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Economic Trends Report: Cheyenne River Counties

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Foreword

The Kansas Center for Community Economic Development (KCCED) is a joint center of the Policy Research Institute at the University of Kansas and the Kansas Center for Rural Initiatives at Kansas State University. Its purpose is to enhance economic development efforts by bringing university expertise to rural areas.

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Economic Trends Report: Cheyenne River

Introduction

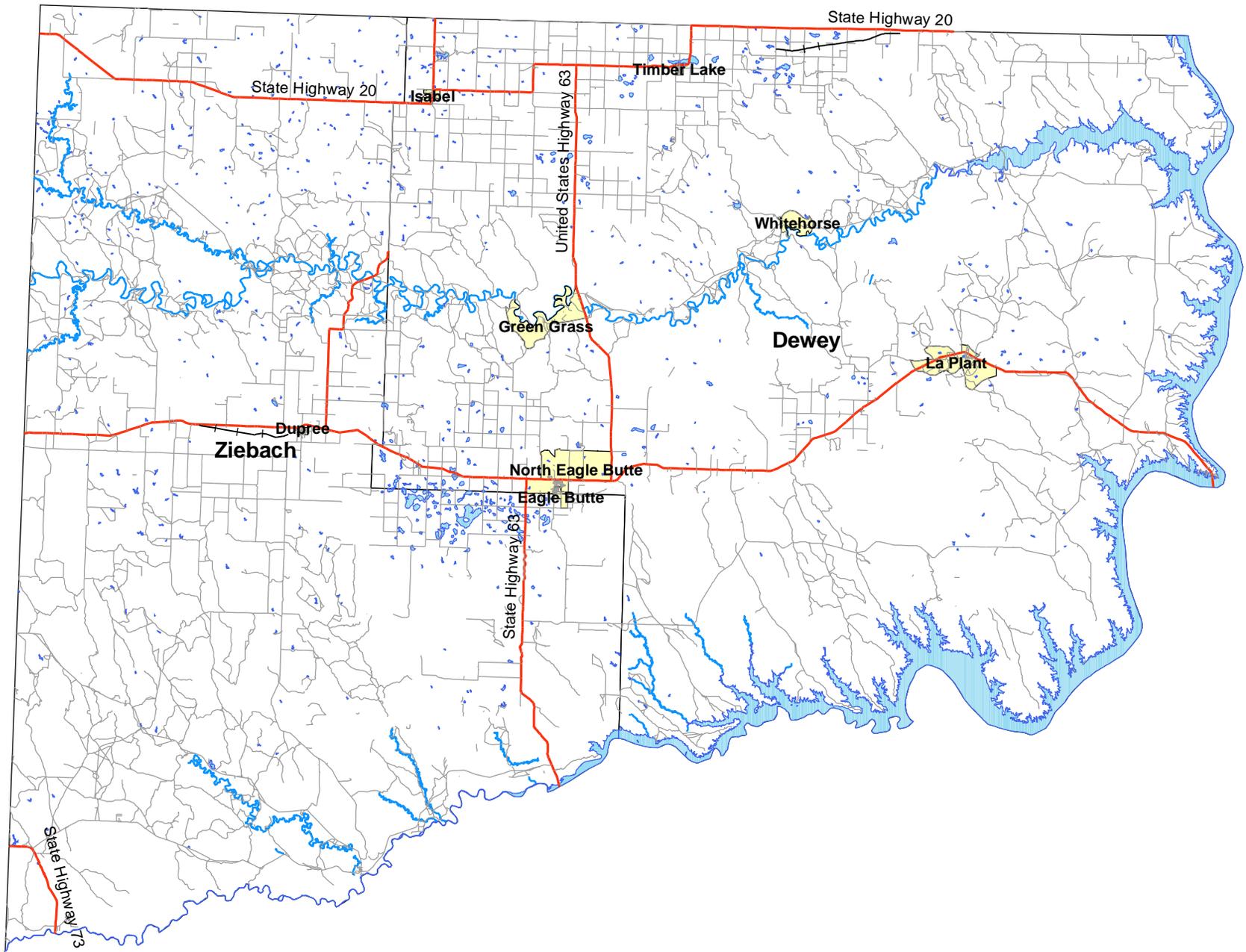
The following report examines several key economic trends occurring in Cheyenne River over the last few decades. The report looks at variables categorized under the following areas:

- population,
- employment,
- earnings and income, and
- education.

In this report, the geographical area of Cheyenne River is defined as Dewey and Ziebach counties, both located in South Dakota (see Map 1). Throughout, Cheyenne River's trends are compared to the surrounding counties. These include Corson, Haakon, Hughes, Meade, Perkins, Potter, Stanley, Sully, and Walworth counties.

It is recognized that data on the county level most frequently fails to capture the nuanced economic conditions of the reservation area in specific or of the American Indian population exclusively. Very little Census or other economic data of interest is clearly divided by Indian and non-Indian status, particularly on the county level, and so many of the indicators in this report reflect a subset of people that includes more than just Cheyenne River tribal members. These shortcomings aside, the direction of growth or lack of it on the county level, specifically in relation to the surrounding areas, can still serve as a reflection of the economic direction the tribe finds itself headed in.

Map 1: Dewey and Ziebach Counties



POPULATION: KEY FINDINGS

- In the last century the combined populations of Dewey and Ziebach counties (from now on referred to as Cheyenne River) has remained remarkably steady. Particularly for the 50 years between 1940 and 1990, total population hardly fluctuated at all. In the last decade Cheyenne River has experienced much more rapid population growth than historically, with a nearly 10 percent increase from the 1990 Census to the 2000. In 2002 the estimated Cheyenne River area population stood at 8,645 (Table 1 and 2).
- Population in Cheyenne River grew almost 12 percent from 1990 to 2002, but not equally between the two counties which comprise it: Dewey County, with a larger total population, grew 9 percent; while Ziebach, only a third as large in terms of population as Dewey, grew over 17 percent. Average population growth for the nine surrounding counties only came to 4 percent for the same time period, though this belies a wide range of changes. Haakon and Potter counties, for example, experienced radical population losses of greater than 20 percent each. On the other hand, Hughes, Meade and Stanley counties each had population increases greater than 10 percent (Table 2 and Figure 1a).
- Historically, the percentage change in population in Cheyenne River has mirrored closely the changes statewide. In the last decade, however, growth in Cheyenne River has outpaced South Dakota's overall growth by about 2 percentage points. Neither Cheyenne River nor the State of South Dakota have typically ever had population grow as rapidly as the national average (Table 2 and Figure 1b).
- The largest age group segment in Cheyenne River in 2000 was made up of people in the 5 to 17 year-old range. They comprised close to one-third of the total population, a percentage little changed from the 1990 Census ten years previous. In fact, none of the age category percentages in Cheyenne River had changed much at all from 1990, with the exception of a 3 percent decrease in the relative share of toddlers and infants (Tables 3a and 3b, Figure 2a).
- There are marked differences in the age distribution of Cheyenne River to those of South Dakota overall or the U.S. For example, in Cheyenne River in 2000 only 43 percent of the population fell into the prime working years between the ages of 25 and 64: across the entire U.S., that same percentage was 52. Percentage-wise there are much fewer elderly in Cheyenne River and many more young children and teenagers than the comparable distributions across the state or the U.S. (Tables 3a and 3b, Figure 2b).
- Census race data from 2000 cannot be directly compared to data from previous years, due to a change in reporting which allowed people to select more than one race in 2000. In the Cheyenne River counties, 113 people indicated they belonged to two or more races. Therefore, the 2000 Census data figures for individual races

would have been just slightly higher if the old categorization had been used. Nevertheless, the new data is still useful for indicating trends (Tables 4a and 4b).

- The population of Cheyenne River quite naturally has a high American Indian population, which is also rapidly increasing (more perhaps from births than from immigration, see below). In 1990, 66 percent of the population identified themselves as American Indian, but by 2000 the percentage had risen to 73.6 percent. The rest of the population is almost exclusively white, but their total numbers fell from 2,610 in 1990 to 2,107 in 2000. On the other hand, South Dakota as a whole is fairly non-diverse in terms of racial makeup, with more than 90 percent of the population being white (Tables 4a and 4b).
- Net migration is calculated as the change in population less the difference between births and deaths. A negative net migration indicates more people have moved out of the county than have moved in. From 1990 to 1999 total net migration in Cheyenne River was a negative 767. This can sound confusing, for the Cheyenne River counties actually grew in total population during that same time period. However, the majority of the population increase can be attributed to births, of which there were nearly more than 1,500 during the decade of the 1990's. This far exceeded the actual numerical increase of the total population, and the difference is accounted for by people who moved out of the counties: hence, the negative net migration. One positive indication in Cheyenne River, however, was that the -9.9 percent net migration in the decade of the 1990's was less than half the -20.3 percent net migration decrease in the 1980's (Table 5).
- Due to a quirk in the availability of data released from the Census Bureau, it is impossible to determine the net migration from 1990 to 2000, which is why in the previous paragraph (and in table 5), net migration is listed from 1990 to 1999. However, confusing as it is, net migration *can* be calculated from the year 2000 to 2002. In that time period yet again, the change has been negative even though total population has increased: and again, this has been due to the fact that population has grown more from new births than from people moving in to Cheyenne River (Table 5).
- From 1990 to 2000, Dewey County moved up from being the 34th most populated county in South Dakota to the 32nd in a state of 66 counties total. From 1990 to 2000 Ziebach County grew from being the 59th most populated county to the 57th.
- From 1990 to 2000, slightly more than half of all the counties in South Dakota (34 out of 66) increased their populations. The increases in these counties were large enough to offset the declines in the remaining 32 counties, so that the overall population of South Dakota grew 9.3 percent for the decade (Map 3).

Table 1
Population Totals and Growth Rates
Cheyenne River and South Dakota
1900-2002

<u>Year</u>	<u>Cheyenne River</u>		<u>South Dakota</u>	
	<u>Population Total</u>	<u>Growth Rate</u>	<u>Population Total</u>	<u>Growth Rate</u>
1900	- - -		401,570	
1910	1,145		583,888	45.4
1920	8,520	644.1	636,547	9.0
1930	10,515	23.4	692,849	8.8
1940	8,584	-18.4	642,961	-7.2
1950	7,522	-12.4	652,740	1.5
1960	7,752	3.1	680,514	4.3
1970	7,391	-4.7	665,507	-2.2
1980	7,674	3.8	690,768	3.8
1990	7,743	0.9	696,004	0.8
2000	8,491	9.7	754,844	8.5
2002	8,645	1.8	761,063	0.8

Source: U.S. Bureau of the Census.

Table 2
Population Growth Rates
Cheyenne River and Surrounding Counties, South Dakota, and US
1970-2002

<u>Year</u>	<u>1970-1980</u>	<u>1980-1990</u>	<u>1990-2002</u>
Cheyenne River	3.8	0.9	11.6
Dewey	3.8	2.9	9.3
Ziebach	3.9	-3.8	17.4
Surrounding Counties	7.7	-3.3	4.3
South Dakota	3.7	0.8	9.3
United States	11.4	9.8	15.9

Source: U.S. Bureau of the Census.

Figure 1a
Rates of Population Change
Cheyenne River and Surrounding Counties
1970-2002

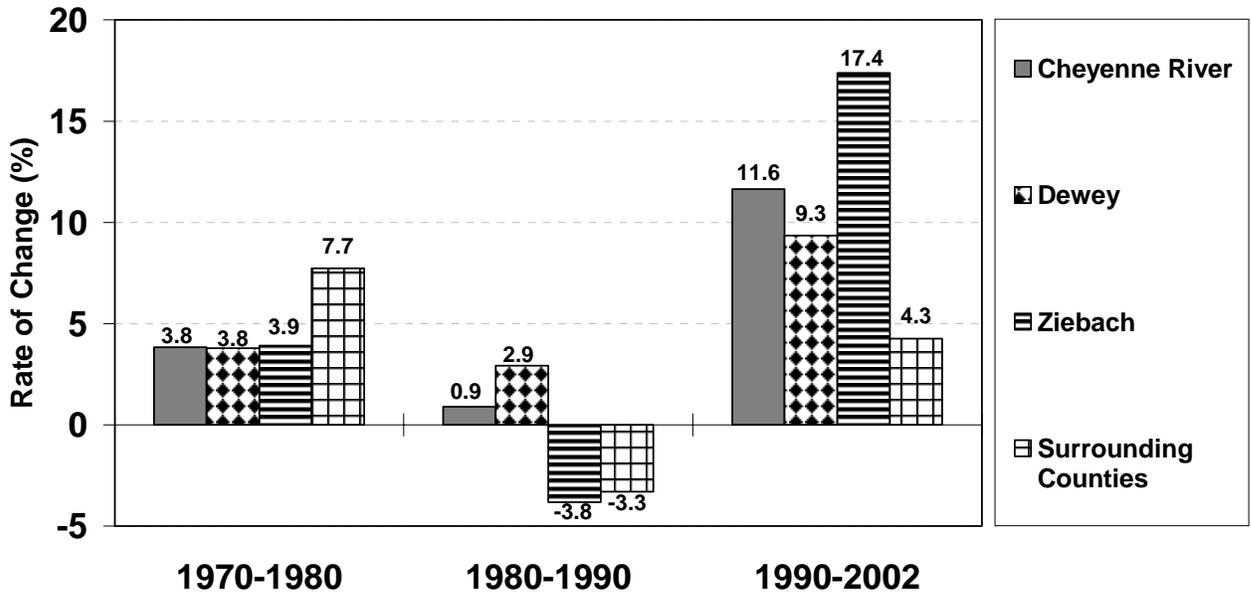


Figure 1b
Rates of Population Change
Cheyenne River Counties, South Dakota, and US
1970-2002

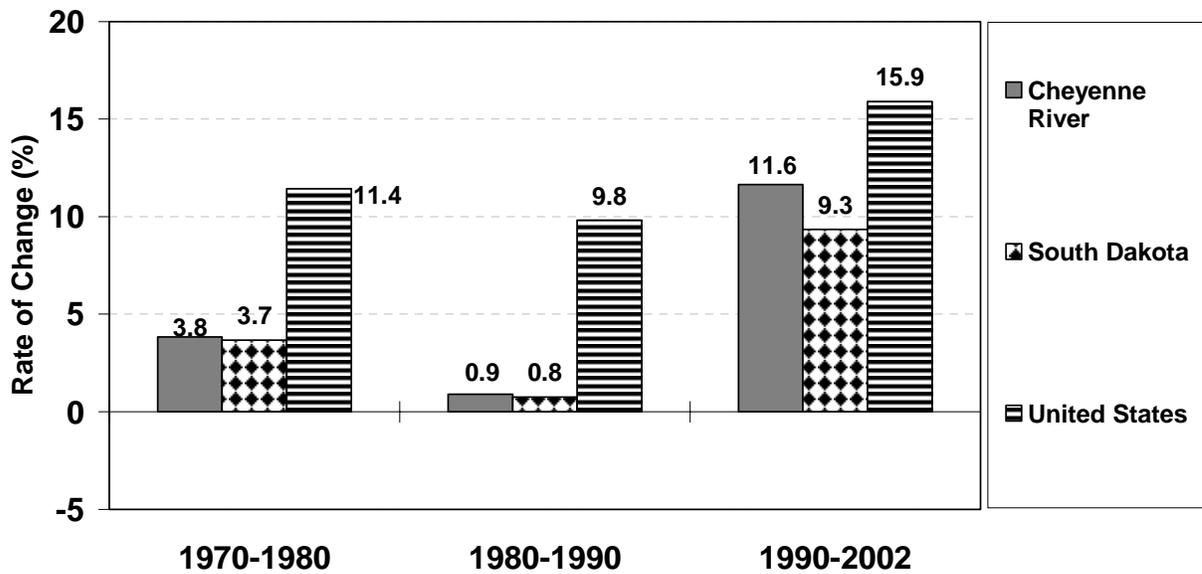


Table 3a
Population by Selected Age Groups
Cheyenne River Counties, South Dakota, and US
1990-2000

	Age:	<u>0-4</u>	<u>5-17</u>	<u>18-24</u>	<u>25-44</u>	<u>45-64</u>	<u>65 and over</u>
Cheyenne River	1990	968	2,210	657	2,074	1,213	621
	2000	821	2,526	808	2,246	1,408	682
South Dakota	1990	55,324	143,649	68,374	204,404	122,139	102,114
	2000	51,069	151,580	77,634	206,399	160,031	108,131
United States	1990	18,765,000	45,184,000	26,961,000	80,618,000	46,178,000	31,083,000
	2000	19,175,798	53,118,014	27,143,454	85,040,251	61,952,636	34,991,753

Source: U.S. Bureau of the Census

Table 3b
Population by Selected Age Groups as Percent of Total
Cheyenne River Counties, South Dakota, and US
1990-2000

	Age:	<u>0-4</u>	<u>5-17</u>	<u>18-24</u>	<u>25-44</u>	<u>45-64</u>	<u>65 and over</u>
Cheyenne River	1990	12.5 %	28.5 %	8.5 %	26.8 %	15.7 %	8.0 %
	2000	9.7	29.7	9.5	26.5	16.6	8.0
South Dakota	1990	7.9	20.6	9.8	29.4	17.5	14.7
	2000	6.8	20.1	10.3	27.3	21.2	14.3
United States	1990	7.5	18.2	10.8	32.4	18.6	12.5
	2000	6.8	18.9	9.6	30.2	22.0	12.4

Source: U.S. Bureau of the Census

Figure 2a
Population by Age Group as Percent of Total Population
Cheyenne River Counties
1990-2000

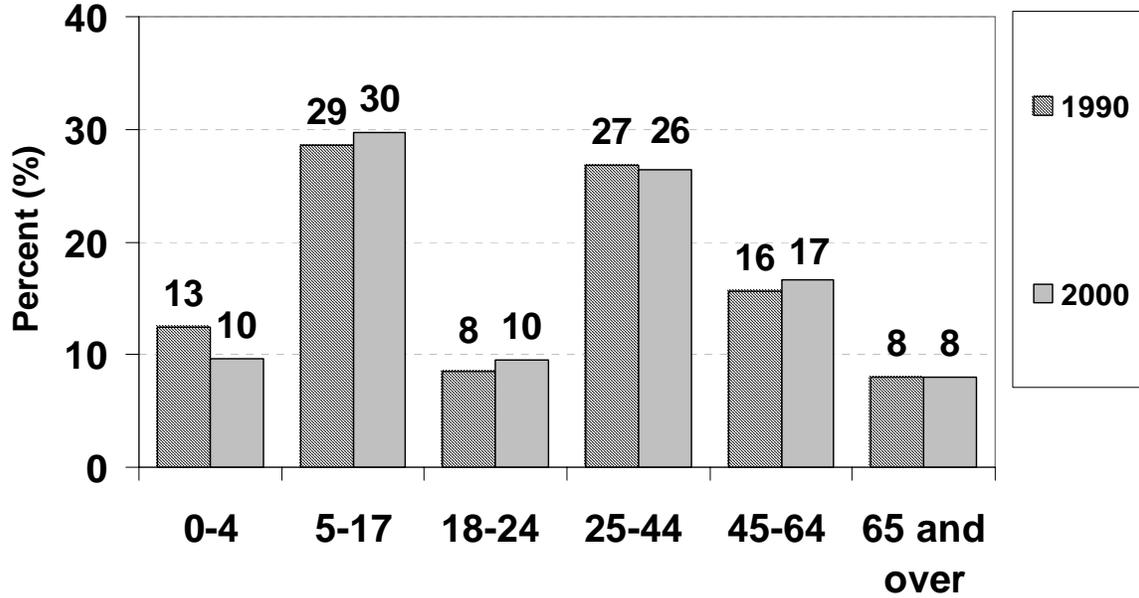


Figure 2b
Population by Age Group as Percent of Total Population
Cheyenne River Counties, South Dakota, and US
2000

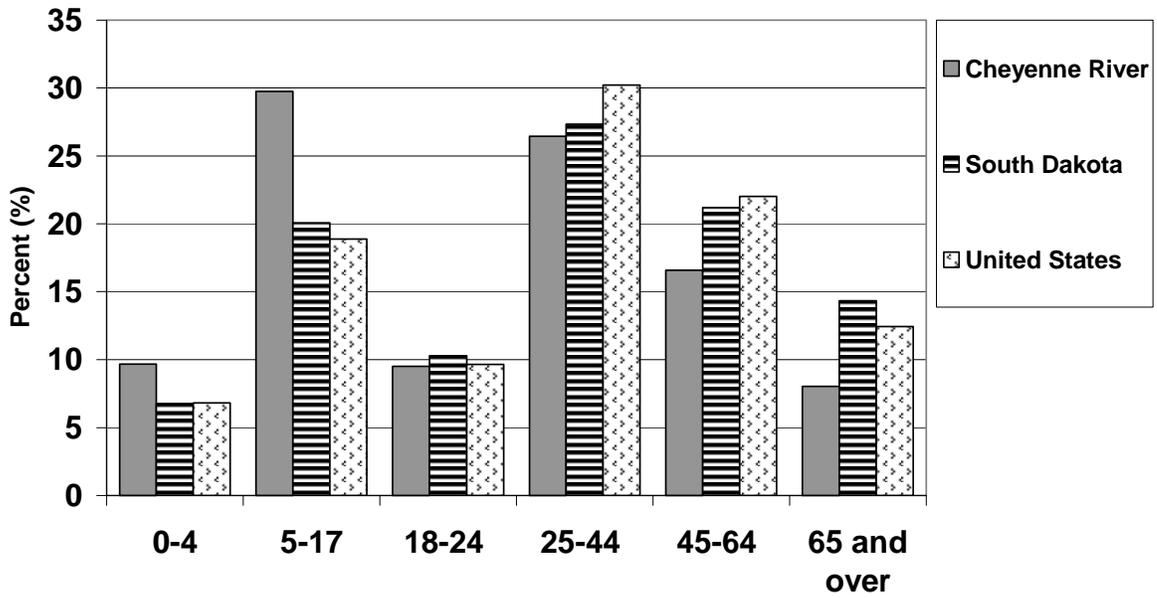


Table 4a
Population by Race
Cheyenne River Counties, South Dakota, and US
1990-2000

	<u>Year</u>	<u>Total</u>	<u>American Indian</u>	<u>White</u>	<u>Black</u>	<u>Other</u>
Cheyenne River	1990	7,743	5,100	2,610	14	19
	2000 *	8,491	6,250	2,107	2	132
South Dakota	1990	696,004	50,575	637,515	3,258	4,656
	2000 *	754,844	62,283	669,404	4,685	18,472
United States (in thousands)	1990	248,710	1,959	199,686	29,986	17,079
	2000 *	281,422	2,476	211,461	34,658	32,827

* 2000 race data is not comparable to previous years due to changes in reporting. See text for more.

Source: U.S. Bureau of the Census

Table 4b
Population by Race as Percent of Total
Cheyenne River Counties, South Dakota, and US
1990-2000

	<u>Year</u>	<u>American Indian</u>	<u>White</u>	<u>Black</u>	<u>Other</u>
Cheyenne River	1990	65.9	33.7	0.2	0.2
	2000	73.6	24.8	0.0	1.6
South Dakota	1990	7.3	91.6	0.5	0.7
	2000	8.3	88.7	0.6	2.4
United States	1990	0.8	80.3	12.1	6.9
	2000	0.9	75.1	12.3	11.7

Source: U.S. Bureau of the Census

Table 5
Net Migration, Decade Ending
Cheyenne River Counties and South Dakota
1990-2002

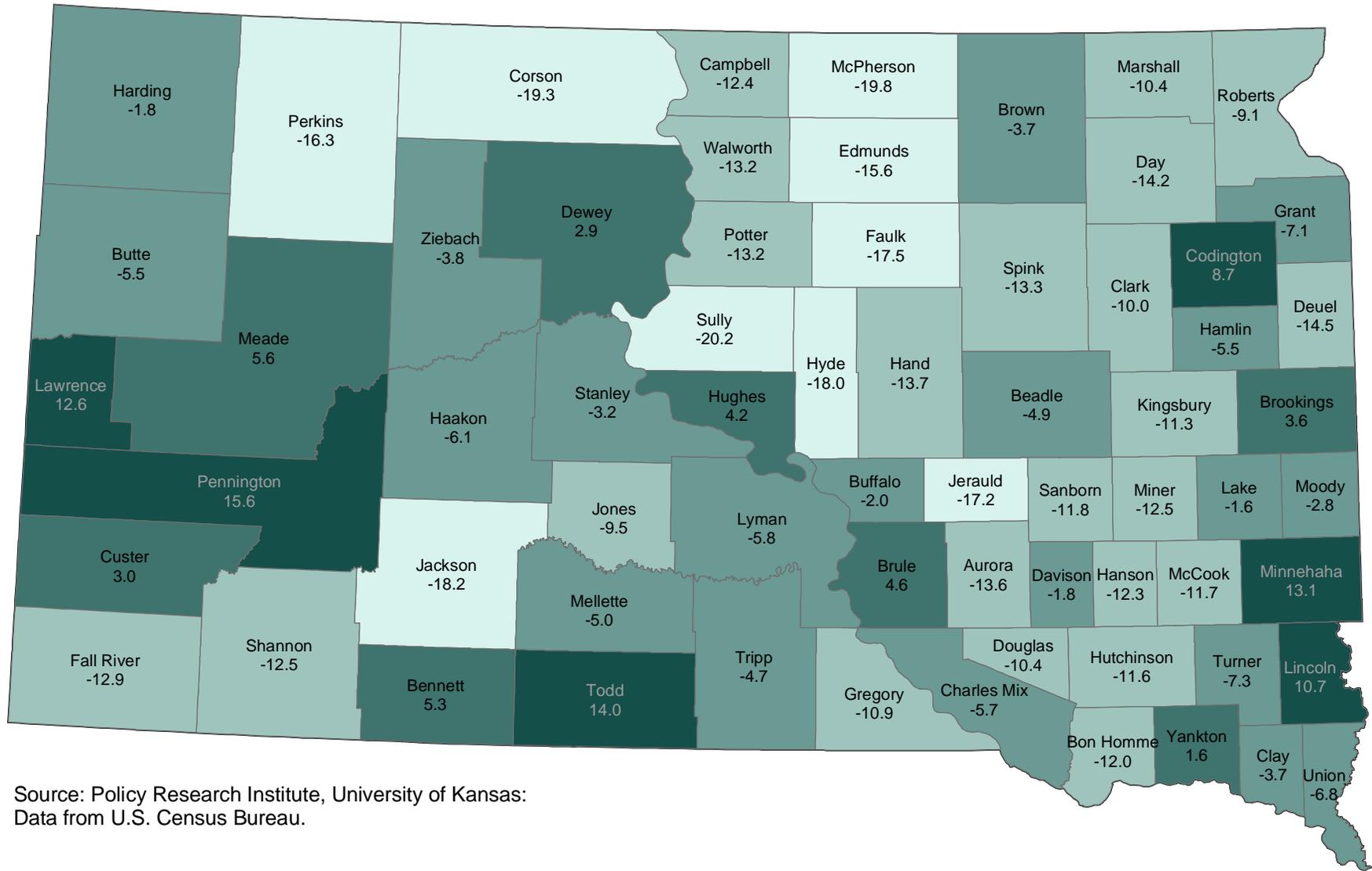
<u>Cheyenne River</u>							
<u>Period Ending</u>	<u>Population</u>	<u>Population Change</u>	<u>Births</u>	<u>Deaths</u>	<u>Births - Deaths</u>	<u>Net Migration</u>	<u>% Net Migration</u>
1990	7,743	69	2,259	635	1,624	-1,555	-20.3
1999	8,167	424	1,679	488	1,191	-767	-9.9
2000	8,491	324	n/a	n/a	-	-	-
2002	8,645	154	473	211	262	-108	-1.3

<u>South Dakota</u>							
<u>Period Ending</u>	<u>Population</u>	<u>Population Change</u>	<u>Births</u>	<u>Deaths</u>	<u>Births - Deaths</u>	<u>Net Migration</u>	<u>% Net Migration</u>
1990	696,004	5,236	120,868	65,811	55,057	-49,821	-7.2
1999	733,133	37,129	98,048	62,765	35,283	1,846	0.3
2000	754,844	21,711	n/a	n/a	-	-	-
2002	761,063	6,219	23,522	15,809	7,713	-1,494	-0.2

n/a: Data from 1990 to 2000 unavailable- see text for explanation to table
Note: net migration = population change - (births - deaths)

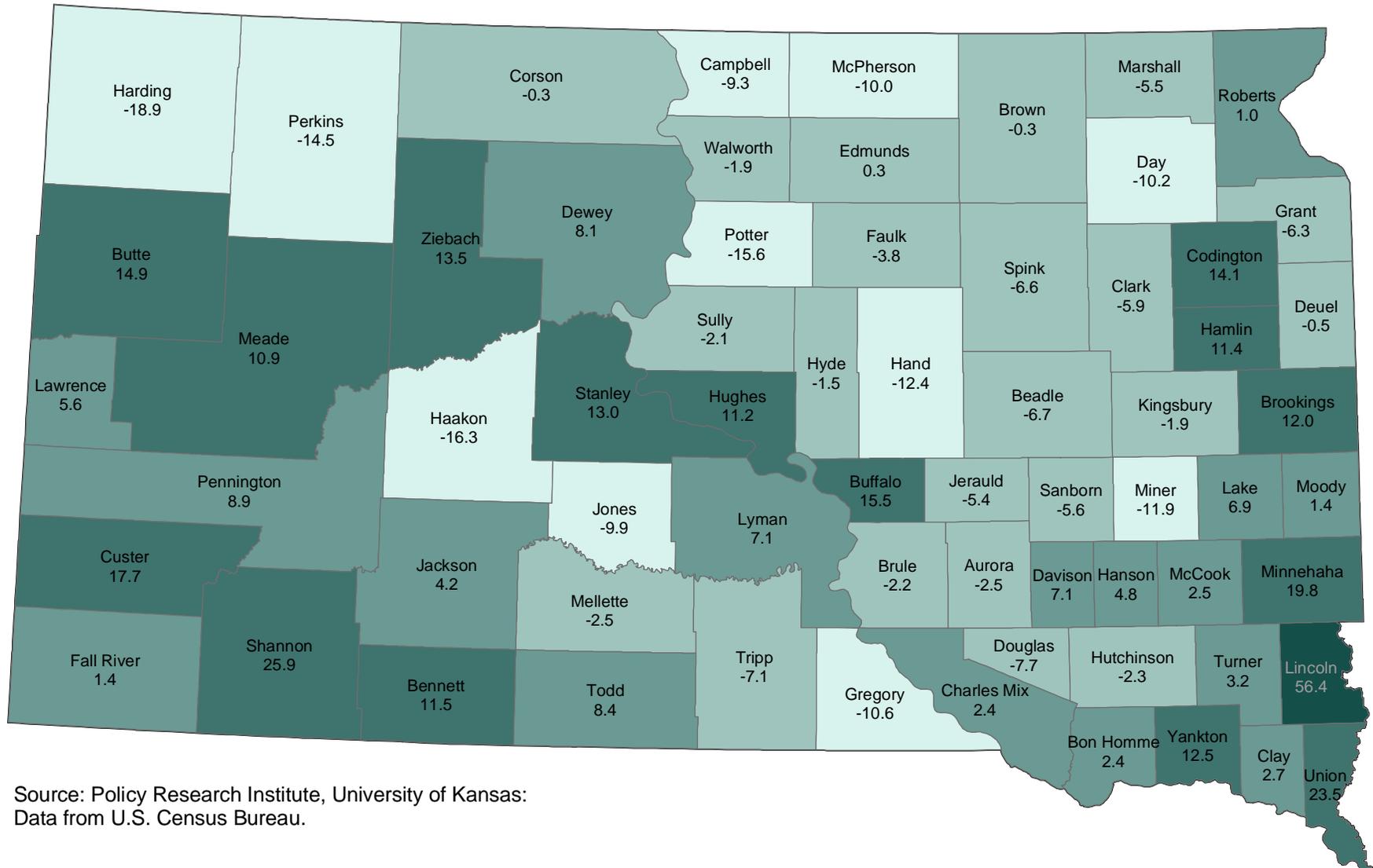
Source: U.S. Bureau of the Census.

Map 2: Percent Population Change, 1980-1990



Source: Policy Research Institute, University of Kansas:
Data from U.S. Census Bureau.

Map 3: Percent Population Change, 1990-2000



Source: Policy Research Institute, University of Kansas:
Data from U.S. Census Bureau.

EMPLOYMENT: KEY FINDINGS

- Average decade employment from 1970 through 2000 grew by 7 percent in Cheyenne River, though the growth occurred primarily in the second half of that time period. These percentages are found by calculating the growth between the average employment level for an entire decade with the average employment level of the next. For the nine surrounding counties, average decade employment grew nearly 30 percent from the 1980s to the 1990s, and for South Dakota as a whole, by an impressive 47 percent (Table 6a and Figure 3a).
- Narrowing our focus to the more recent past gives us a slightly different picture. From 1991 to 2001 employment in Cheyenne River grew a healthy 23 percent. The growth was fairly evenly distributed across the two counties, although Dewey experience most of its growth from 1991 to 1996 where in Ziebach it occurred primarily in the years from 1996 to 2001. From 1991 to 2001 the surrounding counties average 17.6 percent employment growth, though as with population, the range between the individual counties in the list was wide: from negative 5 percent growth in Sully County all the way to 26 percent employment growth in Meade (Table 6b and Figure 3b).
- In 2002 the unemployment rate in Dewey County stood at 11.7 percent, and in Ziebach it was 8.8 percent. At least, those were the rates reported by the U.S. Bureau of Labor Statistics. The average unemployment rate across all of South Dakota came to a very low 3.1 percent (Map 4).
- The Bureau of Labor Statistics unemployment rate, however, only counts those people without a job who have actively looked for one in the last four weeks. If a person has not done so, they are not considered to be in the labor force, and by definition can not be counted as unemployed. However, many of these people may nevertheless still want to find a job. One method of measuring them is through the labor force participation rate, which is the number of people who are in the labor force as a percentage of the total population. Table 7a shows the labor force participation rates in 1990 and 2002 for the Cheyenne River counties and the comparative areas. In 1990 the combined rate for Dewey and Ziebach was 36.1 percent, and by 2002 it had risen slightly to 38.2 percent. The labor force participation rate is significantly lower in Ziebach County than it is in Dewey, and the gap has increased considerably in the last decade. In comparison to Cheyenne River, the participation rates for the surrounding counties, the State of South Dakota, and for the entire U.S. were all over 50 percent in 2002. A very low labor force participation rate, such as the one in Cheyenne River, indicates that many residents who are not being counted by the BLS unemployment rate would still like to hold a job, but they have given up looking for one. In other words, the official unemployment rate significantly undercounts the true level of unemployment (Table 7a and Figure 4).

- In addition to the undercounting issues mentioned above, the BLS unemployment rate represents all residents of an area, and not strictly tribal members. When specific data from the Bureau of Indian Affairs or other sources is available, they provide a much better picture of the tribal situation. Table 7b lists labor force information for strictly Cheyenne River Sioux tribal members in 1999 and 2002.¹ Of the 13,961 enrolled members reporting in 2002 (not all of whom lived on-reservation), over 70 percent claimed they were available for work, or in other words, could be considered in the labor force. This is double the 38 percent reported for Cheyenne River by the BLS above. However, only 1,462 of those people available for work were employed, which brings the unemployment rate up to 85 percent for tribal members: a staggering amount, and much higher than the 8 to 11 percent measured in Map 4. Furthermore, of those that did hold jobs, virtually every single one earned so little they were considered below federal poverty guidelines (Table 7b).
- The total number of firms located in Cheyenne River changed little from 1998 to 2001, with only three small businesses employing less than 20 people lost (Table 8a). These numbers come from the Census Bureau's *County Business Patterns* survey. It has been known to undercount the number of Native American-owned businesses in some cases.
- The patterns of distribution of firms by the number of employees are quite nearly the same in the Cheyenne River counties as they are across South Dakota. In both cases the vast majority of businesses (nearly 90 percent) employ fewer than 20 people, about 10 to 15 percent employ between 20 and 100 people, and the remaining establishments are the large employers. This serves to underscore the tremendous importance of the small business to the Cheyenne River economy (Table 8b).
- Total industry-level employment for Cheyenne River rose 20 percent from 1990 to 2000, a net increase of 593 jobs in ten years. This compared to a 26.7 percent growth rate in South Dakota over the same time period (Table 9a). While these numbers are collected by the Bureau of Economic Analysis, who also collects the annual employment figures cited in Tables 6a and b, the totals will be noticed to differ. This is due to the different methods and reporting accuracies of the separate surveys used to collect wage and salary employment as compared to industry-wide figures.
- Examining individual industry growth trends in Cheyenne River is problematic. In Table 9a, the letter 'D' indicates that the employment level for that industry in both Dewey and Ziebach counties was so low that the BEA was required to suppress the data for confidentiality purposes. Underlined values indicate that the BEA suppressed the data for only Dewey or Ziebach but not both; the number listed is for the single county whose data was reported. Notwithstanding these constraints, it is

¹ U.S. Department of the Interior, Bureaus of Indian Affairs, *Indian Labor Force Report*, 1999 and 2002.

clear that the largest employer in the Cheyenne River counties is the Services sector, followed quite closely by Government employment, and in third place Farming. In 2000 there were 962 Service sector jobs reported in Dewey County (Ziebach's employment in Services was so low it was suppressed), 791 Government positions between the two counties, and 735 Farming jobs, also spread across both counties (Table 9a and Figure 5).

- Calculating each industry's employment share as a percent of the total shows that in Cheyenne River, Service employment accounts for 27 percent of the total, and that its share increase by 4 percent since 1990. The Government sector accounts for another 22 percent, and Farming about 21 percent. In the case of Services, the comparable employment share across all of South Dakota is much higher: slightly over 28 percent in 2000. On the other hand, the percentage of the workforce employed in the Government or Farm sectors is much higher in Cheyenne River than statewide (Table 9b and Figures 6a and 6b).
- The Census Bureau measures commuting patterns every Decennial Census. In 2000 they estimated that 152 people who live in the Cheyenne River counties actually worked in a different county. These are termed out-commuters (Map 5). The majority of these were headed to jobs in Meade, Corson, and Walworth counties, with the rest scattered across the region in smaller numbers. Counties with no shading indicate that no one who lived in Cheyenne River traveled to work in them. On the other hand, a total of 162 people who do not live in the Cheyenne River counties travel in to work there. These are called in-commuters, and the counties which send the most also include Meade and Corson (Map 6). Again in Map 6, counties with no shading simply indicate that no residents of those counties traveled in to Cheyenne for work. Finally, there were 2,447 people who lived in the Cheyenne River counties who did not commute at all: they worked in the place they live. This is the sum of the two numbers listed for Dewey and Ziebach in both maps. However, since Cheyenne River does encompass two counties, it isn't entirely correct to say that none of them commuted at all: 53 residents of Dewey County commuted to Ziebach to work, and 186 from Ziebach commuted to Dewey to work.

Table 6a
Wage and Salary Employment and Growth Rates, by Decade
Cheyenne River and Surrounding Counties, South Dakota, and US
Place of Work Data
1970s-1990s

	Average Decade Employment			% Employment Growth		
	1970's	1980's	1990's	70's-80's	80's-90's	70's-90's
Cheyenne River	2,043	1,897	2,183	-7.1 %	15.1 %	6.9 %
Dewey	1,719	1,619	1,856	-5.8	14.6	8.0
Ziebach	324	278	327	-14.2	17.6	0.9
Surrounding Counties	18,424	19,469	23,772	5.7	22.1	29.0
South Dakota	239,213	270,728	352,681	13.2	30.3	47.4
United States (Thou)	86,280	104,703	124,424	21.4	18.8	44.2

Source: Bureau of Economic Analysis, Table CA34 "Wage and Salary Employment." Place of work data.

Figure 3a
Employment Growth Rates by Decade
Cheyenne River and Surrounding Counties, South Dakota, and US
1970s-1990s

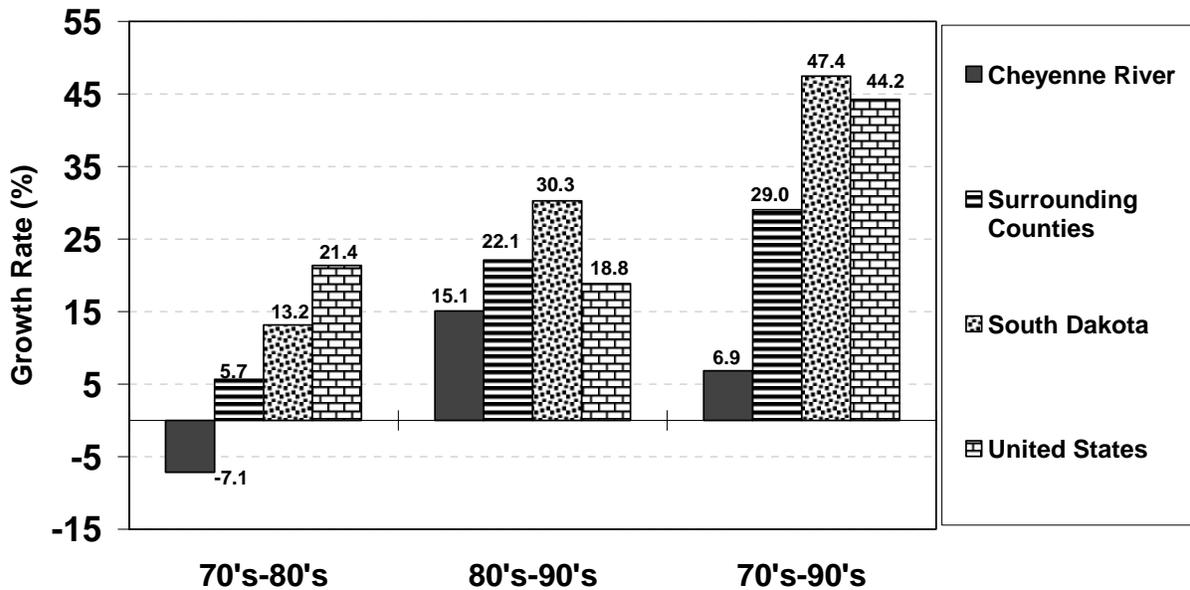


Table 6b
Wage and Salary Employment and Growth Rates, by Selected Years
Cheyenne River and Surrounding Counties, South Dakota, and US
Place of Work Data
1991-2001

	Average Annual Employment			% Employment Growth		
	1991	1996	2001	1991-1996	1996-2001	1991-2001
Cheyenne River	1,981	2,240	2,436	13.1 %	8.8 %	23.0 %
Dewey	1,662	1,915	2,052	15.2	7.2	23.5
Ziebach	319	325	384	1.9	18.2	20.4
Surrounding Counties	22,089	24,331	25,981	10.1	6.8	17.6
South Dakota	317,521	368,349	400,944	16.0	8.8	26.3
United States (Thou)	116,137	127,264	139,165	9.6	9.4	19.8

Source: Bureau of Economic Analysis, Table CA34 "Wage and Salary Employment." Place of work data.

Figure 3b
Employment Growth Rates by Selected Years
Cheyenne River and Surrounding Counties, South Dakota, and US
1991-2001

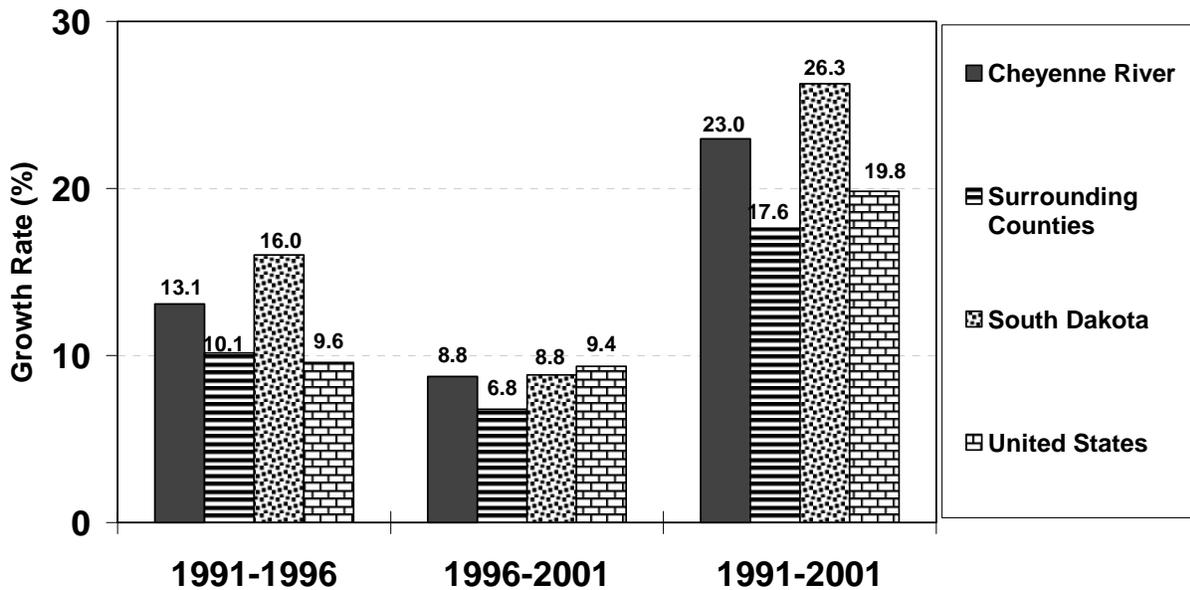


Table 7a
Labor Force Participation Rates
Cheyenne River and Surrounding Counties, South Dakota, and US
1990-2002

	<u>Labor Force Participation Rate</u>		<u>% Change</u>
	<u>1990</u>	<u>2002</u>	<u>1990-2002</u>
Cheyenne River	36.1	38.2	5.8 %
Dewey	37.5	43.1	14.8
Ziebach	32.7	27.0	-17.5
Surrounding Counties	49.0	57.1	16.7
South Dakota	49.9	55.3	10.8
United States (Thou)	66.5	66.6	0.2

Sources: US Bureau of Labor Statistics, US Bureau of the Census.

Figure 4
Labor Force Participation Rate
Cheyenne River and Surrounding Counties, South Dakota, and US
1990-2002

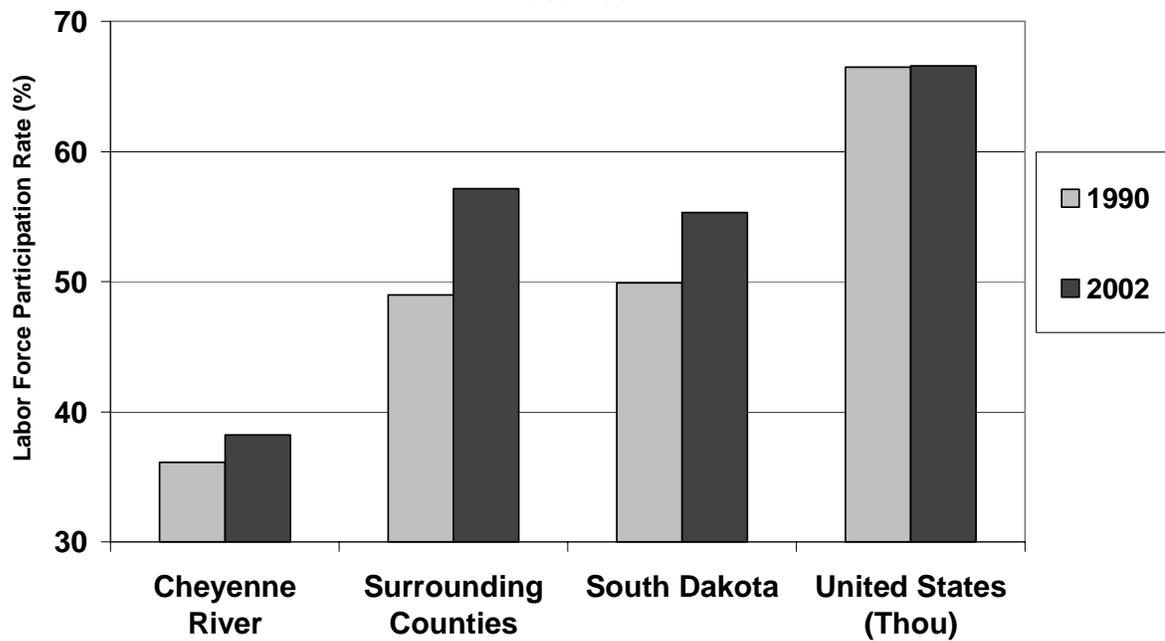


Table 7b
Bureau of Indian Affairs Labor Force Data for Tribal Members
Cheyenne River Sioux Tribe
1999-2002

	<u>Tribal Enrollment</u>	<u>Available for Work</u>	<u>Labor Force Participation</u>	<u>Number Employed</u>	<u>Unemployed</u>		<u>Employed, but Below Poverty Guidelines*</u>	
					<u>(#)</u>	<u>(%)</u>	<u>(#)</u>	<u>(%)</u>
Cheyenne River								
1999	13,270	7,755	58.4%	1,559	6,196	79.9%	1,496	96.0%
2002	13,961	9,841	70.5%	1,462	8,379	85.1%	1,462	100.0%

* Poverty guidelines from Department of Health and Human Service's Poverty Guidelines for 1999 and 2002.
Source: US Department of the Interior, Bureau of Indian Affairs, *Indian Labor Force Report*, 1999 and 2002.

Table 8a
Number of Firms, by Number of Employees
Cheyenne River and South Dakota
1998-2001

<u>Employees</u>	<u>Cheyenne River</u>			<u>South Dakota</u>		
	<u>1998</u>	<u>2001</u>	<u>% Change</u>	<u>1998</u>	<u>2001</u>	<u>% Change</u>
1 -- 19	99	96	-3.0 %	20,842	21,168	1.6 %
20 -- 99	16	16	0.0	2,283	2,431	6.5
100 -- 499	1	1	0.0	361	394	9.1
500+	0	0	-	35	39	11.4
Total	116	113	-2.6	23,521	24,032	2.2

Source: U.S. Bureau of the Census, "County Business Patterns," NAICS.

Table 8b
Percentage Distribution of Firms, by Number of Employees
Cheyenne River and South Dakota
1998-2001

<u>Employees</u>	<u>Cheyenne River</u>		<u>South Dakota</u>	
	<u>1998</u>	<u>2001</u>	<u>1998</u>	<u>2001</u>
0 - 19	85.3 %	85.0 %	88.6 %	88.1 %
20 - 99	13.8	14.2	9.7	10.1
100 - 499	0.9	0.9	1.5	1.6
500+	0.0	0.0	0.1	0.2

Source: U.S. Bureau of the Census, "County Business Patterns," NAICS. Due to numbers being rounded up, percentages may not equal 100%.

Table 9a
Employment Levels by Industry
Cheyenne River and South Dakota
Place of Work Data
1990-2000

Industry	Cheyenne River			South Dakota		
	1990	2000	% Change	1990	2000	% Change
Ag. Services	56	D	/ %	4,348	7,705	77.2 %
Mining	D	D	/	3,200	1,552	-51.5
Construction	91	<u>107</u>	17.6	18,504	27,956	51.1
Manufacturing	<u>22</u>	<u>33</u>	50.0	35,951	52,030	44.7
Transportation	<u>100</u>	<u>159</u>	59.0	17,503	22,727	29.8
Wholesale Trade	<u>35</u>	<u>54</u>	54.3	19,909	21,652	8.8
Retail Trade	323	<u>305</u>	-5.6	71,634	89,412	24.8
Finance, Insur., Real Est.	<u>79</u>	127	60.8	27,069	42,523	57.1
Services	682	<u>962</u>	41.1	101,576	147,400	45.1
Gov't. and Gov't. Services	736	791	7.5	69,928	70,720	1.1
Subtotal -- Non-Farm	2,172	2,793	28.6	369,622	483,677	30.9
Farm Employment	763	735	-3.7	41,912	37,659	-10.1
Total Employment	2,935	3,528	20.2	411,534	521,336	26.7

(D) Less than 10 jobs: not shown to avoid disclosure of confidential information, but the estimates for this item are included in the total.

Underlined numbers indicate actual employment for either Dewey or Ziebach and suppressed (D) data for the other county

Source: Bureau of Economic Analysis, Regional Economic Information System (REIS), table CA25.

Figure 5
Percent Change in Employment by Industry
1990-2000

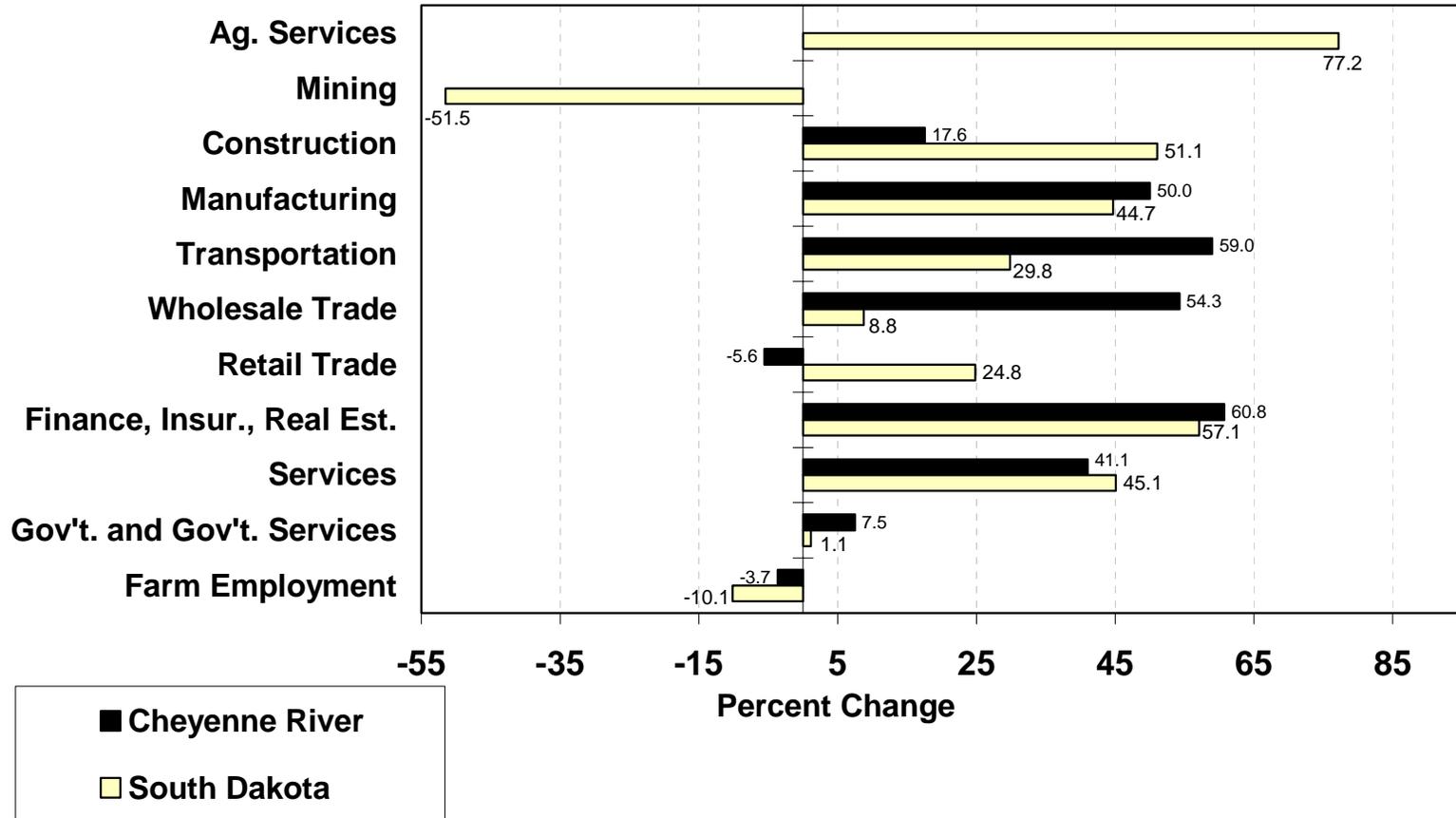


Table 9b
Employment Percent Share by Industry
Cheyenne River and South Dakota
Place of Work Data
1990-2000

<u>Industry</u>	<u>Cheyenne River</u>			<u>South Dakota</u>		
	<u>1990</u>	<u>2000</u>	<u>Change</u>	<u>1990</u>	<u>2000</u>	<u>Change</u>
Ag. Services	1.9	/	/ %	1.1 #	1.5	0.4 %
Mining	/	/	/	0.8	0.3	-0.5
Construction	3.1	3.0	-0.1	4.5	5.4	0.9
Manufacturing	0.7	0.9	0.2	8.7	10.0	1.2
Transportation	3.4	4.5	1.1	4.3	4.4	0.1
Wholesale Trade	1.2	1.5	0.3	4.8	4.2	-0.7
Retail Trade	11.0	8.6	-2.4	17.4	17.2	-0.3
Finance, Insur., Real Est.	2.7	3.6	0.9	6.6	8.2	1.6
Services	23.2	27.3	4.0	24.7	28.3	3.6
Gov't. and Gov't. Services	25.1	22.4	-2.7	17.0	13.6	-3.4
Subtotal -- Non-Farm	74.0	79.2	5.2	89.8	92.8	3.0
Farm Employment	26.0	20.8	-5.2	10.2	7.2	-3.0

Source: Bureau of Economic Analysis, Regional Economic Information System (REIS), table CA25.

Figure 6a
Employment Percent Share by Industry
Cheyenne River, 2000

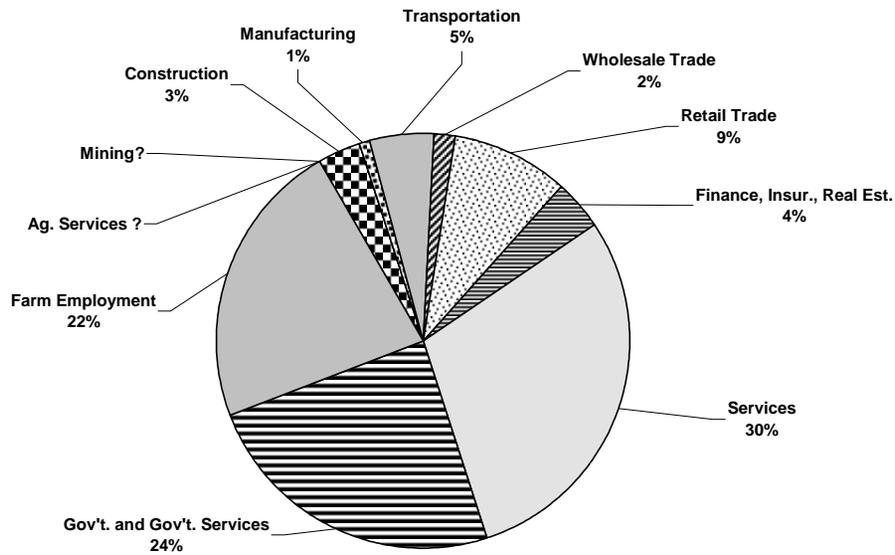
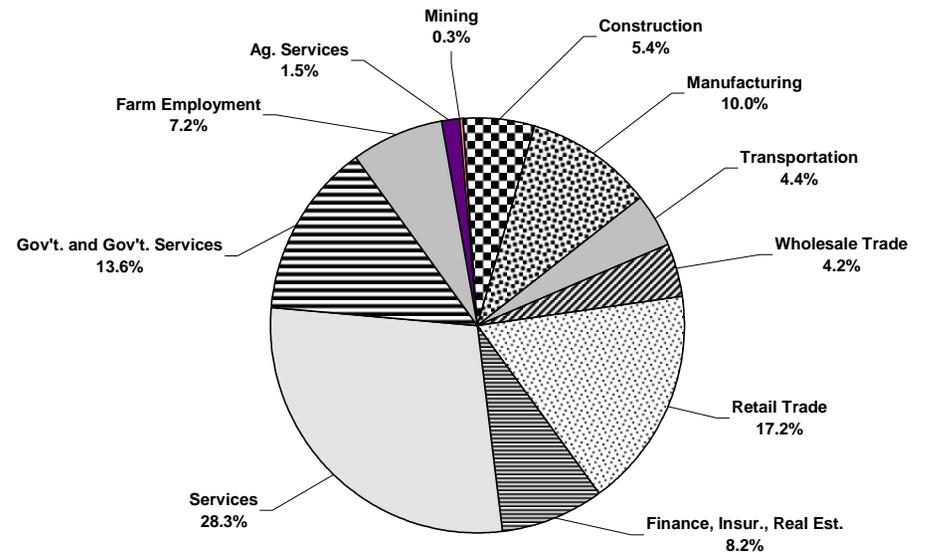
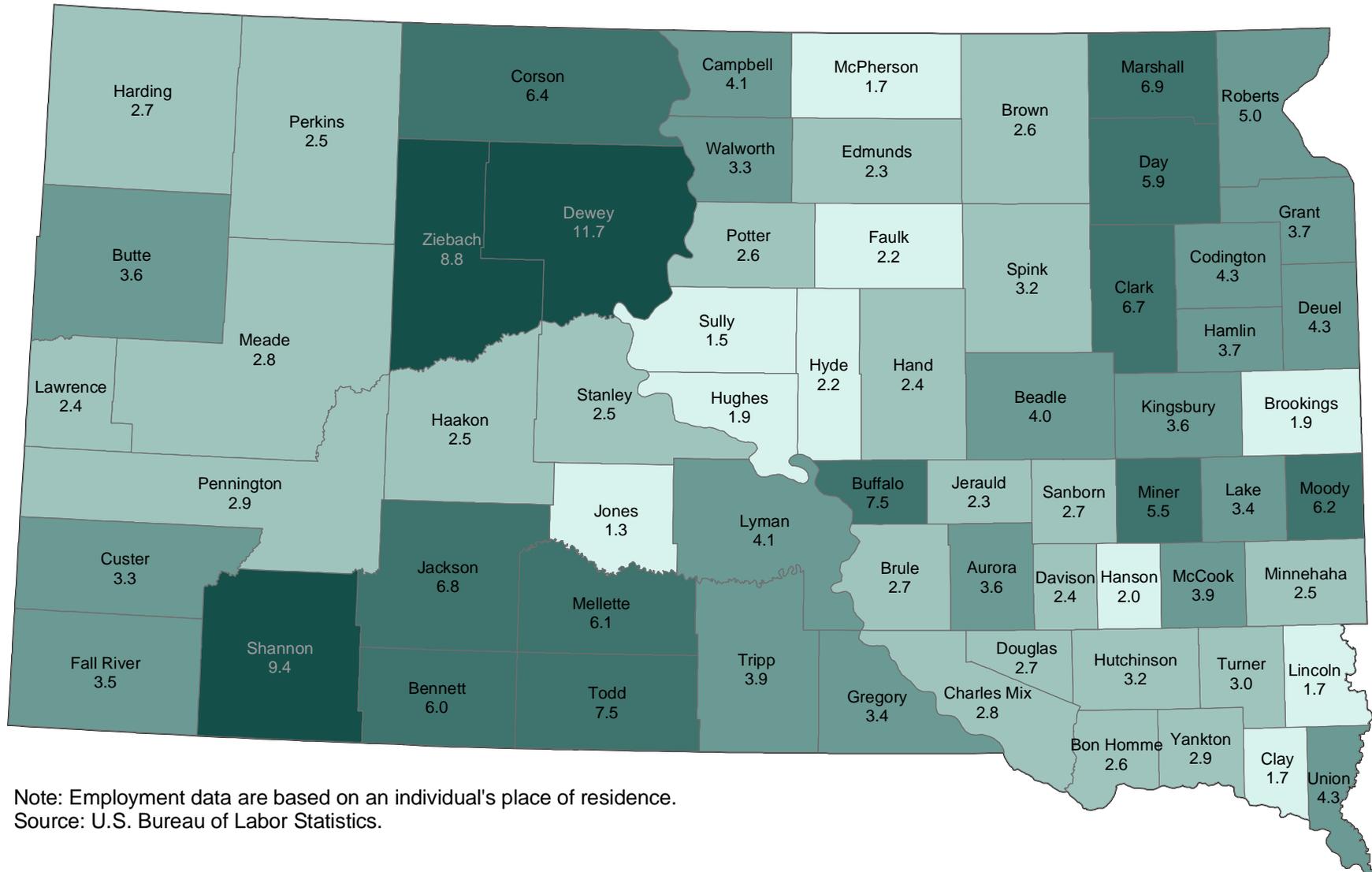


Figure 6b
Employment Percent Share by Industry
South Dakota, 2000

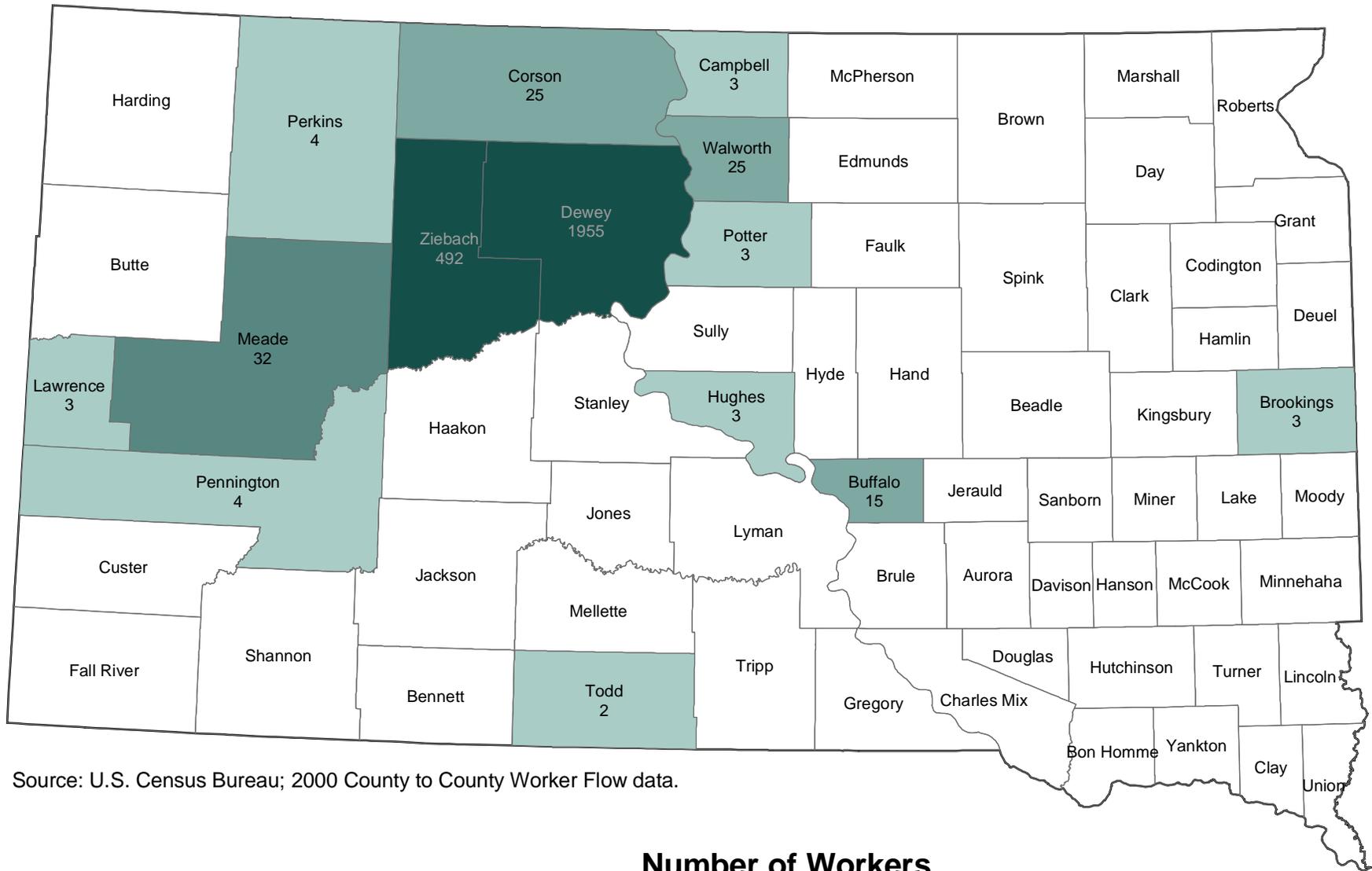


Map 4: Unemployment Rate, 2002



Note: Employment data are based on an individual's place of residence.
Source: U.S. Bureau of Labor Statistics.

Map 5: Place of Work by Workers Residing in Cheyenne River



Source: U.S. Census Bureau; 2000 County to County Worker Flow data.

Number of Workers



EARNINGS AND INCOME: KEY FINDINGS

- In 2001 the average wage per job in Cheyenne River was \$22,559, and the difference in wage levels between the two counties which comprised the area was so little as to be insignificant: less than \$500. However, the Cheyenne River average wage per job was about \$2,500 less than the average wage for South Dakota as a whole (Table 10 and Figure 7). It should be noted also that these wage figures are for the entire population, not simply the tribal population. If the latter were the case, these figures, were they available, would be much lower.
- The average wage per job of all the surrounding counties came to \$19,760 in 2001, a figure roughly \$3,000 less than the average wage in Cheyenne River. But yet again the single average figure for the nine surrounding counties belies a wide range: from a high of \$25,521 in Hughes County to a low of \$18,343 in Potter County (Table 10 and Figure 7).
- Per capita personal income in Cheyenne River in 2001 was \$13,597, though the difference between Dewey and Ziebach counties was large: per capita income in Dewey came to \$17,583, while in Ziebach the figure was only \$9,610. In fact, Ziebach's per capita income is the fifth lowest of all the counties in the United States (over 3,000 of them), and certainly the lowest in South Dakota. The per capita income level for South Dakota as a state exceeded the level in Cheyenne River by over 13,000 dollars (Table 11 and Figure 8).
- Per capita income is calculated by taking total incomes in the area and dividing by total population. The number equates to the amount each person would get if all the incomes in a county were split up equally among all the residents, even those who did not work. This is different from the average wage in that the average wage equates to what each person would get if incomes were split and distributed equally among all *workers*. That measure gets at the quality of jobs. Per capita income better measures the quality of life. In the case of Cheyenne River it is clear that what money there is, is spread very thin, and that the lack can not help but have an adverse affect on quality of life (Table 11, Figure 8, and Map 7).
- From the 2000 Census it is possible to quantify the rate of poverty in the Cheyenne River counties, and furthermore by focusing solely on data for American Indians, which in this case is available. According to the Census Bureau,² 37 percent of all families in Dewey County and 61 percent in Ziebach County earned incomes below the federal poverty level in 1999 (this is not shown in figures).

² U.S. Census Bureau; "Table P-160c. Poverty Status in 1999 of Families by Family Type (American Indian and Alaskan Native Alone Householder);" accessed 23 February 2004; <<http://factfinder.census.gov/servlet/DTGeoSearchByListServlet>>

Table 10
Average Annual Wage Per Job
Cheyenne River and Surrounding Counties, South Dakota, and US
1991-2001

	Average Wage per Job (Nominal Dollars)			% Growth		
	1991	1996	2001	91-96	96-01	91-01
Cheyenne River (Avg.)	14,163	17,386	22,559	22.8	29.8	59.3
Dewey	15,213	18,132	22,808	19.2	25.8	49.9
Ziebach	13,113	16,640	22,310	26.9	34.1	70.1
Surrounding Counties	14,366	16,899	19,670	17.6	16.4	36.9
South Dakota	17,021	20,303	25,061	19.3	23.4	47.2
United States	24,216	28,469	35,550	17.6	24.9	46.8

Source: U.S. Bureau of Economic Analysis, Regional Economic Information System (1969-2000), Regional Economic Profile, Table CA34.

Figure 7
Average Wage per Job
Cheyenne River and Surrounding Counties, South Dakota, US
1991-2001

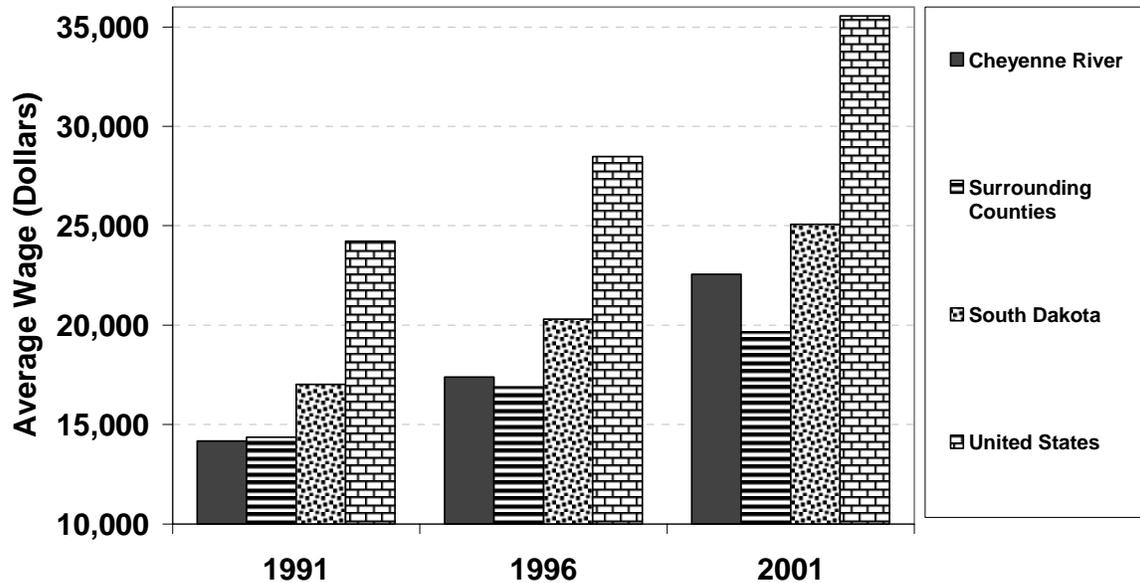
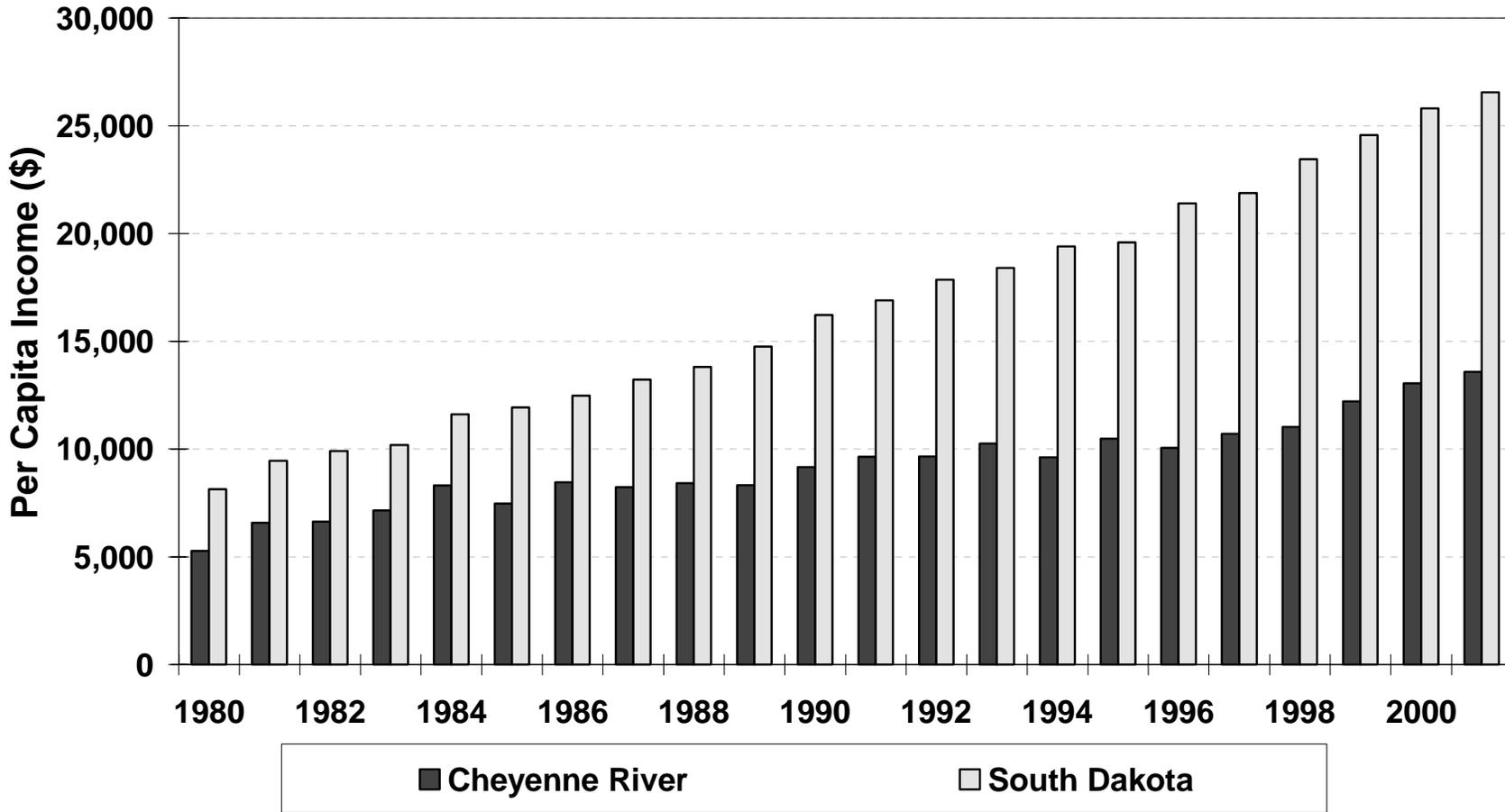


Table 11
Per Capita Personal Income
Cheyenne River Counties and South Dakota
1980-2001

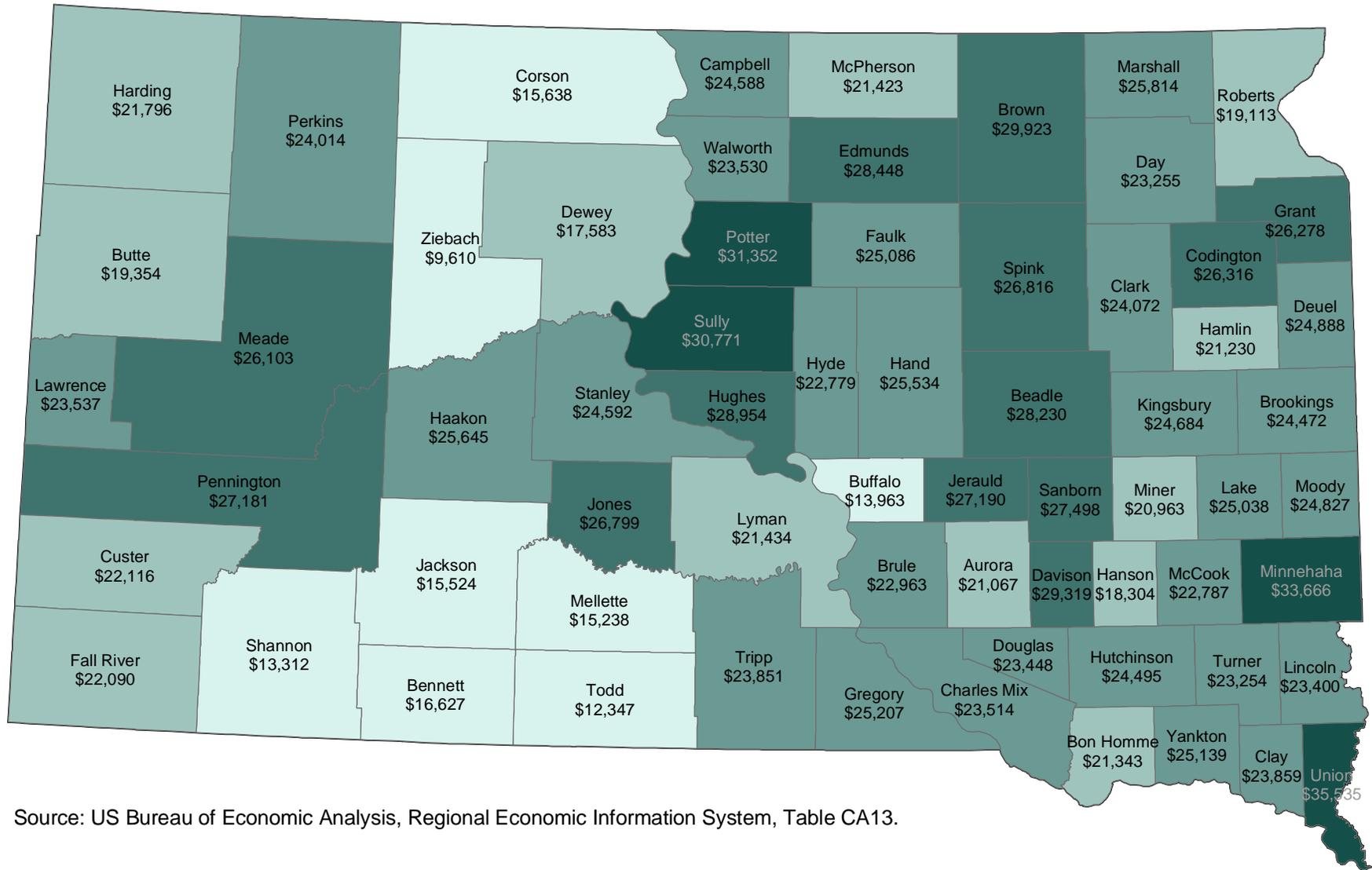
	Income (\$)		Growth Rates (%)	
	Cheyenne River	South Dakota	Cheyenne River	South Dakota
1980	5,271	8,142		
1981	6,584	9,451	24.9	16.1
1982	6,642	9,915	0.9	4.9
1983	7,154	10,195	7.7	2.8
1984	8,322	11,619	16.3	14.0
1985	7,474	11,942	-10.2	2.8
1986	8,455	12,486	13.1	4.6
1987	8,225	13,217	-2.7	5.9
1988	8,423	13,807	2.4	4.5
1989	8,334	14,767	-1.1	7.0
1990	9,166	16,227	10.0	9.9
1991	9,643	16,907	5.2	4.2
1992	9,659	17,862	0.2	5.6
1993	10,257	18,413	6.2	3.1
1994	9,613	19,399	-6.3	5.4
1995	10,486	19,588	9.1	1.0
1996	10,052	21,399	-4.1	9.2
1997	10,708	21,885	6.5	2.3
1998	11,026	23,453	3.0	7.2
1999	12,212	24,576	10.8	4.8
2000	13,051	25,815	6.9	5.0
2001	13,597	26,566	4.2	2.9

Source: U.S. Bureau of Economic Analysis, Regional Economic Information System (1989-2001), Table CA13.

Figure 8
Per Capita Personal Income
Cheyenne River Counties and South Dakota
1980-2001



Map 7: Per Capita Personal Income, 2001



Source: US Bureau of Economic Analysis, Regional Economic Information System, Table CA13.

EDUCATION: KEY FINDINGS

- Compared to the State of South Dakota, the Cheyenne River counties have a relatively less-educated over-25 population. Compared to the state, Cheyenne River has about the same percentage of population who have completed high school (about 33 percent), but a lower number who have graduated with college degrees. Additionally, Cheyenne River has a higher percentage of population than the state who have never graduated from high school at all (Table 12).
- One very positive development in the Cheyenne River counties over the last ten years is the rapid decline in the percentage of the over-25 population who had achieved no more than a 9th grade level of education. In 1990 this percentage stood at 15 percent, but by 2000 had dropped by more than half, to only 6 percent. This was a significant improvement in a relatively short period of time. Furthermore, the percentage of Cheyenne River residents who have gone on to take college courses or graduate with a higher education degree has increased (Table 12).
- One education indicator which changed little from 1990 to 2000 was the percent of the over-25 population who had neared high-school graduation but fell shy of earning a high school diploma. In 1990 this percentage was 19.4 percent, in 2000 it had dropped to only 18 percent. The comparable percentage statewide in 2000 was a much lower 8 percent (Table 12).

Table 12
Educational Attainment of Persons over 25
As a Percentage of the Population of Persons over 25
Cheyenne River Counties and South Dakota
1990-2000

		<u>Completed Less Than 9th Grade</u>	<u>9-12th Grade No Diploma</u>	<u>High School Diploma</u>	<u>Some College</u>	<u>Associate Degree</u>	<u>Bachelor's Degree</u>	<u>Graduate Degree</u>
<i>As a Percent of Population of Persons over 25:</i>								
Cheyenne River	1990	15.2%	19.4%	32.6%	18.3%	5.7%	7.2%	2.8%
	2000	6.1%	18.1%	33.1%	23.8%	6.5%	8.9%	3.2%
South Dakota	1990	13.5%	9.6%	33.8%	18.9%	7.5%	12.3%	4.9%
	2000	7.5%	8.0%	32.9%	23.0%	7.1%	15.5%	6.0%

note: percentages may not add to 100 due to rounding

Source: U.S. Bureau of the Census.

CONCLUSION

The Cheyenne River counties, Dewey and Ziebach combined, are experiencing growth on several levels. First in terms of population, the area has experienced a 10 percent increase over the last decade. The population growth is higher in terms of actual people in Dewey than in Ziebach, although in percentage terms, Ziebach has grown faster. This growth can be attributed almost entirely to increases in the Native American population by births, rather than in-migration from outside. Consequently, the makeup of the population in Dewey and Ziebach counties is weighted heavily towards the younger age groups: a full 40 percent of the population is under the age of 18.

Secondly, job growth has also occurred, by about 20 percent in both counties from 1991 to 2001, or a net increase of about 450 jobs. The majority of these have been created in the Finance and Service sectors, which are necessary industries to any area.

However, it is clear that the employment growth, such as it is, has not been sufficient to provide for the needs of many of Cheyenne River's residents and tribal members, and that more and better jobs will need to be provided for this to change. Data collected locally for the BIA's biennial Labor Force Report indicates that unemployment amongst Cheyenne River tribal members stands at over 80 percent, and that virtually all those who hold jobs still earn less than the federal poverty guidelines. Census data bear out that poverty rates are unnaturally high for the area, and the Bureau of Economic Analysis lists Ziebach County as one of the poorest in the nation in terms of per capita income.

Finally, although great gains have been made in educational attainment in the last ten years, graduating from high school still remains a difficult challenge for many Cheyenne River students. One in five will drop out of high school between the grades of 9 and 12 and not return, placing them at a disadvantage when applying for the scarce jobs available.

Like many tribes, the Cheyenne River Sioux face a wide horizon of simultaneous challenges, from social issues to fiscal constraints to lack of adequate employment, yet in many ways these are all often interrelated. A deliberate and viable economic development plan is a necessary part of the tribe's response to these challenges, not only for the jobs it can hopefully create, but because of the positive social benefits and reduction in poverty that healthy employment opportunities foster.

APPENDIX A: CHEYENNE RIVER SIOUX POPULATION COMPARISONS

In this appendix an effort is made to compare Census population records with tribal enrollment data. Three datasets are evaluated:

1. **Tribal enrollment:** From the Cheyenne River Sioux Tribal Enrollment Office. Members are enrolled at birth or, if their parents neglect to do so then, at a later time by choice, so long as they can prove tribal lineage. Un-enrollment occurs at death. The numbers listed here are for enrolled members who claim to live on the reservation. Although the dataset primarily tracks a running total, the Enrollment Office has paper copies at snapshots of time back to 1993. For some years there were several 'snapshots' taken, others only one, and in the case of 2002, none. In Table A1, the tribal enrollment for each year is the average of all the snapshots taken in that year. In Figure A1, each snapshot is actually plotted at the time it was taken.
2. **Census total population:** From the US Census Bureau, this is simply the total population of Dewey and Ziebach counties combined, from 1993 to 2002 (with the exclusion of 2001, for which data is unavailable). The geographic area of the two counties quite nearly equals that of the reservation, and so they are used as a proxy. Except for population in 2000, all other years represent population estimates. Those in the 1990s were based on the 1990 decennial census. The 2002 population is likewise a projection based on the 2000 decennial census. Because this is *total* population, it naturally counts everyone: not just Native Americans.
3. **Census Native American population:** Again from the Census Bureau, this data reflects the number of people in Dewey and Ziebach counties who claimed Native American as their race. This does not mean they are necessarily Cheyenne River Sioux members, they could be members of any tribe. Specific tribal information in a time series is not available from the Census. However, because the vast majority of Native Americans who live in either Dewey or Ziebach counties are likely to be Cheyenne River Sioux, this figure is the Census equivalent to the on-reservation, tribal enrollment data mentioned first.

KEY FINDINGS

- Contradictory comparisons are immediately apparent. In the early 1990s, the Cheyenne River Sioux reported more enrolled members living on the reservation than the Census Bureau reported *total* population living in Dewey and Ziebach counties. Because the total Census population includes more than just people of Native American descent, it is reasonable to expect it should be a consistently higher figure, and not lower.
- Eventually, Census total population estimates for the two counties rises above tribal enrollment figures, as it should. Yet here again, it is because of another confusing trend: tribal enrollment continuously declines, even though the Census reports that the number of people who live in Dewey and Ziebach and are Native

Americans is steadily and quickly rising. The Census also reports that total population is steadily increasing.

- Finally, there is the obvious difference in the number of members enrolled in the tribe and living on the reservation and the number of Native Americans that the Census reports. In 2000, for example, the Census reported 6,250 Native Americans living in Dewey and Ziebach counties. This would include Native Americans who are members of *any* tribe. On the other hand, the Tribal Enrollment Office reported 7,937 enrolled members living on the reservation. If this was correct, the Census figure failed to account for 21 percent of Native Americans in the area during the last decennial census. Earlier in the decade of the 1990s the difference was even more pronounced.

Simply from an examination of the data itself, it is not possible to pinpoint exactly what is at fault, but clearly within these three records lies an error, and perhaps several.

One notices that in 2000 the number of Native Americans the Census reports for the two counties jumps considerably. This can probably be explained by two things: first, intercensal estimates are merely that: estimates. The estimations between the actual decennial surveys can sometimes veer away from the reality, particularly if the figure upon which they were based possessed inaccuracies. The result is an apparent jump in the trend graph when the next census comes about and more accurate data is once again collected. Secondly, anecdotal evidence indicates that for a variety of reasons Native Americans are generally less likely to fill out census forms than other racial groups, with the result that many are not counted. The Census Bureau made a concerted effort in 2000 to improve response rates from minority populations, and if those efforts were successful, or if attitudes among the Native American population changed somewhat since the 1990 census, the result might have been higher reporting percentages in 2000, which would have contributed to the jump we observe in Figure A1.

Nevertheless, even assuming the Census was able to gather a more complete picture of the Native American population in 2000, there remained a considerable discrepancy between what it recorded and what the Tribal Enrollment Office reported: in fact, a difference of nearly 1,700 residents. Additionally, the downward trend in tribal enrollment and the population growth reported by the Census directly conflict each other. Either the Census is still unable to gather a complete picture, or tribal enrollment data is over-counting the true number of on-reservation members, or both.

Regardless of the reasons, it remains in the tribe's best interests to pursue and foster data collection practices that give trustworthy and reliable results. Encouraging every tribal member to complete the census form at the appropriate times, and examining tribal enrollment data collection practices, are two efforts which may wish to be considered.

**Table A1
Various Population Estimates
Cheyenne River Sioux
1993-2003**

<u>Year</u>	<u>Tribal Enrollment On-Res.</u>	<u>Census: Total Pop. Dewey & Ziebach</u>	<u>Census: Native American Pop. Dewey & Ziebach</u>	<u>Census: Percent Under Tribal</u>
1993	8,893	7,988	5,240	41%
1994	8,864	8,015	5,215	41%
1995	8,622	8,175	5,278	39%
1996	8,399	8,145	5,348	36%
1997	8,223	8,266	5,455	34%
1998	8,077	8,358	5,519	32%
1999	8,134	8,507	5,671	30%
2000	7,937	8,491	6,250	21%
2001	7,897	n/a	n/a	-
2002	n/a	8,645	6,375	-
2003	7,862	n/a	n/a	-

n/a: not available

Sources: Cheyenne River Sioux, Tribal Enrollment Office
U.S. Bureau of the Census.

**Figure A1
Various Population Estimates
Cheyenne River Sioux
1993-2003**

