18,918} 10: {2,678} 17: {1.262}	1: {19,773} 1: {4,912}	23: {29,333} 13: {458} 14: {104,273}	13: {58,913}	9: {8,490}	15: {3,189} 14: /36 68/1	17: {14,393}	11: {61,109}	16: {10,865}	1: {63,939}	12: {4,371}	3: {178,536}	17: {29,790}	2: {37,057}	1: {39,470}	8: {79,641}	10: {31,056}	17: {10,994}	11: {8,052}	11: {32,580}	27: {50,496}	2: {23,883}	12: {12,916}	17: {5,690}	11: {77,695}	8: {21,158}	5: {112,712}	17: {22,508}	18: {87,196}	17: {56,088}
SENATE DISTRICT	37 Split 17; 27 10; 23; 25 17: 25	1; 2; 30 1; 2; 30 1; 9; 20	23; 31 13; 14; 27 14: 15: 16: 26: 27: 32	13; 14; 18; 33	9; 13; 18; 19	15; 16 17: 15: 33	17; 27	11; 22	16; 32	1; 9	12; 17; 19; 23; 29	3; 4; 5; 6; 7; 8; 21; 28	17; 24	2; 12; 19	1; 2; 19; 20	8; 13	10; 25	17; 29	11; 21; 22; 28	11; 15; 16	27; 32	2; 19	12; 23	17; 24; 32	11; 15; 21; 33	8; 9; 13; 33	5; 8; 21; 33	17; 19	18; 19; 20	17; 23
Split Geography	COUNTIES: Adams Barron Bayfield	Brown Calumet	Chippewa Columbia Dane	Dodge	Fond du Lac	Green	Juneau	Kenosha	Lafayette	Manitowoc	Marathon	Milwaukee	Monroe	Oconto	Outagamie	Ozaukee	Polk	Portage	Racine	Rock	Sauk	Shawano	Taylor	Vernon	Walworth	Washington	Waukesha	Waushara	Winnebago	Wood

SENATE DISTRICT: {Persons}	98} 30: {9,193} } 2: {15,569} 30: {91,805} ;972} 30: {5,978} ;37} 2: {4,069} 20: {11,304} ;58} 20: {7,160}		~ ~ 4	<pre> 4:(147,875) 6:(168,067) 7:(91,503) 5:(36,202) 6:(10,428) 5:(30,767) 21:(7,110) 28:(5,441) 19:(142) 20:(62,441) 20:(5,844) 13:(1,776) 22:(5,078) 28:(19,683) 28:(46,640) 28:(46,640) 28:(1,858) 15:(37,942) 8:(36,592) 33:(6,218) 21:(17,450) 20:(9,380) </pre>
Split Geography SENATE DISTRICT SENATE	CTVs: 35 Split Brown, Ashwaubenon - V 2; 30 2: {7,798} Brown, Green Bay - C 1; 2; 30 1: {21} Brown, Howard - V 2; 30 2: {13,972} Brown, Lawrence - T 1; 2 1: {2,237} Calumet, Appleton - C 9; 20 9: {0} Calumet, Harrison - V 9; 20 9: {5,258}	14; 16; 26; 27; 32 16; 26; 32 14; 16; 26 26; 27; 32 16; 32 16; 32 14; 33	.8 7, 28	3; 4; 6; 7; 28 4; 5; 6 3; 5; 21; 28 1; 19; 20 1; 20 8; 13 21; 22 22; 28 21; 28 11; 15 3lls - V 5; 8 21; 33 5; 21 5; 21

296

JOHNSON POLITICAL SUBDIVISION SPLITS - ASSEMBLY

Split Geography	DISTRICT	DISTRICT: {Persons}	{suos.						
COUNTIES: Barron Bavfield	37 Split 28; 67; 75; 93 73: 74	28: {2,486}	67: {850} 74 ⁻ {856}	75: {42,686}	93: {689}				
Brown Chippewa	1; 2; 4; 5; 6; 88; 89; 90 67; 70; 74; 93	1: {9,128} 67: {58,603}	7: {46,589} 2: {46,589} 70: {2,632} 96: {8,662}	4: {20,348} 74: {4,285}	5: {7,032} 93: {777}	6: {6,441}	88: {59,658}	89: {59,746}	90: {59,798}
Dane	75, 30 37; 43; 46; 47; 48; 50; 51; 76; 77; 78; 79; 80; 81		90: {6,002} 43: {9,228} 78: {59,527}	46: {59,794} 79: {59,646}	47: {48,936} 80: {59,514}	48: {59,786} 81: {59,410}	50: {4,713}	51: {12,475}	76: {59,456}
Dodge	37; 38; 39; 53; 58; 98		38: {0}	39: {55,846}	53: {10,477}	58: {13,234}	98: {1,587}		
Eau Claire Fond du Lac Iowa	68; 91 52; 53; 58; 59 49: 51	68: {46,310} 52: {59,265} 49: {146}	91: {59,400} 53: {26,079} 51: {23,563}	58: {16,450}	59: {2,360}				
Jackson	68; 69		69: {7,955}						
Jefferson	31; 33; 37; 39; 98		33: {5,885}	37: {42,004}	39: {3,492}	98: {7,103}			
Kenosha La Crosse	32; 63; 64; 65; 66 69: 94: 95	32: {5} 69: {1,711}	63: {15,494} 94: {59.379}	64: {34,640} 95: {59,694}	65: {59,522}	66: {59,490}			
Lafayette	49; 51		51: {16,341}						
Lincoln	85; 87	85: {4,201}	87: {24,214}						
Manitowoc	2; 3; 25; 26	2: {13,233}	3: {7,025}	25: {59,661}	26: {1,440}				
Marathon	6; 70; 72; 85; 86; 87	6: {14}	70: {17,967}	72: {5,044}	85: {55,369}	86: {58,371}	87: {1,248}		
Milwaukee	7; 8; 9; 10; 11; 12; 14; 15; 16; 17; 18; 19; 20; 21; 23; 82; 84	7: {59,325} 16: {59,714} 84: {59,390}	8: {59,362} 17: {59,662}	9: {59,598} 18: {59,471}	10: {59,503} 19: {59,320}	11: {59,565} 20: {59,469}	12: {59,438} 21: {59,834}	14: {52,834} 23: {40,375}	15: {13,040} 82: {59,589}
Oconto	6; 35; 36	6: {864}	35: {34,389}	36: {3,712}					
Oneida	34; 35	34: {36,554}	35: {1,291}						
Outagamie	4; 5; 6; 40; 53; 55; 57	4: {39,281}	5: {52,718}	6: {1,298}	40: {11,249}	53: {2,869}	55: {23,967}	57: {59,323}	
Ozaukee	23; 24; 59; 60	23: {18,991}	24: {9,545}	59: {4,357}	60: {58,610}				
Pierce	30; 92; 93 36, 36	30: {21,271}	92: {8,312}	93: {12,629}					
POIR	20, 23	26. {50,550}	29. [6,027] 41. [622]	71. JED 2001	73.501	16501.50			
Foliage Bacine	61. 62. 63. 64. 83	40. [3,304] 61. {59.821}	41. [023 <i>]</i> 62: {59.390}	63: {39:173}	72. {0} 64: {24.913}	83: {14 430}			
Rock	31; 32; 43; 44; 45; 47		32: {3,110}	43: {13,223}	44: {59,723}	45: {59,297}	47: {10,348}		
Sauk	38; 50; 51; 96	38: {606}	50: {54,898}	51: {6,982}	96: {2,974}				
Sheboygan	26; 27	26: {58,362}	27: {59,672}						
St. Croix	28; 29; 30; 93	28: {4,326}	29: {51,001}	30: {38,198}	93: {11}				
Walworth	31; 32; 33; 63; 83	31: {15,055}	32: {56,490}	33: {29,930}	63: {4,781}	83: {222}			
Washington	22; 24; 58; 59; 60	22: {3,635}	24: {49,852}	58: {29,692}	59: {52,533}	60: {1,049}			
Waukesha	13; 14; 15; 22; 33; 83; 97; 98; 99	13: {59,375} 99: {59,292}	14: {6,513}	15: {46,560}	22: {55,640}	33: {23,889}	83: {45,144}	97: {59,755}	98: {50,810}
Waupaca	6; 40; 53	6: {10,037}	40: {38,747}	53: {3,028}					

297a

JOHNSON POLITICAL SUBDIVISION SPLITS - ASSEMBLY

	80: {32,543}			
	79: {14,060}			
	78: {57,505}		82: {17,221}	
	77: {59,778}		21: {2,542}	
56: {59,432} 72: {54,416}	76: {53,537}	80: {3}	20: {32,104} 82: {4,565} 57: {35,492}	
55: {35,676} 70: {4,382}	90: {56,162}	78: {654}	19: {59,320} 18: {6,467} 55: {23,967} 64: {9,220} 64: {8,264} 45: {6,006}	
sons} 54: {59,368} 69: {3,332}	88: {15,447} 89: {37,113} 89: {9,813} 70: {2,632} 47: {7,296}	76: {3,750} 48: {6,839} 81: {1,651} 47: {10,562} 91: {54,746} 37: {5,580} 65: {59,522} 66: {12,092} 95: {44,579}	18: {53,004} 15: {13,040} 5: {2,982} 24: {6,255} 62: {17,585} 44: {56,058}	27: {8,045} 33: {8,360} 24: {17,282} 58: {1,204} 22: {28,880} 83: {1,443} 99: {19,860} 56: {18,080}
DISTRICT: {Persons} 53: {17,254} 54: 42: {12,077} 69:	2: {1,544} 88: {14,120} 4: {10,137} 67: {1,172} 46: {7} 81: {3,656}	48: {1,829} 47: {2,152} 80: {20,176} 43: {617} 68: {12,492} 31: {2,213} 64: {25,246} 63: {2,509} 94: {8,101}	17: {59,662} 7: {36,253} 4: {458} 23: {18,887} 61: {927} 61: {58,894} 31: {3.551}	26: {41,884} 32: {1,887} 22: {3,635} 24: {4,788} 13: {9,647} 15: {6,109} 33: {759} 33: {1,483} 97: {51,298} 54: {48,736}
DISTRICT 53; 54; 55; 56 42; 69; 70; 72	32 Split 2; 88 88; 89; 90 4; 89 67; 70 46; 47 46; 47; 48; 76; 77; 78; 79; 80; 81	48; 76; 78; 80 47; 48 80; 81 43; 47 68; 91 31; 37 64; 65; 66 63; 66 94: 95	17; 18; 19; 20; 21; 82 7; 15; 18; 82 4; 5; 55; 57 23; 24 61; 62; 64 61; 62; 64 31: 44: 45	26, 27, 25, 27, 25, 27, 23, 33, 24, 58, 21, 22, 24, 58, 33; 83, 33; 98, 97; 99, 54; 56
Split Geography Winnebago Wood	CTVs: Brown, Ashwaubenon - V Brown, Green Bay - C Brown, Howard - V Chippewa, Stanley - C Dane, Cottage Grove - V Dane, Madison - C	Dane, Madison - T Dane, McFarland - V Dane, Middleton - C Dane, Oregon - V Eau Claire, Eau Claire - C Jefferson, Jefferson - C Kenosha, Kenosha - C Kenosha, Salem Lakes - C La Crosse, La Crosse - C	Milwaukee, West Allis - C Outagamie, Appleton - C Ozaukee, Mequon - C Racine, Mount Pleasant - V Racine, Racine - C	Sheboygan - C

JOHNSON POLITICAL SUBDIVISION SPLITS - SENATE

t	23: {850} 2: {33,821} 24: {2,632} 32: {8,662} 15: {9,228} 18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 4: {178,506} 12: {38,101} 4: {178,506} 12: {38,101} 4: {178,506} 12: {24,041} 24: {23,041} 24: {20,941} 24: {20,941} 24: {20,941} 24: {23,243} 25: {24,913} 27: £4,880	10: (2,486) 11: {55,717} 23: {58,603} 17: {7,451} 13: {9,241} 13: {64,098} 23: {46,310} 11: {5} 23: {46,310} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {20,258} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {1,096} 11: {1,1096} 11: {1,1096} 11: {1,1096} 11: {1,1096} 11: {1,1096} 11: {1,1096} 11: {1,1096} 11: {1,1006} 11: {1,1006} 11: {1,1006} 11: {1,1096} 11: {1,1006	5; 31 5; 31 6; 17; 26; 0; 33 2 2 2; 7; 8; 28 ; 19 6 6
10; 33; 25; 31 10; (2,486) 23; (850) 25; (42,686) 31; (689) 12; 30 23; (85,603) 24; (2,632) 25; (4,285) 31; (777) 17; 32 23; (85,603) 24; (2,632) 25; (4,285) 31; (777) 17; 32 17; (7,451) 32; (8,662) 25; (4,285) 31; (777) 13; 18; 20; 33 13; (9,241) 15; (9,228) 16; (168,516) 17; (17,188) 13; 20 18; (85,344) 20; (18,810) 31; (45,466) 33; (1,587) 23; 32 23; (46,310) 31; (45,466) 33; (1,138) 11; 21; 22 11; (32,301) 11; (45,466) 33; (1,103) 2; 44, 29 11; (32,301) 21; (45,466) 33; (1,148) 3; 45, 50; 78; 28 21; (13,204) 22; (14,304) 22; (14,847) 2; 14; 18; 19 2; (46,301) 21; (14,249) 18; (2,567) 3; 45, 50; 78; 28 2; (46,301) 21; (14,304) 18; (14,305) 10; 31 10; (11,27) 24; (2,903) 32; (2,944) 11; 15; 16 11; (10,475) 24; (4,988) 29; (4,944) 13; 17; 22 13; (909) 17; (4,781) <td< th=""><th>23: {850} 2: {33,821} 24: {2,632} 32: {8,662} 15: {9,228} 18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 4: {178,506} 12: {38,101} 4: {178,506} 12: {38,101} 4: {178,506} 12: {38,101} 4: {10,941} 20: {62,967} 31: {20,941} 21: {24,913} 15: {132,243} 17: £41,880</th><th>10: (2,486) 11: {55,717} 23: {58,603} 17: {7,451} 13: {9,241} 13: {64,098} 23: {46,310} 18: {85,344} 11: {32,301} 11: {5} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 21: {1864} 21: {28,536} 10: {21,271} 11: {21,096} 11: {21,096} 10: {03,525} 10: {03,525} 11: {21,096} 11: {21,096}</th><th>5; 31 6; 17; 26; 0; 33 2 2 2; 7; 8; 28 ; 19 6 6</th></td<>	23: {850} 2: {33,821} 24: {2,632} 32: {8,662} 15: {9,228} 18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 4: {178,506} 12: {38,101} 4: {178,506} 12: {38,101} 4: {178,506} 12: {38,101} 4: {10,941} 20: {62,967} 31: {20,941} 21: {24,913} 15: {132,243} 17: £41,880	10: (2,486) 11: {55,717} 23: {58,603} 17: {7,451} 13: {9,241} 13: {64,098} 23: {46,310} 18: {85,344} 11: {32,301} 11: {5} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 21: {1864} 21: {28,536} 10: {21,271} 11: {21,096} 11: {21,096} 10: {03,525} 10: {03,525} 11: {21,096} 11: {21,096}	5; 31 6; 17; 26; 0; 33 2 2 2; 7; 8; 28 ; 19 6 6
11.2.30 12.4.75;31 12.30 12.5.4.75;31 12.3.24,25;31 12.3.24,25;31 12.3.24,25;31 12.3.24,25;31 12.3.24,25 13.1.3.33 11.3.3.32 12.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3	2: {33,821} 24: {2,632} 32: {8,662} 15: {9,228} 18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 4: {178,506} 12: {38,101} 4: {178,506} 32: {20,941} 24: {59,288} 22: {24,913} 15: {132,243} 17: £41,880	1: {55,717} 23: {58,603} 17: {7,451} 13: {9,241} 13: {9,241} 13: {64,098} 23: {46,310} 18: {85,344} 11: {32,301} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 23: {1,711} 11: {5} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 21: {864} 21: {864} 21: {864} 21: {864} 21: {864} 21: {10,127} 21: {158,384} 21: {10,127} 21: {158,384} 21: {11: {21,096} 21: {158,384} 21: {13: {909} 21: {13: {209} 21: {13: {209} 21: {13: {200} 21: {23,525} 21: {23,525} 21: {21,096} 21: {23,525} 21: {21,096} 21: {23,525} 21: {23,525} 21: {21,096} 21: {	5; 31 6; 17; 26; 0; 33 2 2 2 ; 7; 8; 28 ; 19 6 6 6
23; 24, 25; 31 23; (58,603) 24; (2,632) 25; (4,285) 31; (777) 17; (7,431) 31; (9,228) 16; (168,516) 17; (17,188) 13; 15; 16; 17; 26; 27 13; (9,242) 15; (9,228) 16; (168,516) 17; (17,188) 13; 18; 20; 33 13; (46,310) 31; (59,400) 18; (10,477) 20; (13,234) 33; (1,534) 13; 20 18; (85,344) 20; (18,810) 31; (45,301) 21; (15,496) 33; (7,103) 11; 33 11; (3) 21; (15,496) 22; (15,496) 33; (7,103) 13; 24; 29 1; (20,258) 9; (61,101) 23; (17,138) 2; 44; 29 1; (20,258) 9; (61,101) 23; (17,138) 3; 45; 6; 7; 8; 28 3; (178,285) 4; (178,506) 5; (65,874) 6; (178,847) 3; 42; 20 1; (20,258) 9; (61,101) 2; (45,301) 2; (86,374) 6; (178,847) 3; 42; 5; 7; 8; 28 3; (173,28) 4; (11,249) 18; (2,699) 19; (83,290) 8; 20 8; (26,344) 22; (24,913) 23; (2,974) 14; (10,127) 24; (59,288) 29; (962) 11; 5; 6 11; (101,475) 21; (4,781) 22;	24: {2,632} 32: {8,662} 15: {9,228} 18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243} 17: £61,880	23: {58,603} 17: {7,451} 13: {9,241} 13: {9,241} 13: {64,098} 23: {46,310} 18: {85,344} 11: {32,301} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 11: {20,258} 23: {1,711} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {864} 23: {869} 23: {11: {21,096} 23: {909} 23: {903,251} 24: {903,251} 24: {903,251} 25: {903,251} 26: {903,251} 27: {903,251} 27: {903,251} 27: {903,251} 28: {903,251} 28: {903,251} 29: {903,251} 20: {903,252} 20: {903,	; 25; 31 ; 16; 17; 26; ; 20; 33 ; 22 ; 33 ; 22 ; 6; 7; 8; 28 ; 6; 7; 8; 28 ; 6; 7; 8; 28 ; 6; 7; 8; 28 ; 6; 7; 8; 28
17, 32 17, 7451) 37, 8662) 13, 15, 16, 17, 26, 27 13, 9440) 15, 16, 234) 15, 16, 17, 2434) 15, 16, 17, 2441) 15, 16, 27, 2441) 15, 16, 27, 2441) 15, 16, 27, 2441) 15, 16, 27, 2441) 15, 16, 27, 2441) 13, 16, 2400) 18, 10, 4771 18, 10, 4771 18, 10, 4771 18, 16, 46, 3409 18, 16, 46, 3409 18, 16, 46, 3409 18, 16, 46, 3409 18, 16, 46, 3409 11, 21, 22 11, 21, 22 11, 13, 33 11, 13, 33 11, 13, 33 11, 13, 33 11, 13, 33 11, 13, 33 11, 13, 33 11, 13, 33 11, 13, 33 11, 14, 5404 22, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14	32: {8,662} 15: {9,228} 18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243} 17: £61,880	17: {7,451} 13: {9,241} 13: {64,098} 23: {46,310} 18: {85,344} 11: {32,301} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {5} 23: {1,711} 11: {1,70,258} 23: {864} 23: {866} 23:	; 16; 17; 26; ; 20; 33 ; 22 ; 33 ; 22 ; 6; 7; 8; 28 ; 6; 7; 8; 28 ; 29 ; 28 ; 28 ; 16
13; 15; 16; 17; 26; 27 13; 9,241 15; 9,228 16; 16,516 17; 17,188 13; 18; 20; 33 23; 46,408 18; 16,477 20; 13,234 33; 14,587 13; 18; 20; 33 23; 46,409 18; 16,4040 11; 13; 33 11; 13; 30 11; 13; 45,496 33; 7,103 11; 13; 32 11; 15; 22 11; 19; 31 13; 15,400 33; 17,103 11; 13; 32 11; 21; 22 11; 13; 32 11; 19; 32 11; 19,733 21; 15,494 22; 153,652 2; 24; 29 11; 16; 32,301 32; 14,10,73 21; 14,10,73 21; 14,10,73 21; 14,10,73 21; 14,138 21; 14,138 21; 14,138 21; 14,10,73 21; 14,138 21; 14,138 21; 14,138 21; 14,139 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,138 21; 14,143 21; 14,143 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 21; 14,144 </td <td>15: {9,228} 18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}</td> <td>13: (9,241) 13: (64,098) 23: (46,310) 18: (85,344) 11: (32,301) 11: (5) 23: (1,711) 11: (20,258) 23: (14) 33: (178,285) 23: (484) 23: (864) 24: (864) 24: (864) 25: (864) 25: (864) 26: (864) 27: (864) 27: (864) 28: (864) 29: (8</td> <td>; 16; 17; 26; ; 20; 33 ; 22 ; 33 ; 22 ; 6; 7; 8; 28 18; 19 ; 28 ; 29 ; 28 ; 29 ; 28 ; 29 ; 28</td>	15: {9,228} 18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	13: (9,241) 13: (64,098) 23: (46,310) 18: (85,344) 11: (32,301) 11: (5) 23: (1,711) 11: (20,258) 23: (14) 33: (178,285) 23: (484) 23: (864) 24: (864) 24: (864) 25: (864) 25: (864) 26: (864) 27: (864) 27: (864) 28: (864) 29: (8	; 16; 17; 26; ; 20; 33 ; 22 ; 33 ; 22 ; 6; 7; 8; 28 18; 19 ; 28 ; 29 ; 28 ; 29 ; 28 ; 29 ; 28
13: 18; 20; 33 13: (64,088) 18: (10,477) 20: (13,234) 33: (1,587) 18; 33 18: (65,344) 20: (18,810) 11: (21,22) 11: (25,344) 20: (18,810) 11; 21; 22 11: (55) 21: (15,494) 22: (153,652) 23: (1,711) 33: (119,073) 21: (15,494) 22: (153,652) 1; 29 11: (20,258) 9: (61,101) 20: (14,498) 33: (7,103) 21: (15,494) 22: (14,498) 2; 14 18: (9,49) 21: (14,492) 21: (14,498) 33: (178,847) 22: (41,490) 2; 14, 18: 19 2: (864) 12: (38,101) 22: (44,430) 10: (41,249) 10: (41,440) 10; 31 10; 31 10; (12,273) 21: (59,288) 20: (62,967) 10: (41,440) 11; 5; 16 11: (21,209) 12: (13,243) 12: (13,443) 12: (13,444) 21; 22 21: (15,884) 22: (12,443) 23: (41,440) 11; 5; 16 11: (10,1475) 21: (4,781) 22: (29,74) 10; 31 11: (10,1475) 21: (4,781) 22: (29,74) 10; 31 22: (12,448) 8: (55,640) 11: (43,282) 2; 44 18: (10,337) <td>18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}</td> <td>13: {64,098} 23: {46,310} 18: {85,344} 11: {32,301} 11: {5} 23: {1,711} 1: {20,258} 2: {14} 3: {178,285} 2: {864} 2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 11: {21,096} 11: {21,0</td> <td>13; 18; 20; 33 23; 31 18; 20 11; 13; 33 11; 21; 22 23; 32 1; 9 2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32</td>	18: {10,477} 31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	13: {64,098} 23: {46,310} 18: {85,344} 11: {32,301} 11: {5} 23: {1,711} 1: {20,258} 2: {14} 3: {178,285} 2: {864} 2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 11: {21,096} 11: {21,0	13; 18; 20; 33 23; 31 18; 20 11; 13; 33 11; 21; 22 23; 32 1; 9 2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32
23; 31 23: (46,310) 31: (59,400) 18, 20 18: (85,344) 20: (18,810) 11; 21, 22 11: (32,301) 13: (45,496) 23: (15,5494) 23; 32 23: (17,11) 32: (115,494) 22: (153,652) 23; 32 11: (20,258) 9: (61,101) 21: (15,494) 22: (153,652) 2; 24; 29 2: (144) 24: (23,011) 29: (114,988) 32: (178,286) 5: (65,874) 6: (178,847) 2; 12 2: (864) 12: (38,101) 29: (114,988) 12: (38,101) 29: (114,988) 13: (39,091) 13: (29,67) 10: (33,290) 13: (20,941) 18: (2,869) 19: (83,290) 8; 20 10: (31,271) 31: (20,941) 18: (2,943) 11: (31,442) 11: (10,478) 11: (10,478) 11: (10,488) 12: (2,974) 10: (33,294) 11: (10,478) 11: (10,488) 12: (2,974) 10: (33,288) 28: (45,144) 29: (10,488) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 13: (10,988) 1	31: {59,400} 20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	23: (46,310) 18: (85,344) 11: (32,301) 11: (5) 23: (1,711) 1: (20,258) 2: (14) 3: (178,285) 2: (864) 2: (93,297) 8: (28,536) 10: (21,271) 14: (10,127) 21: (158,384) 11: (21,096) 10: (03,575)	23; 31 18; 20 11; 13; 33 11; 21; 22 23; 32 1; 9 2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32
18, 20 18: [85,344] 20: [18,810] 11, 13, 33 11: [32,301] 13: [45,496] 33: [7,103] 11, 21, 22 21: [15,494] 22: [13,652] 23: [13,073] 13, 32 21: [14,49] 22: [15,494] 22: [15,494] 22: [15,494] 1; 9 1: [20,258] 9: [61,101] 29: [14,988] 3; [17,828] 4: [178,506] 5: [65,874] 6: [178,847] 2; 14, 18; 19 2: [864] 12: [83,101] 29: [14,988] 19: [83,290] 8; [20,294] 19: [83,290] 8; [20,294] 10: [21,204]	20: {18,810} 13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243} 17: £41,880	18: {85,344} 11: {32,301} 11: {5} 23: {1,711} 11: {20,258} 21: {14} 31: {178,285} 21: {864} 21: {93,297} 81: {28,536} 10: {21,271} 11: {10,127} 21: {158,384} 11: {21,096} 11: {21,096} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 11: {21,096} 11:	18; 20 11; 13; 33 11; 21; 22 23; 32 1; 9 2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
11; 13; 33	13: {45,496} 21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243} 17: £41 8801	11: {32,301} 11: {5} 23: {1,711} 1: {20,258} 2: {14} 3: {178,285} 2: {864} 2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 13: {909}	11; 13; 33 11; 21; 22 23; 32 1; 9 2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
11, 21, 22 11: {5} 21: {15,494} 22: {153,652} 23, 32 13: {1,711} 32: {11,073} 21: {15,494} 22: {145,672} 1, 9 1: {20,288} 2: {144} 24: {23,011} 29: {14,988} 2; 44, 29 2: {144} 24: {23,011} 29: {14,988} 3; 45, 56, 7; 8, 28 3: {178,285} 4: {178,506} 5: {65,874} 6: {178,847} 2; 12 2: {83,207} 14: {11,249} 18: {2,869} 19: {83,209} 8; 20 8: {28,536} 20: {62,967} 19: {83,209} 10; 31 10: {11,212} 31: {10,041} 18: {2,869} 19: {83,209} 11; 15, 16 10: {11,212} 21: {158,384} 20: {62,967} 10: {10,348} 10; 31 10: {33,248} 17: {61,880} 32: {2,944} 10; 31 11: {10,1475} 21: {4,781} 28: {45,444} 8; 20 8: {33,487} 20: {83,524} 11: {23,889} 28: {45,144} 9; 8; 11; 28; 33 5: {112,448} 8: {55,604} 11: {23,889} 28: {45,144} 1; 4; 13; 20 30: {10,037} 21: {33,327} 21: {33,327} 21: {33,327} 21: {33,327}	21: {15,494} 32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243} 17: £41,880	11: {5} 23: {1,711} 11: {20,258} 21: {14} 31: {178,285} 21: {864} 21: {93,297} 81: {28,536} 10: {21,271} 11: {10,127} 21: {158,384} 11: {21,096} 10: {03,526} 10: {03,526} 11: {21,096} 10: {03,526} 10: {03,526} 10: {03,526} 10: {03,526} 10: {03,526} 10: {03,526} 10: {03,526} 10: {03,526} 10: {03,526} 10: {03,526} 11: {21,096} 11:	11; 21; 22 23; 32 1; 9 2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 14 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32
23; 32 23; (1,711) 32: (119,073) 1; 9 1: {20,258} 9: {61,101} 2; 24; 29 2: {144} 24: {32,011} 29: {144,888} 3; 45; 6; 7; 8; 28 3: {178,285} 4: {178,506} 5: {65,874} 6: {178,847} 2; 12 2: {864} 12: {38,101} 19: {83,206} 19: {83,207} 8; 20 8: {28,536} 20: {62,967} 19: {83,209} 10; 31 10; {21,271} 31: {20,941} 19: {83,209} 11; 25; 28 21: {158,384} 22: {44,913} 28: {14,430} 11; 15; 16 11: {10,127} 24: {19,288} 29: {962} 11; 15; 16 11: {10,475} 21: {4,781} 28: {10,348} 10; {33,487} 11: {10,475} 21: {4,781} 28: {20,44} 8: {53,487} 20: {81,2344} 10: {33,224} 11: {13,308} 9: {11,28; 33 5: {11,248} 8: {55,408} 11: {23,288} 18; 19 18: {76,622} 19: {95,108} 14: {12,077} 23: {3,332} 24: {58,798} 2; 30 2: {10,037} 2: {10,037} 23: {3,332} 24: {58,798} 2; 30 2: {10,137}	32: {119,073} 9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243} 17: £61 880	23: {1,711} 1: {20,258} 2: {14} 3: {178,285} 2: {864} 2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 10: {03,525} 10: {03,525} 11: {21,096}	23; 32 1; 9 2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
1; 9 1: {20,258} 9: {61,101} 2; 24; 29 2: {14} 24: {23,011} 29: {114,988} 3; 4; 5; 6; 7; 8, 28 3: {178,285} 4: {178,566} 5: {65,874} 6: {178,847} 2; 14; 18; 19 2: {864} 12: {38,101} 8: {2,869} 19: {83,290} 8; 20 8: {28,536} 20: {62,947} 19: {83,290} 9; 20 10: {21,217} 31: {20,941} 19: {83,290} 10; 31 10: {21,227} 24: {59,288} 29: {962} 21; 22; 28 21: {158,384} 22: {24,913} 28: {14,430} 11; 15; 16 11: {21,096} 15: {132,243} 16: {10,348} 11; 21; 28 11: {10,475} 21: {4,731} 28: {12,744} 10; 31 11: {10,475} 21: {4,731} 28: {25,44} 10; 31 11: {10,475} 21: {4,731} 28: {3,204} 8; 20 8: {53,204} 11: {23,889} 28: {45,144} 5; 8; 11; 28; 33 5: {10,037} 14: {38,747} 18: {3,028} 14; 23; 24 14: {12,077} 23: {3,322} 24: {58,798} 2; 30 2: {10,137} 30: {15,447}	9: {61,101} 24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	1: {20,258} 2: {14} 3: {178,285} 2: {864} 2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 11: {21,096} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 10: {03,525} 11: {21,096} 10: {03,525} 10: {03,525} 11: {21,096} 11:	1; 9 2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
2; 24; 29 2: {14} 24: {23,011} 29: {14,988} 3; 4; 5; 6; 7; 8; 28 3: {178,285} 4: {178,506} 5: {65,874} 6: {178,847} 2; 12 2: {864} 12: {38,101} 3: {15,847} 19: {83,290} 8; 20 2: {93,297} 14: {11,249} 18: {2,869} 19: {83,290} 8; 20 10: {21,271} 31: {20,941} 19: {83,290} 11; 15; 16 10: {21,271} 21: {20,288} 29: {66,294} 11; 15; 16 11: {15,384} 22: {24,913} 28: {14,430} 11; 15; 16 11: {10,475} 17: {18,80} 32: {2,974} 10; 31 10: {93,525} 31: {11} 28: {22,444} 8; 20 8: {53,487} 20: {83,274} 32: {45,144} 5; 8; 11; 28; 33 5: {112,448} 8: {55,640} 11: {23,889} 28: {45,144} 14; 23; 24 14: {12,077} 23: {3,332} 24: {58,798} 23: {45,144} 23; 24 23: {112,448} 30: {15,447} 30: {15,447} 30: {15,447} 23; 24 23: {20,233} 24: {58,798} 41: {12,077} 24: {5,623} 23; 24 26: {40,033} 26	24: {23,011} 4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	2: {14} 3: {178,285} 2: {864} 2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 13: {909}	2; 24; 29 3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
3: 4; 5; 6; 7; 8; 28 3: {178,285} 4: {178,506} 5: {65,874} 6: {178,847} 2; 12 2: {864} 12: {38,101} 6: {178,847} 6: {178,847} 2; 14; 18; 19 2: {93,297} 14: {11,249} 18: {2,869} 19: {83,290} 8; 20 8: {28,536} 20: {62,967} 19: {83,290} 10; 31 10: {21,271} 31: {20,941} 18: {4,430} 11; 15; 16 11: {21,096} 15: {132,243} 16: {10,348} 13; 17; 32 11: {21,096} 15: {132,243} 16: {10,348} 10; 31 11: {101,475} 21: {4,781} 28: {22,74} 8; 20 8: {53,487} 20: {83,274} 38: {55,640} 11; 21; 28 8: {53,487} 20: {83,274} 38: {55,640} 2; 41, 18 18: {76,622} 19: {95,108} 14: {12,077} 2; 5; 11; 28; 33 5: {112,244} 8: {55,40} 11: {23,828} 14, 23; 24 14: {12,077} 23: {3,332} 24: {58,798} 2; 30 2: {10,037} 23: {3,332} 24: {58,798} 2; 30 2: {10,137} 30: {15,447} 2; 30 2: {10,137} 30: {10	4: {178,506} 12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	3: {178,285} 2: {864} 2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 13: {909}	3; 4; 5; 6; 7; 8; 28 2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
2; 12 2; (864) 2; 14; 18; 19 2; (93,297) 3; 20 8; (28,536) 10; (21,271) 11; (20,941) 11; (24,29) 11; (24,29) 12; (158,384) 12; (122,28) 12; (128,384) 13; (132,243) 14; (10,127) 14; (10,127) 15; (16,180) 17; (16,180) 17; (16,180) 17; (16,180) 17; (16,180) 17; (10,348) 19; (11; (10,475) 11; (10,348) 11; (10,348) 11; (10,348) 11; (10,3475) 11; (10,3475) 11; (10,3475) 12; (10,037) 12; (10,037) 13; (10,037) 14; (13,348) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 14; (10,037) 15; (10,037) 16; (10,037) 17; (10,037) 18; (10,037) 19; (10,037) 19; (10,037) 19; (10,037) 10	12: {38,101} 14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	2: {864} 2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 13: {909}	2; 12 2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
2; 14; 18; 19 2; 193,297} 10; 21,20; 31 10; 31 11; 24; 29 10; 31 11; 24; 29 11; 24; 29 12; 24; 29 12; 24; 29 12; 24; 29 13; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 14; 24; 29 15; 24; 29 16; 26; 20; 26; 29; 29; 29; 29; 29; 29; 29; 29; 29; 29	14: {11,249} 20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	2: {93,297} 8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 13: {909}	2; 14; 18; 19 8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
8; 20 8; 28, 536) 10; 31 10; 21, 271 11; 24, 29 11; 15, 16 11; 15, 16 11; 15, 16 11; 15, 16 11; 15, 16 11; 15, 16 11; 17, 32 11; 17, 32 11; 18, 32 11; 19, 17; 32 11; 10, 475 11; 11, 18 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 11; 21, 28 12; 21, 31 12; 32 12; 33 13; 33 14; 38, 74 14; 33 14; 23, 24 14; 23, 24 15; 26, 27 16; 26, 27 17; 21, 28 18; 30 18; 19	20: {62,967} 31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243}	8: {28,536} 10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 13: {909}	8; 20 10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
10; 31 10; 31 11; 24; 29 11; 10; 127 12; 28 12; 28 12; 28 11; 15; 16 11; 15; 16 11; 15; 16 11; 12, 109 11; 15; 16 11; 12, 28 11; 10; 10; 10; 10; 10; 10; 10; 10; 10;	31: {20,941} 24: {59,288} 22: {24,913} 15: {132,243} 17: {61,8801}	10: {21,271} 14: {10,127} 21: {158,384} 11: {21,096} 13: {909}	10; 31 14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
14; 24; 29 14; {10,127} 24; {59,288} 29; {962} 21; 22; 28 21; {158,384} 22; {24,913} 28; {14,430} 11; 15; 16 11; {21,096} 15; {132,243} 16; {10,348} 13; 17; 32 10; {93,525} 31; {11} 10; 31 11; {101,475} 21; {4,781} 28; {222} 8; 20 8; {53,487} 20; {83,274} 28; {3028} 5; 8; 11; 28; 33 5; {112,448} 8; {55,640} 11; {23,889} 28; {45,144} 2; 14; 18 2; {10,037} 14; {38,747} 18; {3,028} 18; {76,622} 19; {95,108} 14; 23; 24 14; {12,077} 23; {3,332} 24; {58,798} 22; {10,137} 30; {9,813} 23; {1,172} 24; {2,632} 2; 30 2; {10,137} 30; {9,813} 23; {1,172} 24; {2,632} 16; {48,761} 25; {20,559} 16; {40,404} 27; {50,259} 16; 26; 27 16; {48,761} 26; {4,404} 27; {3} 27; {3} 26; {40,404} 27; {3}	24: {59,288} 22: {24,913} 15: {132,243}	14: {10,127} 21: {158,384} 11: {21,096} 13: {909}	14; 24; 29 21; 22; 28 11; 15; 16 13; 17; 32 10; 31
21; 22; 28 21; {158,384} 22; {24,913} 28; {14,430} 11; {15; 16 11; {21,096} 12; {132,243} 16; {10,348} 10; 31 11; 21; 28 10; {93,525} 31; {11} 11; 21; 28 10; {93,525} 31; {11} 11; 21; 28 10; {93,525} 31; {11} 11; 21; 28 11; 20; 31 11; 21; 28 12; 44,781 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 47,81 21; 41,18 21; 41,18 22; 41,0,37 23; 43,332 24; 43,747 24; 42,632 24; 43,761 25; 41,772 24; 42,632 24; 43,761 25; 47,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 44,744 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 43,764 27; 44,744 27; 44,744	22: {24,913} 15: {132,243}	21: {158,384} 11: {21,096} 13: {909}	21; 22; 28 11; 15; 16 13; 17; 32 10; 31
11; 15; 16 11; (21,096) 15; (132,243) 16; (10,348) 13; 17; 32 10; (93,525) 31; (11) 11; 21; 28 11; (10,475) 21; (4,781) 28; (222) 8; (53,487) 20; (83,274) 5; 8; 11; 28; 33 5; (112,448) 8; (55,640) 11; (23,889) 28; (45,144) 2; 14; 18 18; 19 18; 19 14; 23; 24 14; (12,077) 23; (3,332) 24; (58,798) 14; 23; 24 15; (10,137) 30; (15,447) 2; 30 2; (10,137) 30; (15,447) 2; 30 2; (10,137) 30; (15,447) 2; 30 2; (10,137) 30; (15,447) 2; 30 2; (10,137) 30; (15,447) 2; 30 2; (10,137) 30; (15,447) 2; 30 2; (10,137) 30; (15,427) 16; 26; 27 16; (48,761) 26; (170,820) 27; (50,259) 16; 26; 27 16; (1,829) 26; (4,70,820) 27; (3)	15: {132,243}	11: {21,096} 13: {909} 10: {93 525}	11; 15; 16 13; 17; 32 10; 31
13: 17; 32 13: {909} 17: {61,880} 32: {2,974} 10; 31 10: {93,525} 31: {11} 28: {222} 11; 21; 28 11: {101,475} 21: {4,781} 28: {222} 8; 20 8: {53,487} 20: {83,274} 28: {45,144} 5; 8; 11; 28; 33 5: {112,448} 8: {55,640} 11: {23,889} 28: {45,144} 2; 14; 18 2: {10,037} 14: {38,747} 18: {3,028} 18: {76,622} 19: {95,108} 14; 23; 24 14: {12,077} 23: {3,332} 24: {58,798} 2; 30 2: {10,137} 30: {9,813} 23: {44,447} 2; 30 2: {10,137} 30: {9,813} 23: {4,404} 27: {3} 16; 26; 27 16: {48,761} 26: {4,404} 27: {3} 16; 26; 27 16: {4,404} 27: {3}	17. [61 880]	13: {909}	13; 17; 32 10; 31
10; 31 10; {93,525} 31; {11} 11; 21; 28 11; {101,475} 21; {4,781} 28; {222} 8; 20 8: {53,487} 20; {83,274} 20; {83,274} 5; 8; 11; 28; 33 5: {112,448} 8: {55,640} 11: {23,889} 28: {45,144} 2; 14; 18 2: {10,037} 14: {38,747} 18: {3,028} 18; 19 18: {76,622} 19: {95,108} 18: {3,028} 14; 23; 24 14: {12,077} 23: {3,332} 24: {58,798} 21 Split 1: {1,544} 30: {15,447} 23: {3,24} 2; 30 2: {10,137} 30: {15,447} 24: {56,259} 16; 26; 27 16: {48,761} 26: {170,820} 27: {50,259} 16; 26; 27 16: {1,829} 26: {4,404} 27: {3}	1/.101,0001	10. (93 525)	10; 31
11; 21; 28 8: {53,487} 8; 20 8: {53,487} 20: {83,274} 5; 8; 11; 28; 33 5: {112,448} 8: {55,640} 11: {23,889} 28: {45,144} 2; 14; 18 2: {10,037} 14: {38,747} 18: {3,028} 14; 23; 24 14: {12,077} 23: {3,332} 24: {58,798} 21 Split 1; 30 22: {10,137} 23: {15,447} 2; 30 23: {10,137} 23: {24,044} 25: {10,137} 25: {10,137} 26: {40,44} 27: {30,259} 16; 26; 27 16: {4,8761} 26: {4,404} 27: {31} 27: {31} 27: {31} 27: {31} 27: {32} 27: {32} 27: {33} 27: {33} 27: {33} 27: {34} 27: {34} 27: {34} 27: {35} 27	31: {11}	10.000	۰۲. ۲۲. ۵۰
8; 20 8; 53,487} 20: {83,274} 5; 8; 11; 28; 33 5; {112,448} 8; {55,640} 11: {23,889} 28: {45,144} 2; 14; 18 2; 14; 18 18; 19 18: {76,622} 19: {95,108} 14; 23; 24 14: {12,077} 23: {3,332} 24: {58,798} 21 Split 1; 30 21 Split 1; 30 22: {10,137} 30: {9,813} 23; 24 23; 24 23: {1,172} 24: {2,632} 16; 26; 27 16: {48,761} 26: {1,70,820} 27: {50,259} 16; 26; 27 16: {48,761} 26: {4,7620} 26: {4,7620} 27: {31,722} 26: {4,7620} 26: {4,7620} 27: {16: {18,29}} 26: {4,7620} 27: {16: {18,29}} 26: {4,7620} 27: {16: {18,29}} 26: {4,7620} 27: {16: {18,29}} 26: {4,7620} 27: {27: {31}} 27: {31} 27: {31} 27: {32} 27: {32} 27: {33} 27: {33} 27: {34} 27: {35} 27: {35} 27: {35} 27: {35} 27: {35} 27: {35} 27: {36} 28: {46} 28: {	21: {4,781}	11: {101,475}	11, 21, 28
5; 8; 11; 28; 33 2; 112,448} 8; {55,640} 11; {23,889} 2; 14; 18 2; 14; 18 18; 19 18; {76,622} 19; {95,108} 14; 23; 24 14; {12,077} 23; {3,332} 24; {58,798} 21 Split 1; 30 2; 10,137} 2; 30 2; {10,137} 2; 30 2; 30 2; 30 2; 30 2; 30 2; 30 2; 30 2; 30 2; 30 2; 30 2; 30 2; 30 2; 30 2;	20: {83,274}	8: {53,487}	8; 20
2; 14; 18 2; 10,037} 14; 38,747} 18; 19 18; 19 18; 76,622} 19; 95,108} 14; 23; 24 14: {12,077} 23: {3,332} 21 Split 1; 30 2; 30 2; {10,137} 30: {15,447} 2; 30 2; 31,172} 24: {2,632} 16; 26; 27 16; 48,761} 26: {170,820} 16; 26; 27 16: {1,829} 26: {4,404} 16: 26; 27 16: {1,829} 26: {4,404}	8: {55,640}	5: {112,448}	5; 8; 11; 28; 33
18; 19 18; 76,622} 14; 23; 24 14: {12,077} 23: {3,332} 21 Split 1; 30 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 30 2; {10,137} 2; 24: {2,632} 16; 26; 27 16: {48,761} 26: {170,820} 26: {2,527} 26: {2,4404} 26: {2,527} 26: {2,4404} 27: {2,4404} 27: {2,4404} 28	14: {38,747}	2: {10,037}	2; 14; 18
14; 23; 24	19: {95,108}	18: {76,622}	18; 19
21 Split 1; 30 2; 30 2; 40,137} 2; 30 2; 40,137} 23; 24 23; 24; 25; 27 16; 26	23: {3,332}	14: {12,077}	14; 23; 24
21 Split 1; 30 1; 30 2; 30 2; 40,137} 23; 24 16; 26; 27 26; 27 27; 27 27; 27 27; 27; 27; 27; 27; 27; 27; 27; 27; 27;			
1; 30 1: {1,544} 30: {15,447} 2; 30 2: {10,137} 30: {9,813} 23; 24 23: {1,172} 24: {2,632} 16; 26; 27 16: {48,761} 26: {170,820} 16; 26; 27 16: {1,829} 26: {4,049} 26: {4,049}			21 Split
2; 30 2: {10,137} 30: {9,813} 23; 24 23: {1,172} 24: {2,632} 16; 26; 27 16: {48,761} 26: {170,820} 16; 26; 27 16: {1,829} 26: {4,640}	30: {15,447}	1: {1,544}	1; 30
23; 24 23; {1,172} 24; {2,632} 16; 26; 27 16; {48,761} 26; {170,820} 16; 26; 27 16; {1,829} 26; {4,404}	30: {9,813}	2: {10,137}	2; 30
27 16: {48,761} 26: {170,820} 27 16: {1,829} 26: {4,404} 16: {1,623}	24: {2,632}	23: {1,172}	23; 24
27 16: {1,829} 26: {4,404}	26: {170,820}	16: {48,761}	16; 26; 27
15. [617]	26: {4,404}	16: {1,829}	16; 26; 27
13: {01/}	[67] (47) 77	15: {617}	15; 16
		21: {4,781} 20: {83,274} 8: {55,640} 14: {38,747} 19: {95,108} 23: {3,332} 30: {15,447} 30: {9,813} 24: {2,632} 26: {170,820} 26: {4,404} 16: {10,562}	~

28: {17,221}

7: {93,966}

	6: {172,380} 28: {4,565}									
	5: {4,447} 6: {6,467}									
ICT: {Persons} 31: {54,746} 13: {5,580}	4: {151,290} 5: {13,040}	19: {59,459}	22: {9,220} 22: {8,264}	15: {62,064}	20: {1,204}	8: {28,880}	28: {18,923}	28: {1,443}	33: {3,301}	19: {18,080}
SENATE DISTRICT: {Persons} 23: {12,492} 31: {54,746} 11: {2,213} 13: {5,580} 21: {7,509}	3: {137,918} 3: {36,253}	2: {3,440}	21: {18,512} 21: {69,552}	11: {3,551}	8: {4,788}	5: {9,647}	5: {6,109}	11: {759}	11: {1,483}	18: {48,736}
SENATE DISTRICT 23; 31 11; 13	3; 4; 5; 6; 7; 28 3; 5; 6; 7; 28 3; 5; 6; 28	2; 19	21; 22 21; 22	11; 15	8; 20	/ 5;8	5; 28	11; 28	11; 33	18; 19
Split Geography Eau Claire, Eau Claire - C Jefferson, Jefferson - C Kennsha, Salem Lakes - C	Milwaukee, Milwaukee - C Milwaukee, West Allis - C	Outagamie, Appleton - C	Racine, Mount Pleasant - V Racine, Racine - C	Rock, Janesville - C	Washington, Slinger - V	Waukesha, Menomonee Falls - V 5; 8	Waukesha, Muskego - C	Waukesha, North Prairie - V	Waukesha, Summit - V	Winnebago, Oshkosh - C

50 Split

Total Split:

300a

CERTIFICATION REGARDING APPENDIX

I certify that the appendix meets the form requirements governing a respondent's appendix contained in Wis. Stat. §809.18(3)(b) and further certify that if the record is required by law to be confidential, the portions of the record included in the appendix are reproduced using one or more initials or other appropriate pseudonym or designation instead of full names of persons, specifically including juveniles and parents of juveniles, with a notation that the portions of the record have been so reproduced to preserve confidentiality and with appropriate references to the record.

Dated this 22nd day of January, 2024.

Respectfully submitted,

Electronically Signed by Kevin M. St. John

BELL GIFTOS ST. JOHN LLC KEVIN M. ST. JOHN, SBN 1054815 5325 Wall Street, Suite 2200 Madison, WI 53718 608.216.7995 kstjohn@bellgiftos.com