

2020 Little Rock School District Board Zone Options

**Shelby Johnson
Arkansas GIS Office**



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Redistricting Criteria

- **Equal population**
- **Minority representation**
- **Contiguity**
- **Compactness**
- **Political boundaries**
- **Geographic boundaries**
- **Communities of interest**

One Person, One Vote

- The One-Person One-Vote Rule refers to the rule that one person's voting power ought to be roughly equivalent to another person's within the same state.

- Important Case Precedent:

Baker v. Carr, 1962

- Redistricting issues present justiciable questions and the courts could intervene
- Forced the Tennessee legislature to reapportion itself on the basis of population.

Reynolds v. Sims, 1964

- Formally expressed the standard of "one person, one vote"
- States with bicameral legislatures had to be apportioned to this standard

Cox v. Larios, 2004

- 10% safe harbor rejected the equal-population principle remains the only clear limitation on improper districting

Evenwel v. Abbott, 2016

- The Supreme Court held that when drawing legislative districts, state legislatures may use the total population of areas within the state, rather than being restricted to using the voting-eligible populations.

Minority Representation

- Voting Rights Act of 1965:
 - The Voting Rights Act was designed primarily to combat discrimination and intimidation that were used to deny African Americans and other minorities the right to an effective vote
 - Overrides state law & practices
- “The Supreme Court has interpreted the federal Constitution to require a particularly compelling reason before a state can make the race or ethnicity of citizens the “predominant” reason for drawing particular districting lines”
- “Essentially, states must account for race in some ways, but may not do so “too much.”



Minority Representation

- As a result of the 1990 United States Census, Texas was entitled to three additional congressional districts. The Texas Legislature drew:
 - one new Hispanic-majority district in South Texas ([District 28](#))
 - one new African-American majority district in [Dallas County](#)([District 30](#))
 - one new Hispanic-majority district in the [Houston](#) area ([District 29](#))
 - In addition, the Legislature decided to reconfigure an existing minority-majority district in the Houston area ([District 18](#)) to increase its percentage of African-Americans.
- The Texas Legislature had developed a state-of-the-art computer system, RedApl, that allowed it to draw congressional districts using racial data at the census block level.
- Strict scrutiny applies where "redistricting legislation . . . is so extremely irregular on its face that it rationally can be viewed only as an effort to segregate the races for purposes of voting, without regard for traditional districting principles," or where "race for its own sake, and not other districting principles, was the legislature's dominant and controlling rationale in drawing its district lines," and "the legislature subordinated traditional race-neutral districting principles . . . to racial considerations,".
- The State argued, for example, that the bizarre shape of District 30 in Dallas County was explained by the drafters' desire to unite urban communities of interest and that the bizarre shape of all three districts was attributable to the Legislature's efforts to protect incumbents of old districts while designing the new ones. The Supreme Court upheld the district court's finding to the contrary, holding that race was the predominant factor, saying that "the contours of Congressional District 30 are unexplainable in terms other than race."



Dallas County (District 30)

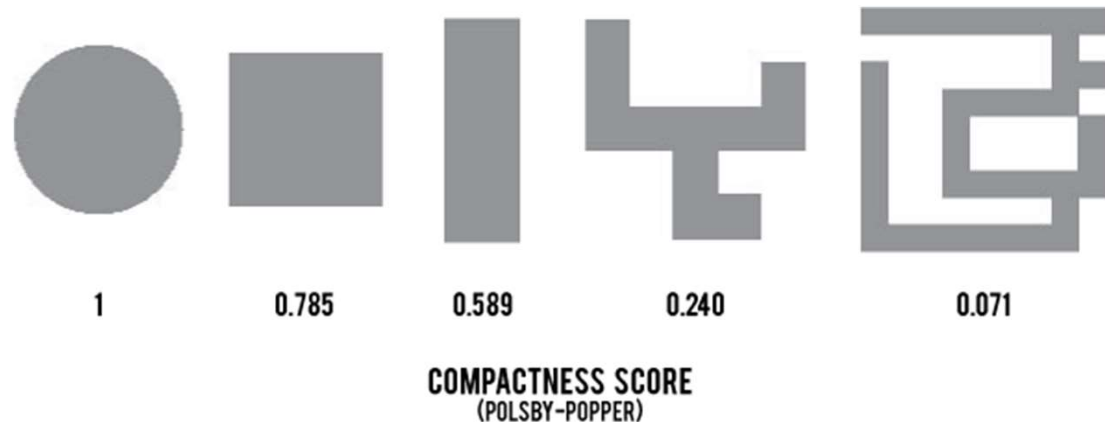
Contiguity

- Not required by the Constitution or federal statute, however, it is considered a “traditional principle” by the Supreme Court
- *“A contiguous district is one where all parts of the district are connected to each other.”*
- Water can create special cases with regard to contiguity



Compactness

- Recognized as a “traditional principle” by the Supreme Court
- “A district is considered compact if it has a fairly regular shape, with constituents all living relatively near to each other.”
- “I know it when it see it” test
- Several mathematical formulas for measuring compactness



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Source: A Citizen's Guide To Redistricting, Justin Levitt, 2010 Edition

Source: <http://www.redistrictingthenation.com>

Political Boundaries

- Respect for political boundaries such as counties, cities, townships, wards, and the like is recognized as a “traditional” redistricting principle
- *Before “one person, one vote” decisions, most districts were county-based*
- *After “one person, one vote” decisions, most states still worked to preserve county-based districts and developed rules that preserved political boundaries when splits were required:*
 - *Split a county, then preserve townships*
 - *Split a township, then preserve municipalities*

Geographic Boundaries

- Districts may be drawn to conform to geographic features such as mountain ranges, water bodies, lakeshores, rivers, and other physical barriers to travel
- *Minimize impediments to travel*



Communities of Interest

- “A group of people concentrated in a geographic area who share similar interests and priorities – whether social, cultural, ethnic, economic, religious, or political”
- Communities of Interest have a chance to elect board members looking out for their interests
- Follow when practicable

The Redistricting Formula

AREA POPULATION / NUMBER OF DISTRICTS REQUIRED
= DISTRICT TARGET POPULATION

POP / #DISTS = TARGET

178,416 / 9 = 19,824

- For the LRSD each of the 9 districts should be drawn in a way so that each has a population at, or near 19,824 persons.
- Gray vs. Sanders, 1963 – One Person, One Vote

Census Blocks

- Blocks are composed of geographic units created from a composite of physical features such as roads, railroads, streams, reservoirs, and other administrative boundaries, such as counties, cities, school districts and voting districts.
- These unique blocks carry the population and other metrics required for redistricting such as:
 - Total Population
 - Voting Age Population
 - Population by Race

Demographic Report

Dist	Target	Total	Variance	Percent	Percent Hispanic	Percent Black	Percent White	Percent American Indian	Percent Native Hawaiian	Percent Asian	Percent Other	Percent More Than One Race
LQJ	19,839	20,200	361	1.79%	10.40%	59.71%	26.73%	0.20%	0.04%	0.97%	0.10%	1.85%
MXR	19,839	20,130	291	1.45%	22.83%	61.54%	13.50%	0.22%	0.00%	0.41%	0.20%	1.29%
ROX	19,839	19,421	-418	-2.15%	9.76%	62.12%	25.10%	0.28%	0.00%	0.89%	0.21%	1.64%
CYF	19,839	19,909	70	0.35%	4.71%	24.13%	62.62%	0.26%	0.03%	6.30%	0.22%	1.74%
SVQ	19,839	19,721	-118	-0.60%	2.22%	25.52%	68.05%	0.31%	0.04%	2.45%	0.13%	1.28%
DDB	19,839	20,692	853	4.12%	4.85%	60.86%	30.52%	0.30%	0.01%	1.87%	0.19%	1.39%
YXF	19,839	19,719	-120	-0.61%	2.17%	68.57%	26.86%	0.28%	0.07%	0.49%	0.08%	1.49%
ZAN	19,839	19,861	22	0.11%	3.74%	19.55%	73.68%	0.24%	0.01%	1.50%	0.07%	1.21%
JJE	19,839	18,895	-944	-4.99%	2.11%	11.08%	80.67%	0.24%	0.04%	4.63%	0.10%	1.13%

Dist = A unique code or name for each zone.

Target = The target population for each zone.

Total = Total population for that zone.

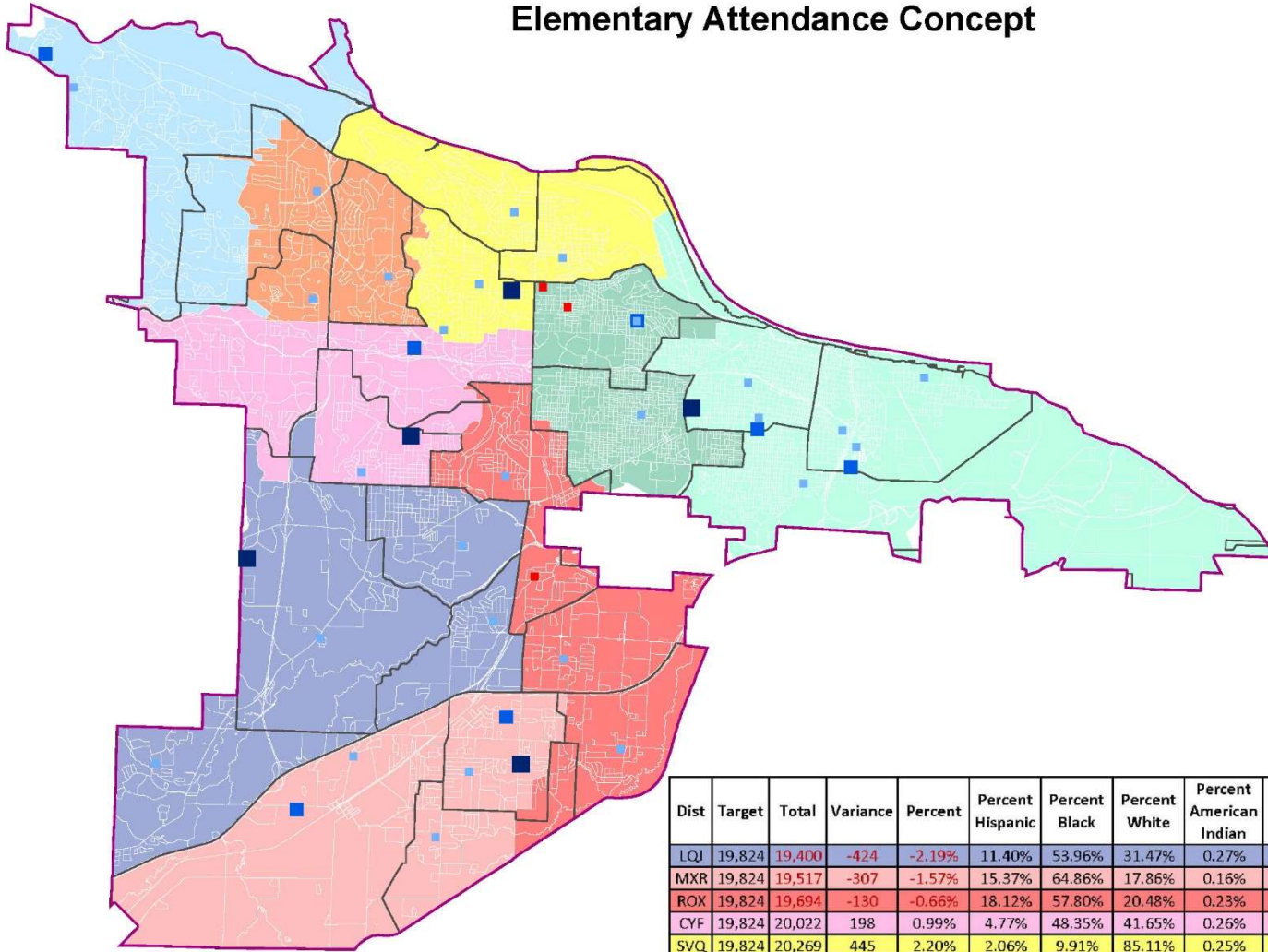
Variance = The population number above or below the target.

Percent = The percent of variance from the target population.

*Red fonts indicate negative values.

FOR DISCUSSION PURPOSES ONLY

Elementary Attendance Concept



Legend

- Schools
- ELEMENTARY
- MIDDLE
- HIGH
- Elementary Attendance Zones
- Proposed Zones

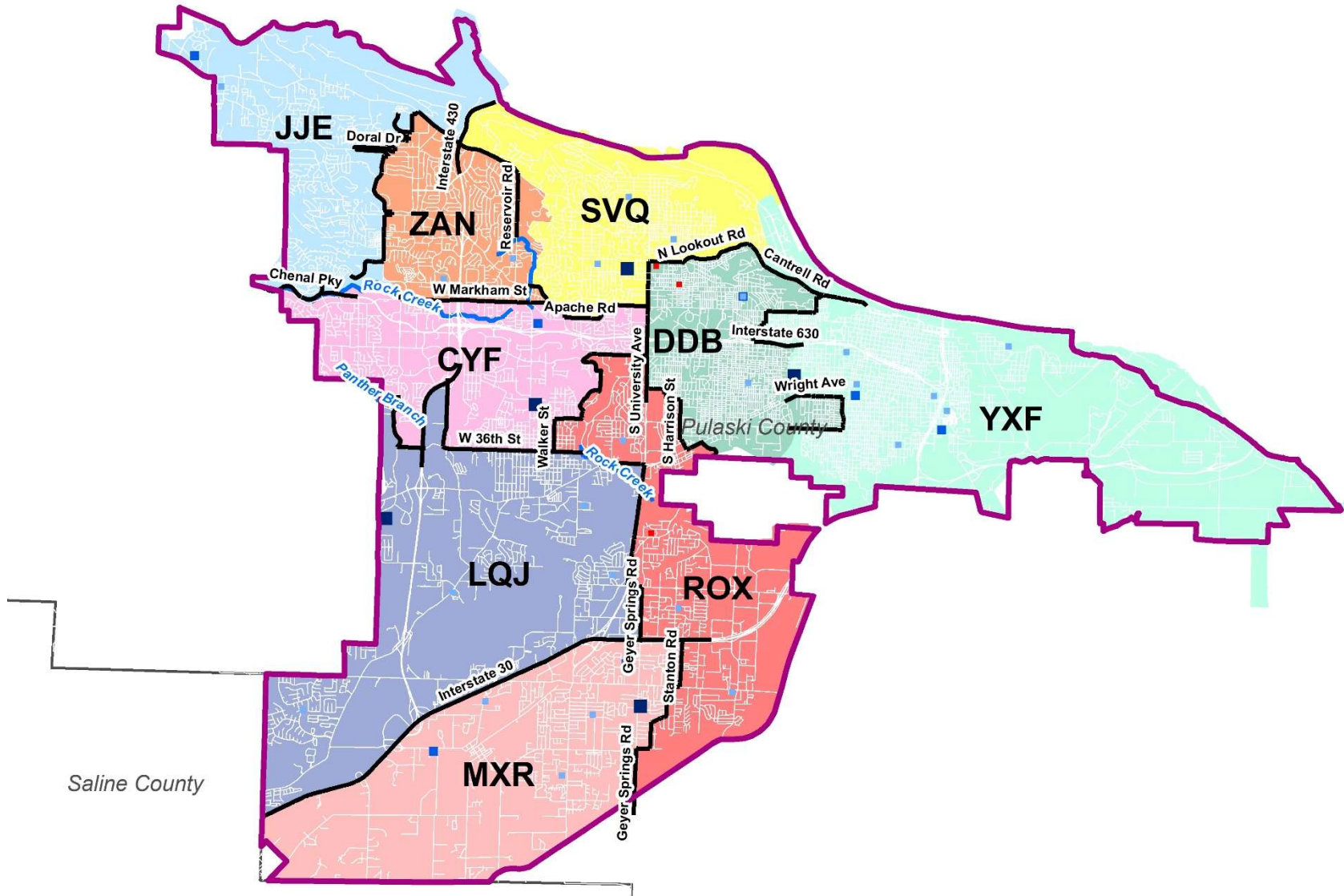
ElementaryAttendance

- LQJ
- MXR
- ROX
- CYF
- SVQ
- DDB
- YXF
- ZAN
- JJE

Revised November 6, 2019

Dist	Target	Total	Variance	Percent	Percent Hispanic	Percent Black	Percent White	Percent American Indian	Percent Native Hawaiian	Percent Asian	Percent Other	Percent More Than One Race
LQJ	19,824	19,400	-424	-2.19%	11.40%	53.96%	31.47%	0.27%	0.01%	1.18%	0.17%	1.54%
MXR	19,824	19,517	-307	-1.57%	15.37%	64.86%	17.86%	0.16%	0.04%	0.44%	0.11%	1.17%
ROX	19,824	19,694	-130	-0.66%	18.12%	57.80%	20.48%	0.23%	0.01%	1.50%	0.26%	1.59%
CYF	19,824	20,022	198	0.99%	4.77%	48.35%	41.65%	0.26%	0.01%	3.19%	0.25%	1.52%
SVQ	19,824	20,269	445	2.20%	2.06%	9.91%	85.11%	0.25%	0.01%	1.50%	0.08%	1.10%
DDB	19,824	20,418	594	2.91%	1.97%	56.88%	38.27%	0.34%	0.04%	1.24%	0.10%	1.17%
YXF	19,824	19,291	-533	-2.76%	2.32%	63.50%	31.31%	0.27%	0.06%	1.00%	0.08%	1.46%
ZAN	19,824	19,602	-222	-1.13%	5.67%	28.66%	60.06%	0.33%	0.03%	3.63%	0.11%	1.52%
JJE	19,824	20,201	377	1.87%	2.10%	13.69%	76.88%	0.22%	0.03%	5.60%	0.15%	1.32%





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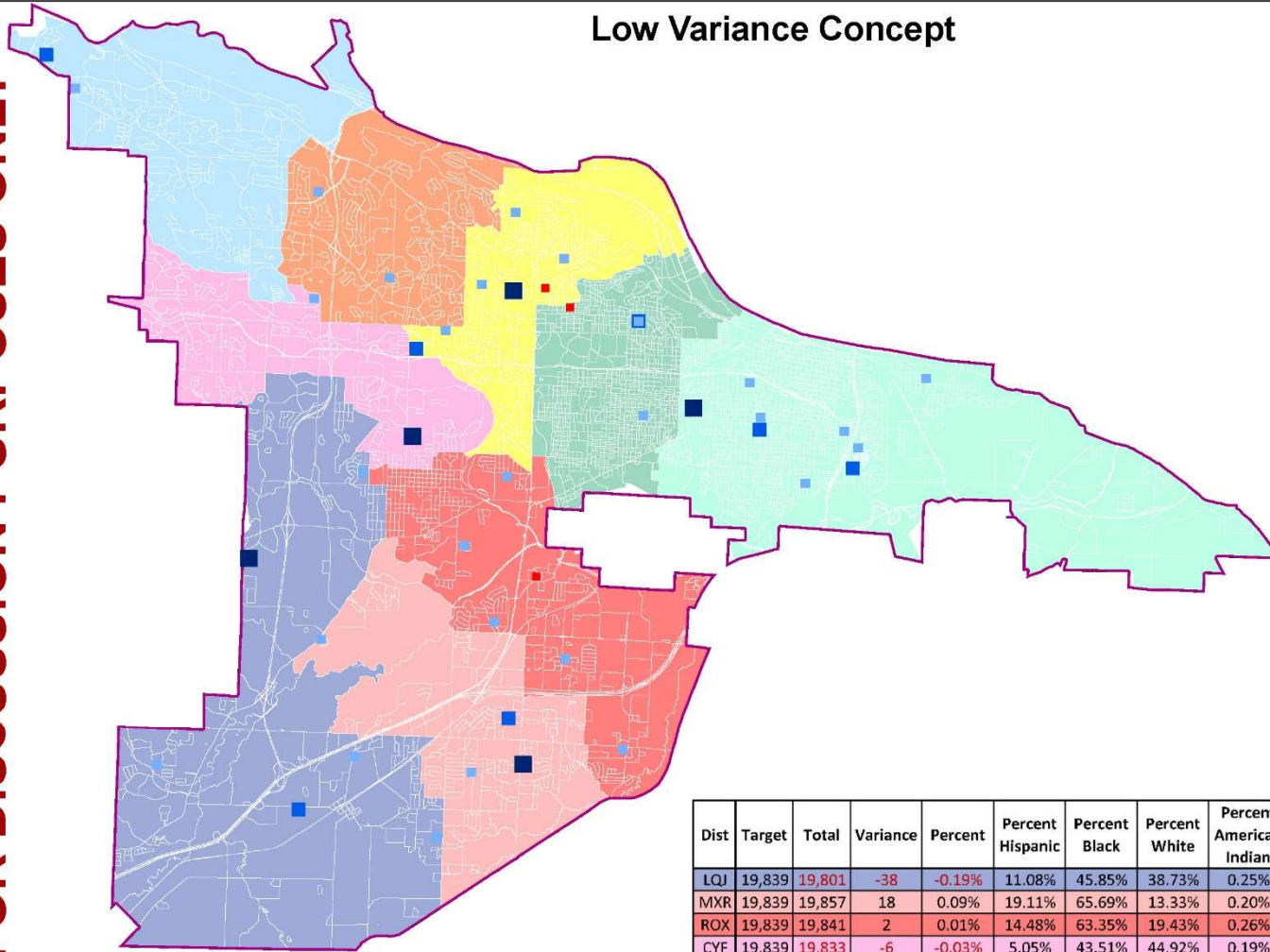
Elementary Attendance Report

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This option attempts to cluster groups of elementary school attendance zones into potential new school board zones. School Board zones themselves then would represent units of school attendance geography. Using existing school geography as zone plan foundation is a practical method.

FOR DISCUSSION PURPOSES ONLY

Low Variance Concept

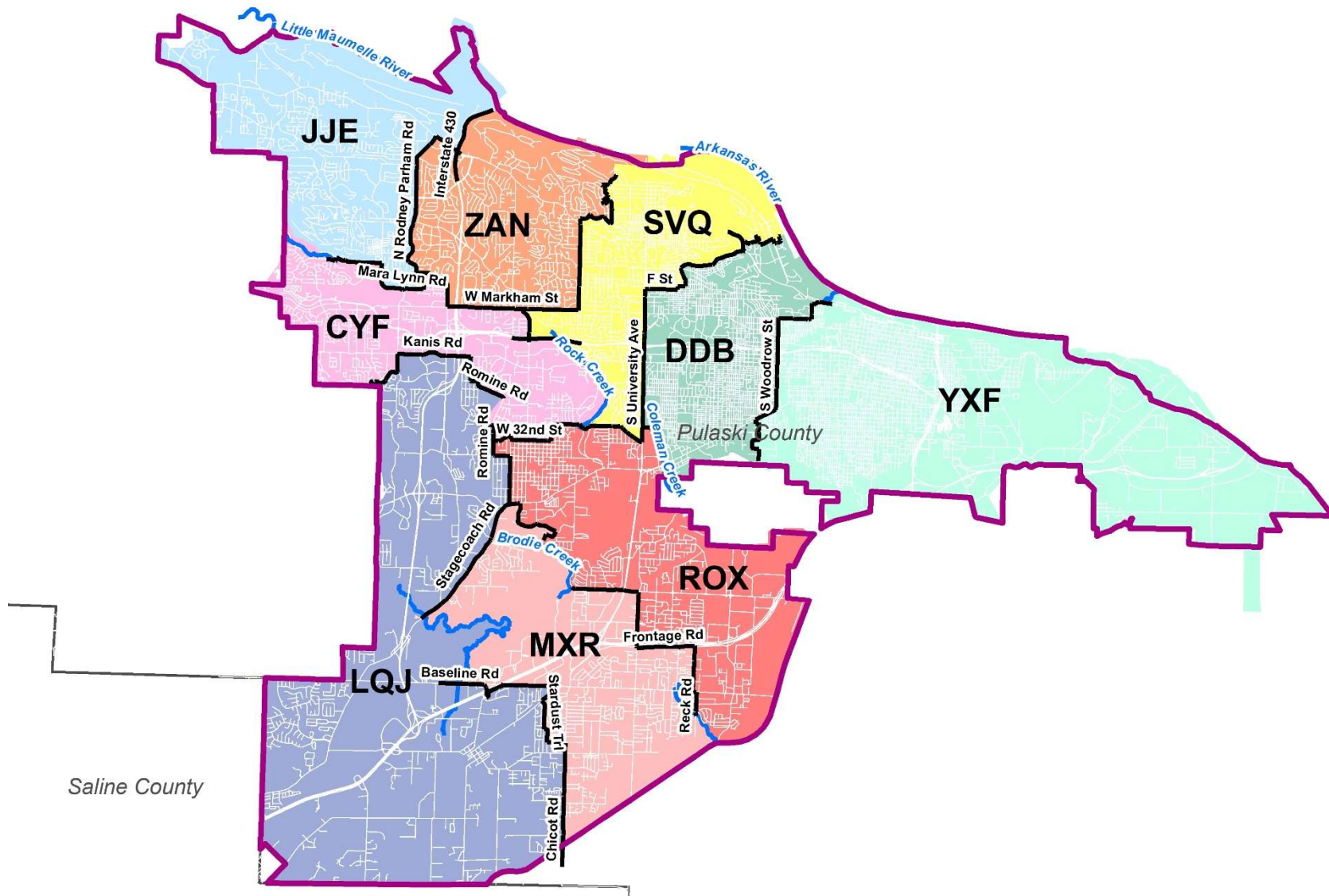


- Legend**
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Revised November 6, 2019

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MXR	19,839	19,857	18	0.09%	19.11%	65.69%	13.33%	0.20%	0.01%	0.33%	0.15%	1.19%
ROX	19,839	19,841	2	0.01%	14.48%	63.35%	19.43%	0.26%	0.01%	0.69%	0.19%	1.59%
CYF	19,839	19,833	-6	-0.03%	5.05%	43.51%	44.92%	0.19%	0.01%	4.46%	0.26%	1.61%
SVQ	19,839	19,840	1	0.01%	2.79%	21.33%	71.62%	0.29%	0.01%	2.48%	0.16%	1.32%
DDB	19,839	19,829	-10	-0.05%	1.96%	52.94%	41.53%	0.35%	0.04%	1.68%	0.13%	1.38%
YXF	19,839	19,829	-10	-0.05%	2.26%	70.19%	25.31%	0.27%	0.07%	0.47%	0.07%	1.36%
ZAN	19,839	19,883	44	0.22%	4.08%	18.70%	73.17%	0.26%	0.02%	2.33%	0.10%	1.34%
JJE	19,839	19,835	-4	-0.02%	2.39%	13.90%	77.03%	0.30%	0.05%	5.03%	0.11%	1.19%





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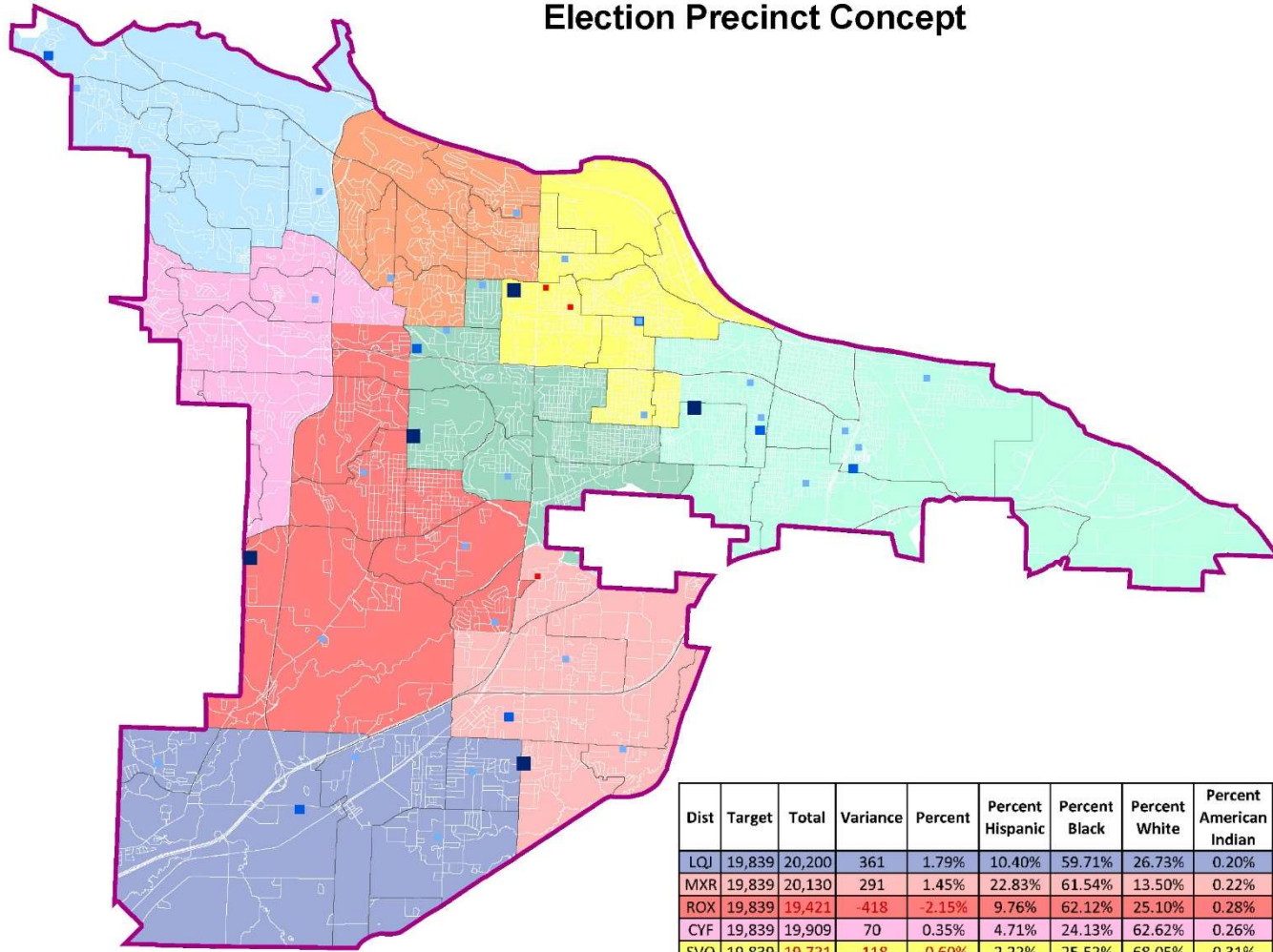
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This option strictly follows the population numbers, ignores many communities of interest and drives toward the lowest variance of population between the zones as was technically possible.

FOR DISCUSSION PURPOSES ONLY

Election Precinct Concept



Legend

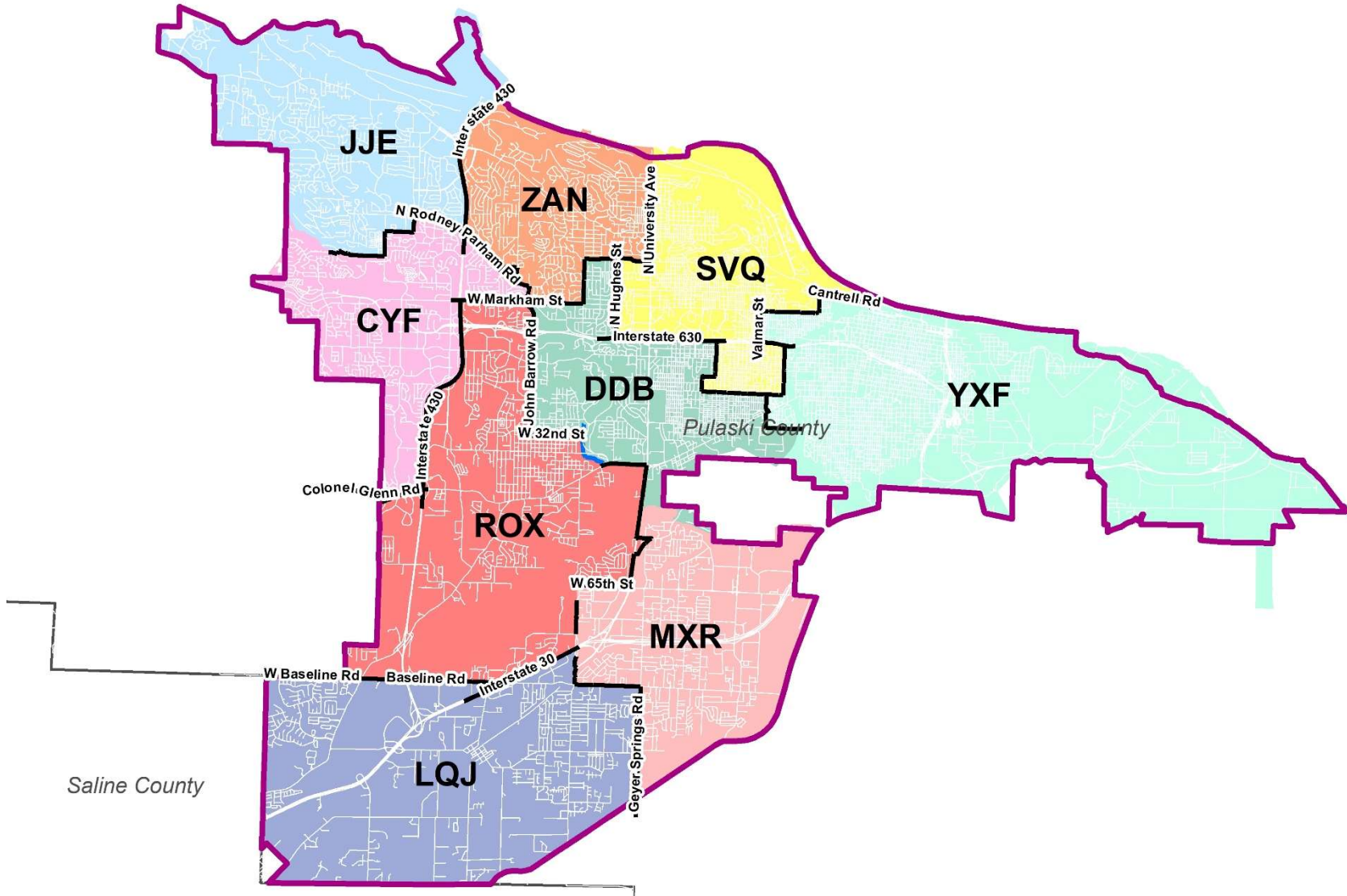
- Schools
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- Election Precincts
- 2010 Census Blocks
- Proposed Zones
- Precinct Plan**
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Election Precinct Report

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This option attempts to cluster groups of Pulaski County election precincts into potential board zones. School Board zones themselves represent units of electoral geography. Using existing electoral geography as a foundation for a zone plan is a practical method for assigning voters to new zones and administering an election.

Growth Example



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The Final Report – The Adopted Plan

- The Final Report is the document that is ultimately adopted by the body that has the legal authority.
E.g.
 - Redistricting Commission
 - Election Commission
 - City Council, etc
- The document and its exhibits are formal transactions that must be preserved for:
 - The election administration officials who will execute the changes in voter assignment
 - Anyone who might pursue a court legal challenge to the districts

The Final Report – The Adopted Plan

- Sample adoption section - **BLOCK LIST DESCRIPTION**

Arkansas Board of Apportionment
2010 Census Data

Senate Districts

SENATE DISTRICT: 19

Governor Mike Beebe, Chairman
Secretary of State, Mark Martin
Attorney General, Dustin McDaniel

Name	Geo ID	Total Persons	White	Black	Asian	Native American	Hawaiian Pacific Islander	Hispanic
Block 5064	051219602005064	0	0	0	0	0	0	0
Block 5102	051219602005102	22	21	0	0	0	0	0
Block 5103	051219602005103	10	10	0	0	0	0	0
		2043	1969	4	4	4	22	37

LEVEL: COUNTIES

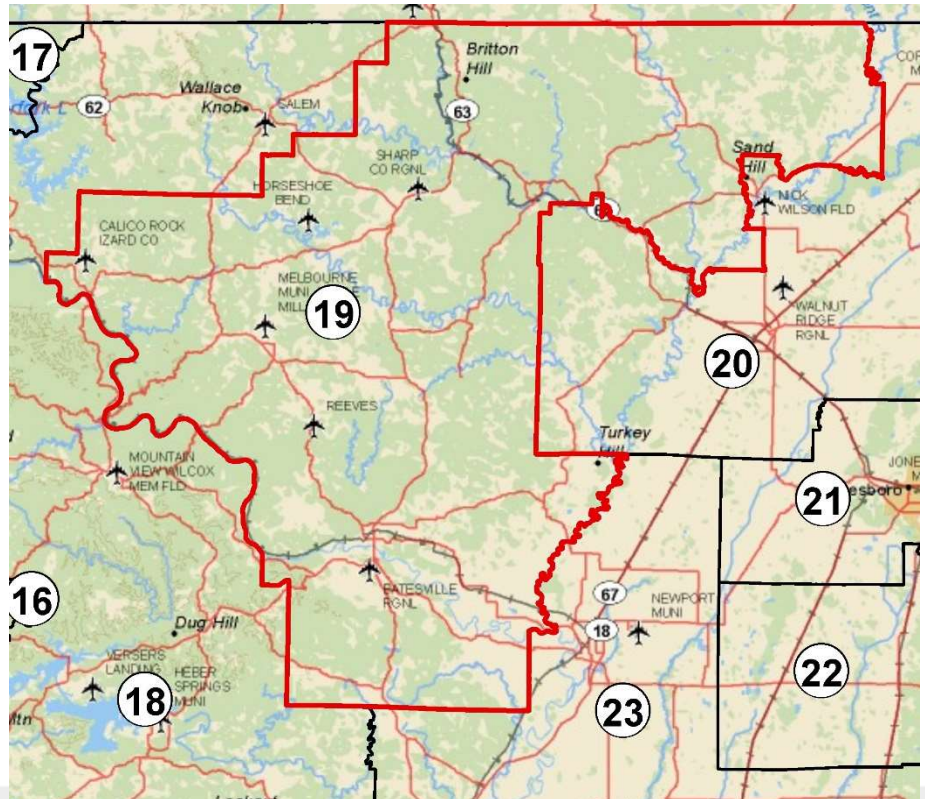
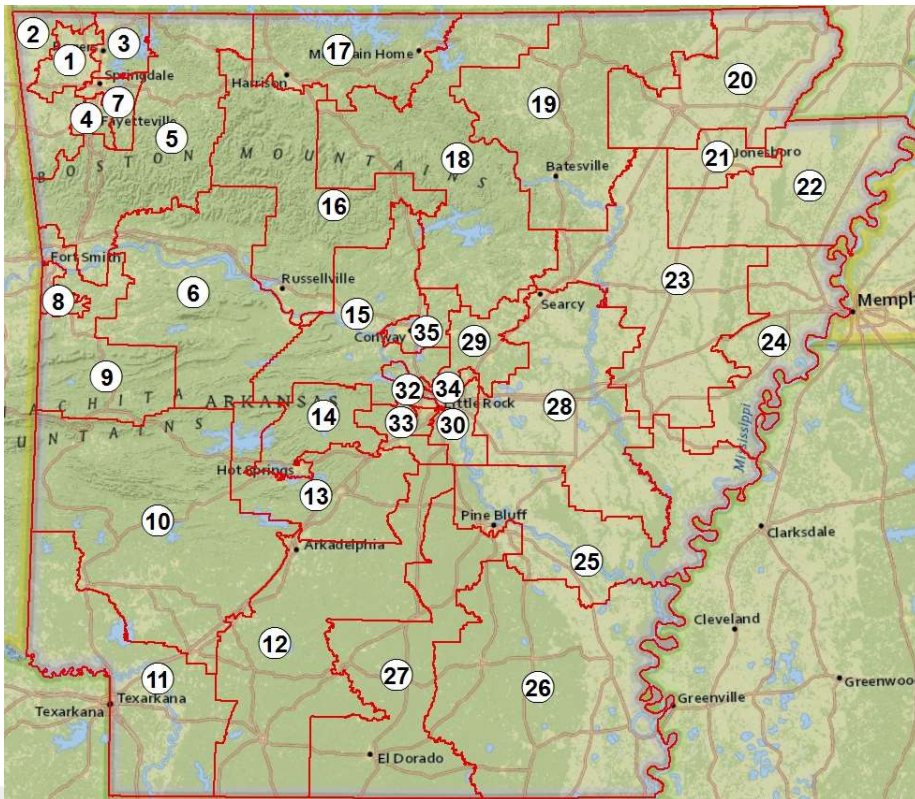
Independence	05063	36647	33688	722	278	179	1178	2139
Izard	05065	13696	13118	175	41	105	77	208
Sharp	05135	17264	16582	93	50	170	72	290
		67607	63388	990	369	454	1327	2637



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The Final Report – The Adopted Plan

- The report should include map exhibits
- Ideally each unique district is shown as a single exhibit with a title and an exhibit showing the composition of all the districts.



Questions

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- 501-682-2767

