

REPORT OF WILLIAM S. COOPER

My name is William S. Cooper. I have a BA degree in Economics from Davidson College. I provided testimony on behalf of the plaintiffs at the March 1998 trial in this case. I also filed two reports in 1997.

Since 1986, I have prepared redistricting maps of approximately 450 jurisdictions for Section 2 litigation, Section 5 comment letters, and for use in other efforts to promote compliance with the Voting Rights Act of 1965. I have prepared election plans for Section 2 litigation in Connecticut, Florida, Georgia, Louisiana, Maryland, Mississippi, Montana, Nebraska, New Jersey, North Carolina, Ohio, South Carolina, South Dakota, Tennessee, Virginia, and Washington.

I have testified at trial as an expert witness on redistricting and demographics in federal courts in the following voting rights cases: Colorado (Cuthair v. Montezuma-Cortez School District); Georgia (Woodard v. Lumber City, Love v. Deal, Askew v. City of Rome, Cofield v. City of LaGrange); Louisiana (Knight v. McKeithen, Reno v. Bossier Parish, and Wilson v. Town of St. Francisville); Maryland (Cane v. Worcester County); Mississippi (Gunn v. Chickasaw County (Board of Supervisors), Gunn v. Chickasaw County (Justice Court), Ewing v. Monroe County, Addy v. Newton County, Nichols v. Okolona, and NAACP v. Fordice); Montana (Old Person v. Cooney); Nebraska (Stabler v. Thurston County); South Carolina (Smith v. Beasley); Tennessee (Cousins v. McWherter and Rural West Tennessee African-American Affairs Council v. McWherter); and Virginia (Henderson v. Richmond County, McDaniel v. Mehfood, White v. Daniel, and Smith v. Brunswick County).

I have filed declarations or been deposed in the following voting rights cases: Florida (Burton v. City of Belle Glade, Johnson v. DeSoto County) and Thompson v. Glades County; Georgia (Jones v. Cook County and Johnson v. Miller); Louisiana (Rodney v. McKeithen and Prejean v. Foster); Mississippi (Clark v. Calhoun County (on remand), Teague v. Attala County (on remand), Stanfield v. Lee County); Montana (Alden v. Rosebud County); North Carolina (Lewis v. Alamance County, Gause

v. Brunswick County, and Webster v. Person County); South Carolina (Vander Linden v. Campbell); and Virginia (Moon v. Beyer).

Demographic Changes Since 1990

According to the 2000 census, Montana has a population of 902,195 with an American Indian population of 56,068.¹ Montana has a total voting age population (VAP) of 672,133 and an American Indian VAP of 33,986. (*See Exhibit 1*) This compares to a 1990 population of 799,065 for all races, of whom 47,679 were American Indian. The 1990 voting age population for all races was 576,961, with an American Indian VAP of 27,799.

In absolute numbers, Montana's population has increased by about 12.9 percent since 1990. (*See Exhibit 2*) Much of this population increase has occurred in the counties west of the Continental Divide. (*See Exhibit 3*)

Since 1990, the American Indian population has increased as a percentage of the total and voting age populations. The 1990 census reported that American Indians comprised 6.0% of the total population and 4.8% of the voting age population. According to the 2000 census, American Indians represent 6.2% of Montana's total population and 5.1% of the voting age population.² In absolute numbers, the American Indian population in Montana has grown at a minimum by more than 17.6% since 1990.³

Methodology and Data Sources

I prepared an illustrative plan based on census block population data from the

¹ I use the term "American Indian" throughout this report in order to be consistent with Census Bureau terminology.

² Non-Hispanic American Indians make up 6% of the total population and 4.9% of the voting age population.

³ See Exhibit 2 for a note on methodological issues associated with measuring population change by race between 1990 and 2000.

2000 *Census of Population and Housing PL 94-171*.⁴ Geographic boundary files were created from the U.S. Census 2000 TIGER (Topologically Integrated Geographic Encoding and Referencing) files. I also prepared a second illustrative plan based on 1990 census block data. In this instance, I used the 1990 versions of the PL94-171 and TIGER files.

The PL 94-171 data file is the complete count population file designed by the Bureau of the Census for use in legislative redistricting. The file contains basic data on the population and voting age population found in units of census geography such as states, counties, municipalities, townships, reservations, school districts, census tracts, census block groups, and census blocks.

The Census TIGER files contain data recording the longitude and latitude coordinates of the boundaries for all of the demographic units in the PL94-171 file. The TIGER files also contain coordinates for non-demographic line boundaries such as highways, streets, streams, railroads and power lines.

Geographic information system (GIS) software processes the TIGER files to produce a map for display on a computer screen. The GIS software also merges demographic data from the PL94-171 file to match the census geography. I use a GIS software package called *Maptitude for Redistricting*, developed by the Caliper Corporation

Population and geographic boundaries for precincts in Montana are not included in the 2000 TIGER and PL94-171 files. This information was not available in the 1990 census redistricting files either.

Although a geographic database showing current precinct lines for the entire state was not available, I did refer to a geographic database showing precinct lines as they existed in 1996 in 19 counties. This database was prepared by the defendants in 1997 in order to develop population estimates by precinct for a racial bloc voting

⁴ A census block is the smallest census tabulation area. A block may be as small as a regular city block bounded by four streets, or as large as several square miles in a rural area. Generally, a census block is bounded on all sides by visible features such as streets, rivers, and railroad tracks.

analysis. I also received updated information from plaintiffs' counsel regarding precinct changes since 1996 in Flathead, Glacier, Lake, and Pondera Counties.

Where possible I aligned districts to follow existing House district boundaries, municipal boundaries, precincts, and elementary school district lines. Information regarding the location of incumbents' residences was limited to public information posted on the Internet by the legislature. In many cases, this was insufficient to determine a legislator's residence with precision.

Illustrative Plan A – 2000 Census

The current legislative plan in Montana contains five Indian-majority voting age House districts and one Indian-majority VAP Senate district.

Under the 1990 census, it was possible to create an additional reasonably compact majority-Indian House district including the Flathead and Blackfeet Reservations in northwest Montana, as well as a new majority-Indian Senate district in the same area. Once again, it is possible to do so using the 2000 census data. Just as in 1990, given the concentration of American Indians in Montana's reservation areas, the 2000 census allows for the creation of six reasonably compact Indian-majority voting age population House districts and two or three Indian-majority voting age Senate districts. (*See Exhibit 4*)

The dramatic population shift from Eastern Montana to western portions of the state since 1990 will require significant changes to Montana's legislative map under the 2000 census. The counties along the High Line north of the Missouri and east of the Divide must lose two House seats to meet one-person, one-vote requirements. In turn, the western area running from Ravalli County north to the Canadian border must pick up two or three seats. (*See Exhibit 5*)

With these new geographic/population parameters in mind, I developed a new plan based on the 2000 census data that establishes an additional majority-Indian House district encompassing portions of Lake, Flathead, Glacier, and Pondera counties and allows for the creation of an additional majority-Indian Senate district in the same region.

In 2000, these four counties had a total population of 120,649 and an American Indian population of 16,277. Single-race American Indians represent 13.5% of the four-county population in 1990 – higher than the 13.1% recorded in 1990.⁵ (*See Exhibit 6*)

Summary population data and maps depicting Illustrative Plan A are included in exhibits attached to this report. (*See Exhibits 7 and 8*).

With the release of the 2000 census data, the ideal population size for the 100-seat Montana House plan is 9,022 persons. Thus, the four-county region will have about 13 House seats when the state legislature is reapportioned.⁶ Currently, House District 85 is the only Indian-majority House district in the four-county region. There are no Indian-majority Senate districts in the four-county region.

The new House District 73 in Illustrative Plan A encompasses an area that is generally the same as the illustrative House District 73 presented to the court by plaintiffs at the 1998 trial. The new district has a 52.8% American Indian VAP and a 53.6% non-Hispanic Indian VAP using the Department of Justice (DOJ) racial classification.

The DOJ classification counts single-race American Indians and respondents who identified themselves as both white and American Indian in the 2000 census as American Indian.⁷ The DOJ dual-race category increases the American Indian VAP by less than one percent in House District 73.

Under Illustrative Plan A, House Districts 5, 6, 85, 92, and 98 remain majority-Indian and encompass the same general areas as the existing House plan. House Districts 5 and 6 could obviously be paired together again in an Indian-majority Senate district joining the Northern Cheyenne and Crow reservations in southeast Montana.

⁵ In 1990, these four counties had a total population of 98,813, of whom 12,905 were American Indian.

⁶ Illustrative Plan A allocates 13 House seats to the region.

⁷ This definition is in accordance with Department of Justice policy pursuant to Part II of OMB Bulletin 00-02. Any multiple-race response that included white and one of the five other race categories is allocated to the minority race listed in the response. (Source: [Federal Register: January 18, 2001 (Volume 66, Number 12)] [Notices] [Page 5411-5414] From the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID:fr18ja01-171] .

In northwest Montana, House District 73 could be combined with House District 85 to create a second majority-Indian Senate district. This Senate district would have an American Indian VAP of 59.14% and a non-Hispanic DOJ Indian VAP of 59.8%.

As can be seen from the map in Exhibit 8-1 showing Illustrative Plan A, there are eight more House districts running east from House District 85 to the North Dakota line. This permits the creation of four Senate districts along the Canadian border without reshuffling Senate districts into some sort of north-south alignment across the Missouri River.

Plaintiffs' Illustrative Plan A complies with key traditional redistricting criteria including compactness, contiguity, one-person one-vote, and the non-dilution of minority voting strength. To the extent possible, tribal reservation lands were kept in the same legislative districts. The overall deviation for Illustrative Plan A is 9.79%.

Plaintiffs' Illustrative Plan A is a full 100-district statewide plan. Changes to districts in counties that are both east of the Divide and south of the Missouri relate to population shifts that have occurred since 1990. I would have drawn districts in this area in the same fashion even without the addition of the sixth Indian-majority House district.

Using the 2000 census data, it is possible to develop a House plan that joins Indian-majority House Districts 92 and 98. In so doing, a majority-Indian "Missouri River" Senate district can be created that conforms to generally accepted redistricting criteria. This approach was adopted in the plaintiffs' Illustrative Plan submitted to the court in 1998. The 1998 plan combined reservations from Rocky Boy's east to Fort Peck to create a third Indian-majority Senate district. This time, in keeping with the focus of the October 2001 hearing, I have not prepared for the court a plan that would permit the creation of a third majority-Indian Senate district.

Illustrative Plan B – 1990 Census

Plaintiffs' counsel asked me to prepare an Illustrative Plan B, using the 1990 census, which creates an additional majority-Indian House district and a new majority-

Indian Senate district in northwest Montana, while minimizing the number of House districts statewide that would need to be changed

District 73 under Illustrative Plan B is identical to District 73 under the 1998 Illustrative Plan submitted to the court, except for a few census blocks in South Browning in Glacier County. I shifted these blocks from District 73 into District 85 in order to keep the current incumbent in that district.

Based on the 1990 census, District 73 has a 52% American Indian voting age population. District 85 has a 59.2% American Indian VAP. Combining House Districts 73 and 85 would create a new Indian-majority Senate District 43. This Senate district would have a 55.6% American Indian voting age population, according to the 1990 census.⁸

The overall deviation for Illustrative Plan B is 9.91%. Summary population data and maps showing Illustrative Plan B are included in exhibits attached to this report. (See *Exhibits 9 and 10*)

West of the Divide, plaintiffs' illustrative Plan B is identical to the plan submitted to the court in 1998. District boundaries in the counties east from Glacier to Blaine County were altered. Under Illustrative Plan B, House districts in northeast Montana (Phillips, Valley, Roosevelt, Daniels, and Sheridan Counties) remain identical to the current plan.

Current House district lines within Ravalli, Missoula, Lake, Flathead, Glacier, Pondera, Liberty, Hill, and Blaine are altered under Illustrative Plan B. House district lines in the remaining 47 counties are unchanged. (*See Exhibit 11*)

District boundary lines are moved in only three counties that do not contain majority American Indian districts – Ravalli, Missoula, and Liberty. Changes to districts within Ravalli and Missoula Counties are relatively minor. Illustrative Plan B divides the

⁸ The 1990 census did not provide for multiple race responses, so racial percentages cannot be calculated applying the Department of Justice's new guidelines.

same number of counties as the current plan – adding a split in Liberty County, but eliminating one in Ravalli County.

William S. Cooper