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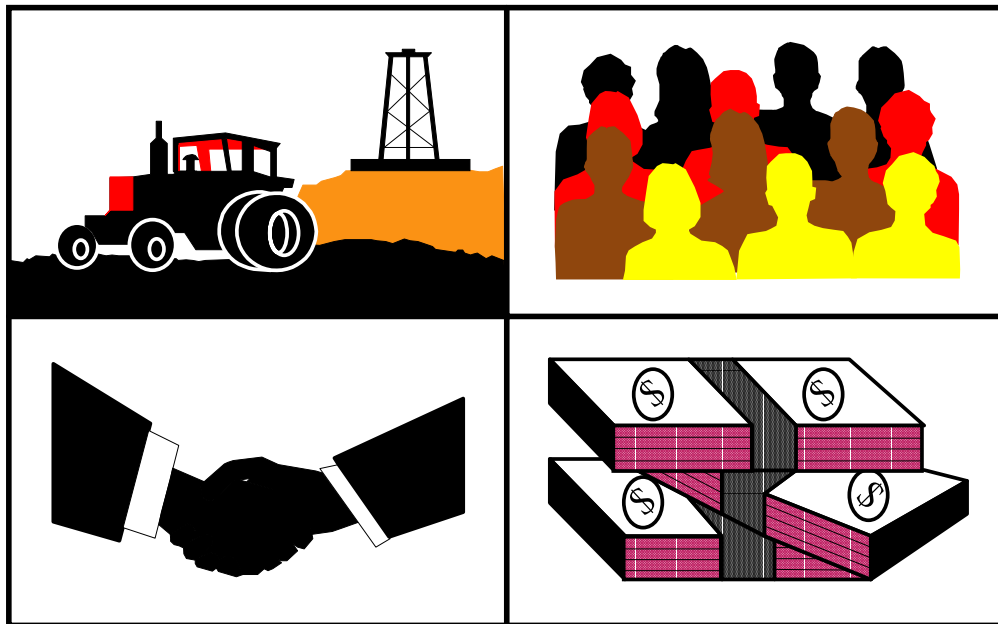
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**The State of North Dakota:  
Economic, Demographic, Public Service,  
and Fiscal Conditions**  
*A Presentation of Selected Indicators*



by

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February 2003

North Dakota State University, Fargo, ND 58105

### *Acknowledgments*

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## *Preface*

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*The State of North Dakota* is a general reference about conditions and trends in North Dakota. Trends are described for selected economic, demographic, public service, and fiscal variables. The report includes information about population, income, employment, retail sales, economic base, human and financial resources, local government finance, health and safety, and housing. A more complete listing of the specific variables can be found in the Table of Contents.

The data are presented and compared at the county level, at the state planning region level, and by metropolitan status. In addition, population, trade area population, taxable sales and purchases, and pull factors are presented at the municipal level. Graphic displays follow the tabular presentations of the data at the county and state planning region level. All of the data items for which county-level data were available are also illustrated for metropolitan and nonmetropolitan counties in the state. All data came from public sources, and all graphics were developed for ease of reproduction; readers are welcome to copy and use the information for presentations and reports.

The rural areas of the state generally lag behind the metropolitan areas in many measures such as population, income, employment growth, and health care. However, *The State of North Dakota* illustrates that all nonmetropolitan areas in the state are not alike either. Documentation of these differences gives decision makers, planners, and economic development professionals another decision making tool.

This report is a compilation of existing data. While secondary data is useful, and in many cases there are few alternatives, there are definite limitations associated with some secondary data sources. Foremost is timeliness. In preparing this report, a substantial effort was made to use the most current data available. Nevertheless, in many cases, the data lags actual events by as much as two years (and in some cases even longer). Also in many cases, data may be available only on the county level, and unavailable for smaller units, such as a city. Finally, this report provides considerable information on historical trends. However, readers are advised to use these trends and other data with caution, as future patterns could differ from those observed in the past.

We would be happy to provide a single copy of this publication free of charge. You can address your inquiry to: Carol Jensen, Department of Agribusiness and Applied Economics, North Dakota State University, P.O. Box 5636, Fargo, ND 58105-5636, Ph. 701-231-7441, Fax 701-231-7400, email [cjensen@ndsuxext.nodak.edu](mailto:cjensen@ndsuxext.nodak.edu) . This publication is also available electronically at this web site: <http://agecon.lib.umn.edu/>

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## Overview

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Rural North Dakota is under stress, as are many rural areas in the United States. The economic disparity between rural and urban areas in the state and nation continues to grow, despite nearly a decade of well-intended attempts to reverse this trend. Many other indicators--population decline, fewer services and jobs--reveal patterns similar to those shown by economic indicators alone.

North Dakota historically has relied on agriculture and mining for its economic fortune. These industries began to falter in the early 1980s, and subsequently the framework of many rural communities began to crumble. Many of the reasons for the faltering are national/international in scope. For example, the shift to fewer and larger farms, the economics of the energy industry, and international competition all have hurt rural North Dakota, and all find their genesis beyond the state's boundaries.

The data presented in this report reflect these negative trends. Yet, bright spots exist as well. Growth in manufacturing employment, growth of export telecommunications-based services, growth of tourism, positive effects of diversification, quality of life as exemplified by continued low crime levels across the state, opportunities for service and retail employment created by population growth in the state's metropolitan areas, and fiscal stability via a system of transfer payments are just a few of the positive trends revealed in this report.

### Organization of This Report

This report profiles current indicators of selected economic, demographic, and social conditions in North Dakota. Metropolitan and nonmetropolitan areas are compared. Comparisons are also made by county and region. Each profile measure--population, public service, etc.--begins with a brief explanation of the data and data sources. Next, the outstanding findings are discussed. The implications of the findings for decision makers make up the final section of text. The data tables and graphics follow the text.

Throughout the report, 2000 Census counts were used to calculate per capita rates. This was done because census numbers are considered to be reliable, and they were the most timely measures available. The Consumer Price Index was used to inflate all dollar values to the most recent year in a data series.

Counties were chosen as the unit of analysis because both federal and state agencies often collect and report data at the county level. The county-level data were aggregated into three types: *metropolitan*, nonmetropolitan *remote*, and nonmetropolitan *adjacent*. This is the classification used by the Economic Research Service (ERS). The metropolitan counties are those counties designated as being in a Metropolitan Statistical Area (MSA) by the U.S. Bureau of the Census: Burleigh-Morton, Cass, and Grand Forks. Nonmetropolitan (nonmetro) counties are referred to at times as "rural" counties in this report. They include the nonmetropolitan adjacent counties and the nonmetropolitan remote counties. The adjacent counties are those counties outside the MSA counties which border the metro counties at more than one point, and 2 percent or more of the county labor force commutes to the central county of the MSA. The nonmetropolitan remote counties either do not border a metropolitan county or they border a MSA county but do not meet the 2 percent commuter criteria established by the ERS.

The data are also presented on a regional basis, using the eight state planning regions. The component areas--both the state planning regions and the metropolitan, adjacent nonmetro, and remote nonmetro designations--are shown in Figure 1.

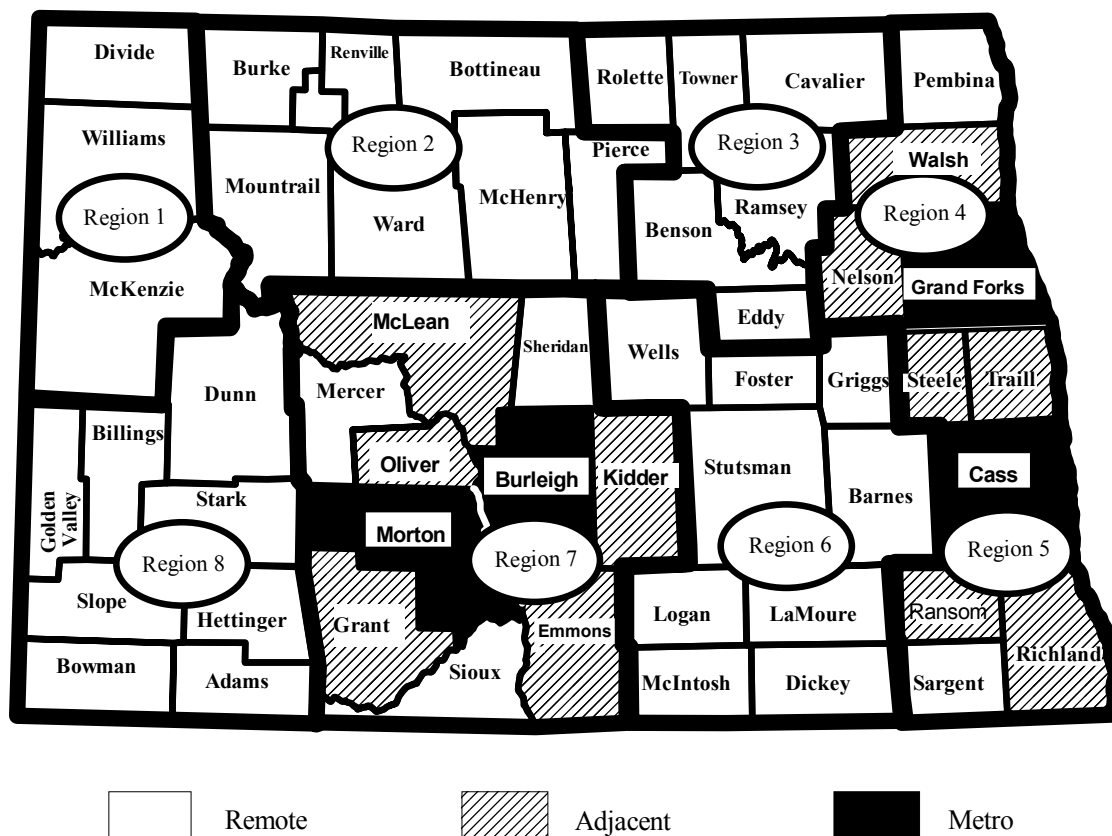


Figure 1. North Dakota Counties by State Planning Regions and Metropolitan Status, 2000



# Economic

## DATA PRESENTATION

*Sales for Final Demand by Economic Sector, 2000*  
*County Total Sales for Final Demand, 2000*  
*Employment, Unemployment, and Change in Employment, 1990-2000*  
*Change in Annual Average Employment by Major Industry, 1990-2000*  
*Income and Farm Income, 1999*  
*Average Annual Earnings, 1990-2000*  
*Per Capita Income, 1989-1999*  
*County and Regional Taxable Sales and Purchases, 1980-2000*  
*Trade Area Taxable Sales and Purchases, 1980-2000*  
*Pull Factors, 1980-2000*  
*Bank Assets, Loans-to-Deposits, and Default Loans, 2001*  
*Females in the Workforce, 2000*

## SOURCES

Data for this section came from numerous sources. Sales for final demand information came from *North Dakota Input-Output Model Data Base*, a Department of Agribusiness and Applied Economics report by Randal Coon and Larry Leistritz (2002) and Coon and Leistritz (2000), *Sales For Final Demand By Economic Sector*, unpublished data; Coon and Leistritz (2001), *Adding an Export Services Component to the North Dakota Input-Output Model's Business and Personal Services Sector*, Department of Agribusiness and Applied Economics, NDSU. Job Service North Dakota provided unpublished data on "benchmarked" employment for Table 3, and annual average employment by major industry and average earnings came from the Job Service *North Dakota Employment and Wages* publication (2000, 2001). Total income and farm income were from the U.S. Department of Commerce, Bureau of Economic Analysis Regional Economic Information System (REIS) Internet Web Page (2002). Per capita income information was available from Bureau of Economic Analysis Internet Web Page, *Personal Income by Major Source and Earnings by Industry* (2002) and the U.S. Bureau of the Census Internet Web Page, *Intercensal County Population Estimates* (1999). Annual reports from the State Tax Commissioner on sales and use taxes provided the taxable sales and purchases data, pull factors were from a Department of Agricultural Economics report by Larry Leistritz and Janet Wanzek titled *North Dakota 1993: Patterns and Trends in Economic Activity*. Pull factors were updated through 2000 by Coon and Leistritz (2002), *Updated Pull Factors for North Dakota*, unpublished data. The Federal Reserve Board of Minneapolis web site provided the December 31, 2001 Bank Directory for the financial indicator analysis. Finally, data on the number of females in the workforce came from the 2000 Census (U.S. Department of Commerce, Bureau of the Census Internet Web Page) Summary File 3 (SF3).

## *Economic Base*

The economic base for a state are those activities that bring money into the state. In North Dakota, these activities are primarily in five "sectors": agriculture, federal government outlays, manufacturing, tourism, and energy. Agriculture includes both livestock and crop operations but excludes agricultural processing. Federal government outlays include federal government transfer payments as well as federally funded construction and payrolls. Manufacturing includes agricultural processing and other manufacturing, and tourism includes expenditures by travelers to the retail trade and business and personal services sectors. An exported services component to the services sector has been added because of recent growth for those industries within the state. Exported services, particularly telemarketing and data processing activities, have become an increasingly important source of jobs and income in many parts of the state and were added to the data base beginning in 1998 (Coon and Leistriz 2001). The final sector, energy, includes coal mining, coal conversion, and petroleum and natural gas extraction, exploration, and refining.

The table and graphs which follow describe the economic base of the state and its eight planning regions. State region sales for final demand have been disaggregated to the county level to show each county's portion of the respective region's total. The economic base of the State is presented at the beginning of this report, since many of the indicators which follow are reflections of the basic sector activities in the regions.

Table 1 shows the sales for final demand by economic sector in 2000. The state's economy is dominated by agriculture (25 percent), federal activities (28 percent) and tourism and export services (23 percent). Region 7 contributes the greatest share (over one-fourth of the state's total sales for final demand), with the energy sector responsible for 45 percent (\$1,682.7 million) of this region's economic base. Energy contributes almost 43 percent of Region 1's sales for final demand (\$389.5 million) and also 40 percent (\$531.0 million) of Region 8's. Although energy's share of the regional sales for final demand has slipped from peak years, it still remains a very important component of the economic base in these regions. Federal activities are important economic base activities in Region 2 (37 percent), Region 3 (41 percent), and Region 4 (38 percent). Regions 2 and 4 are home to air bases in Minot and Grand Forks, and these two regions account for over one-third (38 percent) of all federal activity sales for final demand in the state. Agriculture is the economic backbone of Region 5 and 6. Agriculture accounts for 33 percent of the economy in Region 5, and 43 percent of Region 6's sales for final demand. Manufacturing comprised its largest share of a region's basic economic activity in Region 5 (16 percent), with the lowest in Region 1 (5 percent).

Federal activities, defined here as all federal government outlays except agricultural commodity program payments (which are included in the agricultural sector), was the largest of the five major sectors, statewide. Federal activities are the largest economic sector, comprising 28.3 percent of the state total, slightly more than the 24.9 percent of agriculture, and 22.5 percent for tourism and export services. The influence of the federal government on the state's economy would be even more pronounced if the federal farm program payments were included with the federal outlays rather than the agriculture sector. In view of recent efforts to reduce federal budget deficits, the high dependence of some counties, as well as the state as a whole, on federal expenditures may be cause for concern. In Appendix Table 1, the percentage of the economic base of each county that is attributed to federal activities is documented. Counties with over 45 percent of their economic base attributed to federal activities include Burleigh, Ward, Grand

Forks, Eddy, and Rolette. Two of these counties are located in State Planning Region 3. Appendix Table 2 shows total FY2000 federal expenditures compared to those in 1985, and the distribution of federal expenditures by type. Department of Defense expenditures in Ward and Grand Forks counties highlight the relative importance of the Air Force bases to these local economies.

**Table 1. North Dakota Sales for Final Demand<sup>1</sup> by Economic Sector, by Region, 2000**

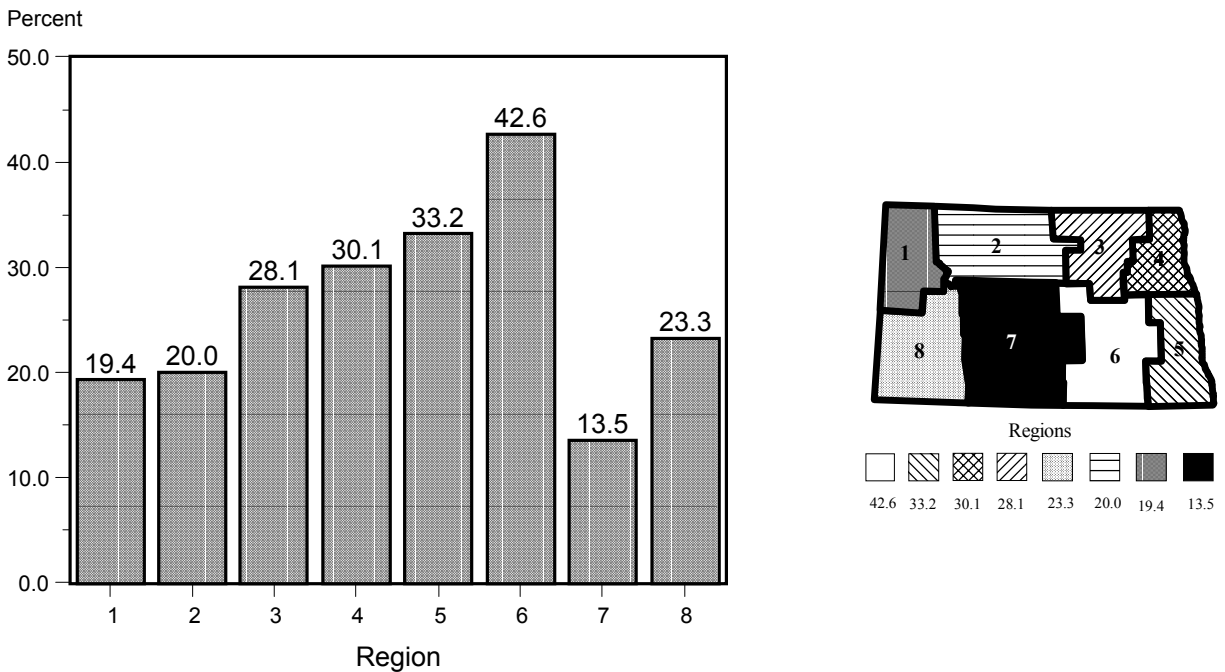
Area	Agriculture	Federal Activities	Tourism & Export Services	Energy	Mfg.	Total
REGION 1						
Million \$s	177.3	133.5	166.9	389.5	47.9	915.1
% of Total	19.4	14.6	18.2	42.6	5.2	100.0
REGION 2						
Million \$s	416.6	764.3	512.0	185.2	208.2	2,086.3
% of Total	20.0	36.6	24.5	8.9	10.0	100.0
REGION 3						
Million \$s	283.4	413.3	259.3	--	53.6	1,009.6
% of Total	28.1	40.9	25.7	--	5.3	100.0
REGION 4						
Million \$s	623.7	782.8	397.9	--	268.8	2,073.2
% of Total	30.1	37.7	19.2	--	13.0	100.0
REGION 5						
Million \$s	859.3	628.3	684.0	--	418.1	2,589.7
% of Total	33.2	24.3	26.4	--	16.1	100.0
REGION 6						
Million \$s	689.9	375.3	427.5	--	128.5	1,621.2
% of Total	42.6	23.1	26.4	--	7.9	100.0
REGION 7						
Million \$s	500.6	764.2	544.6	1,682.7	231.5	3,723.6
% of Total	13.5	20.5	14.6	45.2	6.2	100.0
REGION 8						
Million \$s	309.5	175.4	219.1	531.0	91.0	1,326.0
% of Total	23.3	13.2	16.5	40.1	6.9	100.0
NORTH DAKOTA <sup>2</sup>						
Million \$s	3,560.3	4,037.1	3,211.3	2,034.0	1,447.6	14,290.3
% of Total	24.9	28.3	22.5	14.2	10.1	100.0

<sup>1</sup>Sales for final demand are the activities which lead to a net inflow of income/wealth from outside the state.

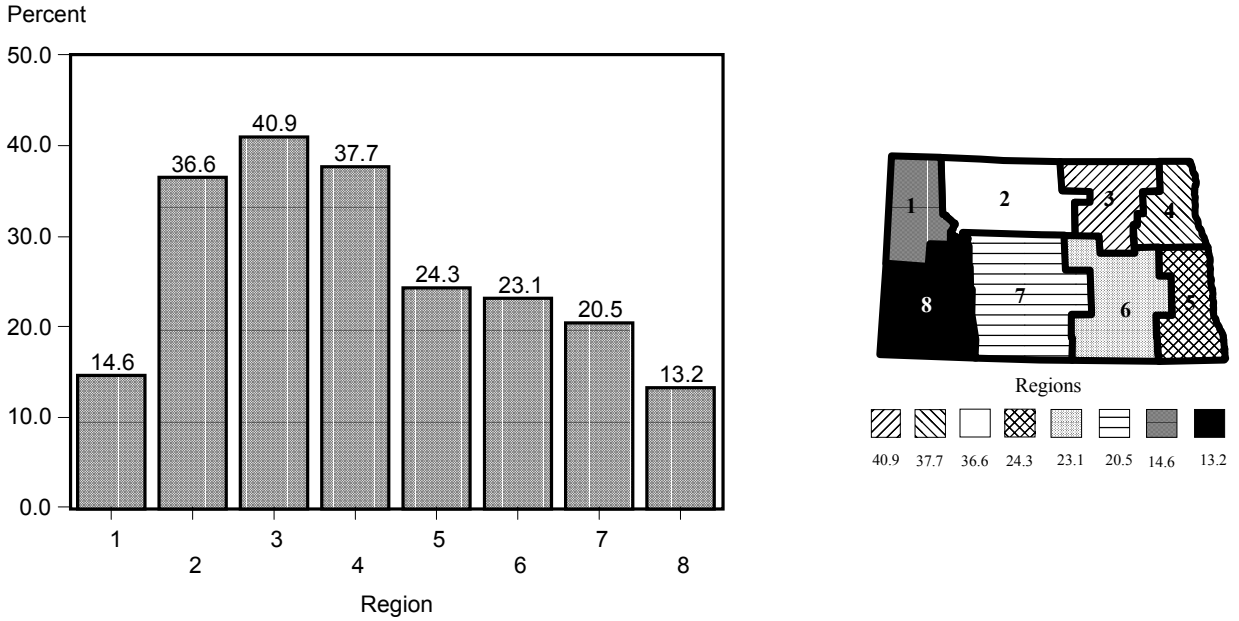
<sup>2</sup>Sum of energy for the regions does not equal state total due to inter-regional exports.

Source: Coon and Leistritz. 2002. North Dakota Input-Output Model Data Base, unpublished data. Fargo: Department of Agribusiness and Applied Economics, NDSU.

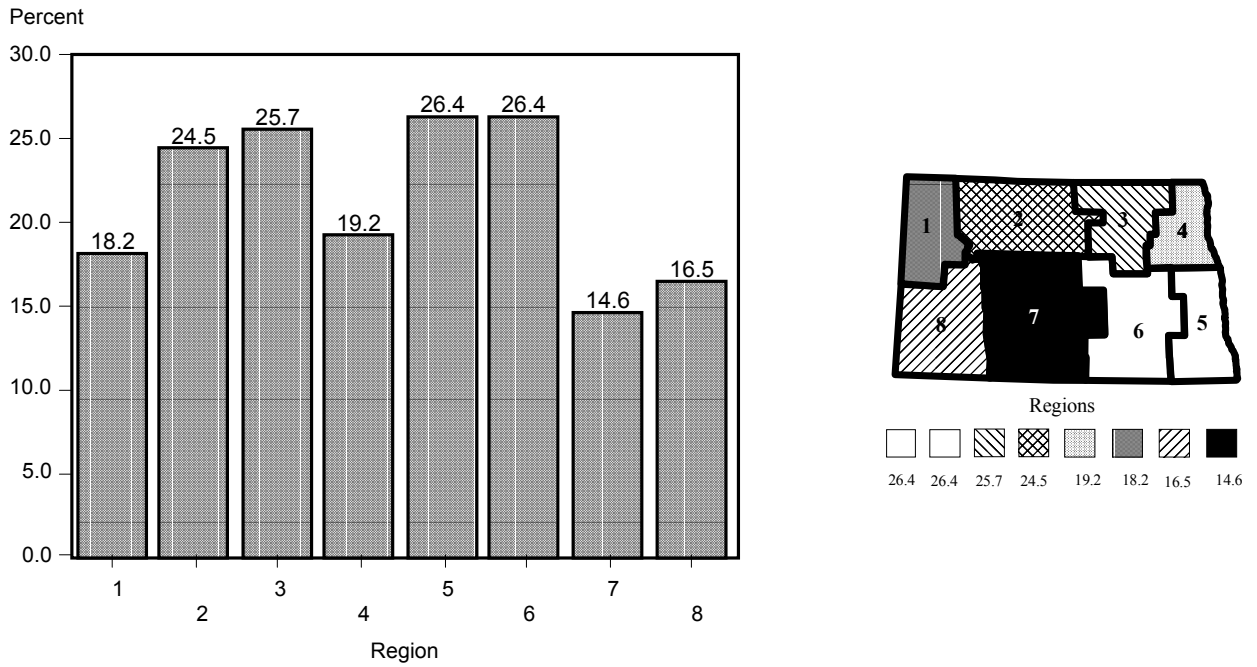
Figures 2-6 depict the comparative position of each basic sector in each region. Figure 2 shows Region 6's reliance on agriculture. Figure 3 shows high levels of federal spending in Regions 2, 3, and 4. Tourism, which accounts for more than 22 percent of the state's total sales for final demand, was of nearly equal importance in Regions 2, 3, 5 and 6, with 24.5 percent or more of their total. Figure 5 displays the relative importance of the energy industry across the 8 planning regions; energy development is nonexistent in Regions 3, 4, 5, and 6, and has only a slight impact in Region 2. Regions 1, 7, and 8, however, have a substantial amount of economic activity related to energy. Finally, Figure 6 shows manufacturing's percentage of total sales for final demand in 2000; the regions with highest percentages of sales for final demand in manufacturing are Regions 5 (16 percent) and 4 (13 percent).



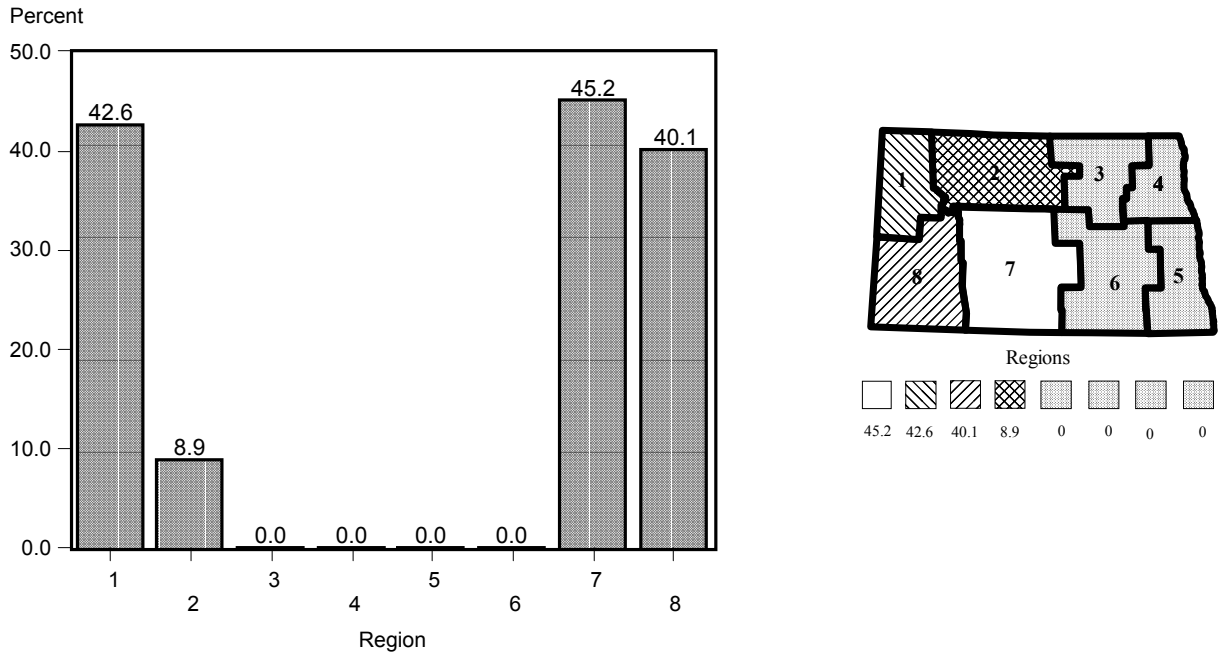
**Figure 2. Agriculture Sector's Percentage of Total Sales for Final Demand by Region, 2000**



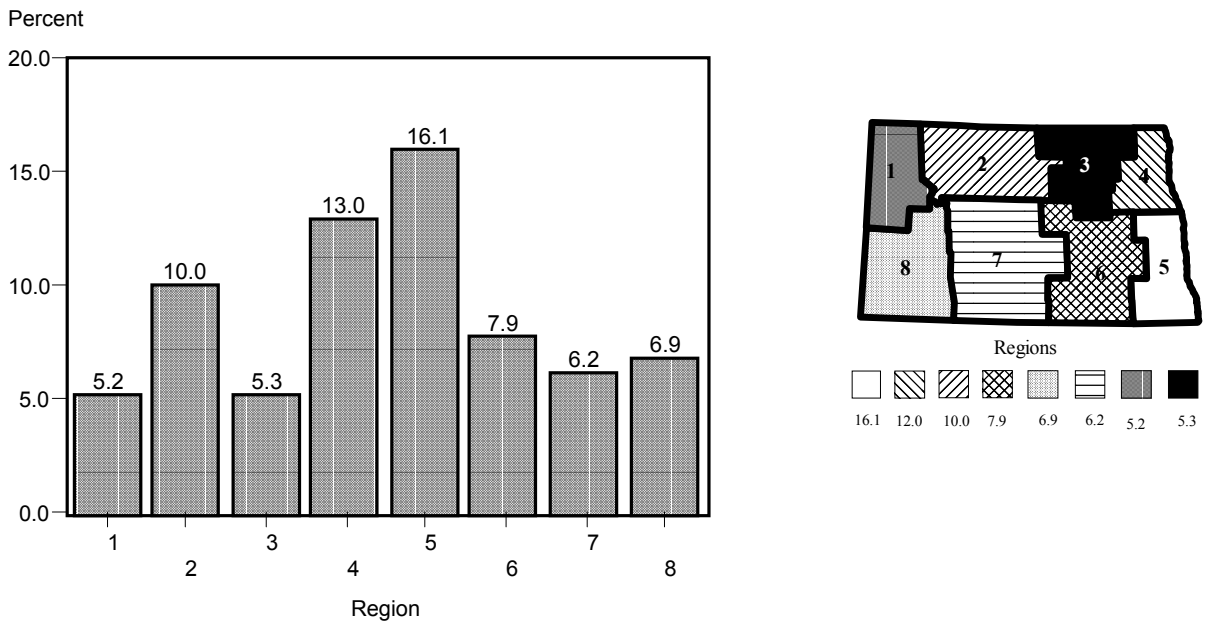
**Figure 3. Federal Activity Sector's Percentage of Total Sales for Final Demand by Region, 2000**



**Figure 4. Tourism Sector's Percentage of Total Sales for Final Demand by Region, 2000**



**Figure 5. Energy Sector's Percentage of Total Sales for Final Demand by Region, 2000**

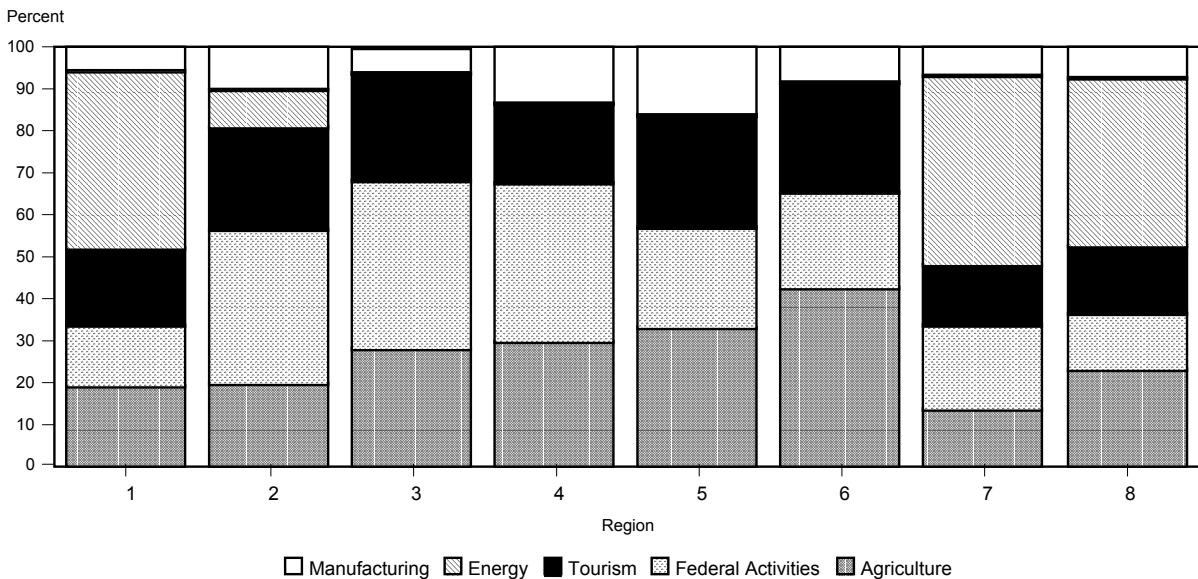


**Figure 6. Manufacturing Sector's Percentage of Total Sales for Final Demand by Region, 2000**

State region sales for final demand for each sector were disaggregated to the counties within each region. County sales for final demand were totaled to show their portion of the region (Table 2). In Region 1, Williams County (Williston Trade Center) contributed over 58 percent of the total sales for final demand. Region 2 had a similar situation, with Ward County (Minot Trade Center). Sales for final demand are more evenly distributed among counties in Region 3, but Regions 4 and 5 are dominated by the counties with major trade centers. Grand Forks County (Grand Forks Trade Center) and Cass County (Fargo Trade Center) contributed 59 and 63 percent to their respective region totals. In Region 6, Stutsman County had the largest share of sales for final demand, but several others contributed significantly. Three counties dominated State Region 7 with nearly equal shares, including Burleigh (Bismarck Trade Center) and Mercer and Morton (energy development). Stark County (Dickinson Trade Center) contributed the most to the Region 8 total. In all North Dakota planning regions, the county with the major trade center contributed the largest share to the region total. Region 7 also had energy development counties that contributed nearly as much as the Bismarck Trade Center.

County sales for final demand were ranked from largest to smallest. The five largest were Cass, Ward, Grand Forks, Burleigh, and Morton, respectively. The largest four had major trade centers and Morton County had extensive energy development. Mercer County, another energy development county, came in sixth, with three of the top six counties in State Region 7. Slope, Sheridan, and Sioux were the three counties with the lowest levels of sales for final demand in 2000.

Figure 7 shows the percentage that each sector contributed to regional total sales for final demand. Similar information is shown for each county in Appendix Table 1.



**Figure 7. North Dakota Total Sales for Final Demand by Economic Sector by Region, 2000**



**Table 2. County Total Sales for Final Demand, County Share of State Region, and County Rank in State, North Dakota, 2000**

COUNTY/REGION	SALES FOR FINAL DEMAND	COUNTY SHARE OF REGION	COUNTY RANK IN STATE
	--- million \$ ---	---- % ----	--- # ---
DIVIDE	89.6	9.8	41
MCKENZIE	293.6	32.1	16
WILLIAMS	531.9	58.1	9
REGION 1	915.1	100.0	
BOTTINEAU	221.5	10.6	17
BURKE	95.7	4.6	38
MCHENRY	144.9	7.0	28
MOUNTRAIL	175.9	8.4	23
PIERCE	119.8	5.7	32
RENVILLE	102.6	4.9	37
WARD	1,225.9	58.8	2
REGION 2	2,086.3	100.0	
BENSON	131.0	13.0	29
CAVALIER	197.8	19.6	21
EDDY	56.8	5.6	50
RAMSEY	309.2	30.6	14
ROLETTE	205.3	20.3	18
TOWNER	109.5	10.9	35
REGION 3	1,009.6	100.0	
GRAND FORKS	1,214.2	58.6	3
NELSON	80.8	3.9	43
PEMBINA	435.0	21.0	10
WALSH	343.2	16.5	13
REGION 4	2,073.2	100.0	
CASS	1,621.0	62.6	1
RANSOM	120.9	4.7	30
RICHLAND	401.7	15.5	11
SARGENT	171.0	6.6	24
STEELE	77.2	3.0	44
TRAILL	197.9	7.6	20
REGION 5	2,589.7	100.0	

- Continued -

Table 2. continued

COUNTY/REGION	SALES FOR FINAL DEMAND	COUNTY SHARE OF REGION	COUNTY RANK IN STATE
	--- million \$ ---	----%----	---#---
BARNES	294.5	18.2	15
DICKEY	167.9	10.3	26
FOSTER	104.9	6.5	36
GRIGGS	75.1	4.6	45
LAMOURE	170.5	10.5	25
LOGAN	64.8	4.0	47
MCINTOSH	90.1	5.6	40
STUTSMAN	542.6	33.5	8
WELLS	110.8	6.8	34
REGION 6	1,621.2	100.0	
BURLEIGH	1,058.0	28.4	4
EMMONS	119.1	3.2	33
GRANT	75.1	2.0	46
KIDDER	89.6	2.4	42
MCCLEAN	351.6	9.4	12
MERCER	824.2	22.1	6
MORTON	965.1	25.9	5
OLIVER	166.7	4.5	27
SHERIDAN	41.7	1.1	52
SIOUX	32.5	1.0	53
REGION 7	3,723.6	100.0	
ADAMS	57.8	4.4	49
BILLINGS	201.9	15.2	19
BOWMAN	179.5	13.5	22
DUNN	120.4	9.1	31
GOLDEN VALLEY	61.3	4.6	48
HETTINGER	91.1	6.9	39
SLOPE	43.4	3.3	51
STARK	570.6	43.0	7
REGION 8	1,326.0	100.0	

Source: Coon and Leistritz. 2000. Sales for Final Demand By Economic Sector, unpublished data, Fargo: Department of Agribusiness and Applied Economics, NDSU.

## *Employment*

Jobs are the primary source of income for most North Dakota residents. Concern about employment is statewide, but most especially in rural areas where the employment base of many counties keeps eroding. Thus, job creation is a major goal of every economic development effort. A way to evaluate the success of these efforts is to look at the unemployment rate and the long- and short-term changes in employment in the state. The employment data presented here come from unemployment compensation records, and the figures are annual averages of monthly data. Employment refers to the number of persons employed, not the number of jobs. The unemployment rate is the percentage of the labor force that is not employed and is seeking work. (The unemployment rates are calculated based on civilian employment and labor force; active duty military personnel are not included in the calculations.)

Figure 8 shows the 2000 annual average unemployment rate. Low unemployment rates (less than 2.5 percent) were most prevalent in the eastern third of the state. The highest unemployment rate was in Rolette County (12.4 percent) (Table 3), and the second highest was in Benson County (7.9 percent). In an earlier edition of this report, Sioux County had the highest rate of unemployment (in 1993) at 15.4 percent. Rolette and Sioux counties have the highest proportion of Native American population in the State. From 1993 to 2000 Sioux County reduced its unemployment rate to 6.2 percent. Region 3 had the highest unemployment rate among the planning regions (6.7 percent), and Region 5 the lowest (1.8 percent) (Figure 9).

Overall, rural counties had higher unemployment levels than metro counties (Figure 9). Given the trend of declining numbers of jobs in many rural counties, rural unemployment rates might be even higher except that persons unable to find jobs in the rural counties may be migrating to the state's metro areas. The state average unemployment rate for 2000 was 3.0 percent, significantly lower than the 1993 rate (4.4 percent) but slightly higher than the 2.8 percent rate in 1996. The lower unemployment rates are indicative of the strength of the North Dakota and national economies in 1996 and the continued strength of the state's economy in 2000, despite the nation's economic slowdown at that time. North Dakota's 2000 unemployment rate was substantially less than the national rate (4.0 percent). State Region 5's unemployment rate of 1.8 percent reflects the influence of the growth in the Fargo trade area. Only 15 North Dakota counties had unemployment rates exceeding the national average in 2000.

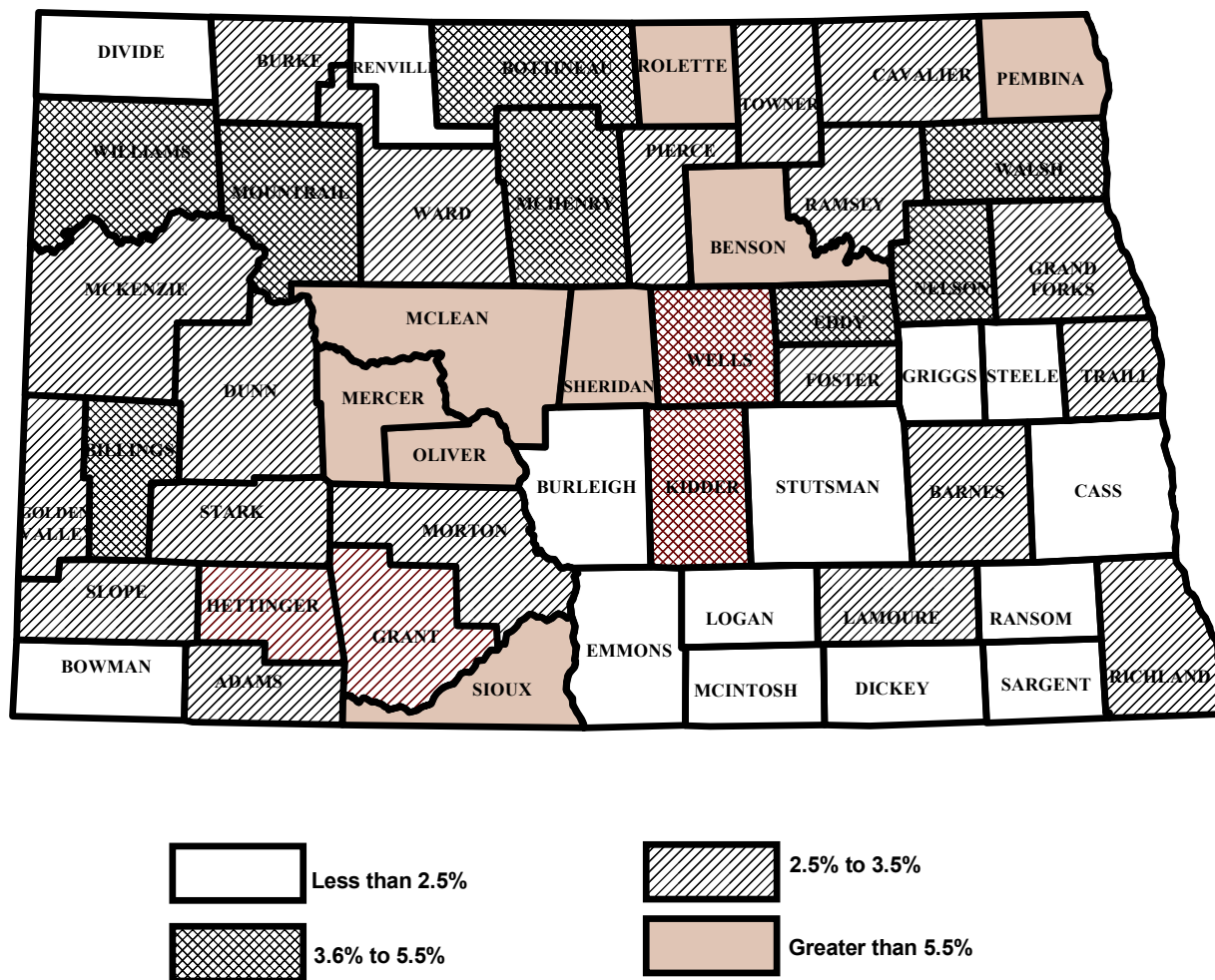


Figure 8. North Dakota Unemployment Rate, 2000

**Table 3. North Dakota Employment, Unemployment, and Employment Change, 1990, 1999, and 2000**

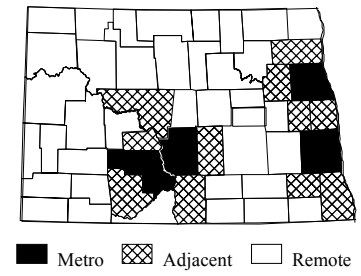
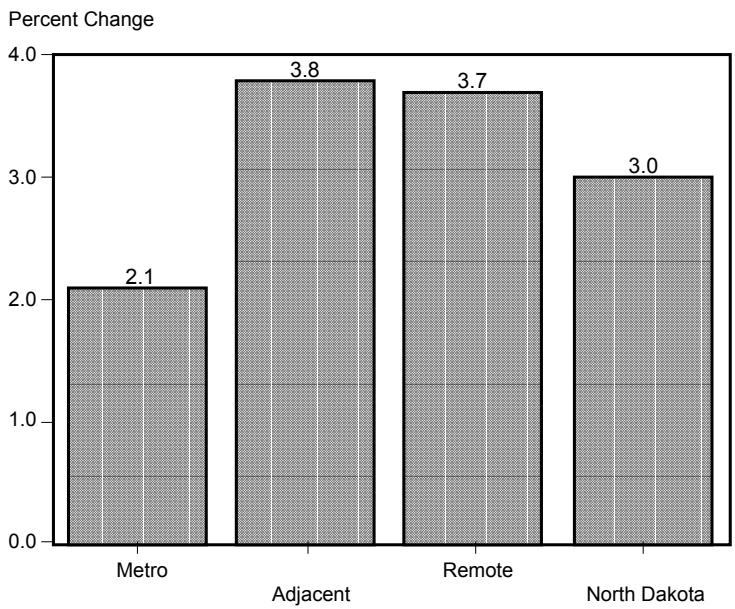
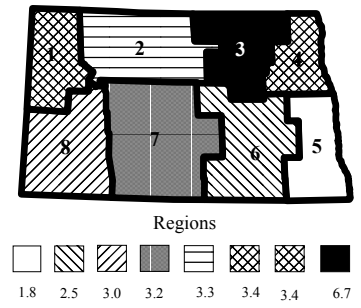
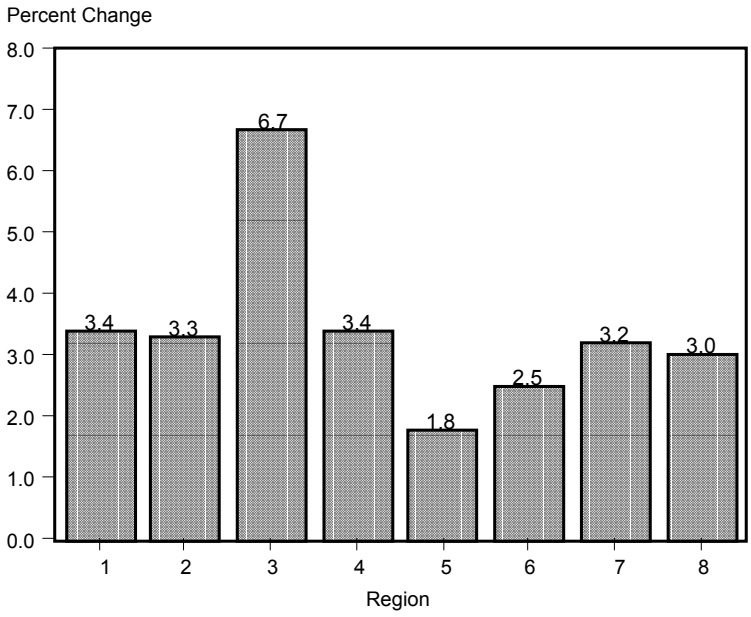
AREA	Employment			Unemployment	Employment Change	
	1990	1999	2000	Rate 2000	Short-Term 1999-2000	Long-Term 1990-2000
------%-----						
DIVIDE	1,154	1,114	1,036	2.2	-7.0	-10.2
MCKENZIE	2,747	2,876	3,131	3.1	8.9	14.0
WILLIAMS	9,935	8,669	8,845	3.7	2.0	-11.0
REGION 1	13,836	12,659	13,012	3.4	2.8	-6.0
BOTTINEAU	3,354	3,073	3,141	4.0	2.2	-6.4
BURKE	1,193	959	939	2.8	-2.1	-21.3
MCHENRY	2,559	2,615	2,661	5.1	1.8	4.0
MOUNTRAIL	2,842	2,823	2,934	5.5	3.9	3.2
PIERCE	2,267	2,404	2,680	2.5	11.5	18.2
RENVILLE	1,323	1,295	1,339	2.1	3.4	1.2
WARD	24,625	27,337	28,196	3.0	3.1	14.5
REGION 2	38,163	40,506	41,898	3.3	3.4	9.8
BENSON	2,354	2,648	2,511	7.9	-5.2	6.7
CAVALIER	2,432	2,436	2,401	3.2	-1.4	-1.3
EDDY	1,304	1,330	1,135	5.0	-14.7	-13.0
RAMSEY	5,970	6,286	5,930	3.5	-5.7	-0.7
ROLETTE	3,541	4,981	4,958	12.4	-0.5	40.0
TOWNER	1,496	1,242	1,320	2.9	6.3	-11.8
REGION 3	17,097	18,923	18,255	6.7	-3.5	6.8
GRAND FORKS	39,741	34,454	34,673	2.7	0.6	-12.8
NELSON	1,702	1,532	1,438	4.6	-6.1	-15.5
PEMBINA	4,294	4,622	4,258	6.9	-7.9	-0.8
WALSH	6,738	6,068	5,937	4.2	-2.2	-11.9
REGION 4	52,475	46,676	46,306	3.4	-0.8	-11.8
CASS	57,729	70,125	71,523	1.6	2.0	23.9
RANSOM	2,597	2,585	2,744	2.2	6.2	5.7
RICHLAND	8,026	8,885	8,971	2.6	1.0	11.8
SARGENT	2,155	2,357	2,658	1.8	12.8	23.3
STEELE	1,006	1,032	1,137	1.4	10.2	13.0
TRAILL	3,609	3,593	3,549	3.0	-1.2	-1.7
REGION 5	75,122	88,577	90,582	1.8	2.3	20.6

- Continued -

Table 3. continued

AREA	Employment			Unemployment	Employment Change	
	1990	1999	2000	Rate 2000	Short-Term 1999-2000	Long-Term 1990-2000
-----%-----						
BARNES	5,416	5,302	5,526	3.1	4.2	2.0
DICKEY	2,854	2,798	2,896	1.6	3.5	1.5
FOSTER	1,876	2,123	2,181	2.7	2.7	16.3
GRIGGS	1,468	1,523	1,523	2.0	0.0	3.7
LAMOURE	2,245	2,183	2,180	2.5	-0.1	-2.9
LOGAN	1,309	1,109	1,117	1.8	0.7	-14.7
MCINTOSH	1,796	1,667	1,621	2.4	-2.8	-9.7
STUTSMAN	10,599	11,388	11,100	2.2	-2.5	4.7
WELLS	2,408	2,400	2,462	3.7	2.6	2.2
REGION 6	29,971	30,493	30,606	2.5	0.4	2.1
BURLEIGH	32,483	38,336	38,929	2.2	1.5	19.8
EMMONS	1,928	1,939	1,943	4.4	0.2	0.8
GRANT	1,527	1,466	1,440	2.8	-1.8	-5.7
KIDDER	1,425	1,354	1,358	4.8	0.3	-4.7
MCCLEAN	4,433	4,176	4,018	6.0	-3.8	-9.4
MERCER	4,737	4,265	4,357	5.6	2.2	-8.0
MORTON	11,768	13,016	13,115	3.2	0.8	11.4
OLIVER	1,166	963	971	6.0	0.8	-16.7
SHERIDAN	732	624	651	6.1	4.3	-11.1
SIOUX	933	1,552	1,531	6.2	-1.4	64.1
REGION 7	61,132	67,691	68,313	3.2	0.9	11.7
ADAMS	1,560	1,331	1,345	2.5	1.1	-13.8
BILLINGS	672	494	483	3.8	-2.2	-28.1
BOWMAN	1,890	1,736	1,781	1.7	2.6	-5.8
DUNN	1,839	1,804	1,951	3.5	8.1	6.1
GOLDEN VALLEY	1,002	862	819	3.5	-5.0	-18.3
HETTINGER	1,493	1,248	1,245	2.6	-0.2	-16.6
SLOPE	457	386	379	2.8	-1.8	-17.1
STARK	11,293	11,983	11,742	3.1	-2.0	4.0
REGION 8	20,206	19,844	19,745	3.0	-0.5	-2.3
NORTH DAKOTA	308,000	325,366	328,716	3.0	1.0	6.7

Source: Job Service North Dakota. Selected Years 1990-2000. Annual Benchmarked Employment Statistics, unpublished data. Bismarck, ND.



**Figure 9. North Dakota Unemployment Rate by Region and Area, 2000**

Statewide short-term employment (1999-2000) grew by 1 percent despite twenty-one counties experiencing declines (Figure 10/Table 3). Five state regions experienced employment increases between 1999 to 2000 (Figure 11). State Region 2 had the largest short-term employment increase (3.4 percent), and the county with the biggest increase was Sargent (12.8 percent). Region 1 had the second largest change, a 2.8 percent increase, followed by Region 5 with a 2.3 percent increase. Eddy County had the largest short-term decline in employment, a 14.7 percent decrease. Many of the remaining counties with short-term employment losses were at a level of 5 percent or less. The number of counties with employment losses during the 1999-2000 period is reflective of national economic conditions rather than the lack of strength of the North Dakota economy during that period. One-year growth for state employment was at 1.0 percent.

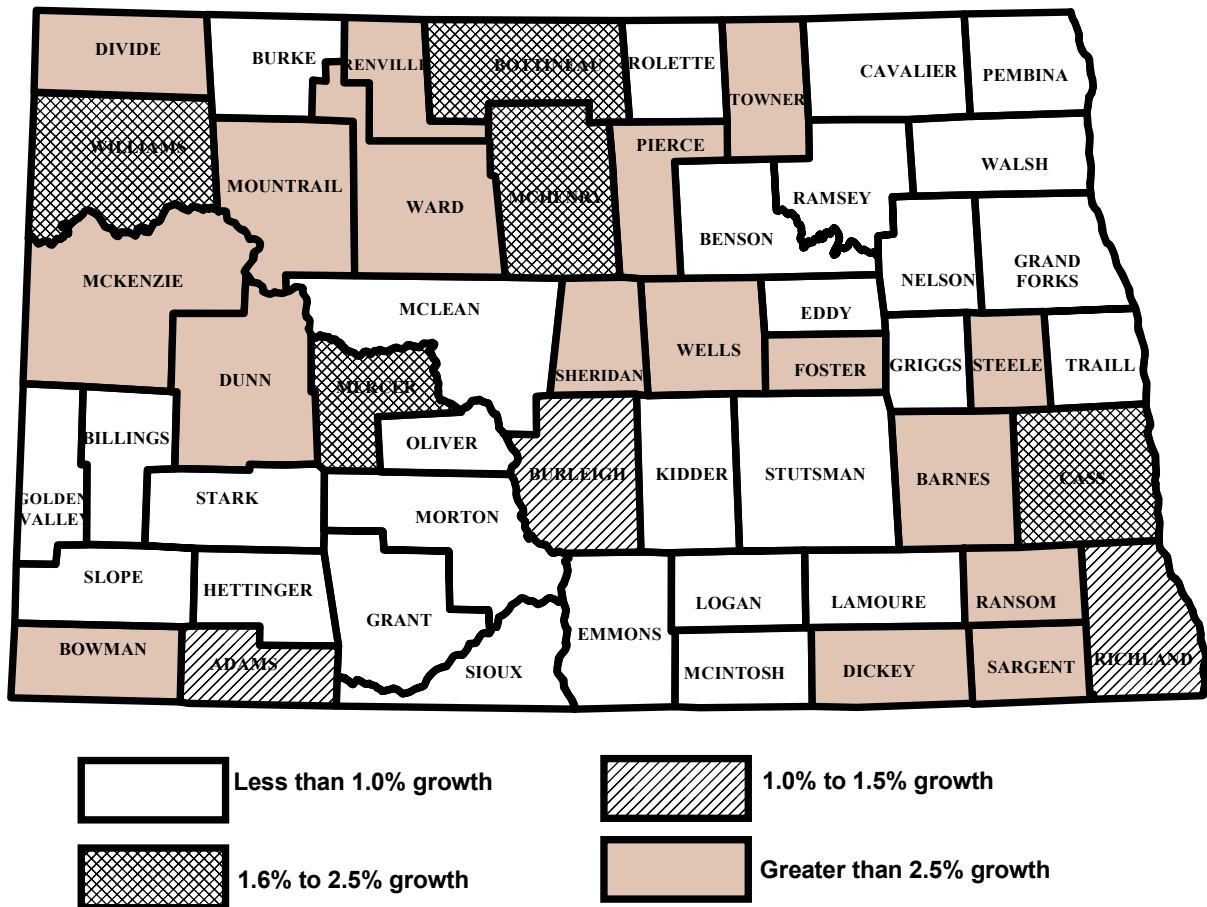
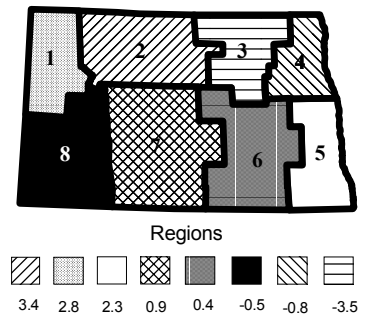
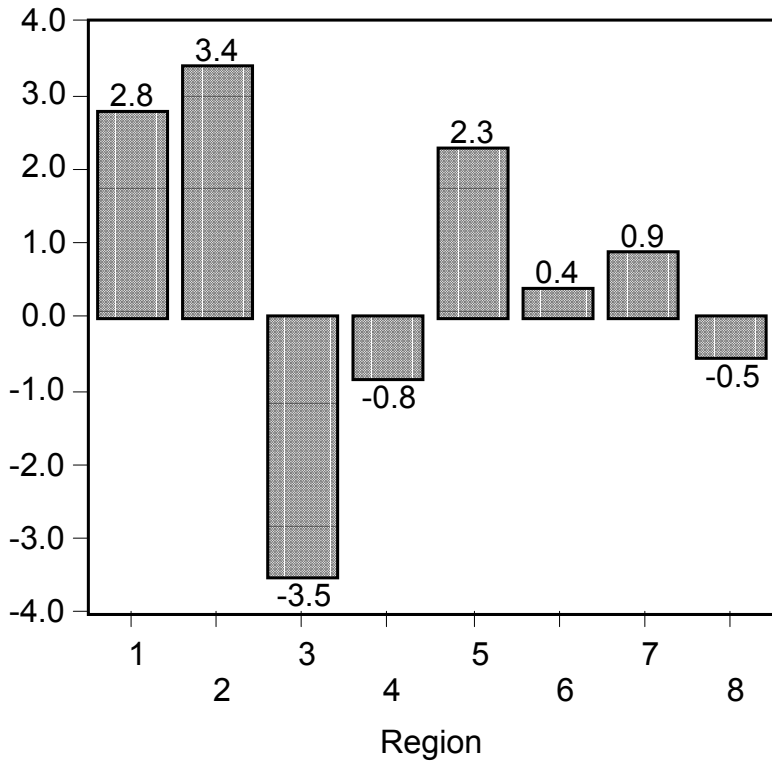


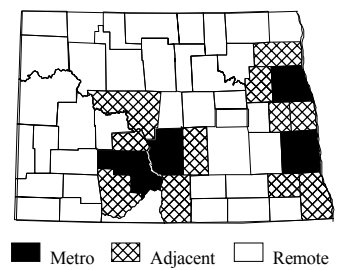
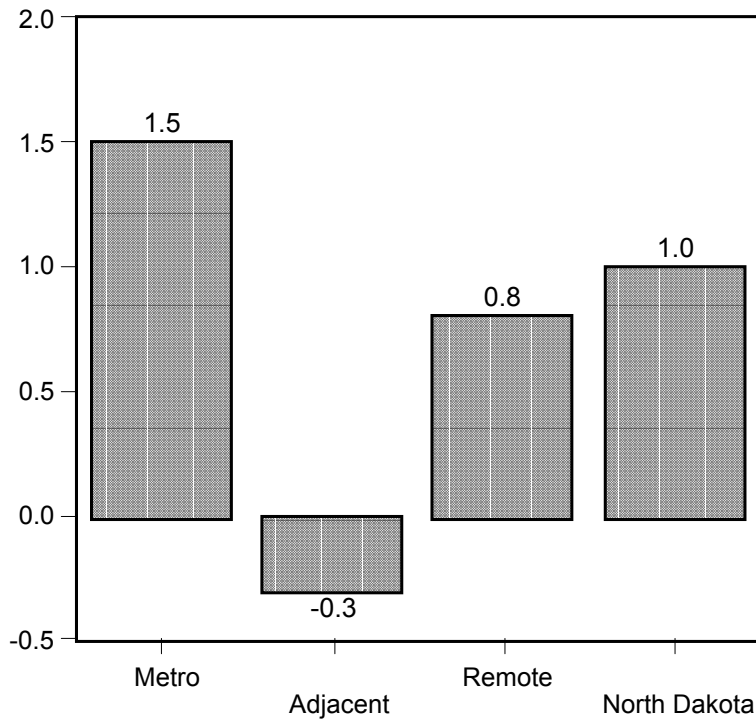
Figure 10. Short-term Employment Growth in North Dakota, 1999-2000



Percent Change



Percent Change



**Figure 11. Short-term Employment Growth in North Dakota by Region and Area, 1999-2000**

The North Dakota economy has produced additional jobs between 1990 and 2000, at a rate of 6.7 percent (Table 3). In North Dakota only 5 counties showed over 20 percent growth; these counties are Rolette (40 percent), Cass (24 percent), Sargent (23 percent), Burleigh (20 percent); and Sioux (64 percent) (Table 3). Twenty-six other counties also had long-term employment growth (Figure 12).

The planning regions with positive long-term employment growth were Regions 2, 3, 5, 6, and 7, regions with the high employment growth counties of Ward, Rolette, Cass, Sargent, Burleigh, and Morton. Long term employment growth in Region 6 was moderate with a 2.1 percent rate. Region 4 experienced a 12 percent decline in employment between 1990 and 2000, followed by Region 1 with a 6 percent decrease. Employment losses in Region 4 can be tied to the long-term impacts of flooding in Grand Forks, as well as the downsizing of the Grand Forks Air Force Base. Region 8 experienced a small decline during the period with a 2.3 percent employment loss.

Long-term job creation was primarily in the metro areas with a 12 percent increase (Figure 13). Rural area employment declined for the nonmetropolitan adjacent counties (-2 percent), but grew in the nonmetropolitan remote counties (4 percent). Thus, the concern for job creation throughout rural North Dakota is supported by the data. Similar to the long-term situation, short-term employment change was positive for metro and remote counties in North Dakota. Metro counties had the largest increase (1.5 percent), indicative of the growth in the state's major trade centers. This short-term growth reflects the strength of the state's economy at this point in time, and this one-year change is highly reflective of current national economic conditions. Efforts to increase employment in North Dakota in both the short- and long-run appear to be having a positive impact.

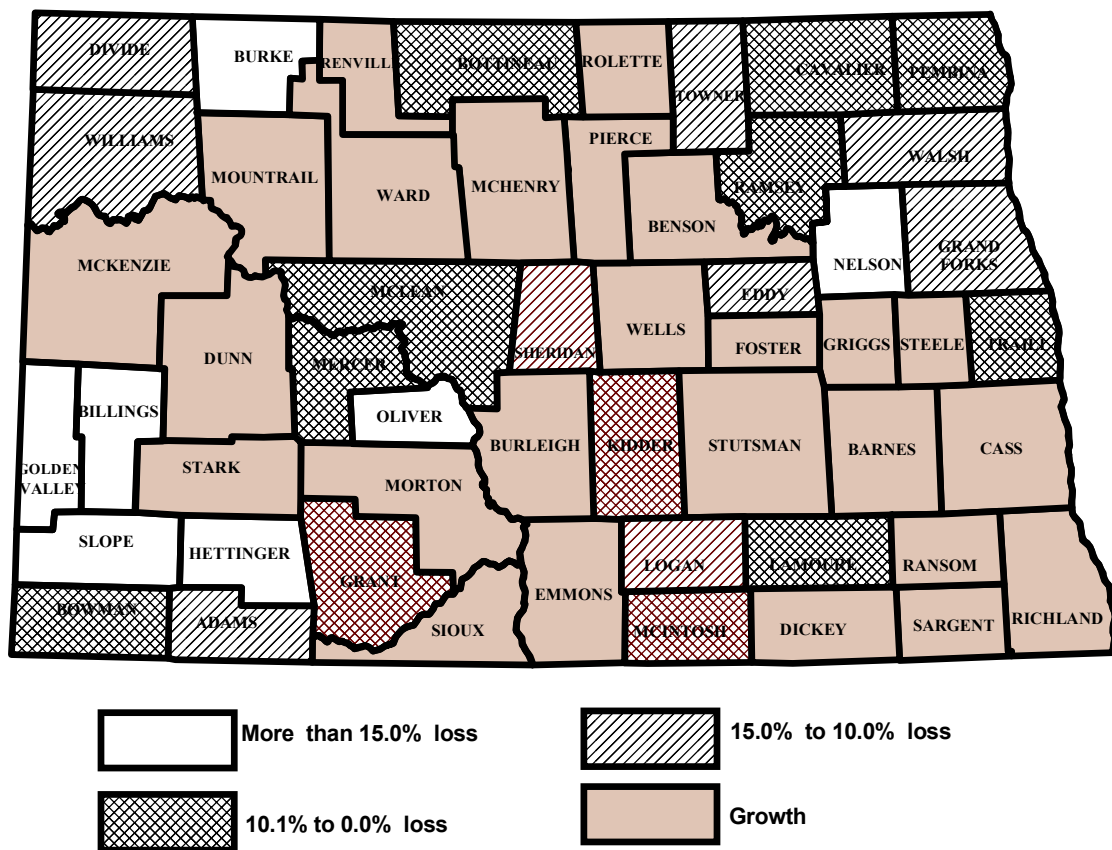
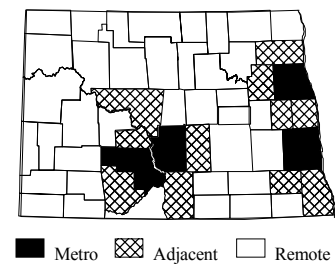
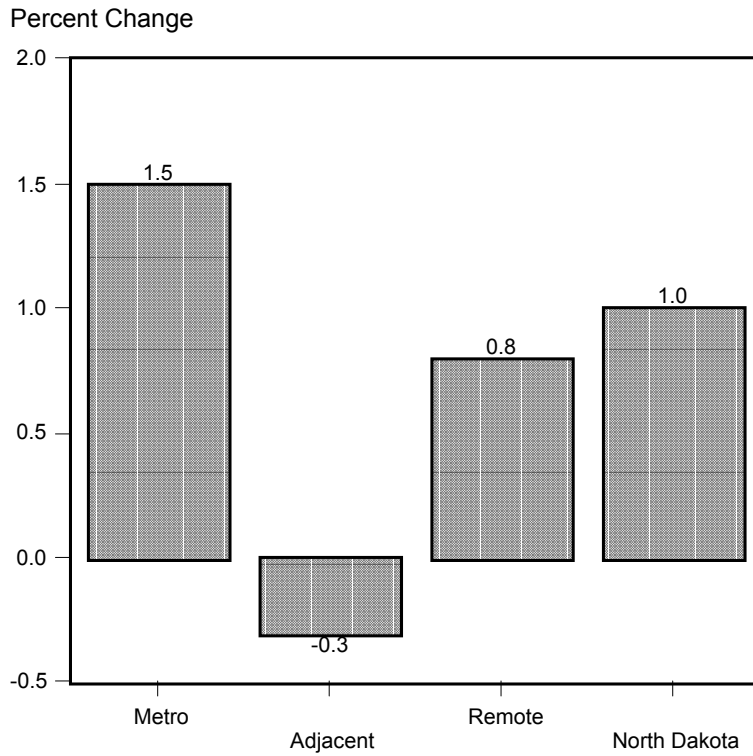
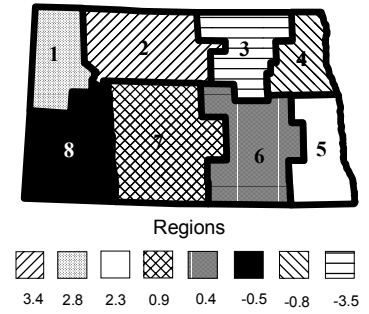
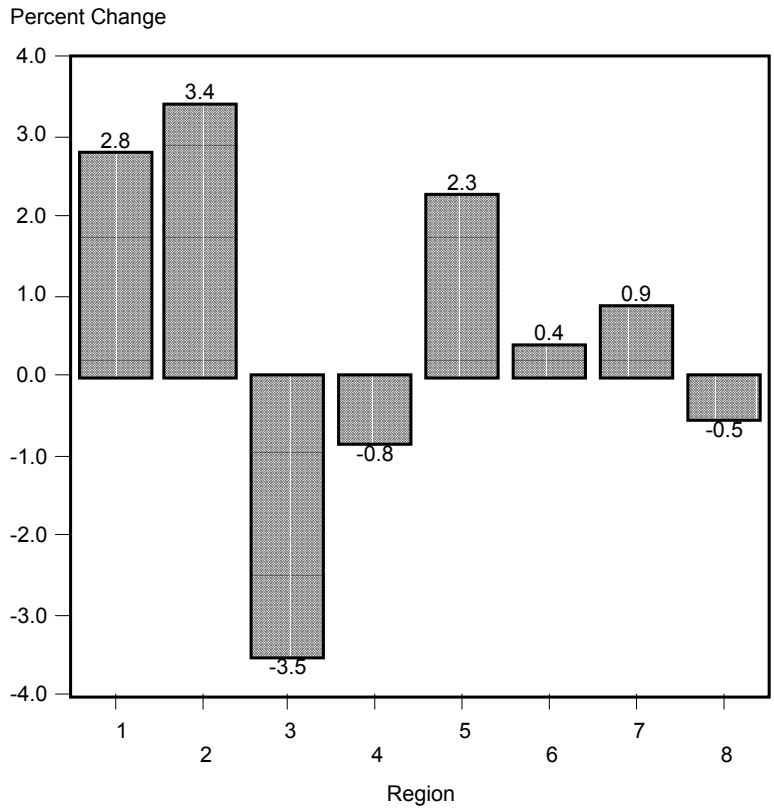


Figure 12. Percentage Change in Long-term Employment in North Dakota, 1990-2000

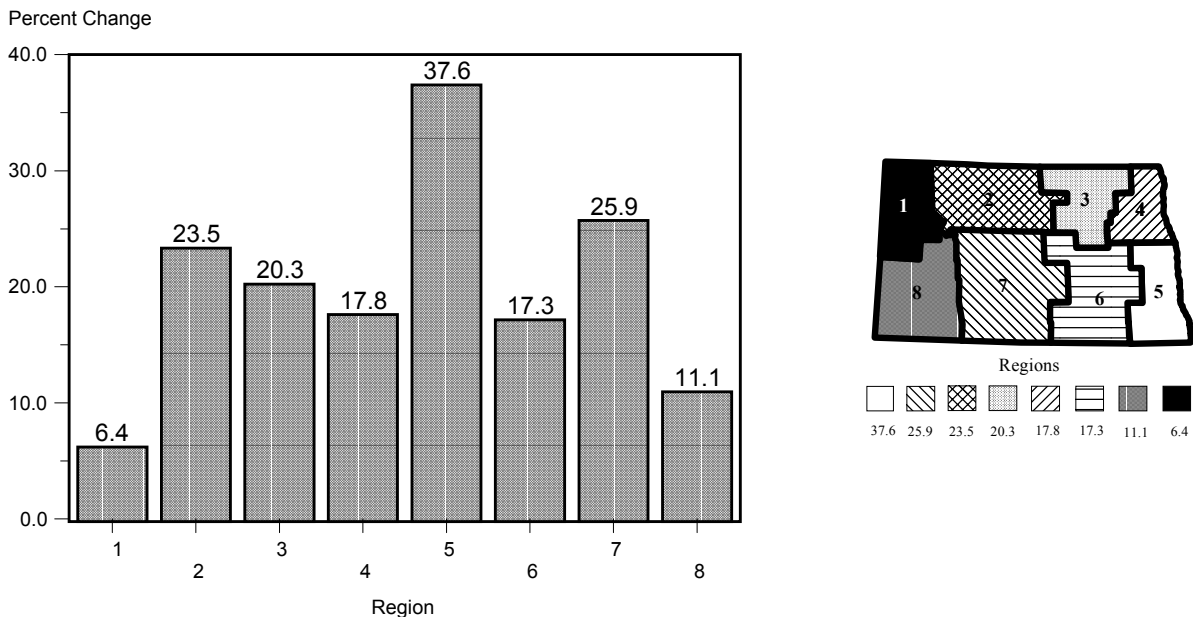


**Figure 13. Percentage Change in Long-term Employment in North Dakota by Region and Area, 1990-2000**

## Employment by Industry

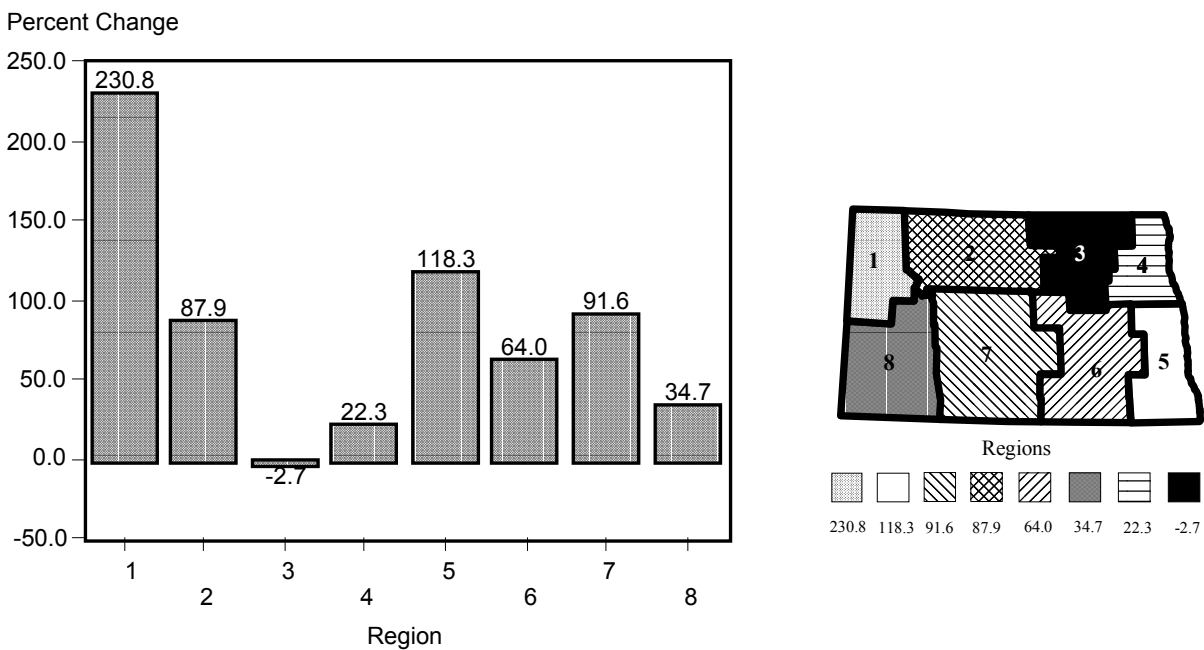
The next 10 figures present data on the percentage change in annual average covered employment between 1990 and 2000 in the state planning regions by industry: agriculture; mining; construction; manufacturing; retail and wholesale trade; finance, insurance, and real estate; transportation, communications, and public utilities; services; and government. Figure 14 presents the total percentage change in annual average employment. Because some regions have so little of some industry types, data at the county level often combine several types of industries; thus, county-level analysis or metropolitan status graphics are not given.

All regions showed an increase in average annual covered employment between 1990 and 2000 (Figure 14). Region 5 experienced the largest growth, almost 38 percent. Region 1 had the smallest increase of all the state regions (6.4 percent), due largely to the decline in energy-related activity in that region. Regions 2, 3, 5, and 7 all experienced growth greater than 20 percent for the 1990-2000 period.



**Figure 14. Percentage Change in North Dakota Annual Average Total Employment, 1990-2000**

Employment in agriculture increased in seven of the eight regions (Figure 15). The data reflect only "covered" employment in agriculture; that is, those agricultural related jobs which are covered by unemployment compensation laws (for example, large corporate farms/custom combine operations, etc.). Region 1, which had been seriously affected by the droughts of 1985, 1986, and 1988, and lost significant agricultural employment, appears to have reversed that trend and increased employment in that sector by over 200 percent between 1990 and 2000. Region 3, the only one to lose agricultural employment, lost 2.7 percent of these workers. A combination of factors was at play in this region, none of which were unique to Region 3, but which together created a situation apparently more severe in that region than in other regions: the drought, acres of Conservation Reserve Program (CRP) land, farm foreclosures, aging farm population, and overall low employment levels (Table 3). The net effect for the state was a gain of 1,277 covered agricultural jobs during the 10-year period (Table 4).



**Figure 15. Percentage Change in North Dakota Annual Average Agriculture Employment, 1990-2000**

**Table 4. Change in North Dakota Annual Average Covered Employment by Major Industry by Region, 1990-2000**

Area	Ag.	Mining	Const.	Mfg.	Transp. Comm. & Util.	Whole- Sale	Retail	Finance, Ins. & Real Est.	Services	Govt.	Total
REGION 1											
# Change	60	-669	35	124	5	-153	86	32	1,067	123	710
% Change	230.8	-37.9	12.5	59.6	0.9	-16.5	4.1	6.8	39.5	6.2	6.4
REGION 2											
# Change	102	2	642	153	16	75	1020	790	3,468	386	6,654
% Change	87.9	0.5	70.5	14.7	1.0	3.3	15.1	59.0	47.3	5.9	23.5
REGION 3											
# Change	-4	(a)	165	-280	123	-31	37	194	2,071	355	2,630
% Change	-2.7	(a)	43.8	-19.9	26.1	-4.0	1.5	32.1	63.5	10.2	20.3
REGION 4											
# Change	216	(a)	1,286	1,594	134	77	937	39	2,720	-201	6,802
% Change	22.3	(a)	84.1	69.6	7.3	3.2	10.2	2.7	31.5	-2.0	17.8
REGION 5											
# Change	595	(b)	2,199	3,944	626	1,372	4,785	2,290	9,696	1,249	26,756
% Change	118.3	(b)	62.4	52.0	14.1	19.0	34.6	49.7	52.1	11.5	37.6
REGION 6											
# Change	167	(b)	225	1,063	219	116	284	93	1,523	-129	3,561
% Change	64.0	(b)	39.8	63.4	26.2	6.5	6.8	8.7	28.3	-2.7	17.3
REGION 7											
# Change	207	-28	804	896	211	357	1,880	994	5,826	1,574	12,721
% Change	91.6	-2.6	32.3	38.0	4.4	13.1	19.9	55.3	44.2	14.3	25.9
REGION 8											
# Change	34	-326	175	422	202	-11	267	-2	488	272	1,521
% Change	34.7	-37.6	38.3	52.8	31.3	-1.1	9.3	-0.4	13.7	9.7	11.1
NORTH DAKOTA											
# Change	1,277	-670	5,681	7,911	1,903	2,006	9,643	4,540	27,620	3,579	63,490
% Change	55.0	-15.6	56.3	45.5	12.5	10.4	19.0	37.9	44.0	6.9	25.8

(a) included with construction sector.

(b) included with agriculture sector.

Source: Job Service North Dakota. 2000. *North Dakota Employment and Wages*, 1999. Bismarck, ND.

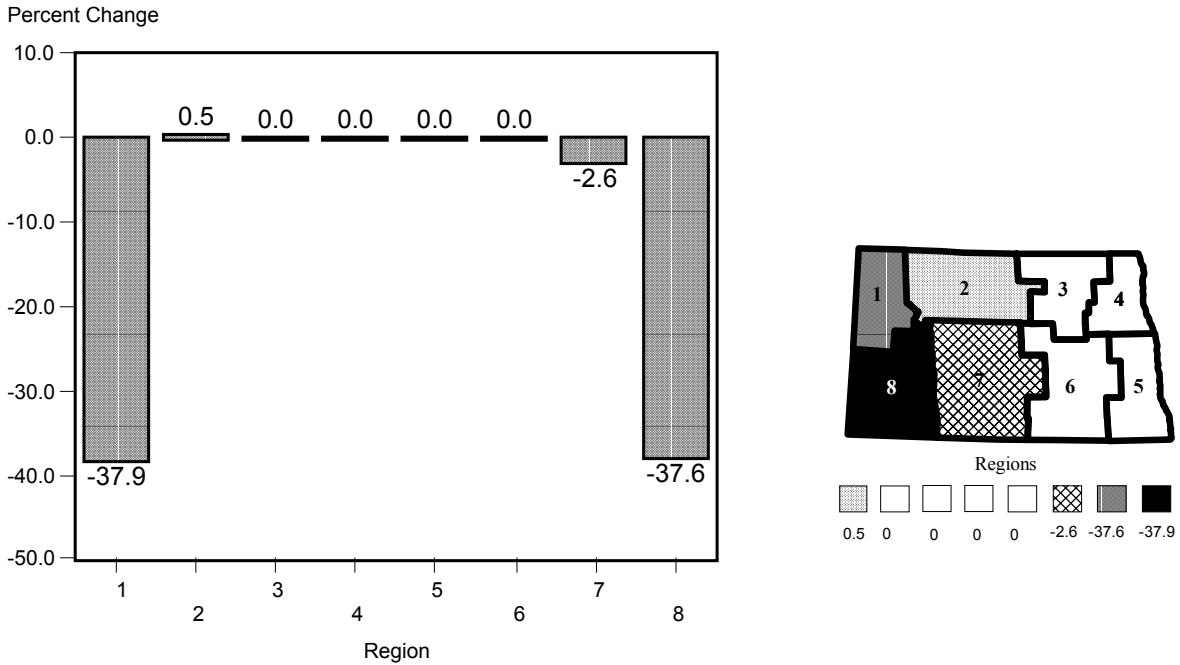
Job Service North Dakota. 2001. *North Dakota Employment and Wages*, 2000. Bismarck, ND.

Region 2 had the only increase in mining employment between 1990 and 2000 (less than 1 percent) (Figure 16). Sand and gravel mining data for Regions 3, 4, 5, and 6 were combined with another sector to avoid disclosure (Table 4). Between 1990 and 2000, the mining industry took a big drop in oil exploration and drilling and has never fully recovered. Also, during this period the Gascoyne Mine of the Knife River Coal Mining Company was closed down. The closure is reflected in the drop in annual employment in mining in Regions 1, 7, and 8. These declines were similar to those portrayed in the previous edition of this report, indicating that energy mining in North Dakota is still affected by national and world energy situations. Statewide, 670 net jobs were lost in mining from 1990 to 2000; Region 8 lost 326 of these jobs.

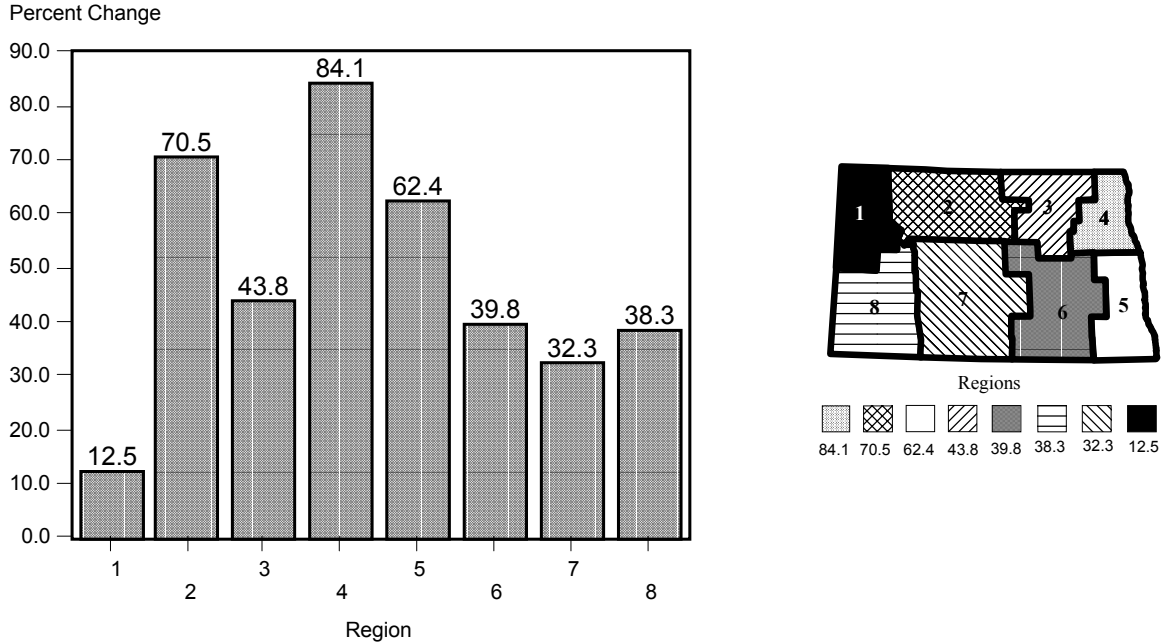
All eight state regions showed an increase in construction-related employment between 1990 and 2000 (Figure 17). State Regions 2, 4, and 5 experienced large gains in construction employment, 70.5, 84.1, and 62.4 percent, respectively, reflecting the growth in their major trade centers. Growth in construction employment in Region 5 parallels the population growth of the Fargo Trade Center. The lower rate of growth in Region 1 construction employment (12.5 percent) when compared to the other regions, reflects the decline in energy in that area. Statewide, the growth in Regions 2, 4, and 5 propelled the state to a large increase (56.3 percent) for construction employment in North Dakota (Table 4). This amounted to 5,681 new jobs in this sector during the 10-year period.

Manufacturing employment has become a key growth area in North Dakota in the past few years with 7,911 jobs being added between 1990 and 2000 (Table 4, Figure 18). Region 3 lost 20 percent of its manufacturing jobs, but all other regions added workers in this sector. Manufacturing has been one area of focus for economic development specialists in recent years. Many of these new manufacturing firms start out as small or “home-grown” enterprises, with the potential to expand. Value-added agriculture has provided an opportunity to manufacture a product using abundant resources from the state. Although most manufacturing firms are not large employers, some larger enterprises and agricultural processing cooperatives have been introduced into the state. Statewide, the number of manufacturing jobs increased by 46 percent, led by the 70 percent growth in Region 4 (Table 4). Regions 1, 5, 6 and 8 also showed strength with manufacturing employment growth exceeding 50 percent.

Transportation, communications, and public utilities industries experienced a 12.5 percent employment increase (1,903 jobs) statewide between 1990 and 2000 (Table 4). Regions 1 and 2 experienced a gain of only 5 and 16 jobs, respectively, for this sector. Again, the decline in the oil industry had ramifications throughout the employment spectrum and limited growth in those counties. Three State Regions (3, 6, and 8) had employment growth exceeding 25 percent for the 1990-2000 period, with Region 5 experiencing the largest number of new jobs in transportation, communications, and public utilities (626) (Figure 19).

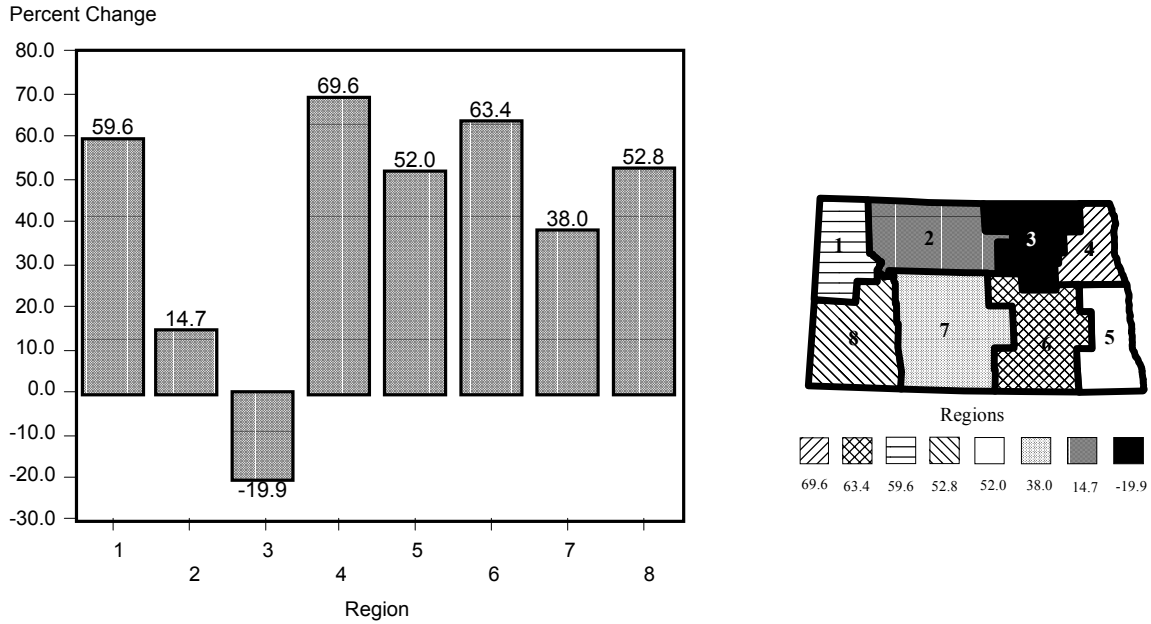


**Figure 16. Percentage Change in North Dakota Annual Average Mining Employment, 1990-2000**

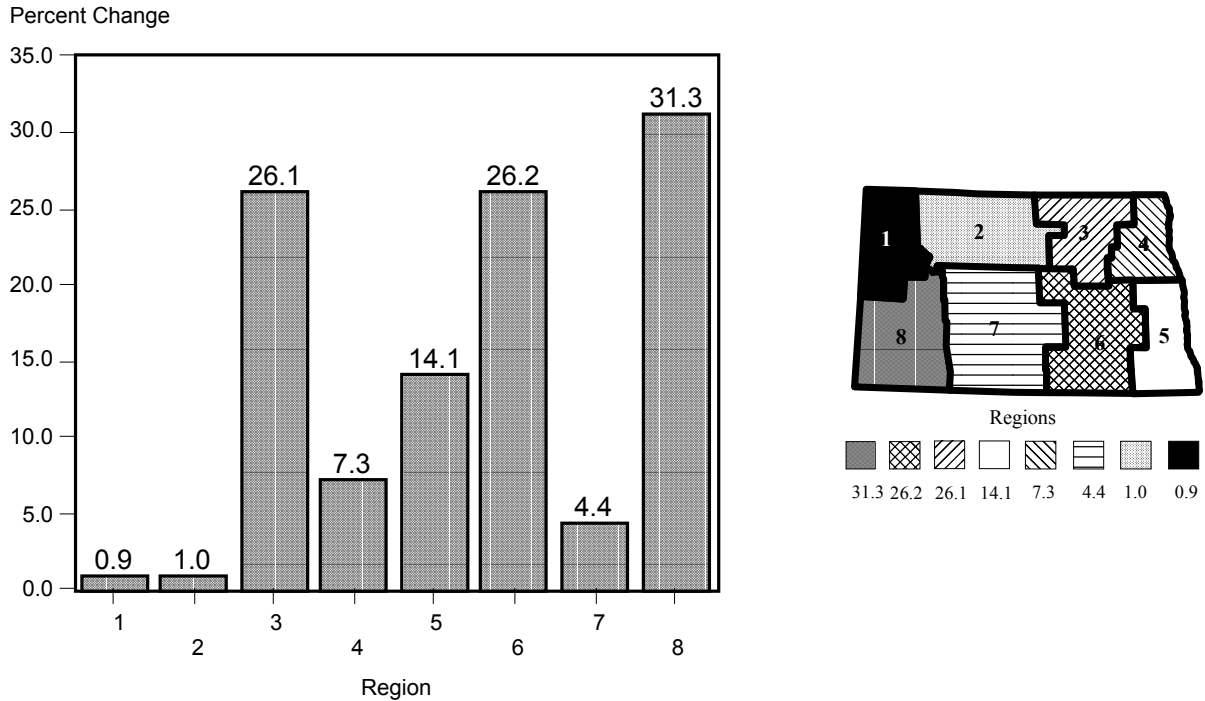


**Figure 17. Percentage Change in North Dakota Annual Average Construction Employment, 1990-2000**





**Figure 18. Percentage Change in North Dakota Annual Average Manufacturing Employment, 1990-2000**

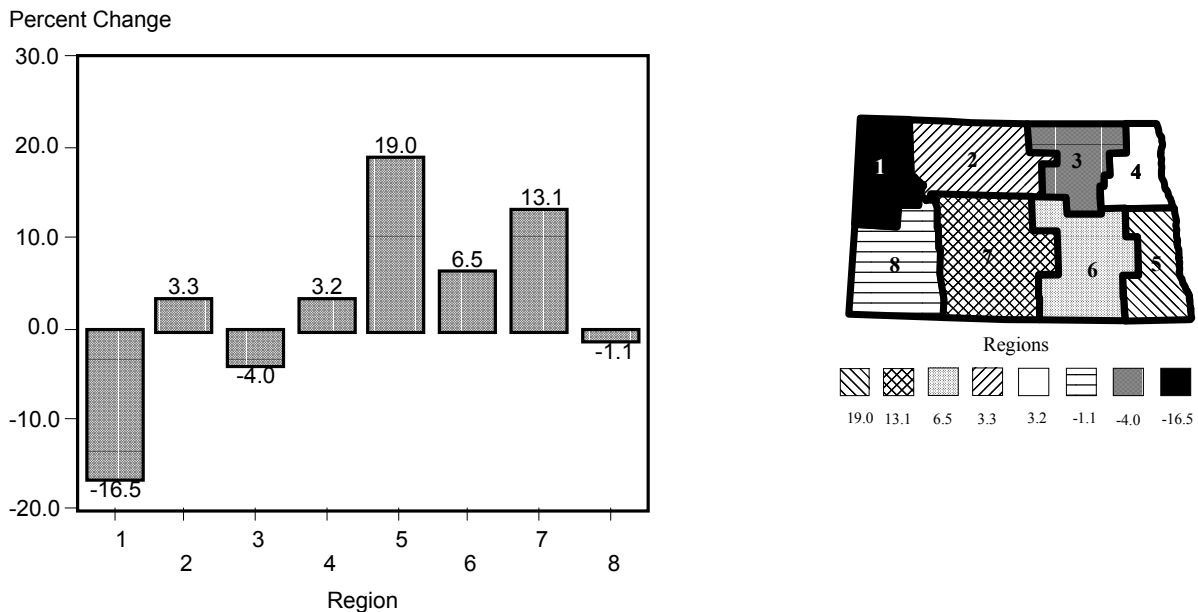


**Figure 19. Percentage Change in North Dakota Annual Average Transportation, Communications, and Public Utilities Employment, 1990-2000**

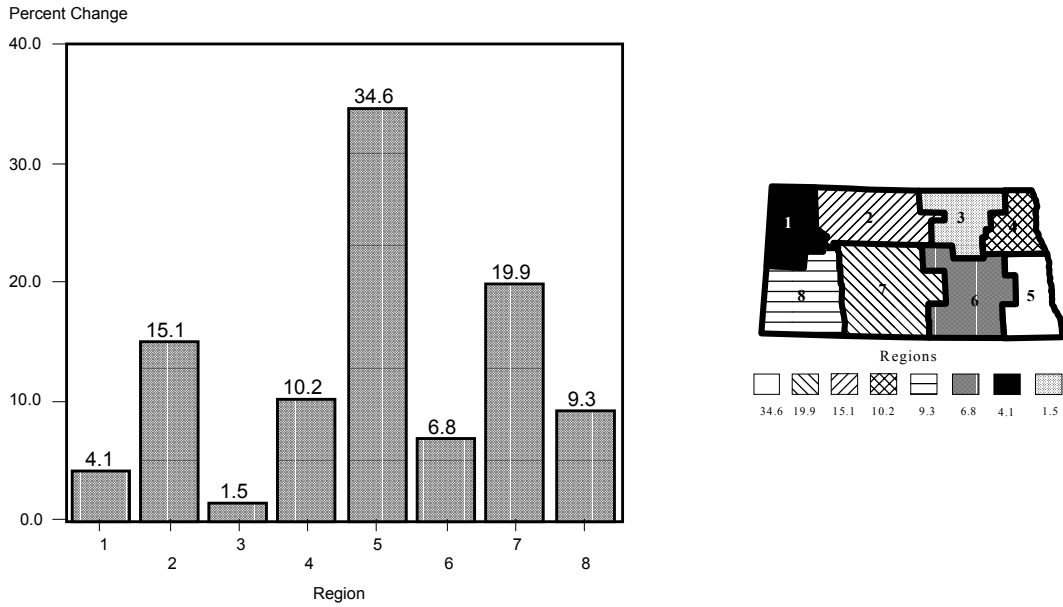
Regions 5 and 7 showed the largest growth in wholesale trade employment (19 percent and 13 percent, respectively) between 1990 and 2000 (Figure 20). State Regions 2, 4, and 6 were the only other areas with wholesale trade employment growth, although much smaller than the other two growth regions. One possible explanation for this range of growth is that trade centers such as Fargo, Jamestown, Grand Forks, Minot and Bismarck are capturing smaller town markets in wholesale trade, and essentially serving the entire state. Statewide, this sector increased by 10 percent or 2,006 jobs (Table 4).

The regions which showed the strongest growth between 1990 and 2000 in retail jobs are those with the four major retail-wholesale trade centers: Fargo, Grand Forks, Bismarck, and Minot; Region 5 led the state with a 34.6 percent increase, followed by Region 7 (19.9 percent), Region 2 (15.1 percent), and Region 4 (10.2 percent) growth in retail trade employment (Figure 21). Regions 1 and 6 "held their own" or gained a modest number of jobs in retail, while Region 3 experienced an increase of 37 (1.5 percent) in its retail sales force during the 10-year period. Statewide, 9,643 retail jobs were added, with Region 5 accounting for 4,785 of them. The advent of Sunday opening in 1991, the increase in Canadian shoppers, and the strength of the economy explain a portion of this increase during this period.

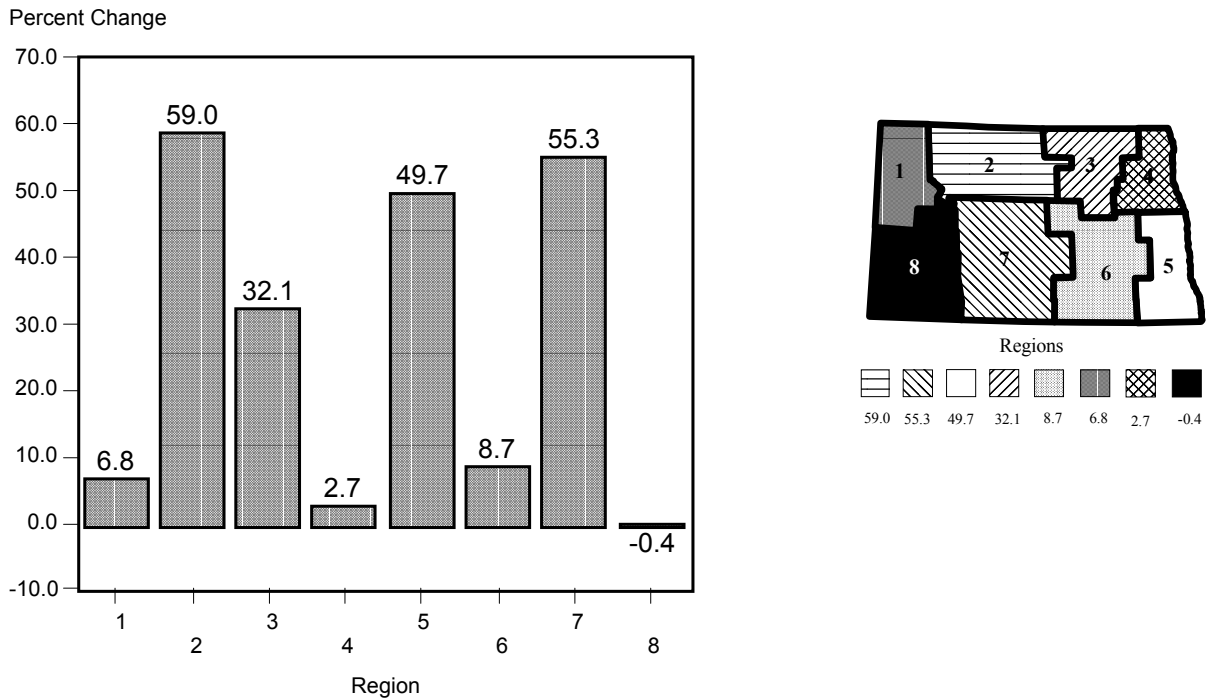
Regions 1, 2, 3, 4, 5, 6 and 7 showed increases in employment in the areas of finance, insurance, and real estate (Figure 22). In fact, Region 5 gained 2,290 jobs in this sector, while the net state gain was 4,540 jobs (Table 4). Losses were experienced in Region 8 but with only 2 jobs lost during the period. Job losses in this region reflect the effects of the downturn in the energy industry and agriculture. Losses in the finance, insurance, and real estate sector were more significant in the 1998 edition in this series of reports, which were believed to reflect the impact of liberalized branch banking laws. Current data would suggest that this situation has stabilized itself at this point in time.



**Figure 20. Percentage Change in North Dakota Annual Average Wholesale Trade Employment, 1990-2000**

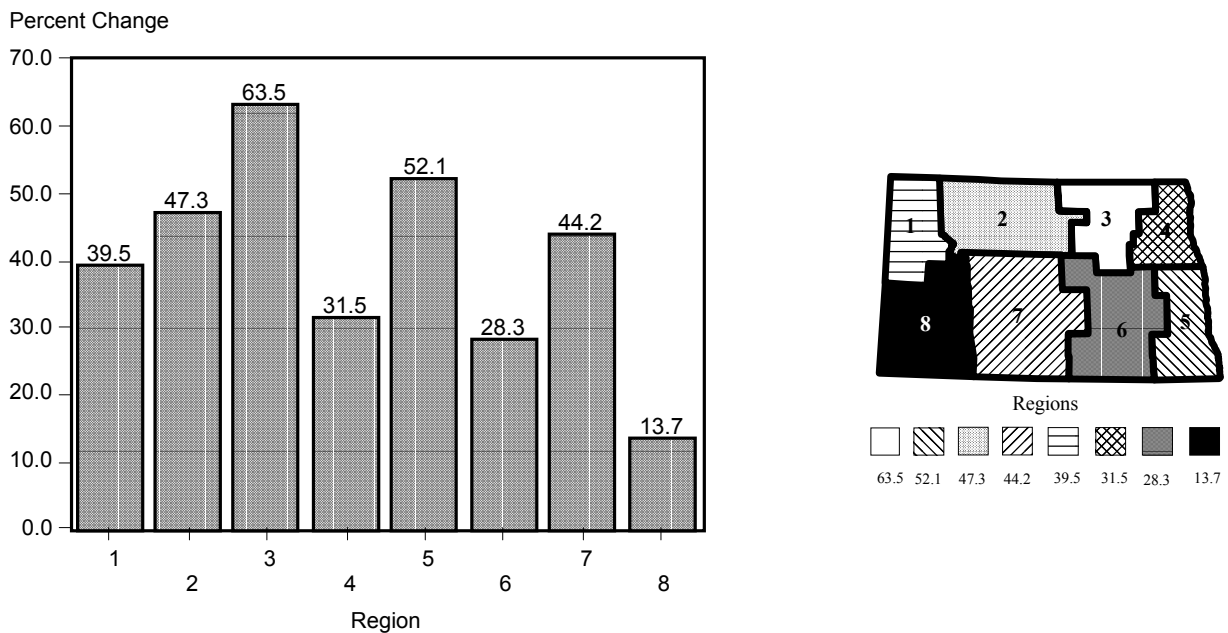


**Figure 21. Percentage Change in North Dakota Annual Average Retail Trade Employment, 1990-2000**



**Figure 22. Percentage Change in North Dakota Annual Average Finance, Insurance, and Real Estate Employment, 1990-2000**

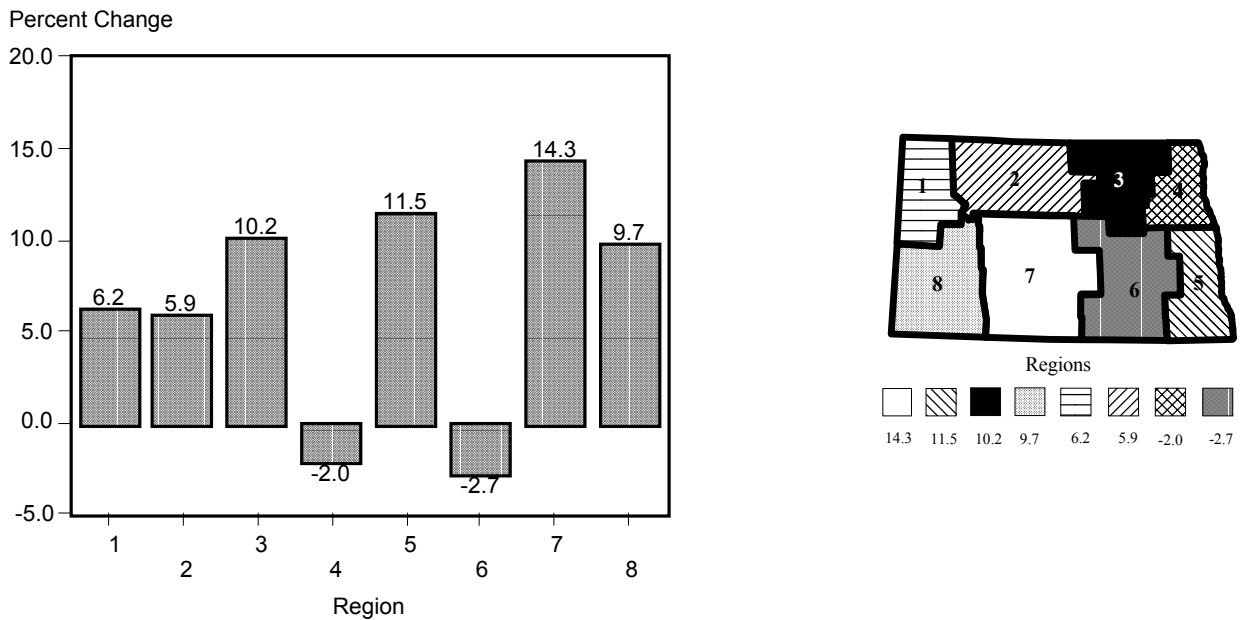
"Services" includes a wide array of activities. These enterprises range from medical to housekeeping services and all other professional services, as well as telecommunications-linked businesses. These all represent examples of services which substantially impact the state's economic base. Services was one of the three (construction and retail were the others) industries to experience job growth in all regions of the state between 1990 and 2000 (Figure 23). Region 3 had the largest percentage growth with a 64 percent increase or 2,071 jobs. However Region 5 had the greatest number of total jobs (9,696), representing 35 percent of the state's total growth in services employment. All but one region had service growth rates of 25 percent or larger during the 1990-2000 period. The 27,620 new jobs in the service sector was the largest number created for any of the state's major industries. The growth in service activities statewide reflects national trends. These trends suggest that both businesses and households are relying more heavily on outside service providers for services once provided internally. For example, many businesses are turning to external sources for accounting and security. Also, the rapid increase in two-income households gives rise to an increased demand for services, including day care and housekeeping.



**Figure 23. Percentage Change in North Dakota Annual Average Services Employment, 1990-2000**

Employment growth in government occurred in Regions 1, 2, 3, 5, 7 and 8 between 1990 and 2000. Region 2, home of the Minot Air Force Base, grew by 10.2 percent or 355 jobs; however, Region 4, location of the U.S. Air Force Base at Grand Forks, and the University of North Dakota, lost by 2.0 percent or 201 jobs. This possibly can be explained by the loss of the missile wing and reclassification of the mission of the Air Force base. Region 7, dominated by the state capitol, grew by over 14 percent or 1,574 jobs (nearly 44 percent of the statewide net growth of 3,579 government jobs) (Table 4, Figure 24). Region 5 grew by 11.5 percent (1,249 jobs); while Regions 1, 2, 3, and 8 showed moderate growth. Region 6, however, decreased its government employment by almost 2.7 percent or 129 jobs. Region 3 had lost a significant number of government jobs between 1986 and 1996 as reported in the 1998 edition of this publication, due in part, to the closing of San Haven (a state institution for the mentally impaired that was located near Dunseith). This region appears to have recovered as reflected by reducing the decline in government employment to 2.0 percent for the 1990 to 2000 period.

Yet another perspective on employment in North Dakota can be obtained by examining estimates of total employment (including farm proprietors, other self-employed persons, etc., as well as wage and salary employment). Appendix Table 3 presents estimates of total employment for North Dakota and the eight state regions for 1980, 1985, 1990, 1995 and 2000. Comparing 2000 total employment for the state from Appendix Table 3 with total covered employment (Table 3) indicates that noncovered employment amounted to about 65,707 persons in 2000.



**Figure 24. Percentage Change in North Dakota Annual Average Government Employment, 1990-2000**

## *Income*

Table 5 shows North Dakota's income picture for current years: total income, farm income as a percent of total income, annual average earnings, and per capita income.

Region 5 accounts for over one-fourth of the state's total income. Farming generated less than 4 percent of the region's 1998 income of \$4,225 million. Statewide, farming was responsible for 1.4 percent of the income generated in 1999. This figure is down significantly from the value in the 1998 edition of this report, reflecting the low commodity prices and production problems experienced in 1999. Many of the counties in the state actually reported negative farm income for that year (Table 5). Pembina County had the highest percentage of income attributable to agriculture, with nearly 17 percent of the county's income coming from farming. Figure 25 shows eight counties with over 10 percent of their income derived from farming, including Pembina (17 percent), Sargent (15 percent), Walsh (15 percent), Cavalier (14 percent), Traill (14 percent), Richland (13 percent), Hettinger (11 percent), and Slope (11 percent). Regions 1 (2.9 percent), 4 (4.2 percent), and 5 (3.6 percent) had greater than the state's average (1.4 percent) of their income coming from farming (Figure 26). As would be expected, nonmetropolitan areas had a far greater portion of their total income coming from farming. The small percent of income from farming for nonmetropolitan remote counties reflects the negative farm incomes experienced by many counties.

Annual average real earnings (wages and salaries) in North Dakota increased by over 6 percent between 1990 and 2000 (Table 5); this was determined by using constant dollars (i.e., adjusting 1990 values to 2000 dollars). In fact, 43 counties realized real annual average earning gains during the decade, while only 10 counties lost earning power during this period (Figure 27). Also, over \$32,000 separates the county with the highest earnings in 2000 (Oliver) from the county with the lowest earnings (Slope). In general, counties that lost earning power during the decade were in the western part of the state (Figure 27), with Region 1 losing 5.3 percent between 1990 and 2000 (Figure 28). Adjacent counties showed the largest increase (8.5 percent), followed by metro and remote counties; both of these areas were lower than the state average of 6 percent increase.

The per capita income (all sources of income for all persons – not just those with income, including children) in Pembina County in 1999 was reported to be two and one-half times as great as in Sioux County (\$29,339 vs. \$11,023; Table 5). Only four counties experienced negative changes in per capita income over the decade 1989 to 1999, with all eight state regions experiencing gains (after adjusting for inflation) (Figure 29). Three of the state's eight regions showed a 20 percent or greater increase in per capita income during this decade (Figure 30), and the remaining five regions were over 14 percent. State Region 2 had a 14.5 percent increase, which was the smallest of any region. The changes in Regions 4, 5 and 7 were the largest per capita income increases with changes of 21.1 percent, 24.0 percent and 19.9 percent respectively (Figure 30). This corresponds with the increases in major trade center cities of Grand Forks (Grand Forks County, 23 percent), Fargo (Cass County, 24 percent), and Bismarck (Burleigh County, 17 percent). Overall, metro areas showed the largest per capita income increase (22.5 percent), followed by adjacent (19.2 percent) and remote (17.2 percent) areas during the 1989-1999 period.

In summary, all measures of income presented in Table 5 show considerable variation among the 53 counties. Furthermore, the two measures of real income change given here generally show different trends, with average annual earnings increasing 6.3 percent for the 1990-2000 period while per capita income has increased 20.7 percent over the 1989-1999 time frame. Some likely explanations for these divergent trends are (1) increases in transfer payments and other, nonlabor income sources and (2) increased labor force participation (e.g., by women).

**Table 5. North Dakota Total Income, Farm Income, Annual Average Earnings, and Per Capita Income, Selected Years**

Area	Total Income		Annual Average Earnings		Per Capita Income	
	1999	Farm as % of Total 1999	2000	Percent Change 1990-2000*	1999	Percent Change 1989-1999**
	\$000s	- % -	- \$ -	- % -	- \$ -	- % -
DIVIDE	50,190	2.5	15,699	-3.4	21,879	32.8
MCKENZIE	110,573	4.8	22,896	-5.5	19,955	26.2
WILLIAMS	429,582	2.5	22,521	-5.5	21,736	15.0
REGION 1	590,345	2.9	22,194	-5.3	21,390	18.7
BOTTINEAU	124,987	(a)	19,113	-1.2	17,261	-7.7
BURKE	48,321	(a)	21,444	-4.2	22,074	40.2
MCHENRY	91,899	4.5	19,036	3.7	15,414	-4.1
MOUNTRAIL	131,226	(a)	20,791	8.5	20,139	27.0
PIERCE	88,591	(a)	18,035	--	19,284	3.3
RENVILLE	46,276	(a)	19,179	4.9	16,533	3.4
WARD	1,399,975	(a)	22,653	4.4	23,989	17.0
REGION 2	1,931,275	(a)	21,842	4.1	22,031	14.5
BENSON	93,887	(a)	21,613	6.6	13,846	2.6
CAVALIER	131,574	14.3	20,209	6.6	27,292	49.3
EDDY	50,605	1.6	18,615	0.5	18,106	9.5
RAMSEY	273,254	(a)	19,959	4.8	22,878	16.5
ROLETTE	212,239	(a)	22,432	6.9	14,916	15.6
TOWNER	54,969	(a)	19,638	6.1	18,602	7.6
REGION 3	816,528	(a)	20,832	6.4	18,760	15.7
GRAND FORKS	1,558,987	0.6	24,776	7.6	24,105	22.6
NELSON	76,992	(a)	17,154	5.2	21,059	21.3
PEMBINA	245,008	16.7	25,043	10.6	29,339	28.7
WALSH	287,129	14.5	19,482	6.5	21,498	8.3
REGION 4	2,168,116	4.2	23,974	8.1	24,080	21.1
CASS	3,327,202	1.3	27,801	7.3	28,100	23.8
RANSOM	128,365	7.7	20,464	17.9	22,398	17.7
RICHLAND	413,876	12.6	24,661	10.5	23,091	22.2
SARGENT	121,930	14.9	33,929	20.4	28,435	22.2
STEELE	44,600	4.9	22,101	10.4	20,440	28.7
TRAILL	189,022	14.0	22,108	12.1	22,095	19.0
REGION 5	4,224,995	3.6	27,338	8.6	26,896	24.0
BARNES	232,913	(a)	20,038	5.9	19,632	10.8
DICKEY	111,118	5.0	19,293	13.0	19,625	9.6
FOSTER	85,026	2.5	21,493	20.9	22,452	28.7
GRIGGS	59,189	7.0	20,207	16.1	21,306	29.6
LAMOURE	86,687	2.6	18,000	9.6	18,444	5.3
LOGAN	45,289	7.9	16,140	6.9	19,969	16.8
MCINTOSH	71,975	5.0	16,826	14.4	21,188	26.9
STUTSMAN	494,215	(a)	23,049	4.6	23,484	22.8
WELLS	110,877	(a)	17,796	5.8	21,766	31.6
REGION 6	1,297,289	0.7	20,853	7.8	21,393	19.5

- Continued -

Table 5. continued

Area	Total Income		Annual Average Earnings		Per Capita Income	
	1999	Farm as % of Total 1999	2000	Percent Change 1990-2000*	1999	Percent Change 1989-1999**
	\$000s	- % -	- \$ -	- % -	- \$ -	- % -
BURLEIGH	1,751,205	0.2	26,312	3.8	25,993	16.9
EMMONS	75,721	2.0	18,149	8.2	17,601	30.7
GRANT	39,311	(a)	16,760	2.3	13,774	21.6
KIDDER	48,378	6.1	17,660	9.7	17,290	25.5
MCLEAN	194,225	(a)	25,880	0.9	20,229	16.0
MERCER	212,024	(a)	36,122	-1.8	23,021	13.8
MORTON	516,035	(a)	23,342	3.7	21,004	21.9
OLIVER	38,366	(a)	42,407	10.2	17,778	22.4
SHERIDAN	30,430	(a)	18,693	8.5	18,276	31.8
SIOUX	45,810	(a)	24,520	6.1	11,023	10.5
REGION 7	2,951,535	(a)	26,308	2.7	22,936	19.9
ADAMS	50,189	(a)	19,407	0.6	18,982	9.1
BILLINGS	15,101	2.7	16,890	-32.4	14,166	--
BOWMAN	72,012	(a)	18,126	-3.6	22,029	6.3
DUNN	49,934	(a)	20,235	8.1	14,444	16.3
GOLDEN VALLEY	28,670	(a)	16,948	-9.2	16,089	-13.7
HETTINGER	59,312	11.3	18,839	3.4	20,892	32.1
SLOPE	10,730	10.6	10,375	-11.5	12,097	-28.1
STARK	481,322	0.2	21,659	1.0	21,402	25.0
REGION 8	767,270	(a)	20,651	-0.1	19,964	18.3
NORTH DAKOTA	14,747,353	1.4	24,683	6.3	23,273	20.7

\*Constant 2000 dollars

\*\*Constant 1999 dollars

(a) County with a negative (loss) farm income for 1999.

Sources: Job Service North Dakota. *North Dakota Employment and Wages, 1990*. Job Service North Dakota Internet Web Page; Job Service North Dakota. *North Dakota Employment and Wages, 2000*. Bismarck (Annual Average Earnings); U.S. Department of Commerce, Bureau of Economic Analysis. *Regional Economic Information System--REIS-Internet Web Page* (Total and Farm Income); U.S. Department of Commerce, U.S. Bureau of the Census, Census of Population, Intercensal County Population Estimates; U.S. Department of Commerce, Bureau of Economic Analysis, 1989. Local Area Personal Income, 1999. Bureau of Economic Analysis Internet Web Page; U.S. Department of Commerce, Bureau of Economic Analysis. 2002. *Personal Income by Major Source and Earnings by Industry* (Per Capita Income).



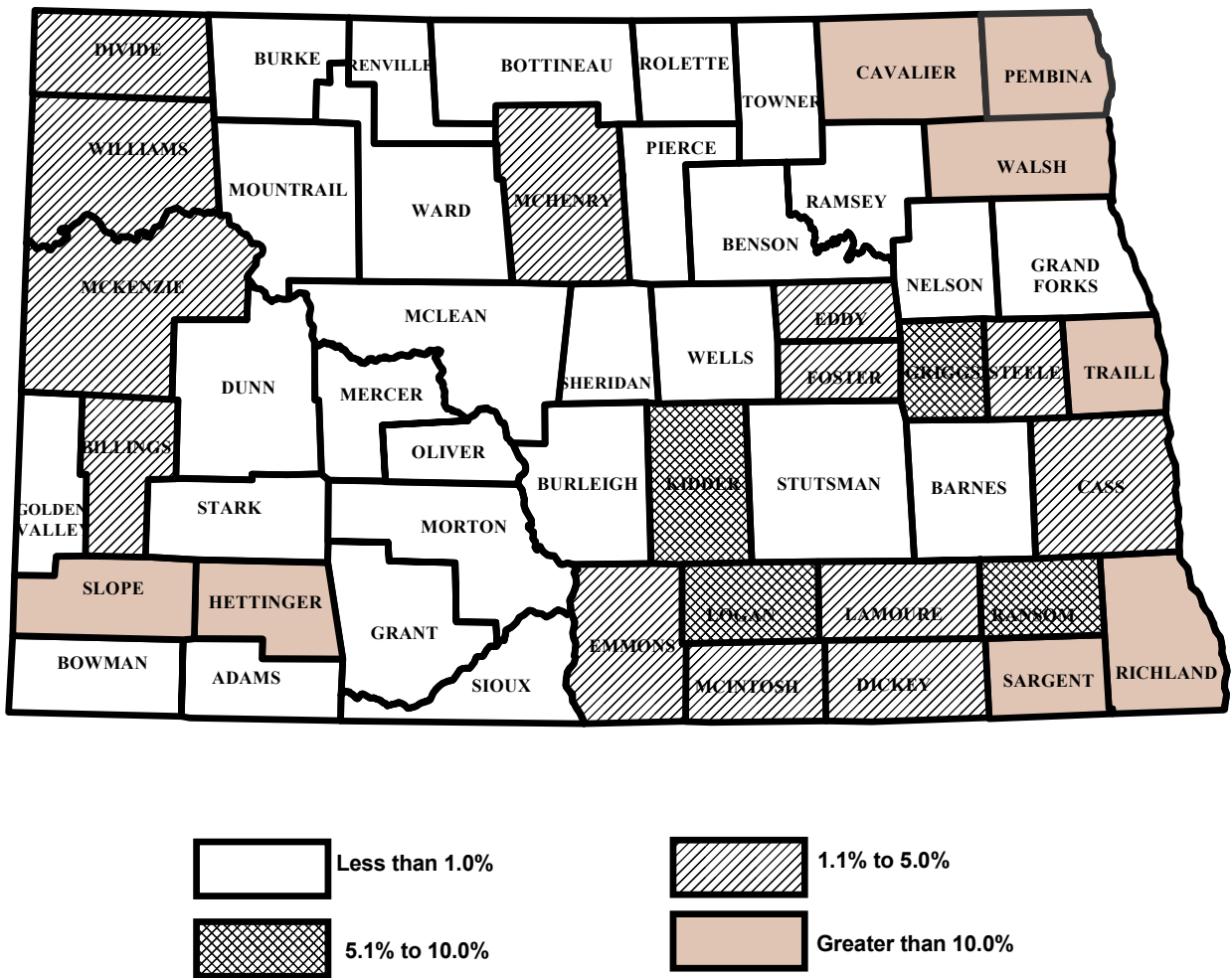
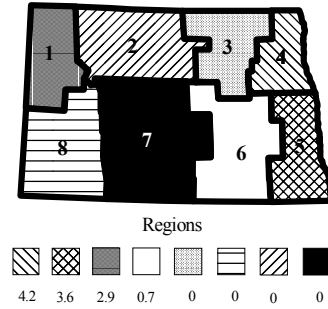
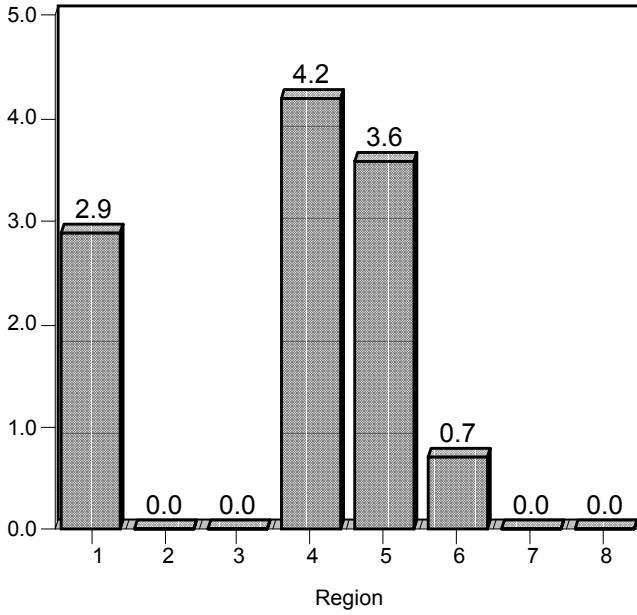
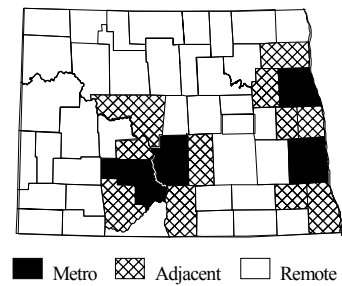
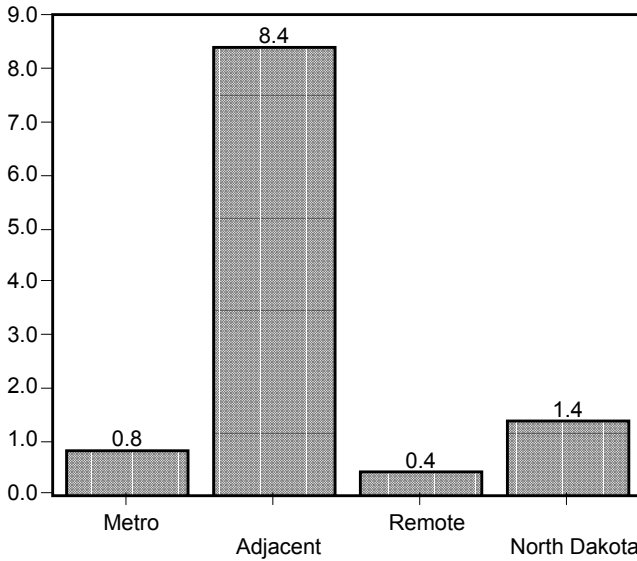


Figure 25. North Dakota Percentage of Total Income Derived from Farming, 1999

Percent Change



Percent



**Figure 26. Percentage of Total North Dakota Income Derived from Farming by Region and Area, 1999**

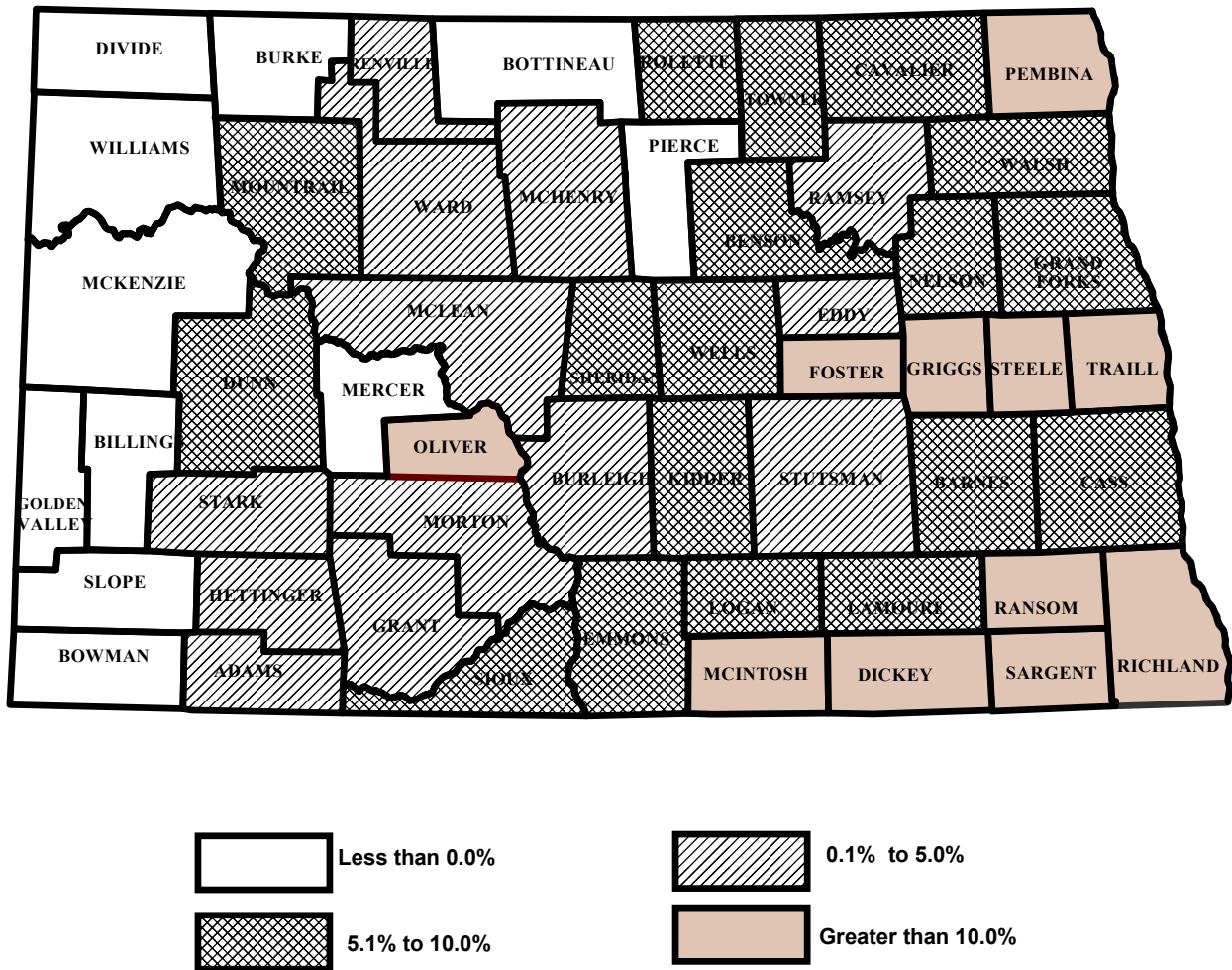
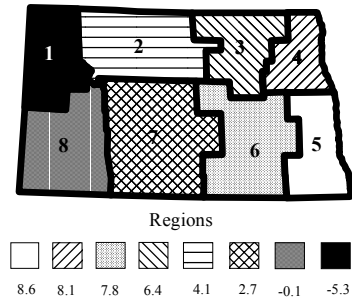
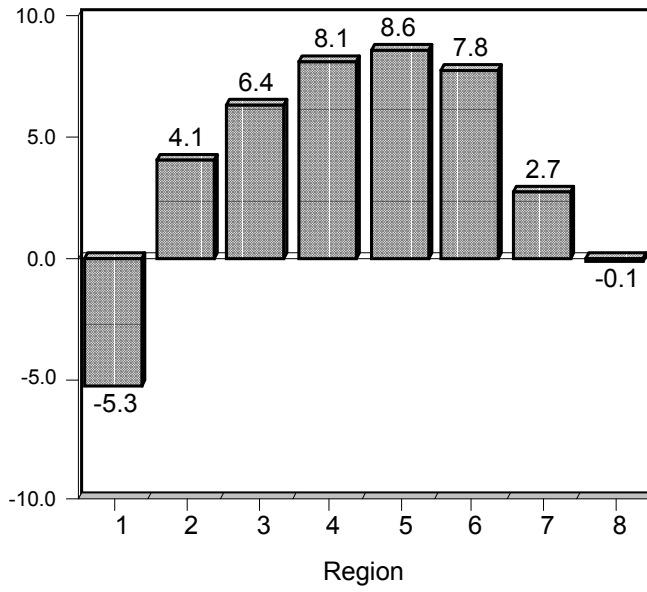
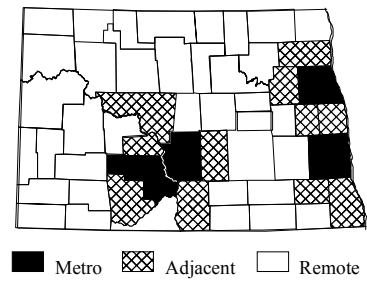
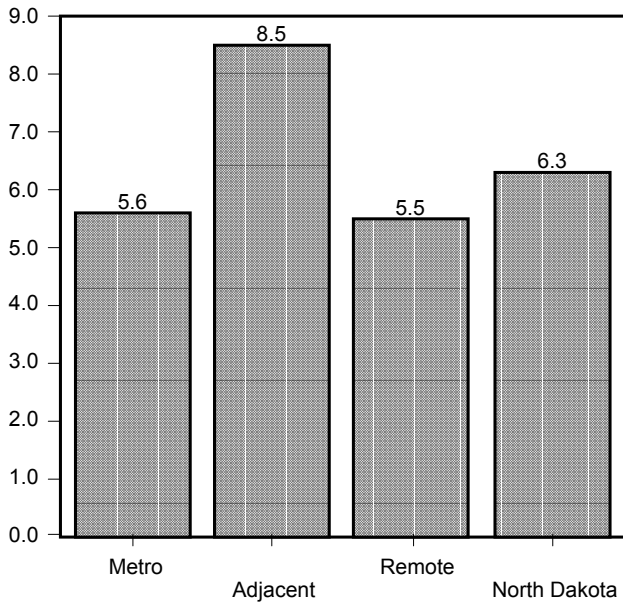


Figure 27. Percentage Change in North Dakota Average Annual Earnings, 1990-2000

Percent Change



Percent Change



**Figure 28. North Dakota Percentage Change in Annual Average Earnings by Region and Area, 1990-2000**

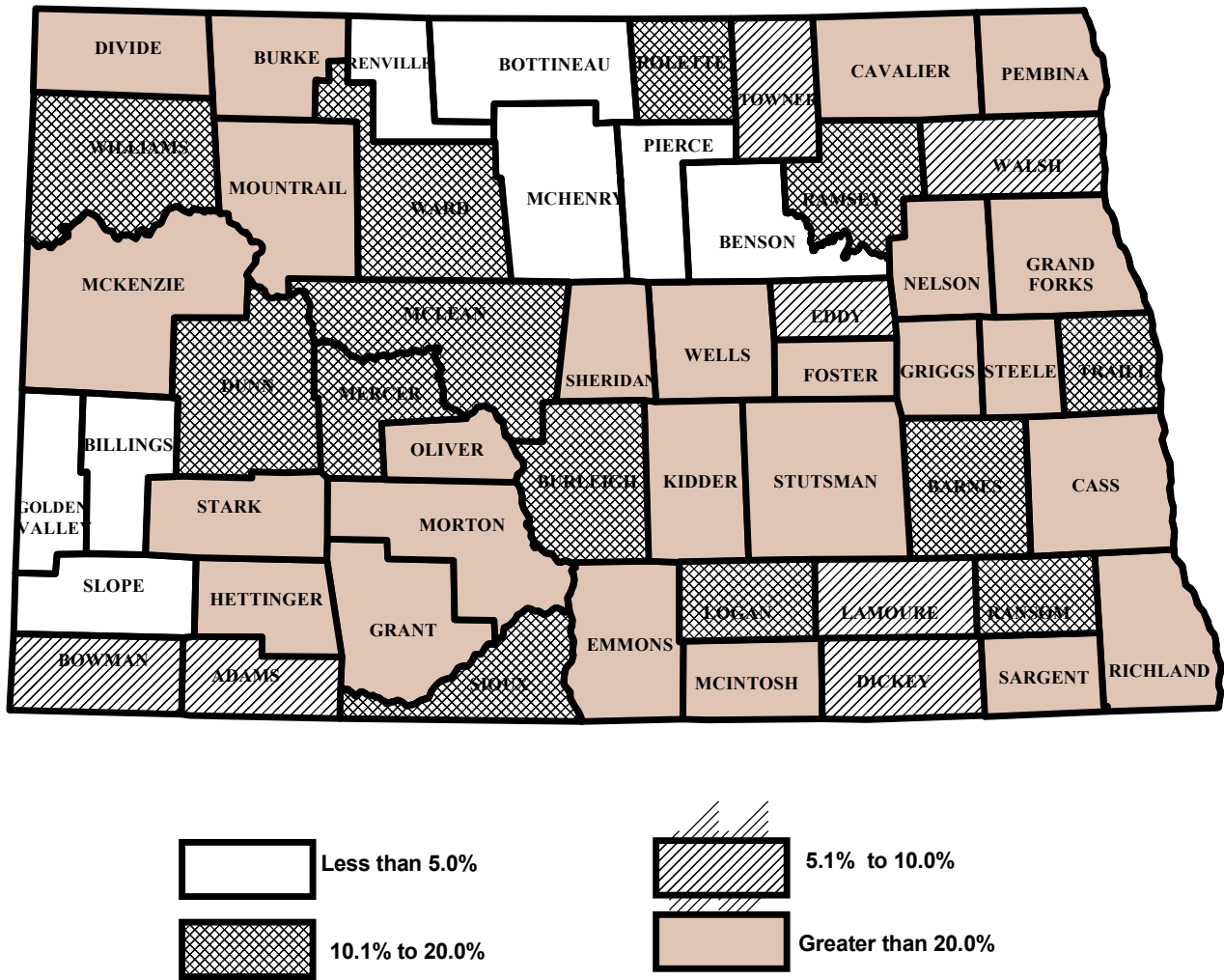
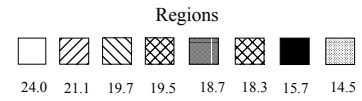
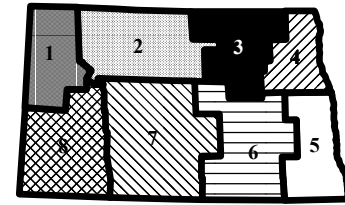
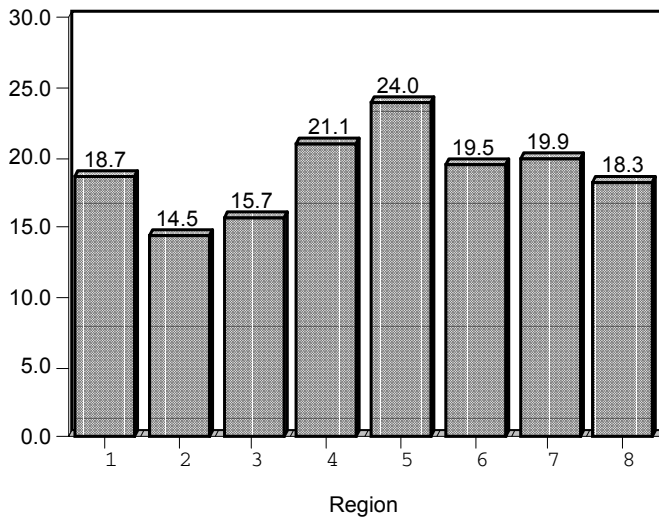
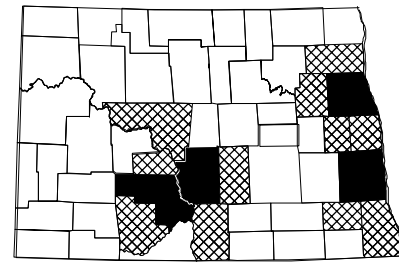
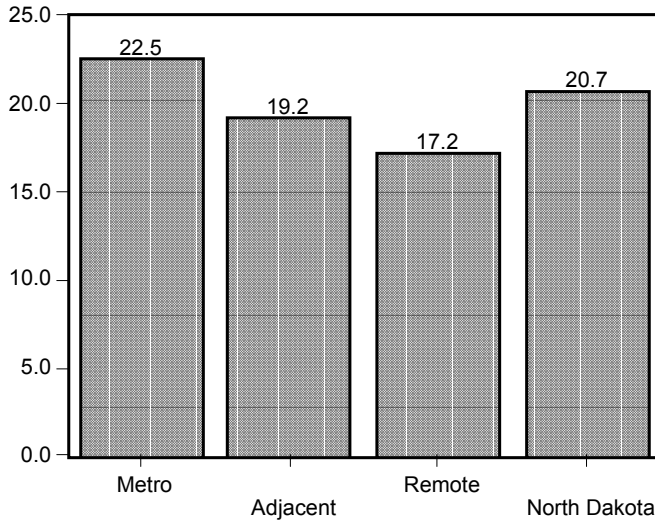


Figure 29. North Dakota Percent Change in Per Capita Income, 1989-1999

Percent Change



Percent Change



**Figure 30. North Dakota Percentage Change in Per Capita Income by Region and Area, 1989-1999**

Another topic of interest is how North Dakota's per capita income compares with the U.S. average. Appendix Table 4 shows per capita personal income for North Dakota and the United States for the period 1970-2000. Examination of Appendix Table 4 indicates that North Dakota's per capita income declined, relative to the U.S. level, during much of the 1980s, reaching a low of 71.8 percent in 1988. Since that time, the trend has been generally upward, with North Dakota's 2000 per capita income standing at 84.1 percent of the U.S. average.

### ***Taxable Sales and Purchases***

Another indicator of the economic health of an area is the level of taxable sales and purchases. Table 6 shows that Region 5 led the state in taxable sales and purchases in 2000, with Cass County sales of just over \$1.7 billion topping the total for any other region. Sales for the state (adjusted for inflation) were virtually unchanged for the period 1980-2000, but declined by 1.5 percent between 1999 and 2000.

Only Cass, Billings, Golden Valley, Grand Forks, Ransom, Burleigh, Ward and Kidder counties showed percentage increases in adjusted sales between 1980 and 2000. Cass experienced a 64 percent increase, Billings 99 percent, Burleigh 26 percent and Grand Forks 35 percent. Increases for Ransom, Golden Valley, Ward, and Kidder counties were smaller, with taxable sales and purchases improving only 13 percent or less. Sales in all other counties dropped in that period (Figure 31). The highest percentage loss was 75 percent in Hettinger County.

Region 1 experienced the highest percentage loss, a decrease of over half (60 percent) of sales and purchases volume between 1980 and 2000 (Figure 32). Only the eastern-most regions (Regions 4 and 5) showed significant sales growth (17.5 percent and 49.2 percent), although State Region 7 (Bismarck trade area) showed a small (7.0 percent) but positive trend. All nonmetropolitan areas lost sales volume (adjacent = -19.1 percent; remote = -31.3 percent), while the metropolitan areas gained 41.4 percent. Overall, taxable sales and purchases were virtually unchanged in North Dakota between 1980 and 2000 (Figure 32).

Change in taxable sales and purchases in the short-run (1999-2000) was almost equally distributed between counties with increases (25 counties) and decreases (28 counties). North Dakota sales decreased by 1.5 percent during the 1999-2000 period (Table 6). Williams County had the largest short-run increase (18 percent) followed by Logan County (16 percent) and Sioux County (15 percent). Counties experiencing the largest declines included Nelson (-13.8 percent), Mercer (-13.6 percent), and Wells (-9.9 percent). Figure 33 presents the 1999-2000 changes in taxable sales for each county. Of the counties with major trade centers, Ward (Minot), Grand Forks (Grand Forks), and Cass (Fargo) had short-run declines in taxable sales of 4 percent or less, while Burleigh (Bismarck) had a modest short-run taxable sales increase of 0.4 percent.

Three of the eight state regions had positive changes in taxable sales for the 1999-2000 period (Figure 34), led by Region 1 with a 16 percent increase. Regions 2 and 7 had the very small short-run decreases, with both under 2 percent. State Regions 3 and 8 had very small increases during the period (less than 0.5 percent). State Regions 4, 5, and 6 had the largest 1999-2000 decline, with all having declines between 3 and 4 percent. Metro areas had the largest one-year decline (2.4 percent) followed by adjacent areas (1.7 percent), while the remote areas were virtually unchanged (Figure 34).

**Table 6. Adjusted Taxable Sales and Purchases for North Dakota Counties and Regions, 1980-2000**

COUNTY	ADJUSTED TAXABLE SALES AND PURCHASES (2000 DOLLARS) <sup>a</sup>				PERCENTAGE CHANGE	
	1980	1990	1999	2000	1980-2000	1999-2000
	-----dollars-----				-----%-----	
DIVIDE	19,294,810	10,140,902	7,392,305	7,689,722	-60.2	4.0
MCKENZIE	45,354,599	28,451,842	17,211,487	18,434,044	-59.4	7.1
WILLIAMS	475,180,149	184,274,365	161,398,881	189,571,906	-60.1	17.5
REGION 1	539,829,558	222,867,109	186,002,673	215,695,672	-60.0	16.0
BOTTINEAU	68,533,265	31,599,029	37,775,324	36,932,356	-46.1	-2.2
BURKE	16,536,851	8,109,082	6,608,755	6,129,660	-62.9	-7.3
MCHENRY	24,821,202	13,432,861	16,167,563	17,046,754	-31.3	5.4
MOUNTRAIL	34,377,492	18,403,366	21,205,261	21,247,021	-38.2	0.2
PIERCE	43,060,722	32,424,404	29,553,825	30,696,854	-28.7	3.9
RENVILLE	22,799,979	13,901,729	11,380,196	12,326,301	-45.9	8.3
WARD	529,928,778	478,439,340	565,199,731	554,654,817	4.7	-1.9
REGION 2	740,058,289	596,309,811	687,890,656	679,033,763	-8.3	-1.3
BENSON	23,252,400	7,963,871	8,545,558	8,316,922	-64.2	-2.7
CAVALIER	47,098,493	28,407,030	23,042,534	25,376,962	-46.1	10.1
EDDY	22,991,858	8,282,260	7,079,575	7,605,705	-66.9	7.4
RAMSEY	129,163,637	101,785,785	121,065,447	120,505,737	-6.7	-0.5
ROLETTE	38,779,213	26,179,853	25,434,273	24,509,517	-36.8	-3.6
TOWNER	25,821,249	10,753,339	9,235,610	8,789,351	-66.0	-4.8
REGION 3	287,106,851	183,372,137	194,402,996	195,104,194	-32.0	0.4
GRAND FORKS	528,536,789	631,058,101	743,296,974	715,464,197	35.4	-3.7
NELSON	36,628,704	20,030,680	17,028,828	14,685,213	-59.9	-13.8
PEMBINA	52,148,295	43,452,100	51,610,456	49,039,160	-6.0	-5.0
WALSH	104,962,650	76,894,430	69,684,406	69,721,130	-33.6	0.1
REGION 4	722,276,438	771,435,311	881,620,663	848,909,700	17.5	-3.7
CASS	1,053,765,038	1,150,166,047	1,786,780,814	1,730,867,919	64.3	-3.1
RANSOM	37,848,861	33,950,958	38,795,893	42,848,468	13.2	10.5
RICHLAND	116,703,284	96,557,232	104,511,144	97,233,201	-16.7	-7.0
SARGENT	29,149,141	27,673,234	26,066,349	26,024,193	-10.7	-0.2
STEELE	12,281,677	5,061,873	5,388,546	5,753,672	-53.2	6.8
TRAILL	49,906,284	34,455,025	37,668,988	35,883,236	-28.1	-4.7
REGION 5	1,299,654,285	1,347,864,365	1,999,211,734	1,938,610,689	49.2	-3.0
BARNES	105,672,950	70,010,797	63,250,253	60,257,016	-43.0	-4.7
DICKEY	47,049,235	24,182,828	24,154,989	21,942,539	-53.4	-9.2
FOSTER	44,985,785	28,161,677	33,262,252	32,206,723	-28.4	-3.2
GRIGGS	26,753,576	15,609,710	14,296,520	14,741,312	-44.9	3.1
LAMOURE	35,920,663	24,095,319	21,344,512	21,888,927	-39.1	2.6
LOGAN	18,327,901	10,211,859	7,559,349	8,784,930	-52.1	16.2
MCINTOSH	24,317,281	15,425,094	17,049,558	18,643,308	-23.3	9.4
STUTSMAN	201,662,689	154,032,225	177,185,298	168,902,411	-16.3	-4.7
WELLS	49,887,434	27,234,199	29,570,552	26,648,535	-46.6	-9.9
REGION 6	554,577,513	368,963,709	387,673,281	374,015,701	-32.6	-3.5

- Continued -



Table 6. continued

COUNTY	ADJUSTED TAXABLE SALES AND PURCHASES (2000 DOLLARS) <sup>a</sup>				PERCENTAGE CHANGE	
	1980	1990	1999	2000	1980-2000	1999-2000
	-----dollars-----				-----%-----	
BURLEIGH	663,545,461	646,386,422	832,633,480	835,601,843	25.9	0.4
EMMONS	27,434,731	16,064,611	16,684,692	16,342,367	-40.4	-2.1
GRANT	14,351,668	8,340,925	9,176,758	9,173,098	-36.1	-0.0
KIDDER	10,787,418	7,242,383	11,372,527	11,348,709	5.2	-0.2
MCLEAN	62,391,593	31,714,715	33,215,885	36,250,290	-41.9	9.1
MERCER	54,358,885	38,012,517	40,763,888	35,206,398	-35.2	-13.6
MORTON	176,407,054	127,098,358	144,365,084	142,501,947	-19.2	-1.3
OLIVER	3,390,015	2,184,581	1,962,578	1,970,435	-41.9	0.4
SHERIDAN	6,955,690	2,800,740	3,011,529	2,953,947	-57.5	-1.9
SIOUX	951,459	411,847	316,612	362,469	-61.9	14.5
REGION 7	1,020,573,976	880,257,099	1,093,503,032	1,091,711,503	7.0	-0.2
ADAMS	24,156,322	15,277,672	13,000,006	12,803,816	-47.0	-1.5
BILLINGS	5,439,478	7,032,271	10,351,529	10,841,707	99.3	4.7
BOWMAN	35,378,182	21,635,196	21,286,426	21,314,187	-39.8	0.1
DUNN	24,878,534	10,958,703	8,445,800	9,468,061	-61.9	12.1
GOLDEN VALLEY	16,452,887	10,216,224	16,293,873	18,429,111	12.0	13.1
HETINGER	29,067,200	9,469,272	7,480,550	7,392,062	-74.6	-1.2
SLOPE	525,112	233,821	406,836	435,467	-17.1	7.0
STARK	331,547,579	197,367,172	222,736,069	219,842,886	-33.7	-1.3
REGION 8	467,445,294	272,190,330	300,001,088	300,527,297	-35.7	0.2
NORTH						
DAKOTA	5,631,522,204	4,643,259,871	5,730,306,123	5,643,608,519	0.2	-1.5

<sup>a</sup> constant 2000 dollars

Source: North Dakota Tax Commissioner. Selected Years 1980-2000. North Dakota Sales and Use Tax Statistical Report, Annual. Bismarck, ND.

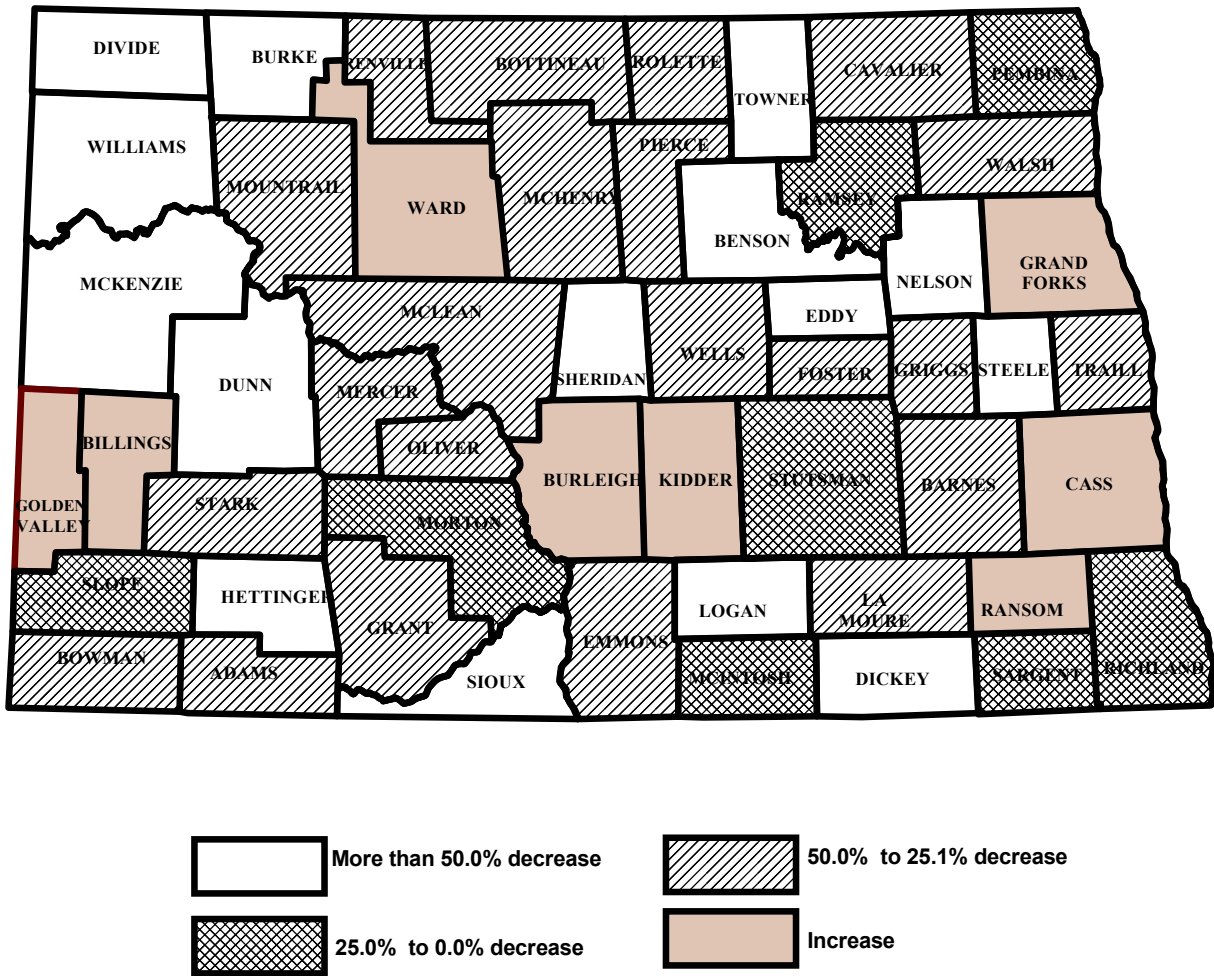
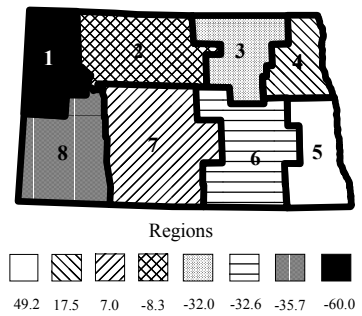
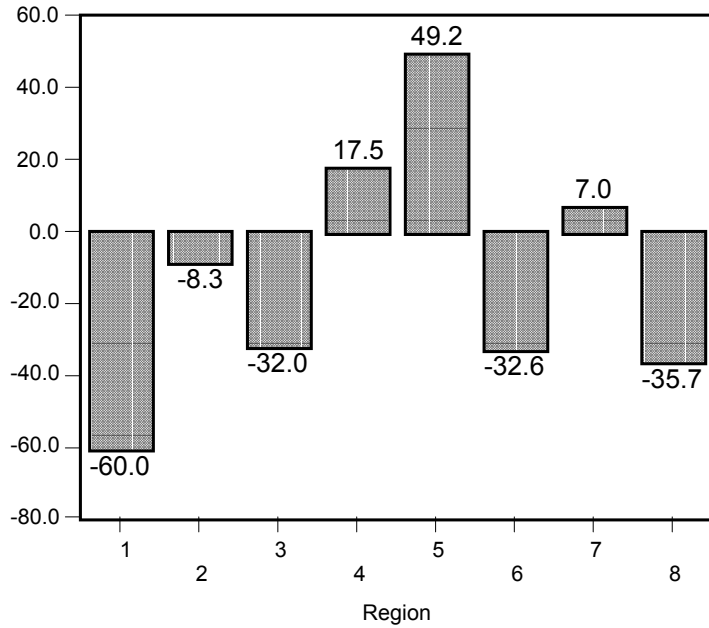
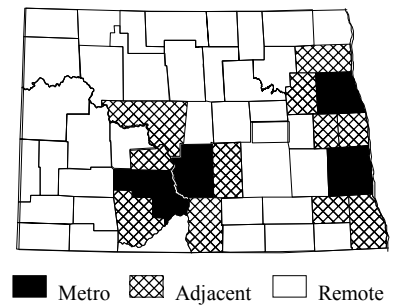
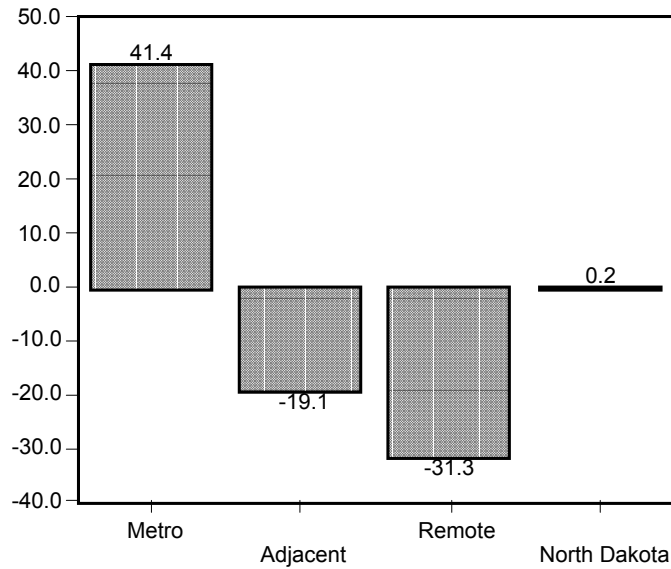


Figure 31. Percentage Change in North Dakota Taxable Sales and Purchases, 1980-2000

Percent Change



Percent Change



**Figure 32. Percentage Change in North Dakota Taxable Sales and Purchases by Region and Area, 1980-2000**

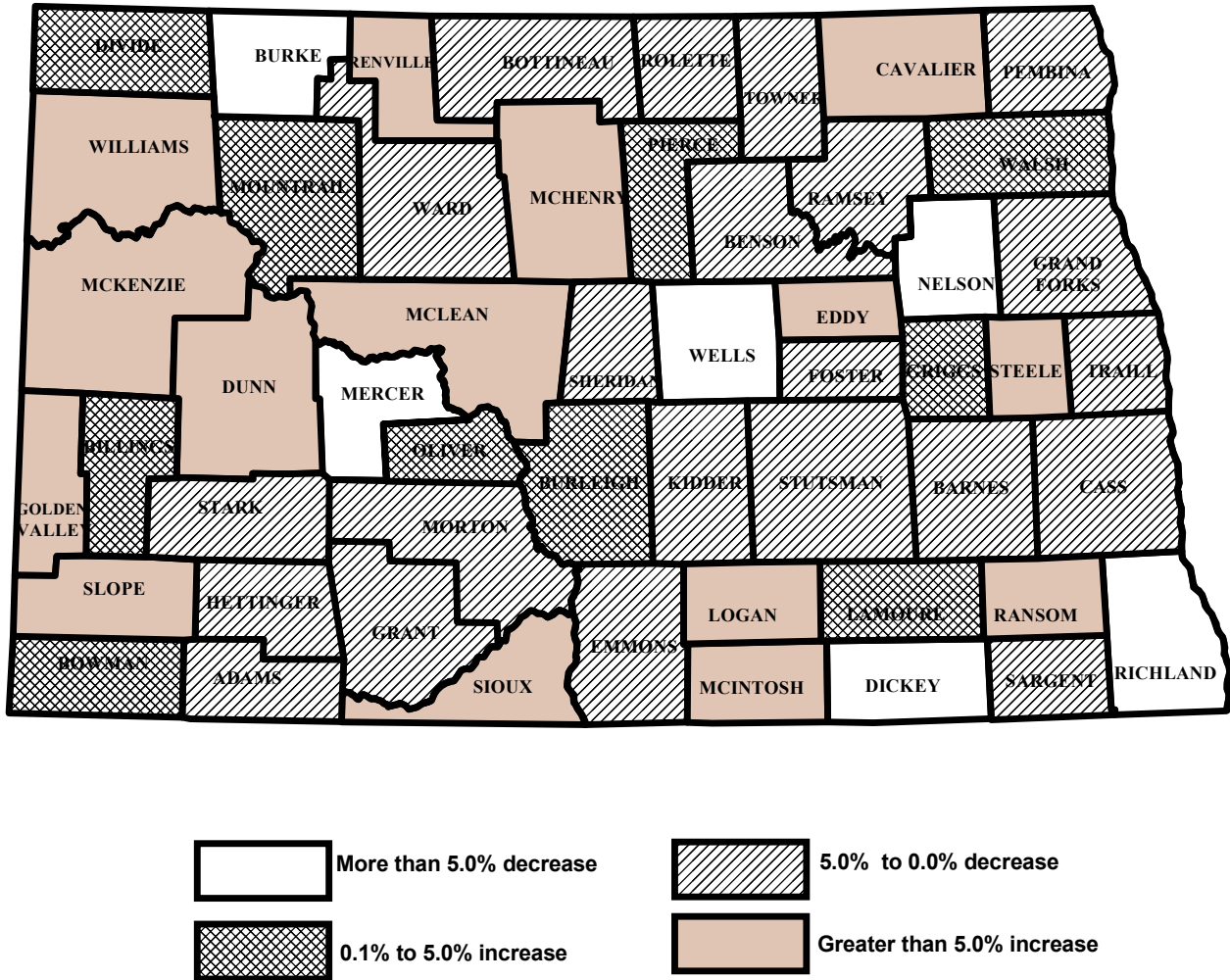
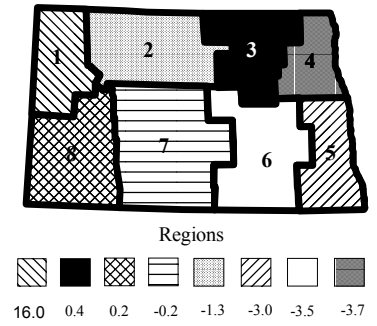
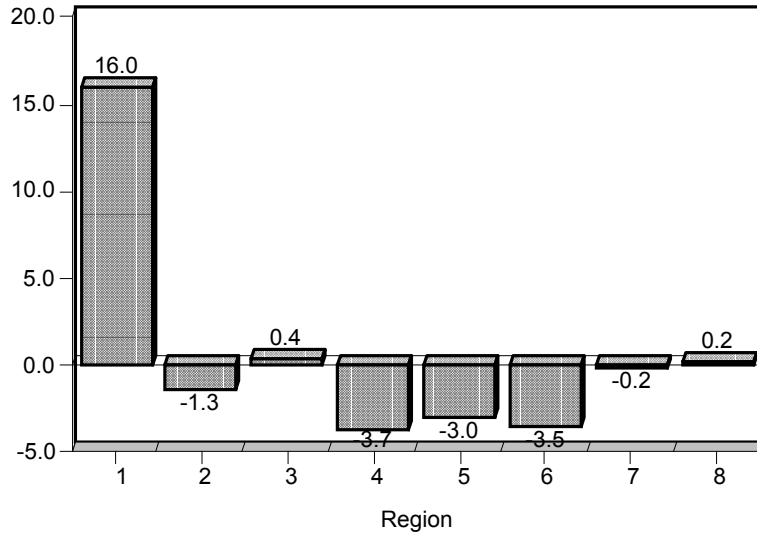
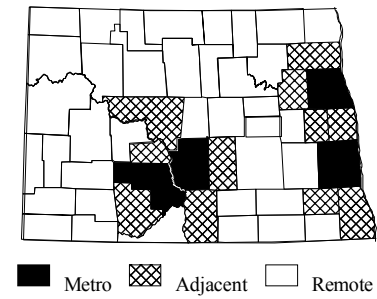
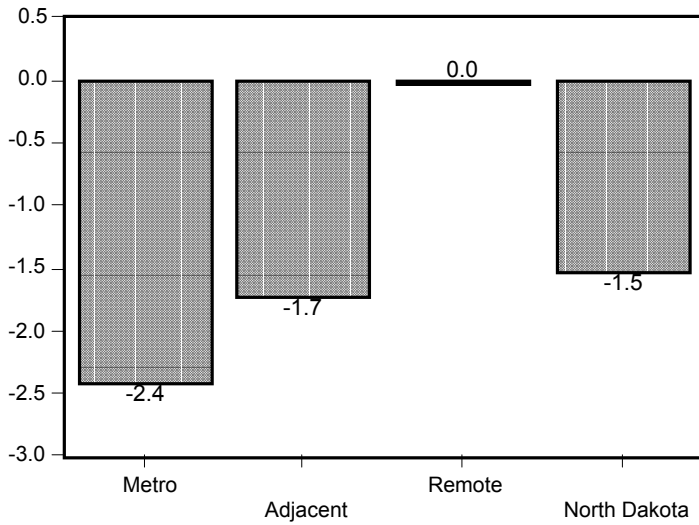


Figure 33. Percentage Change in North Dakota Taxable Sales and Purchases, 1999-2000

Percent Change



Percent Change



**Figure 34. Percentage Change in North Dakota Taxable Sales and Purchases by Region and Area, 1999-2000**

Taxable sales and purchases data also were available for North Dakota towns and cities. These towns and cities were grouped according to trade area classifications as follows: wholesale-retail; complete shopping; partial shopping; full convenience; minimum convenience; and hamlets. Fargo had the largest amount of taxable sales and purchases in 1980 and in 2000. During this period, Fargo's sales increased to the point of nearly doubling sales in Bismarck, the city with the second largest volume of taxable sales and purchases. For the period 1980-2000, the only trade area group to increase taxable sales was the wholesale-retail center group, with growth of 40 percent (Table 7). Generally, as the city/town size got smaller, the percentage loss of taxable sales became larger; the complete shopping centers group lost 29 percent of their taxable sales compared to the 51 percent loss for the hamlets group (Figure 35).

The 1999-2000 period presents a much different picture with all trade area classification groups except wholesale-retail and hamlets showing increased taxable sales. Short-term changes were modest for the complete shopping (0.3 percent), partial shopping (1.0 percent), and full convenience (2.7 percent) classifications for the 1999-2000 period (Table 7). Wholesale-retail centers decreased taxable sales by 2.5 percent from 1999-2000 while the smallest towns experienced a 0.1 percent decline (Figure 36). This indicates that the smaller towns have lost retail sales to the larger trade centers over the long term, but are stabilizing or possibly increasing their market share in recent years. Generally, as the categories went from the larger to smaller cities, the long-term declines were greater while short-term increases were smaller.

**Table 7. Adjusted Taxable Sales and Purchases for North Dakota Cities by Trade Area Classification, 1980-2000**

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (2000 DOLLARS) <sup>a</sup>				PERCENTAGE CHANGE	
	1980	1990	1999	2000	1980 TO 2000	1999 TO 2000
	-----DOLLARS-----				----PERCENT----	
<b>WHOLESALE-RETAIL</b>						
BISMARCK	657,805,748	642,252,019	828,314,301	830,914,848	26.3	0.3
FARGO	943,176,400	1,056,761,927	1,591,369,208	1,531,075,477	62.3	-3.8
GRAND FORKS	480,200,284	602,988,591	715,719,855	688,302,387	43.3	-3.8
MANDAN	144,099,655	111,304,337	130,359,317	128,776,520	-10.6	-1.2
MINOT	484,379,858	456,047,812	539,908,883	529,579,222	9.3	-1.9
WEST FARGO	43,337,326	53,972,684	150,077,040	149,166,954	244.2	-0.6
GROUP TOTAL	2,752,999,271	2,923,327,369	3,955,748,604	3,857,815,408	40.1	-2.5
<b>COMPLETE SHOPPING</b>						
DEVILS LAKE	115,195,176	97,376,928	117,592,715	117,323,650	1.9	-0.2
DICKINSON	305,050,313	183,079,714	208,650,125	206,967,148	-32.2	-0.8
GRAFTON	68,129,141	54,673,303	49,851,167	49,813,813	-26.9	-0.1
JAMESTOWN	190,997,281	147,797,151	171,404,823	163,706,544	-14.3	-4.5
VALLEY CITY	89,692,592	59,844,774	57,745,647	53,117,276	-40.8	-8.0
WHPETON	79,570,326	74,411,652	84,266,000	76,715,193	-3.6	-9.0
WILLISTON	331,774,974	157,380,132	145,203,897	169,947,181	-48.8	17.0
GROUP TOTAL	1,180,409,804	774,563,654	834,714,375	837,590,805	-29.0	0.3
<b>PARTIAL SHOPPING</b>						
BEULAH	29,312,043	22,606,793	25,835,927	22,909,555	-21.8	-11.3
BOTTINEAU	49,601,668	24,133,372	28,837,465	28,393,437	-42.8	-1.5
BOWMAN	30,689,348	18,649,140	18,366,184	18,311,024	-40.3	-0.3
CARRINGTON	43,454,108	27,486,883	32,564,394	31,495,594	-27.5	-3.3
CAVALIER	27,037,408	21,999,773	30,725,611	29,448,641	8.9	-4.2
HARVEY	36,569,989	21,426,741	23,417,448	20,534,369	-43.9	-12.3
HETTINGER	21,391,049	14,289,224	12,384,915	12,165,059	-43.1	-1.8
LANGDON	36,592,578	22,962,672	19,280,257	21,450,571	-41.4	11.3
LISBON	27,548,057	28,611,304	34,813,184	38,746,839	40.7	11.3
ROLLA	25,020,494	17,633,990	16,668,322	16,311,664	-34.8	-2.1
RUGBY	42,142,280	31,963,095	29,084,313	30,198,029	-28.3	3.8
TIOGA	125,670,175	20,095,249	10,324,874	14,277,048	-88.6	38.3
WATFORD CITY	39,411,375	25,477,155	15,454,213	16,622,290	-57.8	7.6
GROUP TOTAL	534,440,572	297,335,392	297,757,107	300,864,120	-43.7	1.0
<b>FULL CONVENIENCE</b>						
BEACH	16,151,958	9,784,964	14,283,552	15,948,686	-1.3	11.7
CANDO	20,873,424	8,368,539	7,654,785	7,270,871	-65.2	-5.0
CASSELTON	19,226,035	11,269,743	11,761,801	15,331,328	-20.3	30.4
COOPERSTOWN	20,484,658	13,262,979	12,273,594	12,585,531	-38.6	2.5
CROSBY	17,472,908	7,242,852	6,437,772	-63.2	-0.4	
GARRISON	21,150,322	10,375,828	9,940,536	9,615,649	-54.5	-3.3
HAZEN	21,871,207	13,204,404	14,054,994	11,541,770	-47.2	-17.9
HILLSBORO	12,213,702	10,444,813	12,850,583	10,704,726	-12.4	-16.7
KENMARE	25,337,329	10,538,560	13,609,254	15,000,934	-40.8	10.2
KILLDEER	17,930,538	8,873,366	6,833,799	8,099,290	-54.8	18.5
LAMOURE	14,735,510	11,662,148	7,488,579	7,326,185	-50.3	-2.2
LINTON	16,992,201	9,821,656	8,382,292	8,206,243	-51.7	-2.1

- Continued -

Table 7. continued

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (2000 DOLLARS) <sup>a</sup>				PERCENTAGE CHANGE	
	1980	1990	1999	2000	1980 TO 2000	1999 TO 2000
	----- DOLLARS -----				----- PERCENT -----	
<b>FULL CONVENIENCE</b>						
MAYVILLE	22,885,933	14,100,814	15,606,161	15,369,741	-32.8	-1.5
MICHIGAN	16,439,071	8,150,736	9,541,739	8,057,157	-51.0	-15.6
MOHALL	17,697,325	10,557,344	8,336,965	9,366,347	-47.1	12.4
NORTHWOOD	22,456,521	13,318,202	14,171,842	14,702,528	-34.5	3.7
OAKES	29,232,919	16,289,764	15,668,272	15,083,562	-48.4	-3.7
PARK RIVER	17,778,257	9,604,024	10,081,085	10,266,679	-42.3	1.8
STANLEY	19,915,836	11,092,321	12,847,115	13,279,781	-33.3	3.4
WASHBURN	17,258,513	10,845,261	10,888,527	13,189,276	-23.6	21.1
WISHEK	14,302,485	9,564,501	10,374,976	12,109,277	-15.3	16.7
GROUP TOTAL	402,406,651	228,372,818	233,112,260	239,493,333	-40.5	2.7
<b>MINIMUM CONVENIENCE</b>						
ARTHUR	3,835,830	2,961,955	1,933,601	2,439,744	-36.4	26.2
ASHLEY	8,190,095	5,168,284	6,130,276	6,050,112	-26.1	-1.3
BELFIELD	15,869,766	7,591,726	6,810,516	8,913,836	-43.8	30.9
BERTHOLD	5,479,205	3,126,638	2,832,275	2,287,193	-58.3	-19.5
DRAYTON	7,168,735	5,966,100	6,534,699	6,063,220	-15.4	-7.2
DUNSEITH	4,398,279	4,735,979	4,043,710	3,716,017	-15.5	-8.1
EDGELEY	10,640,361	6,741,823	9,774,784	10,466,340	-1.6	7.1
EDINBURG	3,821,555	3,035,747	1,963,050	1,721,285	-55.0	-12.3
ELGIN	6,923,271	4,744,577	5,702,444	5,908,785	-14.7	3.6
ELLENDALE	16,590,694	6,850,457	7,209,458	5,636,191	-66.0	-21.8
EMERADO	2,597,626	3,396,336	3,961,219	3,874,369	49.2	-2.2
ENDERLIN	8,570,571	4,355,021	3,099,574	3,123,488	-63.6	0.8
FESSENDEN	8,681,545	4,376,248	5,080,290	5,180,163	-40.3	2.0
FINLEY	5,676,390	3,245,618	3,463,339	3,511,312	-38.1	1.4
FLASHER	5,094,236	2,533,085	1,276,875	1,088,560	-78.6	-14.8
FORMAN	5,096,379	3,100,511	3,039,142	2,706,123	-46.9	-11.0
GLEN ULLIN	7,396,532	4,220,045	4,405,448	4,576,585	-38.1	3.9
GWINNER	10,339,286	16,335,472	15,869,189	15,558,342	50.5	-2.0
HANKINSON	9,043,566	5,994,842	4,756,827	4,910,799	-45.7	3.2
HEBRON	6,550,455	2,756,907	2,294,305	2,407,879	-63.2	5.0
HOOPLE	5,642,341	2,357,337	2,395,760	2,655,258	-52.9	10.8
HUNTER	6,836,390	4,560,828	6,653,106	7,049,615	3.1	6.0
KINDRED	14,767,233	5,965,661	8,421,685	9,526,110	-35.5	13.1
KULM	5,785,277	3,093,507	2,092,917	2,120,572	-63.4	1.3
LAKOTA	8,258,576	4,560,549	2,480,605	2,251,376	-72.7	-9.2
LARIMORE	9,810,600	5,468,733	4,852,624	4,612,415	-53.0	-5.0
LEEDS	7,121,117	2,822,752	2,060,441	2,067,478	-71.0	0.3
LIDGERWOOD	10,077,231	7,174,574	5,670,878	5,531,784	-45.1	-2.5
MADDOCK	10,586,879	2,997,170	3,493,538	3,739,411	-64.7	7.0
MCVILLE	6,047,766	3,848,072	2,180,594	1,700,853	-71.9	-22.0
MILNOR	9,696,352	6,290,268	5,410,261	6,105,756	-37.0	12.9
MINTO	2,444,884	3,465,685	2,553,243	2,563,406	4.9	0.4
MOTT	13,716,436	4,876,743	3,605,025	3,673,563	-73.2	1.9
NAPOLEON	12,717,992	7,937,571	5,809,474	7,143,777	-43.8	23.0
NEW ENGLAND	11,679,458	3,392,453	2,730,264	2,543,620	-78.2	-6.8
NEW ROCKFORD	18,821,173	6,828,763	6,283,896	6,746,614	-64.2	7.4

- Continued -



Table 7. continued

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (2000 DOLLARS) <sup>a</sup>				PERCENTAGE CHANGE	
	1980	1990	1999	2000	1980 TO 2000	1999 TO 2000
	-----DOLLARS-----				----PERCENT----	
<b>MINIMUM CONVENIENCE</b>						
NEW SALEM	11,268,872	5,854,368	5,627,620	5,242,970	-53.5	-6.8
NEW TOWN	5,756,402	3,383,870	4,129,070	3,767,713	-34.6	-8.8
PAGE	4,888,201	2,734,919	1,742,628	1,755,155	-64.1	0.7
PEMBINA	2,653,841	3,617,477	5,413,867	5,003,165	88.5	-7.6
POWERS LAKE	4,718,029	2,678,650	2,593,656	2,535,585	-46.3	-2.2
RAY	9,342,188	3,131,608	2,591,289	2,629,376	-71.9	1.5
RICHARDTON	8,500,282	4,588,308	5,303,168	2,132,406	-74.9	-59.8
ROLETTE	7,871,278	2,693,089	3,151,417	3,071,131	-61.0	-2.6
STEELE	5,512,353	4,073,959	8,181,137	8,309,552	50.7	1.6
STRASBURG	4,029,809	2,733,502	3,507,284	3,090,851	-23.3	-11.9
TOWNER	6,051,434	3,454,424	4,880,290	4,488,412	-25.8	-8.0
TURTLE LAKE	5,839,202	2,896,534	2,144,306	2,491,262	-57.3	16.2
UNDERWOOD	10,991,907	3,617,635	5,593,785	6,690,904	-39.1	19.6
VELVA	9,077,314	5,612,854	5,960,019	7,480,127	-17.6	25.5
WALHALLA	8,656,622	7,219,737	5,292,188	5,018,414	-42.0	-5.2
WESTHOPE	7,531,326	2,561,502	2,491,156	2,527,242	-66.4	1.5
WIMBLEDON	8,163,519	6,007,699	2,635,938	3,734,222	-54.3	41.7
WYNDMERE	7,336,659	5,045,170	3,156,586	3,027,281	-58.7	-4.1
GROUP TOTAL	434,163,319	248,783,341	241,270,840	243,167,719	-44.0	0.8
<b>HAMLETS</b>						
ABERCROMBIE	1,335,267	508,626	2,820,172	2,533,814	89.8	-10.2
ADAMS	1,829,574	739,112	703,102	692,422	-62.2	-1.5
ALEXANDER	2,810,493	995,121	760,597	663,336	-76.4	-12.8
ANAMOOSE	3,087,782	1,548,354	1,928,477	1,678,225	-45.7	-13.0
ANETA	1,277,775	1,064,732	1,041,477	1,056,369	-17.3	1.4
BINFORD	4,624,918	1,069,527	839,332	928,919	-79.9	10.7
BISBEE	1,285,754	711,652	477,878	437,164	-66.0	-8.5
BOWBELLS	4,055,552	1,804,055	1,395,021	1,359,432	-66.5	-2.6
BOWDON	622,752	242,930	214,712	215,331	-65.4	0.3
BUFFALO	1,841,795	815,172	768,385	675,268	-63.3	-12.1
BURLINGTON	2,231,595	2,459,035	2,584,860	2,260,283	1.3	-12.6
BUXTON	1,474,745	1,264,342	1,242,957	1,062,908	-27.9	-14.5
CARPIO	1,307,598	433,451	375,048	350,871	-73.2	-6.5
CARSON	2,447,879	1,533,873	1,172,207	1,123,311	-54.1	-4.2
CENTER	3,104,772	2,084,525	1,946,020	1,954,510	-37.1	0.4
COGSWELL	349,722	293,109	91,366	26,631	-92.4	-70.9
COLUMBUS	2,661,099	872,815	294,404	319,622	-88.0	8.6
CRYSTAL	725,942	786,056	366,223	321,771	-55.7	-12.1
DAVENPORT	--	74,917	69,573	113,074	--	62.5
DES LACS	53,187	155,403	114,533	81,132	52.5	-29.2
DRAKE	3,518,448	738,858	1,045,918	926,264	-73.7	-11.4
EDMORE	2,780,443	1,059,469	516,791	512,247	-81.6	-0.9
ESMOND	1,929,084	908,949	420,275	315,921	-83.6	-24.8
FAIRMOUNT	1,719,327	1,191,214	1,508,704	1,690,842	-1.7	12.1
FORDVILLE	2,846,997	1,212,444	632,346	580,868	-79.6	-8.1
GACKLE	3,402,399	1,420,166	1,090,352	993,219	-70.8	-8.9
GALESBURG	--	--	--	4,271,758	--	--
GILBY	4,053,104	1,248,433	686,382	719,129	-82.3	4.8
GLADSTONE	524,987	561,096	242,310	174,823	-66.7	-27.9
GLENBURN	2,152,998	1,005,488	1,126,182	987,843	-54.1	-12.3
GOLDEN VALLEY	823,532	734,261	306,032	278,682	-66.2	-8.9
GOODRICH	1,141,472	639,753	323,309	338,218	-70.4	4.6
GRANDIN	2,678,553	1,104,400	792,466	806,943	-69.9	1.8

- Continued -

Table 7. continued

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (2000 DOLLARS) <sup>a</sup>				PERCENTAGE CHANGE	
	1980	1990	1999	2000	1980 TO 2000	1999 TO 2000
	----- DOLLARS -----				----PERCENT----	
<b>HAMLETS</b>						
GRANVILLE	760,482	317,243	468,784	422,518	-44.4	-9.9
GRENORA	4,995,604	1,819,125	1,988,126	1,113,895	-77.7	-44.0
HALLIDAY	3,448,460	1,078,372	925,245	868,607	-74.8	-6.1
HANNAFORD	1,056,971	609,309	580,008	628,599	-40.5	8.4
HARWOOD	1,743,783	1,922,648	3,111,339	2,959,024	69.7	-4.9
HATTON	4,254,705	2,381,956	2,540,189	2,249,295	-47.1	-11.5
HAZELTON	1,628,274	1,192,966	2,243,025	2,218,927	36.3	-1.1
HOPE	5,081,733	1,500,835	1,449,447	1,639,789	-67.7	13.1
HORACE	1,076,489	1,166,135	1,311,942	1,482,139	37.7	13.0
KENSAL	760,058	293,161	276,479	260,851	-65.7	-5.7
LANSFORD	3,382,732	593,050	901,530	806,913	-76.2	-10.5
LEHR	1,881,491	473,117	213,859	182,176	-90.3	-14.8
LEONARD	1,655,912	1,217,060	998,564	824,882	-50.2	-17.4
LIGNITE	1,995,329	1,115,645	1,295,869	1,059,097	-46.9	-18.3
LINCOLN	--	670,175	908,499	946,854	--	4.2
LITCHVILLE	4,508,551	1,978,867	910,523	838,622	-81.4	-7.9
MANVEL	1,078,224	1,176,321	1,631,125	1,383,737	28.3	-15.2
MAPLETON	648,992	737,869	1,207,407	1,071,729	65.1	-11.2
MARION	754,729	471,452	358,786	363,583	-51.8	1.3
MAX	1,491,446	968,569	586,696	504,864	-66.2	-14.0
MCCLUSKY	4,955,384	1,641,813	1,918,210	1,765,317	-64.4	-8.0
MEDINA <sup>2,368,053</sup>	787,600	856,723	600,273	-74.7	-29.9	
MINNEWAUKAN	1,500,117	291,245	195,111	229,084	-84.7	17.4
MOORETON	1,933,529	938,959	881,913	835,021	-56.8	-5.3
MUNICH	4,589,004	1,379,557	915,396	1,019,187	-77.8	11.3
NECHE	1,266,091	1,522,309	1,180,365	1,313,403	3.7	11.3
NEW LEIPZIG	4,056,383	1,622,130	1,501,358	1,420,384	-65.0	-5.4
NOONAN	901,866	2,163,086	550,602	808,891	-10.3	46.9
OSNABROCK	1,208,640	655,314	282,050	394,762	-67.3	40.0
PARSHALL	4,820,717	1,944,966	1,928,319	1,860,615	-61.4	-3.5
PETERSBURG	1,521,544	480,826	375,569	280,459	-81.6	-25.3
PICK CITY	--	489,799	790,255	801,689	--	1.5
PLAZA	1,375,889	941,802	642,006	720,732	-47.6	12.3
PORTAL	743,609	834,698	801,668	686,807	-7.6	-14.3
PORTLAND	3,194,220	1,919,420	1,513,904	1,364,098	-57.3	-9.9
REEDER	2,364,111	863,897	610,566	624,696	-73.6	2.3
REGENT	3,561,418	1,941,987	1,137,661	1,169,734	-67.2	2.8
REYNOLDS	1,610,001	975,434	1,177,099	948,723	-41.1	-19.4
RHAME	1,324,818	712,301	754,227	750,780	-43.3	-0.5
RIVERDALE	--	1,001,322	968,029	676,737	--	-30.1
ROCKLAKE	3,113,466	1,258,908	616,183	606,651	-80.5	-1.6
RUTLAND	1,133,031	746,452	867,196	710,191	-37.3	-18.1
S HEART	1,572,376	896,573	1,216,512	1,137,564	-27.7	-6.5
SAWYER	1,339,376	881,734	1,507,507	1,525,895	13.9	1.2
SCRANTON	3,094,214	1,826,502	2,094,170	2,184,447	-29.4	4.3
SELFIDGE	679,793	285,818	196,572	225,521	-66.8	14.7
SHERWOOD	2,687,136	1,768,460	1,630,391	1,641,107	-38.9	0.7
SHEYENNE	3,924,454	1,544,866	831,255	916,033	-76.7	10.2
ST JOHN	936,174	849,102	1,122,997	1,018,302	8.8	-9.3
ST THOMAS	1,144,469	733,145	762,327	685,072	-40.1	-10.1
STANTON	1,032,303	713,932	559,583	497,697	-51.8	-11.1
STARKWEATHER	719,357	284,689	167,882	112,515	-84.4	-33.0
SURREY	1,060,385	894,366	804,527	826,104	-22.1	2.7
SYKESTON	--	211,036	444,517	321,585	--	-27.7

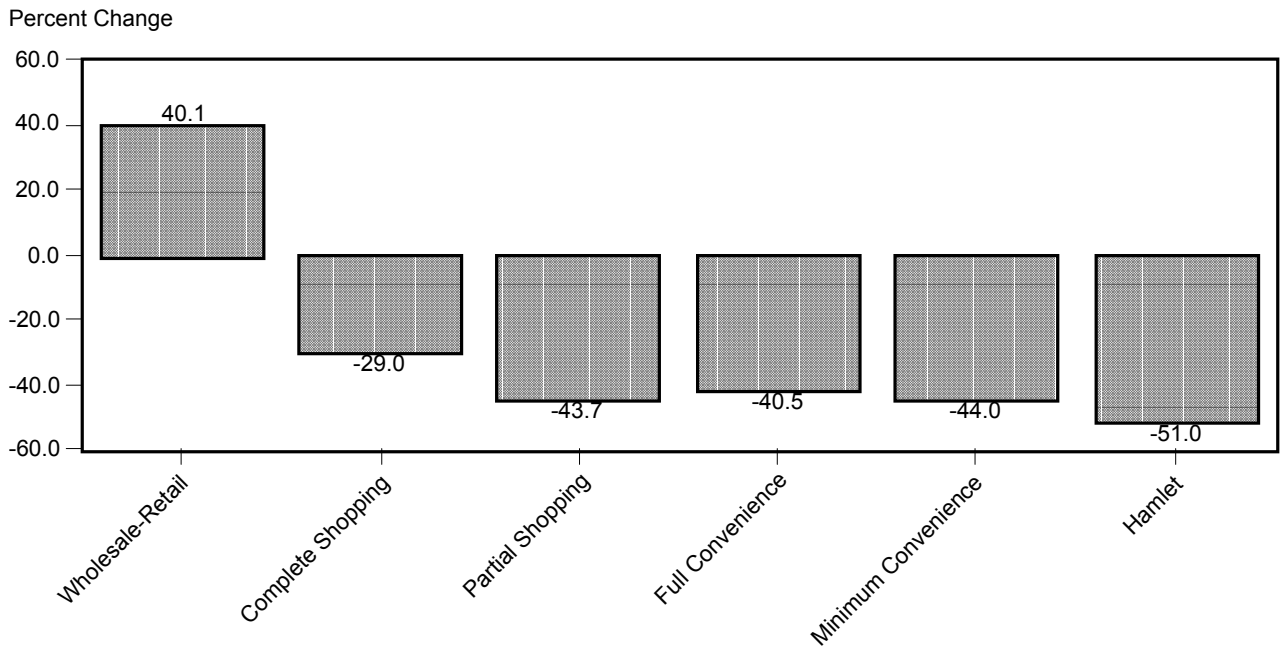
- Continued -

Table 7. continued

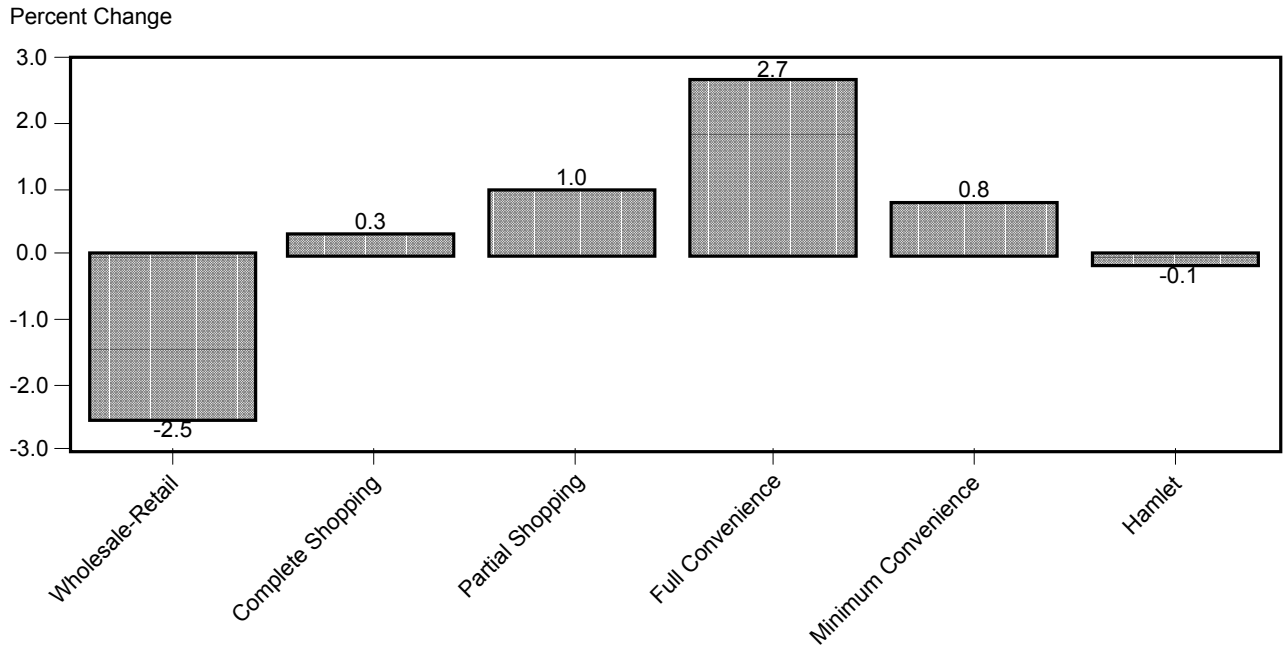
CITY	ADJUSTED TAXABLE SALES AND PURCHASES (2000 DOLLARS) <sup>a</sup>				PERCENTAGE CHANGE	
	1980	1990	1999	2000	1980 TO 2000	1999 TO 2000
	----- DOLLARS -----				----PERCENT----	
<b>HAMLETS</b>						
TAPPEN	2,003,460	1,445,104	1,544,559	1,487,872	-25.7	-3.7
THOMPSON	3,432,158	1,031,592	803,162	940,112	-72.6	17.1
TOLNA	2,183,212	1,380,094	805,552	824,407	-62.2	2.3
TOWER CITY	4,115,337	1,709,837	1,484,748	1,444,529	-64.9	-2.7
UPHAM	668,339	453,319	398,923	497,273	-25.6	24.7
WALCOTT	- -	445,984	2,272,365	2,621,583	- -	15.4
WILDROSE	1,221,298	933,176	585,809	819,729	-32.9	39.9
WILLOW CITY	2,558,584	1,226,458	990,561	891,454	-65.2	-10.0
WILTON	1,949,788	947,449	1,845,960	1,881,754	-3.5	1.9
WING	1,343,746	838,001	472,816	418,388	-68.9	-11.5
ZAP	862,084	257,321	250,530	217,036	-74.8	-13.4
ZEELAND	1,755,139	627,002	517,532	467,046	-73.4	-9.8
GROUP TOTAL	194,728,582	100,264,597	95,580,122	95,468,510	-51.0	-0.1
IN-STATE TOTAL	5,499,148,199	4,572,647,171	5,658,183,306	5,574,399,895	- -	- -

<sup>a</sup> constant 2000 dollars

Source: North Dakota Tax Commissioner. Selected Years 1980-2000. North Dakota Sales and Use Tax Statistical Report, Annual. Bismarck, ND.



**Figure 35. Percentage Change in Taxable Sales and Purchases for North Dakota Towns and Cities by Trade Area Classification, 1980-2000**



**Figure 36. Percentage Change in Taxable Sales and Purchases for North Dakota Towns and Cities by Trade Area Classification, 1999-2000**

## ***Pull Factors***

Pull factors measure a community's success in capturing the potential purchasing power of residents in its trade area. Pull factor is calculated by dividing the trade area capture by the trade area population.\* Trade area capture measures the number of consumer equivalents purchasing taxable merchandise in a particular city. Pull factors greater than 1.0 indicate a community's retail sales are greater than the purchasing power of its trade area residents, i.e., it is "pulling" customers from outside its normal trade area. A pull factor of less than 1.0 indicates that a community is not capturing all of the purchasing power of its trade area residents.

Pull factors for wholesale-retail trade centers in North Dakota were 1.06 in 2000, up from the 0.85 in 1980 (Table 8). Fargo had the greatest pull factor for wholesale-retail centers in 2000 with a 1.17 value. Only seven of the cities in the full convenience, minimum convenience, or hamlet classification had a pull factor of 1.0 or greater. Michigan, a full convenience center, had the highest pull factor (1.86) of any city in the state in 2000. Gwinner, a city that has a large manufacturing plant located in it had the second highest pull factor (1.78).

For the 1980-2000 period, the only trade center class that had a positive change in pull factor was the wholesale-retail centers with a 24.9 percent change (Figure 37). The smallest cities, the hamlets, had the largest decline in pull factor, with a decline of 54.7 percent. All other trade classifications had pull factor decline of more than 14.5 percent.

Short-run changes in pull factors were much less than they were in the long run. Pull factor changes for the 1999-2000 period were 4.3 percent or less for all trade area classifications except the partial shopping and full convenience centers that increased by 6.5 percent or more (Figure 38). Wholesale-retail trade centers were the only classification to decline, with a 1.9 percent decrease.

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\*The formula used in calculating pull factors for this report was as follows:

$$\text{Pull Factor} = \frac{\text{Trade Area Capture (TAC)}}{\text{Trade Area Population}}$$
$$\text{where TAC} = \frac{\text{LTS}_j}{\text{PCS}_s \times (\text{TAPCI}_j / \text{PCI}_s)}$$

LTS<sub>j</sub> = Local taxable sales in community j

PCS<sub>s</sub> = State per capita taxable sales

TAPCI<sub>j</sub> = Per capita income in trade area j

PCI<sub>s</sub> = State average per capita income

**Table 8. Pull Factors for North Dakota Cities by Trade Center Classifications, 1980-2000**

City	Pull Factors				Percentage Change	
	1980	1990	1999	2000	1980 to 2000	2000 to 2000
					-----percent-----	
<b>WHOLESALE-RETAIL</b>						
BISMARCK	0.83	1.05	1.01	1.02	22.9	1.0
FARGO	1.01	1.23	1.22	1.17	15.9	-4.6
GRAND FORKS	0.81	1.18	1.19	1.15	41.8	-3.3
MINOT	0.73	0.92	0.89	0.89	21.0	0.2
AVERAGE	0.85	1.10	1.08	1.06	24.9	-1.9
<b>COMPLETE SHOPPING</b>						
DEVILS LAKE	0.75	0.75	0.82	0.80	6.8	-1.7
DICKINSON	1.16	1.11	0.99	1.02	-11.9	3.7
GRAFTON	0.90	0.95	0.73	0.81	-9.8	10.7
JAMESTOWN	0.87	0.77	0.81	0.77	-11.1	-4.5
VALLEY CITY	0.94	0.65	0.64	0.61	-35.1	-4.8
WAHPETON	0.79	0.82	0.69	0.66	-16.4	4.6
WILLISTON	1.40	1.17	0.96	1.14	-18.3	18.9
AVERAGE	0.97	0.89	0.80	0.83	-14.5	3.3
<b>PARTIAL SHOPPING</b>						
BEULAH	0.56	0.62	0.63	0.61	9.0	-3.6
BOTTINEAU	1.10	0.58	0.84	0.85	-23.0	1.4
BOWMAN	0.73	0.64	0.59	0.61	-16.2	4.6
CARRINGTON	0.91	0.74	0.84	0.83	-8.8	-1.1
CAVALIER	0.69	0.65	0.74	0.71	3.2	-4.0
HARVEY	0.79	0.49	0.59	0.54	-31.6	-7.6
HETTINGER	0.84	0.80	0.69	0.71	-15.8	3.1
LANGDON	0.78	0.66	0.44	0.50	-35.5	15.0
LISBON	0.81	0.83	0.81	0.90	11.6	10.9
ROLLA	0.44	0.40	0.28	0.28	-35.5	1.0
RUGBY	0.98	0.76	0.76	0.82	-16.5	7.8
TIOGA	3.81	1.25	0.56	0.88	-76.8	58.7
WATFORD CITY	1.10	1.40	0.64	0.70	-36.4	8.4
AVERAGE	1.04	0.75	0.65	0.69	-33.9	6.5
<b>FULL CONVENIENCE</b>						
BEACH	0.74	0.66	1.16	1.27	72.9	9.5
CANDO	2.07	0.99	0.95	1.10	-46.6	16.7
CASSELTON	0.60	0.48	0.39	0.48	-20.9	22.8
COOPERSTOWN	1.07	0.55	0.56	0.60	-43.5	7.3
CROSBY	0.67	0.41	0.34	0.35	-47.5	2.7
GARRISON	0.83	0.48	0.42	0.42	-49.1	-0.1
HAZEN	0.45	0.36	0.34	0.32	-28.1	-6.8
HILLSBORO	0.47	0.50	0.54	0.47	-0.8	-13.7
KENMARE	0.74	0.49	0.54	0.70	-4.7	29.2

- Continued -

Table 8. continued

City	Pull Factors				Percentage Change	
	1980	1990	1999	2000	1980 to 2000	2000 to 2000
<b>FULL CONVENIENCE Cont.</b>						
KILLDEER	1.05	1.01	0.71	0.84	-20.2	18.4
LAMOURE	1.12	0.60	0.42	0.41	-63.5	-3.2
LINTON	0.74	0.54	0.36	0.37	-50.1	2.7
MAYVILLE	0.60	0.44	0.43	0.45	-24.7	4.8
MICHIGAN	3.15	1.46	2.12	1.86	-40.8	-11.9
MOHALL	1.69	0.91	0.89	1.12	-33.4	26.5
NORTHWOOD	1.11	0.91	0.85	0.98	-11.5	15.5
OAKES	1.18	0.74	0.69	0.63	-46.4	-9.3
PARK RIVER	0.52	0.38	0.36	0.40	-22.2	13.5
STANLEY	0.89	0.66	0.70	0.76	-15.2	8.5
WASHBURN	1.04	0.78	0.75	0.95	-8.8	26.0
WISHEK	1.04	0.74	0.72	0.83	-20.4	15.5
AVERAGE	1.04	0.67	0.68	0.73	-29.6	7.6
<b>MINIMUM CONVENIENCE</b>						
ARTHUR	0.57	0.66	0.34	0.43	-25.1	27.0
ASHLEY	0.69	0.46	0.48	0.50	-27.5	4.7
BELFIELD	0.73	0.65	0.47	0.68	-6.9	44.7
BERTHOLD	0.73	0.64	0.48	0.39	-46.5	-18.5
DRAYTON	0.47	0.50	0.46	0.44	-5.8	-3.5
DUNSEITH	0.18	0.24	0.15	0.14	-21.5	-4.9
EDGELEY	1.40	0.63	1.01	1.10	-21.5	9.2
EDINBURG	0.39	0.47	0.29	0.29	-25.3	1.0
ELGIN	1.29	1.16	0.97	1.05	-18.8	7.7
ELLENDALE	0.82	0.35	0.37	0.31	-62.8	-16.6
ENDERLIN	0.89	0.43	0.16	0.17	-81.2	7.8
FESSENDEN	0.82	0.44	0.57	0.57	-31.0	-0.1
FINLEY	1.08	0.35	0.41	0.42	-60.8	1.8
FLASHER	0.45	0.37	0.15	0.14	-69.4	-6.4
FORMAN	0.33	0.19	0.15	0.14	-56.2	-5.0
GLEN ULLIN	0.51	0.48	0.39	0.44	-14.5	12.6
GWINNER	1.80	2.96	1.87	1.78	-1.2	-4.6
HANKINSON	0.57	0.44	0.28	0.28	-51.3	-0.2
HEBRON	0.43	0.30	0.19	0.23	-47.3	15.8
HUNTER	1.03	0.97	1.19	1.29	25.6	8.7
KINDRED	0.77	0.38	0.44	0.44	-43.2	-0.4
KULM	1.50	0.55	0.43	0.48	-68.3	10.1
LAKOTA	0.73	0.34	0.14	0.21	-70.9	50.4
LARIMORE	0.37	0.28	0.22	0.19	-47.1	-10.6
LEEDS	1.16	0.53	0.46	0.51	-55.7	12.5
LIDGERWOOD	0.66	0.61	0.40	0.43	-35.4	7.1

- Continued -

Table 8. continued

City	Pull Factors				Percentage Change	
	1980	1990	1999	2000	1980 to 2000	2000 to 2000
<b>MINIMUM CONVENIENCE cont.</b>						
MADDOCK	1.22	0.39	0.54	0.64	-47.6	19.4
MCVILLE	0.83	0.45	0.31	0.26	-69.4	-18.8
MILNOR	0.96	0.55	0.37	0.38	-59.9	3.5
MINTO	0.32	0.58	0.38	0.34	5.8	-10.1
MOTT	1.34	0.48	0.30	0.34	-74.9	10.5
NAPOLEON	1.35	0.63	0.51	0.64	-53.0	24.9
NEW ENGLAND	1.30	0.37	0.24	0.25	-80.8	2.0
NEW ROCKFORD	0.88	0.33	0.34	0.39	-56.1	13.8
NEW SALEM	0.54	0.44	0.33	0.31	-41.9	-4.5
NEW TOWN	0.26	0.16	0.19	0.16	-37.7	-14.1
PAGE	0.71	0.64	0.34	0.34	-51.8	1.3
PEMBINA	0.36	0.58	0.68	0.61	71.1	-9.7
POWERS LAKE	0.54	0.37	0.43	0.40	-26.7	-7.2
RAY	0.77	0.54	0.37	0.42	-45.1	15.2
RICHARDTON	0.75	0.72	0.68	0.30	-59.3	-55.2
ROLETTE	0.66	0.30	0.23	0.31	-53.0	34.5
STEELE	0.96	0.46	0.96	0.89	-7.4	-8.0
STRASBURG	0.54	0.47	0.47	0.44	-19.5	-6.5
TOWNER	0.43	0.30	0.48	0.50	15.2	4.5
TURTLE LAKE	0.42	0.26	0.19	0.24	-42.1	27.5
UNDERWOOD	0.65	0.29	0.51	0.69	5.4	36.2
VELVA	0.68	0.49	0.59	0.69	1.3	15.9
WALHALLA	0.43	0.48	0.28	0.28	-34.8	0.6
WESTHOPE	0.78	0.33	0.38	0.43	-45.4	12.2
WIMBLEDON	1.29	1.07	0.50	0.76	-40.9	54.1
WYNDMERE	1.17	0.88	0.42	0.41	-64.9	-2.2
AVERAGE	0.78	0.54	0.45	0.47	-39.7	4.3
<b>HAMLETS</b>						
ADAMS	0.32	0.20	0.18	0.21	-34.0	18.7
ANETTA	0.41	0.27	0.26	0.30	-27.1	16.9
BISBEE	0.48	0.30	0.21	0.21	-56.1	1.2
BOWBELLS	0.47	0.26	0.24	0.23	-51.4	-4.0
CARSON	0.49	0.39	0.28	0.27	-45.6	-3.9
CENTER	0.36	0.33	0.25	0.28	-22.8	10.9
COLUMBUS	0.92	0.40	0.18	0.20	-77.8	14.8
DRAKE	0.56	0.17	0.28	0.26	-53.9	-8.7
EDMORE	0.43	0.23	0.11	0.13	-70.5	20.4
FAIRMOUNT	0.37	0.32	0.32	0.38	2.6	16.8
FORDVILLE	0.65	0.37	0.18	0.17	-73.4	-2.7
GACKLE	0.82	0.23	0.19	0.20	-75.8	4.1
HALLIDAY	0.35	0.23	0.18	0.17	-52.2	-7.5

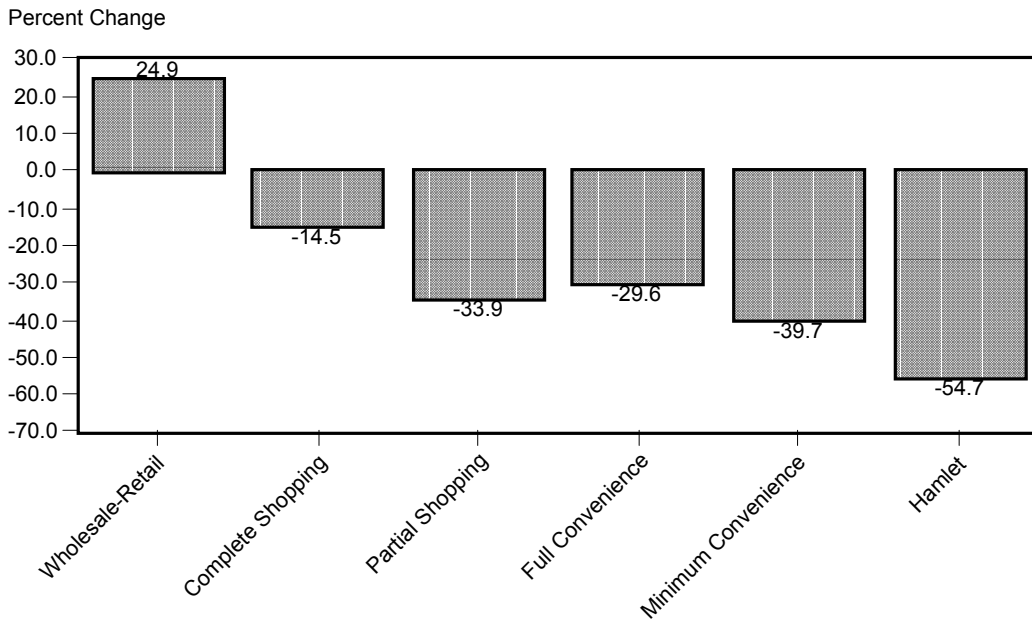
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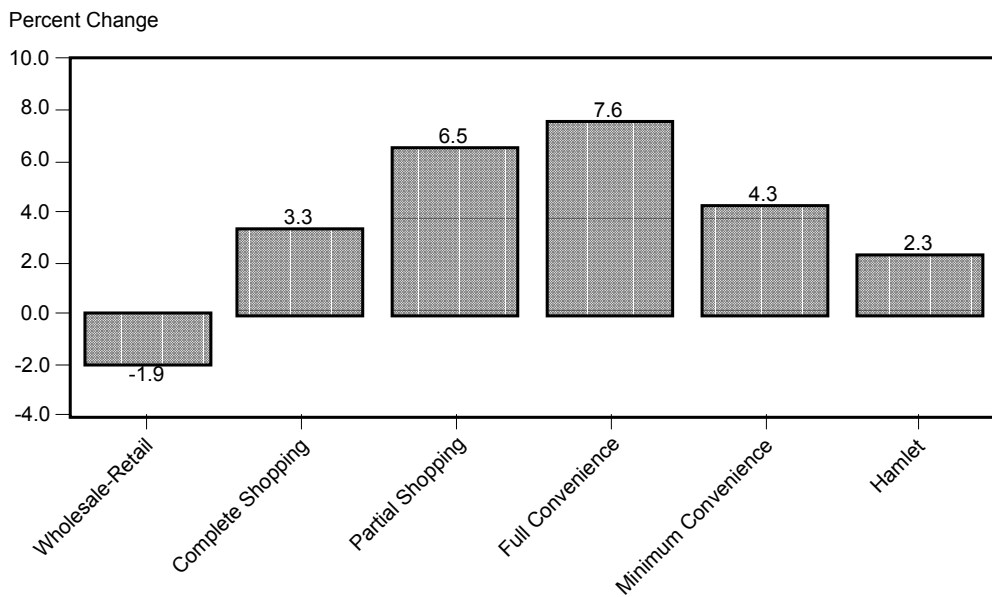
Table 8. continued

City	Pull Factors				Percentage Change	
	1980	1990	1999	2000	1980 to 2000	2000 to 2000
<b>HAMLETS Cont.</b>						
HATTON	0.42	0.27	0.26	0.23	-45.4	-10.1
HAZELTON	0.30	0.29	0.43	0.46	55.1	6.8
HOPE	1.55	0.26	0.28	0.30	-80.6	7.8
LIGNITE	0.57	0.40	0.56	0.50	-11.0	-9.2
MAX	0.23	0.18	0.10	0.11	-51.2	17.6
MCCLUSKY	1.28	0.51	0.61	0.62	-51.5	1.2
MEDINA	0.32	0.14	0.14	0.10	-68.5	-30.7
MUNICH	0.90	0.36	0.19	0.22	-75.7	13.9
NECHE	0.25	0.36	0.23	0.23	-6.7	-0.5
NEW LEIPZIG	1.37	0.65	0.55	0.54	-60.7	-2.0
PARSHALL	0.30	0.15	0.13	0.13	-57.9	-0.7
PETERSBURG	0.68	0.17	0.16	0.12	-82.3	-25.5
REGENT	1.22	0.60	0.30	0.33	-72.6	9.9
RUTLAND	0.33	0.20	0.19	0.15	-53.6	-20.6
SCRANTON	0.37	0.33	0.35	0.40	9.0	15.3
SHERWOOD	0.88	0.50	0.60	0.62	-29.2	3.7
SHEYENNE	1.05	0.40	0.23	0.27	-74.6	17.1
TOLNA	0.38	0.22	0.15	0.16	-58.5	8.6
WILTON	0.18	0.11	0.19	0.19	10.6	1.2
AVERAGE	0.60	0.31	0.27	0.27	-54.7	2.3

Source: Leistritz and Wanzek. 1993. North Dakota 1993: Patterns and Trends in Economic Activity. Fargo: Department of Agricultural Economics, NDSU; Coon and Leistritz. 2002. Updated Pull Factors For North Dakota, unpublished data, Fargo: Department of Agribusiness and Applied Economics, NDSU.



**Figure 37. Percentage Change in Pull Factor for North Dakota Cities by Trade Center Classification, 1980-2000**



**Figure 38. Percentage Change in Pull Factor for North Dakota Cities by Trade Center Classification, 1999-2000**

## ***Financial Indicators***

New and existing businesses most often turn first to local commercial banks to meet their credit needs. Consequently, the strength of the banking sector is of great interest to economic developers and policy makers.

Three indicators of the strength of the state's banking sector are presented in Table 9. Total bank assets, the ratio of bank loans to deposits, and the percentage of nonperforming loans measure different dimensions of the financial sector's strength. Total bank assets in the state as of December 31, 2001, were \$17.9 billion. Region 5 accounted for 62 percent of this total, followed by Regions 4 and 7. Cass County alone accounted for about 60 percent. Figure 39 shows the banks' loan-to-deposit ratios for each county in the state.

Banks' loan-to-deposit ratios give an indication of their capacity to extend more loans to qualified borrowers. Statewide, the loan-to-deposit ratio averaged about 97 percent, with metro areas generally having higher ratios (106 percent) (Figure 40). Adjacent counties had the lowest loan-to-deposit ratios (77 percent). Loan-to-deposit ratios reported by the state's rural banks were 79.6 percent. Loan-to-deposit ratios have risen significantly since the previous version of this report. North Dakota's ratio has risen by nearly 27 percent between 1996 and 2001. Each of the areas have increased their ratio, with the metro banks having the largest change. This may indicate that metro banks are becoming more willing to make additional credit available to qualified borrowers.

The percentage of nonperforming loans is an indication of the extent of an area's residents' and businesses' (and their lenders') financial stress. Nonperforming loans as a percent of total loans averaged 1.1 percent statewide, ranging from a high of 6.0 percent in Sheridan County to 0.0 percent in Divide, McHenry, Emmons, and Golden Valley counties (Table 9).

**Table 9. North Dakota Key Financial Indicators, and Percentage of Females in the Workforce, Selected Years**

Area	Financial Indicators, 2001*			Percent of Females in Workforce 2000
	Total Assets	Bank Loans to Deposits	Non-Performing Loans	
	- \$000 -	- % -	- % -	- % -
Divide	48,250	50.5	0.0	49.3
McKenzie	495,706	93.0	0.7	54.8
Williams	330,710	74.2	2.8	59.9
REGION 1	874,666	83.6	1.4	58.0
Bottineau	174,952	54.7	1.2	51.4
Burke	22,967	89.3	1.2	50.9
McHenry	26,289	59.6	0.0	50.9
Mountrail	133,979	70.4	2.6	53.8
Pierce	40,821	37.0	0.4	52.5
Renville	25,656	79.6	2.6	56.1
Ward	743,681	79.4	1.4	63.0
REGION 2	1,168,345	73.6	1.5	59.1
Benson	87,840	81.5	0.7	51.8
Cavalier	175,719	82.2	2.4	51.3
Eddy	a	a	a	49.9
Ramsey	410,494	96.4	2.8	60.9
Rolette	162,099	57.2	3.9	56.6
Towner	74,084	72.4	0.3	54.3
REGION 3	910,236	83.4	2.5	55.9
Grand Forks	1,066,012	90.5	1.0	67.0
Nelson	85,545	55.6	1.7	51.0
Pembina	258,953	78.7	2.2	54.7
Walsh	165,249	80.8	2.4	58.2
REGION 4	1,575,759	85.3	1.4	63.9
Cass	10,685,676	109.6	0.8	71.0
Ransom	56,413	97.9	0.7	57.8
Richland	39,953	71.2	0.4	60.9
Sargent	99,656	67.7	0.3	56.7
Steele	78,063	70.0	1.0	56.2
Trails	150,068	83.3	1.3	56.6
REGION 5	11,109,829	108.1	0.8	68.2

- Continued -

Table 9. continued

Area	Financial Indicators, 2001*			Percent of Females in Workforce 2000
	Total Assets	Bank Loans to Deposits	Non- Performing Loans	
	- \$000 -	- % -	- % -	- % -
Barnes	85,682	78.9	2.1	56.3
Dickey	a	a	a	58.6
Foster	a	a	a	57.6
Griggs	172,281	89.7	1.3	53.3
LaMoure	104,734	101.8	0.1	51.1
Logan	60,234	63.2	1.9	45.9
McIntosh	95,275	74.6	2.6	47.5
Stutsman	119,967	84.8	1.2	60.4
Wells	99,451	72.7	1.3	49.0
REGION 6	737,624	82.7	1.4	56.0
Burleigh	517,590	79.8	0.8	68.1
Emmons	62,488	76.1	0.0	53.0
Grant	46,728	83.6	0.4	50.8
Kidder	50,094	84.2	0.6	47.2
McLean	140,078	70.9	2.4	51.4
Mercer	150,993	69.3	1.3	58.6
Morton	202,844	82.9	0.6	64.2
Oliver	a	a	a	55.3
Sheridan	23,076	67.0	6.0	43.9
Sioux	a	a	a	57.0
REGION 7	1,193,891	77.9	1.0	63.5
Adams	a	a	a	53.2
Billings	a	a	a	57.1
Bowman	87,505	81.4	1.7	61.8
Dunn	a	a	a	59.6
Golden Valley	26,428	64.4	0.0	54.3
Hettinger	39,199	84.1	0.7	45.7
Slope	a	a	a	52.2
Stark	165,310	83.1	1.0	61.3
REGION 8	318,442	81.1	1.1	58.9
NORTH DAKOTA	17,888,792	96.5	1.1	62.4

\*Data as of June 30, 2001.

a Data were not available.

Sources: U.S. Department of Commerce, Bureau of Census Web Site. 2002. 2000 Summary File 3 (SF3.) Table 43. Washington, D.C. Federal Reserve Bank of Minneapolis Internet Web Site, 2001. Ninth Federal Reserve District Bank Directory. Minneapolis, Minnesota.

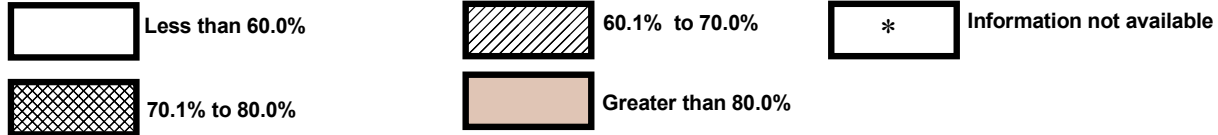
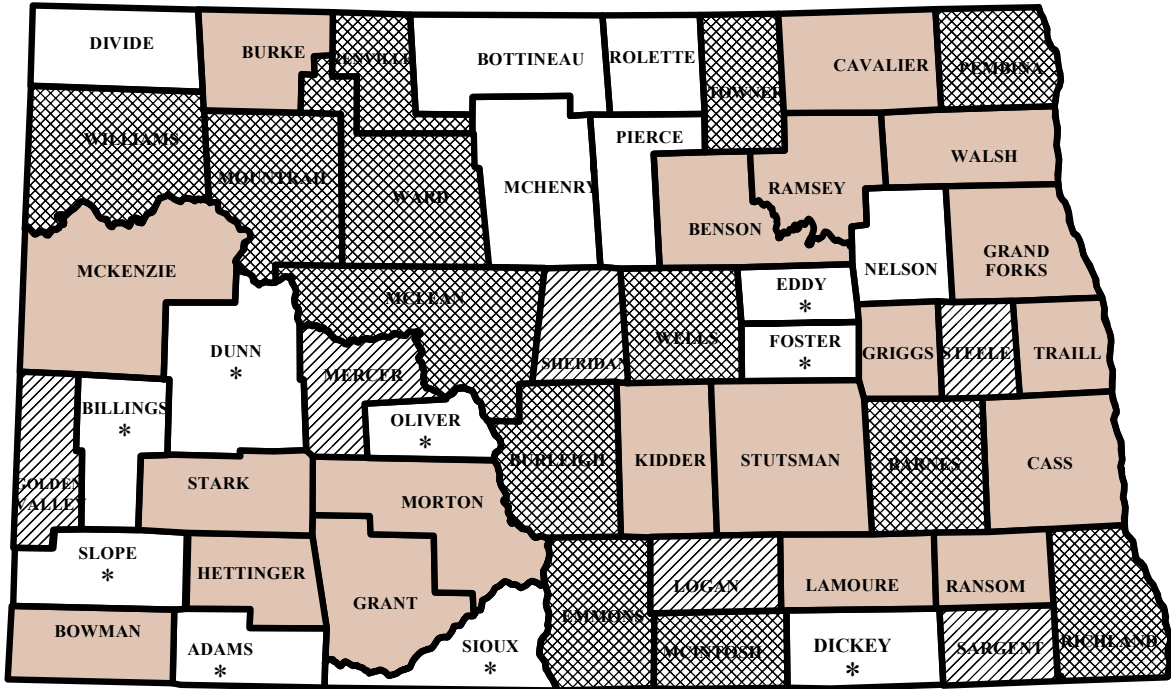
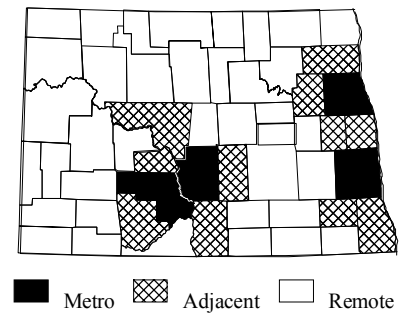
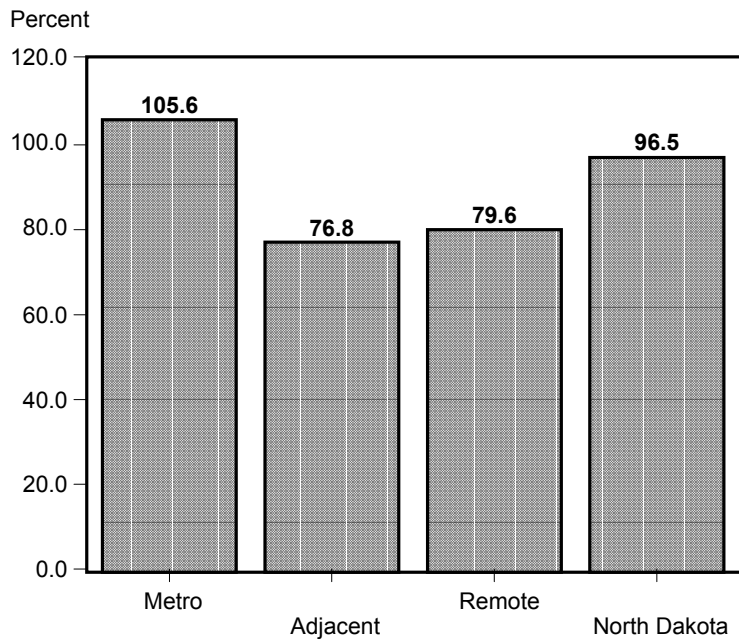
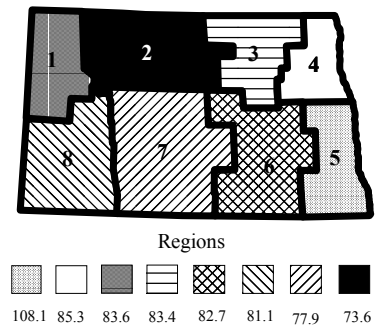
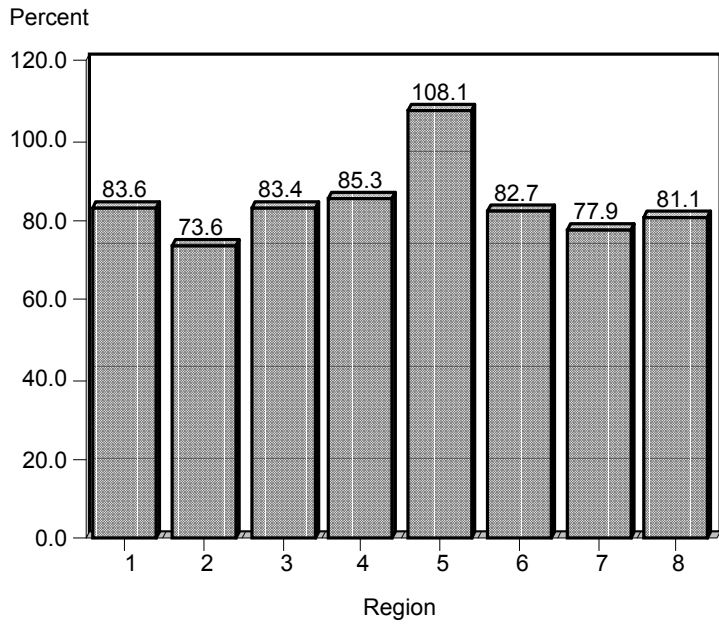


Figure 39. North Dakota Percentage of Bank Loans to Deposits, 2001



**Figure 40. North Dakota Percentage of Bank Loans to Deposits by Region and Area, 2001**

### *Females in the Workforce*

One indication of "survivability" is the availability of employment for both spouses; in short, the potential for households to have two wage earners. Statewide, 62 percent of the females 16 years of age and older were in the workforce in 2000 (Table 9). This participation rate has continued to increase, being up from the 32.7 percent in 1969, 38.5 percent in 1979, and 44.4 percent in 1989. Cass County ranked highest in percent of women in the workforce, 71 percent, and Sheridan County lowest, with only 44 percent of the females in the workforce. Figure 41 shows that female participation in the work force tends to be higher in counties with trade centers (i.e., employment opportunities) and counties near those with trade centers. Figure 42 reinforces this trend, with Region 4 (Grand Forks) having a 63.9 percent female participation, Region 5 (Fargo) 68.2 percent, and Region 7 (Bismarck) 63.5 percent in 2000. Regions 1, 2, 3, 6, and 8 all have female work force participation rates ranging from 55.9 percent to 59.4 percent. Figure 42 also shows that the nonmetropolitan areas have lower percentages of females in the workforce than in the metro areas.

The data provided on women in the workforce do not take into account whether the jobs taken were full-time or part-time positions, nor does it provide an indication of the relative wages earned by women in their positions. However, from the data presented, women are shown to be taking their places in the job market at a relatively uniform rate across the state. The greatest variation is seen among the counties, not across regions.



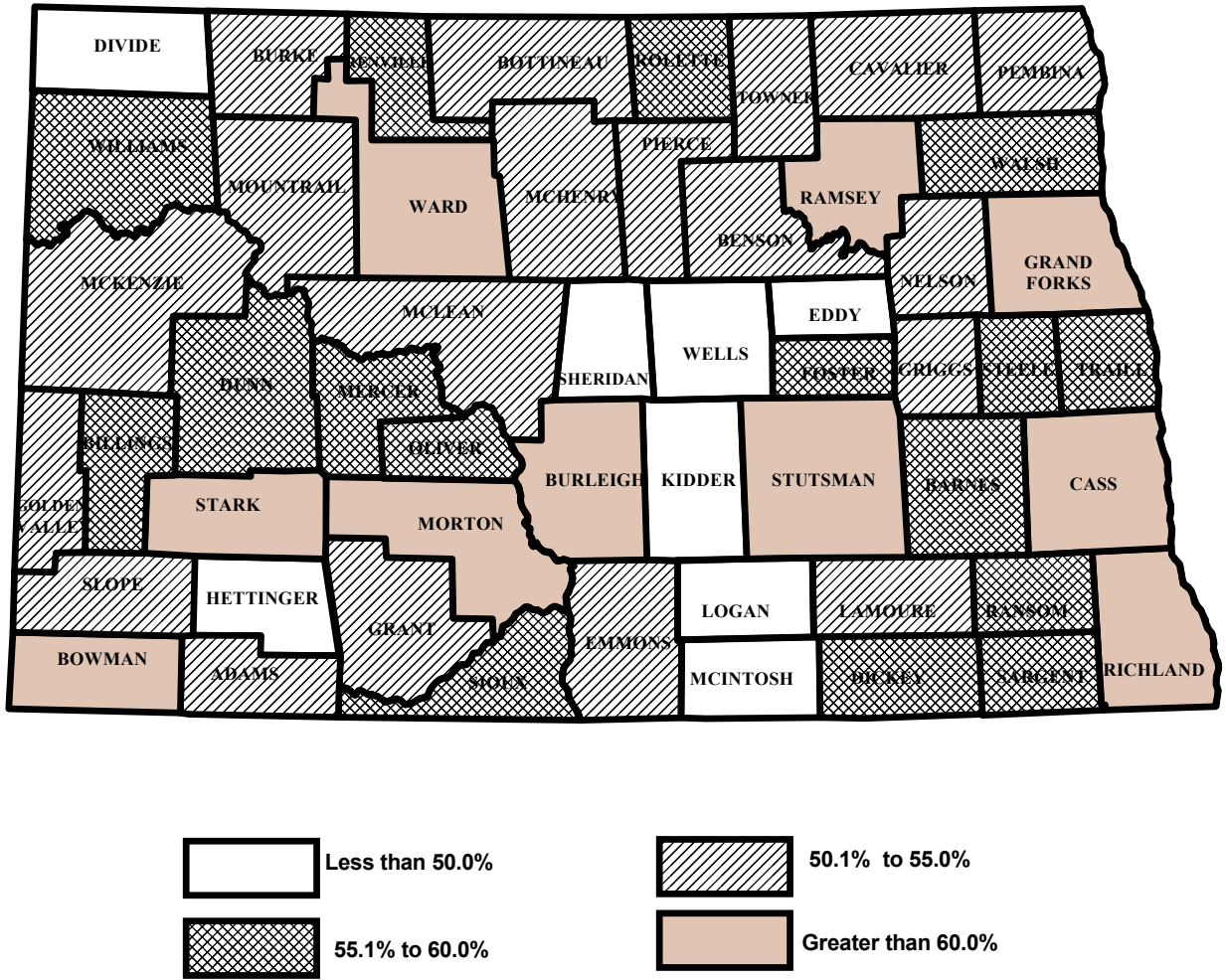
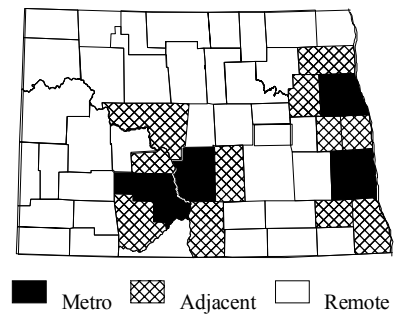
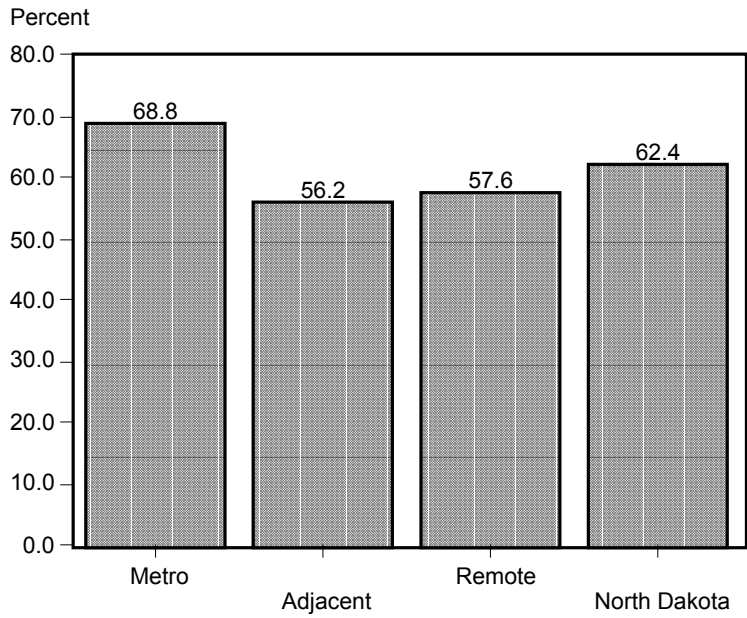
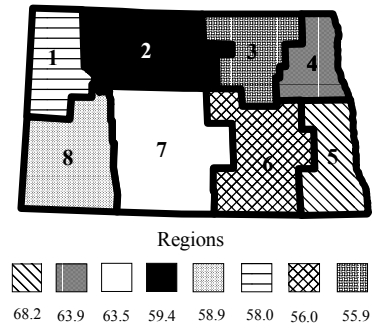
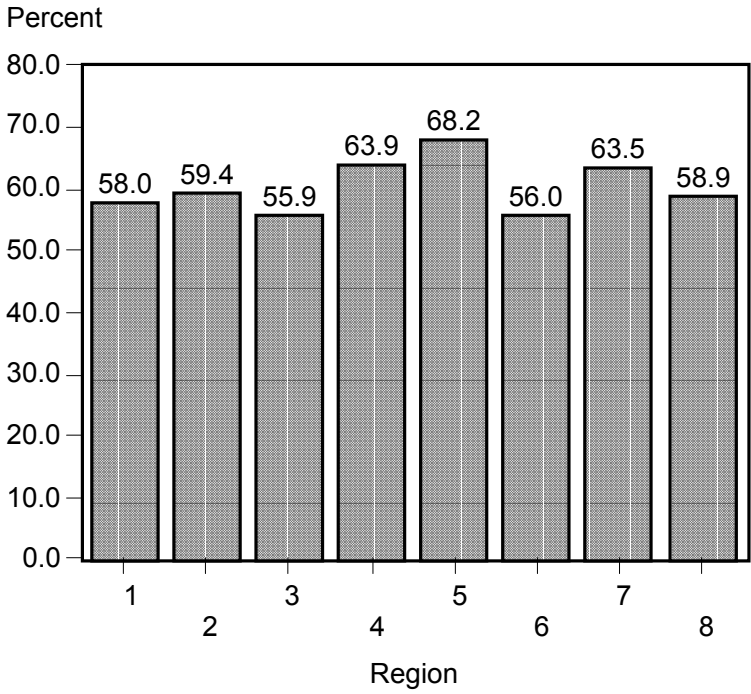


Figure 41. North Dakota Percentage of Females in the Workforce, 2000



**Figure 42. North Dakota Percentage of Females in the Workforce by Region and Area, 2000**

## ***Policy Implications***

A review of key economic indicators points out the consequences of the state's dependency on one or two basic sectors. North Dakota's traditional dependence on agriculture and the energy industry resulted in a downturn in the state's economy during the 1980s. At that time, international economic forces led to a major decrease in prices for both grains and oil. While the entire state was affected by these adverse trends, areas with more diversified economic bases did much better than those that relied most heavily on agriculture and/or energy.

Specifically, the regions with the strongest economic performance (Regions 5, 4 and 7, dominated, respectively, by the regional centers of Fargo, Grand Forks, and Bismarck-Mandan) all drew their growth from several major sectors. While the services sector was the largest source of job growth in each region (accounting for 36 percent of employment growth in Region 5, 39 percent in Region 4, and 46 percent in Region 7), Region 5 also gained almost 4,800 jobs in the retail sector and more than 3,900 jobs in manufacturing. The retail trade and government sectors were sources of substantial employment growth in Region 7, with manufacturing being of major importance in Region 4.

Growth in manufacturing employment from 1990 to 2000 largely offset the jobs lost in the mining sector on a statewide basis, but the distribution of the jobs led to substantial shifts in employment and population within the state. Agricultural processing has taken on a level of importance with several cooperative efforts currently in operation, and more are in planning stages. Exported services, exemplified by telemarketing and data processing, have been another source of economic growth and diversification for some communities in recent years.

A second trend revealed by these indicators is a tendency toward centralization of retail trade and service activities into the state's largest trade centers. In particular, the state's four wholesale-retail centers have increased their share of total retail sales and associated employment substantially over the past decade.

Looking toward the future, policy makers should be aware of the critical importance of further economic diversification. The patterns and trends of recent years suggest that agricultural processing, manufacturing, and exported services all have a potential to contribute to future growth. At the same time, the threat of reductions in such key economic activities as the U.S. Air Force bases reinforces the vulnerability of a region or state that is heavily dependent on a handful of major employers. Similarly, the increasing share of the state's sales to final demand that is accounted for by federal transfer payments could become a source of concern if pressures to reduce the federal deficit lead to reexamination of these programs. Economic development efforts, like the *Growing North Dakota* initiative and various efforts undertaken by the Regional Councils and local development organizations, offer the prospect of reducing the state's future vulnerability.

# Demographic

## DATA PRESENTATION

*Population, 1980-2000*

*Migration, 1980-1999*

*Population Age 65 and Over, 2000*

*Dependency Ratio, 2000*

*High School and College Graduates, 2000*

*2000-2001 High School Graduates Attending College*

*Population Less Than Age 18, 2000*

*City Populations and Trade Area Populations, 1970-2000*

*Population Projections, 2005-2020*

*Number of Farms, 1954-1997*

## SOURCES

Most data were derived from the decennial *Census of Population and Housing*, U.S. Bureau of the Census, Washington, D.C. (1980, 1990, and 2000). Migration rates were computed by the North Dakota State Data Center at using data from the Population Estimates of the U.S. Census Bureau. Population projections were calculated by the North Dakota State Data Center using a standard cohort-survival model. Projected Populations were from Rathge, et al., *North Dakota Population Projections: 2005 to 2020*, North Dakota State Data Center and Department of Agribusiness and Applied Economics, North Dakota State University. Trade Area Populations were from Leistritz and Wanzek, *North Dakota 1993: Patterns and Trends in Economic Activity*, Department of Agricultural Economics, North Dakota State University; and Coon and Leistritz 2000, *Trade Area Populations*, unpublished data, Department of Agribusiness and Applied Economics, NDSU. Farm numbers were from the *Census of Agriculture*.

## **Overview**

This section provides a look at the size, distribution, and composition of the state's population. First, the 1980, 1990 and 2000 populations are compared, and then one cause for the population change, migration, is examined.

The age distribution of the population provides useful information about the potential work force and the need for special services. One measure of age distribution is the dependency ratio. Because of the aging of the population, this report also takes a look at the distribution of elderly (i.e., persons age 65 or older).

Another important characteristic of the population is its level of education. This section of *The State of North Dakota* reports on the level of high school and college attainment. Also important to local decision makers is the number of children/youth who will need an education. Declining numbers of school-aged children in some counties will affect school planning policies quite differently than the increasing numbers of school children in others. Recent high school graduates, and the numbers of those going on to college are also provided. Farm numbers and the average farm size are also presented.

In addition, this section presents population projections through the year 2020. These projections, like all projections, are based on several assumptions about the future. *Thus, they should be regarded cautiously and used for planning only in conjunction with other indicators and projections.*

## **Population**

North Dakota lost 1.6 percent of its population between 1980 and 2000 (Table 10), but not all counties lost population (Figure 43). Population growth was concentrated in Cass and Burleigh counties. Smaller levels of growth were experienced in Sioux, Morton, Ward and Rolette counties. All other counties lost population except Grand Forks County which remained virtually unchanged. Region 6 experienced the greatest percentage loss (18.5 percent) followed by Region 1 (15.5 percent), and Region 8 (14.9 percent). Population losses also were experienced in Regions 2, 3, and 4, although not as large as the other declining regions. Only Regions 5 and 7 had population growth from 1980 to 2000. Although adjacent and remote counties lost a significant share of their population, the metro areas grew by 21.2 percent between 1980 and 2000. (Figure 44).

**Table 10. North Dakota Population, 1980, 1990, and 2000 and Migration, 1980, 1990, and 1999; and Dependency Ratio, and Percentage of Population Age 65 and Over, 2000**

Area	Population			Percent Change 1980-2000	Net Migration						2000 Dependency Ratio <sup>b</sup>	2000 Percent Elderly
	1980	1990	2000		1980-1990		1980-1999		1990-1999			
					Total	Rate <sup>a</sup>	Total	Rate <sup>a</sup>	Total	Rate <sup>a</sup>		
DIVIDE	3,494	2,899	2,283	-34.7	-606	-17.3	-959	-27.4	-353	-12.2	49.8	29.5
MCKENZIE	7,132	6,383	5,737	-19.6	-1,808	-25.4	-2,878	-40.4	-1,070	-16.8	46.3	15.7
WILLIAMS	22,237	21,129	19,761	-11.1	-4,374	-19.7	-6,142	-27.6	-1,768	-8.4	42.7	16.5
REGION 1	32,863	30,411	27,781	-15.5	-6,788	-20.7	-9,979	-30.4	-3,191	-10.5	44.0	17.4
BOTTINEAU	9,239	8,011	7,149	-22.6	-1,417	-15.3	-1,899	-20.6	-482	-6.0	43.5	21.3
BURKE	3,822	3,002	2,242	-41.3	-846	-22.1	-1,513	-39.6	-667	-22.2	45.9	25.1
MCHENRY	7,858	6,528	5,987	-23.8	-1,436	-18.3	-1,840	-23.4	-404	-6.2	45.7	21.8
MOUNTRAIL	7,679	7,021	6,631	-13.6	-1,051	-13.7	-1,602	-20.9	-551	-7.8	45.8	17.7
PIERCE	6,166	5,052	4,675	-24.2	-1,246	-20.2	-1,552	-25.2	-306	-6.1	48.0	24.1
RENVILLE	3,608	3,160	2,610	-27.7	-568	-15.7	-826	-22.9	-258	-8.2	45.1	22.0
WARD	58,392	57,921	58,795	0.7	-9,134	-15.6	-14,106	-24.2	-4,982	-8.6	38.7	12.5
REGION 2	96,764	90,695	88,089	-9.0	-15,698	-16.2	-23,338	-24.1	-7,650	-8.4	41.0	15.4
BENSON	7,944	7,198	6,964	-12.3	-1,737	-21.9	-2,626	-33.1	-889	-12.4	49.6	13.5
CAVALIER	7,636	6,064	4,831	-36.7	-1,724	-22.6	-2,774	-36.3	-1,050	-17.3	47.5	22.9
EDDY	3,554	2,951	2,757	-22.4	-551	-15.5	-562	-15.8	-11	-0.4	48.3	24.7
RAMSEY	13,048	12,681	12,066	-7.5	-942	-7.2	-1,760	-13.5	-818	-6.5	43.8	18.8
ROLETTE	12,177	12,772	13,674	12.3	-1,628	-13.4	-1,842	-15.1	-214	-1.7	46.1	9.7
TOWNER	4,052	3,627	2,876	-29.0	-595	-14.7	-1,133	-28.0	-538	-14.8	47.9	23.3
REGION 3	48,411	45,293	43,168	-10.8	-7,177	-14.8	-10,697	-22.1	-3,520	-7.8	46.5	16.2
GRAND FORKS	66,100	70,683	66,109	0.0	-4,866	-7.4	-17,295	-26.2	-12,429	-17.6	33.4	9.6
NELSON	5,233	4,410	3,715	-29.0	-620	-11.8	-953	-18.2	-333	-7.6	49.5	27.4
PEMBINA	10,399	9,238	8,585	-17.4	-1,456	-14.0	-2,200	-21.2	-744	-8.1	44.4	19.5
WALSH	15,371	13,840	12,389	-19.4	-2,045	-13.3	-2,197	-14.3	-152	-1.1	44.2	19.3
REGION 4	97,103	98,171	90,798	-6.5	-8,987	-9.3	-22,645	-23.3	-13,658	-13.9	36.6	12.6
CASS	88,247	102,874	123,138	39.5	5,334	6.0	12,851	14.6	7,517	7.3	33.1	9.7
RANSOM	6,698	5,921	5,890	-12.1	-748	-11.2	-690	-10.3	58	1.0	46.2	21.2
RICHLAND	19,207	18,148	17,998	-6.3	-2,307	-12.0	-2,910	-15.2	-603	-3.3	39.9	15.3
SARGENT	5,512	4,549	4,366	-20.8	-1,068	-19.4	-1,379	-25.0	-311	-6.8	43.4	17.0
STEELE	3,106	2,420	2,258	-27.3	-732	-23.6	-932	-30.0	-200	-8.3	47.2	19.6
TRAILL	9,624	8,752	8,477	-11.9	-867	-9.0	-841	-8.7	26	0.3	44.0	19.1
REGION 5	132,394	142,664	162,127	22.5	-388	-0.3	6,099	4.6	6,487	4.5	35.4	11.5

- Continued -

Table 10. continued

Area	Population			Percent Change 1980- 2000	Net Migration						2000 Dependency Ratio <sup>b</sup>	2000 Percent Elderly
	1980	1990	2000		1980-1990		1980-1999		1990-1999			
					Total	Rate <sup>a</sup>	Total	Rate <sup>a</sup>	Total	Rate <sup>a</sup>		
BARNES	13,960	12,545	11,775	-15.7	-1,672	-12.0	-2,053	-14.7	-381	-3.0	42.1	19.8
DICKEY	7,207	6,107	5,757	-20.1	-1,205	-16.7	-1,496	-20.8	-291	-4.8	45.1	21.3
FOSTER	4,611	3,983	3,759	-18.5	-728	-15.8	-824	-17.9	-96	-2.4	47.6	21.4
GRIGGS	3,714	3,303	2,754	-25.8	-464	-12.5	-816	-22.0	-352	-14.7	48.3	25.7
LAMOURE	6,473	5,383	4,701	-27.4	-1,249	-19.3	-1,768	-27.3	-519	-9.6	47.6	23.4
LOGAN	3,493	2,847	2,308	-33.9	-749	-21.4	-1,242	-35.6	-493	-17.3	49.6	27.0
MCINTOSH	4,800	4,021	3,390	-29.4	-641	-13.4	-868	-18.1	-227	-5.6	53.6	34.2
STUTSMAN	24,154	22,241	21,908	-9.3	-3,326	-13.8	-4,576	-18.9	-1,250	-5.6	40.5	17.6
WELLS	6,979	5,864	5,102	-26.9	-1,174	-16.8	-1,549	-22.2	-375	-6.4	48.5	26.0
REGION 6	75,391	66,294	61,454	-18.5	-11,208	-14.9	-15,192	-20.2	-3,984	-6.0	44.3	21.4
BURLEIGH	54,811	60,131	69,416	26.6	-885	-1.6	1,368	4.3	3,253	5.4	37.2	12.4
EMMONS	5,877	4,830	4,331	-26.3	-1,133	-19.3	-1,608	-27.4	-475	-9.8	50.4	25.6
GRANT	4,274	3,549	2,841	-33.5	-927	-21.7	-1,547	-36.2	-620	-17.5	48.2	24.7
KIDDER	3,833	3,332	2,753	-28.2	-678	-17.7	-1,137	-29.7	-459	-13.8	47.2	24.0
MCLEAN	12,383	10,457	9,311	-24.8	-2,600	-21.0	-3,215	-26.0	-615	-5.9	44.2	20.4
MERCER	9,404	9,808	8,644	-8.1	-1,004	-10.7	-1,933	-20.6	-929	-9.5	43.3	14.3
MORTON	25,177	23,700	25,303	0.5	-3,827	-15.2	-3,751	-14.9	76	0.3	41.6	14.6
OLIVER	2,495	2,381	2,065	-17.2	-395	-15.8	-650	-26.1	-255	-10.7	41.6	14.2
SHERIDAN	2,819	2,148	1,710	-39.3	-735	-26.1	-1,182	-41.9	-447	-20.8	48.0	26.6
SIOUX	3,620	3,761	4,044	11.7	-700	-19.3	-956	-26.4	-256	-6.8	45.9	5.6
REGION 7	124,693	124,097	130,418	4.6	-12,884	-10.3	-13,611	-10.9	-727	-0.6	40.3	14.5
ADAMS	3,584	3,174	2,593	-27.7	-555	-15.5	-941	-26.3	-386	-12.2	47.2	24.1
BILLINGS	1,138	1,108	888	-22.0	-217	-19.1	-326	-28.6	-109	-9.8	40.9	16.0
BOWMAN	4,229	3,596	3,242	-23.3	-836	-19.8	-1,090	-25.8	-254	-7.1	45.9	21.8
DUNN	4,627	4,005	3,600	-22.2	-1,122	-24.2	-1,693	-36.6	-571	-14.3	44.8	17.4
GOLDEN VALLEY	2,391	2,108	1,924	-19.5	-483	-20.2	-852	-35.6	-369	-17.5	49.6	21.3
HETTINGER	4,275	3,445	2,715	-36.5	-1,020	-23.9	-1,521	-35.6	-501	-14.5	48.5	25.2
SLOPE	1,157	907	767	-33.7	-349	-30.2	-427	-36.9	-78	-8.6	43.2	17.9
STARK	23,697	22,832	22,636	-4.5	-4,240	-17.9	-5,556	-23.4	-1,316	-5.8	41.0	15.5
REGION 8	45,098	41,175	38,365	-14.9	-8,822	-19.6	-12,406	-27.5	-3,584	-8.7	43.2	17.8
NORTH DAKOTA	652,717	638,800	642,200	-1.6	-71,952	-11.0	-101,769	-15.6	-29,817	-4.7	39.8	14.7

<sup>a</sup>Rate of migration is number of net migrants per hundred population

<sup>b</sup>Percent of county population less than 18 or greater than 64

Source: U.S. Department of Commerce, Bureau of the Census. 1980, 1990, and 2000 Decennial Censuses of Population and Housing; U.S. Department of Commerce, Bureau of the Census. U.S. Department of Commerce, Bureau of the Census. 2001. 2000 Census: Summary File 1.

Olson, Karen. 2002. Net Migration for North Dakota by County and Region, unpublished data. State Data Center, North Dakota State University.

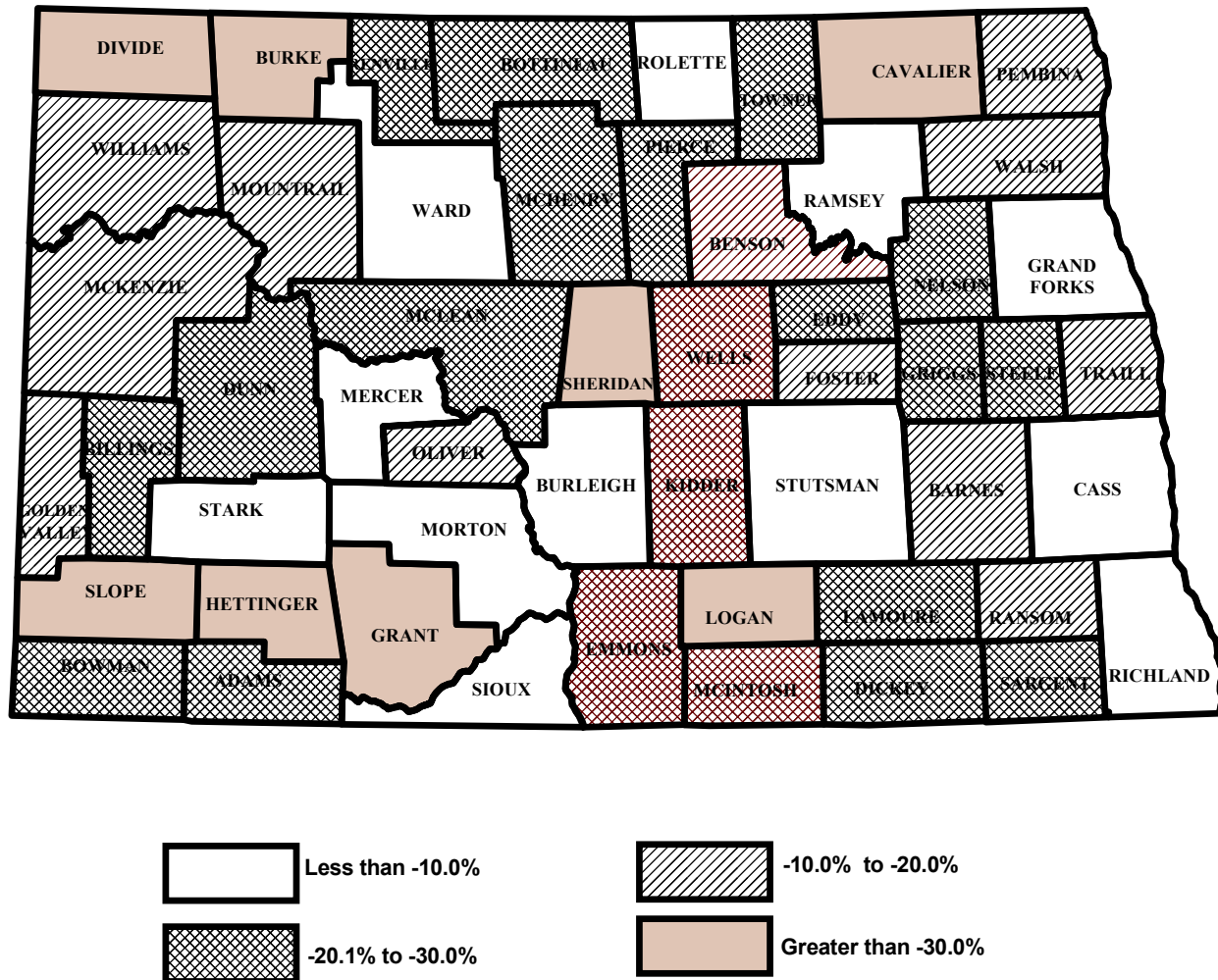
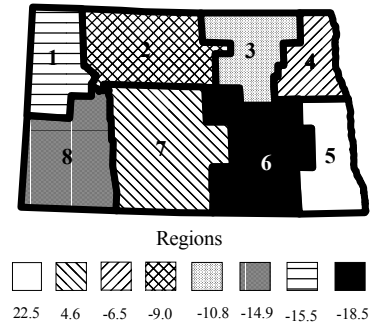
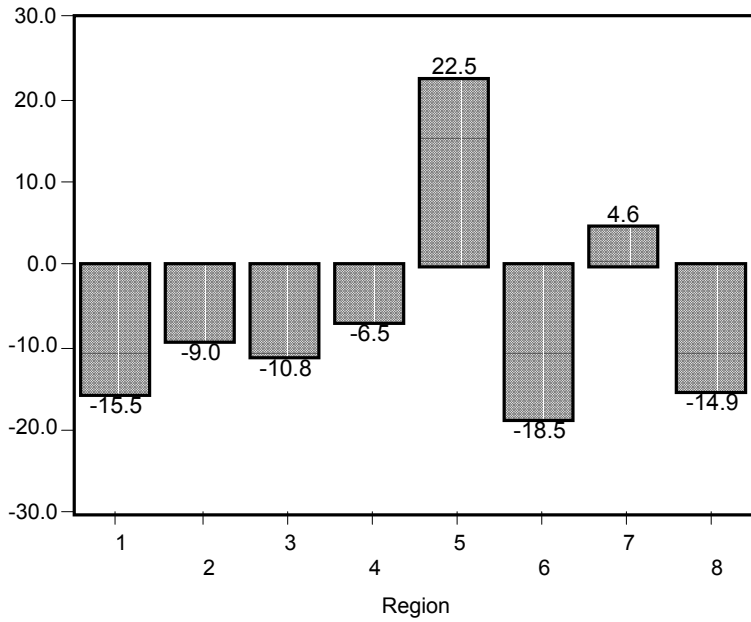


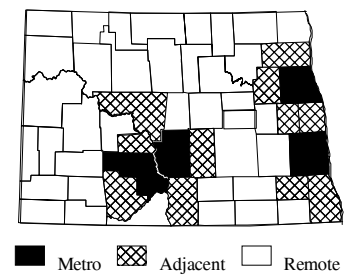
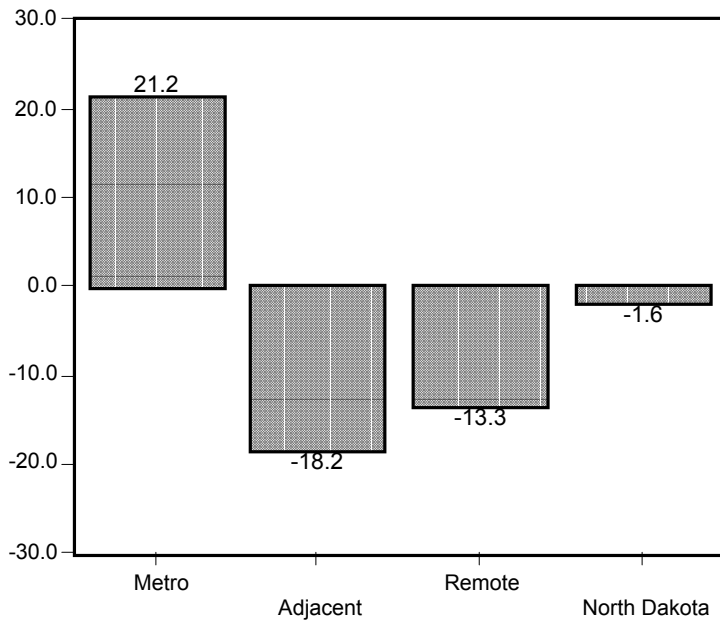
Figure 43. North Dakota Population Change, 1980-2000



Percent Change



Percent Change



**Figure 44. North Dakota Population Change by Region and Area, 1980-2000**

## ***Migration***

Any population change that is not due to births or deaths is due to migration. All counties in the state, except Cass and Burleigh, experienced net out-migration for the 1980-1999 period (Figure 45). (Data to calculate migration rates to 2000 were not available at the time this report was published.) This means that more people moved out of these counties than moved in between 1980 and 1999 (Figure 46). Out-migration was highest in Regions 1 and 8 for the 1980-1999 period. Short-term migration (1990-1999) has a very similar pattern, but the migration rate has declined (Figure 47); Cass and Burleigh counties have positive migration; out-migration is largest for Regions 1 and 4; and Region 5 was the only one with significant in-migration (Figure 48). Long- and short-term migration for Region 5 was essentially the same rate (4.6 and 4.5 persons per 100 population). Adjacent and remote counties had rather large out-migration rates for the 1980-1999 period, a time when metro counties had small net out-migration. This trend is similar for the short-term, but rates have been reduced to about one-third the 1980-1999 rates. The large-scale out-migration of the 1980s appears to have slowed, although the trend continued throughout the 1990s. Loss of population due to migration is troubling, because the persons who choose to migrate are generally young adults who are better educated than the general population, and many of whom are active community leaders.

## ***Dependency Ratio***

Another indicator of the effects of out-migration of the younger, working age population is the dependency ratio. The dependency ratio is the percentage of the population under age 18 or over age 64--persons generally considered not to be members of the labor force. Emmons and McIntosh counties each had dependency ratios in 2000 over 50.0 percent, meaning over half of their population was outside the labor force ages of 18 to 64 (Figure 49). Regions 5 and 4 had the lowest dependency ratios, 35.4 and 36.6 percent, respectively (Figure 50). As might be expected, the metro counties had the lowest dependency ratio (35 percent) among the three types of areas. Nonmetro adjacent counties and the remote counties had nearly identical dependency ratios of 44 and 43 percent, respectively.

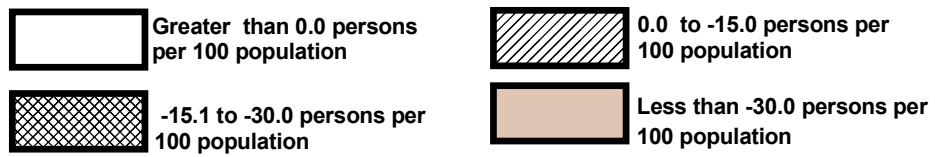
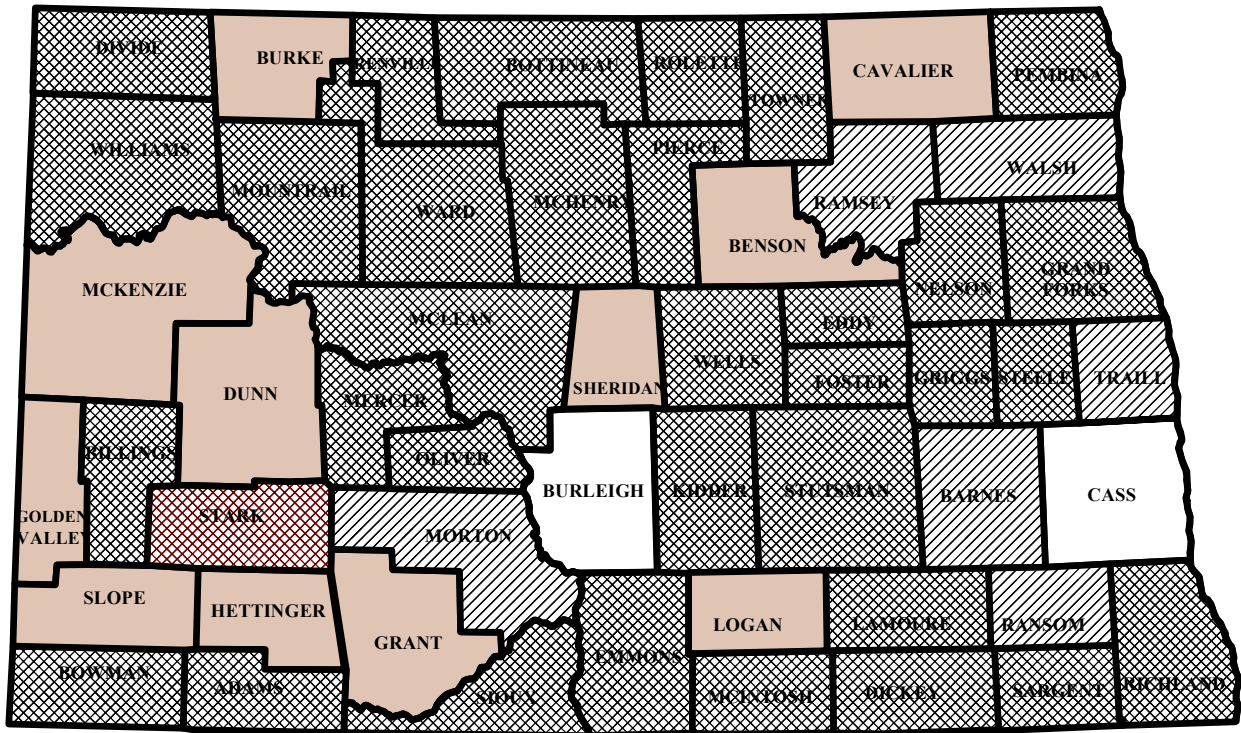
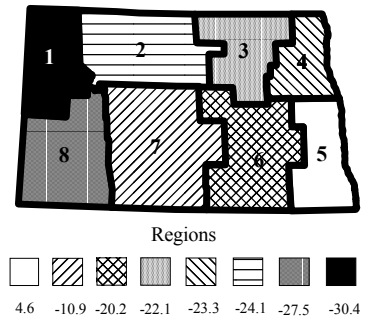
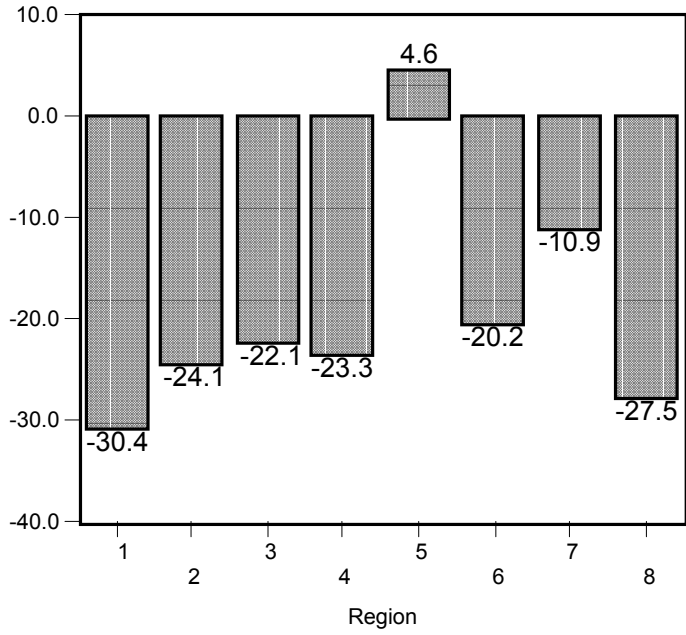
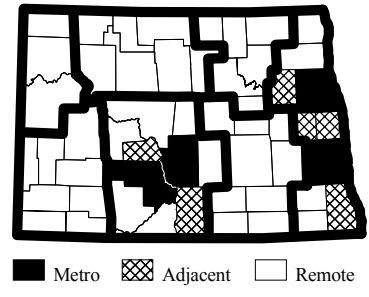
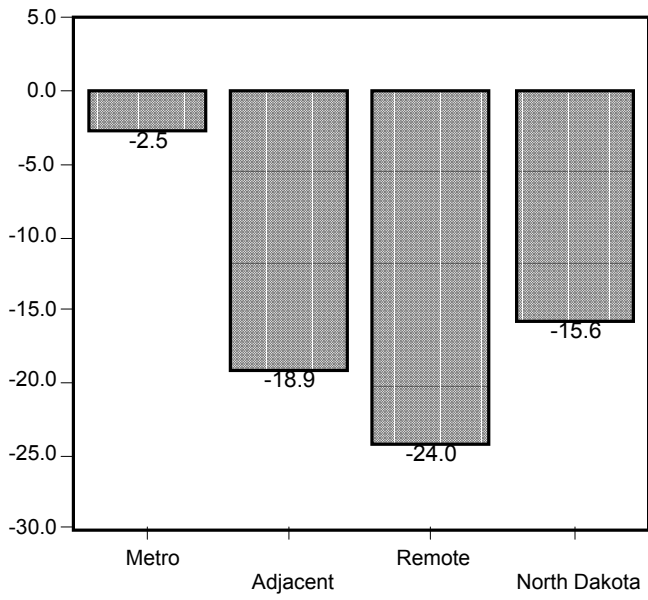


Figure 45. North Dakota Net Migration, 1980-1999

Persons Per 100 Population



Persons Per 100 Population



**Figure 46. North Dakota Net Migration by Region and Area, 1980-1999**

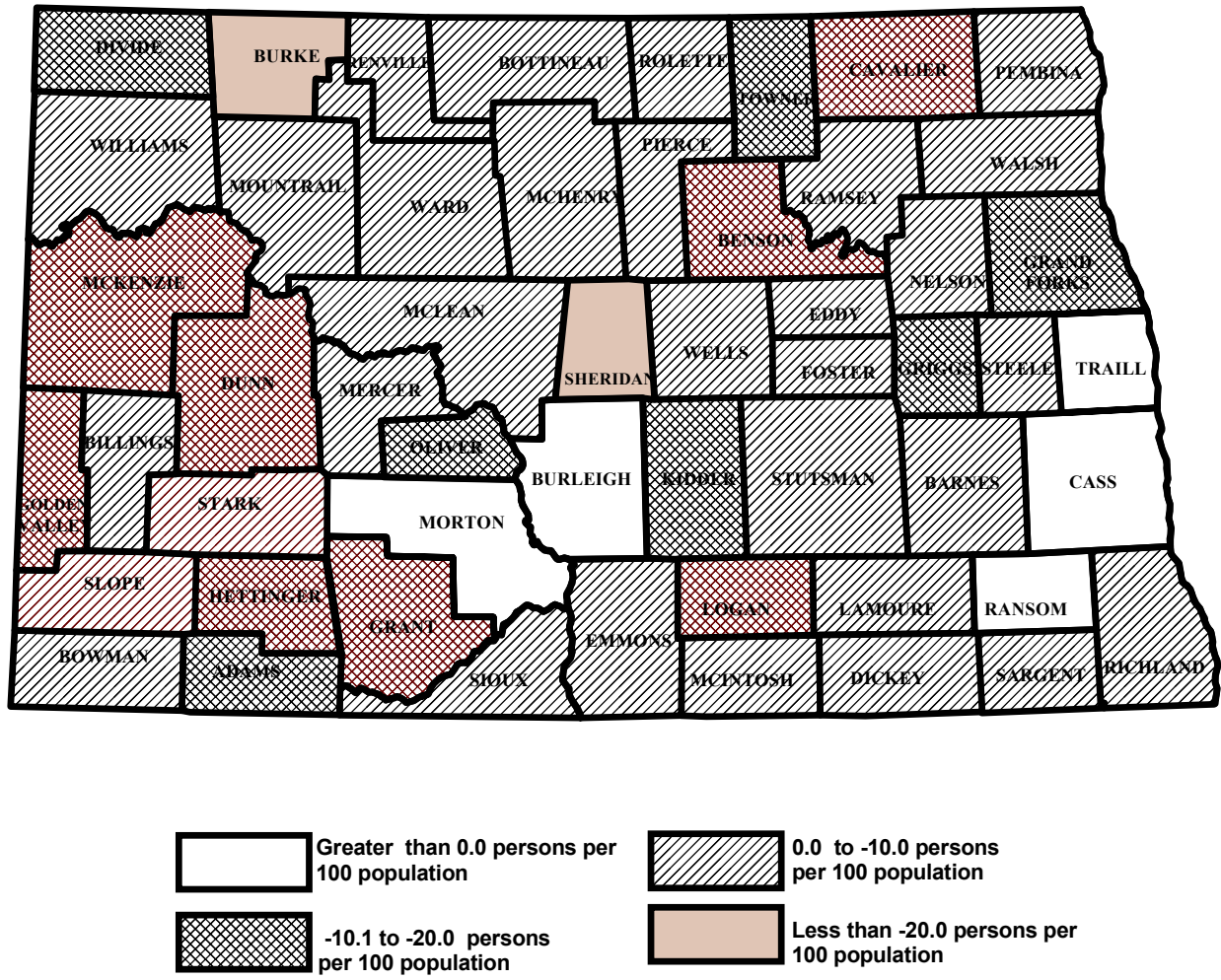
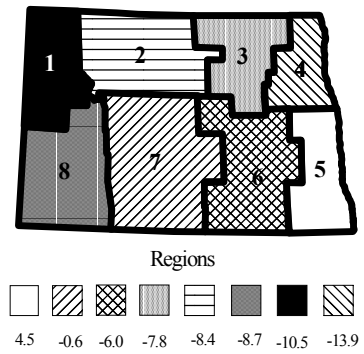
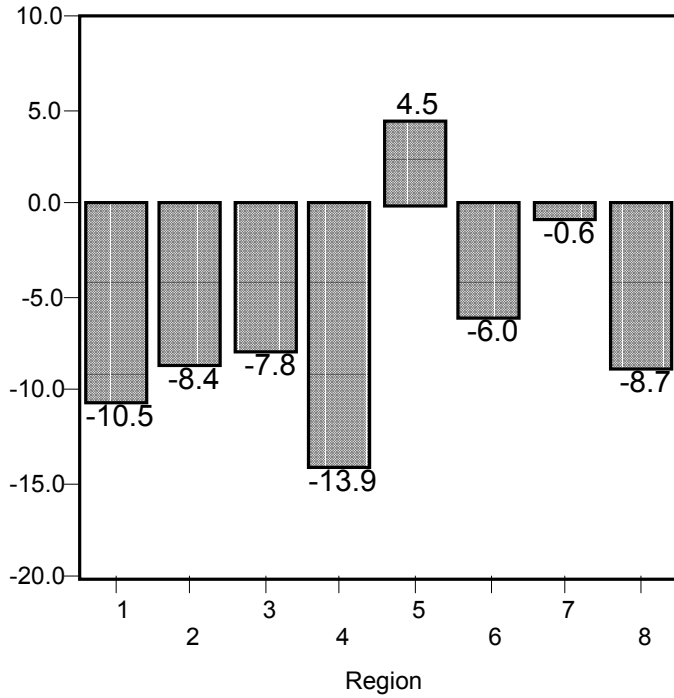
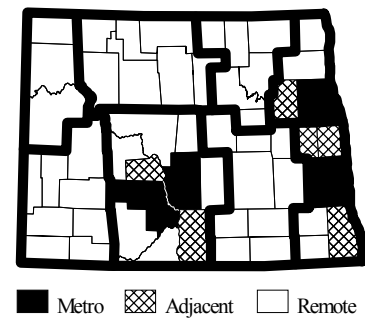
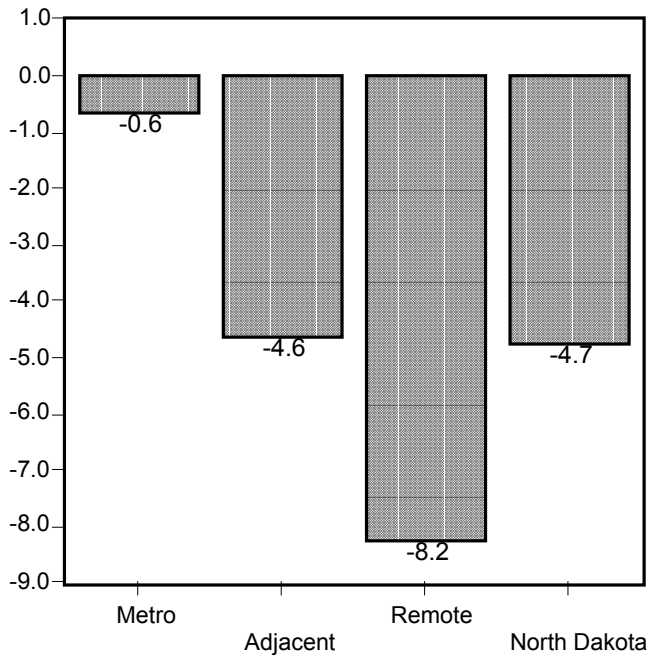


Figure 47. North Dakota Net Migration, 1990-1999

Persons Per 100 Population



Persons Per 100 Population



**Figure 48. North Dakota Net Migration by Region and Area, 1990-1999**

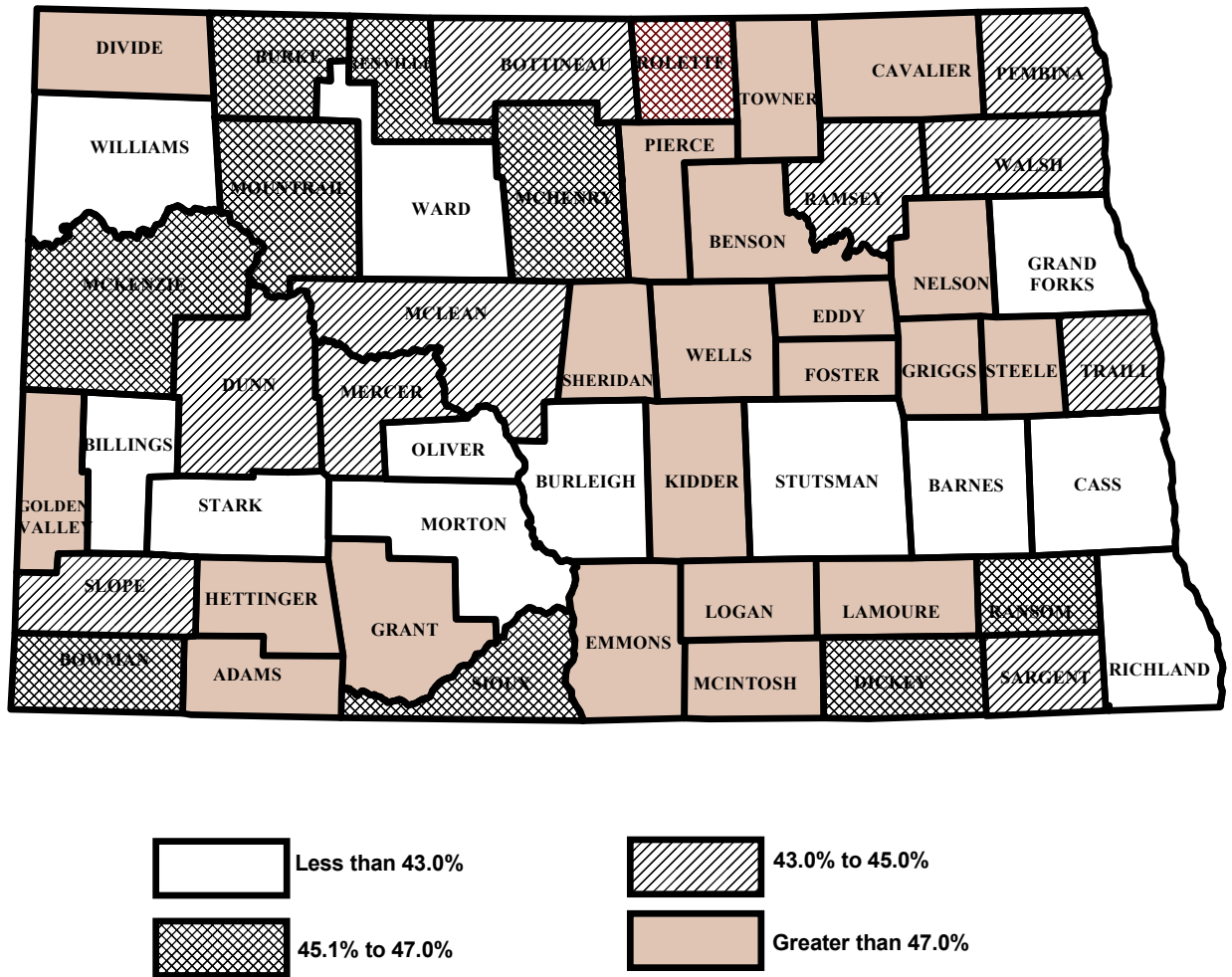
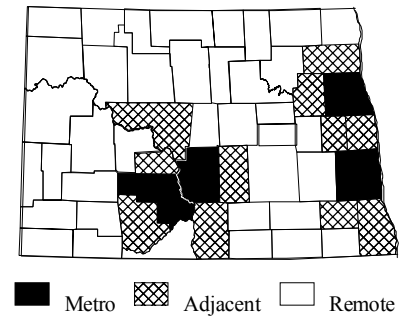
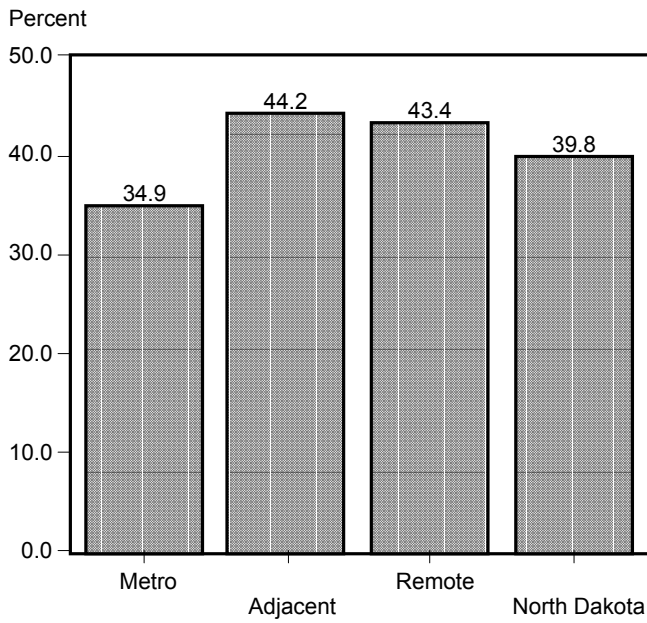
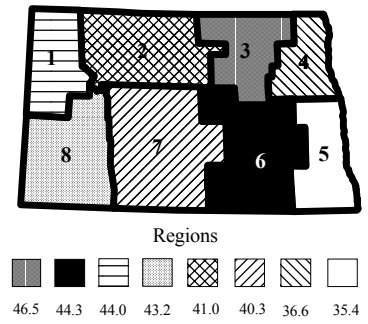
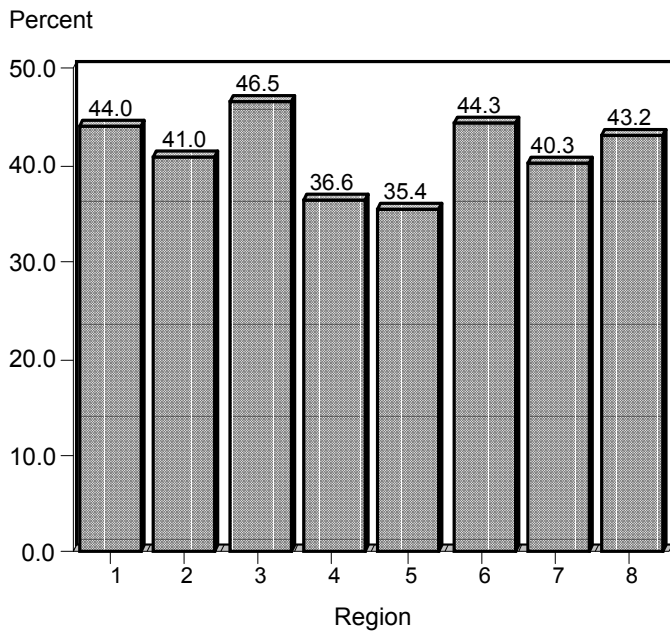


Figure 49. North Dakota Dependency Ratio, 2000



**Figure 50. North Dakota Dependency Ratio by Region and Area, 2000**



## The Elderly

McIntosh County had the largest percent of elderly (age 65 and older) persons (34.2 percent) in the state, followed by Divide (29.5 percent) and Nelson (27.4 percent) counties (Figure 51). Sioux County had the state's lowest percentage (only 5.6 percent) in that age group. Nonmetro adjacent and remote counties had higher percentages of persons aged 65 and older (20 percent and 17 percent, respectively) compared to the 11 percent for the metro areas (Figure 52). Over 21 percent of Region 6's population is elderly, compared to 13 percent for Region 4 and 12 percent for Region 5. The U.S. Air Force Base in Grand Forks and the University of North Dakota, in Region 4, moderate the effect of the aged population. Region 5 has the North Dakota State University among other educational and employment opportunities.

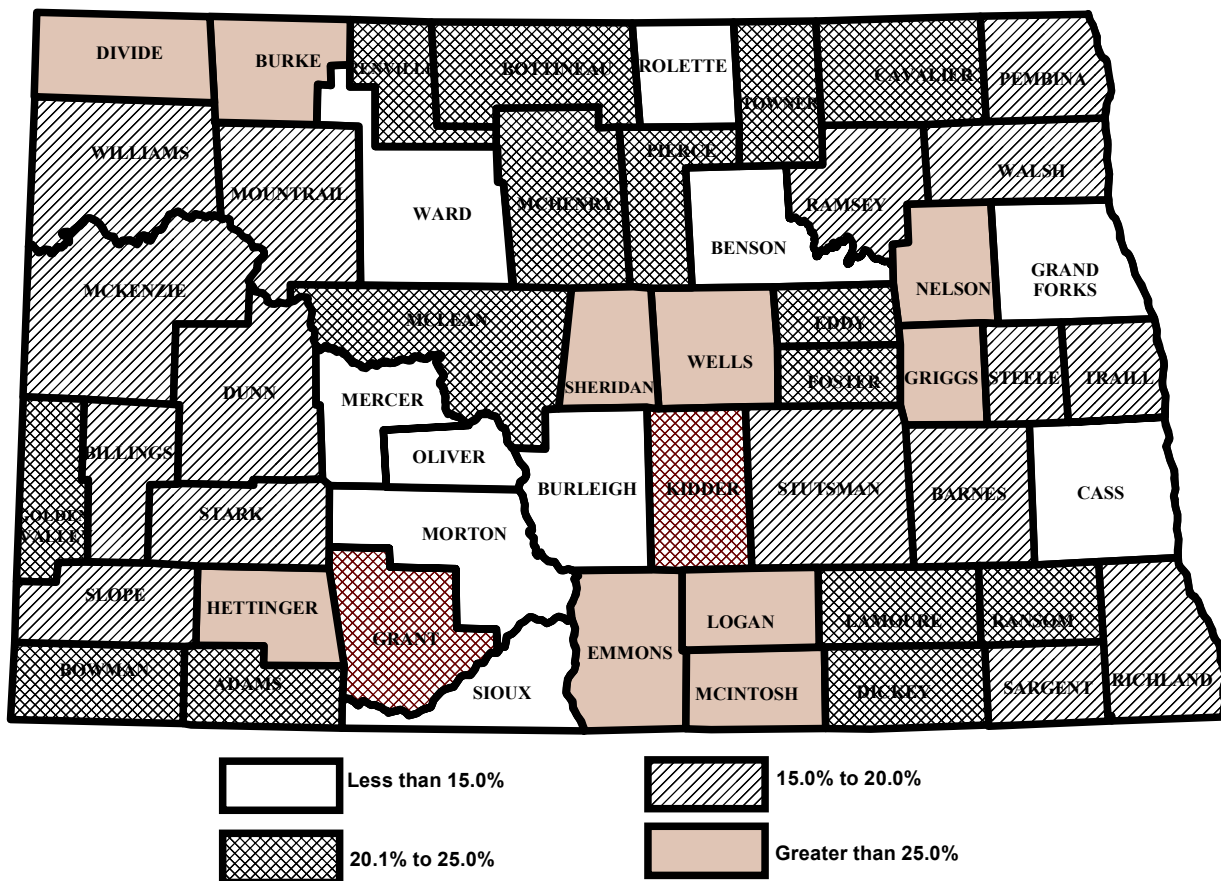
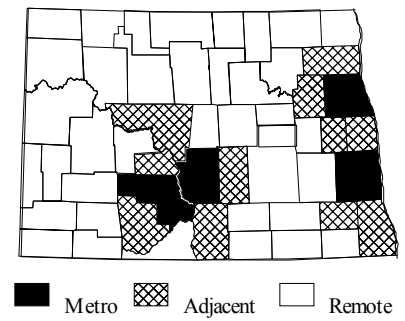
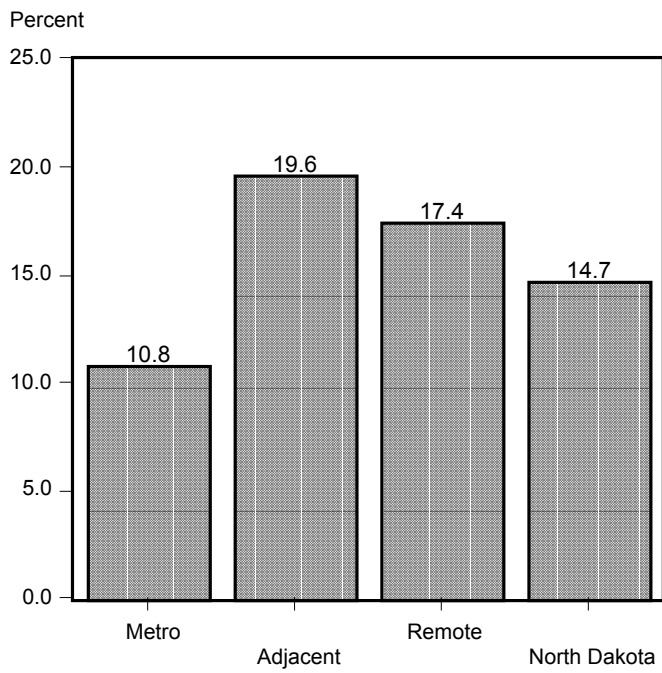
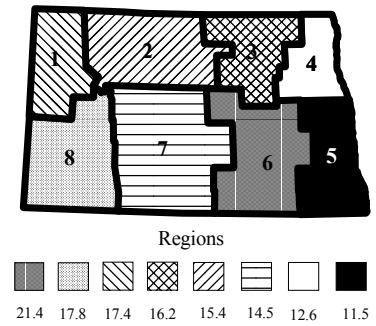
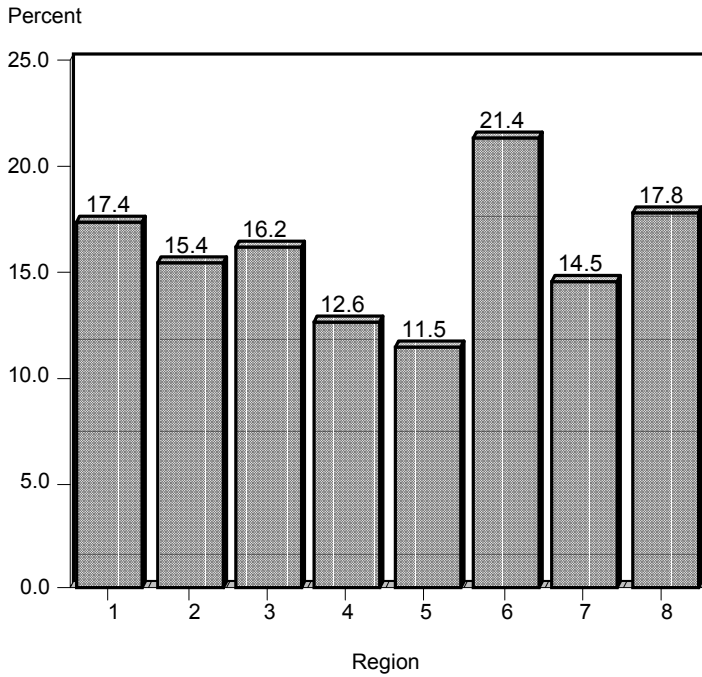


Figure 51. North Dakota Percent of Elderly Population, 2000



**Figure 52. North Dakota Percent of Elderly Population by Region and Area, 2000**

## *Education*

Table 11 provides data on the educational attainment of the North Dakota population and the percentage of the population that requires education (i.e., youth less than 18 years of age). High school attainment is the percentage of persons 25 years of age or older who have completed at least a high school degree; college attainment is the percentage of persons 25 years of age or older who have completed at least a bachelor's degree. In 2000, 83.9 percent of the state's population had attained at least a high school degree.

Three counties in North Dakota had an 88 percent or higher rate of high school attainment; these counties (Grand Forks, Cass, and Burleigh) all had major trade centers (Figure 53). Cass County recorded the highest percentage of persons 25 years and older that were high school graduates (91 percent) and college graduates (31 percent); McIntosh County had the lowest percentage of high school graduates (59 percent) and Sheridan County had the lowest percentage of college graduates (9.7 percent). Regions 4 and 5, the regions with the largest university populations, had the highest high school education levels, and Regions 3 and 6, directly west of Regions 4 and 5, had the lowest (Figure 54). Metropolitan areas had higher percentages of high school graduates than did the rural areas (Figure 54). The adjacent and remote rural areas did not differ from each other greatly. Similar to high school graduates, more college graduates are located in major trade centers (Grand Forks, Cass, and Burleigh counties) (Figure 55). Highest levels of college attainment were in the eastern part of the state (Regions 4 and 5) (Figure 56). The high school and college graduation rates have risen from the 1990 rates presented in the previous version of this report. This verifies that educational attainment has risen significantly during the past decade. Again, the metro areas have the highest level of college education, but the difference between metro and nonmetro is much greater for college than high school degrees. The data imply that the more educated population may have migrated to the state's larger cities; higher levels of education are often attractive to industry. Hence, the more urban areas of the state have higher education levels as an advantage to industrial recruitment.

One task local policy makers face is determining the school-age population in their areas. As a percentage of population, McIntosh County had the lowest percentage of young people (19 percent less than 18 years of age) and Sioux County (40 percent) had the highest (Table 11). Although much variation is seen at the county level, most counties had between 23 and 27 percent of their populations under the age of 18 in 2000 (Figure 57). Both the metro and adjacent counties had 24 percent youth population, and the remote county percentage was only 2 points higher (26 percent). Region 3 represented the highest rate of youth population (30 percent), although only 7 percentage points separated it from the lowest, Region 6 (23 percent) (Figure 58). If rural areas continue to lose the population in the child-bearing years to the metro areas or to out-of-state locations, the per pupil cost of providing high quality educational programs to fewer and fewer children may climb.

**Table 11. Educational Attainment of North Dakotans 25 Years and Older, Population Less Than 18 Years of Age, and Number of High School Graduates and Percent of Those Attending College, Selected Years 2000-2001**

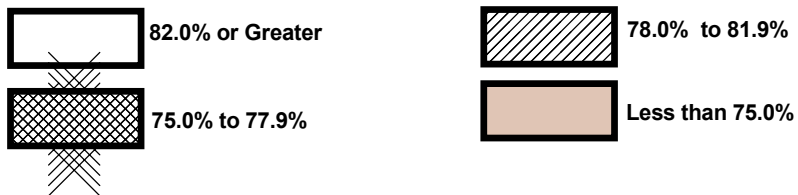
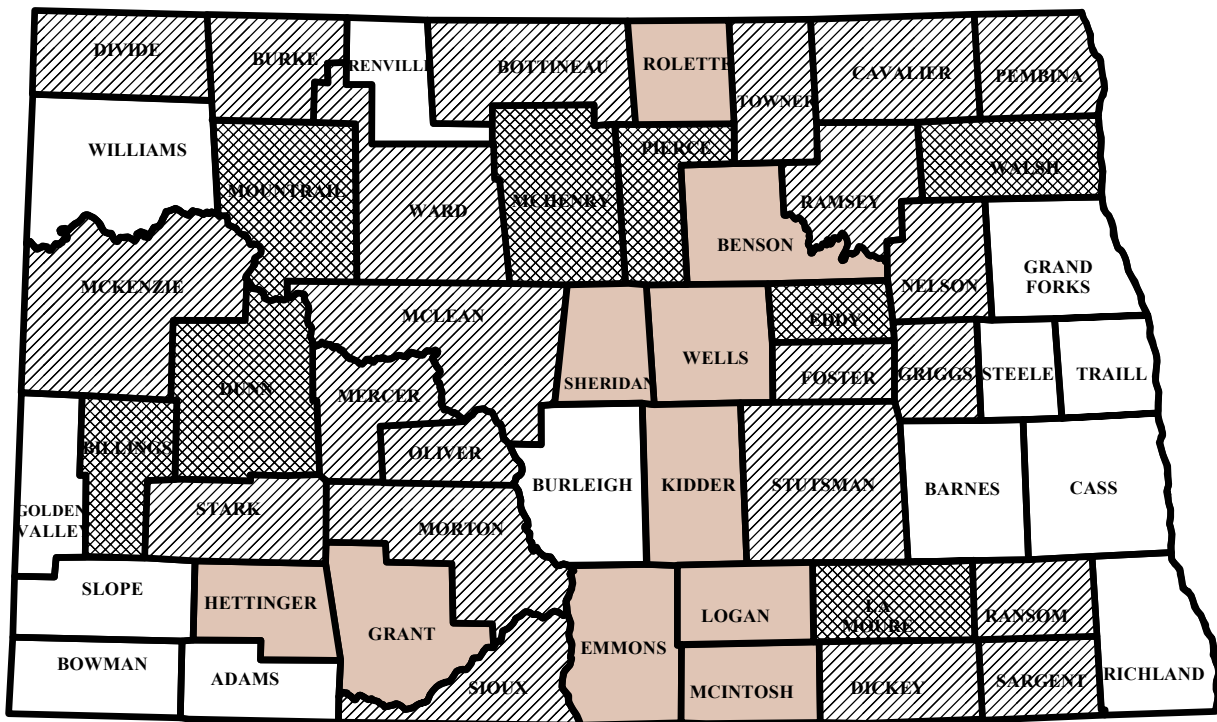
Area	Persons 25 Years and Older who in 2000 had Attained at Least a			2000-2001 High School Graduates	2000-2001 High School Graduates Attending a 4-year College	
	High School Degree	Bachelor's Degree or Higher	Population Less Than Age 18 in 2000		Number	Percent
	-----%-----					
DIVIDE	80.4	13.3	20.2	36	20	55.6
MCKENZIE	79.1	15.7	30.6	87	53	60.9
WILLIAMS	82.5	16.5	26.2	314	97	30.9
REGION 1	81.6	16.1	26.6	437	170	38.9
BOTTINEAU	81.3	14.9	22.2	94	37	39.4
BURKE	78.8	12.0	20.8	40	25	62.5
MCHENRY	76.9	13.2	24.0	106	49	46.2
MOUNTRAIL	77.9	15.6	28.1	93	52	55.9
PIERCE	76.7	14.7	23.9	75	38	50.7
RENVILLE	84.1	16.1	23.3	80	37	46.3
WARD	78.6	19.9	26.2	742	455	61.3
REGION 2	78.7	18.1	25.5	1,230	693	56.3
BENSON	73.8	10.9	36.1	60	21	35.0
CAVALIER	78.8	13.1	24.6	81	44	54.3
EDDY	75.5	15.9	23.6	35	20	57.1
RAMSEY	80.1	18.8	25.0	179	65	36.3
ROLETTE	73.7	14.7	36.5	200	56	28.0
TOWNER	81.9	16.1	24.6	40	20	50.0
REGION 3	77.1	15.4	30.3	595	226	38.0
GRAND FORKS	89.2	27.8	23.8	717	473	66.0
NELSON	81.4	17.5	22.1	77	49	63.6
PEMBINA	79.8	16.4	24.9	143	80	55.9
WALSH	76.6	13.3	24.9	163	90	55.2
REGION 4	85.8	23.8	24.0	1,100	692	62.9
CASS	90.9	31.3	23.4	1,423	861	60.5
RANSOM	81.3	15.8	25.0	104	55	52.9
RICHLAND	83.2	15.2	24.7	261	100	38.3
SARGENT	81.5	12.7	26.5	56	26	46.4
STEELE	86.1	19.8	27.6	41	25	61.0
TRAILL	83.7	21.8	24.8	156	94	60.3
REGION 5	88.9	27.6	23.8	2,041	1,161	56.9
BARNES	85.0	22.1	23.3	173	92	53.2
DICKEY	79.6	16.6	23.8	74	35	47.3
FOSTER	78.0	19.8	26.2	46	36	78.3
GRIGGS	78.7	15.7	22.5	63	36	57.1
LAMOURE	75.3	13.9	24.2	105	58	55.2
LOGAN	66.0	12.9	22.6	37	17	45.9
MCINTOSH	59.3	9.9	19.4	52	17	32.7
STUTSMAN	81.1	19.7	22.8	263	153	58.2
WELLS	72.6	13.7	22.5	75	40	53.3
REGION 6	78.2	17.8	22.9	888	484	54.5

- Continued -

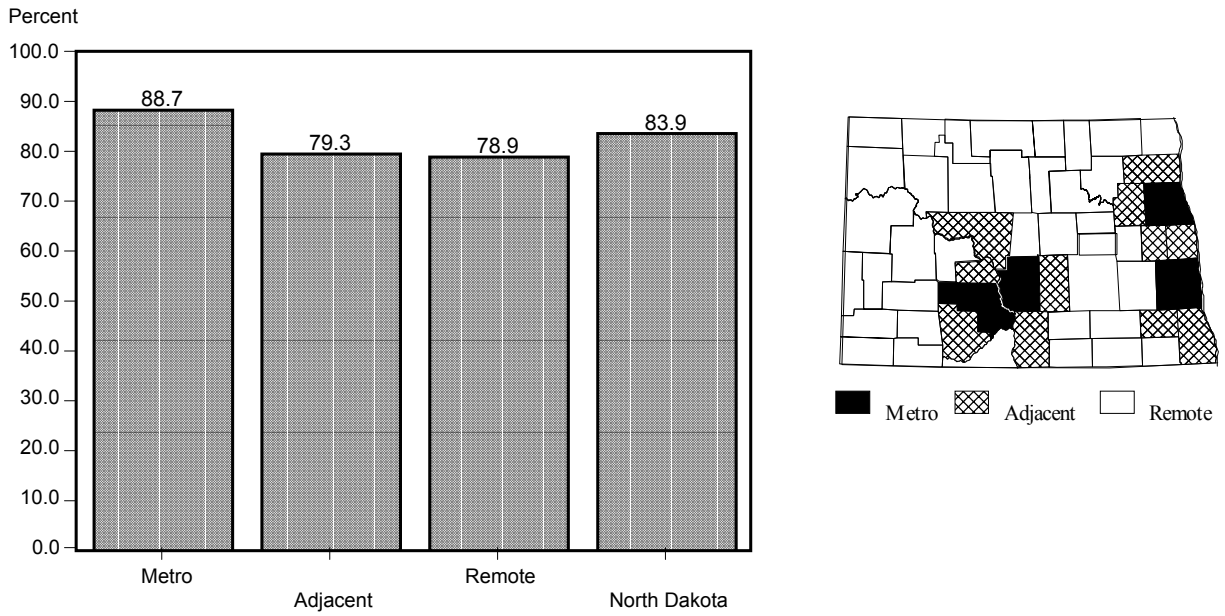
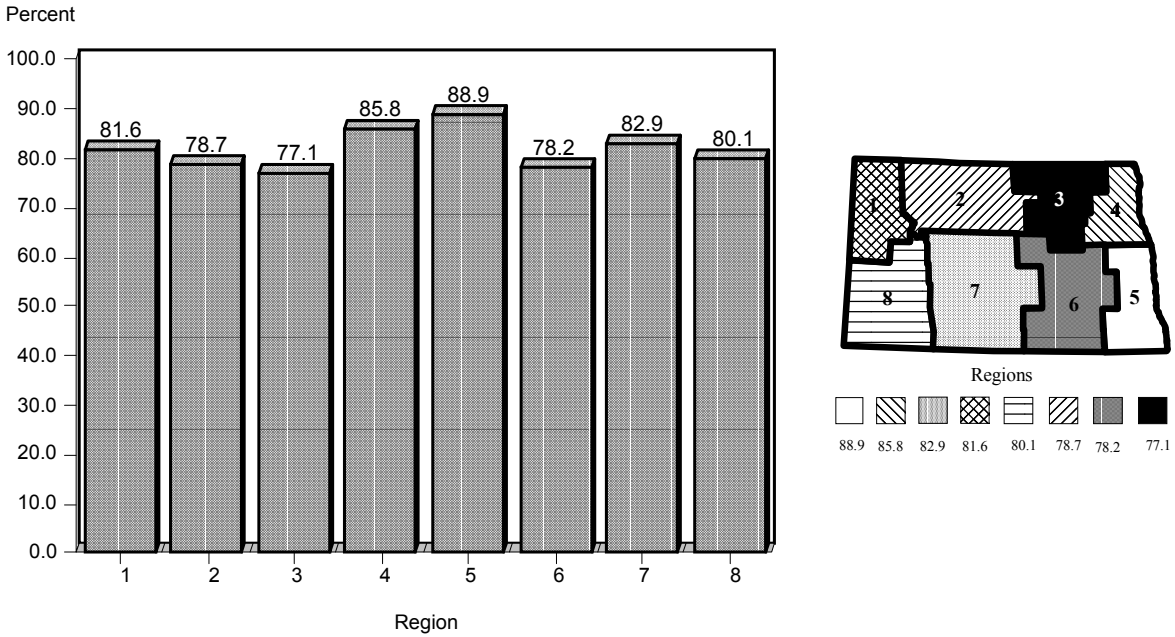
Table 11. continued

Area	Persons 25 Years and Older who in 2000 had Attained at Least a			Population Less Than Age 18 in 2000	2000-2001 High School Graduates	2000-2001 High School Graduates Attending a 4-year College	
	High School Degree	Bachelor's Degree or Higher	Number			Percent	
	-----%-----						
BURLEIGH	87.9	28.7	24.7	1,070	502	46.9	
EMMONS	65.9	12.3	24.8	69	31	44.9	
GRANT	73.4	11.2	23.4	31	10	32.3	
KIDDER	72.0	11.0	23.2	42	20	47.6	
MCLEAN	79.0	15.1	23.8	165	80	48.5	
MERCER	79.0	14.4	29.1	172	64	37.2	
MORTON	80.2	17.0	27.0	351	123	35.0	
OLIVER	79.9	12.0	27.4	21	10	47.6	
SHERIDAN	67.8	9.7	21.4	22	8	36.4	
SIOUX	78.5	11.2	40.3	64	8	12.5	
REGION 7	82.9	22.0	25.8	2,007	856	42.7	
ADAMS	83.1	16.6	23.2	42	31	73.8	
BILLINGS	77.8	18.8	24.9	--	--	--	
BOWMAN	82.2	17.9	24.1	74	49	66.2	
DUNN	77.5	16.3	27.4	44	23	52.3	
GOLDEN VALLEY	87.4	19.8	28.3	40	25	62.5	
HETTINGER	74.8	14.4	23.4	57	33	57.9	
SLOPE	82.5	16.0	25.3	--	--	--	
STARK	79.9	22.3	25.5	345	221	64.1	
REGION 8	80.1	19.9	25.4	602	382	63.5	
NORTH DAKOTA	83.9	22.0	25.0	8,900	4,664	52.4	

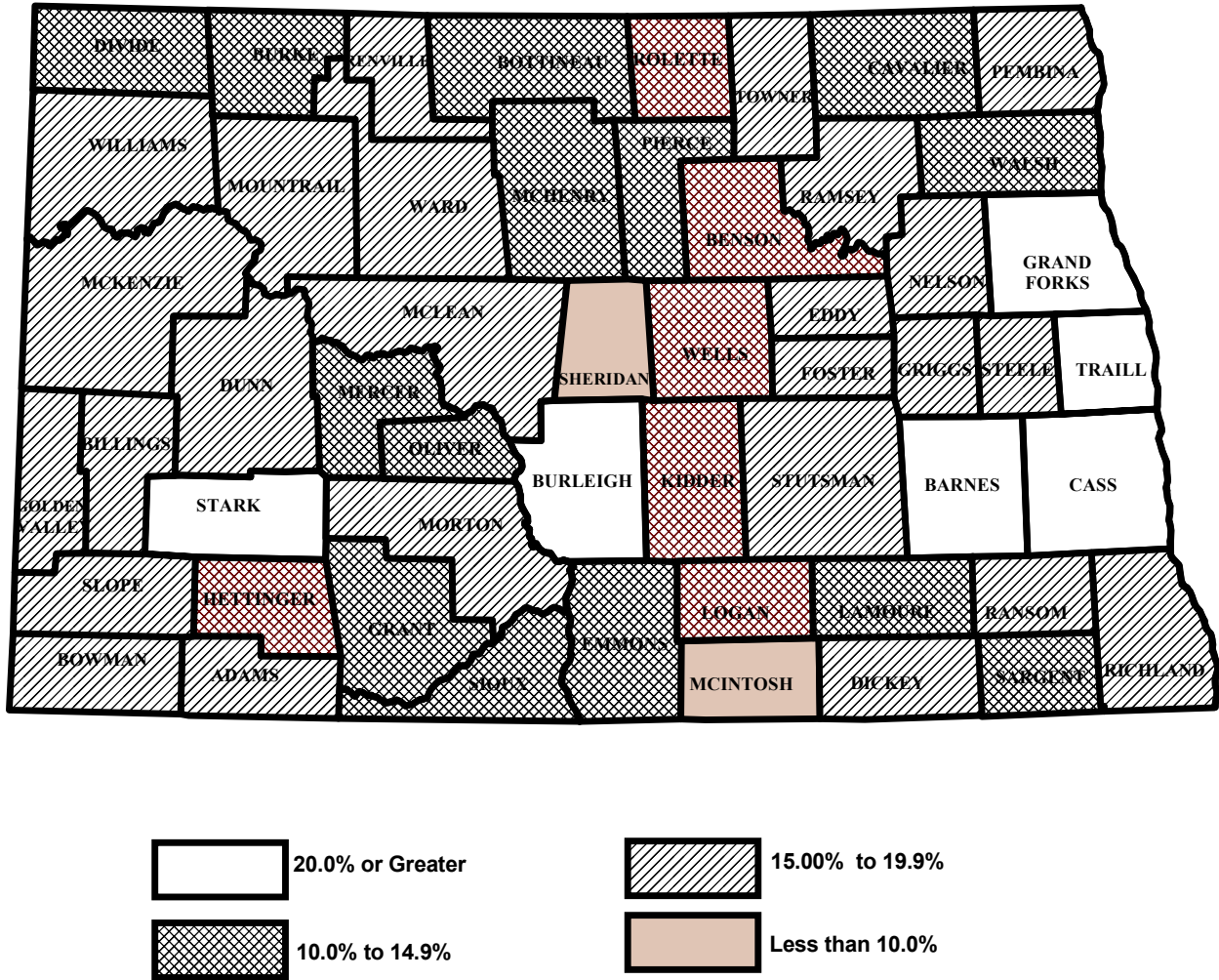
Source: U.S. Department of Commerce, Bureau of the Census. Internet Web Site. Census 2000, Summary File 3 (SF3), Table 37. Washington, D.C. (percent high school and college graduates); North Dakota Department of Public Instruction. 2002. 2000-2001 Enrollment, Graduates, & Drop-out Report. Unpublished Data. Bismarck, ND.



**Figure 53. Percentage of North Dakota Population Age 25 and Over Who Have Attained at Least a High School Degree, 2000**

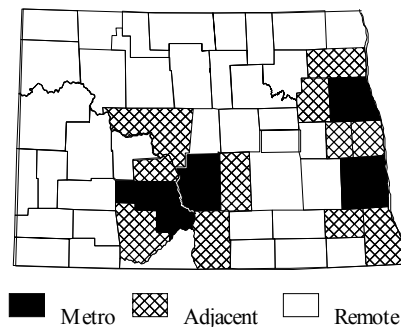
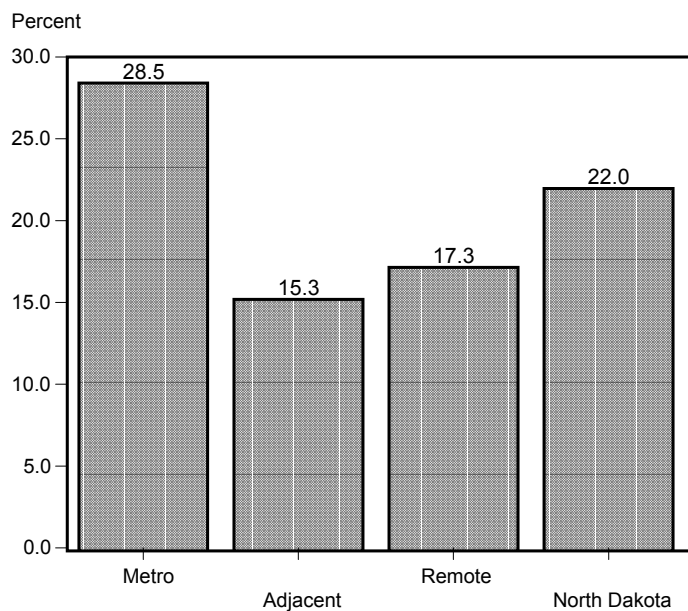
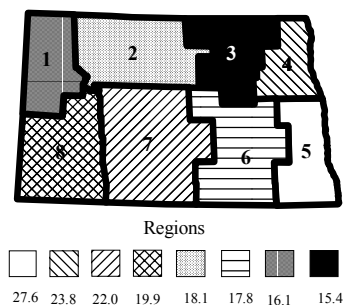
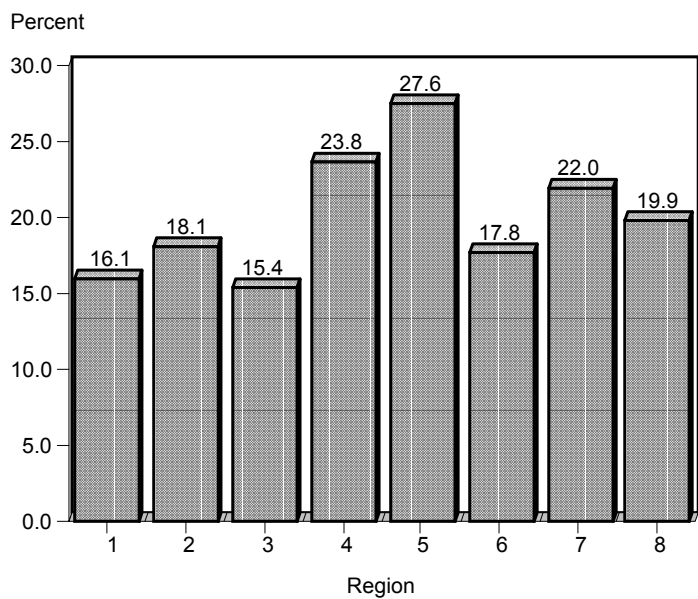


**Figure 54. Percentage of North Dakota Population Age 25 and Over Who Have Attained a High School Degree by Region and Area, 2000**



**Figure 55. Percentage of North Dakota Population Age 25 and Over Who Have Attained at Least a Bachelor's Degree, 2000**





**Figure 56. Percentage of North Dakota Population Age 25 and Over Who Have Attained at Least a Bachelor's Degree by Region and Area, 2000**

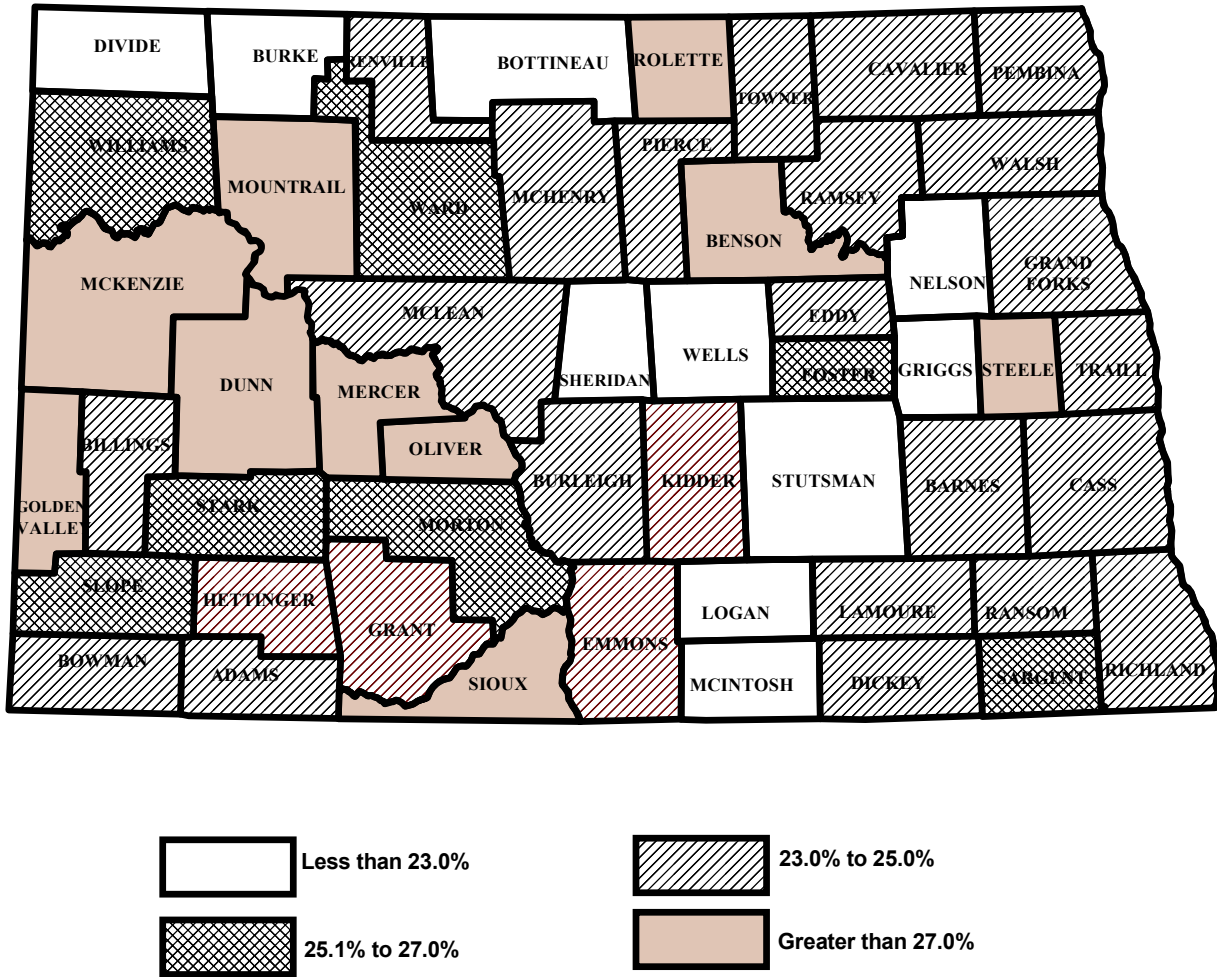
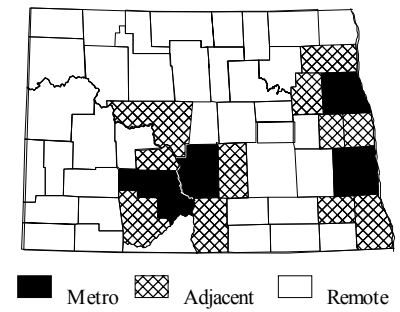
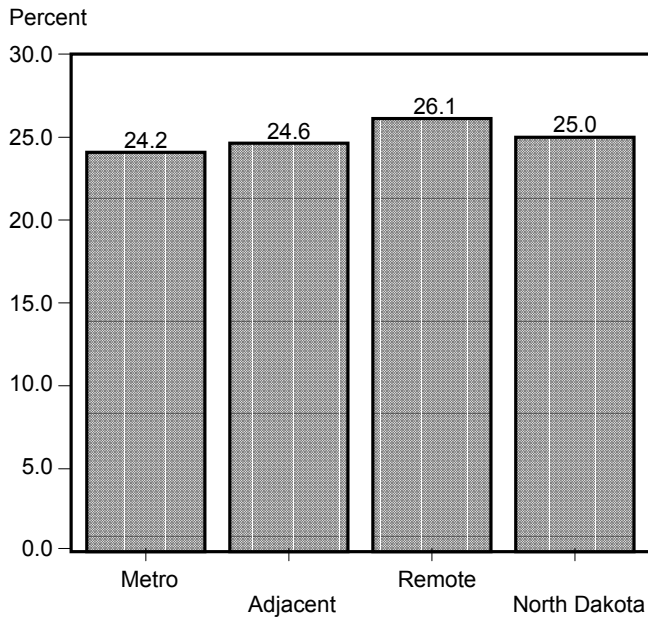
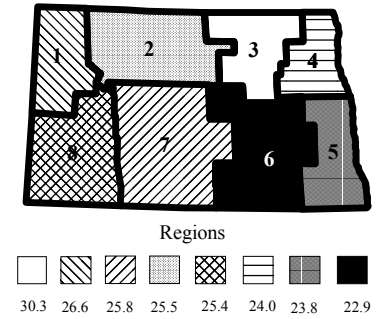
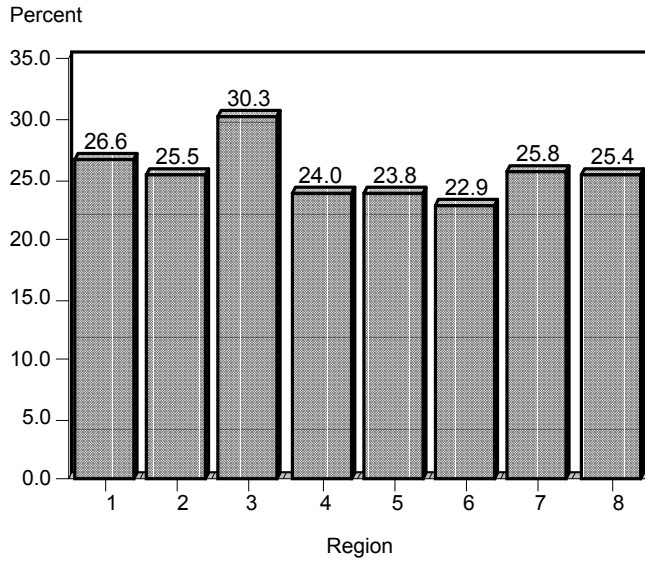
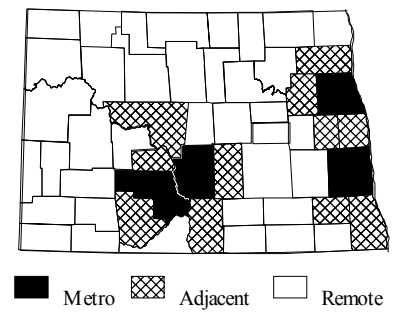
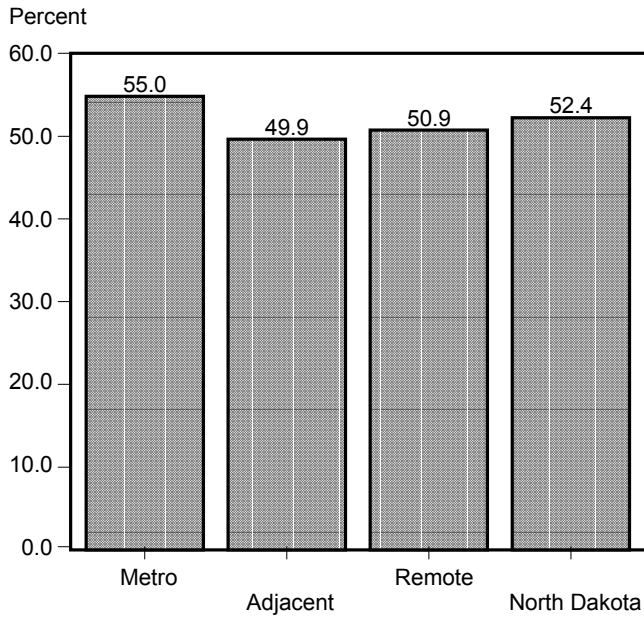
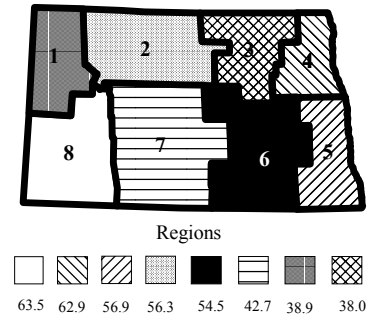
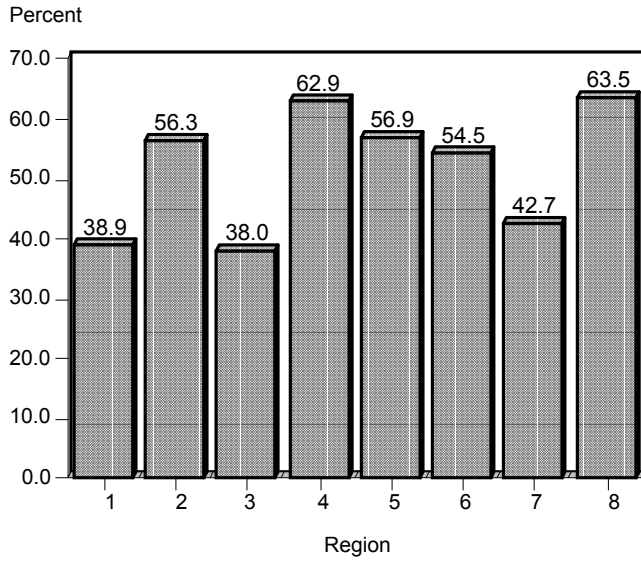


Figure 57. Percentage of North Dakota Population Less Than 18 Years of Age, 2000



**Figure 58. Percentage of North Dakota Population Less Than 18 Years of Age by Region and Area, 2000**





**Figure 60. Percentage of North Dakota 2000-2001 High School Graduates Attending a 4-Year College by Region and Area**

### *Trade Area Populations*

Populations for North Dakota cities and associated trade areas are presented in Table 12. The wholesale-retail centers group was the only trade center class that had a population increase (26.7 percent) between 1980 and 2000 (Figure 61). The rate of decline in population increased as trade area classification groups went from wholesale-retail to less complete shopping centers, except for hamlets which lost only 9.6 percent. Population changes for the trade area classifications showed a very similar pattern for 1990-2000; although the changes by group mirrored those of the earlier period, each classification was roughly half the previous decade. Wholesale-retail city population gains were 12.3 percent for the 1990-2000 period (Figure 62). This could lead to the general conclusion that city population trends of the 1980s held relatively constant through the 1990s.

Trade area populations followed the pattern for the city populations, with wholesale-retail centers being the only group to have a positive change. This trade area group had a 1980-2000 trade area population increase of 15 percent (Figure 63). Trade area populations showed a larger rate of decline as city trade area populations went to smaller trade centers. Complete shopping centers declined by 10 percent while hamlets' trade area populations dropped by 27 percent. Trade area populations for 1990-2000 followed the trend for populations for the two-decade period. All classifications experienced the same growth pattern, and again, the change for the second 10-year period was about one half that for 1980-2000. Wholesale-retail cities were the only ones with 1990-2000 trade area population growth, posting a 7.5 percent increase (Figure 64). The Fargo trade area population was 89,218 in 1980, 103,744 in 1990, and grew to 123,707 by 2000. This was by far the largest in the state and almost half again as large as the second largest trade area. Fargo trade area population grew by 39 percent between 1980 and 2000 and 19 percent between 1990 and 2000, highlighting its importance as a regional trade center.

**Table 12. City and Trade Area Populations by Trade Center Classifications, 1970-2000<sup>a</sup>**

CITY	COUNTY	CITY POPULATION				PERCENT CHANGE		TRADE AREA POPULATION			PERCENT CHANGE	
		1970	1980	1990	2000	1980-2000	1990-2000	1980	1990	2000	1980-2000	1990-2000
<b>WHOLESALE-RETAIL</b>												
-----%-----												
BISMARCK	BURLEIGH	34,703	44,485	49,256	55,532	24.8	12.7	71,640	75,024	82,861	15.7	10.5
FARGO	CASS	53,365	61,383	74,111	90,599	47.6	22.3	89,218	103,744	123,707	38.7	19.2
GRAND FORKS	GRAND FORKS	39,008	43,765	49,425	49,321	12.7	-0.2	65,713	70,275	65,933	0.3	-6.2
MANDAN	MORTON	11,093	15,513	15,177	16,718	7.8	10.2	--	--	--	--	--
MINOT	WARD	32,290	32,843	34,544	36,567	11.3	5.9	67,604	65,728	65,787	-2.7	0.1
WEST FARGO	CASS	5,161	10,099	12,287	14,940	47.9	21.6	--	--	--	--	--
GROUP TOTAL		175,620	208,088	234,800	263,677	26.7	12.3	294,175	314,771	338,288	15.0	7.5
<b>COMPLETE SHOPPING</b>												
DEVILS LAKE	RAMSEY	7,078	7,442	7,782	7,436	-0.1	-4.5	17,743	17,335	16,898	-4.8	-2.5
DICKINSON	STARK	12,405	15,924	16,097	16,010	0.5	-0.5	27,034	25,619	25,064	-7.3	-2.2
GRAFTON	WALSH	5,946	5,293	4,840	4,516	-14.7	-6.7	9,107	8,255	7,583	-16.7	-8.1
JAMESTOWN	STUTSMAN	15,385	16,280	15,571	15,527	-4.6	-0.3	27,757	25,011	24,081	-13.2	-3.7
VALLEY CITY	BARNES	7,843	7,774	7,163	6,826	-12.2	-4.7	13,810	12,463	11,716	-15.2	-6.0
WAHPETON	RICHLAND	7,076	9,064	8,751	8,586	-5.3	-1.9	14,126	13,518	13,365	-5.4	-1.1
WILLISTON	WILLIAMS	11,280	13,336	13,131	12,512	-6.2	-4.7	20,057	19,300	18,124	-9.6	-6.1
GROUP TOTAL		67,013	75,113	73,335	71,413	-4.9	-2.6	129,634	121,501	116,831	-9.9	-3.8
<b>PARTIAL SHOPPING</b>												
BEULAH	MERCER	1,344	2,908	3,363	3,152	8.4	-6.3	4,714	4,761	4,315	-8.5	-9.4
BOTTINEAU	BOTTINEAU	2,760	2,829	2,598	2,336	-17.4	-10.1	6,338	5,660	5,127	-19.1	-9.4
BOWMAN	BOWMAN	1,762	2,071	1,741	1,600	-22.7	-8.1	4,714	3,997	3,595	-23.7	-10.1
CARRINGTON	FOSTER	2,491	2,641	2,267	2,268	-14.1	0.0	5,653	4,874	4,482	-20.7	-8.0
CAVALIER	PEMBINA	1,381	1,505	1,508	1,537	2.1	1.9	4,313	4,063	3,741	-13.3	-7.9
HARVEY	WELLS	2,361	2,527	2,263	1,989	-21.3	-12.1	6,516	5,384	4,598	-29.4	-14.6
HETTINGER	ADAMS	1,655	1,739	1,574	1,307	-24.8	-17.0	3,264	2,919	2,390	-26.8	-18.1
LANGDON	CAVALIER	2,182	2,335	2,241	2,101	-10.0	-6.3	6,477	5,202	4,164	-35.7	-20.0
LISBON	RANSOM	2,090	2,283	2,177	2,292	0.4	5.3	5,726	4,935	5,079	-11.3	2.9
ROLLA	ROLETTE	1,458	1,538	1,286	1,417	-7.9	10.2	8,953	9,312	10,304	15.1	10.7
RUGBY	PIERCE	2,889	3,335	2,909	2,939	-11.9	1.0	6,710	5,520	5,059	-24.6	-8.4
TIOGA	WILLIAMS	1,667	1,597	1,278	1,125	-29.6	-12.0	2,792	2,318	1,971	-29.4	-15.0
WATFORD CITY	MCKENZIE	1,768	2,119	1,784	1,435	-32.3	-19.6	3,843	3,118	3,161	-17.8	1.4
GROUP TOTAL		25,808	29,427	26,989	25,498	-13.3	-5.5	70,013	62,063	57,986	-17.2	-6.6

- Continued -

Table 12. continued

CITY	COUNTY	CITY POPULATION				PERCENT CHANGE		TRADE AREA POPULATION			PERCENT CHANGE	
		1970	1980	1990	2000	1980-2000	1990-2000	1980	1990	2000	1980-2000	1990-2000
<b>FULL CONVENIENCE</b>												
-----%-----												
BEACH	GOLDEN VALLEY	1,408	1,381	1,205	1,115	-19.2	-7.4	2,597	2,299	2,066	-20.5	-10.1
CANDO	TOWNER	1,512	1,496	1,564	1,342	-10.3	-14.2	1,651	1,344	938	-43.2	-30.2
CASSELTON	CASS	1,485	1,661	1,601	1,855	11.7	15.9	3,031	2,834	3,023	-0.3	6.7
COOPERSTOWN	GRIGGS	1,485	1,308	1,247	1,053	-19.5	-15.6	3,515	3,123	2,594	-26.2	-16.9
CROSBY	DIVIDE	1,545	1,469	1,312	1,089	-25.9	-17.0	3,292	2,796	2,202	-33.1	-21.2
GARRISON	MCLEAN	1,614	1,830	1,530	1,313	-28.0	-13.9	3,483	3,057	2,982	-14.4	-2.5
HAZEN	MERCER	1,240	2,365	2,818	2,457	3.9	-12.8	4,421	4,820	4,146	-6.2	-14.0
HILLSBORO	TRAIL	1,309	1,600	1,488	1,563	-2.3	5.0	3,205	2,827	2,736	-14.6	-3.2
KENMARE	WARD	1,515	1,456	1,214	1,081	-25.8	-11.0	3,534	2,859	2,365	-33.1	-17.3
KILLDEER	DUNN	615	790	722	713	-9.8	-1.3	2,188	1,906	1,778	-18.7	-6.7
LAMOURE	LA MOURE	951	1,077	970	944	-12.4	-2.7	3,251	2,795	2,571	-20.9	-8.0
LINTON	EMMONS	1,695	1,561	1,410	1,321	-15.4	-6.3	4,368	3,671	3,329	-23.8	-9.3
MAYVILLE	TRAIL	2,554	2,255	2,092	1,953	-13.4	-6.6	4,742	4,311	4,086	-13.8	-5.2
MICHIGAN	NELSON	478	502	413	345	-31.3	-16.5	874	667	544	-37.8	-18.4
MOHALL	RENVILLE	950	1,049	931	812	-22.6	-12.8	1,827	1,608	1,338	-26.8	-16.8
NORTHWOOD	GRAND FORKS	1,189	1,240	1,166	959	-22.7	-17.8	2,244	2,014	1,648	-26.6	-18.2
OAKES	DICKEY	1,742	2,112	1,775	1,979	-6.3	11.5	3,943	3,151	3,233	-18.0	2.6
PARK RIVER	WALSH	1,680	1,844	1,725	1,535	-16.8	-11.0	4,099	3,654	3,126	-23.7	-14.5
STANLEY	MOUNTRAIL	1,581	1,631	1,371	1,279	-21.6	-6.7	3,005	2,587	2,305	-23.3	-10.9
WASHBURN	MCLEAN	804	1,767	1,506	1,389	-21.4	-7.8	2,265	1,986	1,818	-19.7	-8.5
WISHEK	MCINTOSH	<u>1,275</u>	<u>1,345</u>	<u>1,171</u>	<u>1,122</u>	<u>-16.6</u>	<u>-4.2</u>	<u>2,531</u>	<u>2,097</u>	<u>1,824</u>	<u>-27.9</u>	<u>-13.0</u>
GROUP TOTAL		<u>28,627</u>	<u>31,739</u>	<u>29,231</u>	<u>27,225</u>	<u>-14.2</u>	<u>-6.9</u>	<u>64,066</u>	<u>56,406</u>	<u>50,652</u>	<u>-20.9</u>	<u>-10.2</u>
<b>MINIMUM CONVENIENCE</b>												
ARTHUR	CASS	412	445	400	402	-9.7	0.5	641	543	539	-15.9	-0.7
ASHLEY	MCINTOSH	1,236	1,192	1,052	882	-26.0	-16.2	2,175	1,835	1,501	-31.0	-18.2
BELFIELD	STARK	1,130	1,274	887	866	-32.0	-2.4	2,239	1,800	1,625	-27.4	-9.7
BERTHOLD	WARD	398	485	409	466	-3.9	13.9	774	645	650	-16.0	0.8
DRAYTON	PEMBINA	1,095	1,082	961	913	-15.6	-5.0	1,678	1,419	1,238	-26.2	-12.8
DUNSEITH	ROLETTE	811	625	723	739	18.2	2.2	3,851	4,287	4,722	22.6	10.2
EDGELEY	LA MOURE	888	843	680	637	-24.4	-6.3	1,880	1,550	1,367	-27.3	-11.8
EDINBURG	WALSH	315	300	284	252	-16.0	-11.3	1,177	932	729	-38.1	-21.8
ELGIN	GRANT	839	930	765	659	-29.1	-13.9	1,277	1,036	1,087	-14.9	4.9
ELLENDALE	DICKEY	1,517	1,967	1,798	1,559	-20.7	-13.3	3,203	2,816	2,490	-22.3	-11.6
EMERADO	GRAND FORKS	515	596	483	510	-14.4	5.6	--	--	--	--	--
ENDERLIN	RANSOM	1,343	1,140	997	942	-17.4	-5.5	1,613	1,443	2,196	36.1	52.2

- Continued -



TABLE 12 continued

CITY	COUNTY	CITY POPULATION				PERCENT CHANGE		TRADE AREA POPULATION			PERCENT CHANGE	
		1970	1980	1990	2000	1980-2000	1990-2000	1980	1990	2000	1980-2000	1990-2000
<b>MINIMUM CONVENIENCE CONTINUED</b>												
						-----%-----					-----%-----	
FESSENDEN	WELLS	815	761	655	625	-17.9	-4.6	1,492	1,229	1,110	-25.6	-9.7
FINLEY	STEELE	809	718	543	515	-28.3	-5.2	1,548	1,162	1,078	-30.4	-7.2
FLASHER	MORTON	467	410	317	285	-30.5	-10.1	1,288	1,089	988	-23.3	-9.3
FORMAN	SARGENT	596	629	586	506	-19.6	-13.7	2,363	2,001	1,747	-26.1	-12.7
GLEN ULLIN	MORTON	1,070	1,125	927	865	-23.1	-6.7	1,665	1,409	1,325	-20.4	-6.0
GWINNER	SARGENT	623	725	585	717	-1.1	22.6	878	682	815	-7.2	19.5
HANKINSON	RICHLAND	1,125	1,158	1,038	1,058	-8.6	1.9	2,236	2,020	2,046	-8.5	1.3
HEBRON	MORTON	1,103	1,078	888	803	-25.5	-9.6	1,759	1,485	1,350	-23.3	-9.1
HOOPLE	WALSH	330	350	310	292	-16.6	-5.8	--	--	--	--	--
HUNTER	CASS	362	369	341	326	-11.7	-4.4	635	564	516	-18.7	-8.5
KINDRED	CASS	495	568	569	614	8.1	7.9	1,819	1,880	2,046	12.5	8.8
KULM	LA MOURE	625	570	514	422	-26.0	-17.9	952	818	639	-32.9	-21.9
LAKOTA	NELSON	964	963	898	781	-18.9	-13.0	1,893	1,609	1,331	-29.7	-17.3
LARIMORE	GRAND FORKS	1,469	1,524	1,464	1,433	-6.0	-2.1	2,950	2,745	2,604	-11.7	-5.1
LEEDS	BENSON	626	678	542	464	-31.6	-14.4	1,150	897	770	-33.0	-14.2
LIDGERWOOD	RICHLAND	1,000	971	799	738	-24.0	-7.6	2,128	1,742	1,485	-30.2	-14.8
MADDOCK	BENSON	708	677	559	498	-26.4	-10.9	1,625	1,297	1,119	-31.1	-13.7
MCVILLE	NELSON	583	626	559	470	-24.9	-15.9	1,214	1,019	839	-30.9	-17.7
MILNOR	SARGENT	645	716	651	711	-0.7	9.2	1,552	1,411	1,486	-4.3	5.3
MINTO	WALSH	636	592	560	657	-11.0	17.3	909	851	925	1.8	8.7
MOTT	HETTINGER	1,368	1,315	1,019	808	-38.6	-20.7	2,269	1,758	1,389	-38.8	-21.0
NAPOLEON	LOGAN	1,036	1,103	930	857	-22.3	-7.9	2,300	1,799	1,492	-35.1	-17.1
NEW ENGLAND	HETTINGER	906	825	663	555	-32.7	-16.3	1,985	1,601	1,292	-34.9	-19.3
NEW ROCKFORD	EDDY	1,969	1,791	1,604	1,463	-18.3	-8.8	3,314	2,805	2,551	-23.0	-9.1
NEW SALEM	MORTON	943	1,081	909	938	-13.2	3.2	2,398	2,107	2,112	-11.9	0.2
NEW TOWN	MOUNTRAIL	1,428	1,335	1,388	1,367	2.4	-1.5	2,997	3,341	3,073	2.5	-8.0
PAGE	CASS	367	329	266	225	-31.6	-15.4	653	511	481	-26.3	-5.9
PEMBINA	PEMBINA	741	673	642	642	-4.6	--	818	744	741	-9.4	-0.4
POWERS LAKE	BURKE	523	466	408	309	-33.7	-24.3	1,201	946	766	-36.2	-19.0
RAY	WILLIAMS	776	766	603	534	-30.3	-11.4	1,030	836	760	-26.2	-9.1
RICHARDTON	STARK	799	699	625	619	-11.4	-1.0	1,173	986	870	-25.8	-11.8
ROLETTE	ROLETTE	579	667	623	538	-19.3	-13.6	1,852	1,892	1,752	-5.4	-7.4
STEELE	KIDDER	696	796	762	761	-4.4	-0.1	1,656	1,532	1,434	-13.4	-6.4
STRASBURG	EMMONS	642	623	553	549	-11.9	-0.7	1,424	1,182	1,069	-24.9	-9.6
TOWNER	MCHENRY	870	867	669	574	-33.8	-14.2	2,259	1,877	1,549	-31.4	-17.5
TURTLE LAKE	MCLEAN	712	802	681	580	-27.7	-14.8	1,906	1,581	1,345	-29.4	-14.9
UNDERWOOD	MCLEAN	781	1,329	976	812	-38.9	-16.8	2,300	1,813	1,272	-44.7	-29.8

- Continued -

Table 12. continued

CITY	COUNTY	CITY POPULATION				PERCENT CHANGE		TRADE AREA POPULATION			PERCENT CHANGE	
		1970	1980	1990	2000	1980-2000	1990-2000	1980	1990	2000	1980-2000	1990-2000
<b>MINIMUM CONVENIENCE CONTINUED</b>												
-----%-----												
VELVA	MCHENRY	1,241	1,101	968	1,049	-4.7	8.4	2,160	1,860	1,872	-13.3	0.7
WALHALLA	PEMBINA	1,471	1,429	1,131	1,057	-26.0	-6.5	2,201	1,797	1,609	-26.9	-10.5
WESTHOPE	BOTTINEAU	705	741	578	533	-28.1	-7.8	1,353	1,065	905	-33.1	-15.0
WIMBLEDON	BARNES	337	330	275	237	-28.2	-13.8	916	756	659	-28.1	-12.8
WYNDMERE	RICHLAND	516	550	501	533	-3.1	6.4	876	846	844	-3.7	-0.2
GROUP TOTAL		44,956	45,705	39,518	37,147	-18.7	-6.0	89,605	77,851	72,200	-19.4	-7.3
<b>HAMLETS<sup>b</sup></b>												
ABERCROMBIE	RICHLAND	262	260	252	296	13.9	17.5	--	--	--	--	--
ADAMS	WALSH	284	303	248	203	-33.0	-18.2	689	517	406	-41.1	-21.5
ALEXANDER	MCKENZIE	208	358	216	217	-39.4	0.5	--	--	--	--	--
ANAMOOSSE	MCHENRY	401	355	277	282	-20.6	1.8	--	--	--	--	--
ANETA	NELSON	376	341	314	284	-16.7	-9.6	521	472	444	-14.8	-5.9
BINFORD	GRIGGS	242	293	233	201	-31.4	-13.7	--	--	--	--	--
BISBEE	TOWNER	305	257	227	167	-35.0	-26.4	440	379	297	-32.5	-21.6
BOWBELLS	BURKE	584	587	498	406	-30.8	-18.5	1,183	928	710	-40.0	-23.5
BUFFALO	CASS	241	226	204	209	-7.5	2.5	--	--	--	--	--
BURLINGTON	WARD	247	762	995	1,096	43.8	10.2	--	--	--	--	--
BUXTON	TRAIL	235	336	343	350	4.2	2.0	--	--	--	--	--
CARSON	GRANT	466	469	383	319	-32.0	-16.7	1,194	995	815	-31.7	-18.1
CENTER	OLIVER	619	900	826	678	-24.7	-17.9	1,304	1,237	1,044	-19.9	-15.6
COLUMBUS	BURKE	465	325	223	151	-53.5	-32.3	399	288	188	-52.9	-34.7
DAVENPORT	CASS	147	195	218	261	33.9	19.7	--	--	--	--	--
DES LACS	WARD	197	212	216	209	-1.4	-3.2	--	--	--	--	--
DRAKE	MCHENRY	636	479	361	322	-32.8	-10.8	1,019	727	620	-39.2	-14.7
EDMORE	RAMSEY	398	416	329	256	-38.5	-22.2	752	614	469	-37.6	-23.6
FAIRMOUNT	RICHLAND	412	480	427	406	-15.4	-4.9	657	557	517	-21.3	-7.2
FORDVILLE	WALSH	361	326	299	266	-18.4	-11.0	525	473	414	-21.1	-12.5
FRONTIER	CASS	--	160	218	273	70.6	25.2	--	--	--	--	--
GACKLE	LOGAN	470	456	450	335	-26.5	-25.6	1,015	873	664	-34.6	-23.9
GILBY	GRAND FORKS	268	283	262	243	-14.1	-7.3	--	--	--	--	--
GLADSTONE	STARK	222	317	224	243	-21.8	10.7	--	--	--	--	--
GLENBURN	RENVILLE	381	454	439	374	-17.6	-14.8	--	--	--	--	--
GOLDEN VAL	MERCER	235	287	239	183	-36.2	-23.4	--	--	--	--	--
GRANDIN	CASS	187	210	213	181	-13.8	-15.0	--	--	--	--	--
GRANVILLE	MCHENRY	282	281	236	286	1.8	-21.2	--	--	--	--	--
GRENORA	WILLIAMS	401	362	261	202	-44.2	-22.6	--	--	--	--	--

- Continued -

Table 12. continued

CITY	COUNTY	CITY POPULATION				PERCENT CHANGE		TRADE AREA POPULATION			PERCENT CHANGE	
		1970	1980	1990	2000	1980-2000	1990-2000	1980	1990	2000	1980-2000	1990-2000
<b>HAMLETS<sup>b</sup> CONTINUED</b>												
						-----%-----					-----%-----	
HALLIDAY	DUNN	413	355	288	227	-36.1	-21.2	1,261	1,015	954	-24.4	-6.0
HANNAFORD	GRIGGS	244	201	204	181	-10.0	-11.3	--	--	--	--	--
HARWOOD	CASS	--	326	590	607	86.2	2.9	--	--	--	--	--
HATTON	TRAIL	808	787	800	707	-10.2	-11.6	1,246	1,197	1,166	-6.4	-2.6
HAZELTON	EMMONS	374	266	240	237	-10.9	-1.3	1,042	844	721	-30.8	-14.6
HOPE	STEELE	364	406	281	303	-25.4	7.8	965	727	707	-26.7	-2.8
HORACE	CASS	276	494	662	915	85.2	38.2	--	--	--	--	--
LANSFORD	BOTTINEAU	296	294	249	253	-14.0	1.6	--	--	--	--	--
LEONARD	CASS	221	289	310	255	-11.7	-17.7	--	--	--	--	--
LIGNITE	BURKE	354	332	242	174	-47.6	-28.1	486	365	252	-48.2	-31.0
LINCOLN	BURLEIGH	--	656	1,132	1,730	163.7	52.8	--	--	--	--	--
LITCHVILLE	BARNES	294	251	205	191	-23.9	-6.8	--	--	--	--	--
MANVEL	GRAND FORKS	265	308	333	370	20.1	11.1	--	--	--	--	--
MAPLETON	CASS	219	306	682	606	98.0	-11.1	--	--	--	--	--
MAX	MCLEAN	301	330	301	278	-15.8	-7.6	869	756	577	-33.6	-23.7
MCCLUSKY	SHERIDAN	664	658	492	415	-36.9	-15.7	669	545	414	-38.1	-24.0
MEDINA	STUTSMAN	488	521	387	335	-35.7	-13.4	939	729	680	-27.6	-6.7
MINNEWAUKAN	BENSON	496	461	401	318	-31.0	-20.7	--	--	--	--	--
MUNICH	CAVALIER	249	300	310	268	-10.7	-13.6	701	570	453	-35.4	-20.5
NECHE	PEMBINA	451	471	434	437	-7.2	0.7	558	500	510	-8.6	2.0
NEW LEIPZIG	GRANT	354	352	326	274	-22.2	-16.0	705	635	508	-27.9	-20.0
NOONAN	DIVIDE	403	283	231	154	-45.6	-33.3	--	--	--	--	--
OSNABROCK	CAVALIER	255	222	214	174	-21.6	-18.7	--	--	--	--	--
PARSHALL	MOUNTRAIL	1,246	1,059	943	981	-7.4	4.0	2,177	2,035	1,947	-10.6	-4.3
PETERSBURG	NELSON	266	230	219	195	-15.2	-11.0	373	348	292	-21.7	-16.1
PICK CITY	MERCER	119	182	203	166	-8.8	-18.2	--	--	--	--	--
PORTLAND	TRAIL	534	627	602	604	-3.7	0.3	--	--	--	--	--
REEDER	ADAMS	306	355	252	181	-49.0	-28.2	--	--	--	--	--
REGENT	HETTINGER	344	297	268	211	-29.0	-21.3	644	559	443	-31.2	-20.8
REILES ACRES	CASS	--	191	210	254	33.0	21.0	--	--	--	--	--
RIVERDALE	MCLEAN	--	--	283	273	--	-3.5	--	--	--	--	--
ROCKLAKE	TOWNER	270	287	221	194	-32.4	-12.2	--	--	--	--	--
RUTLAND	SARGENT	225	250	212	220	-12.0	3.8	522	455	430	-17.6	-5.5
SOUTH HEART	STARK	132	294	322	307	4.4	-4.7	--	--	--	--	--
SAWYER	WARD	373	417	319	377	-9.6	18.2	--	--	--	--	--
SCRANTON	BOWMAN	360	415	294	304	-26.8	3.4	943	763	654	-30.7	-14.3
SELFRIDGE	SIOUX	346	273	242	223	-18.3	-7.9	--	--	--	--	--

- Continued -

Table 12. continued

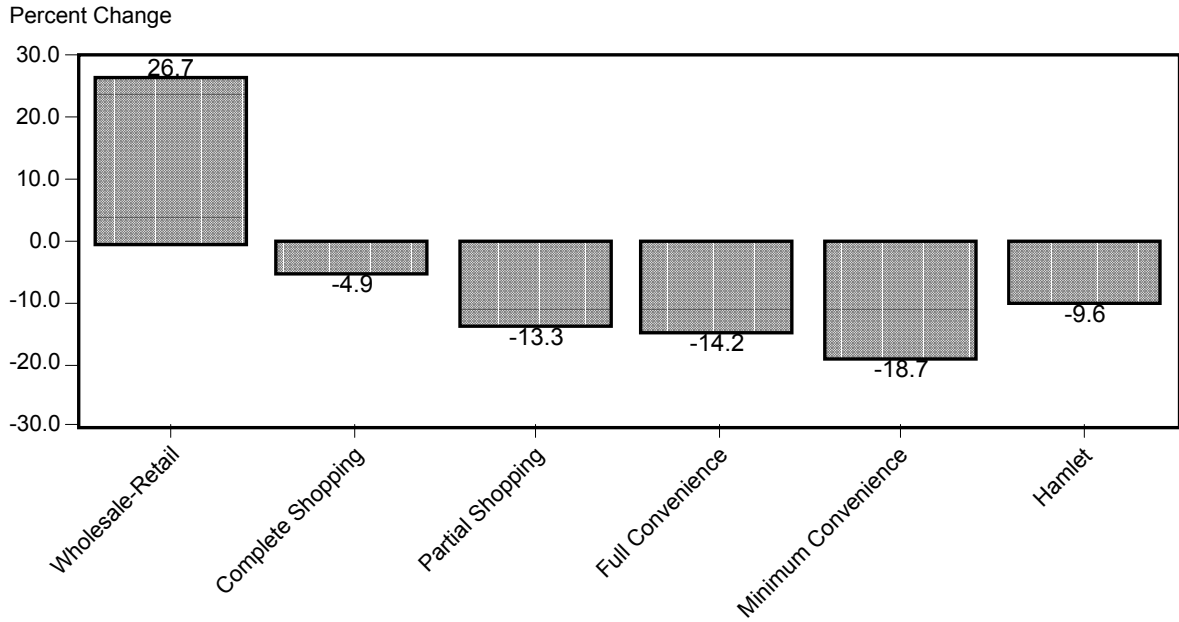
CITY	COUNTY	CITY POPULATION				PERCENT CHANGE		TRADE AREA POPULATION			PERCENT CHANGE	
		1970	1980	1990	2000	1980-2000	1990-2000	1980	1990	2000	1980-2000	1990-2000
<b>HAMLETS<sup>b</sup> CONTINUED</b>												
						-----	-----				-----	-----
SHERWOOD	RENVILLE	369	294	286	255	-13.3	-10.8	530	490	421	-20.6	-14.1
SHEYEENE	EDDY	362	307	272	318	3.6	16.9	583	524	504	-13.6	-3.8
ST JOHN	ROLETTE	367	401	368	358	-10.7	-2.7	--	--	--	--	--
ST THOMAS	PEMBINA	508	528	444	447	-15.3	0.7	--	--	--	--	--
STANTON	MERCER	517	623	517	345	-44.6	-33.3	--	--	--	--	--
SURREY	WARD	361	999	856	917	-8.2	7.1	--	--	--	--	--
TAPPEN	KIDDER	294	271	239	210	-22.5	-12.1	--	--	--	--	--
THOMPSON	GRAND FORKS	291	785	930	1,006	28.2	8.2	--	--	--	--	--
TOLNA	NELSON	247	241	230	202	-16.2	-12.2	959	759	656	-31.6	-130.6
TOWER CITY	CASS	289	293	233	252	-14.0	8.2	--	--	--	--	--
UPHAM	MCHENRY	272	227	205	155	-31.7	-24.4	--	--	--	--	--
WILLOW CITY	BOTTINEAU	403	329	281	221	-32.8	-21.4	--	--	--	--	--
WILTON	MCLEAN	695	950	728	565	-40.6	-22.4	1,514	1,220	1,265	-16.5	-3.7
WING	BURLEIGH	223	220	208	124	43.6	-40.4	--	--	--	--	--
ZAP	MERCER	271	511	287	231	-54.8	-19.5	--	--	--	--	--
GROUP TOTAL		27,311	31,415	29,619	28,409	-9.6	-4.1	27,384	23,096	20,142	-26.5	-12.8
IN-STATE TOTAL		369,335	421,487	433,492	453,369	7.6	4.6	674,877	655,688	656,099	-2.8	0.1

<sup>a</sup> Trade area populations were based on trade area boundaries that were established by trade area analysis conducted in 1991 by the Department of Agricultural Economics at North Dakota State University.

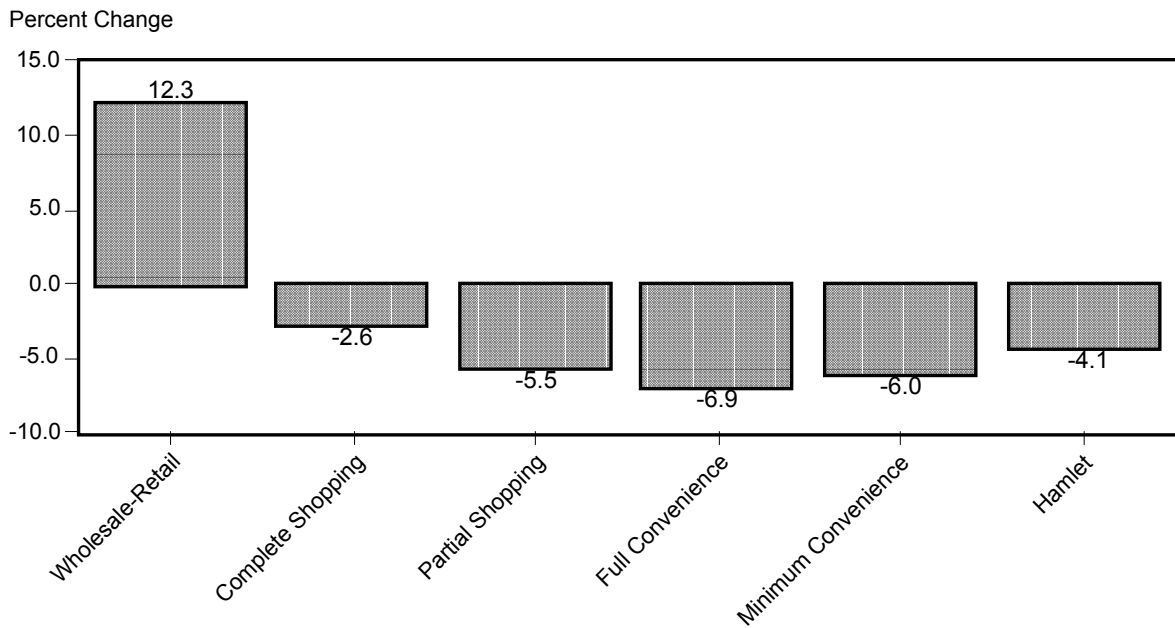
<sup>b</sup> Only trade centers with 200 or more people were included.

Source: Leistriz and Wanzek. 1993. North Dakota 1993: Patterns and Trends in Economic Activity, Fargo: Department of Agricultural Economics, North Dakota State University; Coon and Leistriz. 2002. 2000 Trade Area Populations. Unpublished Data. Fargo: Department of Agricultural Economics, North Dakota State University.

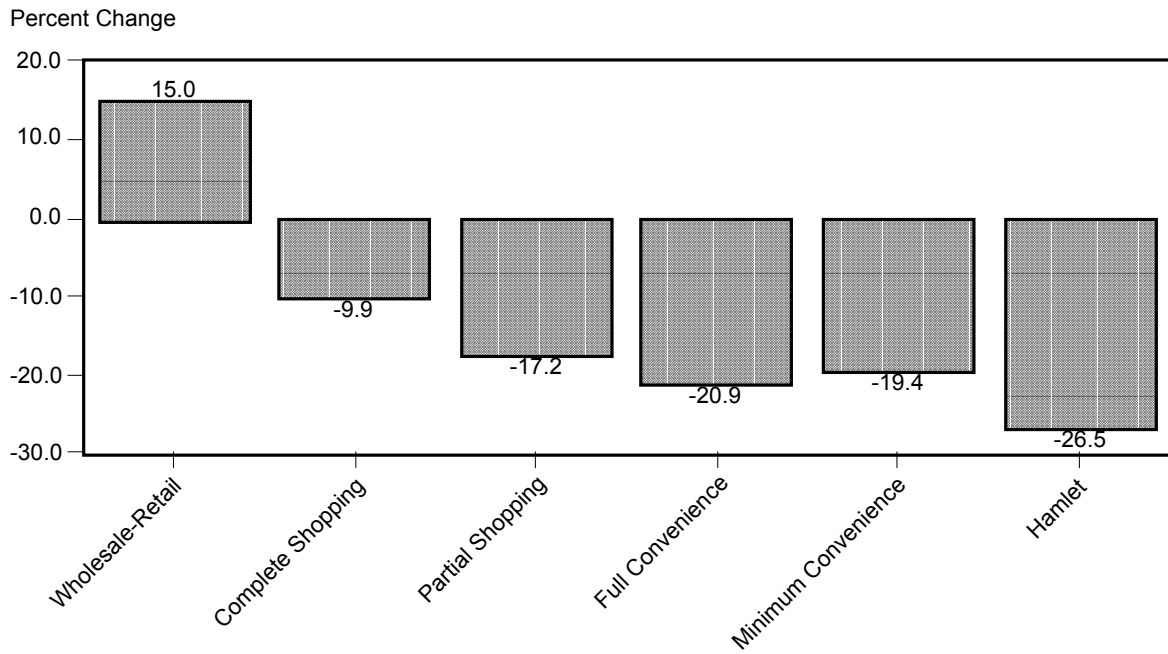
U.S. Department of Commerce, Bureau of the Census. 1970, 1980, 1990, and 2000 Decennial Census of Population and Housing. Washington, D.C.



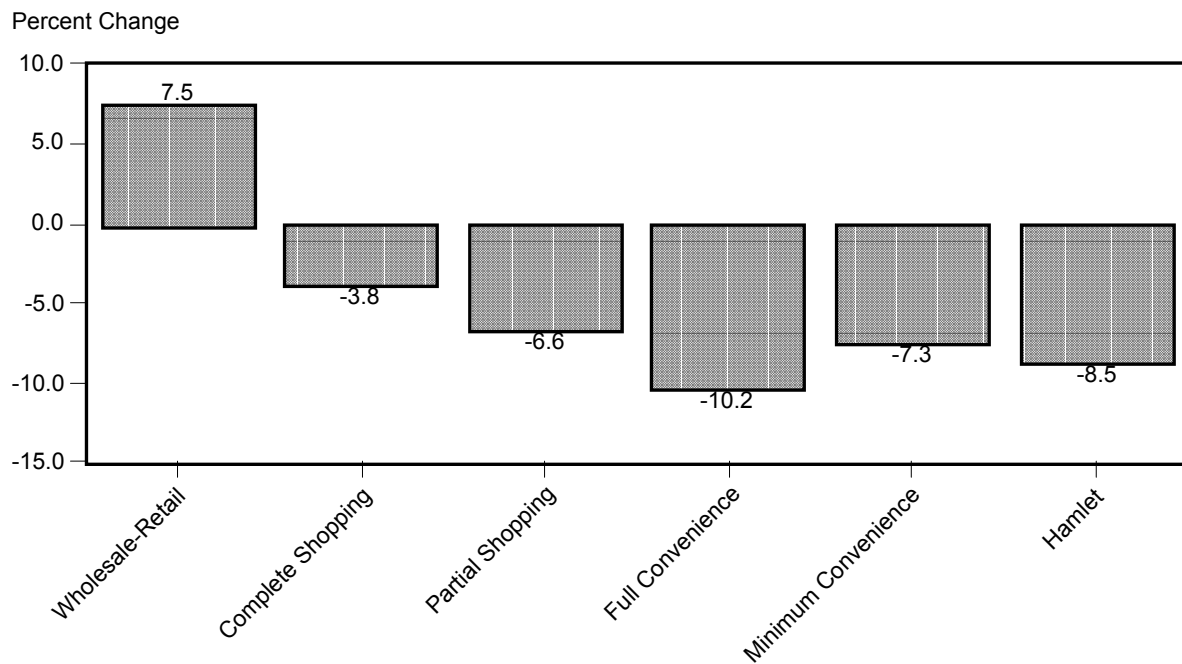
**Figure 61. Percentage Change for North Dakota City Populations by Trade Area Classification, 1980-2000**



**Figure 62. Percentage Change for North Dakota City Populations by Trade Area Classification, 1990-2000**



**Figure 63. Percentage Change in Trade Area Population by Trade Area Classification, 1980-2000**



**Figure 64. Percentage Change in Trade Area Population by Trade Area Classification, 1990-2000**

## *Population Projections*

Population projections are based on assumptions of the continuation of current birth rates, death rates, and migration. The projection scenario given here reflects a continuation of the North Dakota actual birth and death rates which occurred in 1998, 1999, and 2000 (a three-year average), and the rate of migration experienced by each county between 1990 and 2000. These projections, like any projection, are only as accurate as the assumptions on which they are based. Because only time will reveal the accuracy of the future birth, death, and migration trends, these projections should only be used as one of several tools in the planning process.

Table 13 gives 1980, 1990, and 2000 census populations, 1995 intercensal estimates, and projections to the year 2020. The corresponding figures (Figures 65 and 66), however, reflect the 1990-2000 population changes, and the projected changes for 2005-2020. (Population changes for 1980-2000 were previously presented in Figure 43.) Population projections essentially extend historic trends and provide an indication of where populations are headed if past conditions remain stable.

Figure 65 shows a decline in population for most counties in the state for 1990-2000; only Cass, Burleigh, Morton, Sioux, Ward, and Rolette experienced growth between the years 1990 and 2000. (Two of these counties (Morton and Ward) lost population during the 1980-1990 period, whereas Grand Forks and Mercer counties grew during that time; see previous data on population change.) The projected 2005-2020 population changes for all counties and state regions are presented in Figure 66.

Two state planning regions (Region 5 and Region 7) are projected to grow, by 12 percent and 3 percent, respectively. Region 4 is a draw--showing a loss of only 0.1 percent from 2005 to 2020 (Table 13). State Region 3 is also projected to have a very small loss (1.9 percent) for the projection period. Region 1 has the largest projected percentage loss, roughly 11 percent; this is slightly larger than the 6 percent loss projected for Region 6.

Projected population trends are very similar to those that occurred between 1990 and 2000. The projected rate of population change in the metropolitan/nonmetropolitan areas reflect a pattern very much like those in the historic period: adjacent counties are projected to lose a larger percentage of their population than the remote counties, a situation similar to the 1990-2000 period. Metro counties continue to show growth, albeit at a slightly lower rate in the future decade than the 1990-2000 period (Figures 67 and 68).

Overall, rural counties, which historically have lost the most population, are projected to continue to decline, have the lowest percentage of working age/college educated residents, and the highest percentage of elderly. This suggests greater demands for certain services such as health care and social services for the elderly (Meals-on-Wheels, for example). It also suggests that younger, working age persons have left these areas to seek employment and/or education elsewhere. However, most counties must plan an educational system to handle 25 to 30 percent of their population, although data for specific counties and communities should be used in the planning process.

**Table 13. North Dakota 1980, 1990, 1995<sup>a</sup> and 2000 Population and Projected Population for 2005, 2010, 2015, and 2020**

Area	1980	1990	1995	2000	2005	2010	2015	2020	Percent Change		
									1980-2000	1990-2000	2005-2020
-----%-----											
DIVIDE	3,494	2,899	2,574	2,283	2,006	1,796	1,600	1,420	-34.7	-21.2	-29.2
MCKENZIE	7,132	6,383	5,759	5,737	5,391	5,197	5,033	4,924	-19.6	-10.1	-8.7
WILLIAMS	22,237	21,129	20,400	19,761	18,556	17,959	17,318	16,679	-11.1	-6.5	-10.1
REGION 1	32,863	30,411	28,733	27,781	25,953	24,952	23,951	23,023	-15.5	-8.6	-11.3
BOTTINEAU	9,239	8,011	7,575	7,149	6,839	6,661	6,420	6,202	-22.6	-10.8	-9.3
BURKE	3,822	3,002	2,509	2,242	2,024	1,908	1,780	1,686	-41.3	-25.3	-16.7
MCHENRY	7,858	6,528	6,207	5,987	5,787	5,760	5,736	5,701	-23.8	-8.3	-1.5
MOUNTRAIL	7,679	7,021	6,831	6,631	6,492	6,518	6,516	6,503	-13.6	-5.6	0.2
PIERCE	6,166	5,052	4,756	4,675	4,575	4,579	4,490	4,360	-24.2	-7.5	-4.7
RENVILLE	3,608	3,160	2,868	2,610	2,425	2,352	2,300	2,266	-27.7	-17.4	-6.6
WARD	58,392	57,921	58,715	58,795	57,427	56,728	56,349	55,809	0.7	1.5	-2.8
REGION 2	96,764	90,695	89,461	88,089	85,569	84,506	83,591	82,527	-9.0	-2.9	-3.6
BENSON	7,944	7,198	6,945	6,964	7,101	7,329	7,571	7,835	-12.3	-3.3	10.3
CAVALIER	7,636	6,064	5,384	4,831	4,391	4,070	3,830	3,614	-36.7	-20.3	-17.7
EDDY	3,554	2,951	2,859	2,757	2,669	2,633	2,550	2,470	-22.4	-6.6	-7.5
RAMSEY	13,048	12,681	12,500	12,066	11,591	11,447	11,212	10,958	-7.5	-4.8	-5.5
ROLETTE	12,177	12,772	13,834	13,674	13,687	13,965	14,019	14,029	12.3	7.1	2.5
TOWNER	4,052	3,627	3,270	2,876	2,666	2,521	2,440	2,382	-29.0	-20.7	-10.7
REGION 3	48,411	45,293	44,792	43,168	42,105	41,965	41,622	41,288	-10.8	-4.7	-1.9
GRAND FORKS	66,100	70,683	71,569	66,109	66,545	67,551	67,988	68,238	--	-6.5	2.5
NELSON	5,233	4,410	4,022	3,715	3,603	3,592	3,559	3,542	-29.0	-15.8	-1.7
PEMBINA	10,399	9,238	8,773	8,585	8,254	8,125	7,971	7,810	-17.4	-7.1	-5.4
WALSH	15,371	13,840	13,862	12,389	11,621	11,239	10,776	10,336	-19.4	-10.5	-11.1
REGION 4	97,103	98,171	98,226	90,798	90,023	90,507	90,294	89,926	-6.5	-7.5	-0.1
CASS	88,247	102,874	111,780	123,138	131,097	137,724	144,880	151,651	39.5	19.7	15.7
RANSOM	6,698	5,921	5,823	5,890	5,834	5,844	5,860	5,840	-12.1	-0.5	0.1
RICHLAND	19,207	18,148	18,200	17,998	17,715	17,570	17,414	17,218	-6.3	-0.8	-2.8
SARGENT	5,512	4,549	4,508	4,366	4,258	4,230	4,225	4,272	-20.8	-4.0	0.3
STEELE	3,106	2,420	2,299	2,258	2,190	2,134	2,102	2,074	-27.3	-6.7	-5.3
TRAILL	9,624	8,752	8,666	8,477	8,263	8,141	7,987	7,771	-11.9	-3.1	-6.0
REGION 5	132,394	142,664	151,276	162,127	169,357	175,643	182,468	188,826	22.5	13.6	11.5
BARNES	13,960	12,545	12,077	11,775	11,574	11,564	11,629	11,675	-15.7	-6.1	0.9
DICKEY	7,207	6,107	5,765	5,757	5,536	5,426	5,365	5,283	-20.1	-5.7	-4.6
FOSTER	4,611	3,983	3,913	3,759	3,637	3,557	3,395	3,216	-18.5	-5.6	-11.6
GRIGGS	3,714	3,303	3,041	2,754	2,557	2,418	2,271	2,099	-25.8	-16.6	-17.9
LAMOURE	6,473	5,383	4,999	4,701	4,466	4,310	4,104	3,898	-27.4	-12.7	-12.7
LOGAN	3,493	2,847	2,474	2,308	2,202	2,115	2,032	1,919	-33.9	-18.9	-12.9
MCINTOSH	4,800	4,021	3,705	3,390	3,142	3,041	2,917	2,769	-29.4	-15.7	-11.9
STUTSMAN	24,154	22,241	21,389	21,908	21,452	21,278	21,037	20,737	-9.3	-1.5	-3.3
WELLS	6,979	5,864	5,297	5,102	4,783	4,593	4,364	4,094	-26.9	-13.0	-14.4
REGION 6	75,391	66,294	62,660	61,454	59,349	58,302	57,114	55,690	-18.5	-7.3	-6.2
BURLEIGH	54,811	60,131	64,671	69,416	70,524	72,531	73,881	74,727	26.6	15.4	6.0
EMMONS	5,877	4,830	4,511	4,331	4,187	4,105	3,925	3,710	-26.3	-10.3	-11.4
GRANT	4,274	3,549	3,192	2,841	2,531	2,318	2,104	1,890	-33.5	-19.9	-25.3
KIDDER	3,833	3,332	3,054	2,753	2,548	2,385	2,194	1,995	-28.2	-17.4	-21.7
MCLEAN	12,383	10,457	9,894	9,311	8,973	8,820	8,627	8,423	-24.8	-11.0	-6.1
MERCER	9,404	9,808	9,442	8,644	8,151	7,751	7,431	7,267	-8.1	-11.9	-10.8
MORTON	25,177	23,700	24,323	25,303	26,272	27,481	28,550	29,521	0.5	6.8	12.4
OLIVER	2,495	2,381	2,201	2,065	1,995	1,939	1,868	1,799	-17.2	-13.3	-9.8
SHERIDAN	2,819	2,148	1,933	1,710	1,562	1,477	1,408	1,364	-39.3	-20.4	-12.7
SIOUX	3,620	3,761	4,011	4,044	4,096	4,223	4,215	4,208	11.7	7.5	2.7
REGION 7	124,693	124,097	127,232	130,418	130,839	133,030	134,203	134,904	4.6	5.1	3.1

- Continued -



**Table 13. Continued**

Area	1980	1990	1995	2000	2005	2010	2015	2020	Percent Change		
									1980-2000	1990-2000	2005-2020
									-----%-----		
ADAMS	3,584	3,174	2,799	2,593	2,365	2,208	2,075	1,963	-27.7	-18.3	-17.0
BILLINGS	1,138	1,108	1,160	888	815	775	727	679	-22.0	-19.9	-16.7
BOWMAN	4,229	3,596	3,233	3,242	3,177	3,181	3,108	3,038	-23.3	-9.8	-4.4
DUNN	4,627	4,005	3,761	3,600	3,435	3,283	3,110	2,927	-22.2	-10.1	-14.8
GOLDEN VALLEY	2,391	2,108	1,938	1,924	1,856	1,800	1,723	1,658	-19.5	-8.7	-10.7
HETTINGER	4,275	3,445	3,031	2,715	2,432	2,228	2,046	1,877	-36.5	-21.2	-22.8
SLOPE	1,157	907	820	767	705	675	639	605	-33.7	-15.4	-14.2
STARK	23,697	22,832	22,426	22,636	22,220	22,270	22,301	22,360	-4.5	-0.9	0.6
REGION 8	45,098	41,175	39,168	38,365	37,005	36,420	35,729	35,107	-14.9	-6.8	-5.1
NORTH DAKOTA	652,717	638,800	641,548	642,200	640,200	645,325	648,972	651,291	-1.6	0.5	1.7

<sup>a</sup>1995 populations are intercensal estimates.

Source: Rathge, Richard, Mandy Clemenson, and Ramona Danielson. 2002. North Dakota Population Projections: 2005 to 2020. North Dakota State Data Center and Department of Agribusiness and Applied Economics, North Dakota State University, Fargo. (projected populations); U.S. Department of Commerce, Bureau of the Census. 1990 Decennial Census of Population (1980 and 1990 Populations); U.S. Department of Commerce, Bureau of the Census. Intercensal Population Estimates, 1996 (1995 population estimates). U.S. Department of Commerce, Bureau of the Census. Internet Web Site. 2002. Census of Population and Housing. (2000 population counts).

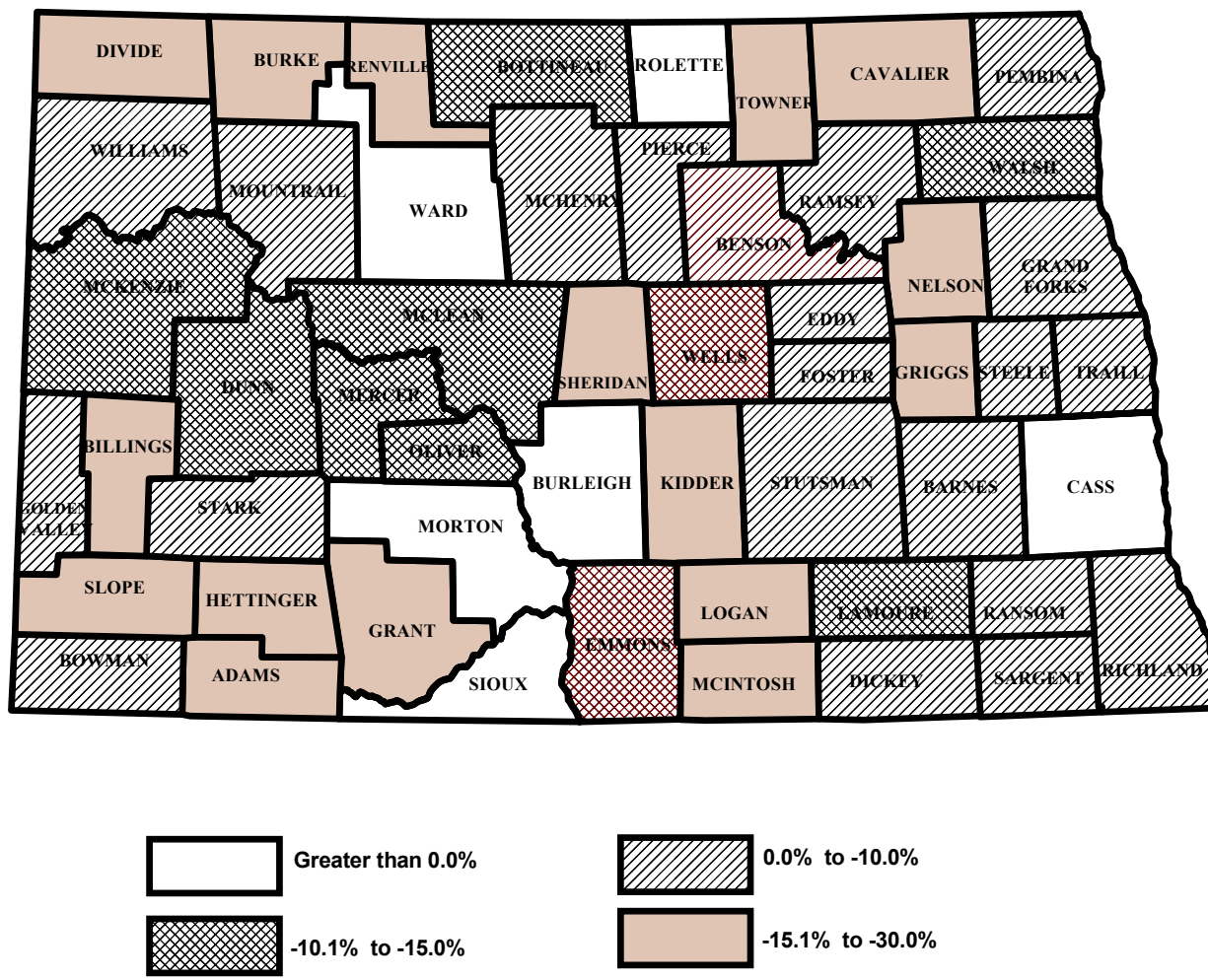


Figure 65. Change in North Dakota Population, 1990-2000

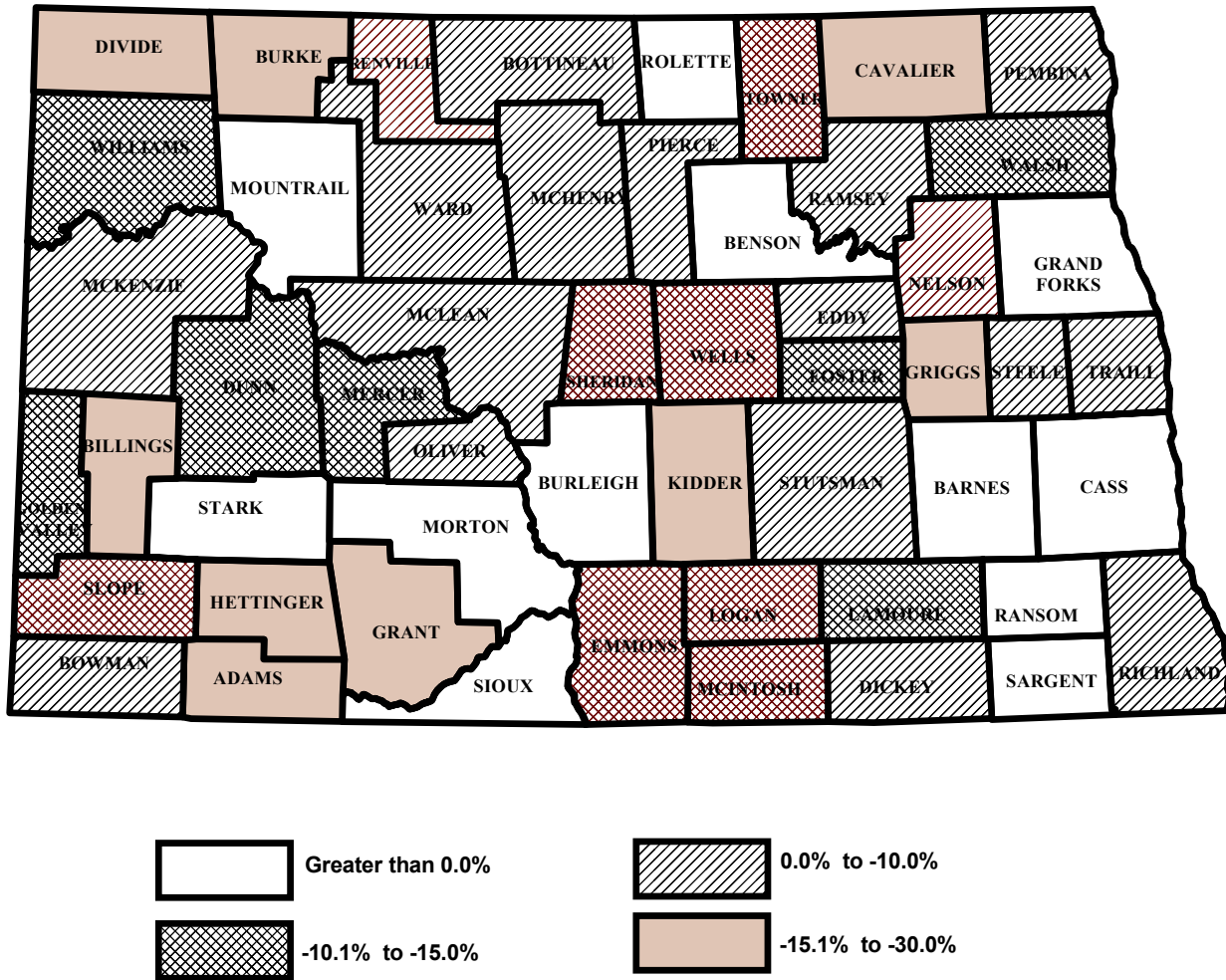
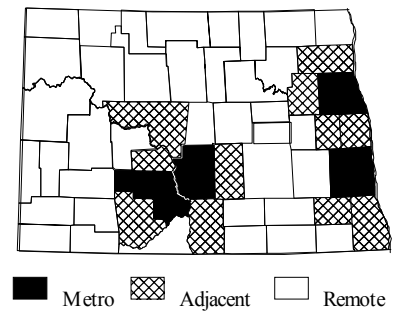
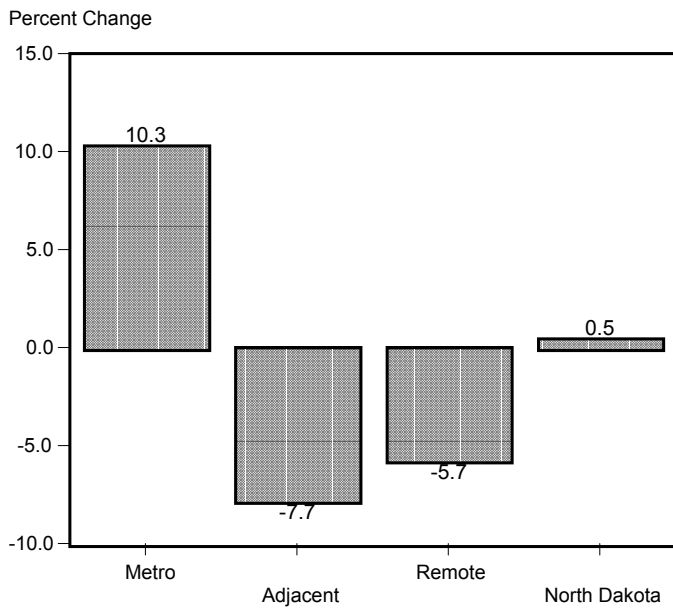
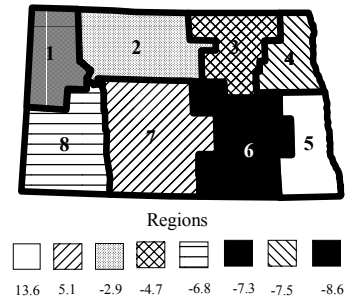
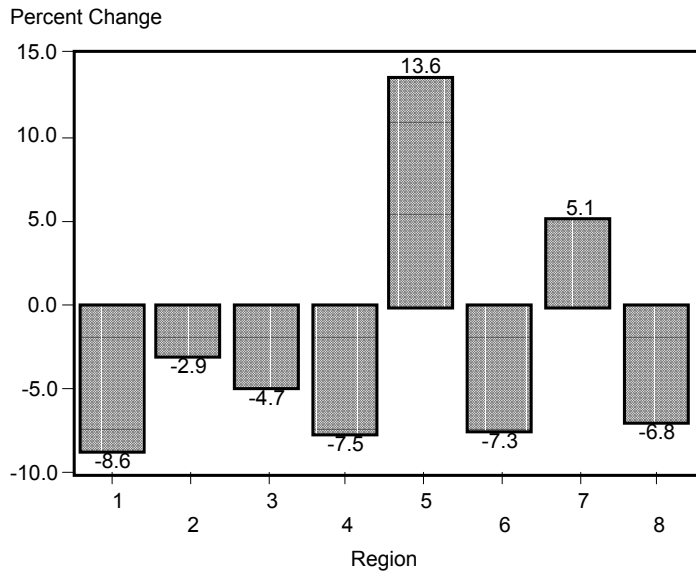
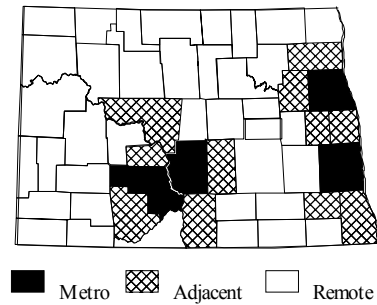
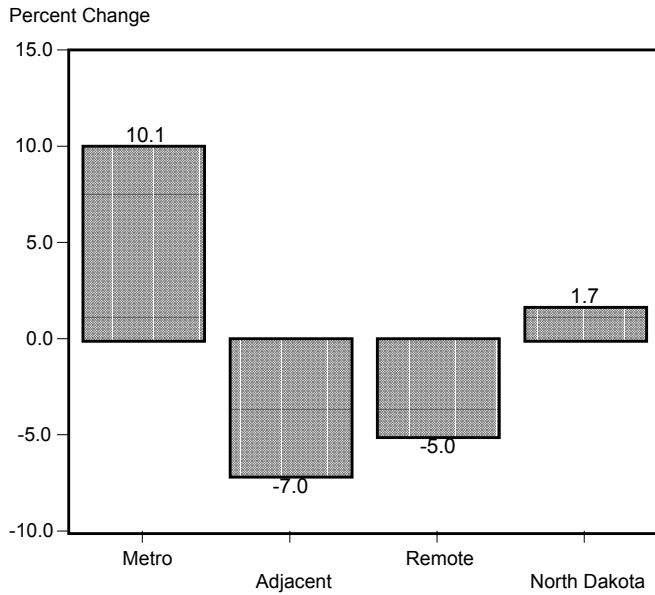
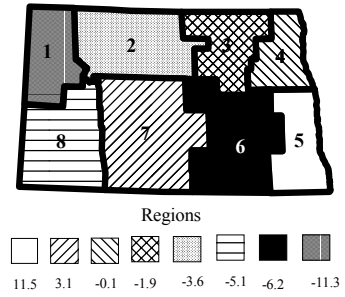
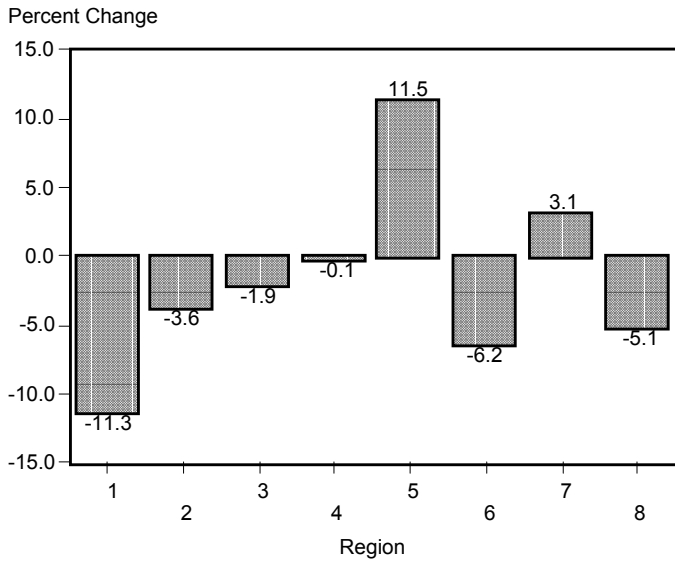


Figure 66. Projected Change in North Dakota Population, 2005-2020



**Figure 67. Change in North Dakota Population by Region and Area, 1990-2000**



**Figure 68. Projected Change in North Dakota Population by Region and Area, 2005-2020**

### *Number of Farms and Average Farm Size*

Corresponding with the decrease in population and employment has been the decline in farm numbers. State Region 7 had the most farms in 1997 (5,969) and Region 1 had the fewest (2,053) (Table 14). The number of farms in North Dakota in 1997 was only one-half the number that existed in 1954. Ward County had the most farms (1,172) of any county in the state in 1997 (Figure 69).

Long-run (1954-1997) decline in farm numbers has been significant with all regions showing a 40 percent or larger decline. Region 5 led the way with 62 percent decrease in farms during the period (Figure 70). The four eastern state regions had larger losses of farms than the western ones during the 1954-1997 period. In the short-run, the trend is not much different. From 1992-1997 six of eight state regions lost farms. Regions 2 and 8 gained farms, although they are only 2.1 percent and 1.0 percent, respectively (Figure 71). The trend of farm consolidation has been significant and consistent during the past four decades.

The result of reduced farm numbers has been an increase in farm size. Average farm size in North Dakota was 1,290 acres in 1997, nearly double that of 1954 (Table 14). Average farm size ranged from 1,020 acres in Region 4 to 1,902 acres in Region 8 (Figure 72). Generally, the larger farms were in the western part of North Dakota, and smaller farms were in the eastern part of the state where more intensive cropping occurs.

**Table 14. Number of Farms and Average Farm Size, by County, North Dakota, Selected Years, 1954-1997**

Regions	Number of Farms						Percent Change	
	1954	1974	1982	1987	1992	1997	1954-1997	1992-1997
DIVIDE	907	693	612	599	527	535	-41.0	1.5
MCKENZIE	1,203	884	778	752	741	668	-44.5	-9.9
WILLIAMS	1,536	1,106	971	948	833	850	-44.7	2.0
REGION 1	3,646	2,683	2,361	2,299	2,101	2,053	-43.7	-2.3
BOTTINEAU	1,677	1,192	967	929	798	808	-51.8	1.3
BURKE	892	671	580	525	462	479	-46.3	3.7
MCHENRY	1,596	1,156	974	964	889	905	-43.3	1.8
MOUNTRAIL	1,279	1,041	881	873	745	755	-41.0	1.3
PIERCE	957	686	589	578	501	491	-48.7	-2.0
RENVILLE	833	547	480	454	396	390	-53.2	-1.5
WARD	1,983	1,425	1,256	1,215	1,107	1,172	-40.9	5.9
REGION 2	9,217	6,718	5,727	5,538	4,898	5,000	-45.8	2.1
BENSON	1,331	1,006	760	717	635	604	-54.6	-4.9
CAVALIER	1,794	1,122	971	922	743	682	-62.0	-8.2
EDDY	556	394	345	326	312	288	-48.2	-7.7
RAMSEY	1,269	785	690	633	511	525	-58.6	2.7
ROLETTE	1,001	628	550	536	486	511	-49.0	5.1
TOWNER	884	684	552	557	462	428	-51.6	-7.4
REGION 3	6,835	4,619	3,868	3,691	3,149	3,038	-55.6	-3.5
GRAND FORKS	1,886	1,136	957	893	751	768	-59.3	2.3
NELSON	1,104	762	632	564	482	471	-57.3	-2.3
PEMBINA	1,519	920	841	763	624	615	-59.5	-1.4
WALSH	2,084	1,210	975	928	780	755	-63.8	-3.2
REGION 4	6,593	4,028	3,405	3,148	2,637	2,609	-60.4	-1.1
CASS	2,324	1,509	1,276	1,183	1,004	919	-60.5	-8.5
RANSOM	1,140	646	521	498	451	485	-57.5	7.5
RICHLAND	2,325	1,486	1,207	1,126	956	874	-62.4	-8.6
SARGENT	1,168	681	590	541	481	449	-61.6	-6.7
STEELE	862	569	440	396	335	290	-66.4	-13.4
TRAILL	1,326	845	685	603	517	471	-64.5	-8.9
REGION 5	9,145	5,736	4,719	4,347	3,744	3,488	-61.9	-6.8
BARNES	1,798	1,248	1,015	917	839	772	-57.1	-8.0
DICKEY	1,171	798	611	597	552	517	-55.8	-6.3
FOSTER	612	372	345	377	297	282	-53.9	-5.1
GRIGGS	805	525	457	444	382	357	-55.7	-6.5
LAMOURE	1,365	924	765	738	679	616	-54.9	-9.3
LOGAN	827	659	536	531	472	401	-51.5	-15.0
MCINTOSH	982	707	595	556	483	505	-48.6	4.6
STUTSMAN	2,042	1,249	1,134	1,113	988	979	-52.1	-0.9
WELLS	1,391	881	735	683	638	593	-57.4	-7.1
REGION 6	10,993	7,363	6,193	5,956	5,330	5,022	-54.3	-5.8

- Continued -

Table 14. continued

Regions	Number of Farms						Percent Change	
	1954	1974	1982	1987	1992	1997	1954-1997	1992-1997
BURLEIGH	1,026	845	792	803	795	867	-15.5	9.1
EMMONS	1,259	951	849	868	759	744	-40.9	-2.0
GRANT	1,018	828	685	688	598	596	-41.5	-0.3
KIDDER	871	626	566	557	499	513	-41.1	2.8
MCLEAN	1,859	1,322	1,149	1,058	926	969	-47.9	4.6
MERCER	852	644	542	575	527	473	-44.4	-10.2
MORTON	1,453	1,095	956	988	923	907	-37.6	-1.7
OLIVER	555	391	349	367	326	327	-41.1	0.3
SHERIDAN	865	565	495	470	419	380	-56.1	-9.3
SIoux	319	257	219	229	200	193	-39.5	-3.5
REGION 7	10,077	7,524	6,602	6,603	5,972	5,969	-40.8	-0.1
ADAMS	555	481	371	410	353	367	-33.9	4.0
BILLINGS	359	271	257	267	242	237	-34.0	-2.1
BOWMAN	537	380	377	390	343	358	-33.3	4.4
DUNN	1,059	792	697	733	650	618	-41.6	-4.9
GOLDEN VALLEY	424	287	288	261	219	244	-42.5	11.4
HETTINGER	887	609	502	525	427	436	-50.8	2.1
SLOPE	447	330	295	299	270	263	-41.2	-2.6
STARK	1,169	889	769	822	788	802	-31.4	1.8
REGION 8	5,437	4,039	3,556	3,707	3,292	3,325	-38.8	1.0
NORTH DAKOTA	61,943	42,710	36,431	35,289	31,123	30,504	-50.8	-2.0

- Continued -



Table 14. continued

Regions	Average Farm Size (acres)						Percent Change	
	1954	1974	1982	1987	1992	1997	1954-1997	1992-1997
DIVIDE	852	1,151	1,205	1,228	1,378	1,371	60.9	-0.5
MCKENZIE	1,085	1,385	1,506	1,493	1,573	1,751	61.4	11.3
WILLIAMS	833	1,122	1,196	1,255	1,420	1,418	70.2	-0.1
REGION 1	921	1,216	1,300	1,326	1,463	1,514	64.4	3.5
BOTTINEAU	615	922	1,005	1,078	1,191	1,188	93.2	-0.3
BURKE	726	986	1,105	1,162	1,211	1,285	77.0	6.1
MCHENRY	697	1,006	1,106	1,087	1,180	1,179	69.2	-0.1
MOUNTRAIL	866	1,069	1,147	1,202	1,343	1,321	52.5	-1.6
PIERCE	695	935	1,019	1,026	1,170	1,155	66.2	-1.3
RENVILLE	647	953	1,060	1,111	1,272	1,322	104.3	3.9
WARD	650	881	958	977	1,049	1,030	58.5	-1.8
REGION 2	694	961	1,050	1,082	1,186	1,186	70.9	--
BENSON	607	931	1,083	1,138	1,225	1,255	106.8	2.4
CAVALIER	513	802	899	995	1,151	1,284	150.3	11.6
EDDY	738	972	1,091	1,079	1,183	1,195	61.9	1.0
RAMSEY	610	950	1,086	1,143	1,252	1,254	105.6	0.2
ROLETTE	514	833	878	945	1,075	965	87.7	-10.2
TOWNER	713	961	1,089	1,132	1,280	1,332	86.8	4.1
REGION 3	594	898	1,010	1,069	1,193	1,214	104.4	1.8
GRAND FORKS	464	762	893	904	1,024	1,009	117.5	1.5
NELSON	560	854	962	1,062	1,147	1,136	102.9	-1.0
PEMBINA	437	730	801	839	963	1,030	135.7	7.0
WALSH	402	675	786	818	945	950	136.3	0.5
REGION 4	455	746	852	891	1,009	1,020	124.2	1.1
CASS	472	690	830	895	1,066	1,162	146.2	9.0
RANSOM	436	838	935	978	1,075	1,062	143.6	-1.2
RICHLAND	372	595	734	763	836	926	148.9	10.8
SARGENT	466	765	872	883	1,030	1,062	127.9	3.1
STEELE	509	817	1,031	1,125	1,313	1,423	179.6	8.4
TRAILL	409	620	757	843	969	1,050	156.7	8.4
REGION 5	436	693	830	883	1,013	1,083	148.4	6.9
BARNES	523	770	890	937	1,023	1,127	115.5	10.2
DICKEY	584	856	1,008	1,049	1,137	1,122	92.1	-1.3
FOSTER	678	1,089	1,118	1,045	1,233	1,313	93.7	6.5
GRIGGS	545	839	921	948	1,037	1,092	100.4	5.3
LAMOURE	537	799	906	878	985	1,089	102.8	10.6
LOGAN	742	941	1,063	1,123	1,269	1,325	78.6	4.4
MCINTOSH	631	876	944	1,021	1,128	1,006	59.4	-10.8
STUTSMAN	683	1,060	1,170	1,168	1,285	1,292	89.2	0.5
WELLS	583	941	1,036	1,080	1,177	1,255	115.3	6.6
REGION 6	605	899	1,007	1,033	1,141	1,181	95.2	3.5

- Continued -

Table 14. continued

Regions	Average Farm Size (acres)						Percent Change	
	1954	1974	1982	1987	1992	1997	1954-1997	1992-1997
BURLEIGH	972	1,163	1,101	1,099	1,104	1,033	6.3	-6.4
EMMONS	746	911	958	998	1,099	1,107	48.4	0.7
GRANT	1,018	1,230	1,352	1,483	1,705	1,627	59.8	-4.6
KIDDER	948	1,259	1,276	1,362	1,451	1,413	49.1	-2.6
MCLEAN	697	935	1,012	1,088	1,219	1,179	69.2	-3.3
MERCER	779	944	1,040	970	1,009	1,165	49.6	15.5
MORTON	854	1,131	1,166	1,242	1,337	1,355	58.7	1.3
OLIVER	767	1,072	1,076	1,052	1,179	1,224	59.6	3.8
SHERIDAN	680	990	1,052	1,112	1,244	1,295	90.4	4.1
SIOUX	2,083	3,040	3,468	3,527	3,729	3,652	75.3	-2.1
REGION 7	861	1,129	1,186	1,239	1,340	1,329	54.4	-0.8
ADAMS	1,055	1,298	1,583	1,525	1,684	1,716	62.7	1.9
BILLINGS	1,385	2,838	2,903	2,994	3,384	3,350	141.9	-1.0
BOWMAN	1,354	1,873	1,883	1,849	1,977	1,998	47.6	1.1
DUNN	1,104	1,795	2,005	1,854	2,081	2,161	95.7	3.8
GOLDEN VALLEY	1,300	1,774	1,914	2,039	2,308	2,372	82.5	2.8
HETTINGER	840	1,244	1,530	1,381	1,612	1,622	93.1	0.6
SLOPE	1,324	2,376	2,586	2,705	2,910	2,879	117.4	-1.1
STARK	764	953	1,046	978	1,068	1,005	31.5	-5.9
REGION 8	1,059	1,591	1,779	1,720	1,903	1,902	79.6	0.1
NORTH DAKOTA	676	992	1,104	1,143	1,267	1,290	90.8	1.8

Source: U.S. Department of Agriculture. 1954-1997. Census of Agriculture. Washington, D.C.

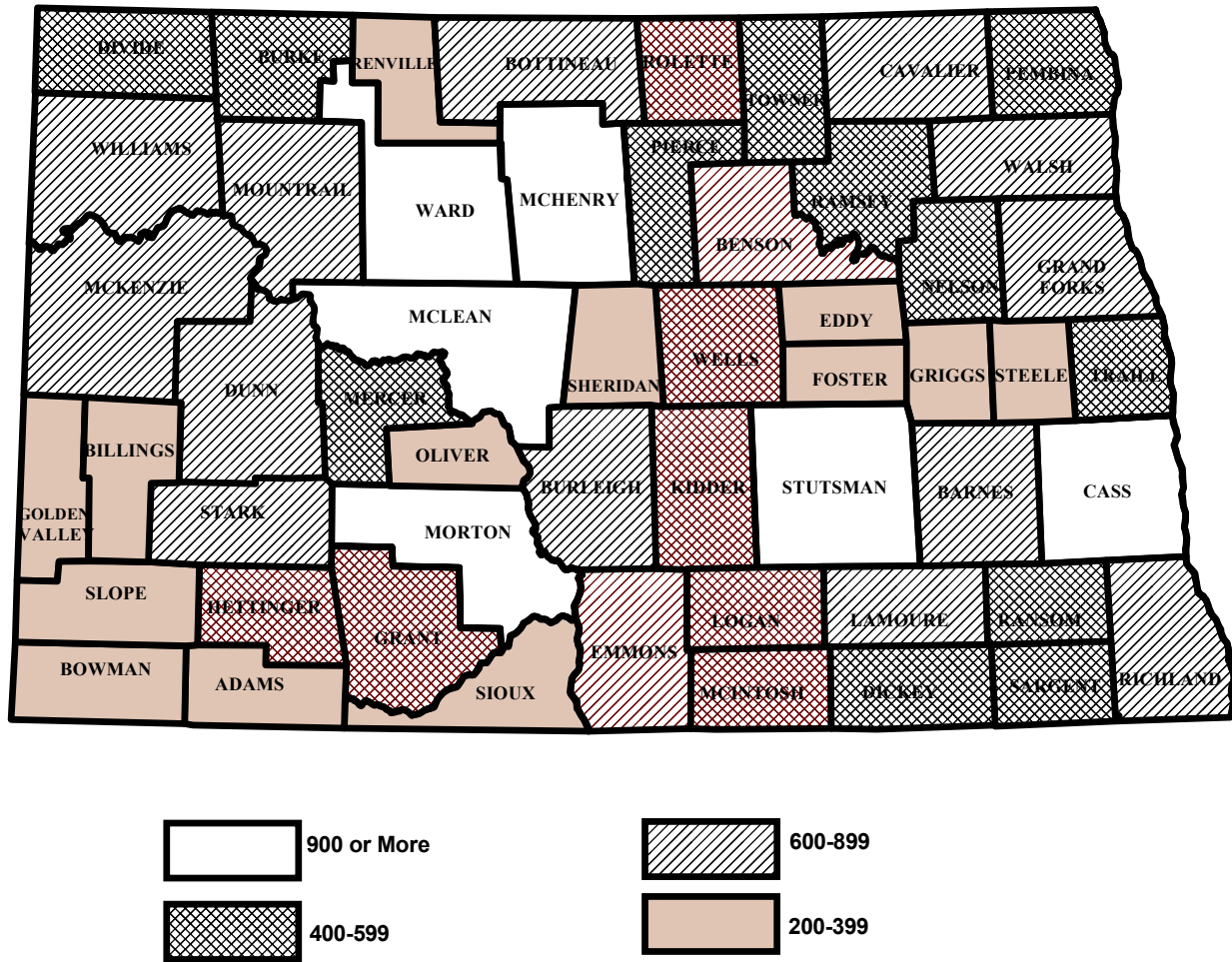
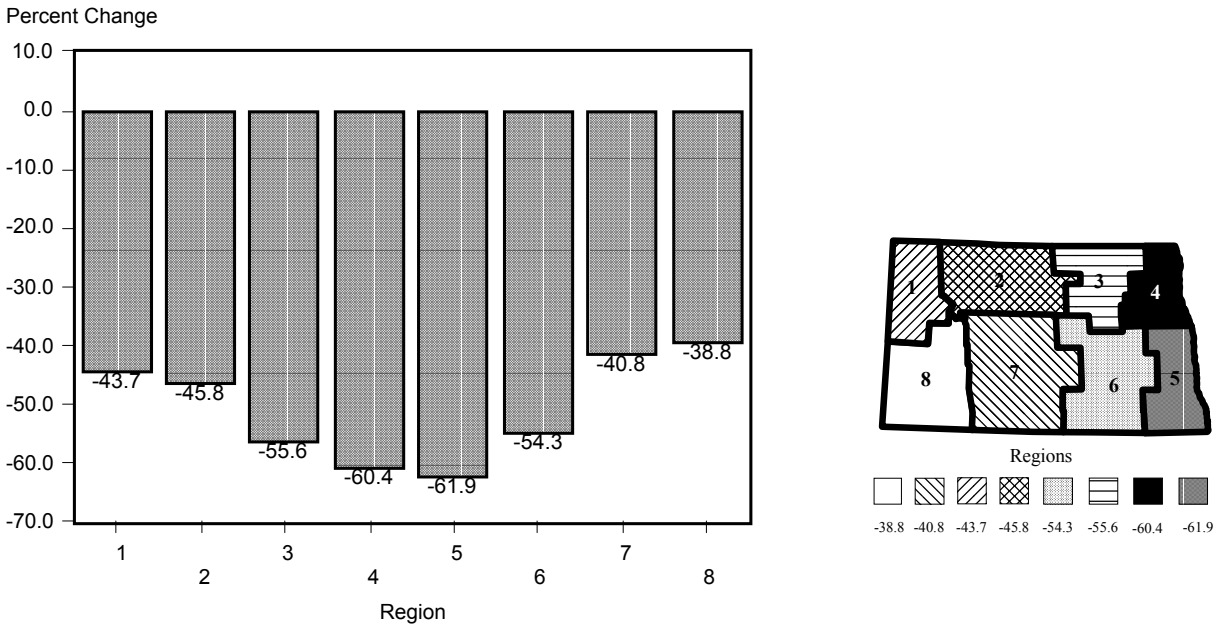
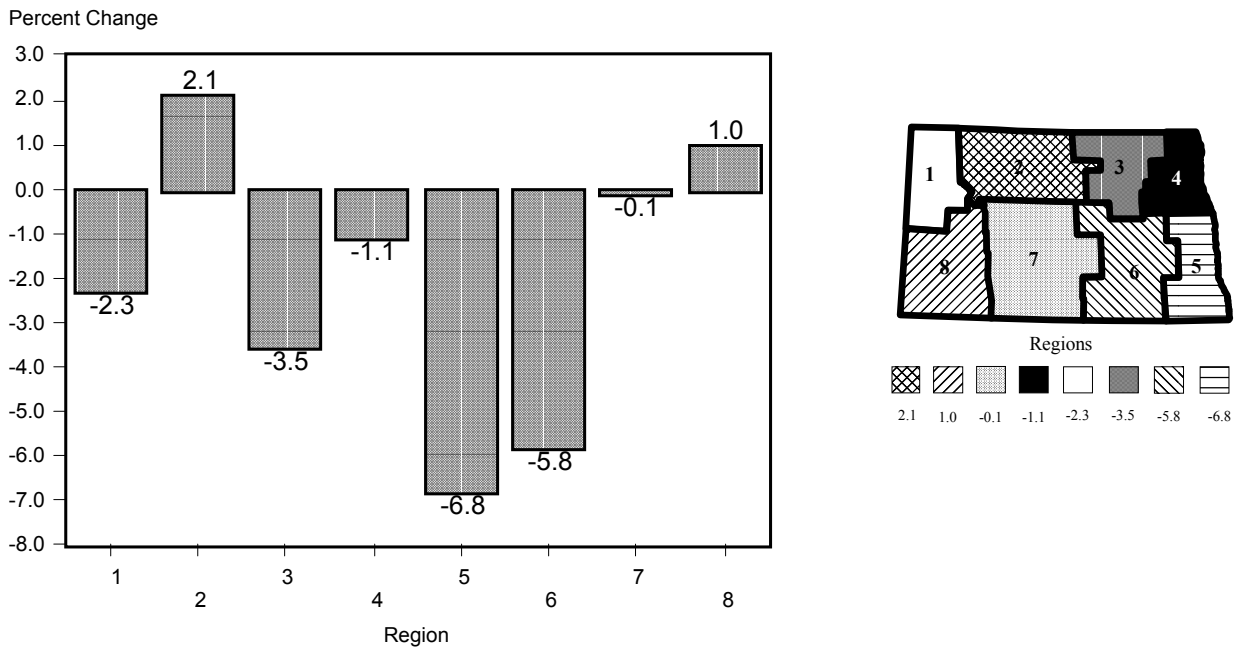


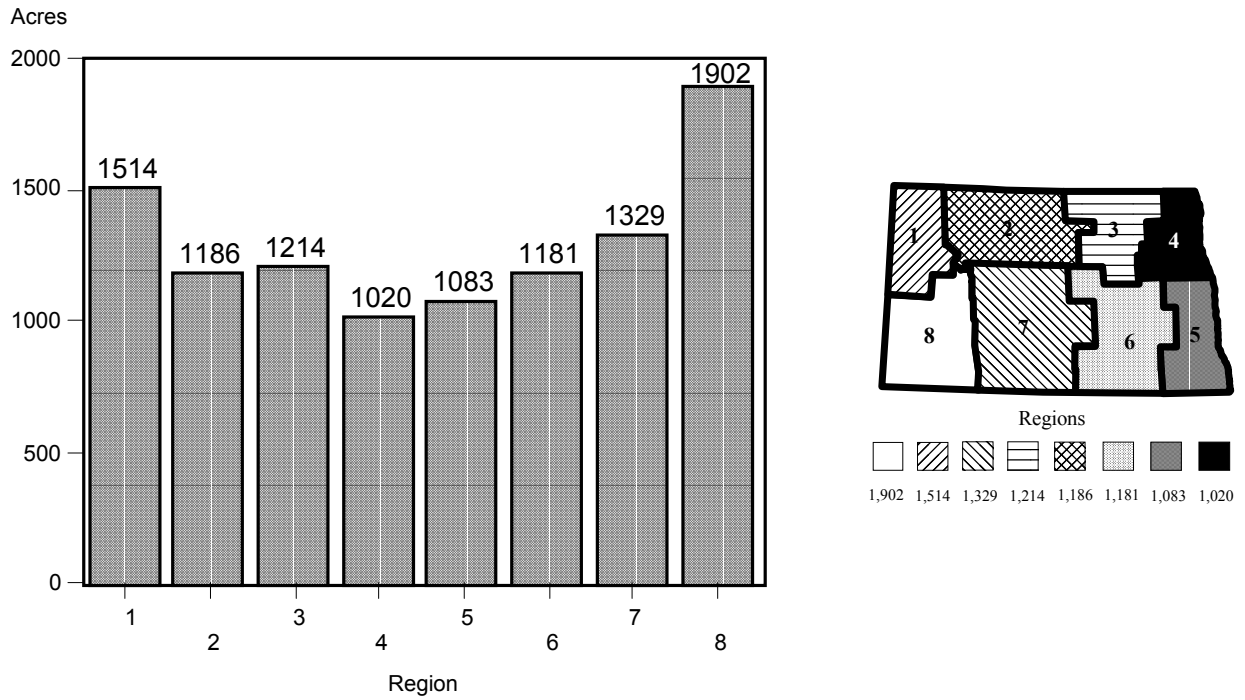
Figure 69. Number of Farms in North Dakota by County, 1997



**Figure 70. Percentage Change in the Number of Farms in North Dakota by State Region, 1954-1997**



**Figure 71. Percentage Change in the Number of Farms in North Dakota by State Region, 1992-1997**



**Figure 72. Average Farm Size in North Dakota by State Region, 1997**

## ***Policy Implications***

Patterns of population change that have occurred over the past decade reflect shifts in the state's economic base and changing patterns of retail trade and service delivery. In all areas of the state the number of farms has declined rather steadily, resulting in larger farm size. At the same time, population growth in some areas has resulted in new economic opportunities and service demands. In other rural areas, a dwindling population base confronts local businesses and service agencies with adjustment challenges.

Overall, state-level statistics on population change tend to mask the dynamics of population shifts within the state. From 1980 to 1990, North Dakota's population decreased by about 2 percent, or about 14,000 people. The population for 2000 shows a growth of over 3,400 people from 1990. This reduces the long-term decline (1980-2000) to 1.6 percent. The 1990-2000 population change showed an increase of 0.5 percent, reversing the trend of decline for the 1980s. However, many counties experienced marked population changes. For instance, 29 rural counties sustained population decreases of more than 20 percent, while one urban county had a population increase of 40 percent from 1980-2000. Cass County led the state both in the rate of growth and the absolute increase in population. Planning problems there are likely to be substantially different from those found in Burke and Sheridan counties, which had the state's largest population decreases, nearly 40 percent.

Policy makers should be aware of the implications of statewide demographic trends, such as the increasing percentage of elderly population in all regions of the state, as well as the diversity of situations confronting communities within the state. Region-specific population and economic projections, which reflect both an area's past trends and its future prospects, are valuable planning tools.

## Public Service/Community Resources

### DATA PRESENTATION

*Physicians, 2001*

*Hospital Beds, 2001*

*Crimes, 1997-1999*

*Housing Units, 2000*

*Vacancy Rates, 2000*

*Median Age of Housing, 2000*

### SOURCES

The number of physicians and hospital beds by county were taken from a list supplied by the North Dakota Medical Association and the North Dakota Department of Health. Crime rates were calculated from the annual report on crime published by the State Attorney General's Office, state crime ranking was from FBI Internet Web Site, 2002, Crime In the Central States - 2001, and all housing information came from the U.S. Department of Commerce, Bureau of the Census Internet Web Site, 2002, *2000 Census*, Summary File 3 (SF3).

### *Overview*

The well-being of rural residents depends not just on economic measures, but also on the availability of public services and a well-developed infrastructure. In addition, a community's public services and infrastructure can be a major factor affecting its ability to attract new economic development projects.

Health care is a major concern in rural areas. In this section, the number of persons per physician and the number of persons per hospital bed are used as measures of health care availability.

On the other hand, crime is associated more with urban areas. A three-year average of the number of crimes per 1,000 population is used to measure this association in North Dakota.

Another gauge of the quality of life across the state is the availability of housing. The number of housing units, the vacancy rate, and the median age of housing provide a measure of housing quantity, quality, and distribution.

## ***Physicians***

In general, residents in the eastern part of North Dakota have better access to physicians than those residents in the western part of the state (Table 15 and Figure 73). However, in terms of state planning regions, Region 3 has the highest number of persons per physician (1,167), followed by Region 6 (891) (Figure 73). Region 5 has the state's lowest average (339), compared to the state average of 480 (Figure 74). A marked difference is also seen when the metro counties are compared to the adjacent and remote counties. Physicians are least plentiful in the counties next to the metro counties, and generally less available in the rural areas of the state (Figure 74). Fifteen nonmetropolitan counties had no physician in 2001, but one rural county, Adams, had the lowest population per physician ratio (199 persons per physician) and another rural county, Benson, had the highest (6,964) (Table 15). State Region 8 had only 54 physicians, and only three of the region's eight counties had a physician. (Adams County is the home of a large regional clinic; the presence of this clinic is reflected in the health care ratios given in this section.) Cass County had the largest number of physicians (Table 15) but had a 276 persons-per-physician ratio.

One caveat is in order: the number of residents in a county/region was divided by the number of physicians in those counties/regions to get the persons-per-physician rate; any out-of-state population (or out-of-county/region) served by physicians was not included. Consequently, the actual number of persons served by one physician may be higher than that reflected in these data, especially for health care providers close to neighboring states or providers close to counties with no physicians. Likewise, health care may be provided to North Dakota residents by out-of-state providers; this scenario is also not considered in the medical case data shown here. This caveat also applies to the data on hospitals.

## ***Hospital Beds***

The number of persons per hospital bed shows a different pattern, with more beds generally available per person in the west (Figure 75). Regions 1, 2, and 6 have the lowest number of persons per hospital bed (Figure 76). Region 3, which had the highest population-per-physician ratio, also has the highest population-per-hospital bed ratio. In spite of the more equitable distribution of hospital beds than physicians, the metro areas still ranked lowest among the three area types on the number of beds per person, with more beds available in the metro areas than in the nonmetropolitan areas. Cass County had the largest number of hospital beds (728), and Adams County had the lowest number of persons per bed (56). Nineteen of the state's counties had no hospital in 2001 (Table 15).



**Table 15. Number of Physicians, Population Per Physician, Number of Hospital Beds, and Population Per Hospital Bed in North Dakota, 2001**

Area	Number of Physicians	Population Per Physician	Number of Hospital Beds	Population Per Hospital Bed	Number of Nursing Facility Beds	Population Per Nursing Facility Bed
Divide	1	2,283	29	79	76	30
McKenzie	1	5,737	24	239	47	122
Williams	41	482	112	176	209	95
REGION 1	43	646	165	168	332	84
Bottineau	5	1,430	25	286	164	44
Burke	--	--	--	--	--	--
McHenry	--	--	--	--	50	120
Mountrail	6	1,105	25	265	156	43
Pierce	9	519	38	123	118	40
Renville	2	1,305	--	--	59	44
Ward	135	436	441	133	410	143
REGION 2	157	561	529	167	957	92
Benson	1	6,964	--	--	--	--
Cavalier	4	1,208	28	173	104	46
Eddy	--	--	--	--	82	34
Ramsey	19	635	50	241	202	60
Rolette	11	1,243	54	253	102	134
Towner	2	1,438	20	144	60	48
REGION 3	37	1,167	152	284	550	78
Grand Forks	182	363	373	177	416	159
Nelson	3	1,238	19	196	153	24
Pembina	8	1,073	29	296	101	85
Walsh	12	1,032	47	264	205	60
REGION 4	205	443	468	194	875	104
Cass	446	276	728	169	807	153
Ransom	5	1,178	20	295	185	32
Richland	19	947	--	--	201	90
Sargent	--	--	--	--	40	109
Steele	--	--	--	--	--	--
Traill	8	1,060	45	188	207	41
REGION 5	478	339	793	204	1,440	113

- Continued -

Table 15. continued

Area	Number of Physicians	Population Per Physician	Number of Hospital Beds	Population Per Hospital Bed	Number of Nursing Facility Beds	Population Per Nursing Facility Bed
Barnes	12	981	74	159	170	69
Dickey	6	960	36	160	179	32
Foster	3	1,253	30	125	60	63
Griggs	3	918	10	275	58	47
LaMoure	--	--	--	--	60	78
Logan	--	--	--	--	44	52
McIntosh	5	678	50	68	142	24
Stutsman	35	626	198	111	242	91
Wells	5	1,020	48	106	116	44
REGION 6	69	891	446	138	1,071	57
Burleigh	255	272	501	139	510	136
Emmons	2	2,166	25	173	76	57
Grant	--	--	21	135	25	114
Kidder	--	--	--	--	50	55
McLean	9	1,035	47	198	163	57
Mercer	7	1,235	25	346	85	102
Morton	19	1,332	41	617	278	91
Oliver	1	2,065	--	--	--	--
Sheridan	--	--	--	--	--	--
Sioux	2	2,022	--	--	--	--
REGION 7	295	442	660	198	1,187	110
Adams	13	199	46	56	88	29
Billings	--	--	--	--	--	--
Bowman	3	1,081	23	141	67	48
Dunn	--	--	--	--	59	61
Golden Valley	--	--	--	--	--	--
Hettinger	--	--	--	--	60	45
Slope	--	--	--	--	--	--
Stark	38	596	135	168	264	86
REGION 8	54	710	204	188	538	71
NORTH DAKOTA	1,338	480	3,417	188	6,950	92

Sources: North Dakota Medical Association. 2001. North Dakota Medical Services Directory. Bismarck, ND (Number of Physicians); North Dakota Department of Health, Division of Health Facilities. 2001. Hospitals & Swing Beds, unpublished data. Bismarck, ND (Hospital Beds).

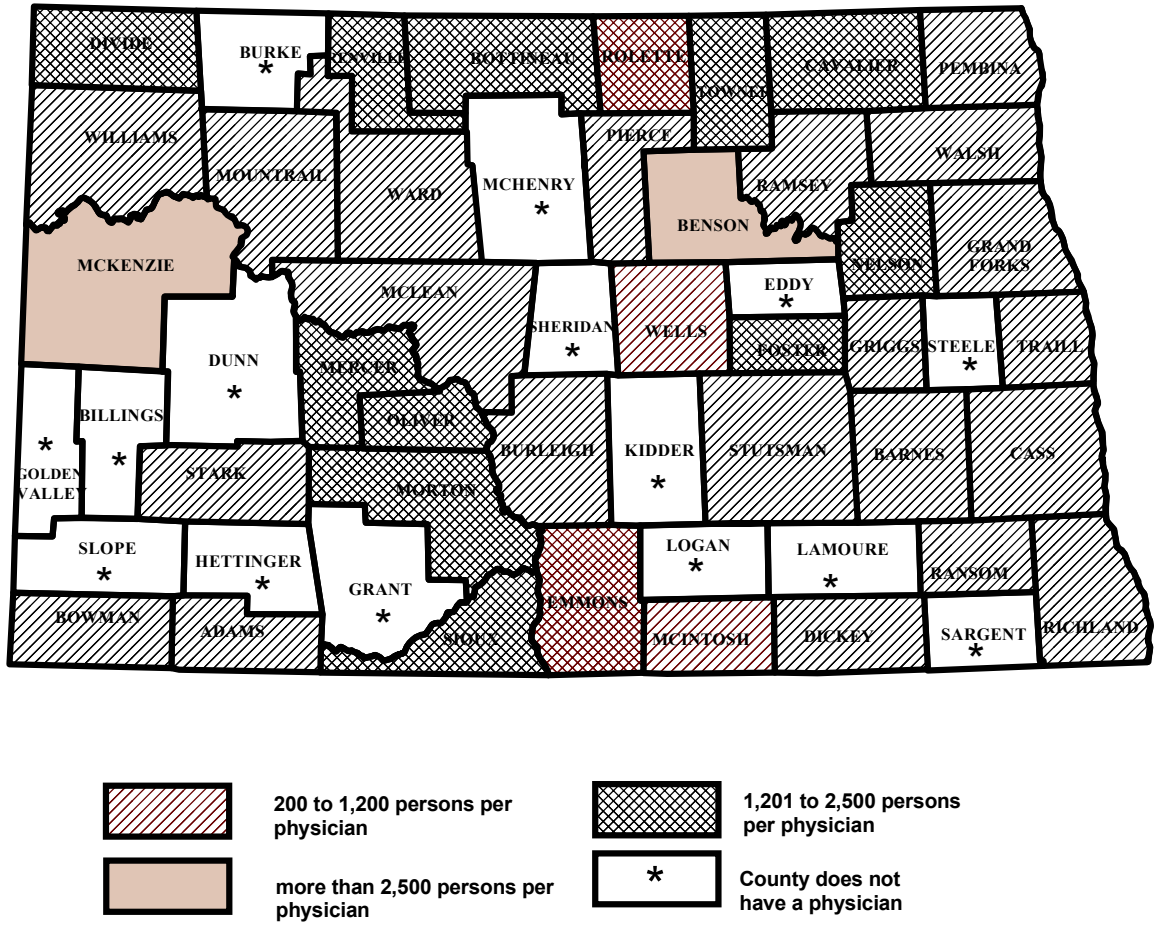
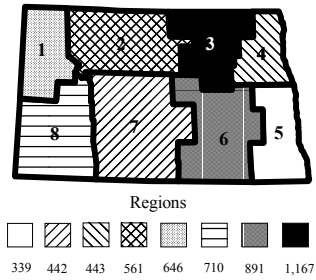
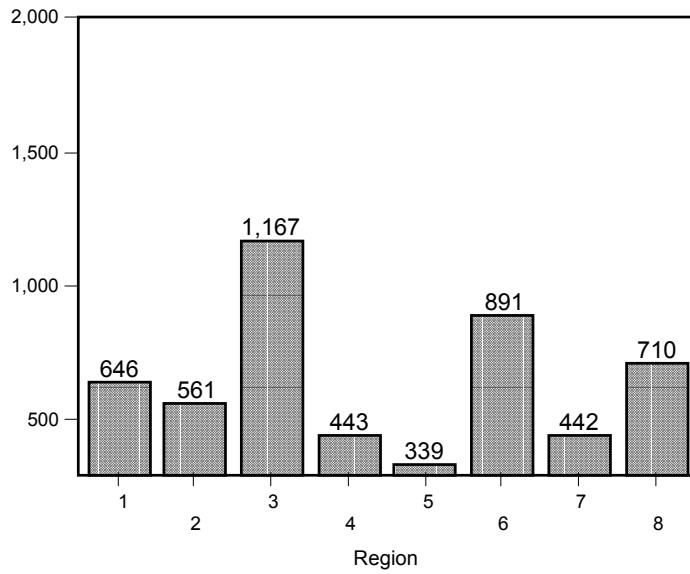
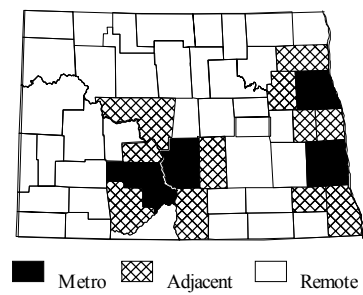
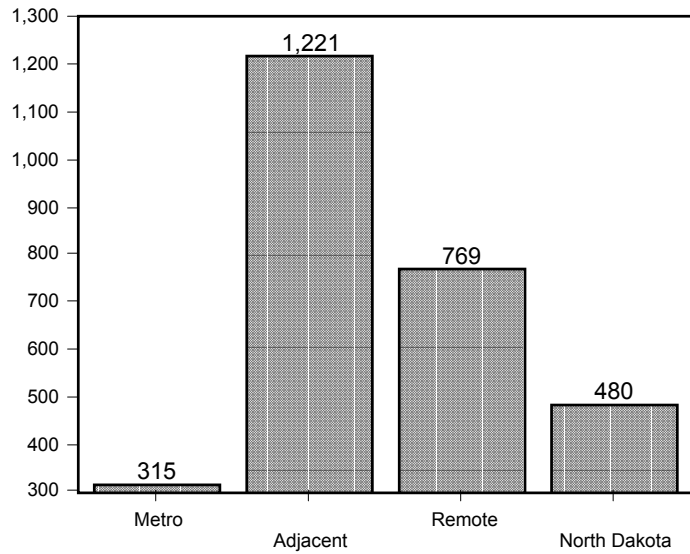


Figure 73. North Dakota Population per Physician, 2001

Population per physician



Population per physician



**Figure 74. North Dakota Population per Physician by Region and Area, 2001**

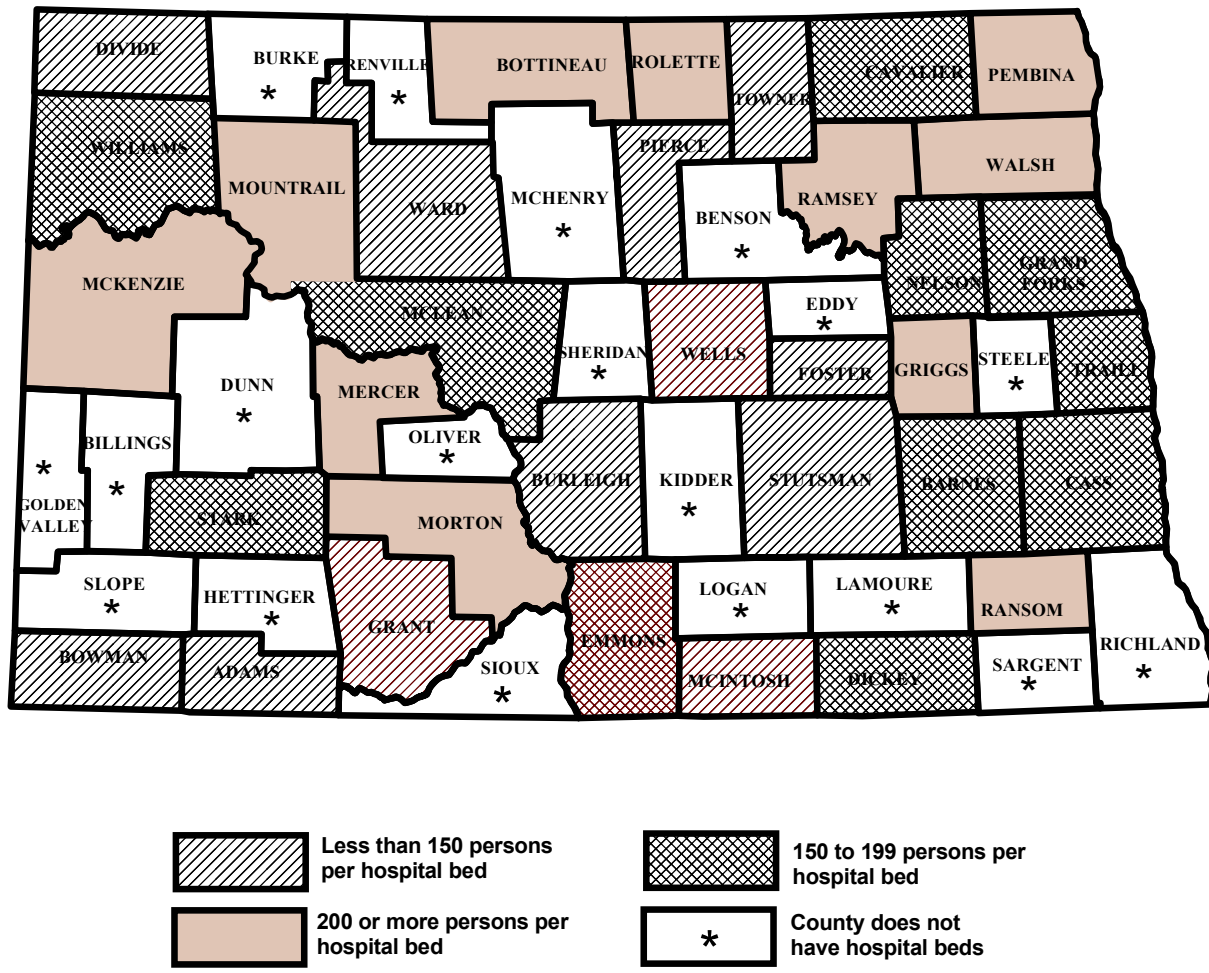
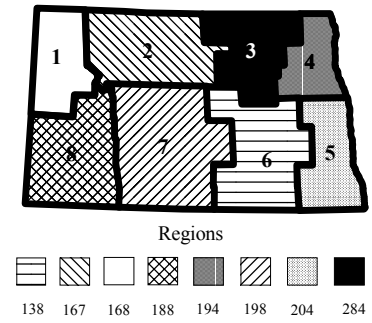
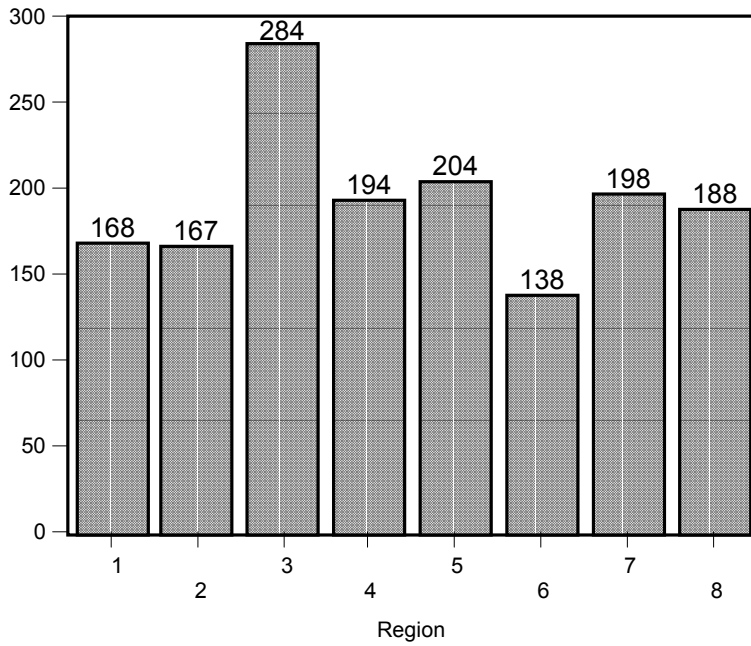
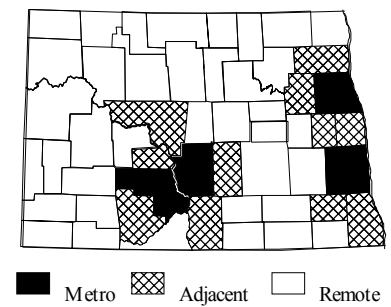
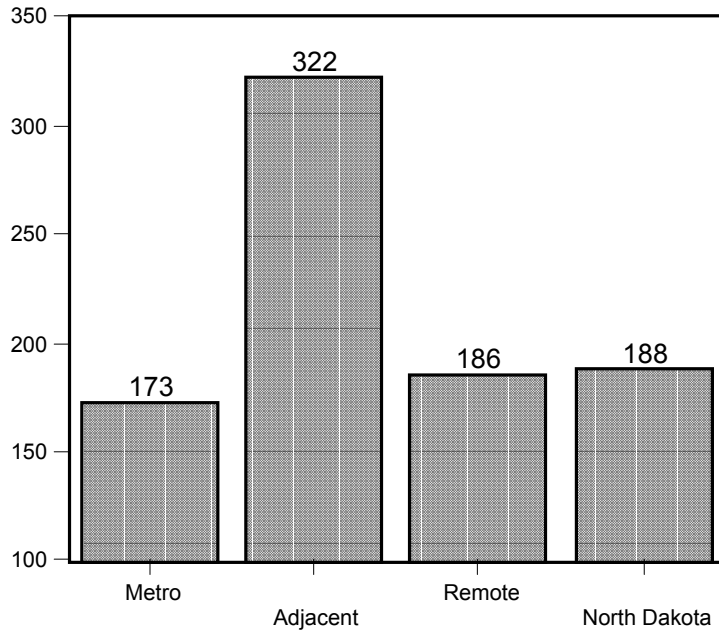


Figure 75. North Dakota Population per Hospital Bed, 2001

Population per hospital bed



Population per hospital bed



**Figure 76. North Dakota Population per Hospital Bed by Region and Area, 2001**

## *Housing*

At the time of the 2000 Census, North Dakota had 289,677 housing units, over 11 percent of which were reported to be vacant (Table 16). (A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms or a single room occupied as separate living quarters or, if vacant, intended for occupancy as single living quarters.) Statewide, the availability of housing varies, with more vacancies reported in the western part of the state (Figure 77 and 78) and in nonmetro counties (Figure 78). Vacancy rates were highest for the adjacent counties (16.4 percent), and for remote counties (15.2 percent). These groups were substantially higher than the 5.4 percent for the metro counties. Bottineau County had a 33 percent vacancy rate in 2000, the state's highest, while Burleigh and Cass counties had the state's lowest vacancy rate, 4.6 percent (Table 16).

The vacancy rate, however, only tells part of the story. In addition to the availability of housing, some idea of the quality of this housing is needed. One indicator of the quality of housing is its age, with the general assumption being that the newer the housing stock, the better its condition. Based on the data collected by the 2000 Census, the median age of the housing stock in 2000 statewide was 30 years (Table 16 and Figure 79). This has risen from the median age of 26 years reported in the 1998 edition of this report. Housing in all regions of the state had a median age of between 27 and 36 years, except Region 6 where the median age of the housing was 42; Region 6 is heavily rural and the region's housing was eight years older than the entire state (Figure 80). The nonmetro adjacent counties had the oldest housing stock (40 years), with new building highest in the metro areas (26 years). Region 8 has the youngest housing stock, and Cass County has the state's newest housing (median age of 24 years). Mercer County housing, with an a median age of 25 years reflects the growth created by the energy industry in the past 20 years. On the other hand, housing in Rolette County, a nonenergy county, also had a low median age (25 years), possibly due to construction of housing on the Turtle Mountain Reservation.

The availability of affordable housing has become an issue in a number of communities that have been successful in economic development. Rental housing in a price range that is affordable for rank-and-file plant workers is most often noted as a problem.

**Table 16. North Dakota Housing Units, Vacancy Rates, and Median Age of Housing, 2000; and Crime Rates, 1997-1999**

Area	Housing			Crime 1997-1999	
	# of units 2000	Percent Vacancy 2000	Median Age 2000 <sup>a</sup>	3-Yr. Avg. # of Crimes	Rate Per 1,000 <sup>b</sup>
Divide	1,469	31.6	50	12	5.1
McKenzie	2,719	20.9	30	52	9.2
Williams	9,680	16.4	33	397 <sup>c</sup>	19.8
REGION 1	13,868	18.9	34	461	16.4
Bottineau	4,409	32.8	37	74	10.1
Burke	1,412	28.3	54	9	4.0
McHenry	2,983	15.3	47	73	12.0
Mountrail	3,438	25.5	38	52	7.9
Pierce	2,269	13.4	43	76	16.4
Renville	1,413	23.2	41	25	8.9
Ward	25,097	8.2	32	1,448 <sup>c</sup>	24.7
REGION 2	41,021	14.3	36	1,757	19.9
Benson	2,932	20.6	32	N/A	N/A
Cavalier	2,725	26.0	39	65	13.0
Eddy	1,418	17.9	49	32	11.3
Ramsey	5,729	13.5	35	584	48.1
Rolette	5,027	9.4	25	98	6.9
Towner	1,558	21.8	44	25	8.3
REGION 3	19,389	16.3	34	804	18.3
Grand Forks	27,373	7.2	29	3,076	45.9
Nelson	2,014	19.2	51	1 <sup>d</sup>	0.3
Pembina	4,115	14.1	38	107	12.6
Walsh	5,757	12.6	39	326 <sup>c</sup>	24.1
REGION 4	39,259	9.4	33	3,510	37.8
Cass	53,790	4.6	24	3,954	33.9
Ransom	2,604	9.8	51	79	13.7
Richland	7,575	9.1	37	472	26.1
Sargent	2,016	11.4	40	69 <sup>c</sup>	15.7
Steele	1,231	25.0	45	N/A	N/A
Traill	3,708	9.9	43	64 <sup>c</sup>	7.5
REGION 5	70,924	6.1	28	4,638	29.8

- Continued -



Table 16. continued

Area	Housing			Crime	1997-1999
	# of units 2000	Percent Vacancy 2000	Median Age 2000 <sup>a</sup>	3-Yr. Avg. # of Crimes	Rate Per 1,000 <sup>b</sup>
Barnes	5,599	12.8	44	122	10.2
Dickey	2,656	14.0	39	64	11.3
Foster	1,793	14.1	38	11	2.9
Griggs	1,521	22.6	52	7 <sup>e</sup>	2.5
LaMoure	2,271	14.5	49	20	4.2
Logan	1,193	19.6	47	13	5.6
McIntosh	1,853	20.8	51	16	4.6
Stutsman	9,817	8.8	36	449 <sup>c</sup>	21.3
Wells	2,643	16.2	46	44 <sup>c</sup>	8.5
REGION 6	29,346	13.4	42	746	12.2
Burleigh	29,003	4.6	25	2,230	33.3
Emmons	2,168	17.6	46	37	8.5
Grant	1,722	30.6	41	18	6.1
Kidder	1,610	28.1	38	26	9.1
McLean	5,264	27.5	33	145	15.0
Mercer	4,402	24.0	25	136	14.5
Morton	10,587	6.6	28	784	32.0
Oliver	903	12.4	30	12	5.5
Sheridan	924	20.9	53	18 <sup>c</sup>	10.5
Sioux	1,216	10.0	28	N/A	N/A
REGION 7	57,799	10.9	28	3,406	26.5
Adams	1,416	20.8	45	28	10.4
Billings	529	30.8	30	N/A	N/A
Bowman	1,596	14.9	37	16	4.9
Dunn	1,965	29.9	37	3	0.8
Golden Valley	973	21.8	52	18 <sup>f</sup>	9.8
Hettinger	1,419	18.8	49	4	1.4
Slope	451	30.6	60	8 <sup>c</sup>	9.2
Stark	9,722	8.1	27	551 <sup>c</sup>	24.4
REGION 8	18,071	14.9	34	628	16.2
NORTH DAKOTA	289,677	11.2	30	15,950	25.0

<sup>a</sup>Based on median year structure built as reported in 2000.

<sup>b</sup>Based on 1997-1999 averaged population estimates.

<sup>c</sup>Only available for 1997 and 1999.

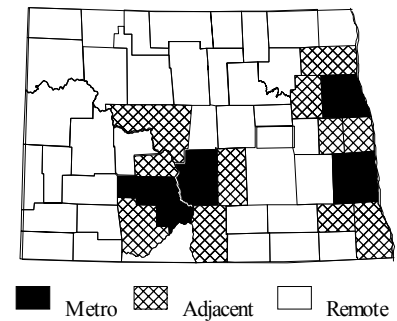
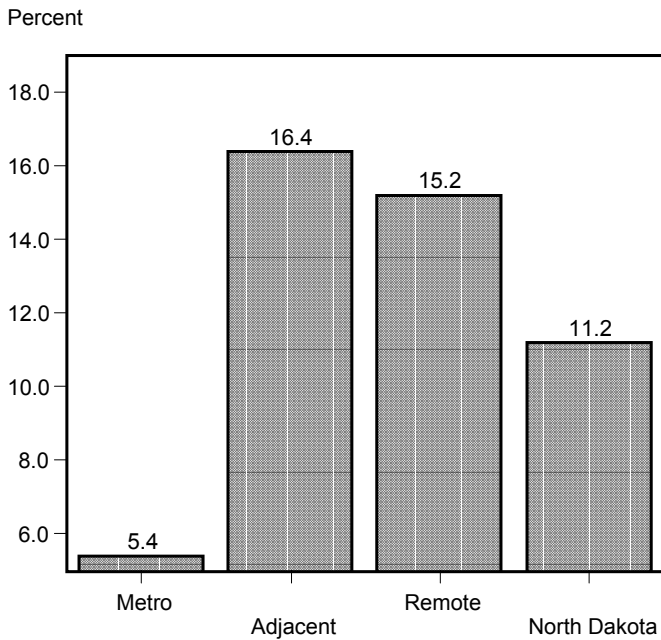
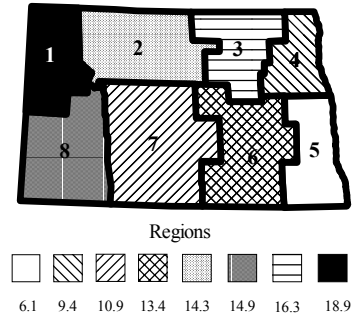
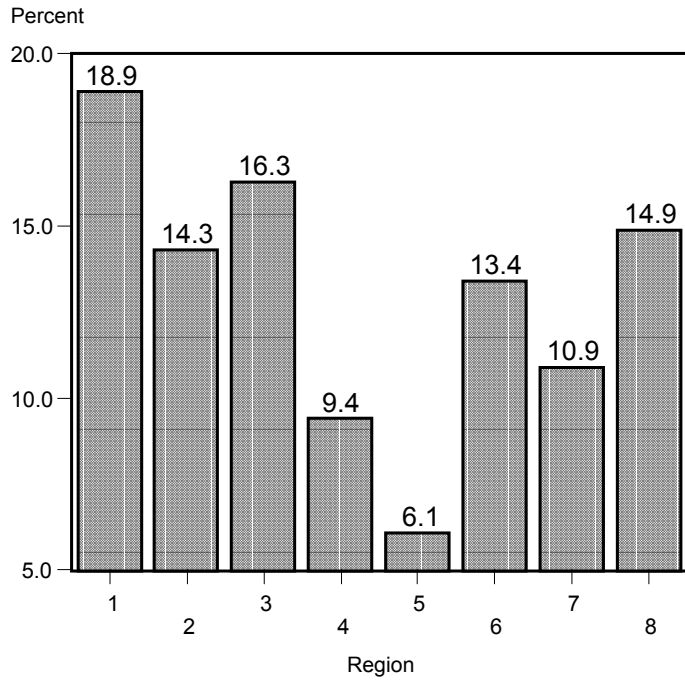
<sup>d</sup>Only available for 1998.

<sup>e</sup>Only available for 1999.

<sup>f</sup>Only available for 1997.

Sources: U.S. Department of Commerce, Bureau of the Census. Internet Web Site. 2000 *Census of Population*. Summary File 3 (SF3), Table 35. Washington, D.C. (Housing); Attorney General's Office, Bureau of Criminal Investigation. 1997-1999. *Crime in North Dakota*. Bismarck., ND (Crime).





**Figure 78. North Dakota Housing Unit Vacancy Rates by Region and Area, 2000**

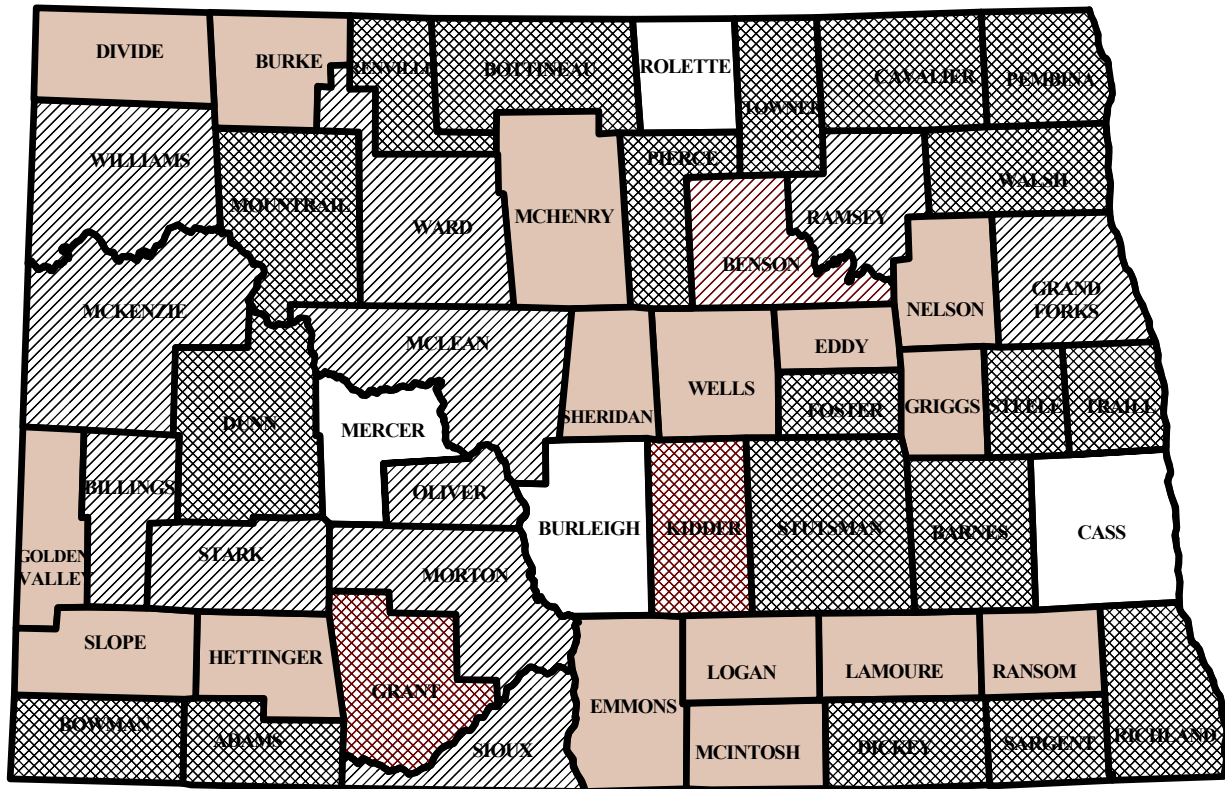
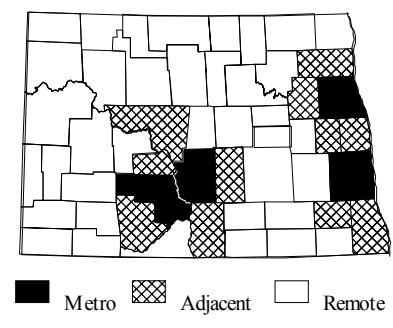
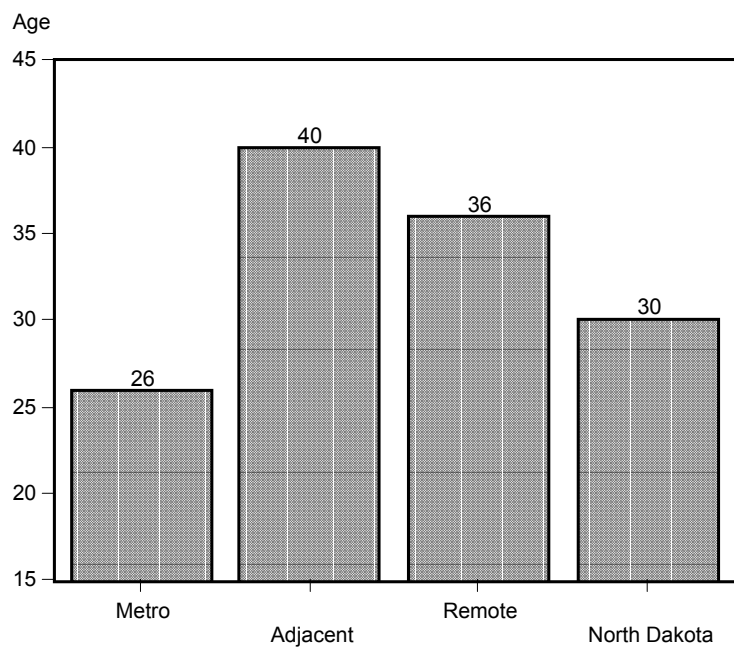
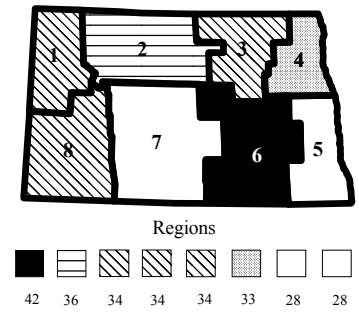
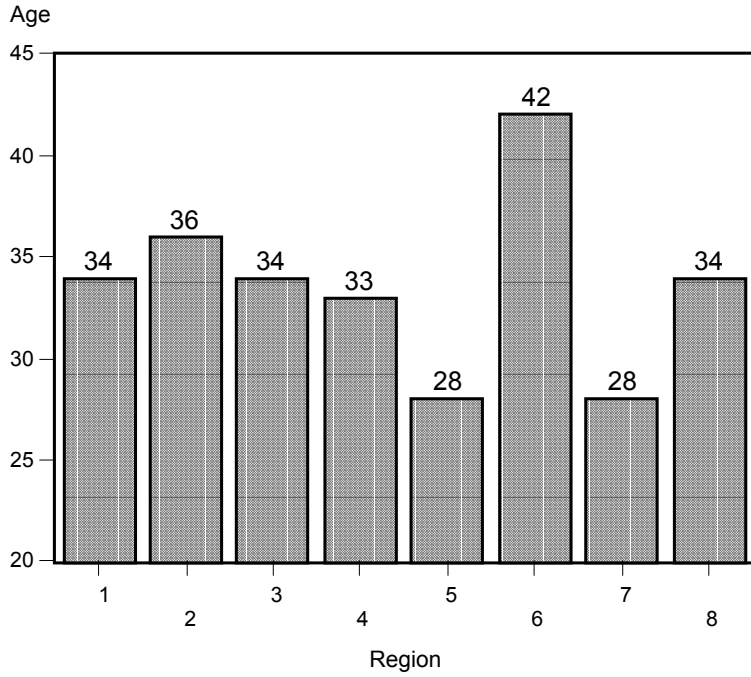


Figure 79. North Dakota Median Age of Housing Units, 2000



**Figure 80. North Dakota Median Age of Housing Units by Region and Area, 2000**

## Crime

The crime statistics presented here are based on three-year averages for all crimes. Figure 81 shows that fewer crimes per 1,000 persons were committed in the western counties between 1997 and 1999. Counties with more than 30 crimes per 1,000 persons in the 1997-1999 period include Cass, Grand Forks, Ramsey, Burleigh, and Morton. Among these, Ramsey had the highest rate (48 per 1,000) and Morton the lowest (32 per 1,000) (Table 16). Nelson County recorded the lowest crime rate, 0.3 crimes per 1,000 persons. Figures 81 and 82 give credence to the idea that crimes are a more frequent occurrence in the eastern part of the state, in the metropolitan areas/more urban regions. The state crime rate for 1997-1999 dropped to 25.0 per 1,000 from the 28.0 per 1,000 rate reported for 1993-1995 in the previous edition of this report.

However, to provide perspective on the higher rates of crime in the metropolitan areas, North Dakota is one of the most crime-free states, ranking 48th among the 50 states for overall crime and 50<sup>th</sup> in violent crime in 2001. (FBI Internet Web Site, 2002)

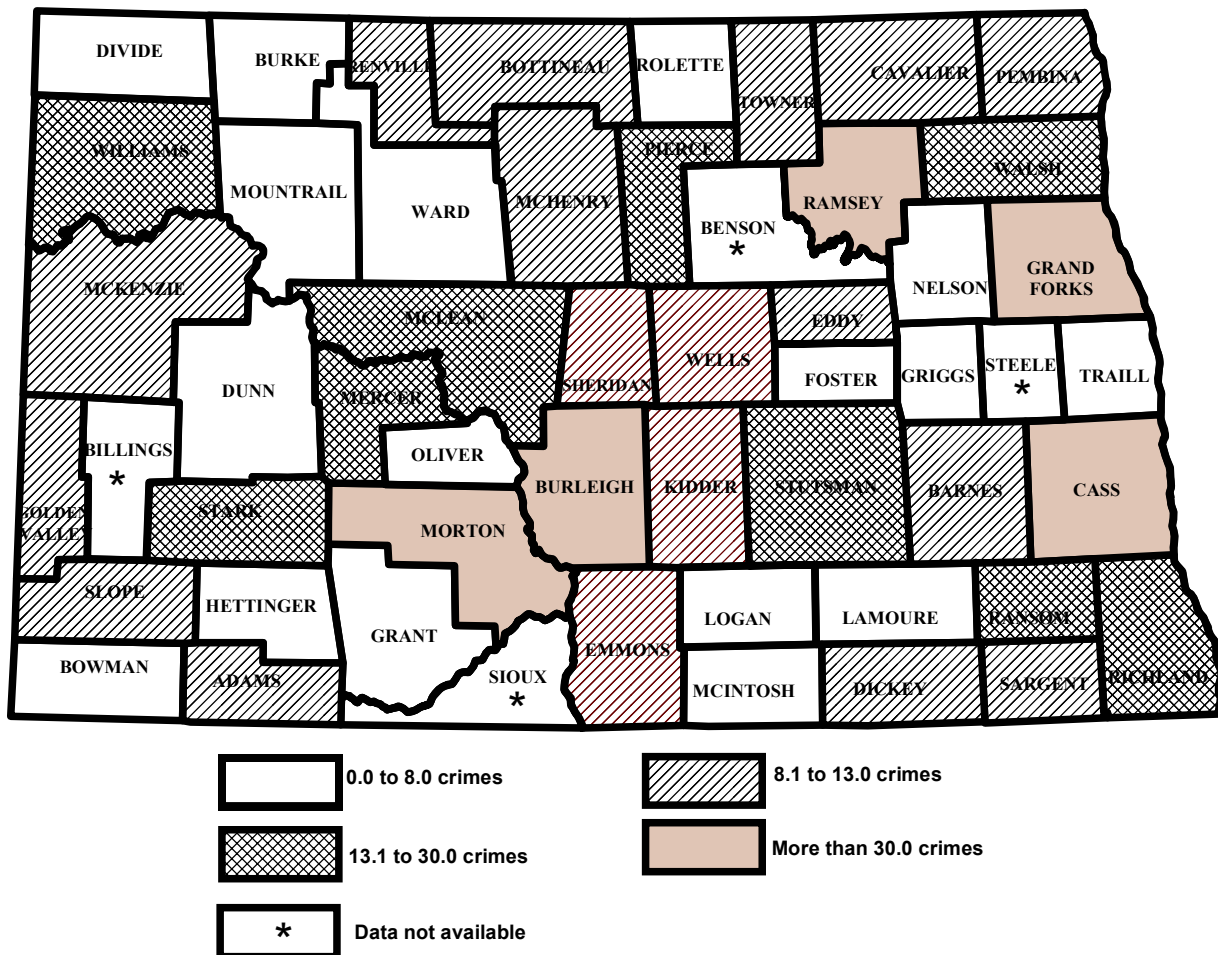
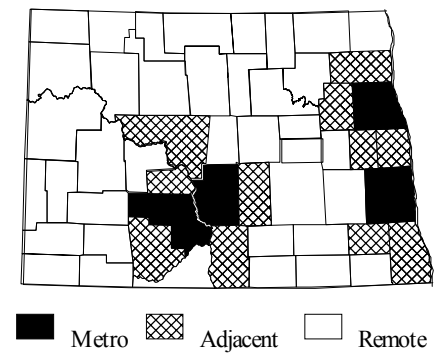
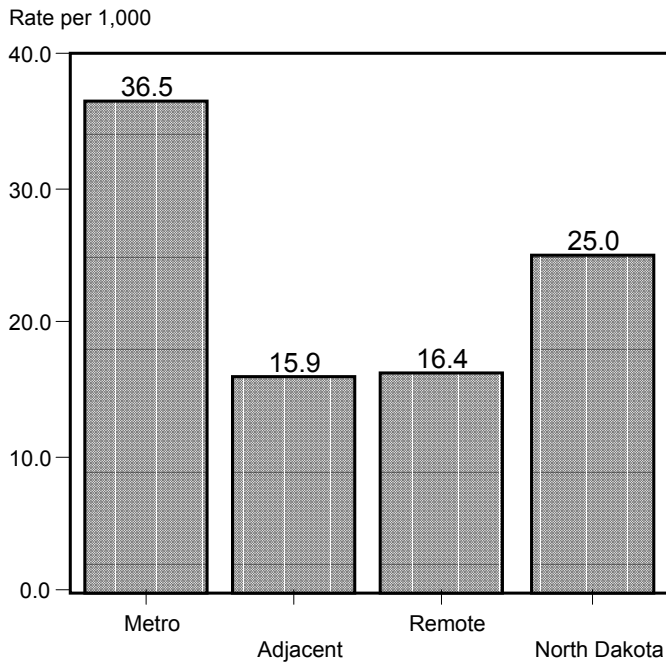
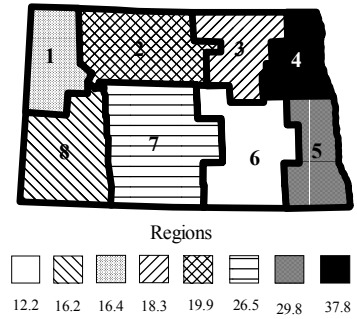
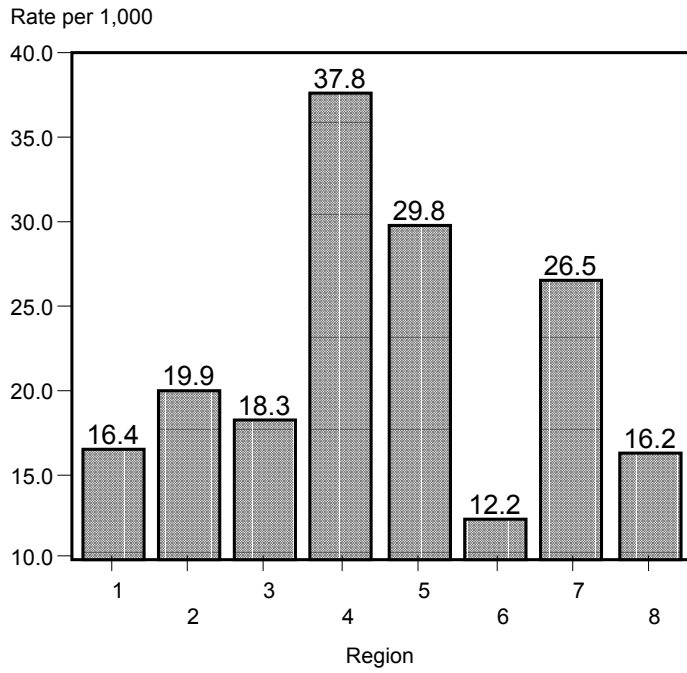


Figure 81. North Dakota Average Crime Rates per 1,000 Persons, 1997-1999



**Figure 82. North Dakota Average Crime Rates per 1,000 Persons by Region and Area, 1997-1999**

### ***Policy Implications***

Trends and patterns observed in just these few selected indicators demonstrate the diversity among North Dakota counties and regions. Counties and regions differ greatly in such indicators as persons per physician, crime rates, and the age of the housing stock. Some of this variability results from the increasingly regional nature of some services--for instance, the major medical facilities in communities like Fargo and Bismarck serve persons from a broad multi-county area. However, this diversity also reflects real differences in the resources and/or problems of different communities, areas, and/or population groups within the state. This variance of resource situations creates a need for policies and programs with sufficient flexibility to accommodate such differences; at the same time, these policies must secure an equitable quantity, quality, and distribution of services throughout North Dakota.



# Fiscal

## DATA PRESENTATION

*Taxable Value of Property, 2000*

*Local Property Taxes, 2000*

*Local Government Expenditures, 1997*

*Agricultural Land Value as Percent of Taxable Value, 2000*

*Transfer Payments for Retirement and Medical Programs, 1975-1999*

## SOURCES

Data for this section are from tax reports prepared by the State Tax Commissioner's Office, Bismarck, except for local government expenditures and transfer payments. Government expenditure data are from the U.S. Department of Commerce, Bureau of the Census, Census of Governments, 1997. Transfer payments are from the Regional Economic Information System, Bureau of Economic Analysis, Transfer Payments for Counties and Metropolitan Areas, 1975-1999.

## *Overview*

Local governments provide residents with services financed by taxes. Our system of government is complicated as North Dakota has townships within counties, cities within counties, and special districts overlaying townships, cities and counties. Consequently, government finance is complicated. To simplify comparisons, this report presents only a few broad measures that represent fiscal capacity (taxable valuation--the tax base), revenues (property taxes), spending (expenditures), and the percent of the tax base that is agricultural land. Taxable valuation is the value placed on all property for tax purposes, after adjustments. The spending and tax data include county data, and all cities, townships, school districts, and special districts in the county.

Federal government transfer payments to North Dakota for retirement and medical programs have increased in recent years due to an aging population and increased benefits. Growth for these two programs will be examined for short-run and long-run changes.

## Taxable Value of Property

Taxable valuation of property is one measure of the local tax base. Two messages can be gleaned from examining taxable values. First, taxable values are evidence of the capacity of a local government to provide services supported by property taxes. Second, taxable valuation can be used in a comparative sense. If the taxable valuation of a county or region is above average, this may be an indication that the residential and industrial activity in the county/region is also above average; however, it can also suggest that the major income generating mechanism is taxes on property.

Figure 83 shows that most 2000 county taxable property valuations in North Dakota ranged between \$1,750 and \$2,999 per capita (in fact, the state average is \$2,002) (Table 17). Billings, Slope (energy industry counties) and Steele (strong agricultural county) counties had the highest assessed value per capita (\$4,000 or more), while Rolette and Sioux had the lowest (less than \$650 per capita). The variation among the regions (Figure 84) ranges from the low of \$1,749 in Region 3 to the high of \$2,383 in Region 6.

Overall, rural areas have higher taxable values per capita than metro areas. However, nonmetro adjacent areas have 39 percent higher taxable valuations than metro areas, whereas remote areas vary from metro areas by only 10 percent (Figure 84).

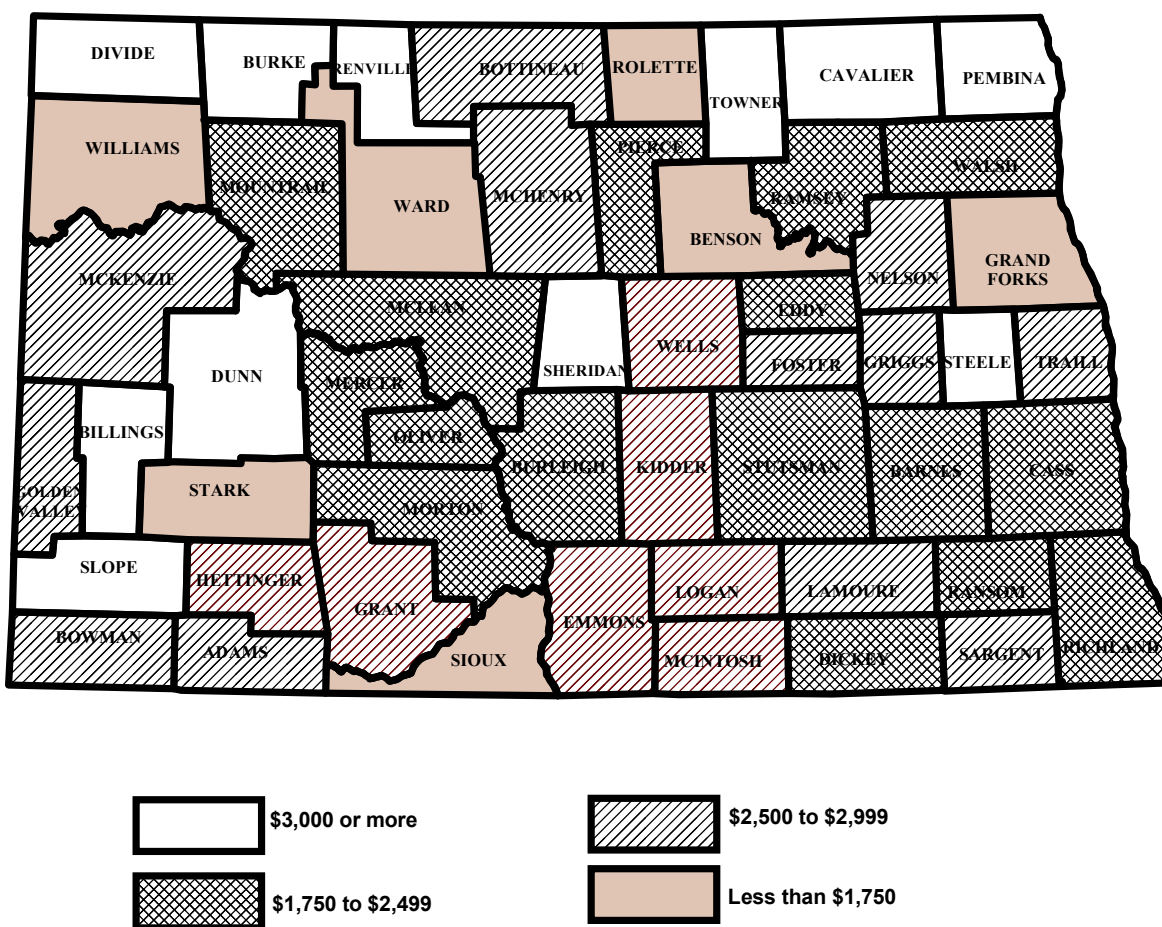


Figure 83. North Dakota Taxable Valuation per Capita, 2000

**Table 17. North Dakota Per Capita Taxable Values and Property Taxes, 2000; Per Capita Local Government Expenditures, 1997; and Total Property Values and Agricultural Land Values as a Percent of Total, 2000**

Area	Per Capita			2000 Taxable Value	
	2000 Taxable Value	2000 Local Property Taxes <sup>a</sup>	1997 Local Govt. Expenditures	Total Property Value	Ag. Land Value as % of Total
	-----dollars-----			--percent--	
Divide	3,840	1,250	3,458	8,765,896	86.6
McKenzie	2,762	707	3,052	15,328,822	49.6
Williams	1,704	764	1,916	33,664,427	29.3
REGION 1	2,079	792	2,280	57,759,145	43.4
Bottineau	2,737	980	2,185	19,567,168	65.6
Burke	3,643	1,037	2,834	8,168,517	76.7
McHenry	2,782	796	1,903	16,653,549	63.8
Mountrail	2,041	788	2,564	13,535,374	70.7
Pierce	2,481	945	1,573	11,599,536	59.5
Renville	3,443	1,011	3,227	8,986,524	82.9
Ward	1,591	621	1,446	93,549,057	15.8
REGION 2	1,953	714	1,723	172,060,025	39.8
Benson	1,642	555	1,847	11,435,717	81.8
Cavalier	3,744	1,298	3,236	18,086,844	77.0
Eddy	2,047	806	2,948	5,642,598	70.8
Ramsey	1,873	807	1,834	22,596,455	43.2
Rolette	649	255	1,892	8,873,938	64.9
Towner	3,760	1,238	2,285	10,813,915	83.0
REGION 3	1,794	675	2,123	77,449,467	66.9
Grand Forks	1,710	853	1,914	113,032,559	16.8
Nelson	2,779	1,182	2,459	10,324,929	80.4
Pembina	3,171	1,174	2,183	27,223,281	62.0
Walsh	2,294	969	2,004	28,425,162	65.7
REGION 4	1,971	912	1,972	179,005,931	35.1
Cass	1,968	1,059	2,071	242,295,621	10.3
Ransom	2,152	923	1,815	12,673,997	59.1
Richland	2,178	1,032	1,931	39,194,926	51.7
Sargent	2,783	1,209	1,968	12,150,114	75.1
Steele	4,184	1,561	2,136	9,448,421	88.0
Traill	2,640	1,013	2,254	22,383,234	59.5
REGION 5	2,086	1,059	2,053	338,146,313	24.9

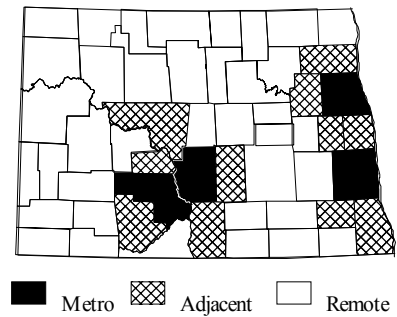
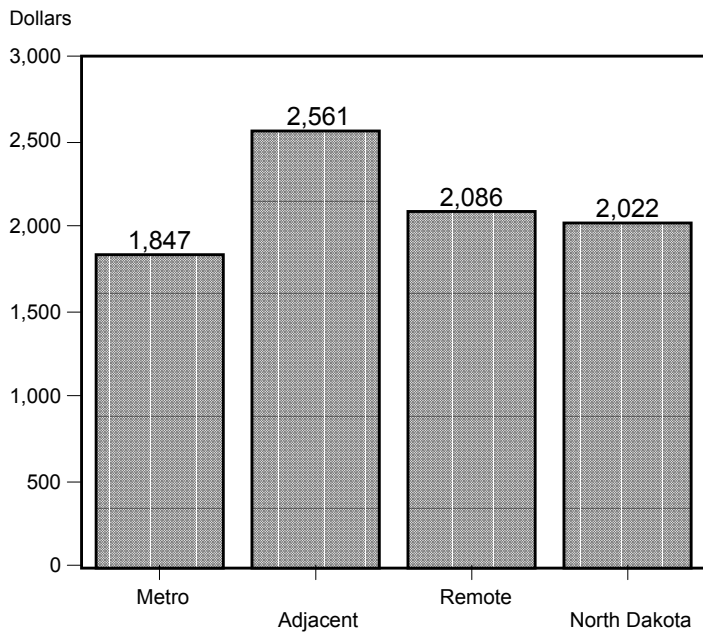
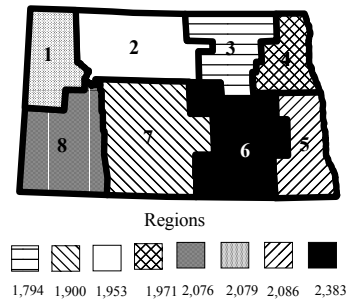
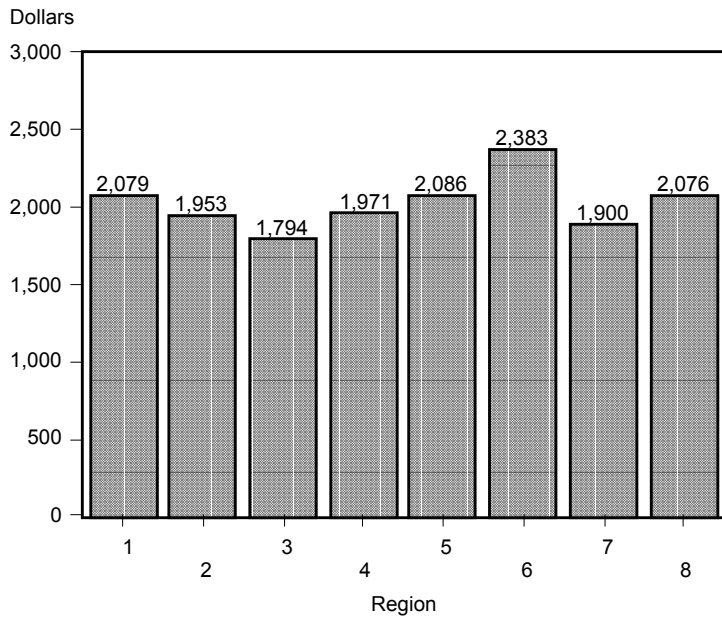
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Table 17. continued

Area	Per Capita			2000 Taxable Value	
	2000 Taxable Value	2000 Local Property Taxes <sup>a</sup>	1997 Local Govt. Expenditures	Total Property Value	Ag. Land Value as % of Total
	-----dollars-----			--percent--	
Barnes	2,291	920	1,713	26,973,513	53.8
Dickey	2,362	922	1,893	13,599,295	72.3
Foster	2,786	1,091	2,332	10,471,435	55.6
Griggs	2,972	1,187	3,512	8,185,507	76.6
LaMoure	2,969	906	5,693	13,956,918	80.4
Logan	2,678	898	1,884	6,180,966	82.8
McIntosh	2,653	853	1,962	8,993,337	57.3
Stutsman	1,954	807	1,982	42,809,556	38.0
Wells	2,988	999	1,766	15,245,785	71.1
REGION 6	2,383	903	2,289	146,416,332	58.1
Burleigh	1,758	896	1,791	122,033,295	6.1
Emmons	2,816	901	3,346	12,198,212	64.6
Grant	2,695	956	1,876	7,655,896	86.9
Kidder	2,971	1,214	3,934	8,179,276	77.7
McLean	2,315	659	2,059	21,550,648	62.0
Mercer	1,916	707	3,316	16,566,218	27.7
Morton	1,863	926	2,181	47,145,843	17.2
Oliver	2,296	684	5,874	4,740,645	67.3
Sheridan	3,391	1,054	1,658	5,798,379	87.4
Sioux	491	188	1,329	1,986,599	93.0
REGION 7	1,900	857	2,126	247,855,011	27.2
Adams	2,520	916	2,194	6,535,650	67.0
Billings	5,107	766	4,140	4,534,753	42.3
Bowman	2,600	733	2,499	8,429,929	50.4
Dunn	3,190	1,010	2,086	11,483,305	51.9
Golden Valley	2,654	963	3,622	6,105,641	68.8
Hettinger	2,894	1,035	2,495	7,858,256	85.2
Slope	6,087	1,259	3,196	4,668,933	96.3
Stark	1,371	608	1,734	31,024,475	66.6
REGION 8	2,076	742	2,114	79,640,942	65.1
NORTH DAKOTA	2,022	879	2,051	1,298,333,166	38.0

<sup>a</sup> Includes general and special property taxes levied by state and political subdivisions.

Sources: North Dakota Tax Commissioner's Office. 2001. *2000 Property Valuations and Property Taxes Levied in North Dakota*. Bismarck (Taxes); U.S. Department of Commerce, Bureau of the Census. 2000. *1997 Census of Governments Compendium of Government Finances (GC97[4]-5)*, Washington, D.C. (Expenditures).



**Figure 84. North Dakota Taxable Valuation per Capita by Region and Area, 2000**

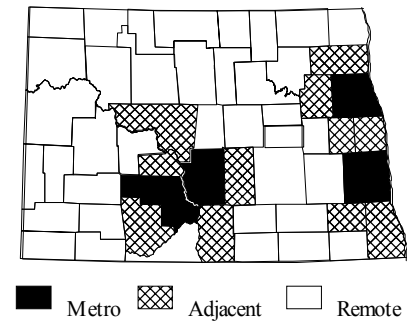
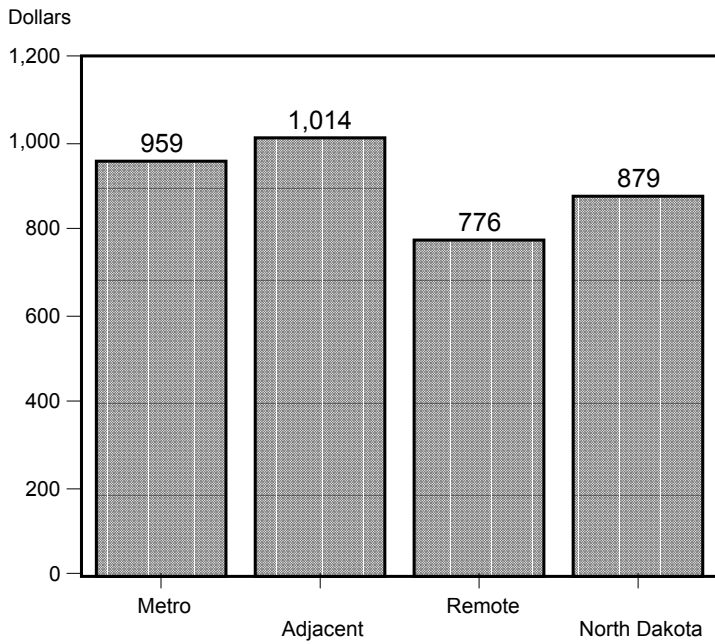
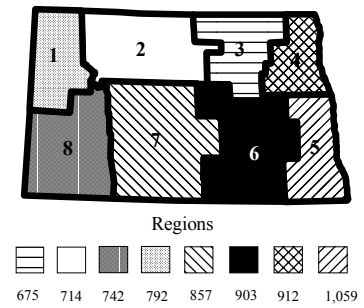
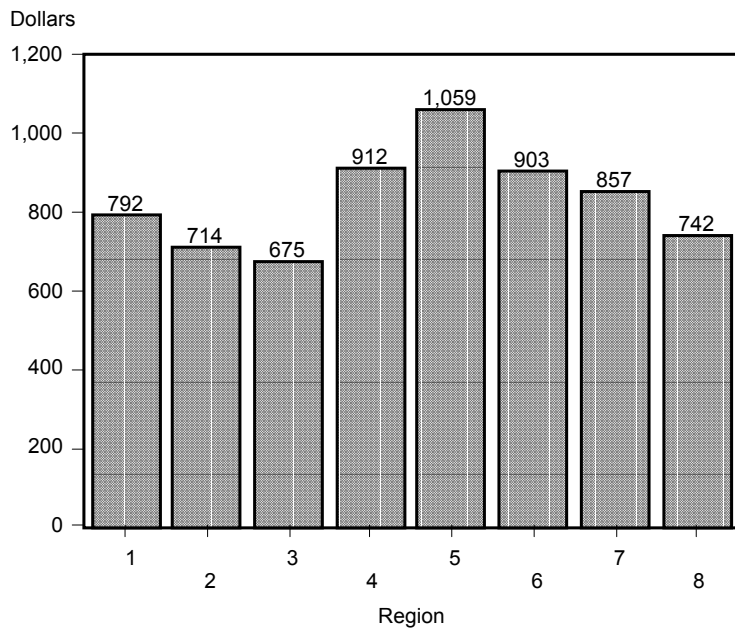
## *Local Property Taxes*

Property taxes are the main revenue source for many counties in North Dakota. All real property, unless specifically exempted, is subject to property tax. The property tax is calculated by multiplying the local mill rate by the taxable value of real property (taxable values were presented in the preceding section). In other words, property in two counties could have the same taxable values, but if the local mill rates were different, taxes paid on the properties would differ.

Figure 85 shows that in most counties, the per capita county property tax is between \$750 and \$1,200. For counties with major trade centers, Cass had the highest per capita property taxes (\$1,059), with Grand Forks and Burleigh counties having similar per capita property taxes (\$853 and \$896, respectively). Sioux (\$188 ) and Rolette (\$255) counties' per capita property taxes were the lowest in the state (Table 17). However, per capita property taxes were \$1,561 in Steele County, one of seven counties in the state to exceed \$1,200 per person (Table 17/Figure 85).

The regions varied from a low of \$675 per capita property tax in Region 3 in 2000 to a high of \$1,059 in Region 5 (Figure 86). The metro areas reported a \$959 per capita property tax, and the adjacent and remote counties reported figures of \$1,014 and \$776. Metro areas had the lowest per capita valuation (\$1,847) but were second only to adjacent areas in per capita taxes (Figure 86). Adjacent areas had both the highest taxable valuation and property taxes per capita in 2000. Considering the overall higher taxable valuations in rural counties, even moderate property tax rates in these areas could be a disproportionate burden.





**Figure 86. North Dakota Property Taxes per Capita by Region and Area, 2000**



## *Expenditures*

Counties vary less in per capita expenditures than they do in the tax base. In fact, the tax base and level of spending seem not to be connected. Figure 87 shows the pattern of expenditures was uniform throughout most of the eastern three-fourths of the state. Billings (\$4,140) with an oil-based revenue, Oliver (\$5,874) with a coal-based revenue, and LaMoure (\$5,693) counties had the highest per capita expenditures in the state.

The extremes in expenditures among the state planning regions are Region 1 and 6 with the highest per capita expenditures (\$2,280 and \$2,289, respectively) and Region 2 with the lowest per capita expenditures (\$1,723) (Figure 88).

Nonmetro adjacent counties had the highest and remote counties had the second highest per capita expenditures in the state (\$2,305 and \$2,074), respectively. Metro counties had a slightly lower level of per capita expenditures, \$1,971. The configuration of expenditures may vary from metro to nonmetro; for example, spending for public assistance may be higher in the metro areas, while road construction disbursements may be higher in the nonmetro areas. However, total spending does not show large differences for rural versus metro counties.

## *Agricultural Lands*

Because of North Dakota's historical dependence on agriculture, the percentage of total taxable valuation that is derived from agricultural property is presented in Table 17. The true and full value of agricultural property is based on its productivity. Productivity, for taxation purposes, is established through computations of the average annual gross return of the land. The assessed value of agricultural land is 50 percent of the true and full value, and the taxable value is 10 percent of the assessed value.

Figure 89 reveals that in the trade center counties, agricultural land comprises less than 30 percent of the total tax base; in fact, in Burleigh, Cass, Grand Forks, and Ward counties, it accounts for less than 16 percent. Regions 3, 6, and 8 are the most dependent on agricultural taxes (Figure 90), having over 58 percent of their total taxable value from agricultural lands. Burleigh County had the lowest percentage of its taxable value coming from agricultural land (6.1 percent), followed by Cass (10.3 percent). Not surprisingly, nonmetropolitan counties are about five times more dependent on taxes from agricultural property (Figure 90).

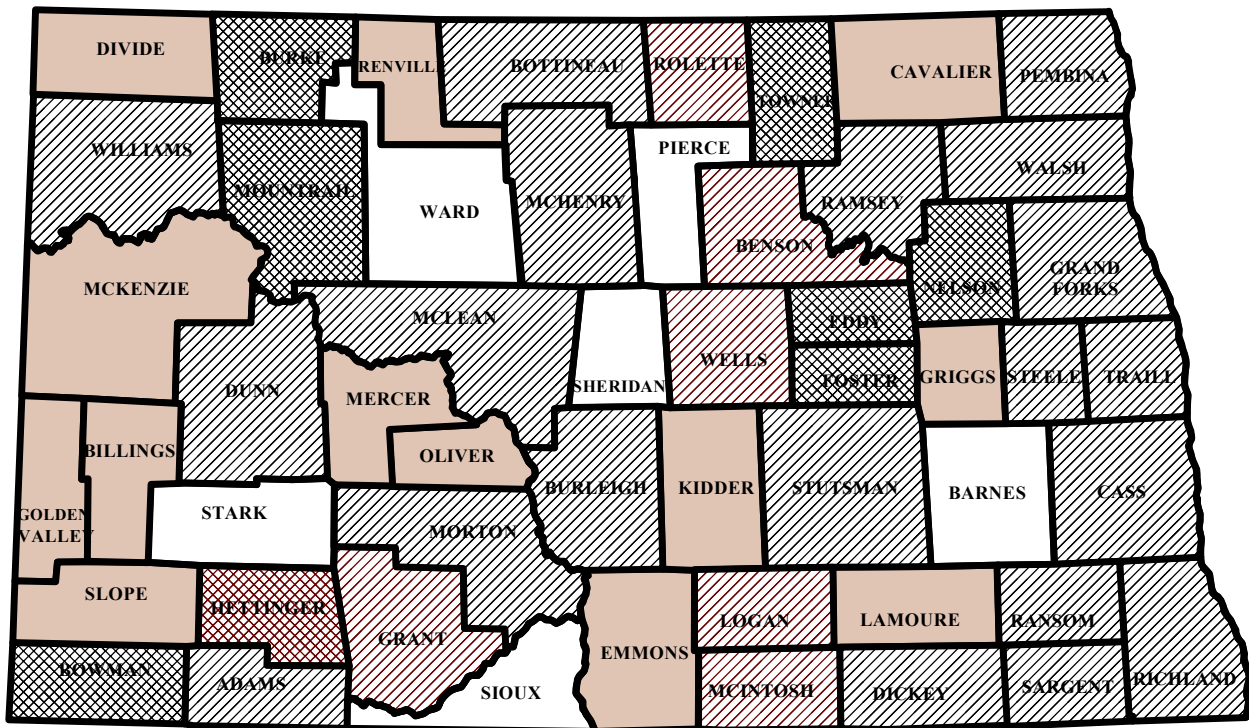
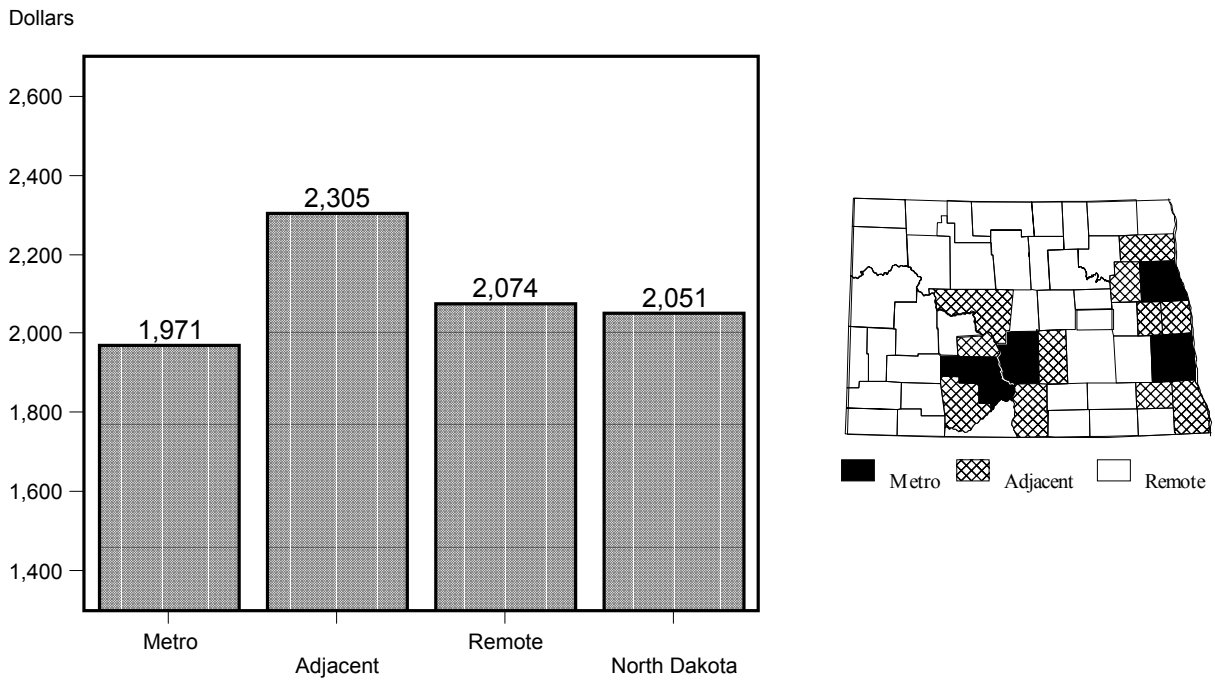
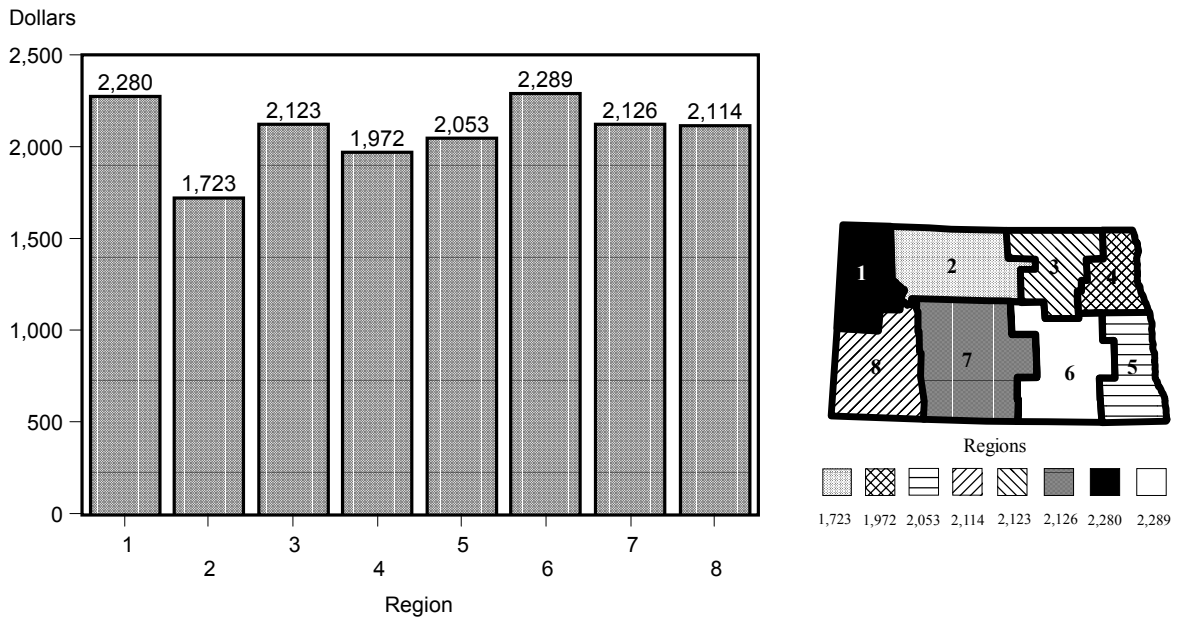
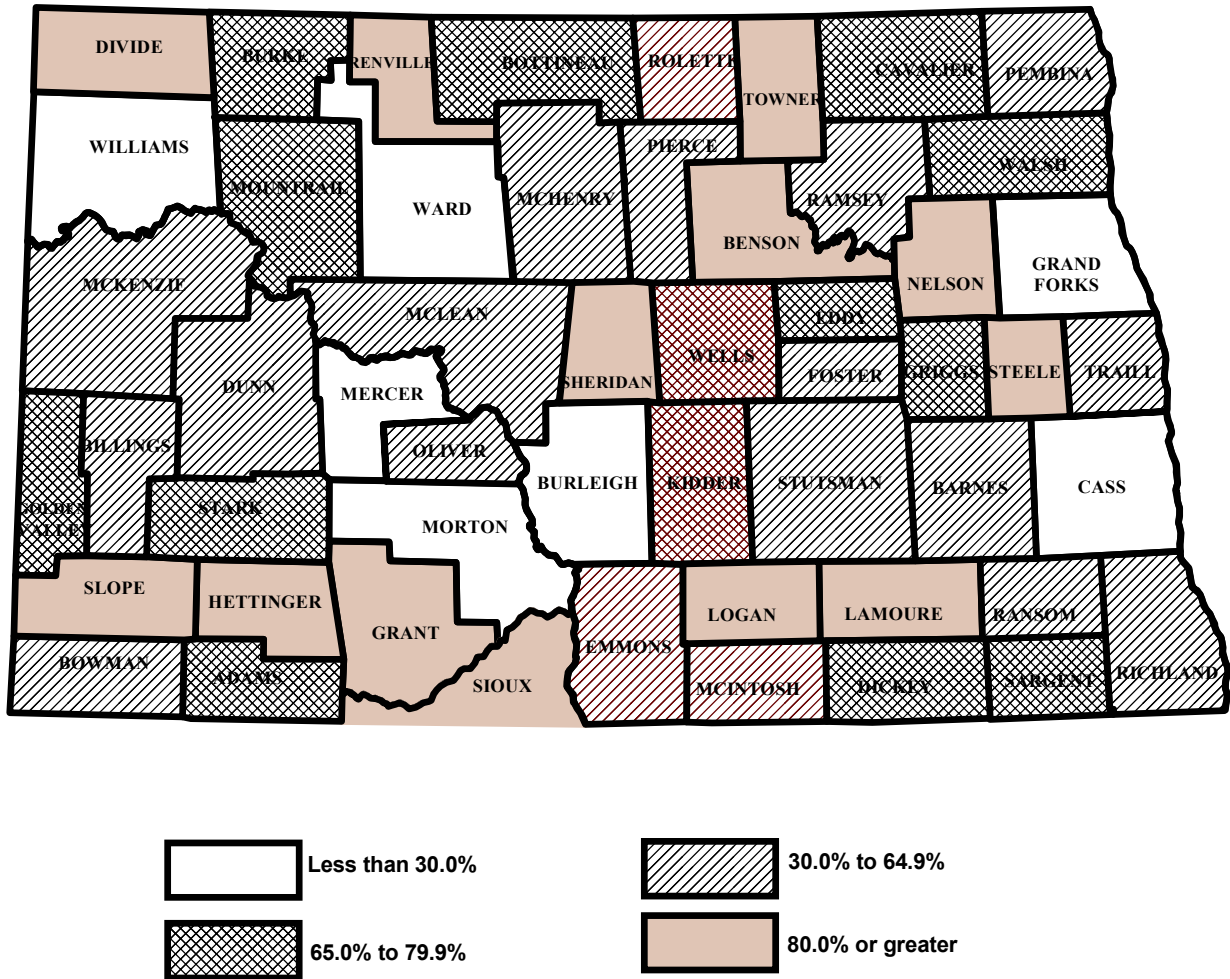


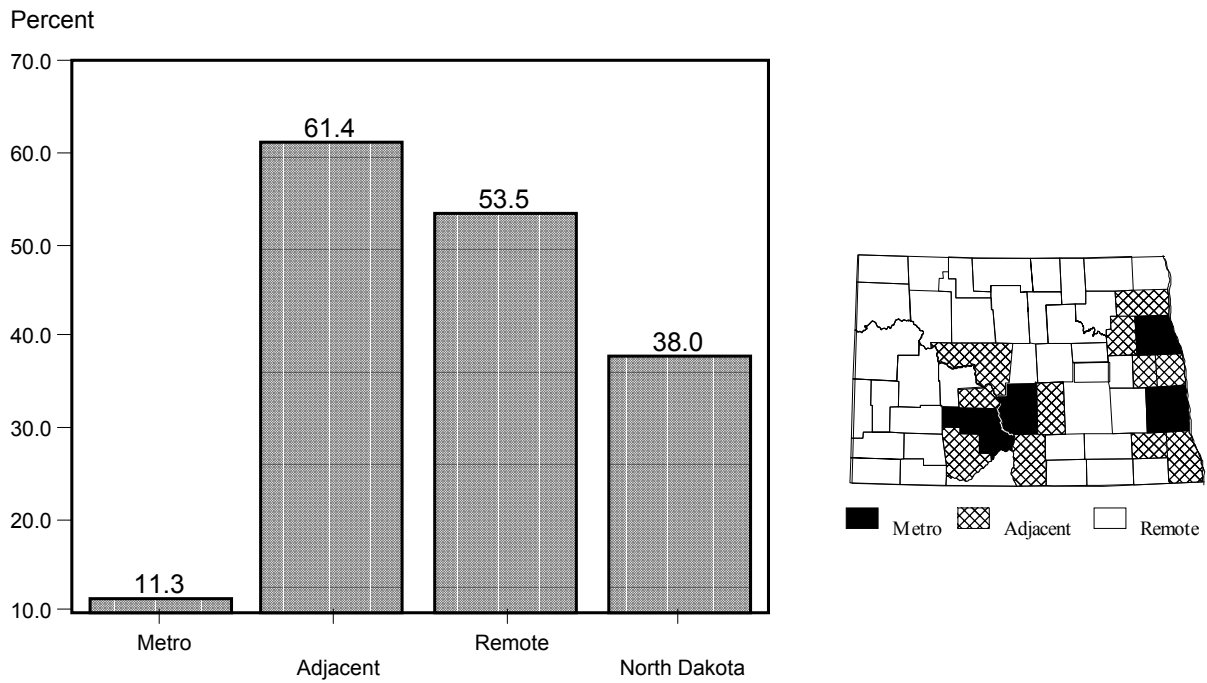
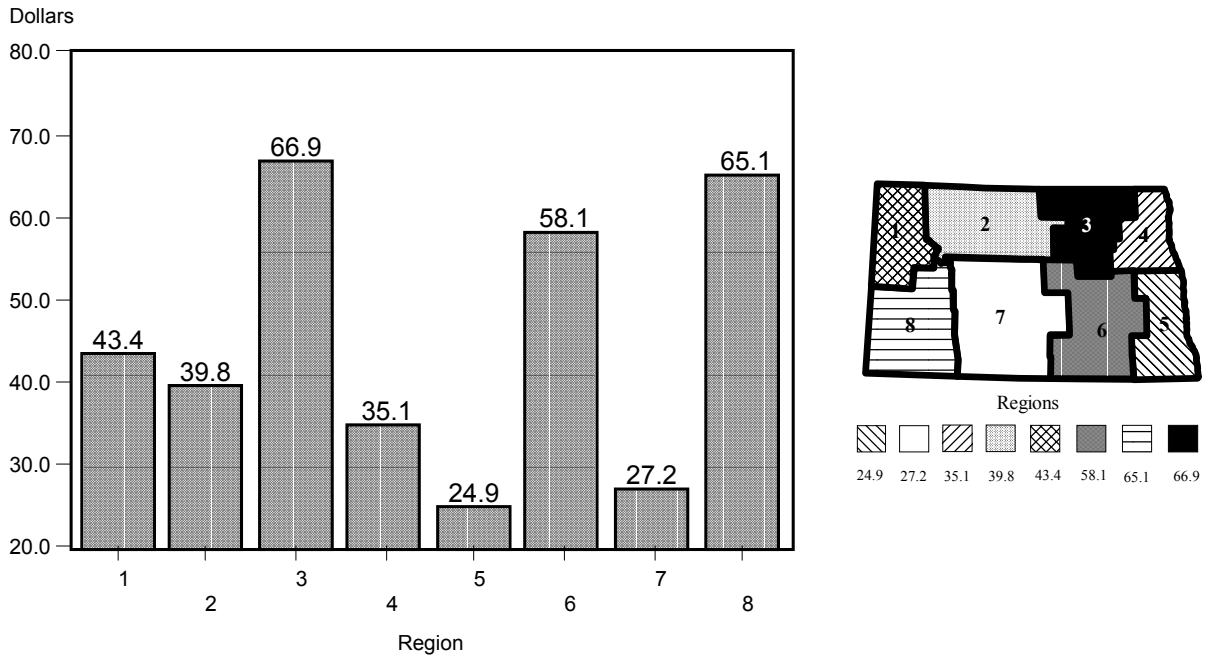
Figure 87. North Dakota per Capita Local Government Expenditures, 1997



**Figure 88. North Dakota per Capita Local Government Expenditures by Region and Area, 1997**



**Figure 89. North Dakota Taxable Agricultural Property as a Percentage of Taxable Value of All Property, 2000**



**Figure 90. North Dakota Taxable Agricultural Property as a Percentage of Taxable Value of All Property by Region and Area, 2000**

## *Transfer Payments*

Federal transfer payments for retirement and medical programs account for a large amount of money entering North Dakota. Retirement and medical transfer payments presented in Table 18 are in terms of 1999 base dollars, so all growth in those expenditures can be termed real growth. Retirement transfers grew from over \$665 million in 1975 to almost \$1.1 billion by 1999 (Table 18). Figure 91 shows the regional growth in retirement transfers for the 1975-1999 period. Several counties more than doubled the retirement payments they received from 1975 to 1999, led by Burleigh (173.3 percent) and Oliver (149.9 percent) (Figure 92). State Region 5 had the greatest amount of transfer retirement funds in 1999 (\$236 million), but Region 7 had the fastest growth rate with 1999 values more than double the amount in 1975 (Figures 91 and 93). Metro counties grew much faster (106.4 percent) in the long-run than either adjacent or remote counties. For the 1975-1999 period, federal transfers for retirement programs in North Dakota increased 63.1 percent (Figure 93).

Short-run federal retirement payments grew by 6 percent for the state from 1995-1999 (Table 18). Figure 94 shows the regional growth from 1995-1999, with Region 7 (11 percent) and Region 5 (10 percent) leading the increases. During this period, Region 3 was the only one to have a decline, although it was very small (0.6 percent). Short-run change was much less than long-run, but the pattern was similar with metro counties having the largest change and adjacent counties the least. Increase in transfer payments for retirement programs for remote counties was greater than for adjacent counties but considerably less than that for metro counties in both the short- and long-run situation (Figure 94). Only three counties had increases greater than 10 percent between 1995 and 1999; these counties were Cass, Burleigh, and Mercer (Figure 95).

Federal government transfer payments for medical programs have increased for North Dakota residents, at a faster rate than retirement transfers. In 1975, medical transfers were about 35 percent of retirement funding, but by 1999 they grew to 76 percent of that amount (Table 18). Nine counties had medical program payments increases from 1975-1999 exceeding 300 percent, led by Sioux County with a 736.5 percent increase (Figure 96). Transfers for medical programs were the largest in State Region 7 in 1999 (\$175 million). In the long-run (1975-1999) medical transfers grew by around 200 to 250 percent for all regions except for Region 7 which was closer to 350 percent growth (Figure 97). Metro centers grew the fastest in the long-run (363 percent), followed by adjacent counties (175 percent), and remote counties (104 percent). Short-run increases were much smaller than those for the long-run and showed much less variability (Figures 98-99). Regions 5 and 7 had the largest increase (5.8 percent each), and Region 4 had a decline of 1.2 percent. The level of variability at the regional level also existed for the metro, adjacent, and remote county classifications. These divisions showed increases in short-run federal medical transfer payments ranging from 9 percent for metro areas, to 2 percent for remote areas, while adjacent areas experienced a decrease of 1.6 percent (Figure 99).

**Table 18. Transfer Payments to North Dakota for Retirement and Medical Payments, 1975-1999 (1999 Base Dollars)**

Area	Retirement Transfer Payments				Percentage Change	
	1975	1985	1995	1999	1975-1999	1995-1999
	-----\$000-----				-----%-----	
Divide	4,729	5,986	7,029	5,839	23.5	-16.9
McKenzie	4,620	7,997	8,108	8,558	85.2	5.5
Williams	21,683	31,382	38,977	41,624	92.0	6.8
REGION 1	31,032	45,365	54,114	56,021	80.5	3.5
Bottineau	12,625	15,743	15,950	15,429	22.2	-3.3
Burke	6,457	7,249	6,670	6,161	-4.6	-7.6
McHenry	11,188	13,303	13,314	12,996	16.2	-2.4
Mountrail	9,228	12,215	12,567	12,309	33.4	-2.1
Pierce	7,361	9,601	10,558	10,517	42.9	-0.4
Renville	4,877	5,882	5,475	5,800	18.9	5.9
Ward	49,711	68,505	86,161	93,832	88.8	8.9
REGION 2	101,448	132,497	150,694	157,044	54.8	4.2
Benson	9,866	11,114	10,528	10,065	2.0	-4.4
Cavalier	10,238	11,313	11,410	11,181	9.2	-2.0
Eddy	5,689	6,765	6,731	6,579	15.7	-2.3
Ramsey	17,818	22,813	24,890	24,888	39.7	0.0
Rolette	8,996	12,013	13,478	14,482	61.0	7.4
Towner	5,899	7,396	7,239	6,633	12.4	-8.4
REGION 3	58,506	71,414	74,275	73,828	26.2	-0.6
Grand Forks	50,684	68,969	81,651	85,073	67.9	4.2
Nelson	9,148	10,807	10,282	10,006	9.4	-2.7
Pembina	14,118	17,336	17,362	17,723	25.5	2.1
Walsh	21,853	27,067	26,591	26,379	20.7	-0.8
REGION 4	95,803	124,180	135,886	139,181	45.3	2.4
Cass	79,876	109,398	144,466	165,101	106.7	14.3
Ransom	9,767	11,470	11,631	11,992	22.8	3.1
Richland	21,587	26,058	28,740	29,732	37.7	3.5
Sargent	6,772	8,523	7,991	8,143	20.2	1.9
Steele	4,159	4,975	5,069	4,907	18.0	-3.2
Traill	13,957	16,999	17,263	17,097	22.5	-1.0
REGION 5	136,119	177,423	215,160	236,972	74.1	10.0

- Continued -

Table 18. continued

Area	Retirement Transfer Payments				Percentage Change	
	1975	1985	1995	1999	1975-1999	1995-1999
	-----\$000-----				-----%-----	
Barnes	19,107	23,824	25,379	25,088	31.3	-1.1
Dickey	8,996	10,943	11,011	11,110	23.5	0.9
Foster	5,605	7,760	8,273	8,180	45.9	-1.1
Griggs	5,264	6,907	6,892	6,308	19.8	-8.5
LaMoure	8,649	10,408	10,887	10,758	24.4	-1.2
Logan	4,038	5,535	5,041	5,025	24.4	-0.3
McIntosh	6,481	8,567	9,176	9,135	40.9	-0.5
Stutsman	28,338	36,176	42,381	43,756	54.4	3.2
Wells	10,597	12,837	13,406	13,369	26.2	-0.3
REGION 6	97,075	122,957	132,446	132,729	36.7	0.2
Burleigh	40,068	63,598	93,007	109,516	173.3	17.7
Emmons	6,342	7,635	8,870	9,205	45.1	3.8
Grant	4,224	5,764	5,620	5,727	35.6	1.9
Kidder	4,010	5,219	5,755	5,542	38.2	-3.7
McLean	13,554	18,736	20,890	20,464	51.0	-2.0
Mercer	6,875	11,341	13,295	14,697	113.8	10.5
Morton	23,275	30,816	39,879	43,517	87.0	9.1
Oliver	1,313	1,925	2,986	3,281	149.9	9.9
Sheridan	3,236	3,753	4,272	3,950	22.1	-7.5
Sioux	1,657	1,946	2,182	2,282	37.7	4.6
REGION 7	104,554	150,733	196,756	218,181	108.7	10.9
Adams	4,633	6,176	5,949	6,199	33.8	4.2
Billings	474	610	1,060	1,097	131.5	3.5
Bowman	4,565	6,264	7,018	7,157	56.8	2.0
Dunn	3,530	4,825	5,232	5,185	46.9	-0.9
Golden Valley	3,137	4,157	4,411	4,344	38.5	-1.5
Hettinger	5,069	7,536	6,676	6,746	33.1	1.0
Slope	979	1,157	1,336	1,440	47.2	7.8
Stark	18,493	27,105	35,710	38,970	110.7	9.1
REG ION 8	40,880	57,829	67,394	71,138	74.0	5.6
NORTH DAKOTA	665,444	882,398	1,026,726	1,085,094	63.1	5.7

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Table 18. continued

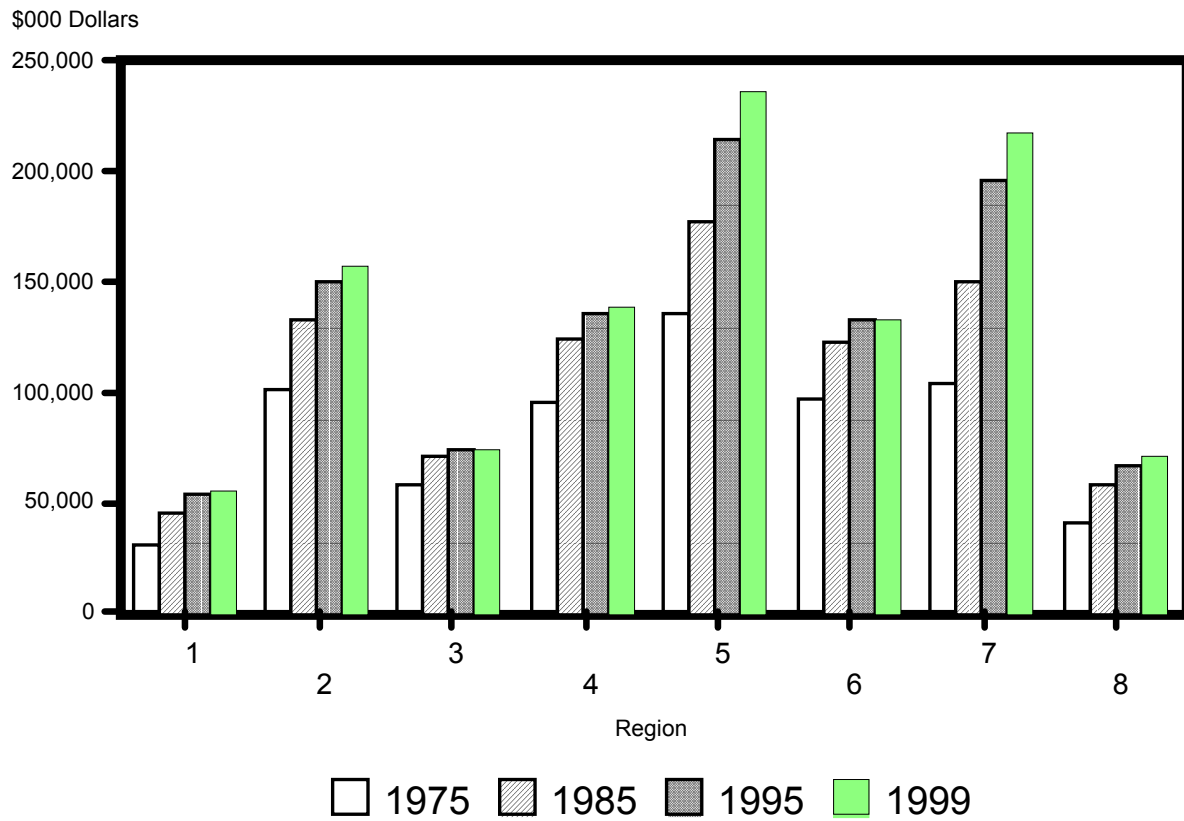
Area	Medical Transfer Payments				Percentage Change	
	1975	1985	1995	1999	1975-1999	1995-1999
	-----\$000-----				-----%-----	
Divide	1,626	2,931	4,218	3,768	131.8	-10.7
McKenzie	2,756	4,371	7,059	7,171	160.2	1.6
Williams	7,488	16,342	27,196	27,229	263.6	0.1
REGION 1	11,870	23,644	38,472	38,168	221.6	-0.8
Bottineau	4,431	9,519	12,370	12,335	178.4	-0.3
Burke	2,121	3,104	4,373	4,125	94.5	-5.7
McHenry	4,633	6,554	10,370	9,666	108.6	-6.8
Mountrail	3,917	8,093	12,673	13,050	233.1	3.0
Pierce	3,013	6,182	8,037	8,862	194.1	10.3
Renville	1,660	2,677	4,281	4,556	174.5	6.4
Ward	16,589	40,996	64,041	68,220	311.2	6.5
REGION 2	36,365	77,125	116,145	120,814	232.2	4.0
Benson	5,871	7,531	10,357	10,792	83.8	4.2
Cavalier	3,837	5,071	7,441	7,591	97.8	2.0
Eddy	1,914	5,244	6,444	5,666	196.1	-12.1
Ramsey	6,655	12,196	20,475	20,625	209.9	0.7
Rolette	7,705	16,189	23,947	26,224	240.4	9.5
Towner	2,456	3,909	6,484	5,679	131.3	-12.4
REGION 3	28,437	50,140	75,148	76,577	169.3	1.9
Grand Forks	14,183	32,403	57,538	56,963	301.6	-1.0
Nelson	3,728	6,147	9,600	10,223	174.2	6.5
Pembina	4,642	9,141	11,760	11,102	139.2	-5.6
Walsh	5,645	13,029	19,568	19,000	236.6	-2.9
REGION 4	28,199	60,720	98,467	97,288	245.0	-1.2
Cass	24,225	53,384	90,683	101,556	319.2	12.0
Ransom	3,601	7,728	10,646	10,477	190.9	-1.6
Richland	7,311	12,659	18,297	18,357	151.1	0.3
Sargent	2,833	4,890	6,547	4,862	71.6	-25.7
Steele	1,341	1,637	2,478	2,382	77.6	-3.9
Trail	4,354	7,729	12,632	11,851	172.2	-6.2
REGION 5	43,667	88,025	141,283	149,485	242.3	5.8

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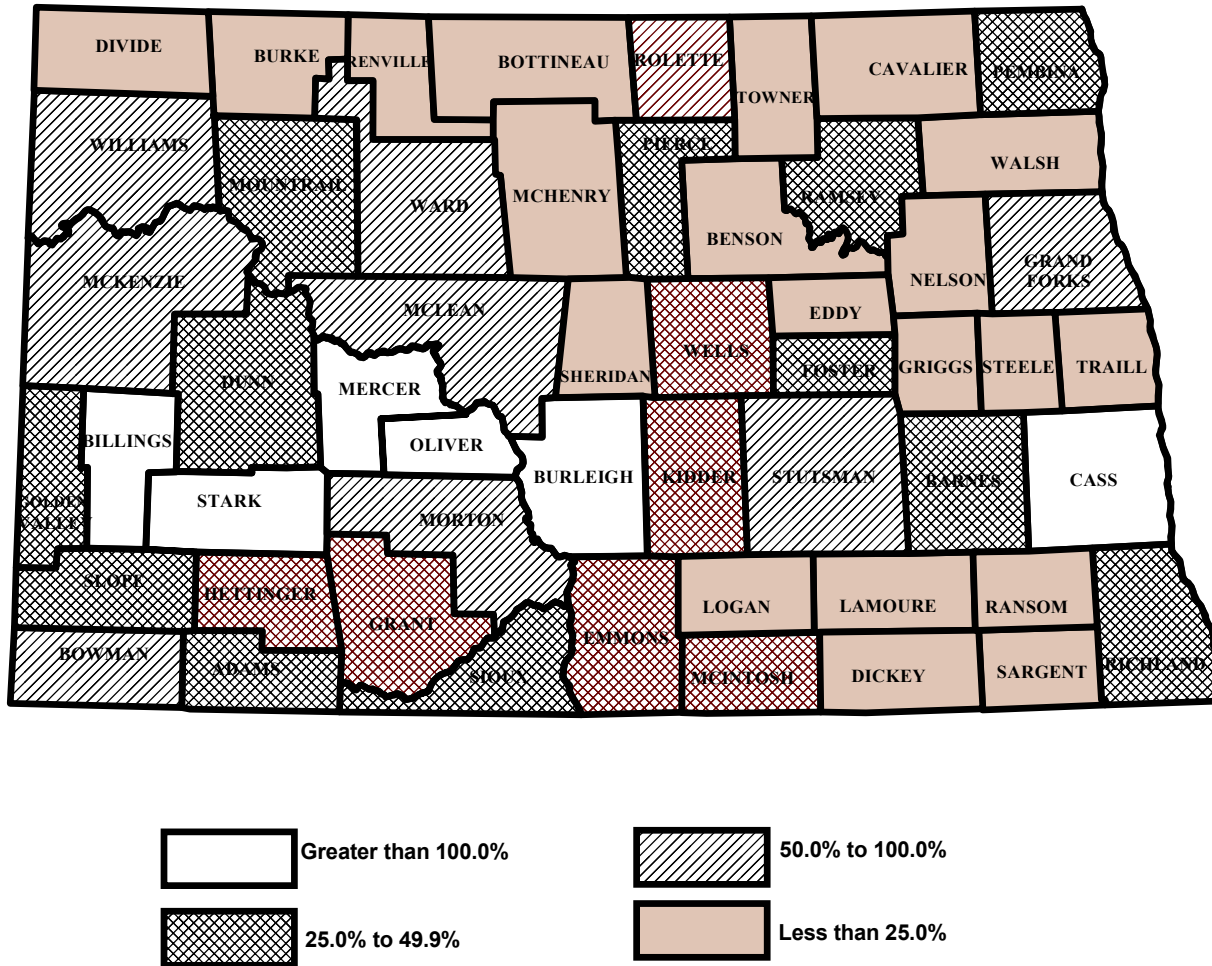
Table 18. continued

Area	Medical Transfer Payments				Percentage Change	
	1975	1985	1995	1999	1975-1999	1995-1999
	-----\$000-----				-----%-----	
Barnes	6,450	11,863	15,862	17,357	169.1	9.4
Dickey	3,540	8,441	11,283	11,112	213.9	-1.5
Foster	2,419	5,156	6,966	6,512	169.3	-6.5
Griggs	1,874	3,954	5,043	5,238	179.6	3.9
LaMoure	2,728	4,835	7,375	7,500	174.9	1.7
Logan	1,858	2,909	5,071	5,071	172.9	0.0
McIntosh	3,029	6,514	10,401	10,262	238.8	-1.3
Stutsman	8,705	22,998	34,197	31,876	266.2	-6.8
Wells	3,577	8,544	9,566	9,985	179.2	4.4
REGION 6	34,178	75,215	105,764	104,913	207.0	-0.8
Burleigh	12,857	37,413	73,033	83,347	548.2	14.1
Emmons	2,833	4,441	7,526	7,377	160.4	-2.0
Grant	1,904	3,733	5,156	5,232	174.7	1.5
Kidder	2,205	3,027	5,169	5,165	134.3	-0.1
McLean	6,035	11,290	17,480	16,775	177.9	-4.0
Mercer	2,595	6,627	11,267	10,720	313.1	-4.9
Morton	8,652	19,789	33,948	35,700	312.6	5.2
Oliver	483	842	1,726	1,634	238.2	-5.3
Sheridan	1,493	2,160	3,648	3,678	146.4	0.8
Sioux	700	3,368	6,834	5,854	736.5	-14.3
REGION 7	39,759	92,689	165,786	175,482	341.4	5.8
Adams	1,864	3,851	5,325	5,649	203.0	6.1
Billings	195	362	427	448	129.6	4.8
Bowman	1,480	3,073	5,725	6,269	323.5	9.5
Dunn	1,731	2,906	6,046	5,568	221.7	-7.9
Golden Valley	932	1,839	2,278	2,162	131.9	-5.1
Hettinger	1,598	4,589	5,785	5,736	259.0	-0.9
Slope	282	396	543	532	88.8	-2.1
Stark	6,215	18,467	31,466	33,594	440.5	6.8
REGION 8	14,297	35,484	57,596	59,958	319.4	4.1
NORTH DAKOTA	236,771	503,041	798,660	822,685	247.5	3.0

Source: Bureau of Economic Analysis Internet Web Page. 1975-1999. *Transfer Payments for Counties and Metropolitan Areas*, U.S. Department of Commerce, Washington, D.C.

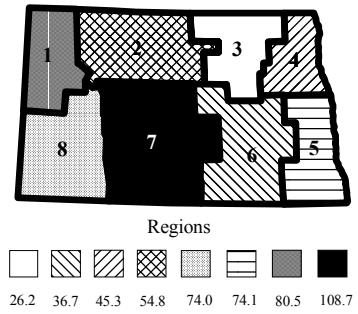
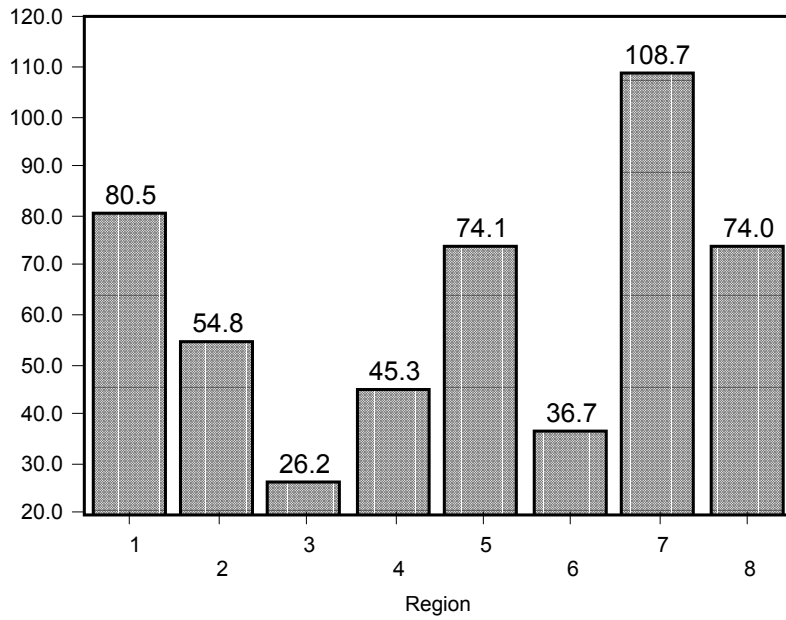


**Figure 91. Federal Transfer Payments to North Dakota for Retirement Programs by Region, 1975, 1985, 1995, and 1999**

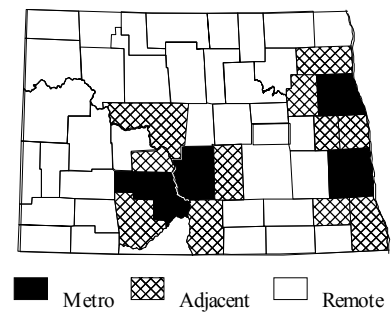
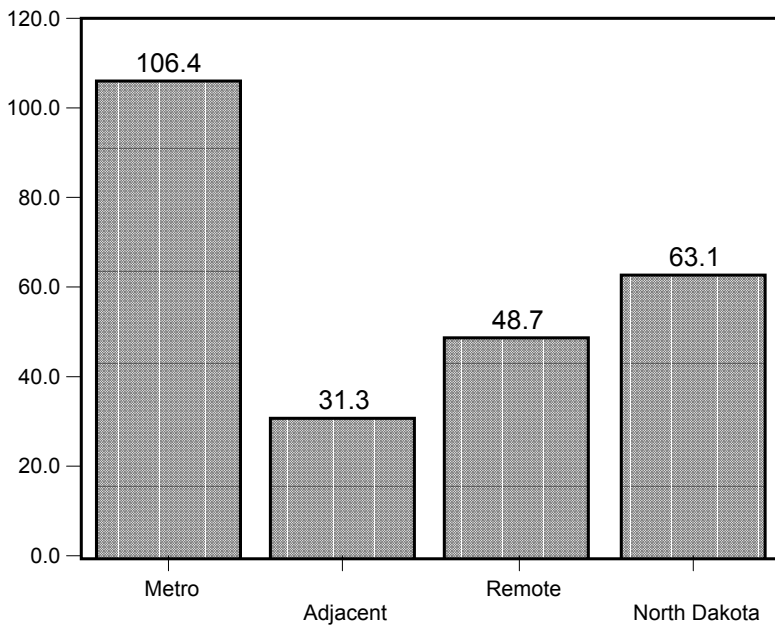


**Figure 92. Long-term Change in Federal Transfer Payments to North Dakota for Retirement Programs, 1975-1999**

Percent Change

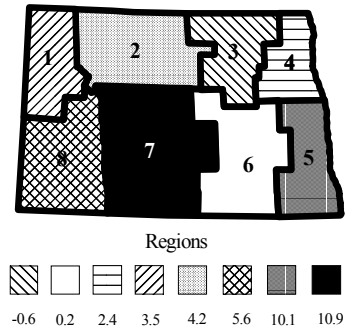
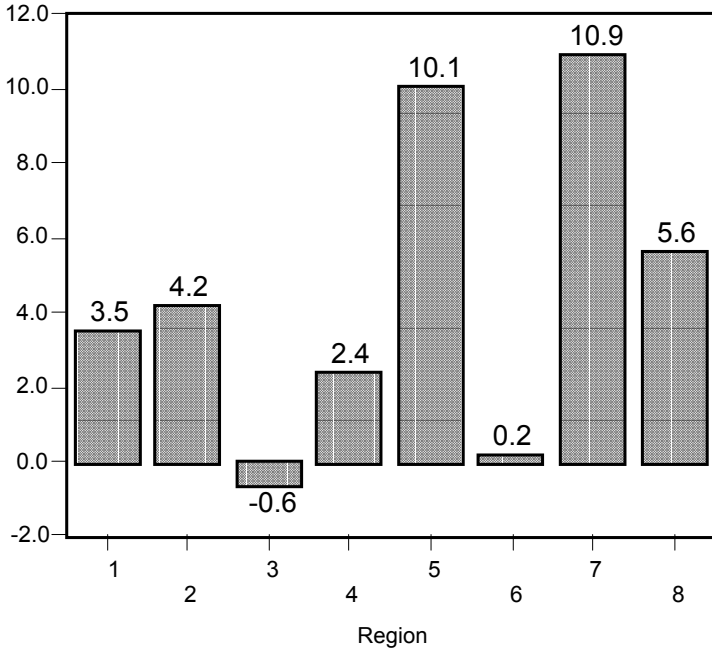


Percent Change

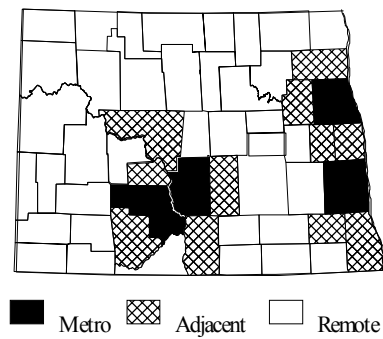
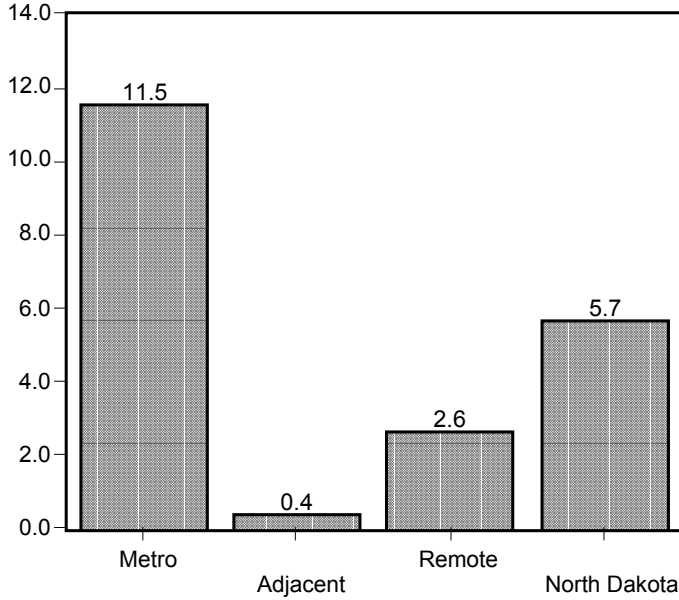


**Figure 93. Long-term Change in Federal Transfer Payments to North Dakota for Retirement Programs by Region and Area, 1975-1999**

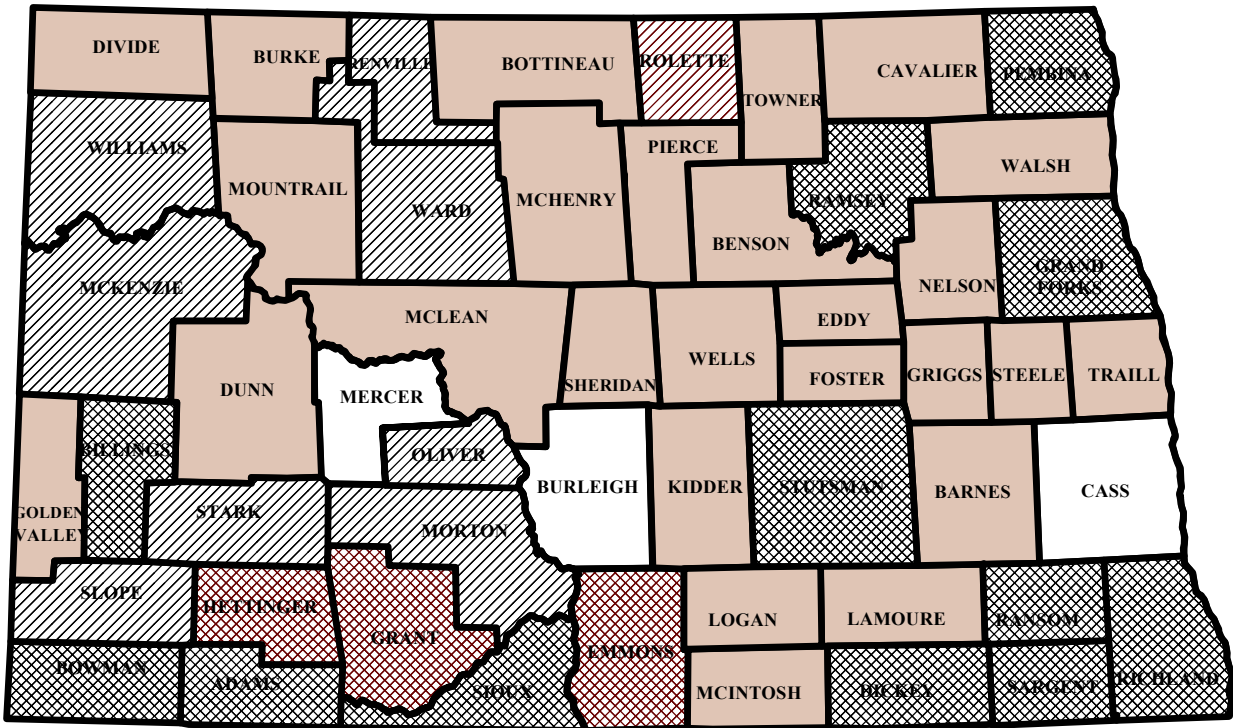
Percent Change



Percent Change



**Figure 94. Short-term Change in Federal Transfer Payments to North Dakota for Retirement Programs by Region and Area, 1995-1999**



**Figure 95. Short-term Change in Federal Transfer Payments to North Dakota for Retirement Programs, 1995-1999**

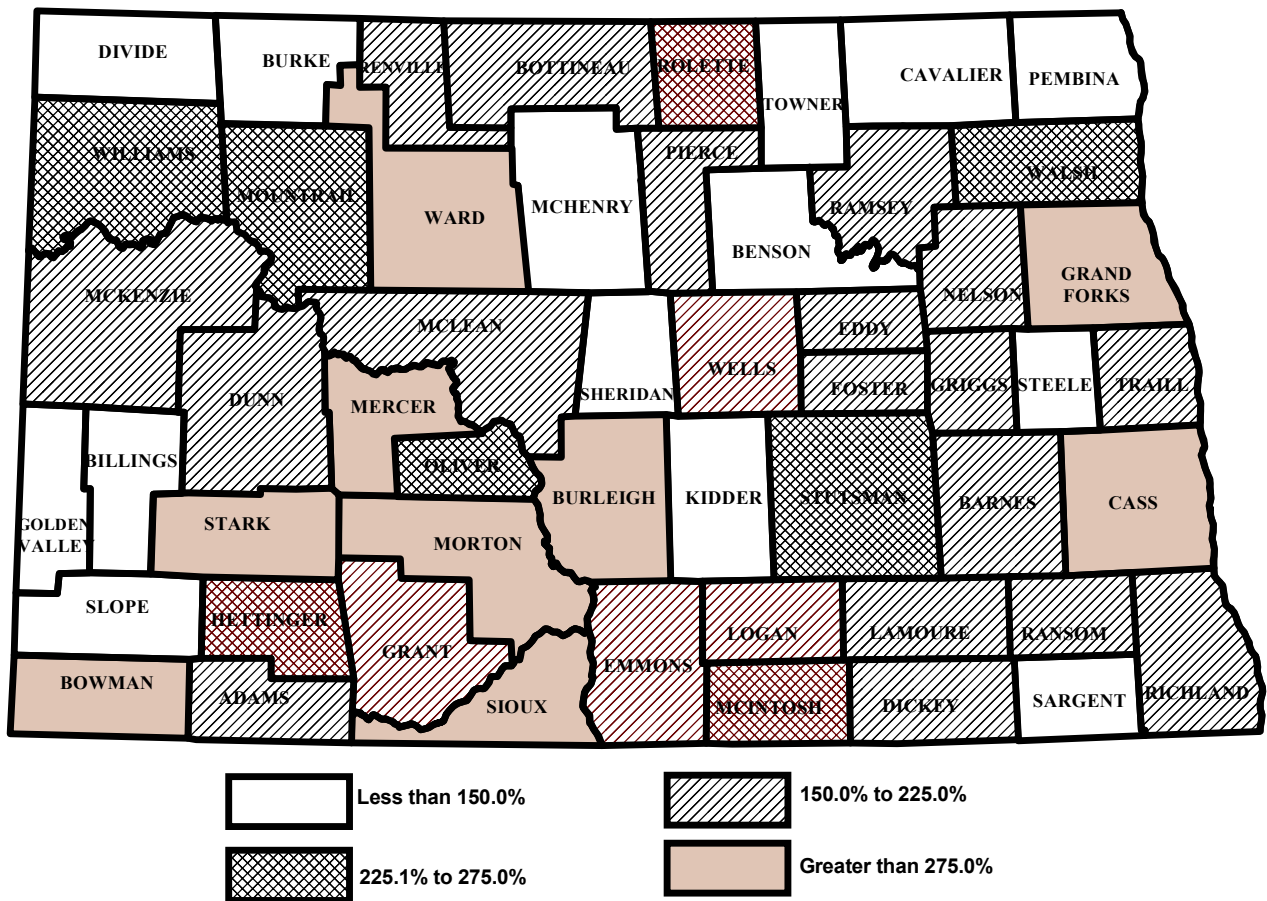
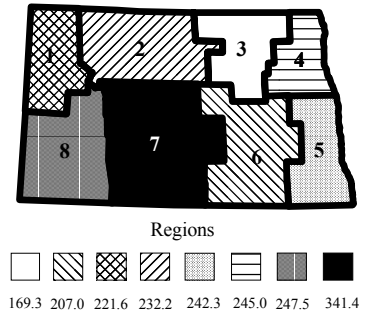
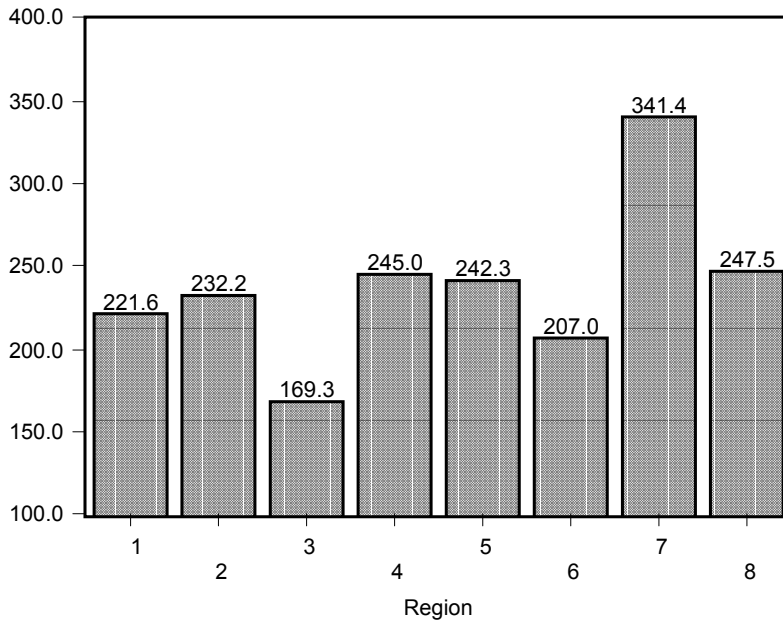


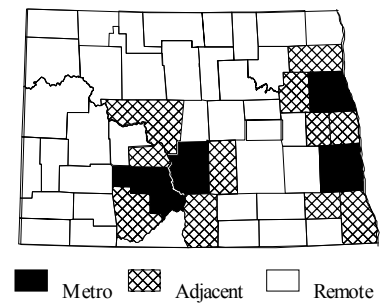
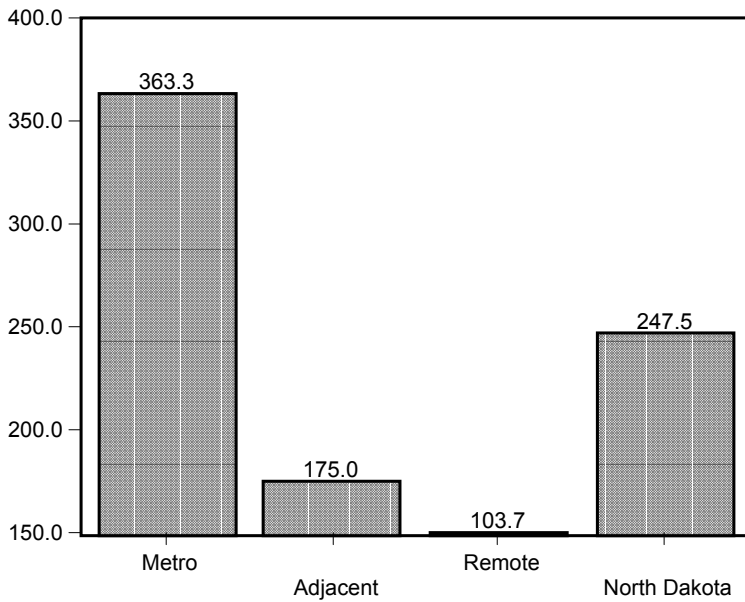
Figure 96. Long-term Change in Federal Transfer Payments to North Dakota for Medical Programs, 1975-1999



Percent Change



Percent Change



**Figure 97. Long-term Change in Federal Transfer Payments to North Dakota for Medical Programs by Region and Area, 1975-1999**

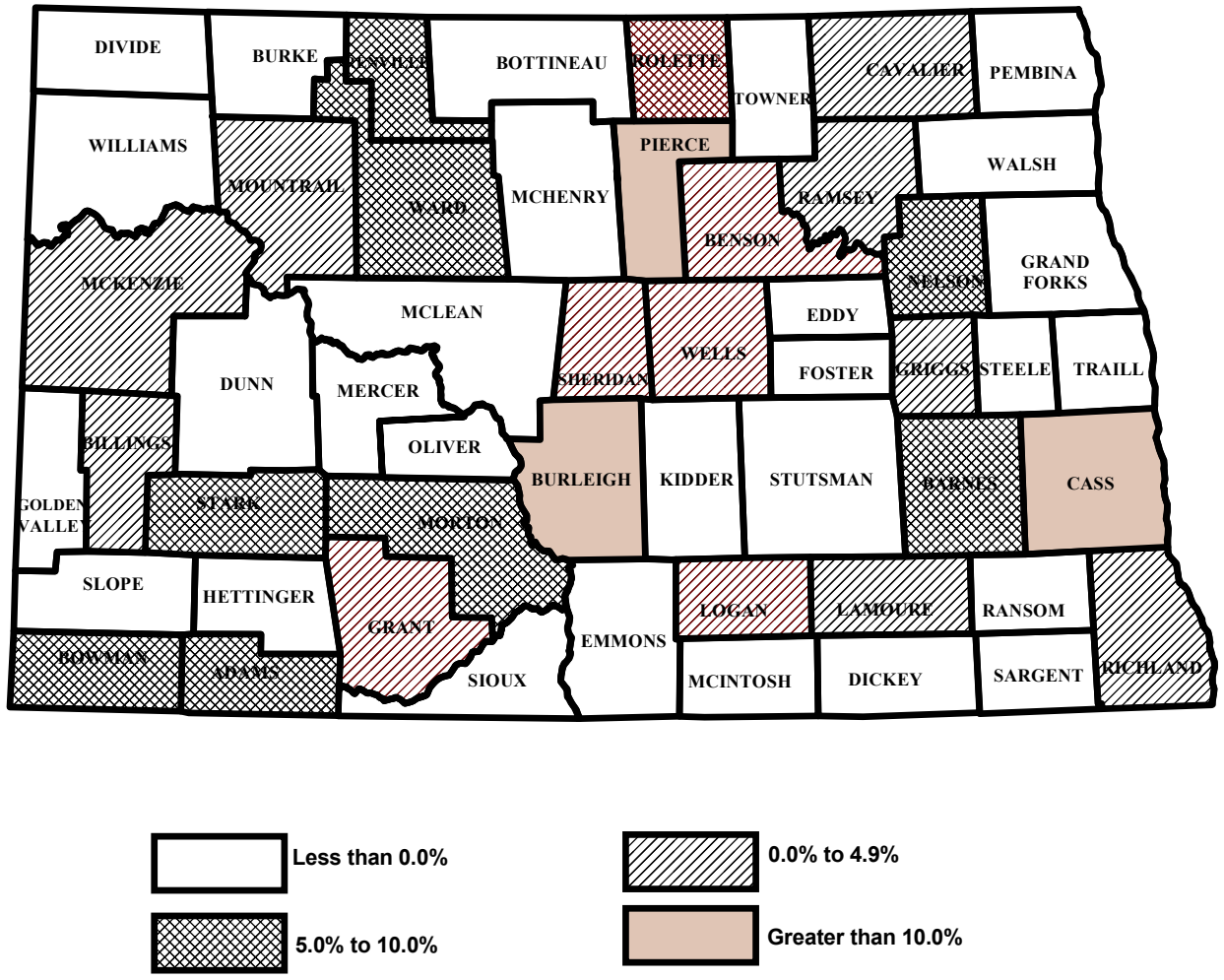
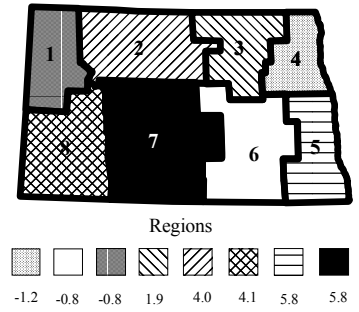
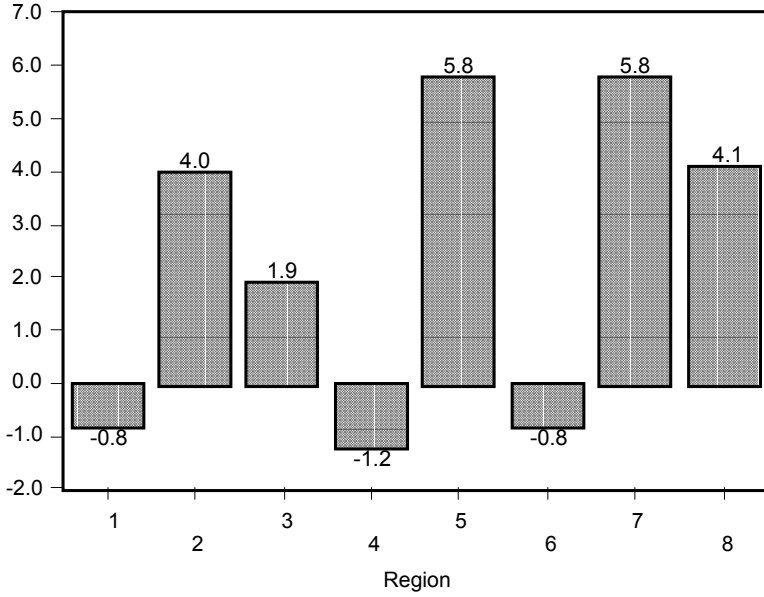
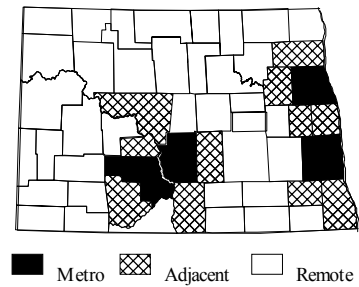
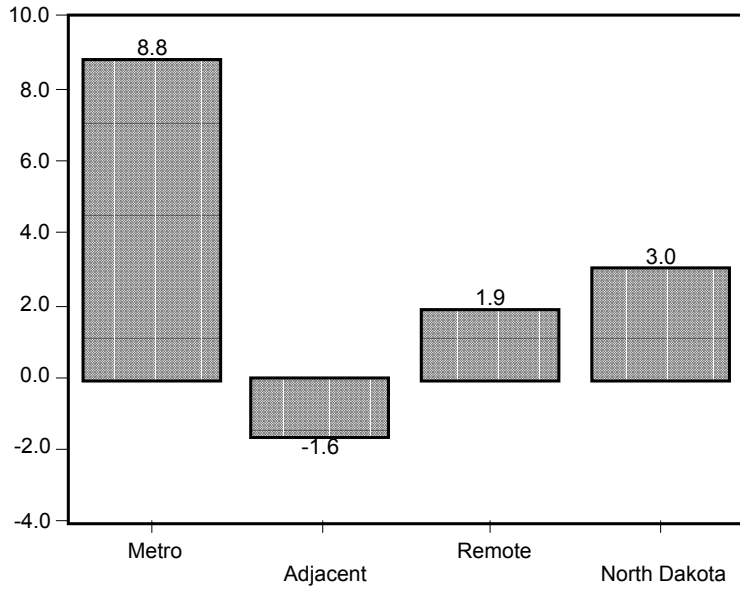


Figure 98. Short-term Change in Federal Transfer Payments to North Dakota for Medical Programs, 1995-1999

Percent Change



Percent Change



**Figure 99. Short-term Change in Federal Transfer Payments to North Dakota for Medical Programs by Region and Area, 1995-1999**

### ***Policy Implications***

Indicators of fiscal capacity, revenues, and expenditures of local governments show diversity among counties. Variations in taxable property values per capita generally reflect the key role of agricultural land in the tax base of the state's more rural counties. At the same time, the per capita total expenditures (and total revenues) of North Dakota counties appear largely unrelated to per capita local property tax revenues. This reflects the state's system of state-local transfer payments which underwrite the bulk of primary-secondary education costs and a substantial part of other local expenditures.

An increasingly aged population in the state with increased benefits for federal government retirement and medical programs has resulted in a very large amount of benefit money coming into North Dakota. These entitlement programs have increased rapidly in absolute terms for the state's residents in the long-run, and are still showing significant growth in the short-run. These revenues have contributed much to the state and local economies.

While the state's local governments appear to be in reasonably good fiscal condition, declining population bases in some areas may pose challenges for traditional service delivery systems. Policy makers may need to address alternatives for multicomunity cooperation or innovative delivery systems, if some services are to be delivered cost effectively in the more sparsely populated sections of the state.

# **APPENDIX**

**Appendix Table 1. Sales for Final Demand by County and Region, North Dakota, Selected Years**

County/ REGION	Sales for Final Demand (2000 dollars)				Percent Change 1985-2000	Sector Share of Total, 2000					
	1985	1990	1995	2000		Ag.	Federal Activities	Tourism	Energy	Mfg.	Total
	-----million\$-----				-----%-----						
DIVIDE	80.3	81.7	92.6	89.6	11.5	48.6	18.4	10.5	20.5	2.0	100.0
MCKENZIE	743.2	394.9	241.9	293.6	-60.5	21.6	12.6	10.5	50.9	4.4	100.0
WILLIAMS	491.1	396.1	366.8	531.9	8.3	13.2	27.3	23.8	29.4	6.3	100.0
<b>REGION 1</b>	1,314.6	872.7	701.4	915.1	-30.4	19.4	14.6	18.2	42.6	5.2	100.0
BOTTINEAU	279.8	236.3	213.3	221.5	-20.8	31.8	24.0	12.4	26.5	5.3	100.0
BURKE	117.4	88.3	97.2	95.7	-18.5	37.7	21.3	18.4	21.3	1.3	100.0
MCHENRY	163.1	128.3	124.1	144.9	-11.2	50.3	27.3	10.0	0.7	11.7	100.0
MOUNTRAIL	149.0	181.6	172.6	175.9	18.0	32.5	31.6	19.1	5.8	11.0	100.0
PIERCE	108.1	102.4	116.9	119.8	10.9	31.6	31.4	16.6	--	20.4	100.0
RENVILLE	154.6	119.3	115.1	102.6	-33.6	41.9	19.0	10.9	20.8	7.4	100.0
WARD	681.3	725.8	863.6	1225.9	79.9	8.1	49.7	31.6	0.2	10.4	100.0
<b>REGION 2</b>	1,653.2	1,582.1	1,702.8	2,086.3	26.2	20.0	36.6	24.5	8.9	10.0	100.0
BENSON	155.9	144.1	142.7	131.0	-16.0	41.6	35.2	15.3	--	7.9	100.0
CAVALIER	218.5	167.4	172.6	197.8	-9.5	47.8	34.5	16.9	--	0.8	100.0
EDDY	63.9	66.8	60.8	56.8	-11.1	34.3	46.1	16.2	--	3.4	100.0
RAMSEY	225.4	210.0	233.2	309.2	37.2	13.5	44.6	38.0	--	3.9	100.0
ROLETTE	126.2	131.4	158.3	205.3	62.6	13.5	52.2	25.3	--	9.0	100.0
TOWNER	130.0	100.1	112.5	109.5	-15.8	41.7	25.1	24.8	--	8.4	100.0
<b>REGION 3</b>	919.9	819.8	880.1	1,009.6	9.7	28.1	40.9	25.7	--	5.3	100.0
GRAND FORKS	737.9	770.7	914.2	1,214.2	64.5	14.0	46.6	28.1	--	11.3	100.0
NELSON	129.0	114.2	86.0	80.8	-37.4	46.3	33.7	18.8	--	1.2	100.0
PEMBINA	313.0	302.9	347.6	435.0	39.0	51.4	20.5	5.0	--	23.1	100.0
WALSH	340.9	280.6	322.6	343.2	0.7	56.0	29.4	5.7	--	8.9	100.0
<b>REGION 4</b>	1,520.9	1,468.4	1,671.2	2,073.2	36.3	30.1	37.7	19.2	--	13.0	100.0
CASS	830.3	855.7	1,005.2	1,621.0	95.2	14.9	30.7	38.2	--	16.2	100.0
RANSOM	112.1	95.6	101.7	120.9	7.8	69.5	15.5	9.1	--	5.9	100.0
RICHLAND	387.3	318.5	336.6	401.7	3.7	57.8	15.1	6.5	--	20.6	100.0
SARGENT	148.0	127.6	149.4	171.0	15.5	55.0	10.4	4.6	--	30.0	100.0
STEELE	85.0	75.0	60.9	77.2	-9.2	82.8	8.3	6.6	--	2.3	100.0
TRAILL	184.0	170.6	148.6	197.9	7.5	72.7	13.9	7.4	--	6.0	100.0
<b>REGION 5</b>	1,746.8	1,643.0	1,802.4	2,589.7	48.3	33.2	24.3	26.4	--	16.1	100.0

- Continued -

Appendix Table 1. Continued

County/ REGION	Sales for Final Demand (2000 dollars)				Percent Change 1985-2000	Sector Share of Total, 2000					
	1985	1990	1995	2000		Ag.	Federal Activities	Tourism	Energy	Mfg.	Total
	-----million\$-----					-----%-----					
BARNES	205.7	225.8	227.9	294.5	43.2	42.4	23.9	28.5	--	5.2	100.0
DICKEY	133.5	120.8	124.1	167.9	25.8	57.8	18.9	16.6	--	6.7	100.0
FOSTER	82.8	83.4	82.6	104.9	26.7	42.7	23.4	23.2	--	10.7	100.0
GRIGGS	82.8	75.7	64.0	75.1	-9.3	51.1	22.1	21.2	--	5.6	100.0
LAMOURE	127.0	128.8	133.4	170.5	34.3	64.5	14.3	19.2	--	2.0	100.0
LOGAN	70.3	63.8	58.7	64.8	-7.8	66.1	19.9	13.7	--	0.3	100.0
MCINTOSH	77.3	70.8	64.6	90.1	16.6	56.4	22.4	17.8	--	3.4	100.0
STUTSMAN	347.2	342.6	372.6	542.6	56.3	23.7	26.3	35.4	--	14.6	100.0
WELLS	140.5	130.5	122.0	110.8	-21.1	47.4	29.1	23.0	--	0.5	100.0
<b>REGION 6</b>	1,267.0	1,242.2	1,250.0	1,621.2	28.0	42.6	23.1	26.4	--	7.9	100.0
BURLEIGH	502.7	556.0	687.6	1,058.0	110.4	4.5	47.7	33.4	--	14.4	100.0
EMMONS	106.9	83.3	95.3	119.1	11.4	67.6	18.0	13.3	--	1.1	100.0
GRANT	89.2	65.2	63.9	75.1	-15.8	68.8	14.4	14.7	--	2.1	100.0
KIDDER	68.1	66.1	54.2	89.6	31.5	72.5	14.7	12.1	--	0.7	100.0
MCLEAN	369.8	305.7	342.3	351.6	-4.9	19.2	15.9	8.9	55.3	0.7	100.0
MERCER	387.3	653.7	698.3	824.2	112.8	3.2	7.5	3.6	85.5	0.2	100.0
MORTON	723.2	730.7	640.7	965.1	33.4	9.3	15.1	8.5	59.8	7.3	100.0
OLIVER	172.4	145.6	144.9	166.7	-3.3	16.6	6.8	1.8	74.5	0.3	100.0
SHERIDAN	75.0	50.2	50.2	41.7	-44.4	69.5	21.1	8.4	--	1.0	100.0
SIOUX	36.0	33.8	29.4	32.5	-9.8	50.1	38.8	11.1	--	--	100.0
<b>REGION 7</b>	2,530.7	2,690.4	2,806.7	3,723.6	47.1	13.5	20.5	14.6	45.2	6.2	100.0
ADAMS	55.6	42.2	46.2	57.8	3.9	61.6	22.2	14.0	--	2.2	100.0
BILLINGS	532.8	238.2	150.5	201.9	-62.1	6.6	2.0	22.2	69.1	0.1	100.0
BOWMAN	145.3	98.6	111.2	179.5	23.6	16.8	10.4	7.5	64.0	1.3	100.0
DUNN	212.8	112.3	101.8	120.4	-43.4	41.9	10.6	16.3	26.7	4.5	100.0
GOLDEN VALLEY	73.2	49.1	45.0	61.3	-16.3	28.4	12.1	6.5	52.0	1.0	100.0
HETTINGER	99.1	59.9	75.4	91.1	-8.0	73.0	17.0	7.0	0.1	2.9	100.0
SLOPE	43.3	28.6	32.7	43.4	0.3	75.8	6.5	3.9	13.8	--	100.0
STARK	265.1	227.2	319.0	570.6	115.2	11.0	22.6	21.2	31.4	13.8	100.0
<b>REGION 8</b>	1,427.2	856.1	881.7	1,326.0	-7.1	23.3	13.2	16.5	40.1	6.9	100.0

SOURCE: Coon and Leistritz. 2002. North Dakota Input-Output Model Data Base, unpublished data. Fargo: Department of Agribusiness and Applied Economics, NDSU.

**Appendix Table 2. Direct Federal Expenditures or Obligations to North Dakota Counties, 2000**

County	2000 Total Expenditures	Per Capita			Percent of					Percent Defense
		1995 <sup>a</sup>	2000	% Change 1995-2000	Total Federal Expenditures/Obligations					
	-----\$000-----	-----\$-----		----%---	-----	-----	-----	-----	-----	-----
Adams	26,069	6,811	10,053	47.6	19.1	3.3	50.9	0.7	26.0	0.8
Barnes	122,414	5,911	10,566	78.8	20.4	5.5	47.8	3.2	23.1	5.9
Benson	88,017	9,577	12,639	32.0	26.5	5.6	44.2	8.7	15.0	8.0
Billings	5,689	6,428	6,406	-0.3	4.6	21.3	48.7	7.3	18.1	0.6
Bottineau	81,051	6,424	11,337	76.5	6.3	4.0	66.4	0.7	22.6	1.3
Bowman	33,073	6,547	10,202	55.8	31.6	3.0	40.5	0.7	24.2	0.3
Burke	31,666	8,939	14,124	58.0	7.1	8.1	61.9	0.7	22.2	0.1
Burleigh	573,886	7,334	8,267	12.7	50.5	10.0	14.5	2.0	23.0	4.8
Cass	569,717	4,737	4,627	-2.3	19.3	19.1	23.9	4.2	33.5	7.4
Cavalier	88,170	7,848	18,251	132.6	7.0	2.0	76.5	0.4	14.1	0.3
Dickey	60,013	6,317	10,424	65.0	8.5	2.8	66.6	0.7	21.4	0.9
Divide	32,067	8,113	14,046	73.1	11.3	3.6	63.7	0.6	20.8	0.2
Dunn	25,241	4,701	7,011	49.1	12.9	4.3	48.0	12.0	22.8	2.0
Eddy	26,868	7,421	9,746	31.3	8.7	4.2	58.1	0.8	28.2	0.5
Emmons	41,249	5,709	19,524	66.8	13.2	2.9	57.7	0.6	25.6	0.3
Foster	48,131	12,740	12,804	0.5	26.2	3.0	48.6	2.8	19.4	0.7
Golden Valley	18,412	8,462	9,569	13.1	16.8	2.6	52.9	0.5	27.2	0.9
Grand Forks	484,725	6,339	7,332	15.7	18.6	26.6	23.1	12.7	19.0	34.6
Grant	29,085	5,943	10,238	72.3	14.5	4.1	58.7	0.7	22.0	0.4
Griggs	35,741	6,582	12,978	97.2	8.0	3.4	66.8	1.6	20.2	0.3
Hettinger	41,783	7,510	15,390	104.9	13.0	2.7	64.8	0.4	19.1	0.8
Kidder	26,942	6,353	9,786	54.0	13.4	4.4	56.2	2.7	23.3	0.1
LaMoure	59,071	6,037	12,566	108.1	8.2	3.6	66.8	0.9	20.5	0.8
Logan	23,025	6,634	9,976	50.4	13.6	2.9	60.0	0.7	22.8	0.1
McHenry	60,677	6,663	10,135	52.1	17.9	4.7	49.1	1.0	27.3	0.9
McIntosh	36,281	7,089	10,702	51.0	12.9	3.2	54.6	0.6	28.7	1.0
McKenzie	35,481	4,474	6,185	38.2	19.5	6.6	41.0	5.1	27.8	0.6
McLean	100,778	6,216	10,824	74.1	19.6	5.2	43.0	7.6	24.6	9.6

- Continued -



Appendix Table 2. Continued

County	2000 Total Expenditures	Per Capita			Percent of					Percent Defense
		1995 <sup>a</sup>	2000	% Change 1995-2000	Total Federal Expenditures/Obligations					
					Grants	Salaries	Payments	Procurement	Retirement	
-----\$000-----	-----\$-----	-----%-----	-----%-----							
Mercer	37,742	3,219	4,366	35.6	13.4	4.9	39.9	1.3	40.5	0.9
Morton	115,633	4,212	4,570	8.5	19.0	4.6	31.9	0.8	43.7	1.2
Mountrail	68,819	8,232	10,378	26.1	24.6	6.8	45.3	0.8	22.5	0.4
Nelson	54,536	8,770	14,680	67.4	9.8	2.4	65.0	0.6	22.2	0.6
Oliver	12,074	3,206	5,847	82.4	17.3	1.3	59.0	0.2	22.2	0.1
Pembina	81,687	7,353	9,515	29.4	11.5	8.8	50.5	4.4	24.8	5.2
Pierce	45,025	5,828	9,631	65.3	12.9	3.1	58.9	0.5	24.6	0.8
Ramsey	127,223	6,568	10,544	60.5	10.4	7.9	52.9	5.0	23.8	6.6
Ransom	51,761	7,030	8,788	25.0	9.9	3.3	59.5	1.3	26.0	0.9
Renville	40,096	6,666	15,363	130.5	4.1	2.3	74.7	0.6	18.3	1.9
Richland	117,201	4,097	6,512	58.9	20.4	3.1	48.2	0.8	27.5	0.6
Rolette	152,878	9,969	11,180	12.1	31.2	16.5	18.8	18.2	15.3	3.3
Sargent	45,154	5,619	10,342	84.1	8.9	4.5	65.5	1.6	19.5	0.3
Sheridan	23,801	7,106	13,919	95.9	18.6	2.1	59.6	0.8	18.9	0.5
Sioux	45,278	9,475	11,196	18.2	43.5	15.3	24.3	5.3	11.6	0.1
Slope	10,239	6,494	13,350	105.6	8.3	1.0	79.9	0.4	10.4	0.1
Stark	120,316	4,200	5,315	26.5	24.8	6.0	31.4	0.8	37.0	1.0
Steele	34,213	8,933	15,152	69.6	10.8	2.0	70.7	0.3	16.2	0.6
Stutsman	174,750	5,765	7,977	38.4	18.2	5.9	45.6	1.5	28.8	1.0
Towner	57,692	9,188	20,060	118.3	11.5	1.9	72.0	1.8	12.8	0.5
Traill	72,612	6,073	8,566	41.1	12.6	3.0	56.8	0.7	26.9	1.4
Walsh	108,310	5,906	8,742	48.0	13.3	3.1	54.2	2.0	27.4	1.9
Ward	482,566	7,437	8,208	10.4	11.5	34.4	17.6	10.8	25.7	43.2
Wells	62,333	7,176	12,217	70.2	11.9	2.5	60.6	0.7	24.3	0.4
Williams	112,041	4,641	5,670	22.2	15.9	4.7	33.6	4.1	41.7	1.1
Undistributed	183,203	--	--	--	--	--	--	--	--	--
North Dakota	5,244,510	6,471	8,166	26.2	21.0	11.7	38.5	4.5	24.3	9.7

<sup>a</sup>1995 dollars have been inflated to their 2000 values using the Consumer Price Index.

Source: U.S. Bureau of the Census Internet Web Page. 2002. *Consolidated Federal Funds Report: Fiscal Year 1995 and 2000*, Consolidated Federal Funds Report. Washington, D.C.

**Appendix Table 3. Employment by Economic Sector, North Dakota and Regions, Selected Years 1980-2000<sup>a</sup>**

Region and Year	(1) & (2) Ag	(3) Non-metal Mining	(4) Con- struct	(5) Trans	(6) Comm & Pub Util	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(9) FIRE	(10) Bus & Pers Serv	(11) Prof & Soc Serv	(12) House- holds	(13) Govt	(14) Coal Mining	(15) Coal Conv	(16) Pet Exp/ Ext	(17) Pet Refining	(18) TOTAL
North Dakota																	
1980	52,680	175	19,996	7,525	9,724	32,701	55,928	10,532	28,114	31,704	--	56,057	970	386	6,066	212	312,770
1985	50,370	189	14,644	7,574	9,506	31,649	59,537	11,476	33,983	38,322	--	58,127	1,358	682	4,786	207	322,410
1990	47,870	278	12,144	8,181	10,219	32,900	61,752	11,390	39,346	44,386	--	60,560	1,019	833	2,685	296	333,859
1995	45,370	337	16,054	8,862	11,070	38,045	69,327	12,856	45,544	50,717	--	66,666	1,206	944	2,087	374	369,429
2000	42,870	376	19,139	9,019	11,267	42,062	71,460	15,603	55,402	54,098	--	68,474	1,175	1,081	1,974	423	394,423
Region 1																	
1980	3,142	--	1,032	464	600	1,379	2,813	460	1,310	1,462	--	1,727	50	--	2,963	31	17,433
1985	3,117	--	1,013	760	543	1,425	3,060	484	1,866	1,708	--	1,847	26	--	2,108	34	17,791
1990	2,816	--	394	219	444	967	2,362	462	1,741	1,780	--	1,826	20	--	1,258	56	14,345
1995	2,899	--	363	300	466	1,119	2,567	487	1,902	1,741	--	1,953	20	--	837	71	14,725
2000	2,893	--	392	236	344	1,115	2,766	498	2,193	1,637	--	1,961	24	--	778	80	14,917
Region 2																	
1980	7,620	--	2,210	874	971	3,298	7,717	1,175	3,925	4,344	--	11,317	110	--	844	--	44,405
1985	6,750	--	1,666	1,051	1,016	3,151	8,812	1,210	4,219	4,876	--	11,575	31	--	714	--	45,071
1990	7,059	41	1,006	712	1,282	3,084	8,034	1,233	4,527	4,934	--	11,209	24	--	514	--	43,659
1995	6,492	15	1,459	652	1,074	3,461	9,817	1,278	4,969	6,116	--	11,903	25	--	294	--	47,555
2000	6,713	35	1,785	699	1,281	2,901	10,021	1,314	7,952	6,119	--	13,557	30	--	281	--	52,688
Region 3																	
1980	5,640	28	738	263	342	1,479	2,755	486	1,546	1,614	--	3,120	--	--	--	--	18,011
1985	5,588	13	652	251	314	1,881	2,997	546	1,231	2,080	--	3,232	--	--	--	--	18,785
1990	5,212	28	398	308	383	1,922	2,776	599	1,654	2,011	--	3,064	--	--	--	--	18,355
1995	4,956	29	673	485	602	1,917	3,202	551	2,183	2,705	--	3,565	--	--	--	--	20,868
2000	4,426	29	564	239	848	1,589	3,019	692	2,054	2,616	--	3,885	--	--	--	--	19,961
Region 4																	
1980	5,937	39	2,512	648	1,595	3,550	9,267	1,352	4,134	4,429	--	13,383	--	27	--	--	46,873
1985	5,199	62	1,856	852	1,305	3,666	9,682	1,392	5,613	5,126	--	14,635	--	--	--	--	49,388
1990	4,530	75	1,684	1,181	1,325	4,536	11,149	1,337	7,464	5,857	--	15,370	--	--	--	--	54,508
1995	4,436	114	2,317	1,059	1,573	5,264	12,001	1,460	6,316	7,176	--	16,673	--	--	--	--	58,389
2000	4,067	112	3,172	1,230	1,134	6,108	12,321	1,575	8,136	7,087	--	15,326	--	--	--	--	60,268
Region 5																	
1980	7,161	31	5,820	2,860	2,285	12,897	13,726	3,786	7,536	8,035	--	10,084	--	--	--	--	74,221
1985	7,045	64	4,231	2,178	2,166	12,494	14,722	4,432	8,760	10,005	--	10,454	--	--	--	--	76,551
1990	6,355	67	4,721	3,174	2,698	13,380	18,005	4,676	10,804	12,977	--	11,609	--	--	--	--	88,466
1995	6,055	61	6,122	3,616	2,400	16,439	20,430	5,723	16,552	13,608	--	13,239	--	--	--	--	104,245
2000	5,644	79	7,709	3,612	3,634	19,242	20,820	6,881	17,166	16,714	--	13,979	--	--	--	--	115,480

- Continued -

Appendix Table 3. Continued

Region and Year	(1) & (2) Ag	(3) Non-metal Mining	(4) Con- struct	(5) Trans	(6) Comm & Pub Util	(7) Ag Proc & Misc Mfg	(8) Retail Trade	(9) FIRE	(10) Bus & Pers Serv	(11) Prof & Soc Serv	(12) House- holds	(13) Govt	(14) Coal Mining	(15) Coal Conv	(16) Pet Exp/ Ext	(17) Pet Refining	(18) TOTAL
Region 6																	
1980	9,040	26	1,826	589	771	3,514	5,268	934	2,251	3,506	--	4,543	--	--	--	--	32,268
1985	8,722	51	975	494	632	2,905	5,322	873	2,242	3,831	--	4,103	--	--	--	--	30,150
1990	8,392	68	800	674	676	2,575	4,922	849	3,007	4,497	--	4,187	--	--	--	--	30,647
1995	7,837	81	892	713	646	3,304	5,330	898	3,301	5,286	--	4,339	--	--	--	--	32,627
2000	7,105	72	969	653	580	4,164	5,648	1,207	4,066	5,070	--	4,248	--	--	--	--	33,782
Region 7																	
1980	8,815	13	4,634	1,385	2,736	4,743	10,305	1,836	5,674	6,526	--	9,721	591	358	132	159	57,628
1985	9,092	--	3,176	1,564	2,970	4,554	10,979	1,880	7,246	8,516	--	9,889	986	682	193	173	61,900
1990	8,496	--	2,511	1,481	3,049	4,826	11,292	1,743	8,110	10,011	--	10,847	780	833	235	240	64,454
1995	8,280	15	3,639	1,688	3,796	4,835	12,606	1,948	8,512	11,530	--	12,464	925	944	196	303	71,682
2000	7,490	24	3,728	1,941	2,997	4,938	12,991	2,885	10,963	12,437	--	12,839	1,120	1,081	192	343	75,969
Region 8																	
1980	5,326	39	1,221	437	426	1,840	4,076	501	1,736	1,788	--	2,164	219	--	2,125	--	21,920
1985	4,858	--	1,077	424	561	1,578	3,964	660	2,805	2,179	--	2,393	315	--	1,753	--	22,567
1990	5,011	--	634	433	358	1,608	3,214	493	2,041	2,316	--	2,450	194	--	677	--	19,429
1995	4,420	23	589	353	515	1,705	3,374	511	1,806	2,254	--	2,529	235	--	731	--	19,345
2000	4,528	24	820	406	450	2,004	3,877	552	2,873	2,420	--	2,677	--	--	722	--	21,353

<sup>a</sup> Includes nonagricultural self-employed, unpaid family domestics (proprietors), and adjusted wage and salary employment (i.e., employees, not jobs).

**Appendix Table 4. Personal Income Comparison, North Dakota and U.S., 1970-2000**

Year	Total North Dakota Personal Income	Per Capita Income		
		North Dakota	U.S.	North Dakota as Percent of U.S.
	-----\$000-----	-----dollars-----		-----%-----
1970	1,930,101	3,119	4,047	77.1
1971	2,227,342	3,554	4,294	82.8
1972	2,674,153	4,238	4,659	91.0
1973	3,796,482	6,003	5,168	116.2
1974	3,751,112	5,915	5,628	105.1
1975	3,888,707	6,091	6,045	100.8
1976	3,833,582	5,941	6,629	89.6
1977	3,977,608	6,127	7,267	84.3
1978	5,062,360	7,780	8,117	95.9
1979	5,235,334	8,028	9,017	89.0
1980	2,002,145	7,641	9,940	76.9
1981	6,488,583	9,839	11,009	89.4
1982	7,003,683	10,469	11,583	90.4
1983	7,516,048	11,106	12,223	90.9
1984	7,093,800	11,614	13,332	87.1
1985	8,131,953	12,011	14,155	84.9
1986	8,276,573	12,361	14,906	82.9
1987	8,352,561	12,632	15,638	80.8
1988	7,815,823	11,925	16,610	71.8
1989	8,877,393	13,735	17,690	77.6
1990	9,765,275	15,321	18,666	82.1
1991	9,842,901	15,523	19,201	80.8
1992	10,762,348	16,940	20,146	84.1
1993	10,859,605	17,046	20,809	81.9
1994	11,612,277	19,033	22,581	84.3
1995	11,640,079	19,084	23,562	81.0
1996	12,982,928	21,166	24,651	85.9
1997	12,885,281	20,801	25,874	80.4
1998	13,855,000	22,733	27,321	83.2
1999	14,747,353	23,273	28,546	81.5
2000	15,915,510	24,780	29,451	84.1

Source: U.S. Department of Commerce, Bureau of Economic Analysis. 1995. Table CA05. U.S. Department of Commerce, Bureau of Economic Analysis Internet Web Page. 2002. Bureau of Economic Analysis Regional Account Data.

**Appendix Table 5. Average Wage Per Job for North Dakota, by County, Selected Years, 1985-1999**

County	Year		
	1985	1995	1999
	-----\$-----		
Adams	12,149	17,382	19,390
Barnes	12,053	16,077	18,819
Benson	13,209	17,006	18,774
Billings	16,766	14,433	15,294
Bottineau	12,735	15,986	17,165
Bowman	12,762	15,392	17,154
Burke	15,438	17,783	19,620
Burleigh	16,438	21,951	24,717
Cass	16,268	22,048	26,229
Cavalier	12,038	17,302	20,171
Dickey	11,338	15,514	18,438
Divide	11,053	13,007	14,882
Dunn	12,880	16,986	18,802
Eddy	10,511	15,574	17,781
Emmons	10,544	14,552	16,722
Foster	12,320	16,795	19,806
Golden Valley	13,828	16,532	16,810
Grand Forks	15,249	20,516	23,548
Grant	10,110	14,560	15,880
Griggs	10,887	15,397	19,145
Hettinger	10,922	14,993	17,725
Kidder	10,635	14,222	16,255
LaMoure	10,554	14,404	16,478
Logan	9,008	13,170	14,843
McHenry	12,569	15,993	17,977
McIntosh	9,348	13,686	16,056
McKenzie	16,974	18,846	21,169
McLean	16,396	21,623	25,104
Mercer	24,514	31,067	33,499
Morton	14,916	20,316	23,240
Mountrail	12,361	16,713	19,696
Nelson	10,933	14,671	17,391

- Continued -

Appendix Table 5. Continued

County	Year		
	1985	1995	1999
	-----\$-----		
Oliver	23,427	33,179	38,129
Pembina	14,719	21,129	24,914
Pierce	11,679	16,584	17,760
Ramsey	12,501	16,574	18,812
Ransom	11,394	17,266	20,029
Renville	11,787	15,667	17,759
Richland	13,681	19,851	23,369
Rolette	12,773	17,415	20,816
Sargent	15,794	25,963	32,764
Sheridan	11,064	15,587	20,398
Sioux	14,101	19,044	22,070
Slope	9,900	13,315	14,926
Stark	14,716	18,086	20,465
Steele	12,451	17,666	21,003
Stutsman	14,230	18,568	21,520
Towner	11,385	16,710	19,189
Traill	12,763	17,644	20,336
Walsh	11,450	17,204	19,408
Ward	15,528	20,671	23,149
Wells	12,164	16,450	18,751
Williams	17,265	19,116	20,799
North Dakota	15,096	20,253	23,372

Source: U.S. Department of Commerce, Bureau of Economic Analysis Internet Web Site. 2002. Local Area Personal Income. Average Wage Per Job. CA34: Regional Accounts Data. Washington, D.C.

**Appendix Table 6. Annual Average Wages<sup>a</sup> for Selected Industries, by State Region, North Dakota, 1985-1999**

State Region	Construction			Manufacturing			Retail			Services		
	1985	1995	1999	1985	1995	1999	1985	1995	1999	1985	1995	1999
-----\$-----												
1	27,519	23,889	21,139	27,334	21,090	19,209	14,883	11,942	12,071	22,464	18,144	19,029
2	27,388	26,187	27,666	26,717	24,105	25,486	14,082	13,052	13,177	19,213	19,553	20,225
3	21,960	21,497	25,163	22,788	20,813	21,357	12,939	12,129	12,376	16,835	16,634	17,522
4	27,143	26,804	32,849	28,405	25,915	27,231	13,405	12,050	13,309	21,354	20,466	21,865
5	29,105	28,241	32,112	30,311	30,107	32,553	14,383	12,832	13,855	23,307	22,560	24,631
6	23,294	21,215	24,593	30,001	25,322	27,408	12,337	10,915	11,865	15,982	15,815	16,895
7	33,878	29,442	30,204	30,602	32,273	31,745	14,125	13,094	13,702	22,658	22,136	22,642
8	29,020	24,048	25,281	26,072	21,834	25,042	13,404	11,890	12,326	17,160	16,635	17,625
North Dakota	29,085	27,147	31,446	28,932	27,881	29,711	13,822	12,520	13,298	20,970	20,386	21,702

<sup>a</sup> constant 1999 dollars

Note: County-level annual average wages were available, but were not presented because industries were grouped to avoid disclosure for many counties. This resulted in an incomplete data set that provided meaningful data primarily for more populated counties.

Source: Job Service North Dakota. 1985-1999. North Dakota Employment and Wages. Labor Market Information. Bismarck, ND.

**Appendix Table 7. Urban Influence Codes, Land Area, and Population Density for North Dakota Counties**

County	FIPS	UIC Code	UIC Description	Land Area (sq mi)	Population Density (#/sq mi)	
					1990	2000
Adams	38001	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	988.0	3.2	2.6
Barnes	38003	8	Nonmetro/Not adjacent to metro area with a town of 2,500-9,999 residents	1,491.8	8.4	7.9
Benson	38005	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,388.6	5.2	5.0
Billings	38007	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	-1,151.5	1.0	0.8
Bottineau	38009	8	Nonmetro/Not adjacent to metro area with a town of 2,500-9,999 residents	1,668.7	4.8	4.3
Bowman	38011	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,162.1	3.1	2.8
Burke	38013	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,103.6	2.7	2.0
Burleigh	38015	2	Small metro	1,633.2	36.8	42.5
Cass	38017	2	Small metro	1,765.8	58.3	69.7
Cavalier	38019	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,489.1	4.1	3.2
Dickey	38021	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,131.1	5.4	5.1
Divide	38023	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,259.4	2.3	1.8

- Continued -



Appendix Table 7. Continued

County	FIPS	UIC Code	UIC Description	Land Area (sq mi)	Population Density (#/sq mi)	
					1990	2000
Dunn	38025	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	2,010.0	2.0	1.8
Eddy	38027	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	632.1	4.7	4.4
Emmons	38029	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	1,510.0	3.2	2.9
Foster	38031	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	635.3	6.3	5.9
Golden Valley	38033	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,002.0	2.1	1.9
Grand Forks	38035	2	Small metro	1,437.9	49.2	46.0
Grant	38037	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	1,659.6	2.1	1.7
Griggs	38039	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	708.6	4.7	3.9
Hettinger	38041	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	-1,132.3	3.0	2.4
Kidder	38043	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	1,351.7	2.5	2.0
LaMoure	38045	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,147.2	4.7	4.1
Logan	38047	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	992.7	2.9	2.3
McHenry	38049	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,874.2	3.5	3.2
McIntosh	38051	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	975.3	4.1	3.5

- Continued -

Appendix Table 7. Continued

County	FIPS	UIC Code	UIC Description	Land Area (sq mi)	Population Density (#/sq mi)	
					1990	2000
McKenzie	38053	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	2,742.2	2.3	2.1
McLean	38055	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	2,110.4	5.0	4.4
Mercer	38057	8	Nonmetro/Not adjacent to metro area with a town of 2,500-9,999 residents	1,045.4	9.4	8.3
Morton	38059	2	Small metro	1,926.4	12.3	13.1
Mountrail	38061	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,824.0	3.8	3.6
Nelson	38063	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	981.7	4.5	3.8
Oliver	38065	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	723.6	3.3	2.9
Pembina	38067	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,118.8	8.3	7.7
Pierce	38069	8	Nonmetro/Not adjacent to metro area with a town of 2,500-9,999 residents	1,017.9	5.0	4.6
Ramsey	38071	8	Nonmetro/Not adjacent to metro area with a town of 2,500-9,999 residents	1,186.2	10.7	10.2
Ransom	38073	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	862.8	6.9	6.8
Renville	38075	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	874.8	3.6	3.0
Richland	38077	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	1,436.9	12.6	12.5
Rolette	38079	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	902.5	14.2	15.2

- Continued -

Appendix Table 7. Continued

County	FIPS	UIC Code	UIC Description	Land Area (sq mi)	Population Density (#/sq mi)	
					1990	2000
Sargent	38081	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	858.8	5.3	5.1
Sheridan	38083	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	971.8	2.2	1.8
Sioux	38085	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,094.2	3.4	3.7
Slope	38087	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,218.0	0.7	0.6
Stark	38089	7	Nonmetro/Not adjacent to metro area with a city of at least 10,000 residents	1,338.3	17.1	16.9
Steele	38091	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	712.4	3.4	3.2
Stutsman	38093	7	Nonmetro/Not adjacent to metro area with a city of at least 10,000 residents	2,221.5	10.0	9.9
Towner	38095	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,025.4	3.5	2.8
Traill	38097	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	861.9	10.2	9.8
Walsh	38099	6	Nonmetro/Adjacent to small metro no city of 10,000 or more	1,282.0	10.8	9.7
Ward	38101	7	Nonmetro/Not adjacent to metro area with a city of at least 10,000 residents	2,013.0	28.8	29.2
Wells	38103	9	Nonmetro/Not adjacent to metro area and contains no part of a city with at least 2,500 residents	1,271.4	4.6	4.0
Williams	38105	7	Nonmetro/Not adjacent to metro area with a city of at least 10,000 residents	2,070.6	10.2	9.5

Source: Economic Research Service Internet Web Site 2002. Urban Influence Codes for North Dakota. U.S. Department of Agriculture, Washington, D.C.

**Appendix Table 8. Consumer Price Index for All Items, 1982-1984 = Base, 1958-2001**

Year	CPI	Year	CPI
1958	28.9	1980	82.4
1959	29.1	1981	90.9
1960	29.6	1982	96.5
1961	29.9	1983	99.6
1962	30.2	1984	103.9
1963	30.6	1985	107.6
1964	31.0	1986	109.6
1965	31.5	1987	113.6
1966	32.4	1988	118.3
1967	33.4	1989	124.0
1968	34.8	1990	130.7
1969	36.7	1991	136.2
1970	38.8	1992	140.3
1971	40.5	1993	144.5
1972	41.8	1994	148.2
1973	44.4	1995	152.4
1974	49.3	1996	156.9
1975	53.8	1997	160.5
1976	56.9	1998	163.0
1977	60.6	1999	166.6
1978	65.2	2000	172.2
1979	72.6	2001	177.1

Source: Bureau of Labor Statistics. U.S. Department of Labor Internet Website. 2002. Consumer Price Index. Washington, D.C.: U.S. Department of Labor.