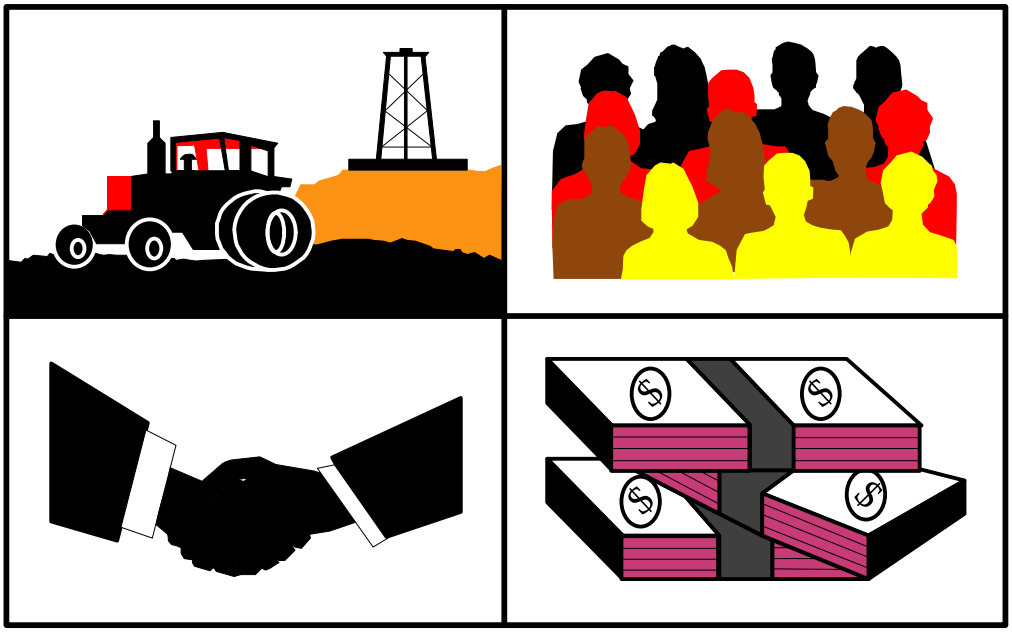
The State of North Dakota: Economic, Demographic, Public Service, and Fiscal Conditions

A Presentation of Selected Indicators



by

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Acknowledgments

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Preface

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 not all nonmetropolitan areas in the state are alike. Documentation of these differences gives decision makers, planners, and economic development professionals a basis on which to plan future programs/policies and makes it clear that policies and programs are likely to affect some areas of the state differently than others.

This report is a compilation of existing sources of data. While secondary data are useful, and in many cases there are few alternatives to its use, there also are definite limitations associated with some secondary data sources. The foremost of these often is timeliness. In preparing this report, a substantial effort was made to use the most current data available. Nevertheless, in many cases, the data lag actual events by as much as two years (and in some cases even longer). Also in many cases, data may be available only for counties, whereas the user may be more interested in information for a smaller unit, such as a city. Finally, a report such as this provides considerable information regarding 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.

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Table of Contents

Table of Contents (Continued)

List of Tables

List of Tables (Continued)

List of Appendix Tables

List of Figures

List of Figures (Continued)

List of Figures (Continued)

List of Figures (Continued)

List of Figures (Continued)

List of Figures (Continued)

Overview

Rural North Dakota is under stress, as are many rural areas in the United States. The economic disparity between rural and urban parts of 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 rural communities began to crumble. Many of the reasons for the faltering are national/international in scope: 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 emerge. *Growth in manufacturing employment, growth of export telecommunications-based services, 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 the 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, 1990 Census counts and 1991-1996 Intercensal Population Estimates were used to calculate per capita rates. This was done because intercensal estimates are considered to be reliable, and this provided more timely measures. The Consumer Price Index was used to inflate all dollar values to the most recent year in a data series.

Counties are the unit of analysis because both federal and state agencies often collect and report data at the county level. 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). 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. 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, by 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.

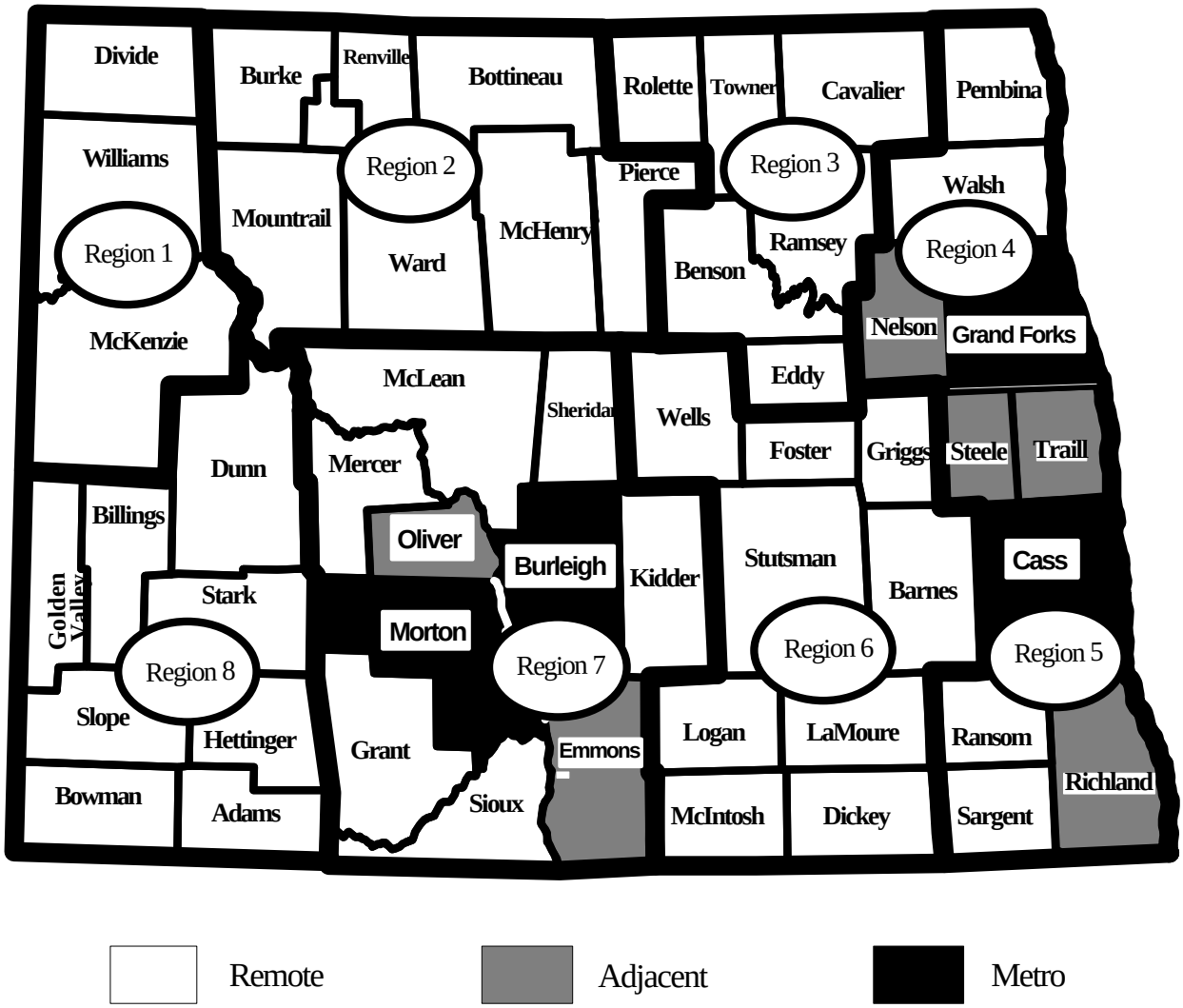


Figure 1. North Dakota Counties by State Planning Regions and Metropolitan Status, 1994

Economic

DATA PRESENTATION

Sales for Final Demand by Economic Sector, 1996
County Total Sales for Final Demand, 1996
Employment, Unemployment, and Employment Change, 1986-1996
Annual Average Employment by Major Industry, 1986-1996
Income and Farm Income, 1994
Average Annual Earnings, 1986-1996
Per Capita Income, 1985-1995
County and Regional Taxable Sales and Purchases, 1980-1996
Trade Area Taxable Sales and Purchases, 1980-1996
Pull Factors, 1980-1996
Bank Assets, Loans-to-Deposits, and Default Loans, 1996
Females in the Workforce, 1989

SOURCES

Data for this section came from numerous sources. Sales for final demand information came from *An Updated Economic Base Data Set for North Dakota*, a Department of Agricultural Economics report by Randy Coon and Larry Leistritz (1995) and Coon and Leistritz (1997), *Sales For Final Demand By Economic Sector*, unpublished data. 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 most recent Job Service *North Dakota Employment and Wages* publication (September, 1997). Total income and farm income were from the U.S. Department of Commerce, Bureau of Economic Analysis Regional Economic Information System (REIS) CD-ROM (August 1997). Per capita income information was determined from Bureau of Economic Analysis, *Personal Income by Major Source and Earnings by Industry* (1997) and the U.S. Bureau of the Census, *Intercensal County Population Estimates* (1997). Annual reports from the State Tax Commissioner on sales and use taxes are the source of 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 1996 by Coon and Leistritz (1997), *Updated Pull Factors for North Dakota*, unpublished data. The Federal Reserve Board of Minneapolis web site provided the December 31, 1996 Bank Directory for the financial indicator analysis. Finally, data on the number of females in the workforce came from the 1990 Census (U.S. Department of Commerce, Bureau of the Census).

Economic Base

The economic base for a state comprises 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 ag 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. The final sector, energy, includes coal mining, coal conversion, and petroleum and natural gas extraction, exploration, and refining.

The table and graphs which follow portray the economic base of the state and for the state's 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 1996. As shown by the percentage of the state total, the state's economy is dominated by agriculture (35%), federal activities (34%) and energy (12%). Region 7 contributes the greatest share (one-fourth of the state's total sales for final demand), with the energy sector responsible for 44 percent ($1,226.0M) of this region's economic base. Energy contributes over 37 percent of Region 1's sales for final demand ($253.4M) and also 37 percent ($352.3M) 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 show high percentages of Region 2 (45%), Region 3 (43%), and Region 4's (44%) economic base activities. Regions 2 and 4 are home to air bases in Minot and Grand Forks, and these two regions account for over one-third (38%) of all federal activity sales for final demand in the state. Agriculture is the backbone of Region 3, 5, and 6's economies. Agriculture accounts for 42 percent of the economy in Region 3, 44 percent in Region 5, and 56 percent of Region 6's sales for final demand. Manufacturing comprised its largest share of a region’s basic economic activity in Region 5 (17%), with the lowest in Region 1 (5%).

Federal activities, defined here as all federal government outlays except agricultural commodity program payments (which are included in the agricultural sector), is the second largest of the five major sectors, statewide. Although federal activities are the second largest economic sector, it comprises 33.6% of the state total, nearly equal to the 34.7% of agriculture, the largest. 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 accounted for by federal activities is documented. Counties with over 50 percent of their economic base attributed to federal activities include Burleigh, Ward, Grand Forks, Ramsey, and Rolette. Appendix Table 2 shows total FY1996 federal expenditures compared to the previous year, and the distribution of federal expenditures by type. The high percentage of Department of Defense expenditures in Ward and Grand Forks Counties highlights the importance of the Air Force bases to the economies of these areas.

Table 1. North Dakota Sales for Final Demand[1] by Economic Sector, by Region, 1996

Area	Agriculture	Federal Activities	Tourism	Energy	Mfg.	Total
REGION 1						
Million $s	172.9	159.0	58.4	253.4	36.4	680.1
% of Total	25.4	23.4	8.6	37.3	5.3	100.0
REGION 2						
Million $s	471.4	736.1	163.5	95.2	158.3	1,624.5
% of Total	29.0	45.3	10.1	5.9	9.7	100.0
REGION 3						
Million $s	356.6	370.8	91.3	- -	40.7	859.4
% of Total	41.5	43.2	10.6	- -	4.7	100.0
REGION 4						
Million $s	564.6	706.1	145.3	- -	204.4	1,620.4
% of Total	34.8	43.6	9.0	- -	12.6	100.0
REGION 5						
Million $s	845.5	564.2	194.3	- -	317.9	1,921.9
% of Total	44.0	29.4	10.1	- -	16.5	100.0
REGION 6						
Million $s	730.3	335.3	151.7	- -	97.7	1,315.0
% of Total	55.5	25.5	11.6	- -	7.4	100.0
REGION 7						
Million $s	463.3	725.8	179.3	1,226.0	176.0	2,770.4
% of Total	16.7	26.2	6.5	44.3	6.3	100.0
REGION 8						
Million $s	287.5	174.7	77.5	352.3	69.2	961.2
% of Total	29.9	18.2	8.1	36.6	7.2	100.0
NORTH DAKOTA[2]						
Million $s	3,892.1	3,772.0	1,061.3	1,390.7	1,100.6	11,216.7
% of Total	34.7	33.6	9.5	12.4	9.8	100.0

[1]Sales for final demand are the activities which lead to a net inflow of income/wealth from outside the state.
[2]Sum of energy for the regions does not equal state total due to inter-regional exports.

Source: Coon and Leistritz. 1997. Sales for Final Demand By Economic Sector, unpublished data. Department of Agricultural Economics, NDSU.

Figures 2-6 depict the comparative position of each basic sector in each region. Figure 2 shows Region 6's domination by agriculture. Figure 3 shows high levels of federal spending in Regions 2, 3, and 4. Tourism, which accounts for less than 6 percent of the state's total sales for final demand, was of equal importance in Regions 5 and 6, with 6.9 percent of their total. Figure 5 displays the relative influence 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 energy activity. Finally, Figure 6 shows manufacturing's percentage of total sales for final demand in 1993; the regions with highest percentages of sales for final demand in manufacturing are Regions 4 (11%) and 5 (16%).

While the economic base data reported here reflect the major activities that bring money into the state, some sources of basic income or "new wealth" are not included. An increasingly important primary sector activity which is not reflected in these data is the exported services sector. Exported services, particularly telemarketing and data processing activities, have become an increasingly important source of jobs and income in many parts of the state. Better documenting the magnitude of and changes in this activity should be a priority for future research.

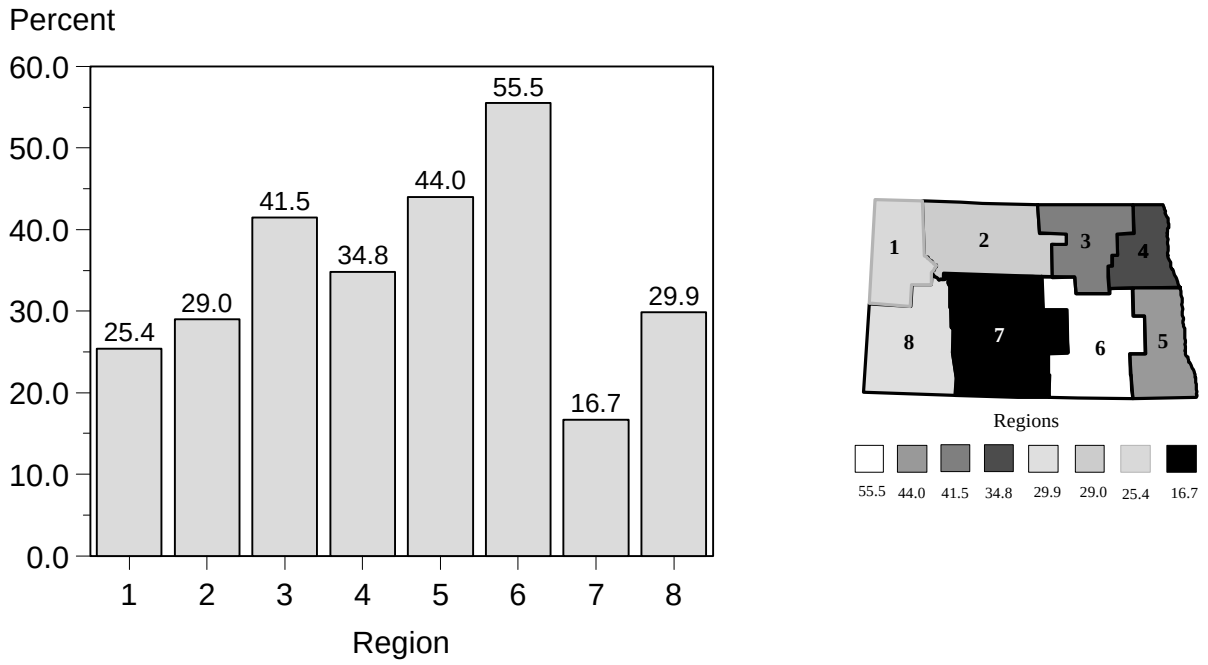


Figure 2. Agriculture Sector's Percentage of Total Sales for Final Demand by Region, 1996

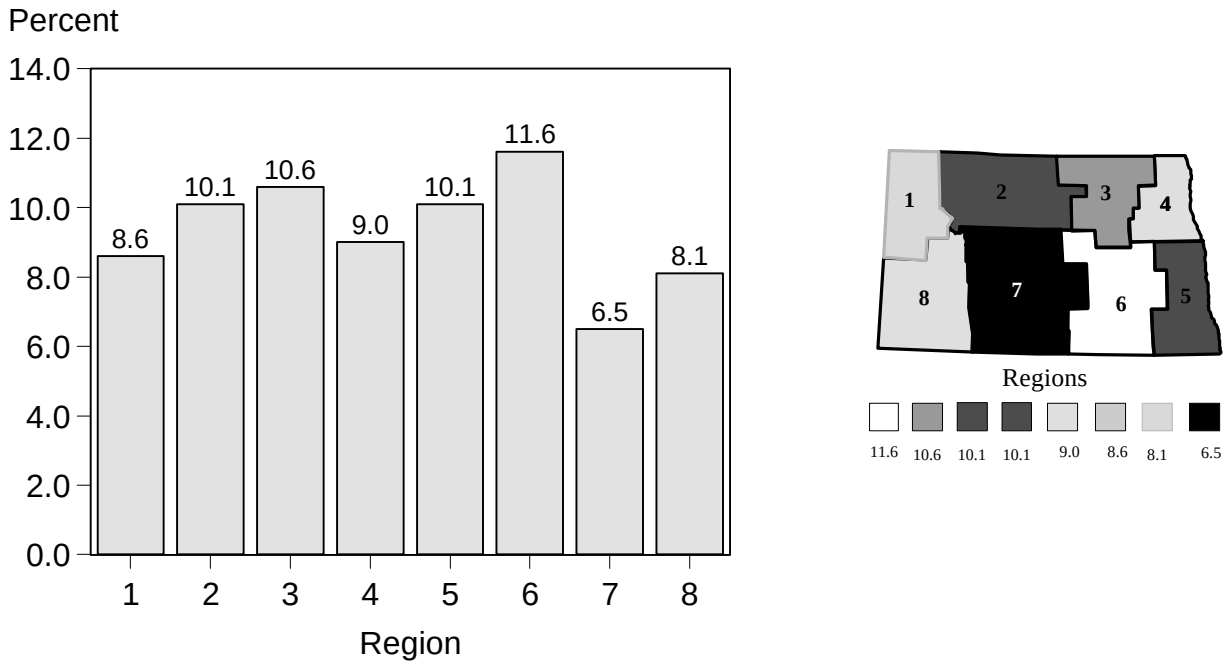


Figure 3. Federal Activity Sector's Percentage of Total Sales for Final Demand by Region, 1996

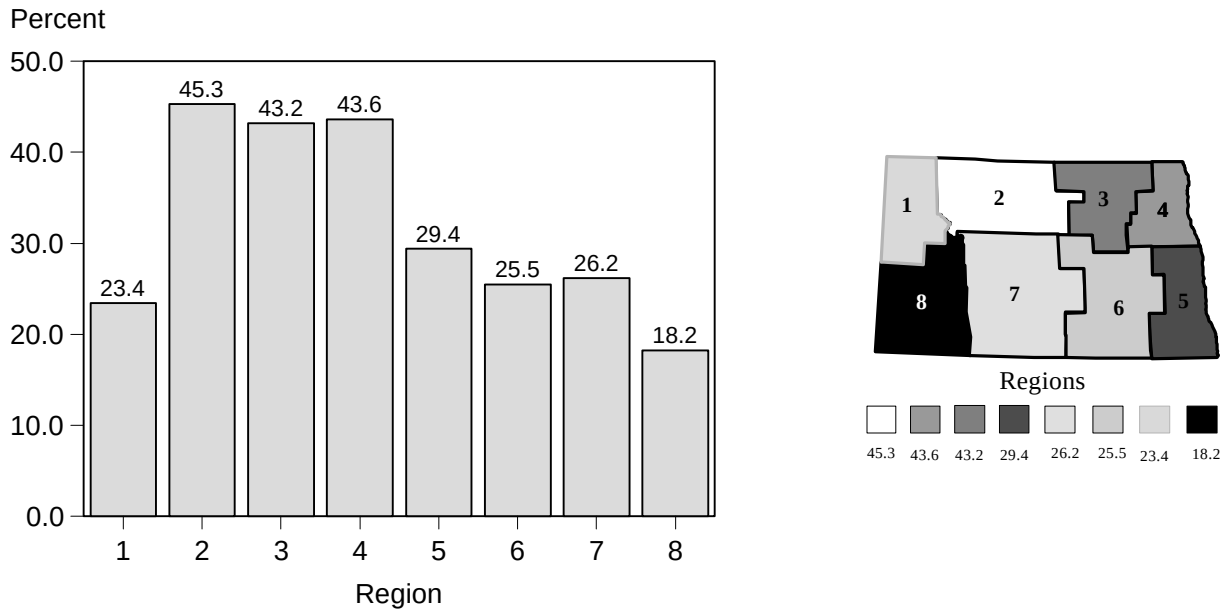


Figure 4. Tourism Sector's Percentage of Total Sales for Final Demand by Region, 1996

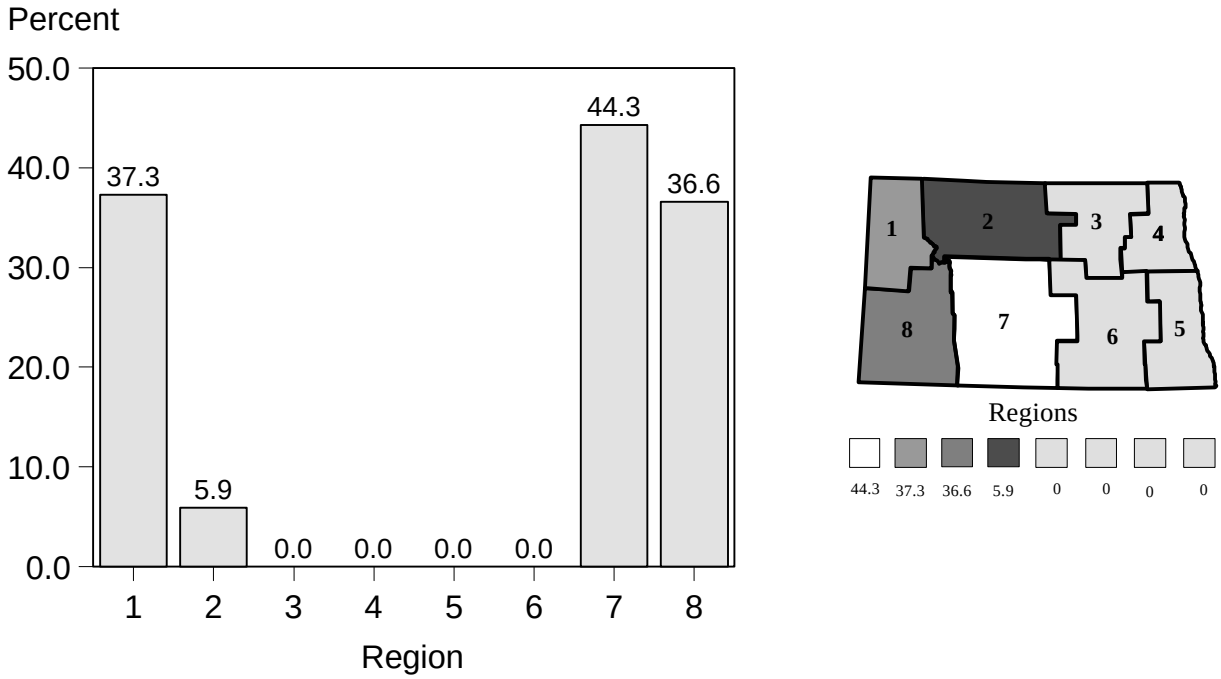


Figure 5. Energy Sector's Percentage of Total Sales for Final Demand by Region, 1996

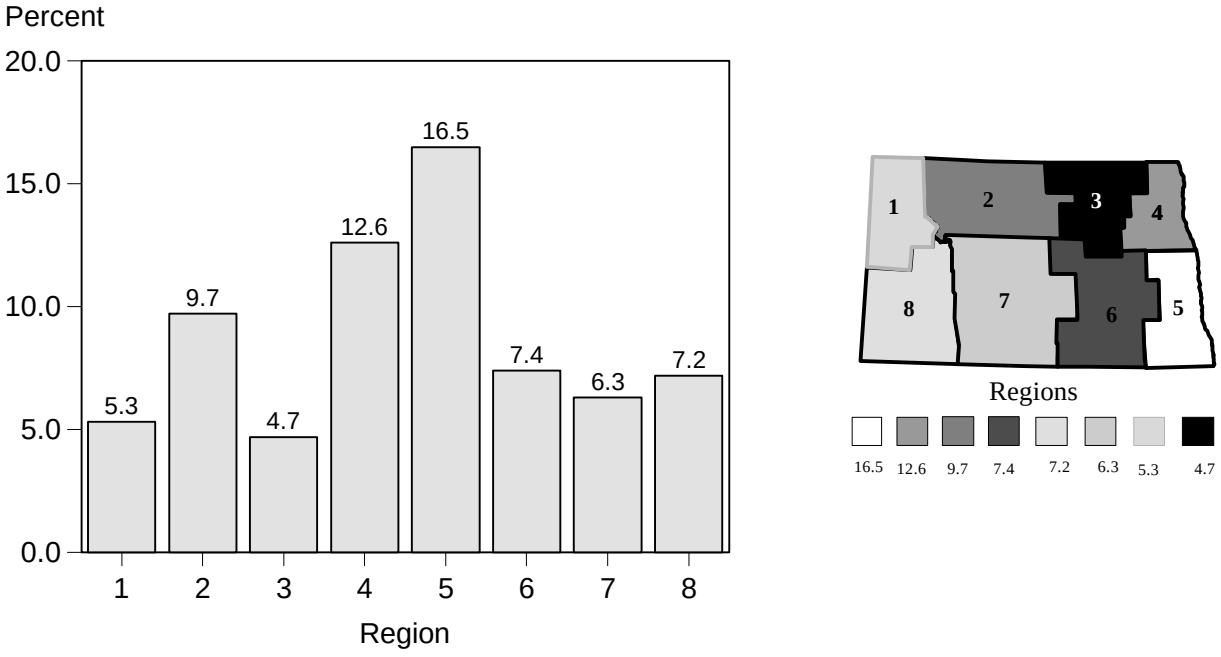


Figure 6. Manufacturing Sector's Percentage of Total Sales for Final Demand by Region, 1996

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 (with the Williston trade center) contributed over 50 percent of the total sales for final demand, and 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) each contributed 55 percent or more to their 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 North Dakota's planning regions, the county with the major trade center contributed the largest share to the region total except for Region 7, where energy development counties were the leaders.

County sales for final demand were ranked from largest to smallest. The five largest were Cass, Grand Forks, Ward, Burleigh, and Mercer, respectively. The largest four had major trade centers and Mercer County has extensive energy development. Morton County, another energy development county, came in sixth, giving three of the top six counties in State Region 7. Golden Valley, Slope, and Sioux were the three counties with the lowest levels of sales for final demand in 1996.

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

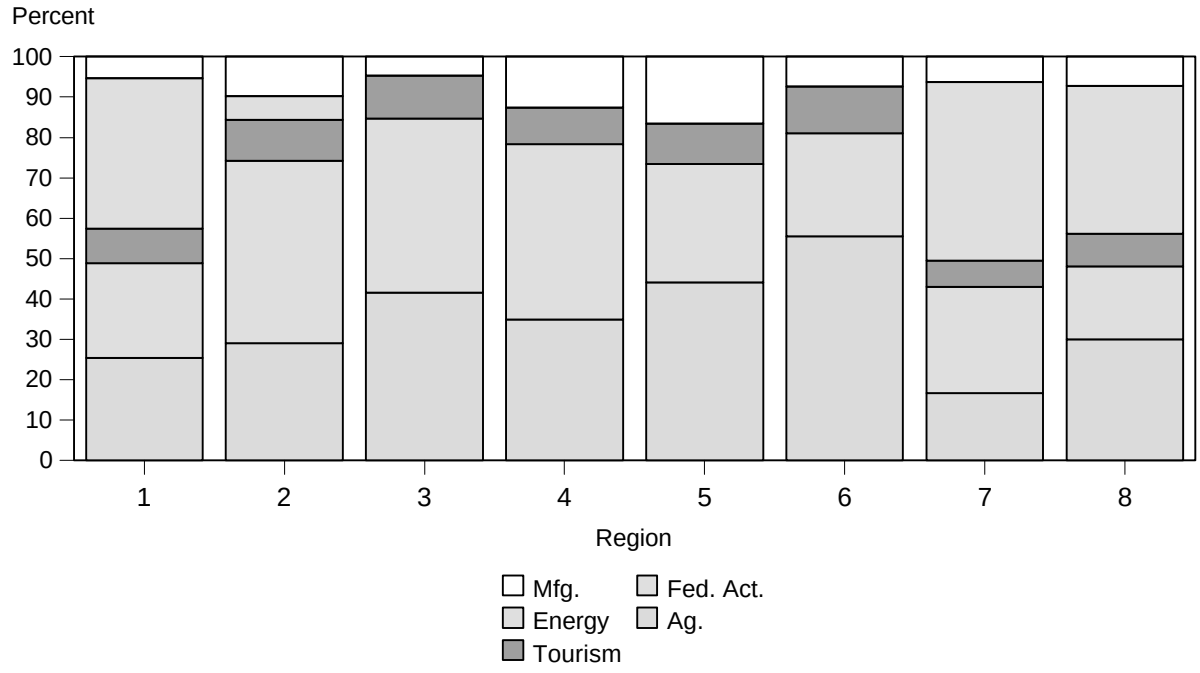


Figure 7. North Dakota Total Sales for Final Demand by Economic Sector by Region, 1996

Table 2. County Total Sales for Final Demand, County Share of State Region, and County Rank in State, North Dakota, 1996

COUNTY/REGION	SALES FOR FINAL DEMAND	COUNTY SHARE OF REGION	COUNTY RANK IN STATE
	--- million $ ---	---- % ----	--- # ---
DIVIDE	81.4	12.0	40
MCKENZIE	233.2	34.3	15
WILLIAMS	365.4	53.7	8
REGION 1	680.0	100.0	
BOTTINEAU	206.9	12.7	17
BURKE	84.8	5.2	39
MCHENRY	116.4	7.2	31
MOUNTRAIL	154.5	9.5	23
PIERCE	102.5	6.3	33
RENVILLE	107.0	6.6	32
WARD	852.4	52.5	3
REGION 2	1,624.5	100.0	
BENSON	131.6	15.3	28
CAVALIER	171.6	20.0	18
EDDY	55.5	6.5	48
RAMSEY	248.8	28.9	14
ROLETTE	156.6	18.2	22
TOWNER	95.3	11.1	34
REGION 3	859.4	100.0	
GRAND FORKS	909.8	56.1	2
NELSON	86.7	5.4	38
PEMBINA	335.8	20.7	11
WALSH	288.1	17.8	13
REGION 4	1,620.4	100.0	
CASS	1,057.0	55.0	1
RANSOM	117.4	6.1	30
RICHLAND	360.3	18.7	9
SARGENT	152.1	7.9	24
STEELE	66.8	3.5	43
TRAILL	168.3	8.8	20
REGION 5	1,921.9	100.0	

- Continued -

Table 2. continued

COUNTY/REGION	SALES FOR FINAL DEMAND	COUNTY SHARE OF REGION	COUNTY RANK IN STATE
	--- million $ ---	---- % ----	--- # ---
BARNES	232.8	17.7	16
DICKEY	142.4	10.8	27
FOSTER	87.2	6.6	37
GRIGGS	66.9	5.1	42
LAMOURE	146.8	11.2	25
LOGAN	58.0	4.4	45
MCINTOSH	66.3	5.1	44
STUTSMAN	388.3	29.5	7
WELLS	126.3	9.6	29
REGION 6	1,315.0	100.0	
BURLEIGH	692.8	25.0	4
EMMONS	90.8	3.3	36
GRANT	57.8	2.1	46
KIDDER	56.0	2.0	47
MCLEAN	324.7	11.7	12
MERCER	675.3	24.4	5
MORTON	653.4	23.6	6
OLIVER	143.9	5.2	26
SHERIDAN	46.6	1.7	50
SIOUX	29.1	1.0	53
REGION 7	2,770.4	100.0	
ADAMS	47.6	5.0	49
BILLINGS	159.0	16.5	21
BOWMAN	169.6	17.6	19
DUNN	94.9	9.9	35
GOLDEN VALLEY	42.0	4.4	51
HETTINGER	79.0	8.2	41
SLOPE	29.2	3.0	52
STARK	339.9	35.4	10
REGION 8	961.2	100.0	

Source: Coon and Leistritz. 1997. Sales for Final Demand By Economic Sector, unpublished data, Fargo: Department of Agricultural 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. 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 1996 annual average unemployment rate. Low unemployment rates (less than 4%) are most prevalent in the eastern third of the state. The highest unemployment rate was in Rolette County (13%) (Table 3), and the second highest was in Benson County (11%). In the previous edition of this report, Sioux County had the highest rate of unemployment (in 1993) at 15.4%. Rolette and Sioux Counties have the highest proportion of Native American population in the state. From 1993 to 1996, Sioux County has reduced its unemployment rate to 6.6%. Region 3 had the highest unemployment rate among the planning regions (7%) and Region 5 the lowest (2%) (Figure 9).

Overall, the rural counties had higher unemployment levels than the 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 1996 was 2.8 percent, significantly lower than the 1993 rate (4.4 percent). The lower unemployment rate is indicitive of the strength of the North Dakota and national economies in 1996. North Dakota’s 1996 unemployment rate was substantially less than the national rate (5.4 percent). State Region 5's unemployment rate of 1.9 percent reflects the influence of the growth in the Fargo trade area. Only six North Dakota counties had unemployment rates exceeding the national average in 1996.

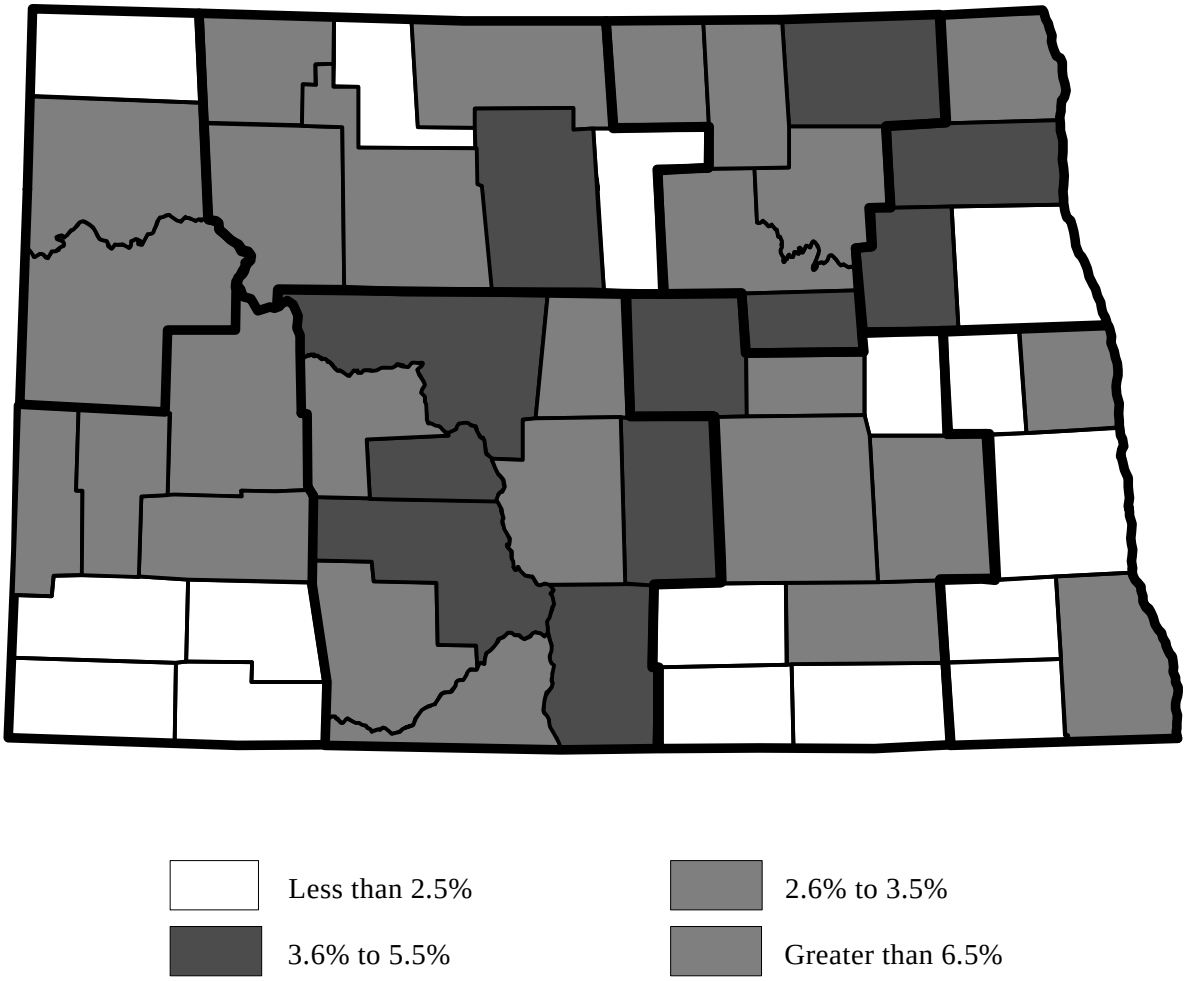


Figure 8. North Dakota Unemployment Rate, 1996

Table 3. North Dakota Employment, Unemployment, and Employment Change, 1986-1996

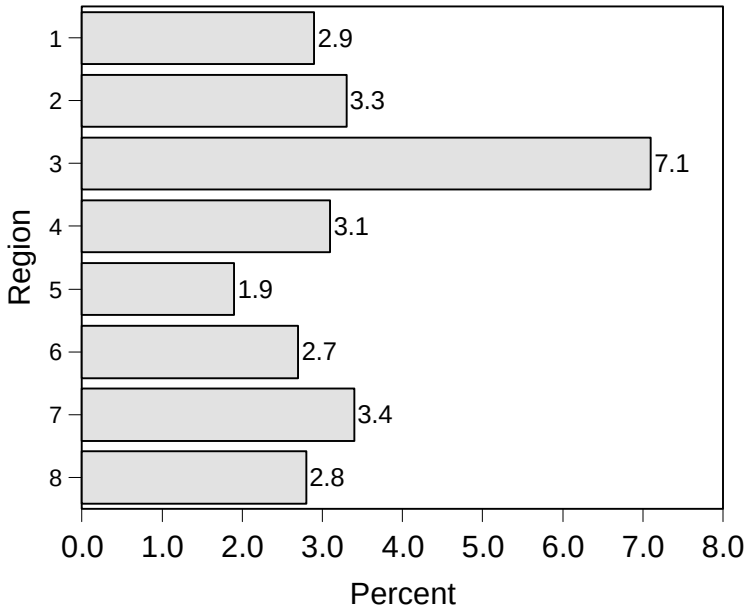
AREA	Employment 1986	Employment 1995	Employment 1996	Unemployment Rate 1996	Employment Change Short-Term 1995-96	Employment Change Long-Term 1986-96
				----------%----------		
DIVIDE	1,462	1,185	1,198	2.4	1.1	-18.1
MCKENZIE	3,080	3,135	3,173	3.4	1.2	3.0
WILLIAMS	11,579	9,774	10,024	2.9	2.6	-13.4
REGION 1	16,121	14,094	14,395	2.9	2.1	-10.7
BOTTINEAU	3,512	3,269	3,320	3.0	1.6	-5.5
BURKE	1,393	1,037	1,051	2.9	1.4	-24.6
MCHENRY	2,588	2,749	2,827	4.2	2.8	9.2
MOUNTRAIL	3,142	2,842	2,893	6.9	1.8	-7.9
PIERCE	2,525	2,328	2,363	2.5	1.5	-6.4
RENVILLE	1,300	1,324	1,362	2.1	2.9	4.8
WARD	24,189	27,667	28,444	2.9	2.8	17.6
REGION 2	38,649	41,216	42,260	3.3	2.5	9.3
BENSON	3,108	2,484	2,514	10.5	1.2	-19.1
CAVALIER	2,617	2,442	2,477	4.1	1.4	-5.3
EDDY	1,403	1,195	1,207	5.4	1.0	-14.0
RAMSEY	6,255	6,307	6,454	3.2	2.3	3.2
ROLETTE	4,561	5,044	5,189	12.6	2.9	13.8
TOWNER	1,713	1,492	1,506	2.8	0.9	-12.1
REGION 3	19,657	18,964	19,347	7.1	2.0	-1.6
GRAND FORKS	33,866	36,087	37,222	2.4	3.1	9.9
NELSON	1,979	1,670	1,690	3.9	1.2	-14.6
PEMBINA	4,848	4,809	4,892	6.1	1.7	0.9
WALSH	7,797	6,120	6,222	4.6	1.7	-20.2
REGION 4	48,490	48,686	50,026	3.1	2.8	3.2
CASS	55,917	64,716	67,152	1.7	3.8	20.1
RANSOM	2,683	2,722	2,767	2.2	1.7	3.1
RICHLAND	8,300	8,757	8,897	2.8	1.6	7.2
SARGENT	2,463	2,324	2,356	1.9	1.4	-4.3
STEELE	1,154	1,093	1,100	1.9	0.6	-4.7
TRAILL	4,368	3,838	3,923	3.5	2.2	-10.2
REGION 5	74,885	83,450	86,195	1.9	3.3	11.1

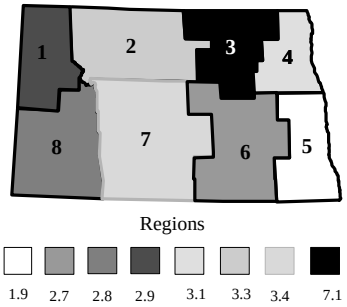
- Continued -

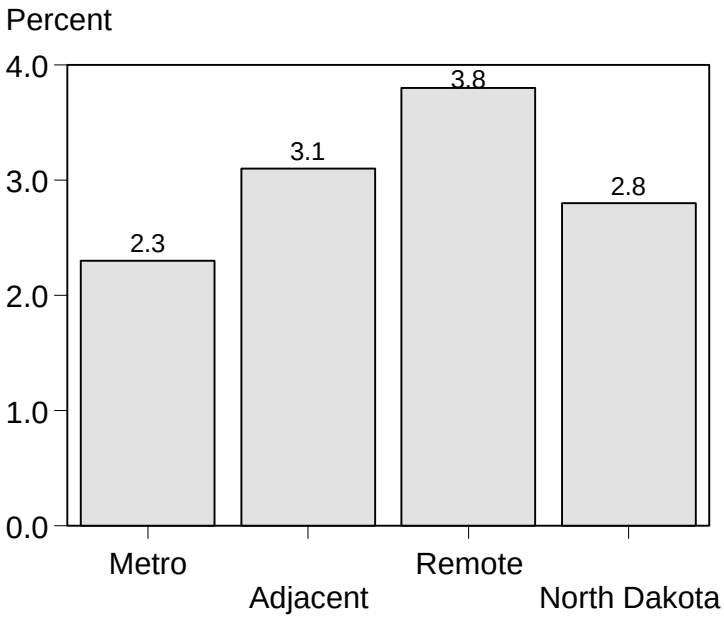
Table 3. continued

AREA	Employment 1986	Employment 1995	Employment 1996	Unemployment Rate 1996	Employment Change Short-Term 1995-96	Employment Change Long-Term 1986-96
				----------%----------		
BARNES	5,825	5,692	5,810	2.7	2.1	-0.3
DICKEY	3,260	2,816	2,849	1.7	1.2	-12.6
FOSTER	2,107	2,080	2,120	2.7	1.9	0.6
GRIGGS	1,510	1,786	1,804	2.0	1.0	19.5
LAMOURE	2,408	2,271	2,285	2.5	0.6	-5.1
LOGAN	1,452	1,215	1,213	2.0	-0.2	-16.5
MCINTOSH	2,222	1,747	1,761	2.1	0.8	-20.7
STUTSMAN	11,812	10,858	11,145	2.9	2.6	-5.6
WELLS	2,830	2,406	2,435	4.3	1.2	-14.0
REGION 6	33,426	30,871	31,422	2.7	1.8	-8.9
BURLEIGH	30,748	36,588	37,620	2.7	2.8	22.3
EMMONS	2,169	2,058	2,076	3.6	0.9	-4.3
GRANT	1,896	1,593	1,573	2.6	-1.3	-17.0
KIDDER	1,487	1,443	1,440	4.4	-0.2	-3.2
MCLEAN	4,267	4,370	4,431	5.4	1.4	3.8
MERCER	5,370	4,792	4,925	5.8	2.8	-10.1
MORTON	11,266	12,848	13,210	3.7	2.8	17.3
OLIVER	1,047	1,131	1,143	3.9	1.1	9.2
SHERIDAN	1,156	723	726	2.7	0.4	-37.2
SIOUX	1,240	1,519	1,550	6.6	2.0	25.0
REGION 7	60,646	67,065	68,694	3.4	2.4	13.3
ADAMS	1,773	1,448	1,465	1.8	1.2	-17.4
BILLINGS	791	565	564	3.4	0.2	-28.7
BOWMAN	2,145	1,775	1,797	2.0	1.2	-16.2
DUNN	1,740	1,953	1,951	3.4	-0.1	12.1
GOLDEN VALLEY	1,031	908	915	3.3	0.8	-11.3
HETTINGER	1,877	1,389	1,390	2.2	0.1	-25.9
SLOPE	463	410	397	2.2	-3.2	-14.3
STARK	11,307	11,820	12,103	3.0	2.4	7.0
REGION 8	21,127	20,268	20,582	2.8	1.5	-2.6
NORTH DAKOTA	313,001	324,614	332,921	2.8	2.6	6.4

Source: Job Service North Dakota. Selected Years 1986-1996. Annual Benchmarked Employment Statistics, unpublished data. Bismarck, ND.







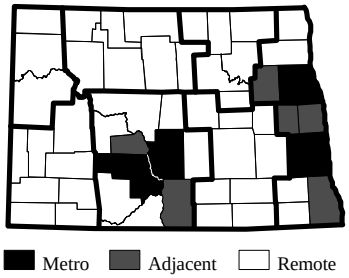


Figure 9. North Dakota Unemployment Rate by Region and Area, 1996

Statewide short-term employment (1995-1996) showed a 3 percent increase despite five counties experiencing declines. (Figure 10/Table 3). All eight state regions experienced employment increases from 1995 to 1996. (Figure 11). State Region 5 had the largest short-term employment increase (3.3%) and also had the county with the biggest increase, Cass (3.8%). Region 4 had the second largest change, a 2.8 percent increase, followed by Region 7 with a 2.4% increase. Slope County had the largest short-term decline in employment, a 3.2% decrease. Remaining counties with short-term employment losses were at a level of 1.3 percent or less. The small number of counties with employment losses during the 1995-1996 period is reflective of the strength of the North Dakota economy during that period. One-year growth for state employment was at 2.6 percent.

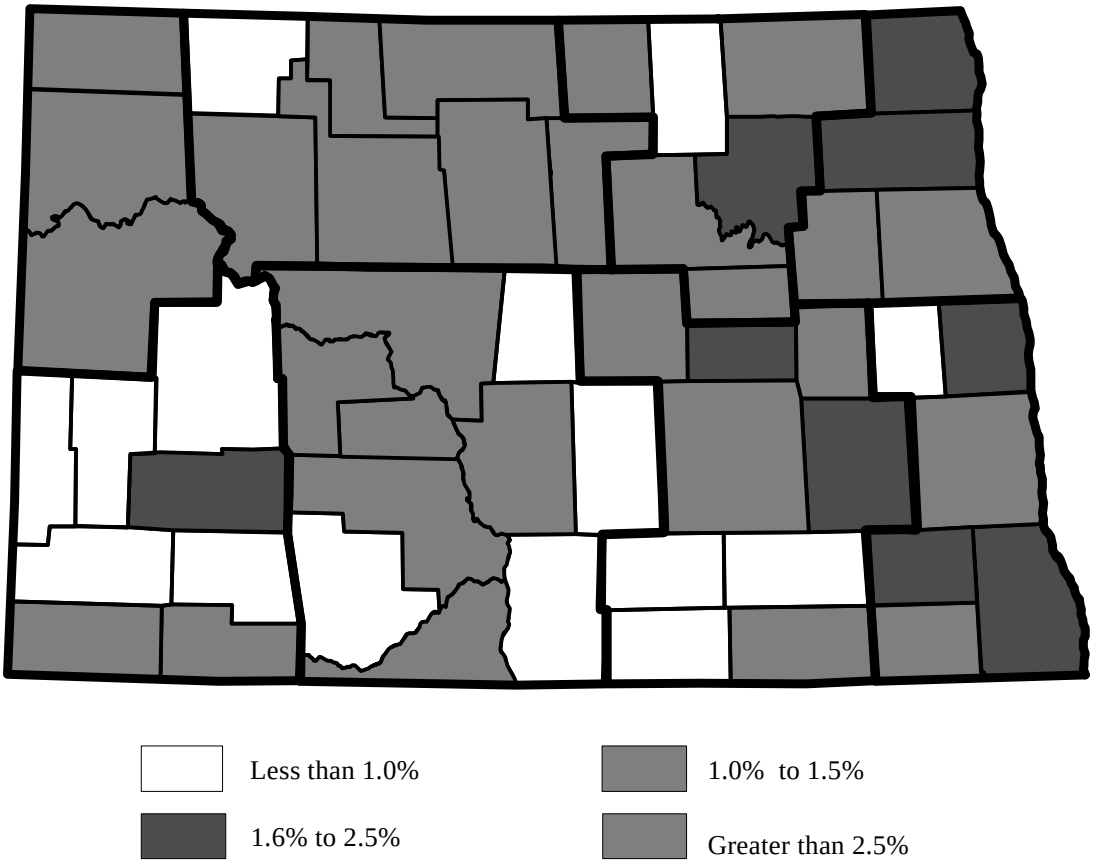


Figure 10. Percentage of Short-term Employment Growth in North Dakota, 1995-1996

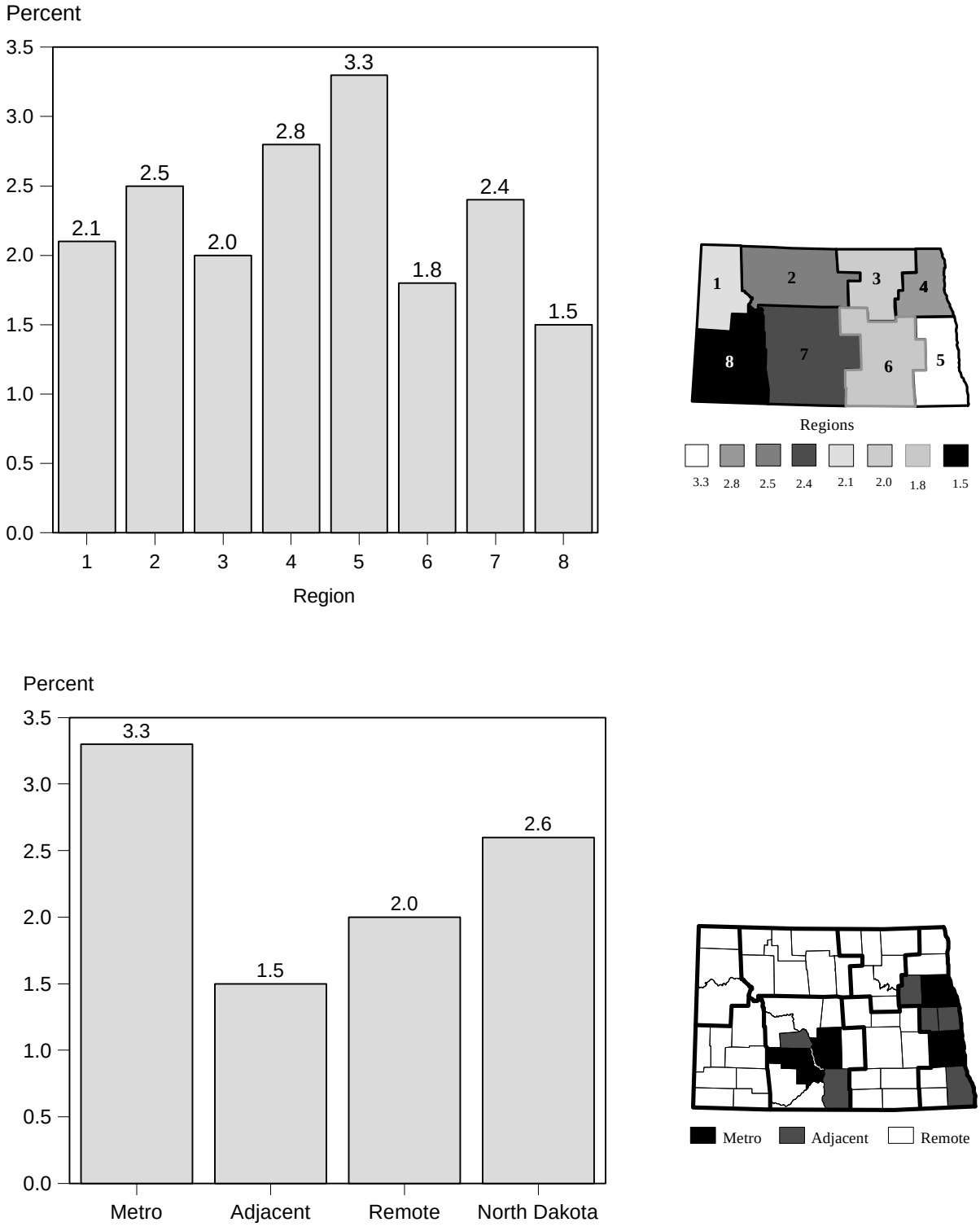


Figure 11. Short-term Employment Growth in North Dakota by Region and Area, 1995-1996

The North Dakota economy increased employment between 1986 and 1996 by 6 percent (Table 3). In North Dakota only three counties showed over 20 percent growth; these counties are Cass (20%), Burleigh (22%), and Sioux (25%) (Table 3). Seventeen other counties also had long-term employment growth (Figure 12).

The planning regions with positive long-term employment growth were Regions 2, 4, 5 and 7 regions with the high employment growth counties of Ward, Grand Forks, Cass and Burleigh/Morton. Region 1 experienced an 11 percent decline in employment between 1986 and 1996, followed by Region 6 with a 9 percent decrease. Regions 3 and 8 experienced small declines during the period with 1.6 and 2.6 percent employment losses, respectively.

Long-term job creation was primarily in the metro areas with an 18 percent increase (Figure 13). Rural area employment change was negative, being slightly more negative for the nonmetropolitan remote counties (-2%) than for the nonmetropolitan adjacent counties (-1%). Thus, the concern for job creation throughout rural North Dakota is supported by these data. Short-term employment change was positive for metro, adjacent, and remote counties in ND. Metro counties had the largest increase (3.3%), 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, but also may indicate efforts to increase employment in North Dakota are having some impact.

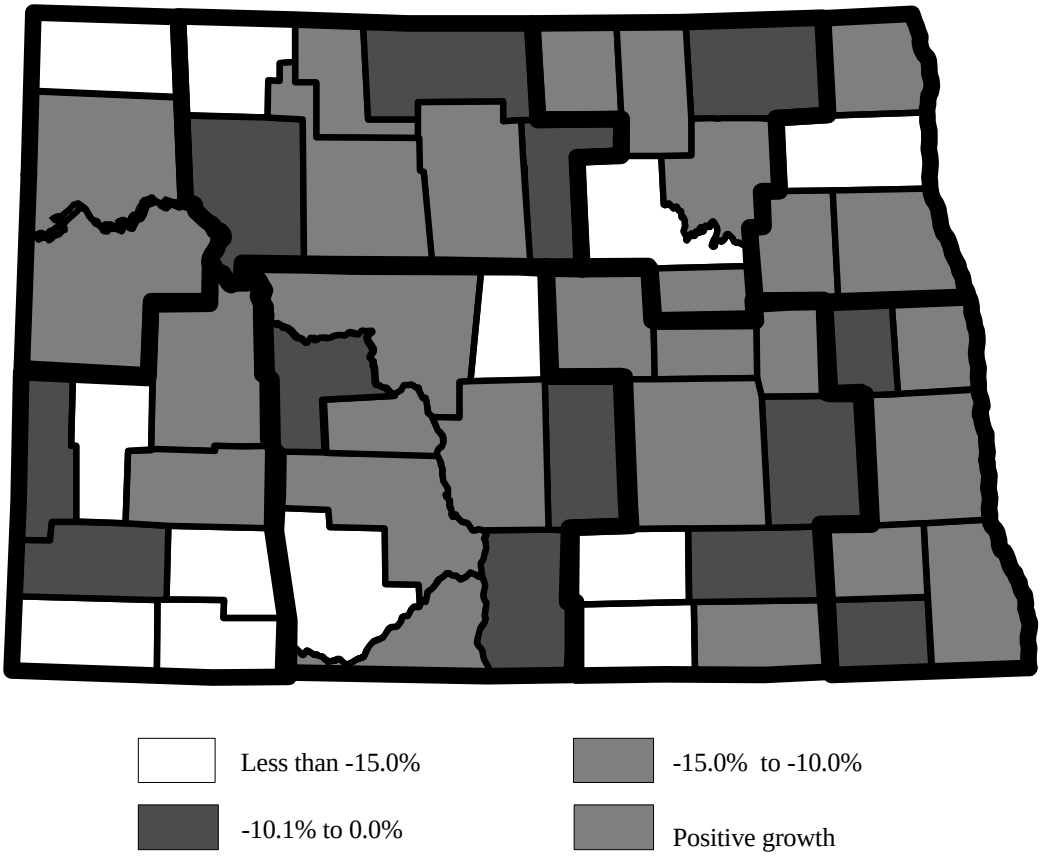


Figure 12. North Dakota Long-term Employment Growth in North Dakota, 1986-1996

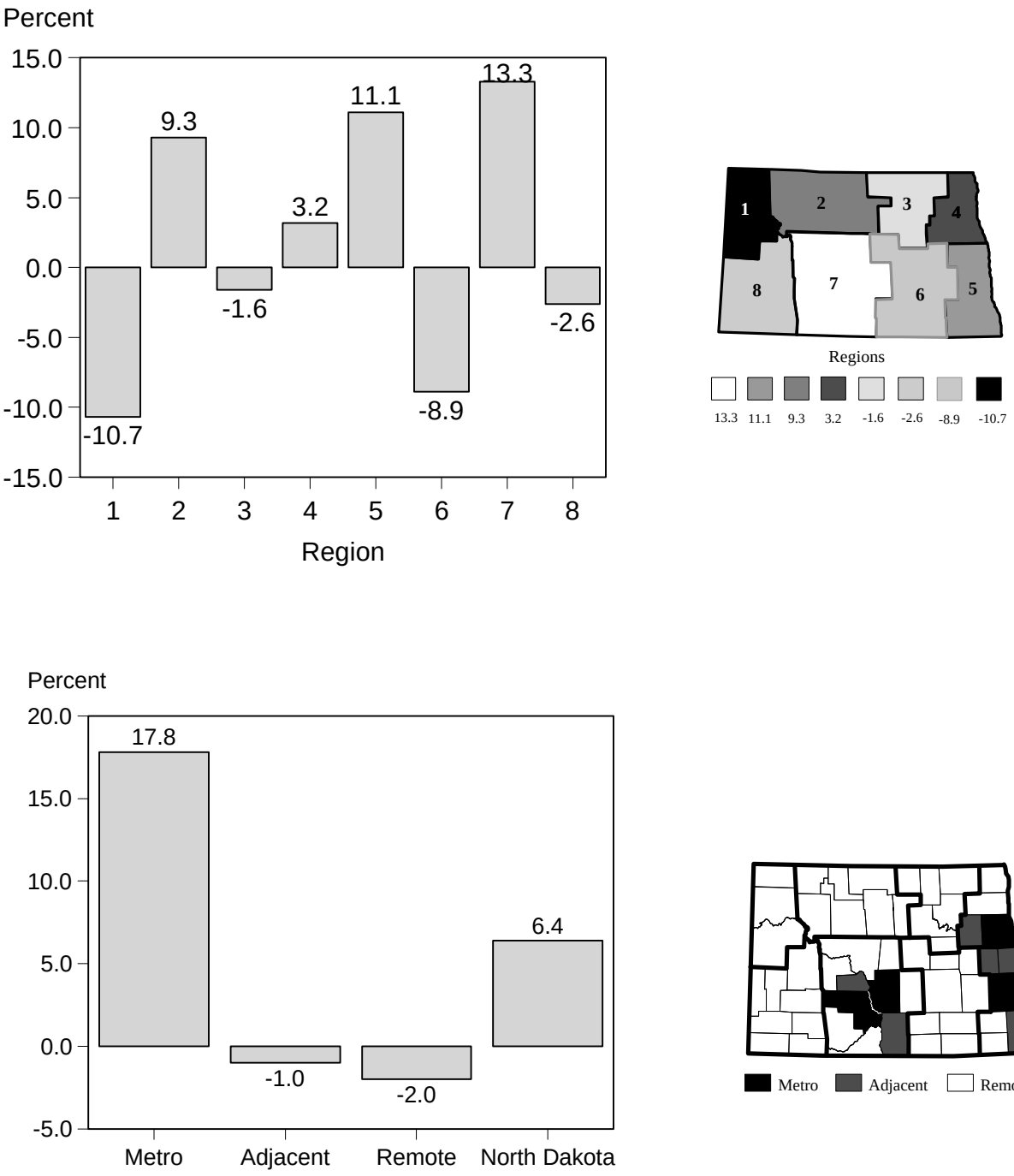


Figure 13. Long-term Employment Growth in North Dakota by Region and Area, 1986-1996

Employment by Industry

The next 10 figures present data on the percentage change in annual average employment from 1986 through 1996 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 employment between 1986 and 1996 (Figure 14). Region 5 experienced the largest growth, over 39 percent. Region 1 had the smallest increase of all the state regions (1.6%), due in most part to the decline in energy-related activity in that region. Regions 2, 4, 5, and 7 all experienced growth greater than 20 percent for the 1986-1996 period.

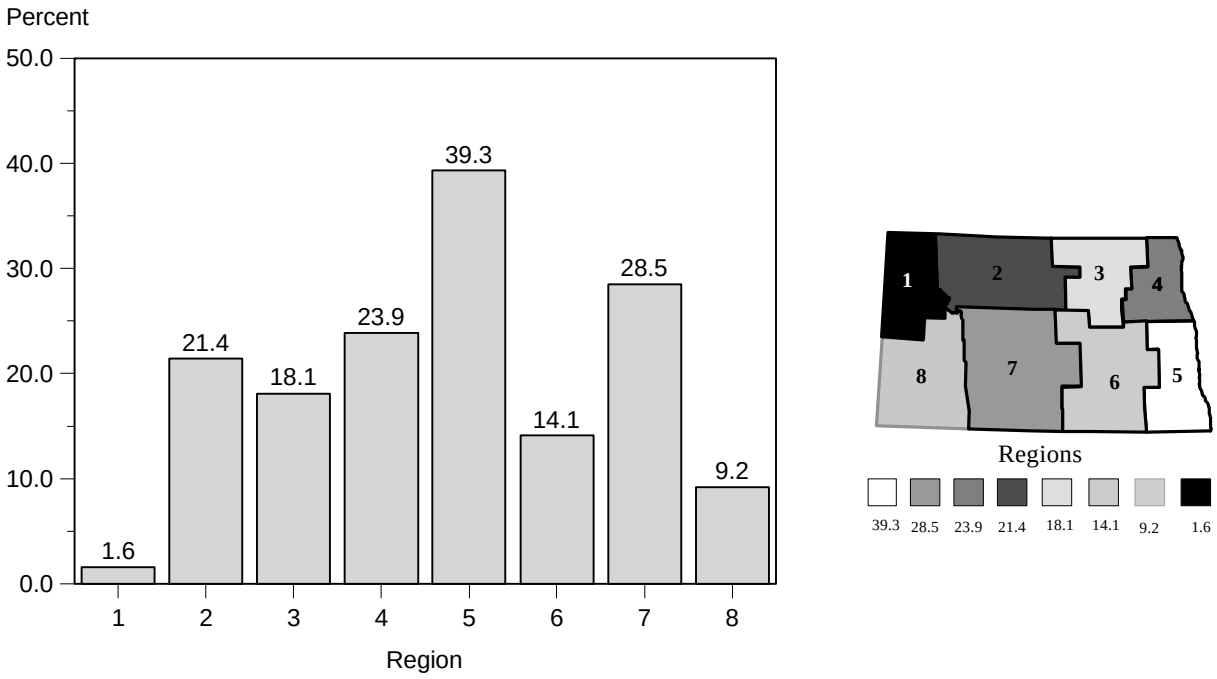


Figure 14. Total Percentage Change in North Dakota Annual Average Employment, 1986-1996

Employment in agriculture increased in seven of the eight regions (Figure 15). This 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 50 percent. Region 3 employment decreased by 2.3 percent of these workers. The decline of employment in this regions was caused by a combination of factors, none of which were unique to Region 3, but which together created a situation apparently more severe here than in other regions: the drought, acres of CRP land, farm foreclosures, aging farm population, and overall low employment levels (Figure 9). The net effect for the state was a gain of 998 covered agricultural jobs during the 10-year period (Table 4).

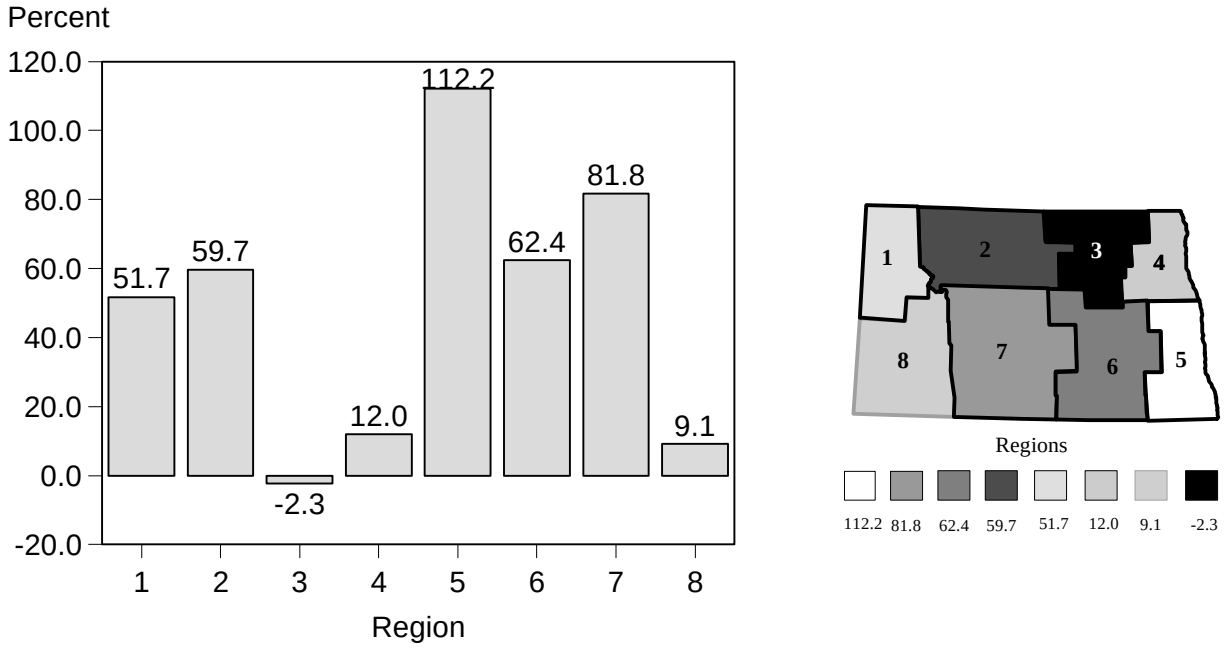


Figure 15. North Dakota Percentage Change in Annual Average Employment in Agriculture, 1986-1996

Table 4. North Dakota Annual Average Employment by Major Industry and Percentage Change by Region, 1986-1996

Area	Ag.	Mining	Const.	Mfg.	Transp. Comm. & Util.	Whole-Sale	Retail	Finance, Ins. & Real Est.	Services	Govt.	Total
REGION 1											
# Change	15	-414	-114	86	-286	-126	-82	-58	1,149	18	188
% Change	51.7	-22.6	-25.1	29.9	-34.9	-12.8	-3.6	-10.2	45.5	0.9	1.6
REGION 2											
# Change	71	-37	228	75	165	99	1,640	-83	3,359	374	5,891
% Change	59.7	-6.9	17.8	6.9	11.6	4.2	25.5	-5.8	51.2	5.9	21.4
REGION 3											
# Change	-4	(a)	151	-136	100	-59	388	171	2,037	-293	2,355
% Change	-2.3	(a)	33.9	-10.1	23.4	-6.7	16.3	28.5	69.7	-7.6	18.1
REGION 4											
# Change	117	78	244	1,064	458	472	1,939	29	3,878	287	8,566
% Change	12.0	132.2	12.5	50.3	27.4	21.5	23.5	1.9	51.3	3.0	23.9
REGION 5											
# Change	487	(a)	2,140	3,862	1,634	1,314	4,622	1,392	8,627	782	24,849
% Change	112.2	(a)	69.0	60.5	44.0	19.0	37.5	32.9	56.7	7.2	39.3
REGION 6											
# Change	131	-27	53	621	165	-25	240	6	1,868	-205	2,827
% Change	62.4	-50.9	7.0	42.2	19.8	-1.3	5.6	0.5	39.7	-4.3	14.1
REGION 7											
# Change	157	-61	1,320	659	391	81	2,318	609	5,954	1,393	12,821
% Change	81.8	-5.5	59.2	31.8	8.5	2.9	26.7	31.3	54.2	13.4	28.5
REGION 8											
# Change	7	-249	39	304	-97	-56	404	-84	935	40	1,243
% Change	9.1	-23.5	7.4	51.2	-13.3	-4.9	14.0	-14.0	30.0	1.4	9.2
NORTH DAKOTA											
# Change	998	-625	4,037	6,530	2,599	1,858	11,514	1,999	27,906	2,357	59,173
% Change	45.1	-13.3	37.3	42.5	18.3	9.6	24.2	16.6	52.0	4.7	25.7

(a) included with construction sector.
Source: Job Service North Dakota. 1997. *North Dakota Employment and Wages, 1996.* Bismarck, ND.

Annual average employment in mining increased only in Region 4, by over 132 percent (Figure 16). Sand and gravel are mined in this region. This high percentage, however, masks the small number of jobs (11) actually affected (Table 4). Region 6, which also mines sand and gravel, experienced a 51 percent decline; again, this high percentage is based on a small number of total mining jobs. From 1985 to 1996, the mining industry took a big drop in oil exploration and drilling, and has never fully recovered. This demise is reflected in the drop in annual employment in mining in Regions 1, 2, 7, and 8. These declines were not nearly as severe as indicated in the previous edition of this report, indicating energy mining in North Dakota may have peak. Statewide, 625 net jobs were lost in mining from 1986 to 1996; Region 1 lost 414 of these jobs.

All regions except Region 1 showed an increase in construction-related employment (Figure 17). State Regions 5 and 7 experienced large gains in construction employment, 69.0 and 59.2 percent, respectively, reflecting the growth in their major trade centers. The 25 percent loss in Region 1 corresponds to declines in energy and agriculture in that area. Statewide, the growth in Region 5 and 7 propelled the state to a large increase (37.3%) for construction employment in North Dakota (Table 4). This amounted to 4,037 new jobs in this sector during the 10-year period.

Manufacturing employment has become one of the strongest growth areas in North Dakota in the past few years, with 6,530 jobs being added from 1986-1996 (Table 4, Figure 18). Region 3 lost 10 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. 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 43 percent, led by the 61 percent growth in Region 5 (Table 4). Regions 4 and 8 also showed strength with manufacturing employment growth exceeding 50 percent.

Transportation, communications, and public utilities industries experienced an 18 percent employment increase (2,599 jobs) statewide (Table 4). Region 1 experienced a loss of 286 jobs, or 35 percent of its pre-1986 employment in this industry. Here again, the decline in the oil industry had ramifications throughout the employment spectrum in those counties. Three state regions (3, 4, and 5) had employment growth exceeding 20 percent for the 1986-1996 period, with Region 5 experiencing the largest number of new jobs (1,684) in transportation, communications, and public utilities (Figure 19).

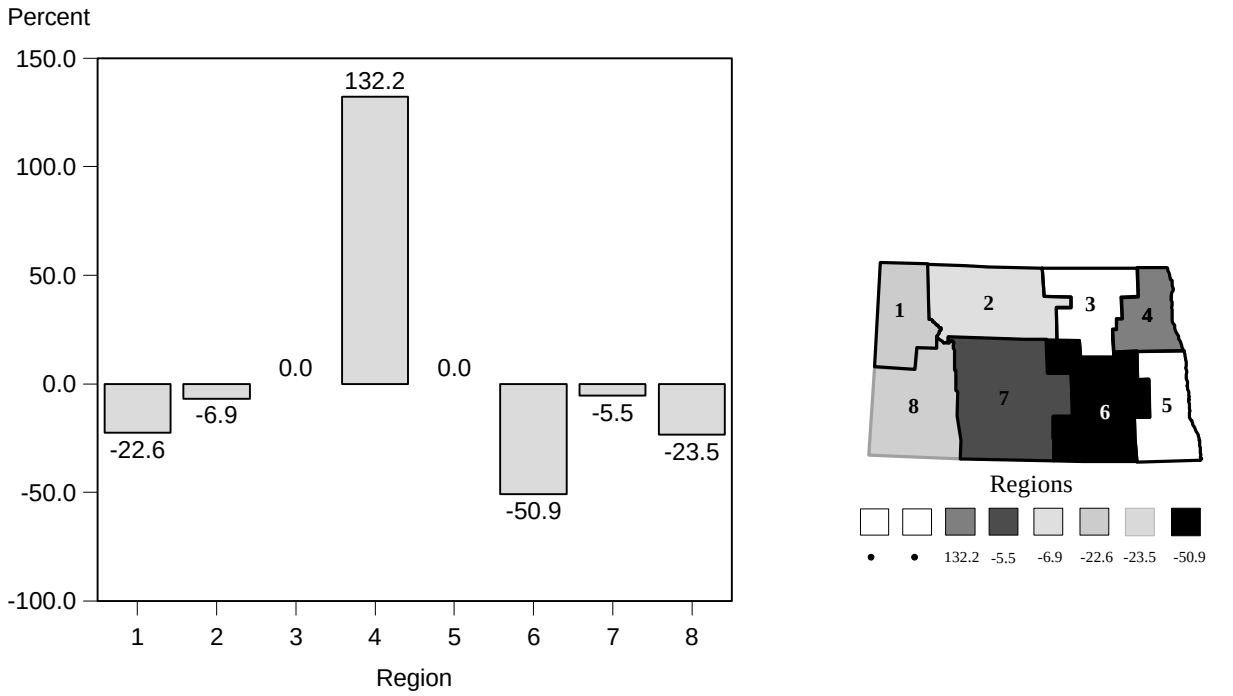


Figure 16. North Dakota Percentage Change in Annual Average Employment in Mining, 1986-1996

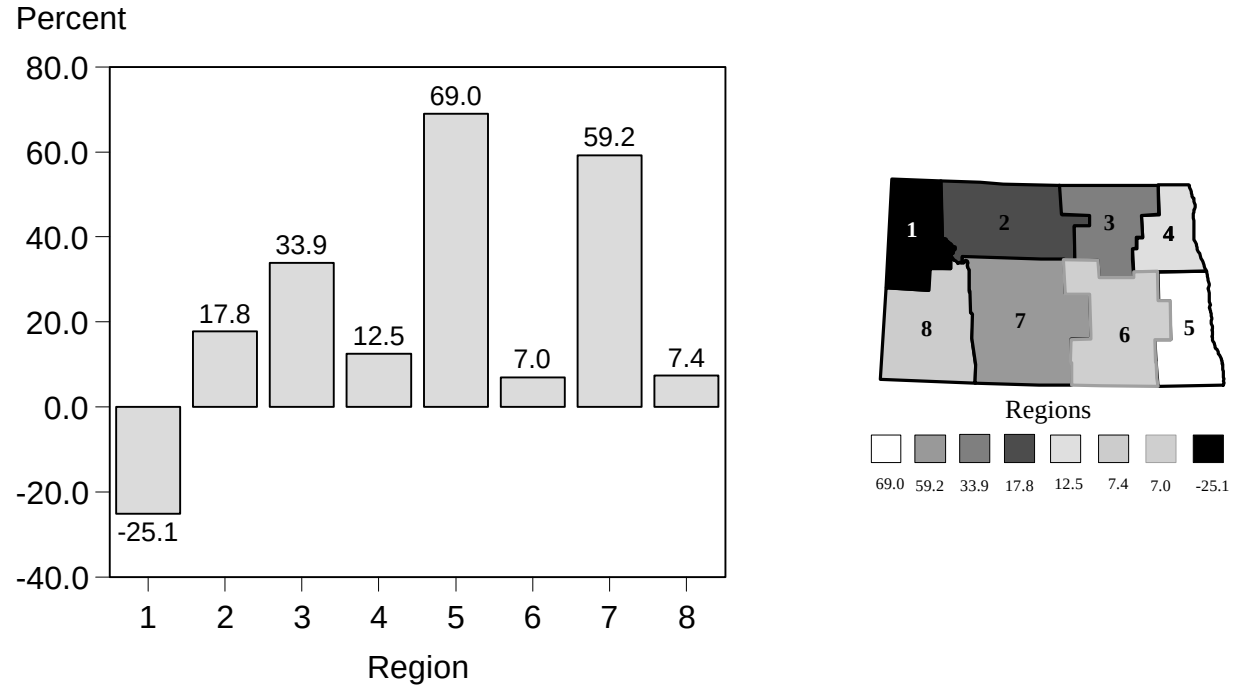


Figure 17. North Dakota Percentage Change in Annual Average Employment in Construction, 1986-1996

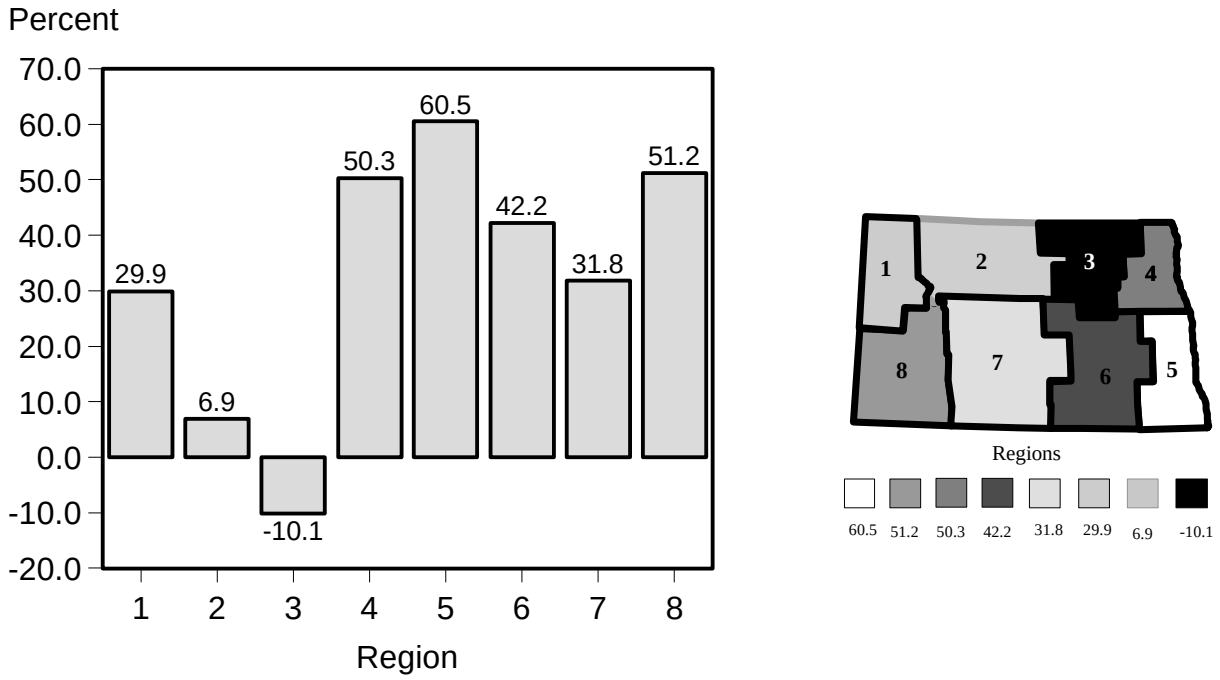


Figure 18. North Dakota Percentage Change in Annual Average Employment in Manufacturing, 1986-1996

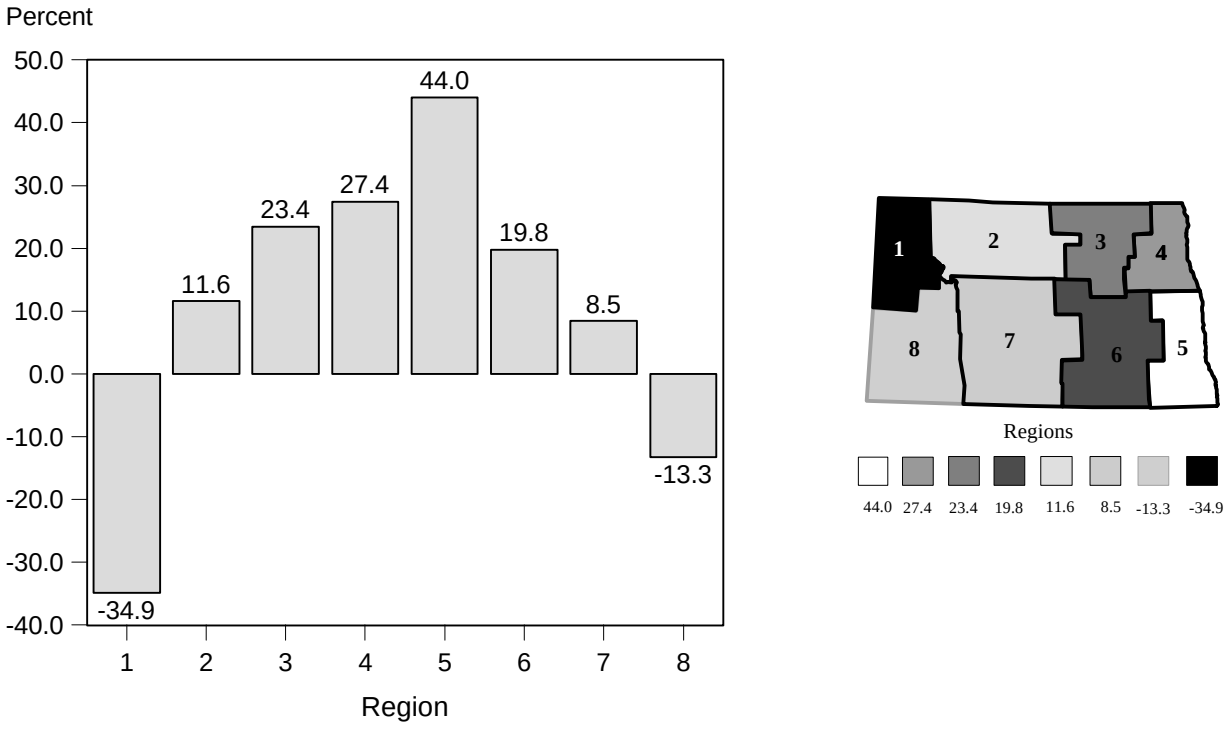


Figure 19. North Dakota Percentage Change in Annual Average Employment in Transportation, Communications, & Public Utilities, 1986-1996

Regions 4 and 5 showed the largest growth in wholesale trade employment (22 percent and 19 percent, respectively) (Figure 20). State Regions 2 and 7 were the only other areas with wholesale trade employment growth, although much smaller than the two eastern regions. One possible explanation for this range of growth is that trade centers such as Fargo, 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 1,858 jobs (Table 4).

The regions which showed the strongest growth 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 38 percent increase, followed by Region 7 (27%), Region 2 (26%), and Region 4 (24%) growth in retail trade employment (Figure 21). Regions 3, 6, and 8 "held their own" or gained a modest number of jobs in retail, and Region 1 lost 4 percent of its retail sales force during the 10-year period. Statewide, 11,514 retail jobs were added, with Region 5 accounting for 4,622 of them. The advent of Sunday opening in 1991, the increase in Canadian shoppers, and the strength of the economy explain a portion of the increase during this period.

Regions 3, 4, 5, 6 and 7 showed increases in employment in the areas of finance, insurance, and real estate (Figure 22). Region 5 gained 1,392 jobs in this sector, while the net state gain was 1,999 jobs (Table 4). Losses were experienced in Regions 1, 2, and 8 (58, 83, and 84 jobs, respectively). Losses in these counties further reflect the effects of the downturn in the energy industry and agriculture. These losses also may reflect the impact of liberalized branch banking laws.

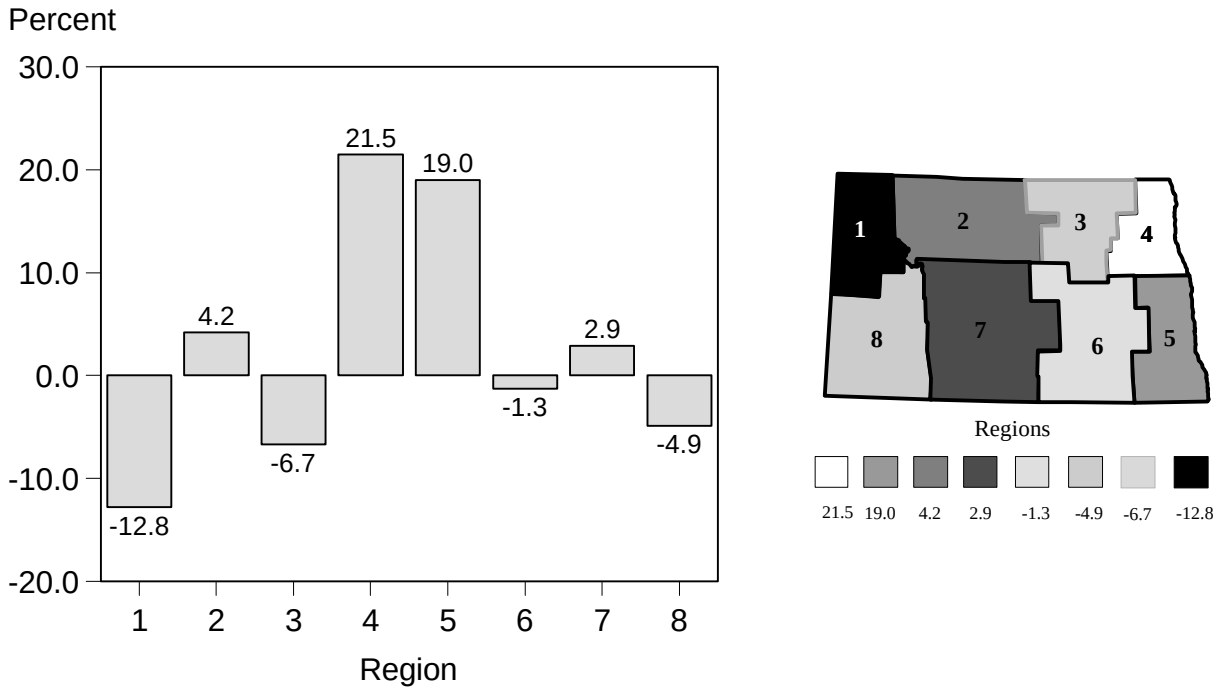


Figure 20. North Dakota Percentage Change in Annual Average Employment in Wholesale Trade, 1986-1996

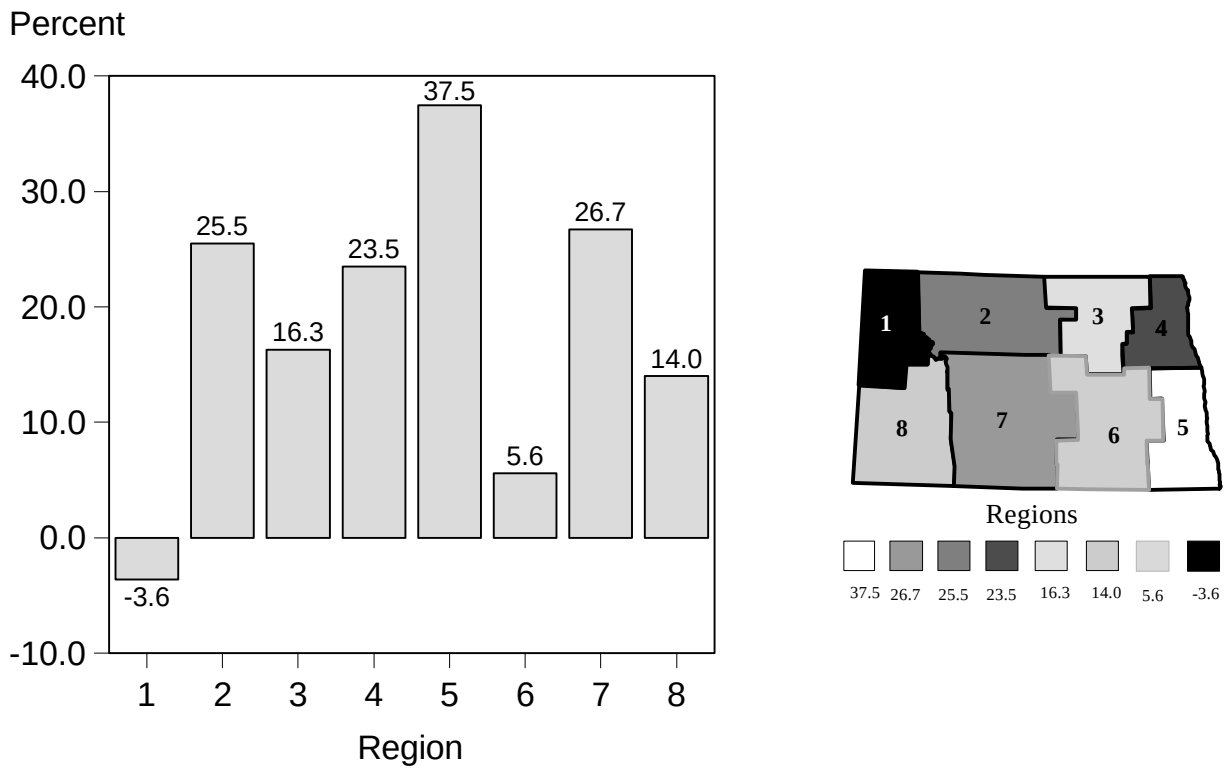


Figure 21. North Dakota Percentage Change in Annual Average Employment in Retail Trade, 1986-1996

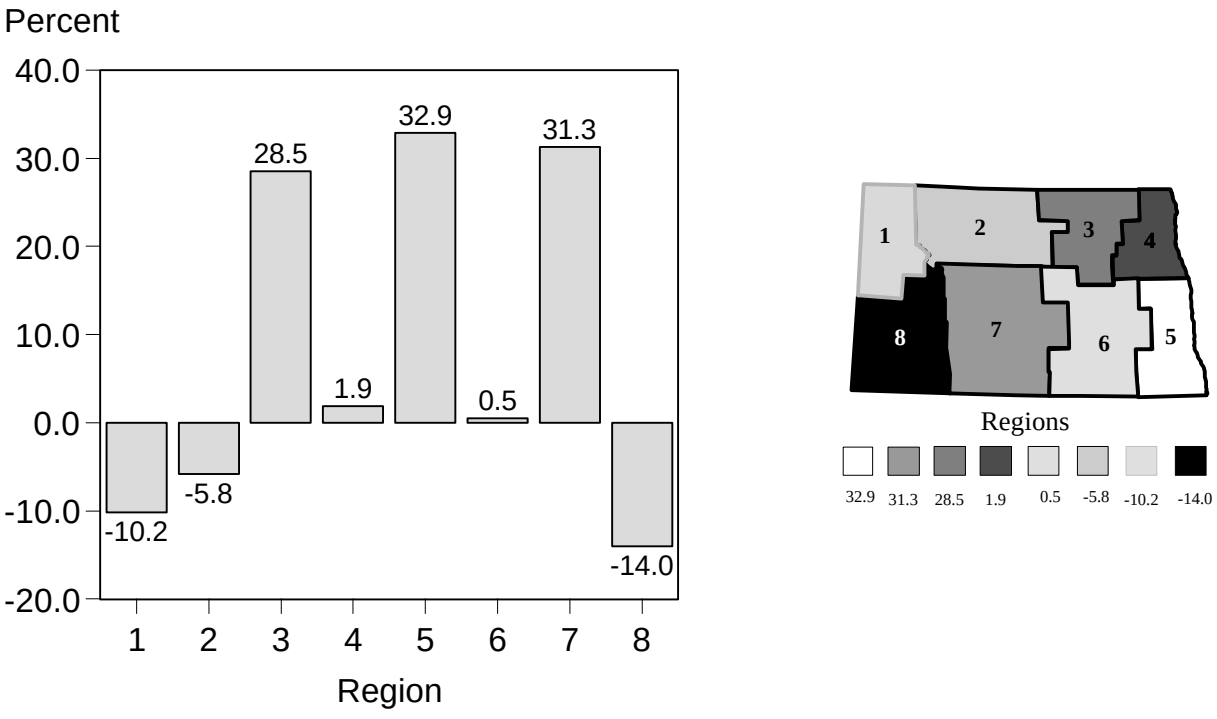


Figure 22. North Dakota Percentage Change in Annual Average Employment in Finance, Insurance, and Real Estate, 1986-1996

"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--exported services which impact the state's economic base. Services was the only industry to experience job growth in all regions of the state (Figure 23). However, Region 5 again dominates the scene, with a 57 percent increase or 8,627 jobs representing 31 percent of the state's total growth in this area. All but one region had service growth rates of 40 percent or larger during the 1986-1999 period. The 27,906 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.

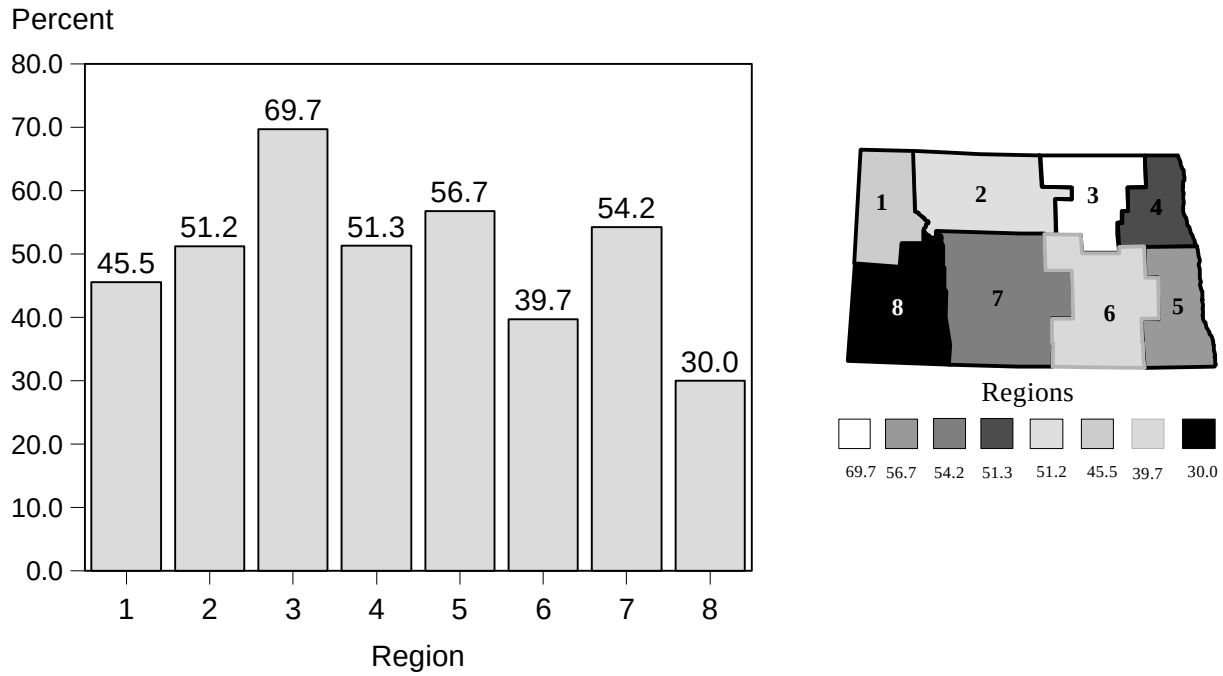


Figure 23. North Dakota Percentage Change in Annual Average Employment in Services, 1986-1996

Employment growth in government occurred in Regions 1, 2, 4, 5, 7, and 8. Region 2, home of the Minot Air Force Base, grew by 5.9 percent or 374 jobs; Region 4, location of the U.S. Air Force Base at Grand Forks and the University of North Dakota, grew by 3 percent or 287 jobs; and Region 7, dominated by the state capitol, grew by over 13 percent or 1,393 jobs (nearly 60 percent of the statewide net growth of 2,357 government jobs) (Table 4, Figure 24). Region 5 grew by 7 percent (782 jobs) while Regions 1 and 8 showed little change. Region 3, however, decreased its government employment by almost 8 percent or 293 jobs. This is due, for the most part, to the closing of San Haven, a state institution for the mentally impaired that was located near Dunseith. This facility was closed in 1987. Region 6, the other region losing employment in this sector, had a decline of 205 jobs during the 10-year 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 1985, 1990, and 1996. Comparing 1996 total employment for the state from Appendix Table 3 with total covered employment (Table 3) indicates that noncovered employment amounted to about 42,704 persons in 1996.

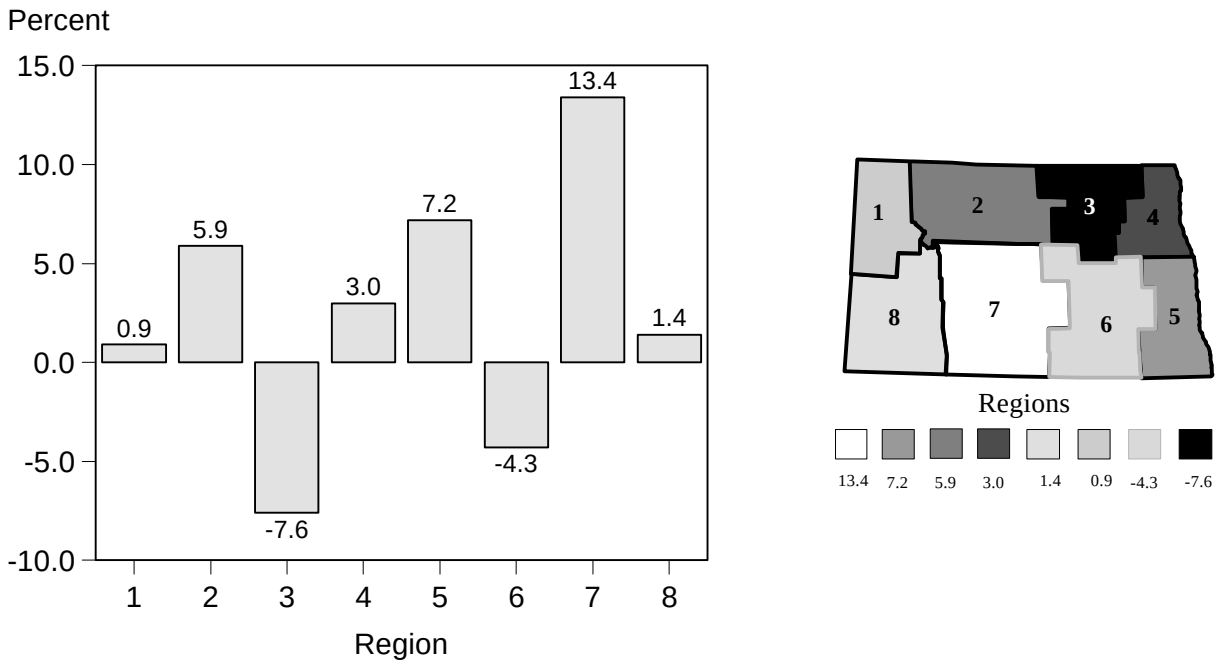


Figure 24. North Dakota Percentage Change in Annual Average Employment in Government, 1986-1996

Income

Table 5 portrays North Dakota's income for current years: total income, farm income as a percentage 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 7 percent of the region's 1994 income of $3,075 million. Statewide, farming was responsible for slightly over 6 percent of the income generated in 1994. Sargent County had the highest percentage of income attributable to agriculture, with nearly 29 percent of the county's income coming from farming. Figure 25 shows six counties with over 20 percent of their income derived from farming, including Slope (28%), LaMoure (26%), Dickey (25%), Wells (24%), Walsh (24%), and Pembina (20%). Regions 2 (7%), 4 (8%), 5 (7%) and 6 (12%) had greater than the state's average (6%) 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.

Annual average real earnings (wages and salaries) in North Dakota declined by almost 5 percent between 1986 and 1996 (Table 5); this was determined by using constant dollars (i.e., adjusting 1986 dollars to 1996 values). All counties, except Cavalier, Ransom, Richland, Sargent, and McIntosh lost earning power during this period (Figure 27). Also, over $15,000 separates the county with the highest annual average earnings in 1996 (Oliver) from the county with the lowest earnings (Slope). In general, western counties lost a greater percentage of their earning power (Figure 27), with Region 1 losing 15 percent between 1986 and 1996 (Figure 28). Adjacent areas showed the smallest decline, followed by remote counties; both of these areas were lower than the state average of 5 percent decline and less than the metro area losses of over 6 percent.

The per capita income (all sources of income per person) in Pembina County in 1995 was reported to be two and one-half times as great as in Sioux County ($22,915 vs. $9,294; Table 5). Many of the counties experienced negative changes in per capita income over the decade 1985 to 1995, with 31 counties experiencing losses (after adjusting for inflation) (Figure 29). Three of the state's eight regions showed a negative change in per capita income during this decade (Figure 30), although two of three regions were less than 1 percent. State Region 3 had a 14 percent decline, which was the largest change of any region. Regions 4, 5, and 7 had the largest per capita income increases with changes of 8.2%, 10.5% and 9.5%, respectively (Figure 30). This corresponds with the increases in major trade center cities of Grand Forks (Grand Forks County, 15%), Fargo (Cass County, 13%), and Bismarck (Burleigh County, 13%). Overall, metro areas showed the only positive change in per capita income (13.9%), with adjacent and remote areas having declines during the 1985-1995 period.

In short, all measures of income presented in Table 5 show considerable variation among the 53 counties. Furthermore, the two measures of income change given here generally show different trends with average annual earnings declining for the 1986-1996 period while per capita income has increased over the 1985-1995 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	
	1994	Farm as % of Total 1994	1996	Percent Change 1986-96*	1995	Percent Change 1985-95**
	$000s	- % -	- $ -	- % -	- $ -	- % -
DIVIDE	43,794	10.6	13,399	-18.9	19,113	6.0
MCKENZIE	91,288	6.0	19,359	-18.9	15,436	3.1
WILLIAMS	352,792	1.7	20,470	-13.7	18,093	-2.7
REGION 1	487,874	3.3	19,832	-14.9	17,653	-0.8
BOTTINEAU	134,128	15.2	16,980	-10.4	16,817	-15.9
BURKE	45,747	7.9	18,726	-16.1	19,111	10.1
MCHENRY	91,342	14.4	16,857	-14.5	14,147	-10.4
MOUNTRAIL	113,551	15.7	17,849	-6.9	16,554	6.7
PIERCE	90,551	14.2	16,796	-7.0	18,063	-3.6
RENVILLE	51,893	25.4	16,871	-7.5	17,040	-16.9
WARD	1,029,840	2.5	19,924	-6.6	18,955	10.0
REGION 2	1,557,052	6.9	19,259	-7.0	18,161	4.1
BENSON	87,739	10.8	18,725	-5.2	11,641	-23.8
CAVALIER	95,918	8.4	18,233	2.5	17,080	-22.2
EDDY	44,046	14.7	15,626	-0.9	14,382	-20.2
RAMSEY	288,697	1.8	17,683	-5.8	18,732	-5.4
ROLETTE	159,760	1.1	19,425	-2.9	12,006	-1.4
TOWNER	59,998	12.9	17,054	-0.9	14,815	-29.1
REGION 3	736,158	5.2	18,218	-3.1	14,790	-14.4
GRAND FORKS	1,269,403	3.5	20,772	-7.3	18,577	15.2
NELSON	67,234	6.6	16,001	-3.4	15,431	-23.9
PEMBINA	207,094	20.3	21,844	1.2	22,915	8.8
WALSH	260,736	23.5	17,451	-1.1	18,890	-7.0
REGION 4	1,804,467	8.4	20,352	-5.1	18,879	8.2
CASS	2,322,999	2.5	23,480	-3.8	21,971	12.7
RANSOM	111,540	19.0	17,104	4.9	17,675	10.6
RICHLAND	348,024	19.2	22,575	6.0	17,785	3.2
SARGENT	100,442	28.6	28,071	14.8	19,754	3.4
STEELE	38,654	19.5	18,681	-8.1	16,673	-9.8
TRAILL	153,598	13.7	18,529	-3.6	18,414	-3.7
REGION 5	3,075,257	6.6	23,162	-2.2	20,952	10.5
BARNES	197,533	7.0	17,151	-9.3	16,399	-3.7
DICKEY	105,869	25.3	16,862	-0.6	16,623	-1.9
FOSTER	66,250	10.8	17,696	-6.4	15,921	-15.4
GRIGGS	48,080	5.6	16,307	-4.7	14,779	-20.2
LAMOURE	90,731	25.8	15,060	-8.3	16,526	6.5
LOGAN	42,359	17.6	13,773	-9.0	15,777	15.6
MCINTOSH	55,724	4.3	14,354	0.4	14,327	-0.4
STUTSMAN	393,519	4.6	19,471	-7.5	18,944	5.3
WELLS	108,154	23.5	15,275	-10.3	18,008	-6.6
REGION 6	1,018,219	11.5	17,648	-6.9	17,179	-0.7

- Continued -

Table 5. continued

Area	Total Income 1994	Total Income Farm as % of Total 1994	Annual Average Earnings 1996	Annual Average Earnings Percent Change 1986-96*	Per Capita Income 1995	Per Capita Income Percent Change 1985-96**
	$000s	- % -	- $ -	- % -	- $ -	- % -
BURLEIGH	1,038,953	0.7	23,219	-5.1	21,604	12.9
EMMONS	57,999	6.2	16,011	-3.0	12,597	-1.2
GRANT	34,742	(a)	15,143	-6.4	10,072	-20.6
KIDDER	37,953	7.6	15,065	-8.2	11,044	-6.1
MCLEAN	180,541	14.2	24,179	-3.7	18,246	-1.5
MERCER	184,266	0.2	33,161	-7.7	20,812	8.7
MORTON	387,573	0.9	19,771	-8.5	16,981	11.4
OLIVER	29,373	0.2	35,832	-7.7	13,819	-10.6
SHERIDAN	31,130	17.0	16,809	-4.1	14,732	-22.5
SIOUX	36,239	(a)	20,728	-7.2	9,294	10.9
REGION 7	2,217,788	2.3	23,367	-6.2	18,912	9.5
ADAMS	43,822	3.9	17,567	-0.8	16,541	5.9
BILLINGS	11,479	7.3	15,064	-40.8	10,074	-38.8
BOWMAN	60,138	7.6	15,860	-16.9	18,990	9.9
DUNN	44,654	1.6	17,844	-10.1	11,698	-8.7
GOLDEN	27,994	1.3	16,267	-12.0	13,779	-18.2
VALLEY	37,301	24.2	16,426	-7.3	17,562	2.5
HETTINGER	9,704	28.1	10,079	-13.8	8,990	-29.3
SLOPE	367,255	0.9	18,807	-11.5	17,366	11.2
STARK	622,347	4.5	18,070	-11.8	16,343	4.6
REGION 8						
NORTH DAKOTA	11,618,143	6.2	21,235	-4.9	18,611	5.8

*Constant 1996 dollars
**Constant 1995 dollars
(a) County with a negative (loss) farm income for 1994.
Sources: Job Service North Dakota. *North Dakota Employment and Wages* 1986 and 1996. Bismarck (Annual Average Earnings); U.S. Department of Commerce, Bureau of Economic Analysis. *Regional Economic Information System*--REIS-CD-ROM (Total and Farm Income); U.S Department of Commerce, U.S. Bureau of the Census, Census of Population, Intercensed County Population Estimates; U.S. Department of Commerce, Bureau of Economic Analysis. 1997. *Personal Income by Major Source and Earnings by Industry*.

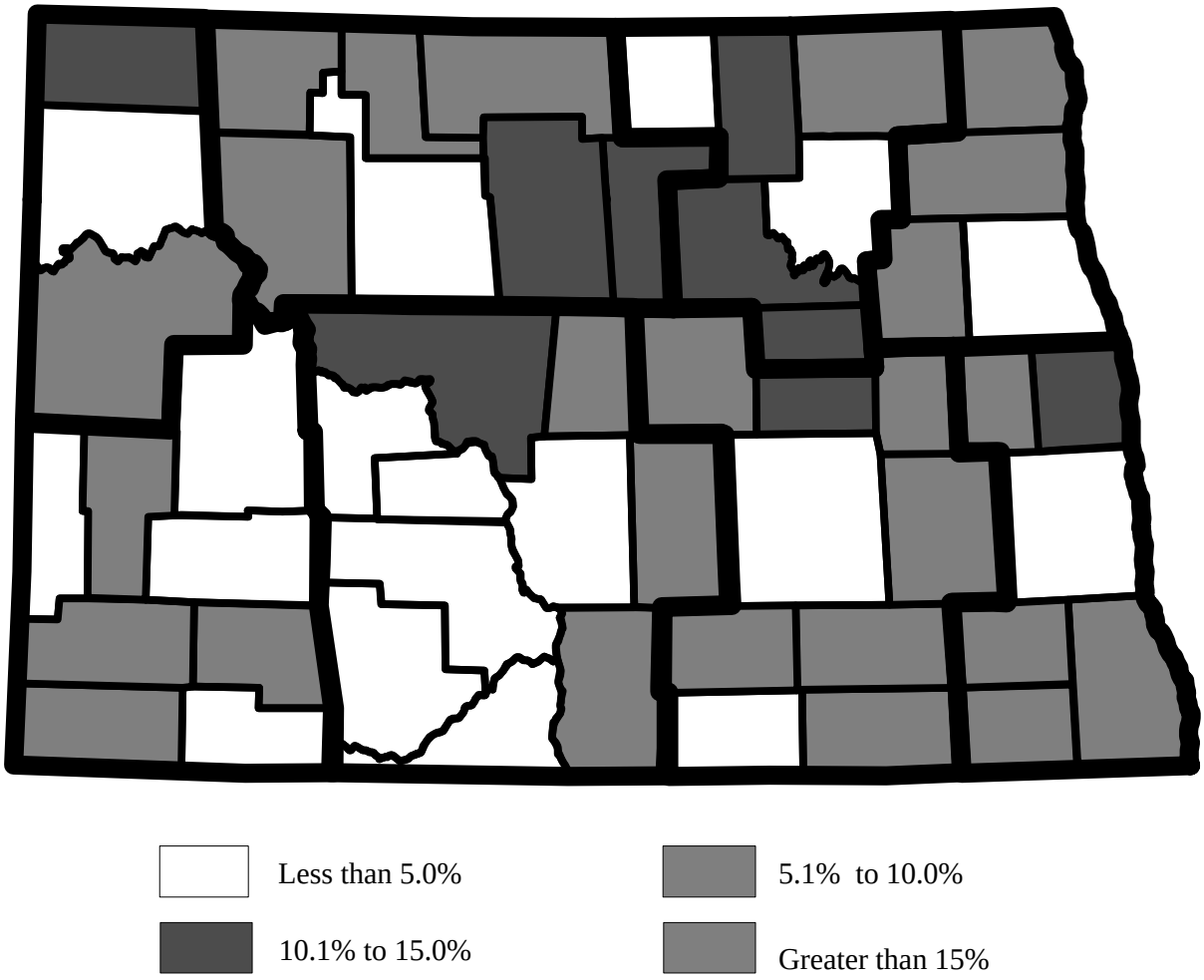
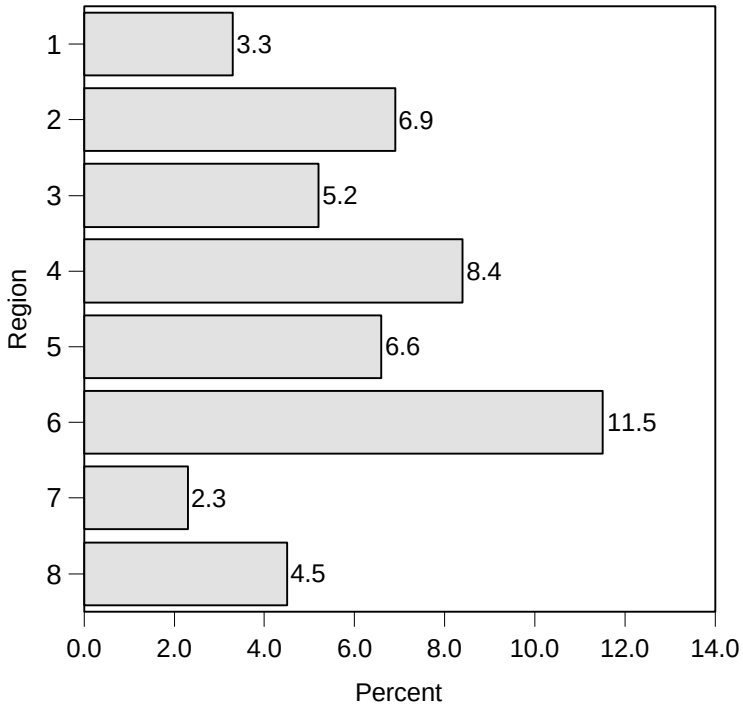
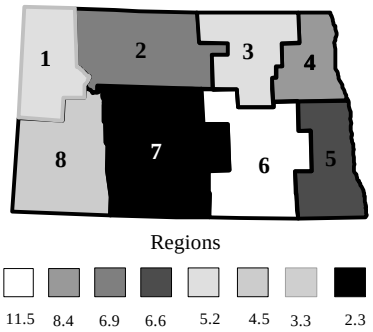
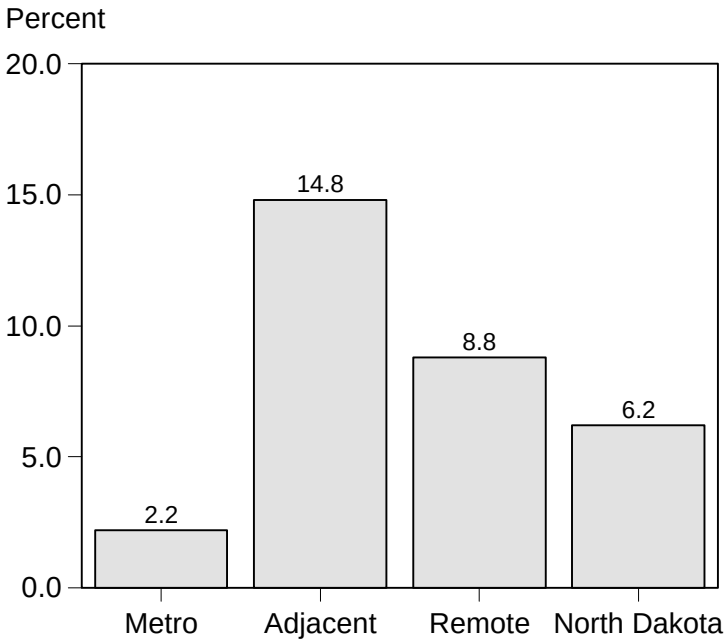


Figure 25. North Dakota Percentage of Total Income Derived From Farming, 1995







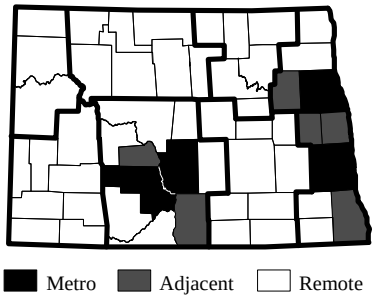


Figure 26. Percentage of Total North Dakota Income Derived from Farming by Region and Area, 1994

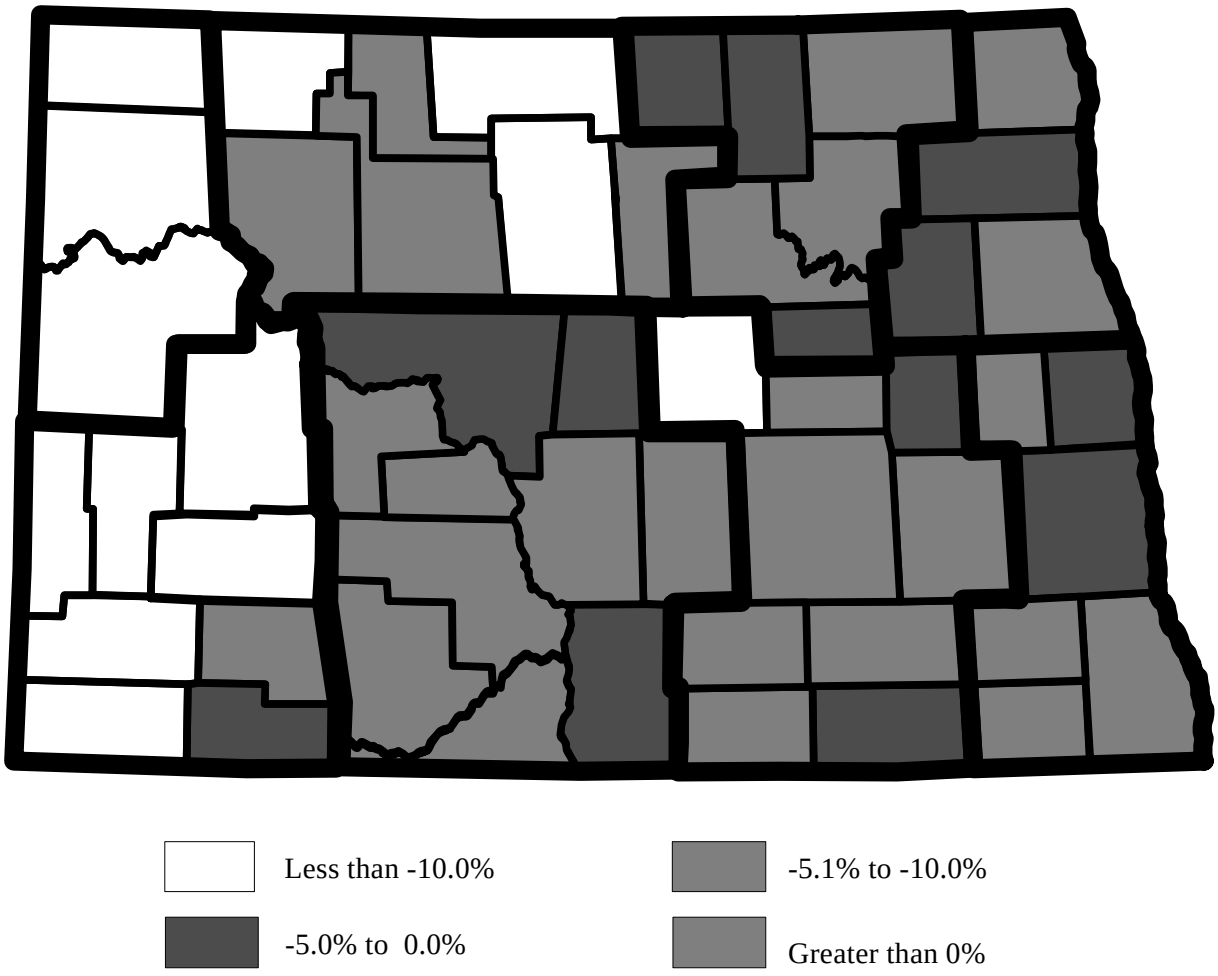
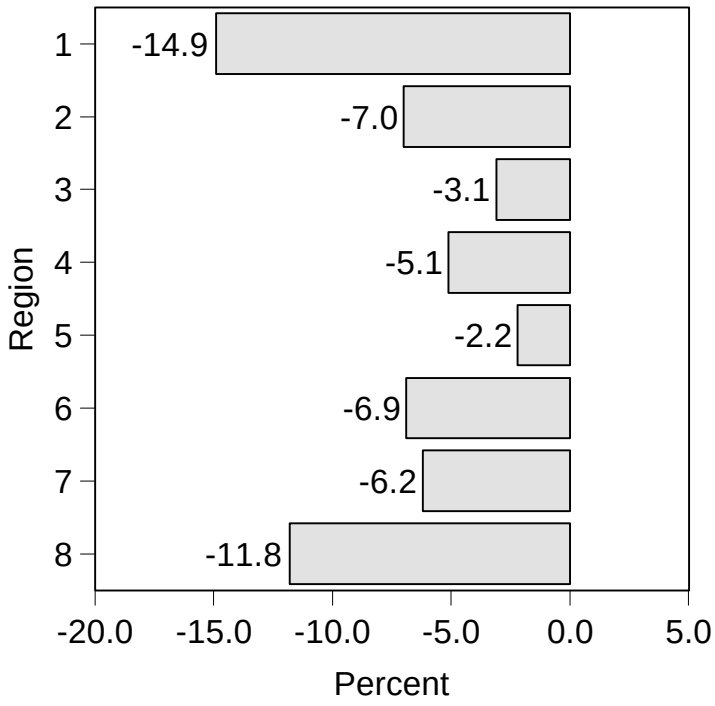
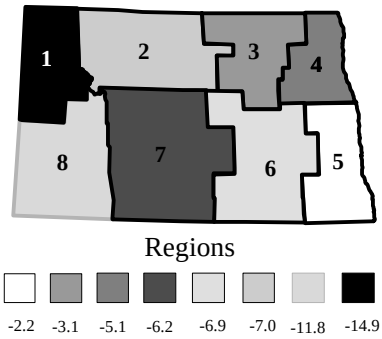
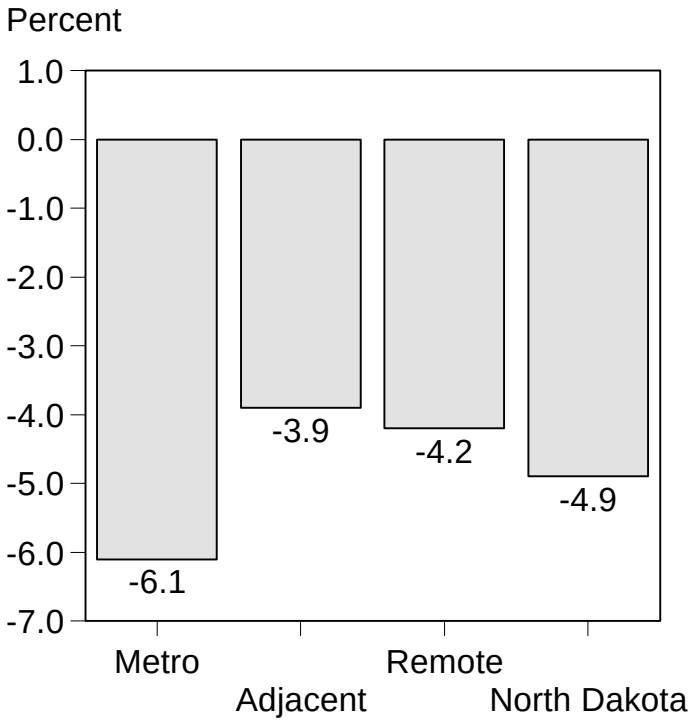


Figure 27. Percentage Change in North Dakota Average Annual Earnings, 1985-96







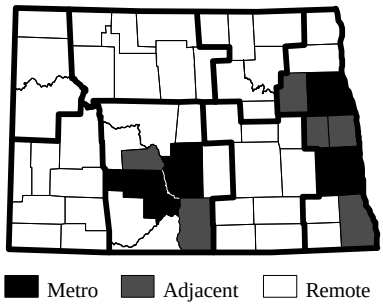


Figure 28. North Dakota Percentage Change on Annual Average Earnings by Region and Area, 1986-1996

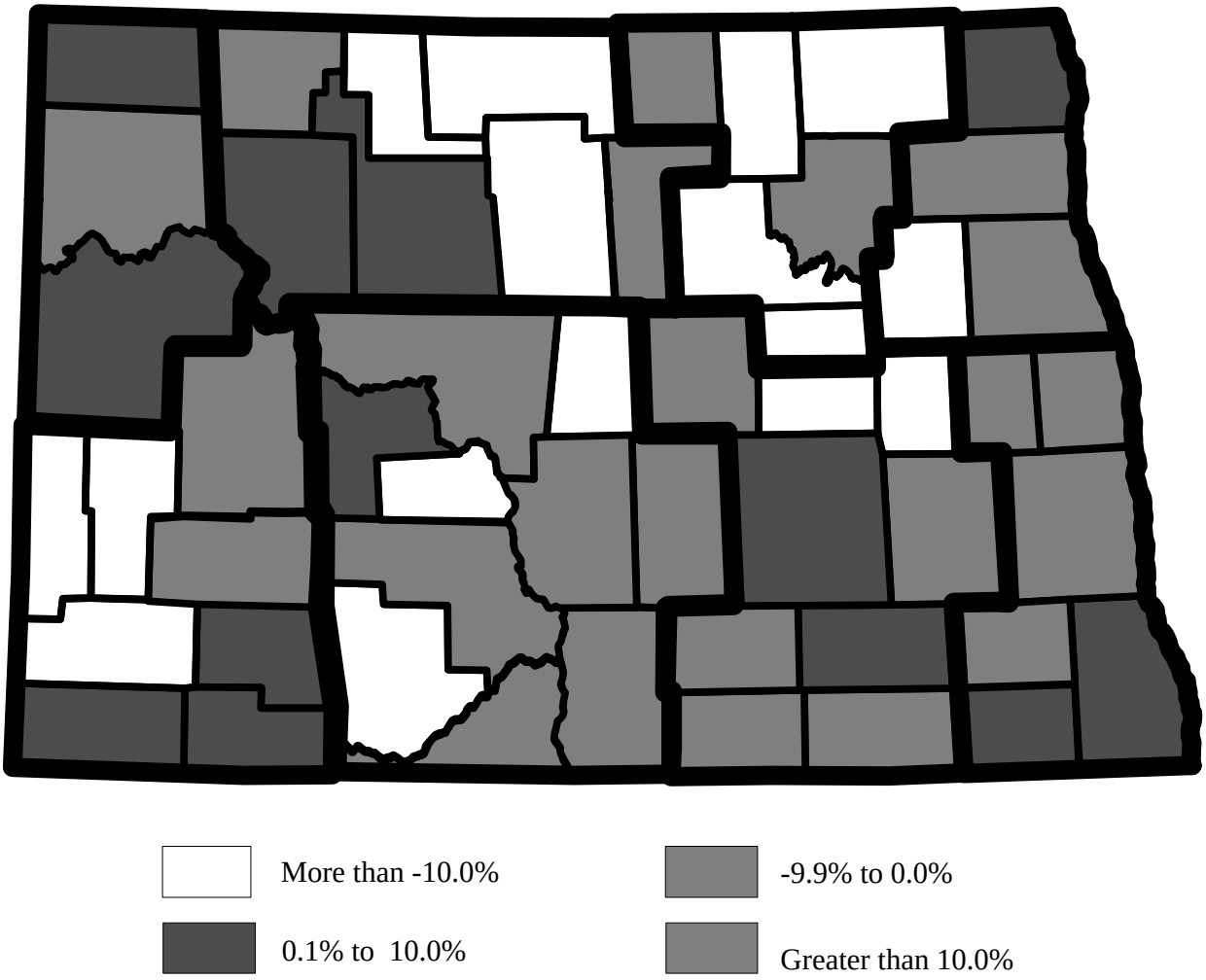


Figure 29. North Dakota Percentage Change in Per Capita Income, 1985-1995

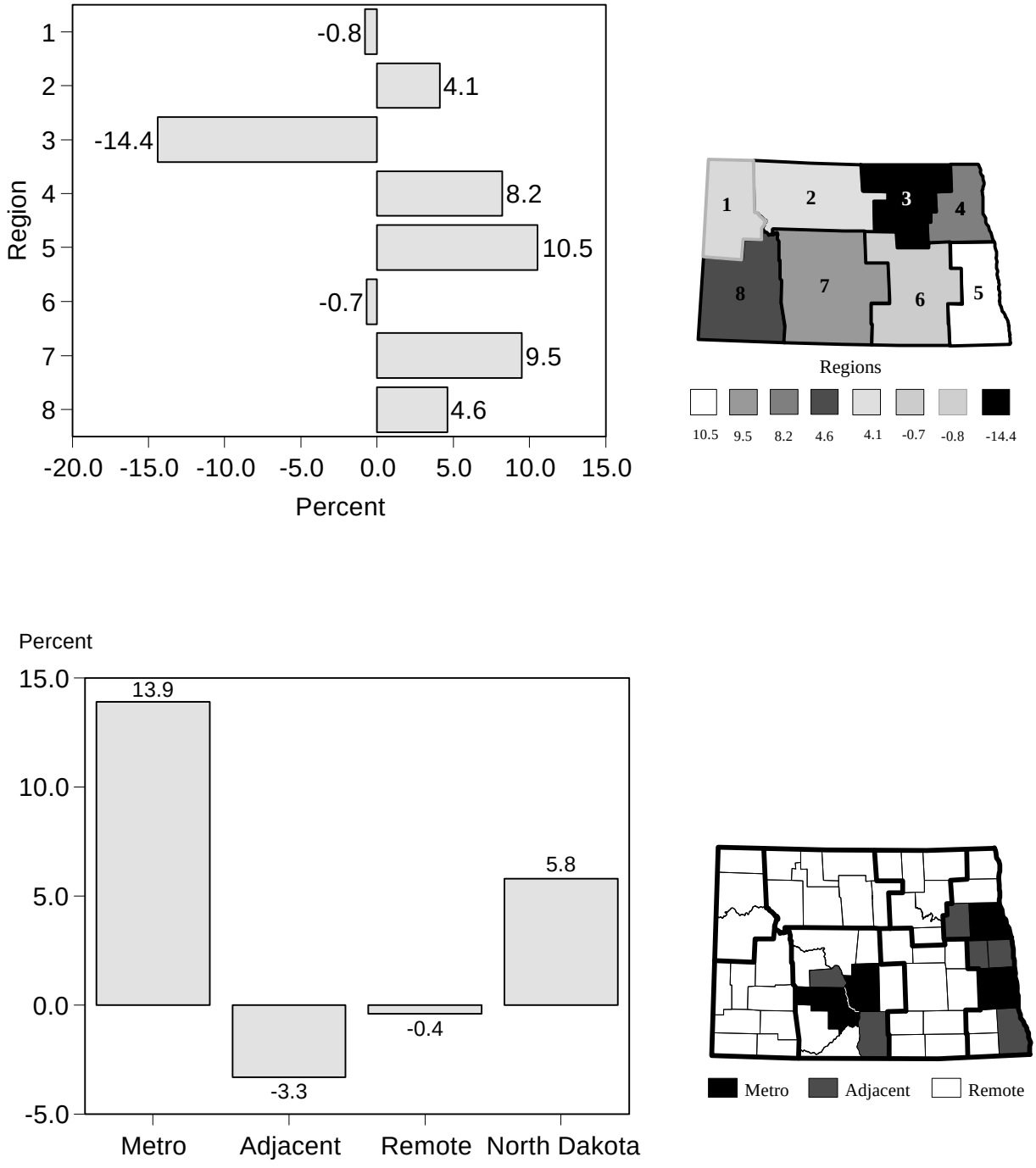


Figure 30. North Dakota Percentage Change in Per Capita Income by Region and Area, 1985-1995

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 U.S. for the period 1970-1996. North Dakota's per capita income has 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 1996 per capita income standing at 83.7 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 1996, with Cass County sales of just over $1.4 million topping the total for any other region. Sales for the state (adjusted for inflation) were virtually unchanged for the period 1980-1996, but increased by 2 percent from 1995-1996.

Only Cass, Billings, Slope, Grand Forks, Ransom, Burleigh, Ward and Pembina Counties showed percentage increases in adjusted sales between 1980 and 1996. Cass experienced a 52 percent increase, Billings 51 percent, Slope 46 percent and Grand Forks 40 percent increase. Increases for Ransom, Burleigh, Ward, and Pembina Counties were smaller, with taxable sales and purchases improving only 23 percent or less. Sales in all other counties dropped in that period (Figure 31). The highest percentage loss was 75 percent in Sioux County.

Region 1 experienced the highest percentage loss, a decrease of over half (58%) of sales and purchases volume between 1980 and 1996 (Figure 32). Only the eastern-most regions (Regions 4 and 5) showed significant sales growth (24% and 41%), although Region 7 (Bismarck trade area) showed a small (2%) but positive trend. All nonmetropolitan areas lost sales volume (adjacent -21%; remote -28%), while the metropolitan areas gained 35 percent. Overall, taxable sales and purchases did not change in North Dakota between 1980 and 1993 (Figure 32).

Change in taxable sales and purchases in the short run (1995-1996) was almost equally distributed among counties with increases (28) and decreases (25). North Dakota sales increased by 2 percent during the 1995-1996 period (Table 6). Steele County had the largest short run change (24 %) followed by Kidder County (20 %) and Slope County(18 %). Counties experiencing the largest declines included Sioux (-21 %), Divide (-13 %), and Logan (-11 %). Figure 33 presents the 1995-1996 changes in taxable sales for each county. Of the counties with major trade centers, Ward (Minot), Grand Forks (Grand Forks), Cass (Fargo), and Burleigh (Bismarck), Cass had the largest short run taxable sales increase of near 4 percent.

Five of the eight regions had positive changes in taxable sales for the 1995-1996 period (Figure 34), led by Region 1 and 5 with a 4.2 percent increase. Northeastern North Dakota (Regions 3 and 4) had the only short run decrease with both under 2 percent. State Region 6 had virtually no change during the period. Adjacent areas had the largest one-year growth (6.2 percent) followed by remote (3.6 percent), and the metro areas grew 1.9 percent (Figure 34).

Table 6. Adjusted Taxable Sales for North Dakota Counties and Regions, 1980-1996

COUNTY	ADJUSTED TAXABLE SALES AND PURCHASES (1996 DOLLARS)[a]				CHANGE	
	1980	1990	1995	1996	1980-96	1995-96
	----------dollars----------				--%--	
DIVIDE	17,437,161	9,152,597	10,102,483	8,766,642	-49.7	-13.2
MCKENZIE	40,987,987	25,679,002	18,021,817	19,638,983	-52.1	9.0
WILLIAMS	429,431,156	166,315,482	168,154,087	176,163,029	-59.0	4.8
REGION 1	487,856,304	201,147,081	196,278,388	204,568,654	-58.1	4.2
BOTTINEAU	61,935,077	28,519,473	33,568,574	33,173,371	-46.4	-1.2
BURKE 14,944,730	7,318,793	6,818,063	6,975,529	-53.3	2.3	
MCHENRY	22,431,488	12,123,731	14,313,333	15,270,695	-31.9	6.7
MOUNTRAIL	31,067,725	16,609,823	22,474,316	22,079,185	-28.9	-1.8
PIERCE	38,914,958	29,264,409	39,927,541	35,681,471	-8.3	-10.6
RENVILLE	20,604,862	12,546,904	14,670,143	14,430,145	-30.0	-1.6
WARD	478,908,742	431,811,931	519,082,110	530,459,588	10.8	2.2
REGION 2	668,807,582	538,195,063	650,854,081	658,069,984	-1.6	1.1
BENSON	21,013,725	7,187,734	10,225,546	9,985,885	-52.5	-2.3
CAVALIER	42,563,984	25,638,557	28,661,446	26,306,649	-38.2	-8.2
EDDY	20,778,268	7,475,093	7,201,737	7,773,069	-62.6	7.9
RAMSEY	116,728,130	91,866,017	114,926,192	113,976,821	-2.4	-0.8
ROLETTE	35,045,660	23,628,435	25,927,479	25,224,929	-28.0	-2.7
TOWNER	23,335,253	9,705,347	8,860,838	9,154,007	-60.8	3.3
REGION 3	259,465,020	165,501,183	195,803,237	192,421,360	-25.8	-1.7
GRAND FORKS	477,650,770	569,556,879	670,109,042	667,485,848	39.7	-0.4
NELSON	33,102,197	18,078,544	18,811,194	19,581,418	-40.9	4.1
PEMBINA	47,127,605	39,217,375	45,240,928	47,541,409	0.9	5.1
WALSH	94,857,145	69,400,506	73,629,856	72,820,167	-23.2	-1.1
REGION 4	652,737,717	696,253,304	807,791,020	807,428,842	23.7	-0.1
CASS	952,311,538	1,038,073,963	1,391,853,474	1,446,191,333	51.9	3.9
RANSOM	34,204,880	30,642,184	40,239,418	45,326,052	32.5	12.6
RICHLAND	105,467,424	87,147,025	92,076,597	98,523,997	-6.6	7.0
SARGENT	26,342,744	24,976,275	21,290,433	19,280,770	-26.8	-9.4
STEELE	11,099,232	4,568,557	4,562,989	5,663,188	-49.0	24.1
TRAILL	45,101,449	31,097,132	34,633,760	36,440,105	-19.2	5.2
REGION 5	1,174,527,267	1,216,505,135	1,584,656,671	1,651,425,445	40.6	4.2
BARNES	95,499,059	63,187,734	67,176,125	65,601,685	-31.3	-2.3
DICKEY	42,519,468	21,826,035	23,075,640	21,886,385	-48.5	-5.2
FOSTER	40,654,682	25,417,116	30,557,198	31,384,753	-22.8	2.7
GRIGGS	24,177,818	14,088,429	14,485,277	15,242,865	-37.0	5.2
LAMOURE	32,462,324	21,747,054	22,606,543	23,067,576	-28.9	2.0
LOGAN	16,563,343	9,216,639	9,238,853	8,220,031	-50.4	-11.0
MCINTOSH	21,976,082	13,921,806	12,841,252	13,863,711	-36.9	8.0
STUTSMAN	182,247,179	139,020,660	151,360,799	152,407,436	-16.4	0.7
WELLS	45,084,414	24,580,028	27,364,616	26,993,738	-40.1	-1.4
REGION 6	501,184,368	333,005,500	358,706,303	358,668,180	-28.4	-0.0

- Continued -

Table 6. continued

COUNTY	ADJUSTED TAXABLE SALES AND PURCHASES (1996 DOLLARS)[a]				CHANGE	
	1980	1990	1995	1996	1980-96	1995-96
	----------dollars----------				-------%--------	
BURLEIGH	599,661,192	583,391,343	702,518,048	706,617,725	17.8	0.6
EMMONS	24,793,393	14,498,997	14,212,301	14,505,264	-41.5	2.1
GRANT	12,969,930	7,528,041	9,373,281	9,025,718	-30.4	-3.7
KIDDER	9,748,836	6,536,560	7,527,645	9,024,248	-7.4	19.9
MCLEAN	56,384,708	28,623,884	34,480,820	33,456,126	-40.7	-3.0
MERCER	49,125,366	34,307,919	34,044,223	36,541,156	-25.6	7.3
MORTON	159,423,085	114,711,695	127,716,952	126,938,836	-20.4	-0.6
OLIVER	3,063,634	1,971,678	1,976,997	1,944,662	-36.5	-1.6
SHERIDAN	6,286,016	2,527,788	2,761,138	2,703,030	-57.0	-2.1
SIOUX	859,855	371,709	270,349	213,249	-75.2	-21.1
REGION 7	922,316,016	794,469,614	934,881,755	940,970,014	2.0	0.7
ADAMS	21,830,620	13,788,751	14,461,844	14,122,895	-35.3	-2.3
BILLINGS	4,915,780	6,346,925	7,404,371	7,403,376	50.6	-0.0
BOWMAN	31,972,072	19,526,688	22,069,395	22,336,513	-30.1	1.2
DUNN	22,483,300	9,890,697	10,044,483	9,683,684	-56.9	-3.6
GOLDEN VALLEY	14,868,850	9,220,579	10,325,306	11,305,043	-24.0	9.5
HETINGER	26,268,692	8,546,422	8,289,247	9,077,201	-65.4	9.5
SLOPE	474,556	211,033	588,408	693,602	46.2	17.9
STARK	299,627,121	178,132,299	198,280,017	204,043,157	-31.9	2.9
REGION 8	422,440,990	245,663,394	271,463,072	278,665,471	-34.0	2.7
NORTH DAKOTA	5,089,335,264	4,190,740,275	4,996,278,350	5,089,864,059	0.0	1.9

[a] constant 1996 dollars

Source: North Dakota Tax Commissioner. Selected Years 1980-1996. North Dakota Sales and Use Tax Statistical Report, Annual. Bismarck, ND.

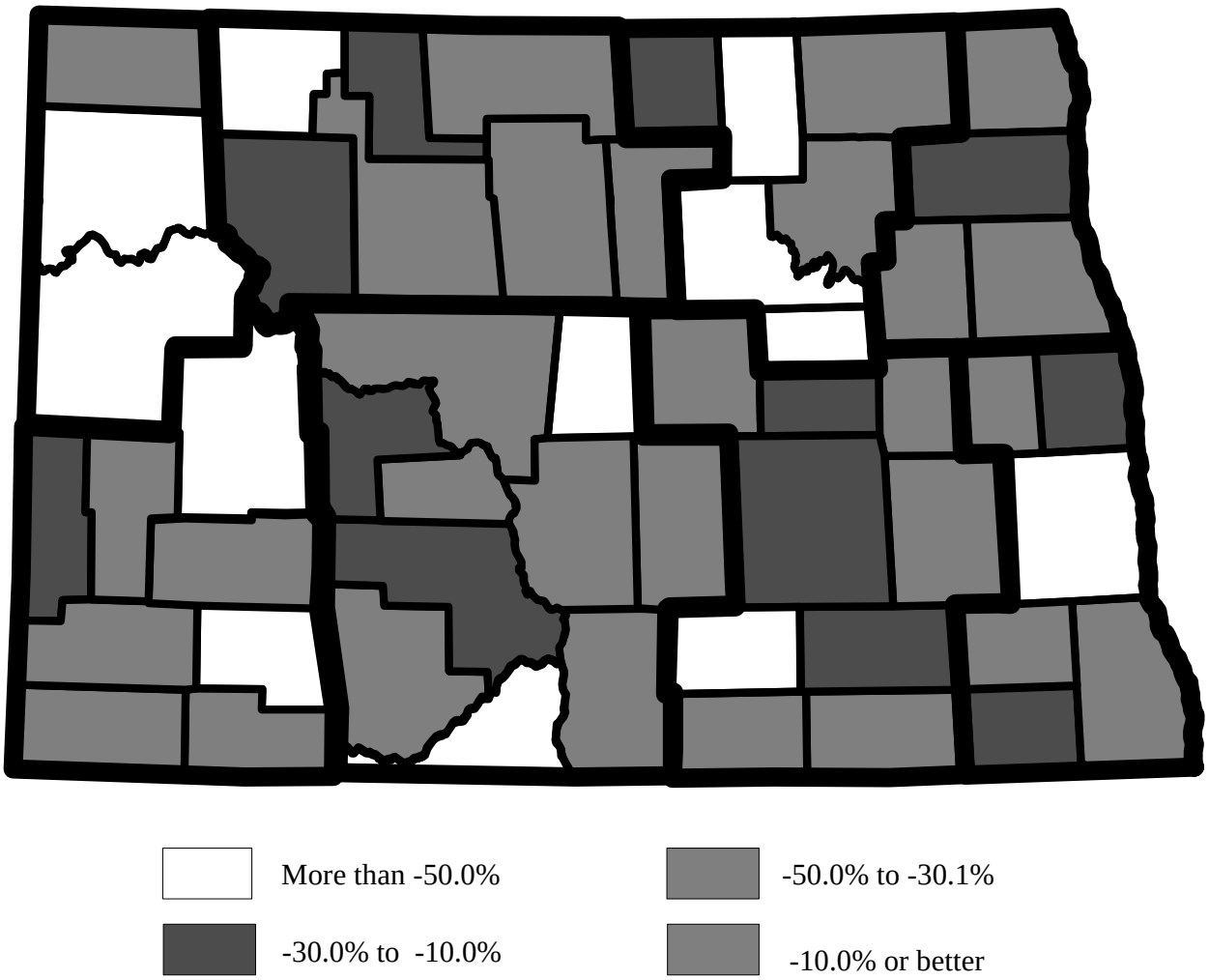


Figure 31. Percentage Change in North Dakota Taxable Sales and Purchases, 1980-1996

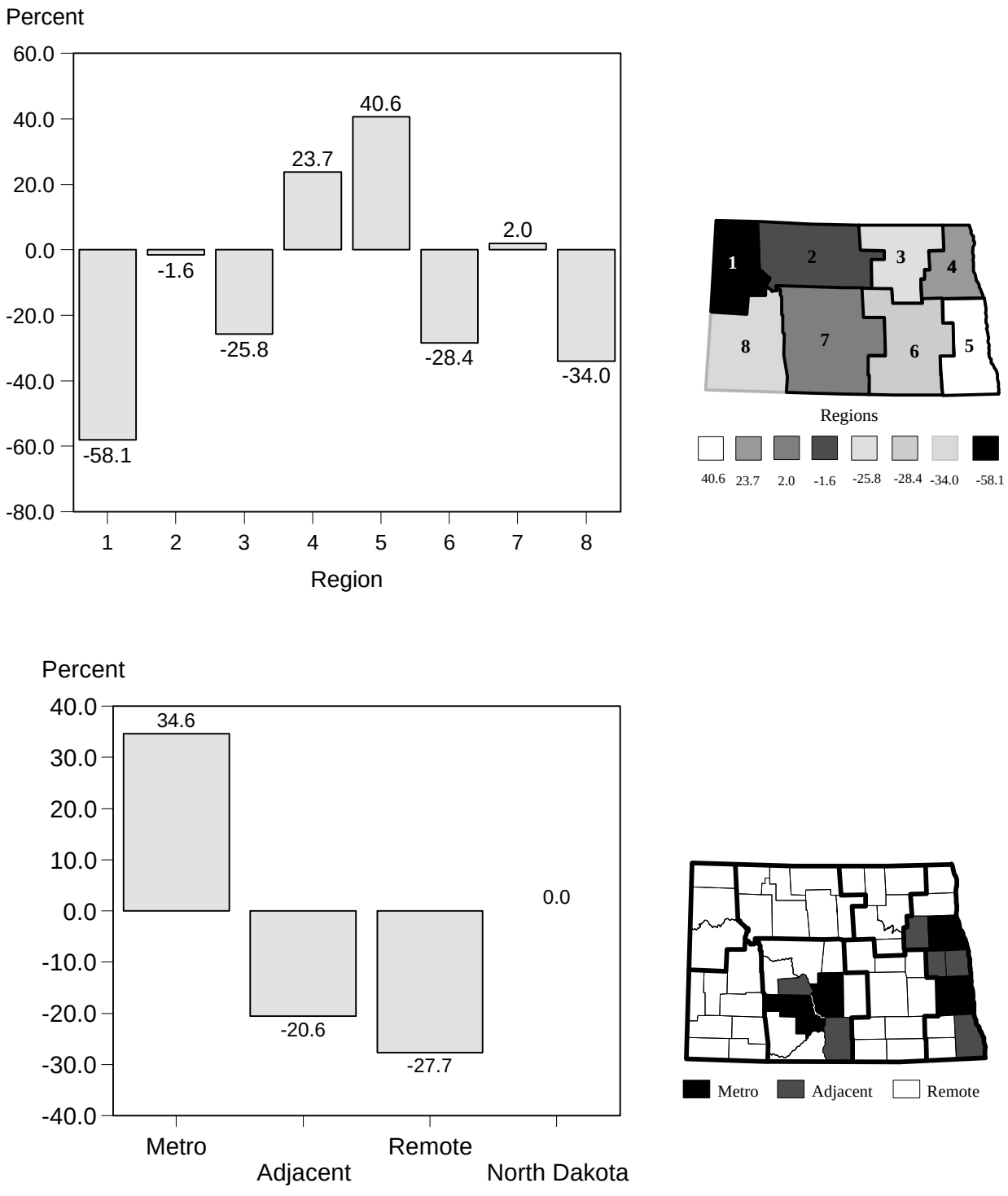


Figure 32. Percentage Change in North Dakota Taxable Sales and Purchases by Region and Area, 1980-1996

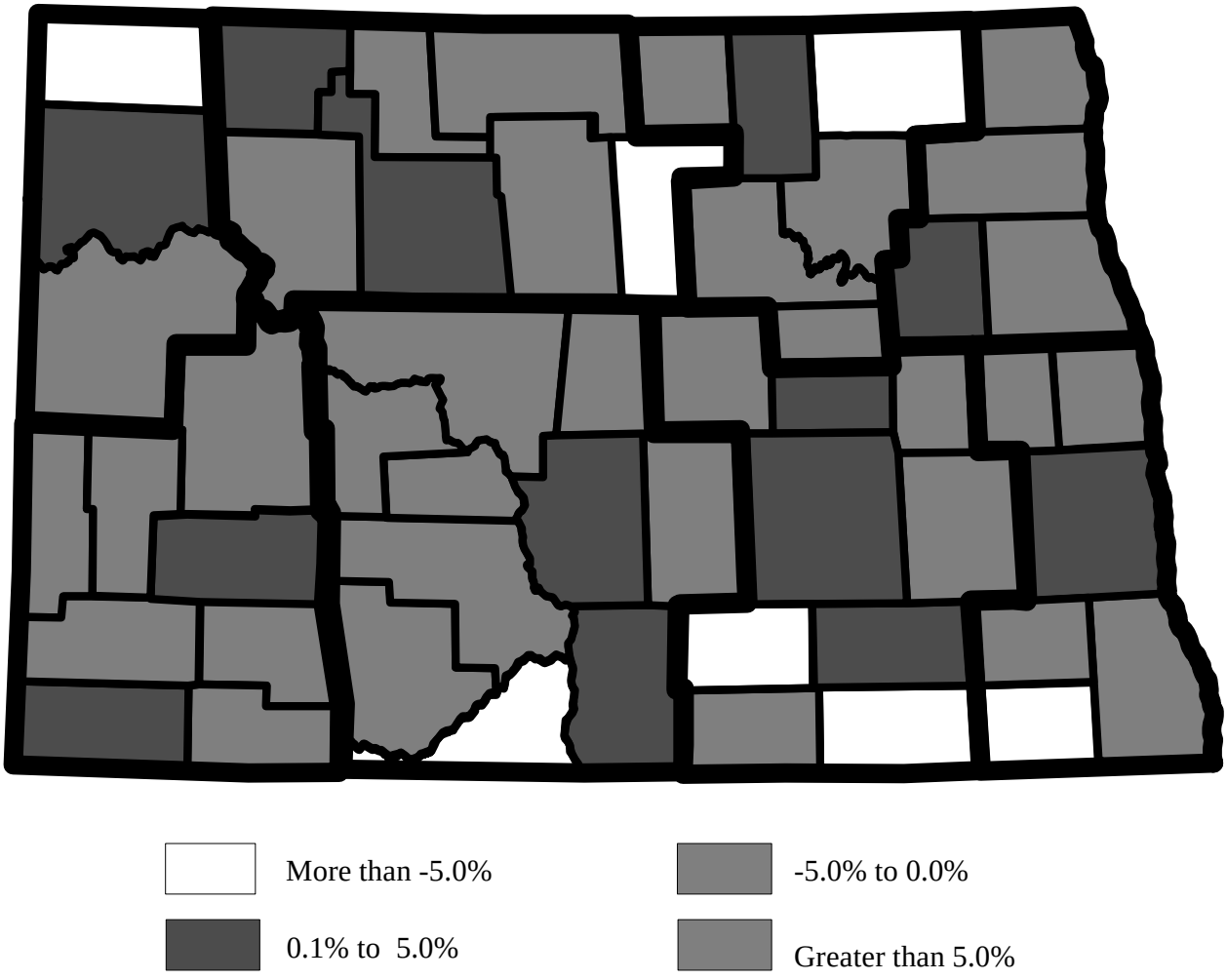
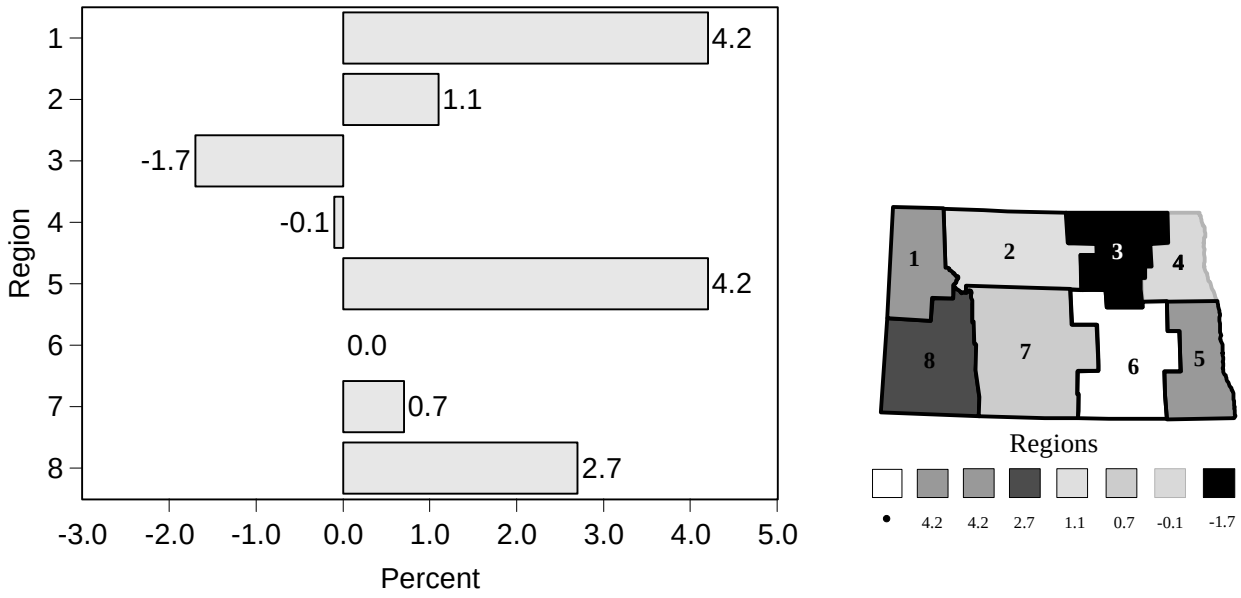


Figure 33. Percentage Change in North Dakota Taxable Sales and Purchases, 1995-1996



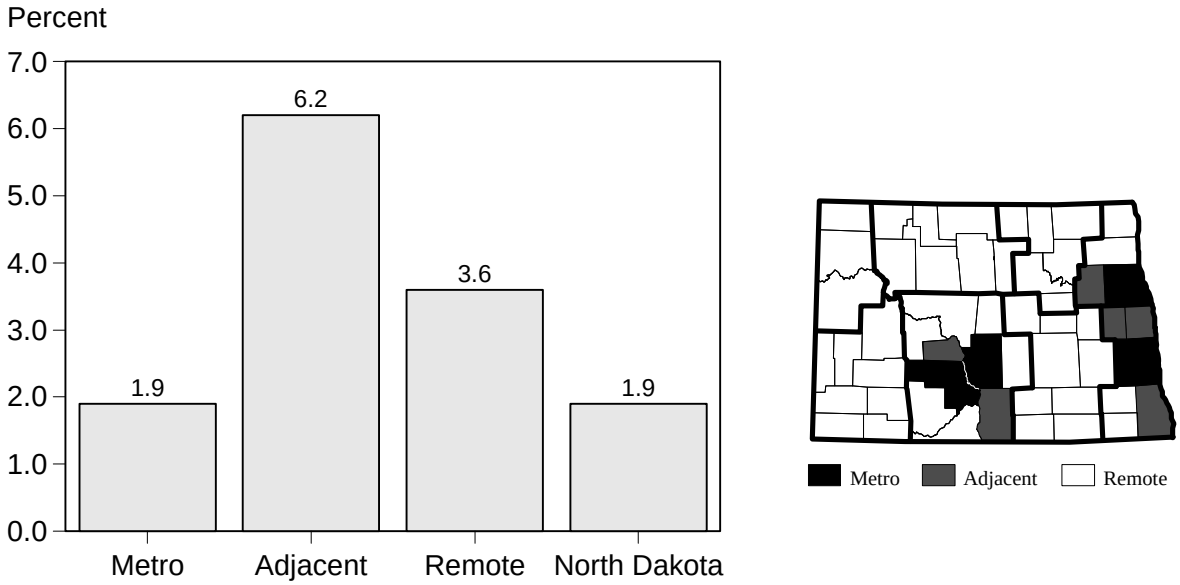


Figure 34. Percentage Change in North Dakota Taxable Sales and Purchases by Region and Area, 1995-1996

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 1996. During this period its sales increased to the point of nearly doubling the city (Bismarck) with the second largest volume of taxable sales and purchases. For the period 1980-1996, the only trade area group to increase taxable sales was the wholesale-retail center group, with growth of 35 percent (Table 7). Generally, as the city/town size decreased, the percentage loss of taxable sales increased; the complete shopping centers group lost 26 percent of their taxable sales compared to the 45 percent loss for the hamlets group (Figure 35).

The 1995-1996 period presents a much different picture with all trade area classification groups showing increased taxable sales. As the classification groups went from the larger trade centers to smaller hamlets, the percentage increase generally declined (Table 7). Wholesale-retail centers increased taxable sales by 2 percent from 1995-1996 while the smallest towns experienced a 1 percent improvement (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, 1980-1996

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (1996 DOLLARS) 1980	1990	1995	1996	PERCENTAGE CHANGE 1980 TO 1996	1995 TO 1996
	DOLLARS				PERCENT	
WHOLESALE RETAIL						
BISMARCK	594,474,082	579,659,867	698,993,574	703,220,654	18.3	0.6
FARGO	852,370,059	953,772,757	1,280,583,898	1,334,089,864	56.5	4.2
GRAND FORKS	433,967,966	544,222,948	640,148,437	637,855,594	47.0	-0.4
MANDAN	130,226,150	100,456,916	113,789,983	113,193,095	-13.1	-0.5
MINOT	437,745,143	411,602,621	486,447,931	500,887,098	14.4	3.0
WEST FARGO	39,164,931	48,712,652	68,386,128	67,053,413	71.2	-2.0
GROUP TOTAL	2,487,948,332	2,638,427,761	3,288,349,951	3,356,299,718	34.9	2.1
COMPLETE SHOPPING						
DEVILS LAKE	104,104,512	87,886,835	111,352,365	110,423,295	6.1	-0.8
DICKINSON	275,680,936	165,237,259	184,217,716	188,598,283	-31.6	-2.4
GRAFTON	61,569,861	49,344,990	50,716,465	48,875,224	-20.6	-3.6
JAMESTOWN	172,608,606	133,393,239	147,605,250	148,179,411	-14.2	0.4
VALLEY CITY	81,057,245	54,012,463	55,691,173	56,283,520	-30.6	1.1
WAHPETON	71,909,522	67,159,693	73,581,380	78,268,731	8.8	6.4
WILLISTON	299,832,623	142,042,289	148,507,706	155,304,755	-48.2	4.6
GROUP TOTAL	1,066,763,306	699,076,768	771,672,055	785,933,219	-26.3	-1.9
PARTIAL SHOPPING						
BEULAH	26,489,963	20,403,596	21,443,436	22,125,279	-16.5	3.2
BOTTINEAU	44,826,161	21,781,399	25,967,226	26,021,321	-42.0	0.2
BOWMAN	27,734,665	16,831,645	19,656,058	19,665,618	-29.1	0.1
CARRINGTON	39,270,470	24,808,085	29,689,789	30,504,146	-22.3	2.7
CAVALIER	24,434,323	19,855,734	23,783,594	26,359,264	7.9	10.8
HARVEY	33,049,135	19,338,549	21,460,978	21,765,203	-34.1	1.4
HETTINGER	19,331,579	12,896,635	13,694,183	12,464,219	-35.5	-9.0
LANGDON	33,069,548	20,724,792	24,013,920	22,102,333	-33.2	-8.0
LISBON	24,895,808	25,822,924	35,908,864	40,486,226	62.6	12.8
ROLLA	22,611,592	15,915,429	17,715,214	17,121,340	-24.3	-3.4
RUGBY	38,084,941	28,848,058	39,334,372	35,161,076	-7.7	-10.6
TIOGA	113,571,008	18,136,820	10,947,576	13,579,364	-88.0	24.0
WATFORD CITY	35,616,960	22,994,220	16,058,233	17,758,696	-50.1	10.6
GROUP TOTAL	482,986,154	268,357,886	299,673,443	305,114,085	-36.8	1.8
FULL CONVENIENCE						
BEACH	14,596,893	8,831,348	9,986,077	10,823,713	-25.9	8.4
CANDO	18,863,790	7,552,963	7,152,621	7,467,079	-60.4	4.4
CASSELTON	17,375,007	10,171,425	11,718,513	12,875,167	-25.9	9.9
COOPERSTOWN	18,512,454	11,970,405	12,652,189	13,112,647	-29.2	3.6
CROSBY	15,790,666	6,536,983	8,616,596	7,512,455	-52.4	-12.8
GARRISON	19,114,030	9,364,627	10,627,112	10,269,307	-46.3	-3.4
HAZEN	19,765,510	11,917,538	11,099,030	12,890,095	-34.8	16.1
HILLSBORO	11,037,802	9,426,890	11,198,308	11,446,453	3.7	2.2
KENMARE	22,897,923	9,511,500	19,169,948	17,483,251	-23.7	-8.8
KILLDEER	16,204,237	8,008,592	7,559,687	7,225,005	-55.4	-4.4
LAMOURE	13,316,817	10,525,586	9,015,260	9,559,144	-28.2	6.0
LINTON	15,356,241	8,864,463	7,727,579	7,988,705	-48.0	3.4

- Continued -

Table 7. continued

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (1996 DOLLARS) 1980	1990	1995	1996	PERCENTAGE CHANGE 1980 TO 1996	1995 TO 1996
	DOLLARS				PERCENT	
FULL CONVENIENCE						
MAYVILLE	20,682,540	12,726,587	14,687,790	15,875,495	-23.2	8.1
MICHIGAN	14,856,364	7,356,387	10,996,604	11,957,577	-19.5	8.7
MOHALL	15,993,477	9,528,453	11,749,383	11,430,824	-28.5	-2.7
NORTHWOOD	20,294,471	12,020,246	15,300,404	14,493,063	-28.6	-5.3
OAKES	26,418,456	14,702,207	15,387,777	15,180,474	-42.5	-1.4
PARK RIVER	16,066,617	8,668,042	10,572,145	10,602,153	-34.0	0.3
STANLEY	17,998,396	10,011,293	14,747,660	14,195,186	-21.1	-3.8
WASHBURN	15,596,912	9,788,311	14,745,528	13,924,418	-10.7	-5.6
WISHEK	12,925,482	8,632,370	8,113,749	9,303,964	-28.0	14.7
GROUP TOTAL	363,664,083	206,116,218	242,823,960	245,616,175	-32.5	1.2
MINIMUM CONVENIENCE						
ARTHUR	3,466,527	2,673,291	2,507,427	3,135,318	-9.6	25.0
ASHLEY	7,401,576	4,664,597	4,346,745	4,145,800	-44.0	-4.6
BELFIELD	14,341,870	6,851,857	7,390,419	9,137,550	-36.3	23.6
BERTHOLD	4,951,683	2,821,925	3,320,791	2,955,620	-40.3	-11.0
DRAYTON	6,478,550	5,384,660	7,176,228	6,507,663	0.5	-9.3
DUNSEITH	3,974,825	4,274,423	4,318,664	3,954,159	-0.5	-8.4
EDGELEY	9,615,937	6,084,783	8,879,513	8,886,444	-7.6	0.1
EDINBURG	3,453,626	2,739,891	3,001,388	3,588,128	3.9	19.6
ELGIN	6,256,718	4,282,183	6,064,430	5,885,174	-5.9	-3.0
ELLENDALE	14,993,390	6,182,830	6,839,543	5,782,151	-61.4	-15.5
EMERADO	2,347,534	3,065,338	5,044,329	5,395,869	129.9	7.0
ENDERLIN	7,745,421	3,930,593	3,394,380	3,787,728	-51.1	11.6
FESSENDEN	7,845,711	3,949,750	4,542,141	4,051,053	-48.4	-10.8
FINLEY	5,129,883	2,929,309	2,759,524	2,901,798	-43.4	5..2
FLASHER	4,603,778	2,286,217	1,360,982	1,492,140	-67.6	9.6
FORMAN	4,605,714	2,798,344	2,807,140	2,712,864	-41.1	-3.4
GLEN ULLIN	6,684,415	3,808,771	4,158,286	4,106,545	-38.6	-1.2
GWINNER	9,343,849	14,743,461	11,396,146	10,229,606	9.5	-10.2
HANKINSON	8,172,877	5,410,601	4,441,693	4,970,388	-39.2	11.9
HEBRON	5,919,796	2,488,226	2,014,683	2,135,864	-63.9	6.0
HOOPLE	5,099,112	2,127,597	2,642,449	2,781,448	-45.5	5.3
HUNTER	6,178,202	4,116,342	5,634,685	5,173,325	-16.3	-8.2
KINDRED	13,345,486	5,384,264	8,425,197	8,972,350	-32.8	6.5
KULM	5,228,287	2,792,022	2,619,155	2,682,035	-48.7	2.4
LAKOTA	7,463,464	4,116,090	2,767,580	2,512,848	-66.3	-9.2
LARIMORE	8,866,063	4,935,765	4,610,617	4,735,002	-46.6	2.7
LEEDS	6,435,516	2,547,654	3,763,098	4,955,903	- 23.0	31.7
LIDGERWOOD	9,107,024	6,475,359	5,101,917	5,278,094	-42.0	3.5
MADDOCK	9,567,604	2,705,074	3,109,201	3,043,380	-68.2	-2.1
MCVILLE	5,465,505	3,473,050	2,378,169	2,480,869	-54.6	4.3
MILNOR	8,762,815	5,677,235	5,409,155	5,240,805	40.2	-3.1
MINTO	2,209,498	3,127,929	3,644,654	3,599,333	62.9	-1.2
MOTT	12,395,856	4,401,469	3,379,479	3,580,637	-71.1	6.0
NAPOLEON	11,493,540	7,163,997	6,979,219	6,253,374	-45.6	-10.4
NEW ENGLAND	10,554,993	3,061,834	3,730,071	4,212,372	-60.1	12.9
NEW ROCKFORD	17,009,124	6,163,250	5,771,586	6,154,968	-63.8	6.6

- Continued -

Table 7. continued

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (1996 DOLLARS) 1980	1990	1995	1996	PERCENTAGE CHANGE 1980 TO 1996	1995 TO 1996
	DOLLARS				PERCENT	
MINIMUM CONVENIENCE						
NEW SALEM	10,183,937	5,283,817	5,982,106	5,600,418	-45.0	-6.4
NEW TOWN	5,202,192	3,054,087	3,412,494	3,428,560	-34.1	0.5
PAGE	4,417,579	2,468,381	1,339,617	1,746,515	-60.5	30.4
PEMBINA	2,398,337	3,264,927	3,542,858	3,656,355	52.5	3.2
POWERS LAKE	4,263,790	2,417,596	2,625,927	2,581,102	-39.5	-1.7
RAY	8,442,748	2,826,410	2,881,655	2,613,731	-69.0	-9.3
RICHARDTON	7,681,899	4,141,144	5,024,283	4,679,127	-39.1	-6.9
ROLETTE	7,113,453	2,430,627	2,856,758	3,158,547	-55.6	10.6
STEELE	4,981,640	3,676,922	4,937,308	6,402,201	28.5	29.7
STRASBURG	3,641,831	2,467,102	2,726,900	2,892,578	-20.6	6.1
TOWNER	5,468,819	3,117,766	2,909,600	3,992,160	-27.0	37.2
TURTLE LAKE	5,277,020	2,614,246	1,908,563	2,044,459	-61.3	7.1
UNDERWOOD	9,933,638	3,265,070	2,972,524	2,985,475	-70.0	0.4
VELVA	8,203,376	5,065,841	7,342,782	7,020,135	-14.4	-4.4
WALHALLA	7,823,187	6,516,121	6,583,700	6,497,112	-17.0	-1.3
WESTHOPE	6,806,231	2,311,865	2,558,260	2,690,407	-60.5	5.2
WIMBLEDON	7,377,559	5,422,204	5,319,152	4,010,570	45.6	-24.6
WYNDMERE	6,630,306	4,553,481	3,605,264	3,237,998	-51.2	-10.2
GROUP TOTAL	392,363,309	224,537,587	234,260,435	236,656,055	-39.7	1.0
HAMLETS						
ABERCROMBIE	1,206,712	459,057	1,814,055	2,275,406	88.6	25.4
ADAMS	1,653,428	667,080	724,502	754,694	-54.4	4.2
ALEXANDER	2,539,906	898,139	745,755	616,421	-75.7	-17.3
ANAMOOSE	2,790,499	1,397,455	1,837,991	1,902,016	-31.8	3.5
ANETA	1,154,754	960,966	960,959	1,037,463	-10.2	8.0
BINFORD	4,179,644	965,294	887,716	870,084	-79.2	-2.0
BISBEE	1,161,965	642,296	594,811	539,775	-53.6	-9.3
BOWBELLS	3,665,095	1,628,237	1,465,594	1,441,779	-60.7	-1.6
BOWDON	562,795	219,255	238,338	220,811	-60.8	-7.4
BUFFALO	1,664,472	735,727	862,908	910,584	-45.3	5.5
BURLINGTON	2,016,743	2,219,384	2,036,691	2,100,655	4.2	3.1
BUXTON	1,332,760	1,141,122	805,199	1,820,121	36.6	126.1
CARPIO	1,181,706	391,208	526,896	526,012	-55.5	-0.2
CARSON	2,212,204	1,384,386	1,174,390	1,240,854	-43.9	5.7
CENTER	2,805,853	1,881,373	1,954,836	1,921,057	-31.5	-1.7
COGSWELL	316,052	264,544	151,450	142,346	-55.0	-6.0
COLUMBUS	2,404,896	787,753	438,005	445,386	-81.5	1.7
CRYSTAL	656,051	709,449	546,647	533,356	-18.7	-2.4
DAVENPORT	- -	67,616	57,111	103,845	- -	81.8
DES LACS	48,067	140,258	533,782	453,172	842.8	-15.1
DRAKE	3,179,702	666,851	592,076	538,124	-83.1	-9.1
EDMORE	2,512,750	956,216	666,254	629,641	-74.9	-5.5
ESMOND	1,743,357	820,365	845,727	817,391	-53.1	-3.4
FAIRMOUNT	1,553,795	1,075,121	1,510,092	1,952,232	25.6	29.3
FORDVILLE	2,572,896	1,094,282	546,101	636,137	-75.3	16.5
FORT YATES	49,598	40,379	13,716	16,111	-67.5	17.5
GACKLE	3,074,826	1,281,761	1,460,425	1,209,508	-60.7	-17.2
GILBY	3,662,883	1,126,764	1,429,607	1,135,086	-69.0	-20.6
GLADSTONE	474,443	506,413	254,367	276,933	-41.6	8.9
GLENBURN	1,945,713	907,496	1,012,554	1,006,195	-48.3	-0.6
GOLDEN VALLEY	744,244	662,702	205,556	146,453	-80.3	-28.8
GOODRICH	1,031,574	577,404	378,332	317,398	-69.3	-16.1
GRANDIN	2,420,670	996,768	946,353	819,860	-66.1	-13.4

- Continued -

Table 7. continued

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (1996 DOLLARS) 1980	1990	1995	1996	PERCENTAGE CHANGE 1980 TO 1996	1995 TO 1996
	---------- DOLLARS----------				----PERCENT----	
HAMLETS						
GRANVILLE	687,265	286,326	340,887	407,815	-40.7	19.6
GRENORA	4,514,642	1,641,838	2,854,615	2,046,650	-54.7	-28.3
HALLIDAY	3,116,453	973,277	1,113,731	1,057,627	-66.1	-5.0
HANNAFORD	955,209	549,928	545,561	668,387	-30.0	22.5
HARWOOD	1,575,897	1,735,271	2,377,135	2,923,335	85.5	23.0
HATTON	3,845,074	2,149,817	1,906,989	1,837,154	-52.2	-3.7
HAZELTON	1,471,508	1,076,703	1,569,441	1,591,653	8.2	1.4
HOPE	4,592,478	1,354,568	1,600,587	2,392,400	-47.9	49.5
HORACE	972,848	1,052,487	982,859	996,956	2.5	1.4
KENSAL	686,882	264,590	245,591	236,581	-65.6	-3.7
LANSFORD	3,057,052	535,253	982,445	925,485	-69.7	-5.8
LEHR	1,700,346	427,008	239,517	195,582	-88.5	-18.3
LEONARD	1,496,485	1,098,449	1,103,091	1,070,813	-28.4	-2.9
LIGNITE	1,803,224	1,006,917	977,303	1,025,971	-43.1	5.0
LINCOLN	- -	604,862	728,281	584,902	- -	-19.7
LITCHVILLE	4,074,481	1,786,012	1,192,127	1,136,859	-72.1	-4.6
MANVEL	974,416	1,061,680	1,239,090	1,277,595	31.1	3.1
MAPLETON	586,509	665,958	814,930	905,988	54.5	11.2
MARION	682,066	425,505	335,990	252,249	-63.0	-24.9
MAX	1,347,854	874,175	923,316	983,817	-27.0	6.6
MCCLUSKY	4,478,294	1,481,806	1,761,575	1,719,812	-61.6	-2.3
MEDINA	2,140,063	710,843	657,162	569,966	-73.4	-13.3
MINNEWAUKAN	1,355,690	262,861	317,535	246,550	-81.8	-22.4
MOORETON	1,747,374	847,450	910,034	1,152,232	-34.1	26.6
MUNICH	4,147,188	1,245,109	1,501,206	1,191,817	-71.3	-20.6
NECHE	1,144,195	1,373,949	1,307,392	1,205,867	5.4	-7.8
NEW LEIPZIG	3,665,846	1,464,041	1,447,136	1,505,012	-59.0	4.0
NOONAN	815,037	1,952,277	838,851	664,627	-18.5	-20.8
OSNABROCK	1,092,276	591,449	407,271	367,987	-66.3	-9.7
PARSHALL	4,356,592	1,755,415	2,128,337	2,103,319	-51.7	-1.2
PETERSBURG	1,375,054	433,966	317,536	329,235	-76.1	3.7
PICK CITY	- -	442,065	780,786	800,141	- -	2.5
PLAZA	1,243,422	850,016	879,450	861,727	-30.7	-2.0
PORTAL	672,017	753,351	778,826	1,040,850	54.9	33.6
PORTLAND	2,886,689	1,732,358	1,806,160	1,587,900	-45.0	-12.1
REEDER	2,136,501	779,704	751,551	733,208	-65.7	-2.4
REGENT	3,218,535	1,752,726	1,159,822	1,268,892	-60.6	9.4
REYNOLDS	1,454,994	880,370	1,009,322	1,137,726	-21.8	12.7
RHAME	1,197,269	642,882	644,803	793,445	-33.7	23.1
RIVERDALE	- -	903,736	606,758	526,270	- -	-13.3
ROCKLAKE	2,813,710	1,136,218	784,191	761,028	-73.0	-3.0
RUTLAND	1,023,946	673,705	745,344	763,178	-25.5	2.4
S HEART	1,420,992	809,196	854,973	894,504	-37.1	4.6
SAWYER	1,210,425	795,803	2,812,372	1,843,052	52.3	-34.5
SCRANTON	2,796,312	1,648,496	1,704,632	1,809,874	-35.3	6.2
SELFRIDGE	614,345	257,963	173,708	215,471	-64.9	24.0
SHERWOOD	2,428,426	1,596,111	1,584,951	1,629,403	-32.9	2.8
SHEYENNE	3,546,619	1,394,308	1,380,956	1,627,985	-54.1	17.9
ST JOHN	846,042	766,351	609,660	575,362	-32.0	-5.6
ST THOMAS	1,034,282	661,695	757,240	801,342	-22.5	5.8
STANTON	932,916	644,354	602,268	660,374	-29.2	9.7
STARKWEATHER	650,100	256,944	223,904	238,832	-63.3	6.7
SURREY	958,295	807,204	984,804	995,880	3.9	1.1
SYKESTON	.	190,469	502,846	410,569	- -	-18.4

- Continued -

Table 7. continued

CITY	ADJUSTED TAXABLE SALES AND PURCHASES (1996 DOLLARS) 1980	1990	1995	1996	PERCENTAGE CHANGE 1980 TO 1996	1995 TO 1996
	DOLLARS				PERCENT	
HAMLETS						
TAPPEN	1,810,572	1,304,268	1,251,171	1,256,409	-30.6	0.4
THOMPSON	3,101,720	931,056	717,697	823,792	-73.4	14.8
TOLNA	1,973,019	1,245,594	989,669	819,306	-58.5	-17.2
TOWER CITY	3,719,124	1,543,201	1,392,980	1,293,435	-65.2	-7.2
UPHAM	603,993	409,140	407,384	429,474	-28.9	5.4
WALCOTT	- -	402,520	1,758,642	2,012,728	- -	14.5
WILDROSE	1,103,715	842,231	2,153,779	1,768,965	60.3	-17.9
WILLOW CITY	2,312,251	1,106,931	1,008,466	1,032,952	-55.3	2.4
WILTON	1,762,068	855,113	1,469,847	1,587,205	-9.9	8.0
WING	1,214,374	756,332	444,283	464,920	-61.7	4.7
ZAP	779,085	232,243	162,758	193,686	-75.1	19.0
ZEELAND	1,586,160	565,896	394,203	372,615	-76.5	-5.5
GROUP TOTAL	176,030,266	90,533,459	96,176,521	96,963,649	-44.9	0.8
IN-STATE TOTAL	4,969,755,450	4,127,049,678	4,932,956,365	5,026,582,901	1.1	1.9

[a] constant 1996 dollars

Source: North Dakota Tax Commissioner. Selected Years 1980-1996. North Dakota Sales and Use Tax Statistical Report, Annual. Bismarck, ND.

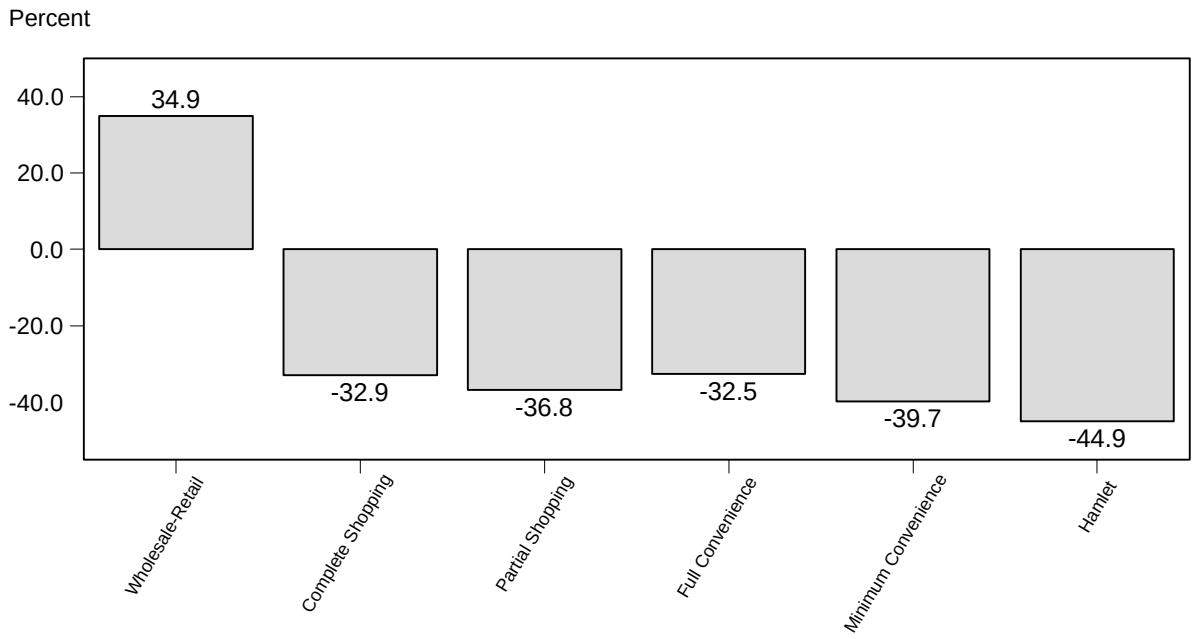


Figure 35. Percentage Change in Taxable Sales and Purchases for North Dakota Towns and Cities by Trade Area Classification, 1980-1996

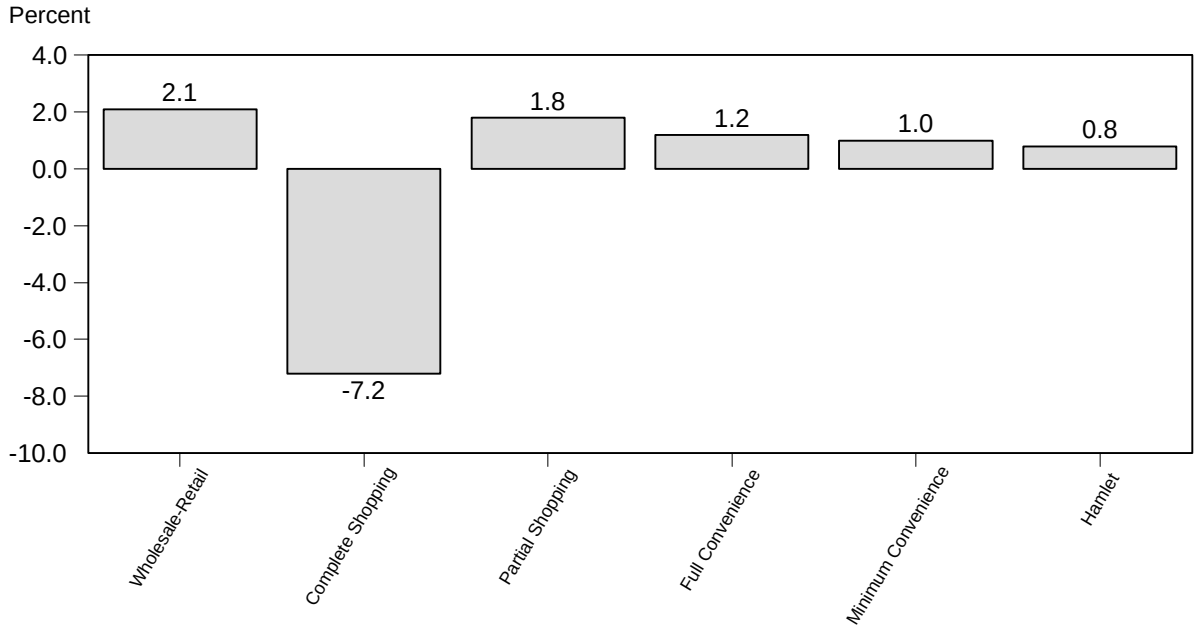


Figure 36. Percentage Change in Taxable Sales and Purchases for North Dakota Towns and Cities by Trade Area Classification, 1995-1996

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 1996, up from the 1.00 in 1980 (Table 8). Fargo had the greatest pull factor for wholesale-retail centers in 1996 with a 1.25 value. Only 6 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 (2.90) of any city in the state in 1996. Gwinner, a city that has a large manufacturing plant located in it, had the second highest pull factor (1.73).

For the 1980-1996 period, the only trade center class that had a positive change in pull factor was the wholesale-retail centers with a 6.3 percent change (Figure 37). Hamlets had the largest decline in pull factors with a decline of 44.9 percent. All other trade classifications had pull factor declines of more than 20 percent.

Short run changes in pull factors were much less than they were in the long run. Changes in pull factors for the 1995-1996 period were 2 percent or less for all trade area classifications except the hamlets, which increased by 3.5 percent (Figure 38). Wholesale-retail trade centers and complete shopping centers were the only two classifications to decline, with 0.5 and 0.2 percent decreases, respectively.

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

$$\text{Pull Factor} = \frac{\text{Trade Area Capture (TAC)}}{\text{Trade Area Population}}$$

$$\text{where TAC} = \frac{LTS_j}{PCS_s \times (TAPCI_j / PCI_s)}$$

LTS_j = Local taxable sales in community j
PCS_s = State per capita taxable sales
$TAPCI_j$ = Per capita income in trade area j
PCI_s = State average per capita income

Table 8. Pull Factors for North Dakota Cities by Trade Area Classifications, 1980-1996

City	Pull Factors				Change	
	1980	1990	1995	1996	1980 to 1996	1995 to 1996
					--------percent--------	
WHOLESALE RETAIL						
BISMARCK	1.03	1.08	1.04	1.02	-0.8	-2.0
FARGO	1.12	1.18	1.24	1.25	11.3	1.3
GRAND FORKS	0.92	1.12	1.09	1.07	16.4	-1.6
MINOT	0.94	0.95	0.92	0.92	-1.9	-0.0
AVERAGE	1.00	1.08	1.07	1.06	6.3	-0.5
COMPLETE SHOPPING						
DEVILS LAKE	0.90	0.87	0.98	0.96	6.6	-1.8
DICKINSON	1.36	1.07	1.00	1.00	-26.3	-0.2
GRAFTON	1.12	0.86	0.77	0.72	-35.4	-6.5
JAMESTOWN	0.88	0.80	0.77	0.76	-13.5	-0.7
VALLEY CITY	0.84	0.71	0.67	0.67	-20.2	-0.5
WAHPETON	0.71	0.79	0.75	0.79	10.7	4.9
WILLISTON	1.78	1.09	1.01	1.04	-41.7	2.6
AVERAGE	1.08	0.88	0.85	0.85	-21.7	-0.2
PARTIAL SHOPPING						
BEULAH	0.68	0.57	0.50	0.50	-25.5	0.6
BOTTINEAU	1.07	0.60	0.69	0.68	-35.9	-0.6
BOWMAN	0.86	0.71	0.85	0.83	-3.4	-2.3
CARRINGTON	0.98	0.88	0.95	0.97	-1.0	2.1
CAVALIER	0.82	0.68	0.71	0.78	-5.3	9.5
HARVEY	0.86	0.64	0.59	0.61	-29.7	2.1
HETTINGER	0.84	0.69	0.72	0.63	-24.1	-11.4
LANGDON	0.73	0.63	0.72	0.67	-8.6	-7.3
LISBON	0.68	0.77	0.97	1.08	59.5	11.4
ROLLA	0.50	0.39	0.35	0.33	-33.7	-5.9
RUGBY	0.93	0.97	1.20	1.07	14.8	-11.2
TIOGA	4.97	1.25	0.66	0.79	-84.1	20.2
WATFORD CITY	1.27	1.03	0.69	0.74	-41.8	7.6
AVERAGE	1.17	0.75	0.74	0.74	-36.2	0.9
FULL CONVENIENCE						
BEACH	0.81	0.68	0.90	0.97	20.1	7.4
CANDO	1.59	1.09	1.08	1.14	-28.7	4.9
CASSELTON	0.76	0.47	0.46	0.51	-32.7	9.5
COOPERSTOWN	0.80	0.70	0.72	0.75	-5.6	4.3
CROSBY	0.72	0.38	0.40	0.35	-51.6	-12.4
GARRISON	0.82	0.54	0.50	0.48	-41.3	-4.6
HAZEN	0.60	0.35	0.28	0.31	-47.9	13.3
HILLSBORO	0.46	0.50	0.51	0.51	11.8	0.6
KENMARE	0.96	0.56	0.92	0.82	-14.6	-10.9

- Continued -

Table 8. continued

City	Pull Factors 1980	1990	1995	1996	Change 1980 to 1996	Change 1995 to 1996
FULL CONVENIENCE Cont.					-- percent --	-- percent
KILLDEER	1.06	0.77	0.67	0.64	-39.6	--
LAMOURE	0.70	0.68	0.55	0.58	-17.6	-5.1
LINTON	0.68	0.45	0.37	0.38	-43.9	5.2
MAYVILLE	0.62	0.48	0.46	0.49	-19.9	3.3
MICHIGAN	2.63	1.72	2.65	2.90	10.2	6.4
MOHALL	1.31	0.85	0.87	0.84	-35.5	9.5
NORTHWOOD	1.33	0.88	0.93	0.88	-33.5	-3.2
OAKES	1.09	0.78	0.77	0.76	-30.1	-5.4
PARK RIVER	0.70	0.39	0.50	0.50	-27.9	-1.2
STANLEY	0.90	0.70	0.84	0.80	-10.6	1.5
WASHBURN	0.85	0.74	0.93	0.86	1.4	-4.0
WISHEK	0.87	0.75	0.74	0.85	-2.9	-7.5
AVERAGE	0.96	0.69	0.76	0.78	-19.3	14.7
						1.7
MINIMUM CONVENIENCE						
ARTHUR	0.71	0.60	0.48	0.60	-15.4	24.5
ASHLEY	0.55	0.46	0.44	0.42	-23.4	-4.2
BELFIELD	0.85	0.74	0.72	0.88	4.7	22.5
BERTHOLD	1.11	0.82	0.79	0.68	-38.1	-13.6
DRAYTON	0.57	0.54	0.65	0.58	3.3	-10.0
DUNSEITH	0.23	0.25	0.21	0.18	-19.2	-10.8
EDGELEY	0.79	0.66	1.04	1.03	29.9	-0.7
EDINBURG	0.46	0.53	0.59	0.72	55.9	20.7
ELGIN	0.65	0.68	0.99	0.97	49.9	-2.2
ELLENDALE	0.82	0.44	0.46	0.39	-52.6	-14.9
ENDERLIN	0.43	0.26	0.21	0.23	-46.4	10.9
FESSENDEN	0.80	0.52	0.50	0.44	-44.6	-11.0
FINLEY	0.42	0.36	0.28	0.30	-29.7	4.8
FLASHER	0.59	0.36	0.18	0.20	-66.5	9.0
FORMAN	0.31	0.24	0.23	0.23	-27.1	-2.8
GLEN ULLIN	0.64	0.47	0.44	0.43	-33.4	-2.1
GWINNER	1.49	2.78	1.97	1.73	16.2	-12.0
HANKINSON	0.65	0.47	0.35	0.38	-40.4	10.8
HEBRON	0.51	0.31	0.21	0.22	-56.6	4.8
HUNTER	1.24	1.03	1.26	1.16	-6.7	-8.2
KINDRED	0.89	0.38	0.53	0.56	-36.8	6.0
KULM	0.87	0.54	0.48	0.49	-43.3	2.1
LAKOTA	0.60	0.41	0.28	0.25	-57.7	-8.0
LARIMORE	0.46	0.31	0.24	0.25	-45.4	2.8
LEEDS	0.79	0.52	0.76	1.00	26.1	31.5
LIDGERWOOD	0.67	0.71	0.52	0.53	-20.6	2.9

- Continued -

Table 8. continued

City	Pull Factors 1980	1990	1995	1996	Change 1980 to 1996	Change 1995 to 1996
MINIMUM CONVENIENCE					– Percent -	-Percent-
MADDOCK	0.95	0.41	0.45	0.44	-53.3	-2.0
MCVILLE	0.79	0.60	0.42	0.44	-44.4	5.5
MILNOR	0.83	0.61	0.57	0.55	-34.2	-3.1
MINTO	0.41	0.63	0.78	0.78	92.6	-0.2
MOTT	0.92	0.46	0.29	0.31	-66.4	6.6
NAPOLEON	0.96	0.70	0.70	0.63	-34.3	-10.6
NEW ENGLAND	0.83	0.36	0.40	0.45	-45.9	13.9
NEW ROCKFORD	0.76	0.39	0.35	0.36	-52.3	4.7
NEW SALEM	0.68	0.46	0.44	0.40	-40.6	-7.7
NEW TOWN	0.29	0.20	0.19	0.19	-33.3	-0.4
PAGE	0.84	0.65	0.31	0.41	-51.0	30.5
PEMBINA	0.44	0.56	0.51	0.52	18.4	1.9
POWERS LAKE	0.65	0.54	0.47	0.46	-29.0	-1.3
RAY	1.12	0.51	0.44	0.39	-64.8	-10.6
RICHARDTON	0.92	0.86	0.88	0.81	-12.6	-8.5
ROLETTE	0.76	0.30	0.28	0.31	-59.3	8.3
STEELE	0.55	0.45	0.68	0.89	61.1	30.7
STRASBURG	1.15	0.74	0.77	0.81	-29.5	5.9
TOWNER	0.43	0.31	0.28	0.38	-12.0	36.4
TURTLE LAKE	0.46	0.29	0.18	0.19	-59.4	6.2
UNDERWOOD	0.63	0.34	0.26	0.25	-59.7	-0.5
VELVA	0.59	0.48	0.68	0.65	10.6	-5.0
WALHALLA	0.60	0.68	0.60	0.58	-2.6	-2.3
WESTHOPE	0.76	0.33	0.35	0.37	-51.5	4.9
WIMBLEDON	1.30	1.20	1.07	0.80	-38.1	-25.3
WYNDMERE	1.04	0.81	0.57	0.51	-51.3	-11.2
AVERAGE	0.73	0.56	0.53	0.53	-26.4	0.2
HAMLETS						
ADAMS	0.46	0.24	0.27	0.28	-38.8	4.9
ANETTA	0.38	0.37	0.38	0.41	7.5	9.6
BISBEE	0.33	0.36	0.35	0.32	-1.9	-9.0
BOWBELLS	0.49	0.29	0.21	0.20	-58.4	-2.3
CARSON	0.36	0.28	0.24	0.26	-28.2	6.9
CENTER	0.29	0.24	0.23	0.22	-24.9	-4.2
COLUMBUS	0.89	0.41	0.18	0.19	-79.2	2.3
DRAKE	0.54	0.16	0.14	0.13	-75.5	-4.1
EDMORE	0.51	0.25	0.15	0.15	-71.4	-5.2
FAIRMOUNT	0.34	0.30	0.38	0.49	45.6	28.7
FORDVILLE	0.88	0.42	0.22	0.26	-70.2	18.1
GACKLE	0.49	0.18	0.20	0.17	-66.3	-17.8
HALLIDAY	0.38	0.17	0.18	0.17	-55.6	-5.7

- Continued -

Table 8. continued

City	Pull Factors 1980	1990	1995	1996	Change 1980 to 1996	Change 1995 to 1996
HAMLETS Cont.						
HATTON	0.50	0.27	0.21	0.20	-60.4	-4.7
HAZELTON	0.27	0.26	0.35	0.36	35.3	1.7
HOPE	0.67	0.29	0.29	0.42	-36.2	48.9
LIGNITE	0.62	0.45	0.34	0.36	-42.7	4.0
MAX	0.24	0.20	0.18	0.18	-23.3	4.8
MCCLUSKY	1.23	0.56	0.55	0.60	-51.4	8.7
MEDINA	0.38	0.17	0.14	0.12	-69.0	-13.5
MUNICH	0.77	0.35	0.42	0.34	-55.6	-19.1
NECHE	0.36	0.44	0.37	0.34	-6.6	-8.2
NEW LEIPZIG	0.94	0.39	0.39	0.41	-55.9	5.0
PARSHALL	0.34	0.16	0.16	0.16	-53.6	-2.3
PETERSBURG	0.63	0.23	0.17	0.18	-71.3	5.5
REGENT	0.77	0.56	0.31	0.34	-56.4	9.5
RUTLAND	0.28	0.28	0.31	0.32	14.9	2.3
SCRANTON	0.43	0.35	0.36	0.38	-12.5	3.3
SHERWOOD	0.68	0.54	0.46	0.47	-31.1	2.4
SHEYENNE	0.95	0.49	0.46	0.53	-44.4	15.2
TOLNA	0.33	0.30	0.24	0.20	-39.0	-16.7
WILTON	0.19	0.14	0.17	0.18	-9.7	5.7
AVERAGE	0.53	0.32	0.28	0.29	-44.9	3.5

Source: Leistritz and Wanzek. 1993. North Dakota 1993: Patterns and Trends in Economic Activity. Fargo: Department of Agricultural Economics, NDSU; Coon and Leistritz. 1997. Updated Pull Factors For North Dakota, unpublished data, Fargo: Department of Agricultural Economics, NDSU.

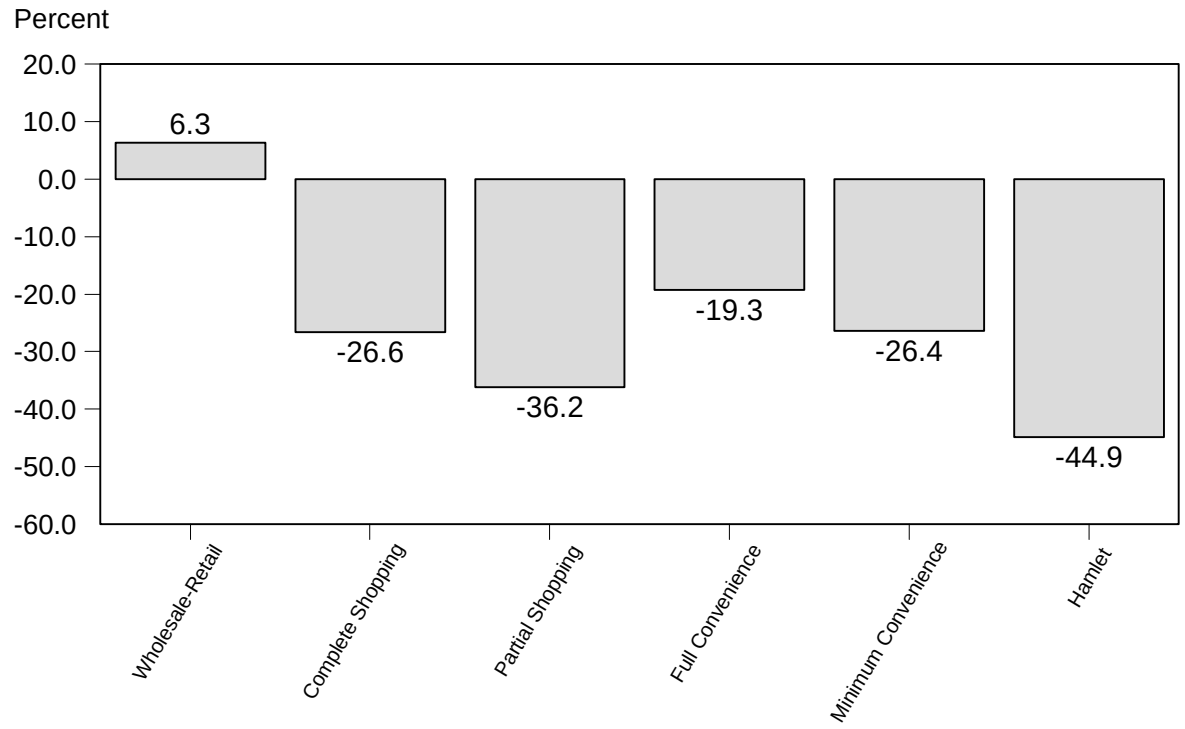


Figure 37. Percentage Change in Pull Factor for North Dakota Cities by Trade Center Classification, 1980-1996

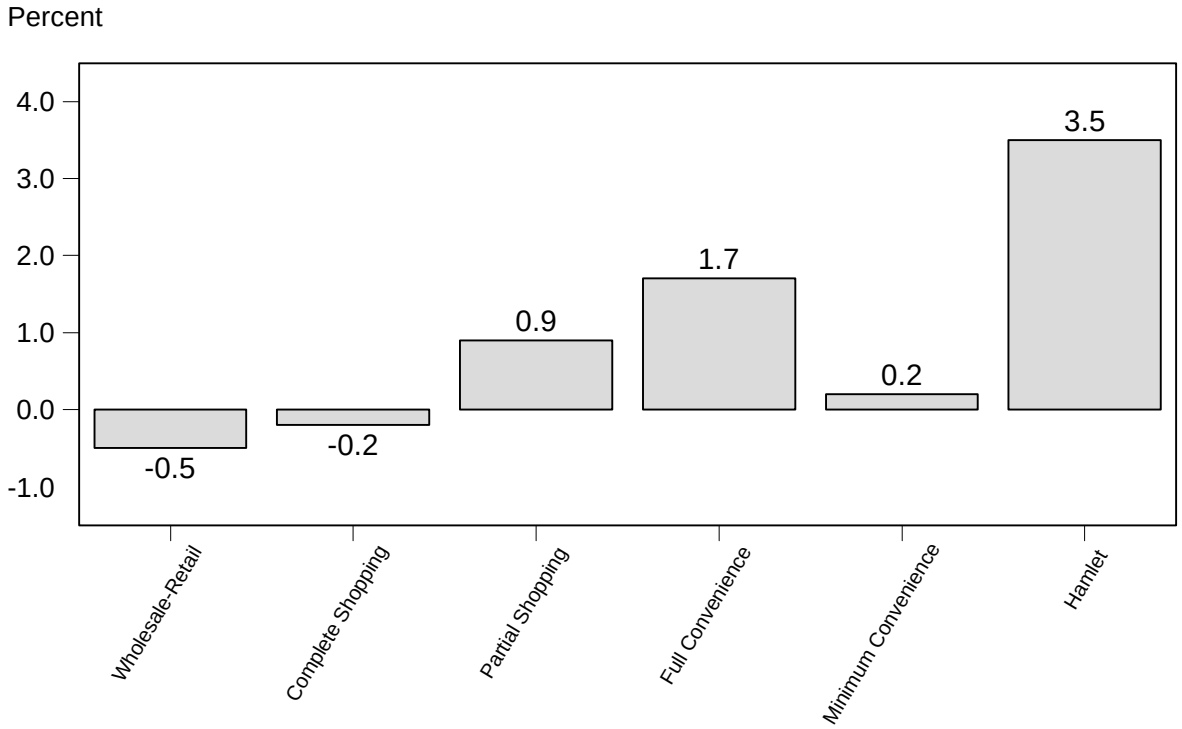


Figure 38. Percentage Change in Pull Factor for North Dakota Cities by Trade Center Classification, 1995-1996

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, 1996, exceeded $8.5 billion. Region 5 accounted for 30 percent of this total, followed by Regions 4 and 7. Cass County alone accounted for about 25 percent of the state's banking assets. 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 70 percent, with metro areas generally having higher ratios (74%) (Figure 40). Adjacent counties had the lowest loan-to-deposit ratios (62%). Loan-to-deposit ratios reported by the state's rural banks were 68.9%. Loan-to-deposit ratios have risen significantly since the previous version of this report. North Dakota's ratio has risen by 10 percent from 1993 to 1996. Each of the areas has increased their ratio, with the remote county banks having the largest change. This may indicate these banks are becoming more willing to make additional credit available to qualified borrowers.

The percentage of nonperforming loans is a manifestation of the extent to which an area's residents and businesses (and their lenders) are experiencing financial stress. Nonperforming loans as a percentage of total loans averaged 1.0 percent statewide, ranging from a high of 7.1 percent in Williams County to 0 percent in Divide County (Table 9).

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

Area	Financial Indicators, 1996* Total Assets	Bank Loans to Deposits	Non-Performing Loans	Females in Workforce 1989
	- $000 -	- % -	- % -	- % -
Divide	48,620	38.1	0.0	44.1
McKenzie	281,753	77.6	0.5	40.4
Williams	306,964	54.7	7.1	44.1
REGION 1	637,337	63.6	3.2	43.4
Bottineau	160,077	50.0	1.7	41.2
Burke	51,011	67.8	2.5	40.0
McHenry	62,576	65.9	2.2	38.6
Mountrail	124,479	54.4	0.2	44.8
Pierce	42,608	38.0	0.2	42.3
Renville	22,175	71.1	0.1	42.2
Ward	623,081	64.1	1.0	44.2
REGION 2	1,086,007	60.2	1.2	43.3
Benson	23,071	81.4	0.2	40.5
Cavalier	156,651	71.7	1.6	39.2
Eddy	--	--	--	42.7
Ramsey	251,732	76.9	1.2	46.2
Rolette	104,318	45.0	1.9	46.5
Towner	63,424	61.4	0.3	41.5
REGION 3	599,196	68.3	1.3	43.8
Grand Forks	934,557	84.8	0.6	44.0
Nelson	78,277	51.1	1.6	41.2
Pembina	198,432	76.1	0.5	43.9
Walsh	134,430	70.9	0.9	43.9
REGION 4	1,345,696	79.9	0.6	43.8
Cass	2,140,901	69.3	0.5	46.6
Ransom	146,548	81.6	0.1	41.4
Richland	38,958	52.4	2.8	41.0
Sargent	80,064	59.3	0.3	38.0
Steele	70,366	71.3	2.5	39.5
Traill	109,410	67.3	0.5	44.4
REGION 5	2,586,277	69.4	0.6	45.3

- Continued -

Table 9. continued

Area	Financial Indicators, 1996* Total Assets	Bank Loans to Deposits	Non-Performing Loans	Females in Workforce 1989
	- $000 -	- % -	- % -	- % -
Barnes	143,324	76.9	0.6	44.4
Dickey	--	--	--	43.7
Foster	--	--	--	44.5
Griggs	112,919	76.2	0.2	41.9
LaMoure	85,923	76.3	1.5	40.3
Logan	60,607	51.1	1.7	38.6
McIntosh	87,863	50.9	2.4	43.7
Stutsman	149,306	81.9	2.6	46.4
Wells	85,231	56.6	4.7	42.3
REGION 6	725,173	70.0	1.8	44.1
Burleigh	610,535	77.0	0.5	48.3
Emmons	49,756	60.4	0.6	38.6
Grant	40,542	67.8	0.7	39.7
Kidder	51,925	70.4	1.3	39.1
McLean	131,830	57.3	1.4	42.0
Mercer	119,512	63.7	1.6	40.3
Morton	76,232	74.2	2.7	45.8
Oliver	16,116	74.0	1.7	41.2
Sheridan	44,213	47.8	4.9	33.1
Sioux	--	--	--	45.0
REGION 7	1,140,661	70.6	1.0	45.5
Adams	48,673	51.7	1.4	43.9
Billings	--	--	--	38.2
Bowman	47,296	73.0	1.4	45.4
Dunn	--	--	--	40.5
Golden Valley	18,500	63.7	0.1	43.3
Hettinger	33,145	70.2	1.6	42.9
Slope	--	--	--	40.7
Stark	276,425	79.7	0.6	45.2
REGION 8	424,039	74.0	0.8	44.1
NORTH DAKOTA	8,544,386	69.8	1.0	44.4

*Data as of December 31, 1996

Sources: U.S. Department of Commerce, Bureau of Census. 1992. 1990 *Census of Population and Housing*, STF3A. Washington, D.C.; (Females in the Workforce). Public Affairs Department, Federal Reserve Bank of Minneapolis, 1996. Ninth Federal Reserve District Bank Directory. Minneapolis, Minnesota.

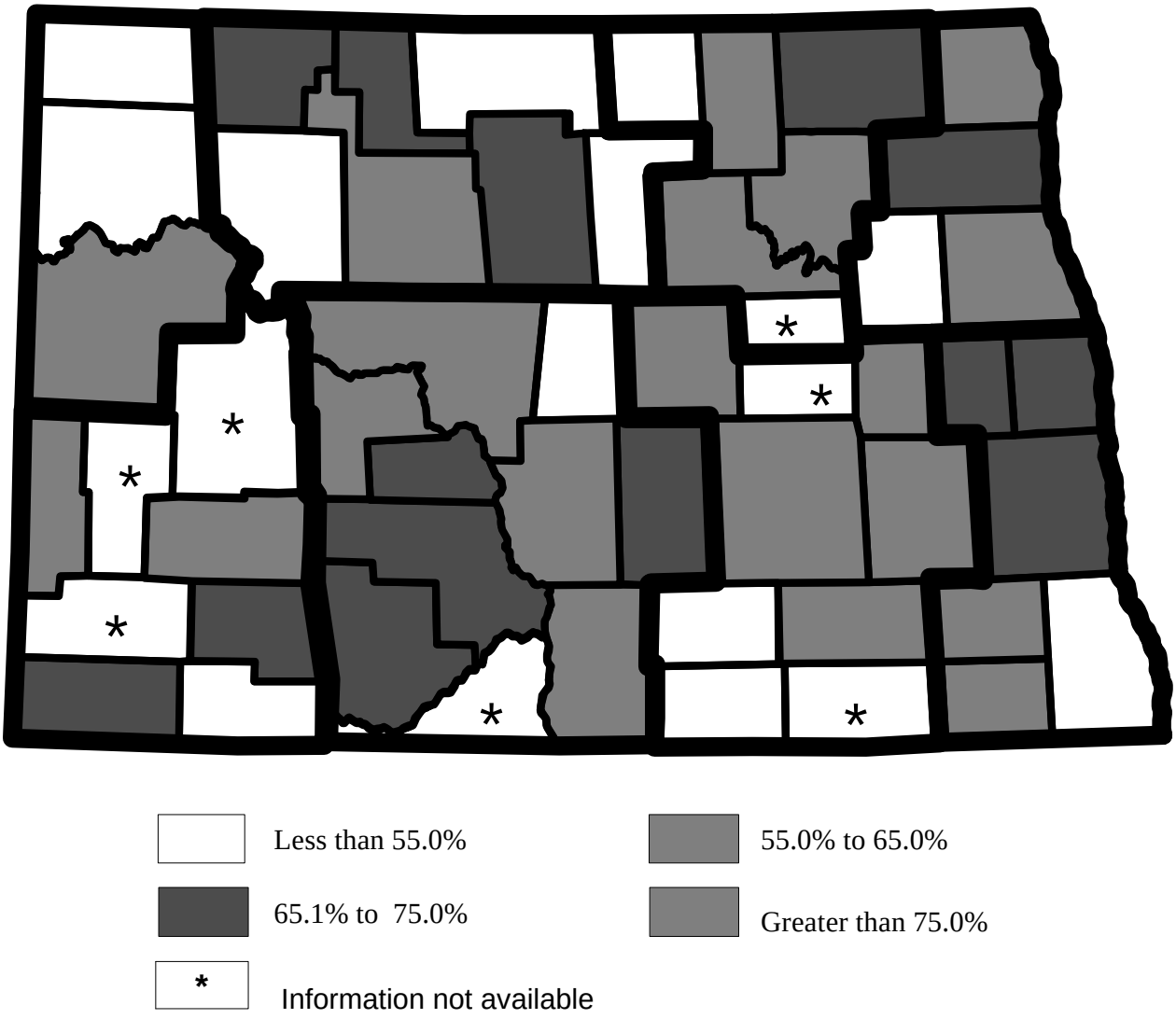
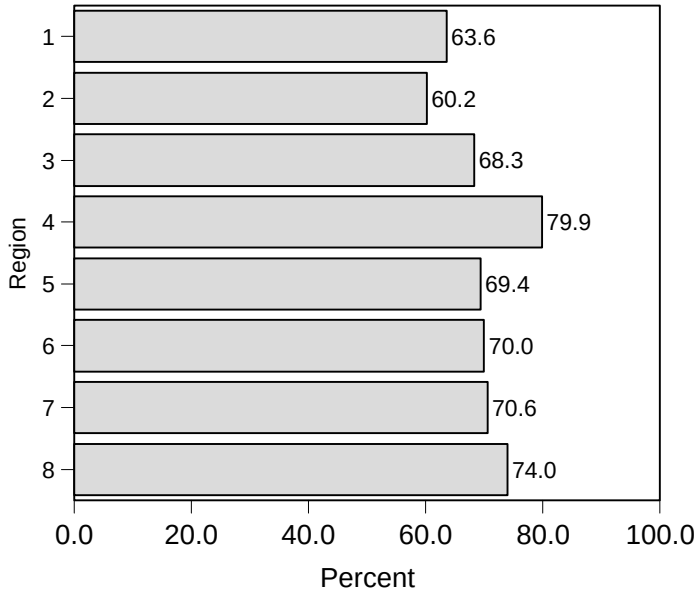
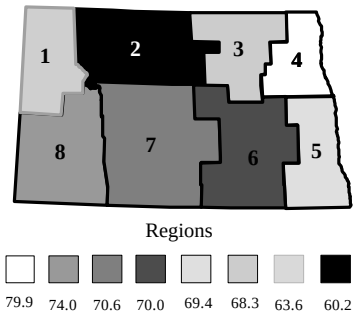
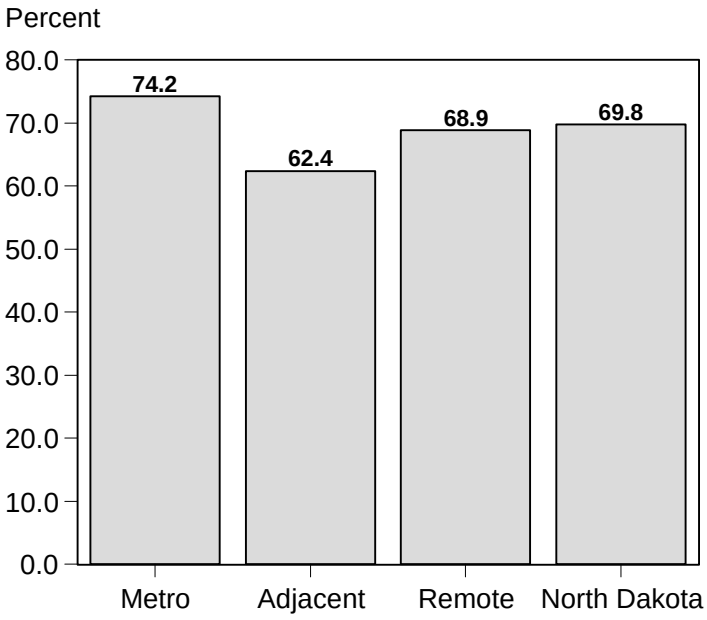


Figure 39. North Dakota Percentage of Bank Loans to Deposits, 1996







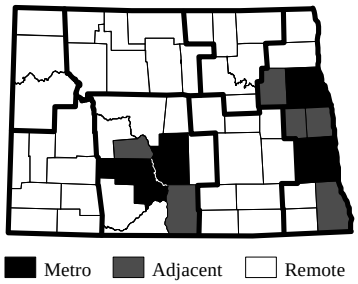


Figure 40. North Dakota Percentage of Bank Loans to Deposits by Region and Area, 1996

Females in the Workforce

One indication of "survivability" in the 90s is the availability of employment for both men and women; in short, the potential for households to have two wage earners. Statewide, 44 percent of the workforce was women in 1989 (Table 9), up from 38.5 percent in 1979 and 32.7 percent in 1969. Burleigh County ranked highest in percentage of women in the workforce, 48 percent, and Sheridan County lowest, with only one-third of the workforce composed of females. Figure 41 shows that women make up a higher percentage of the workforce in the southern half of the state; Figure 42 paints this observation even more sharply, with Regions 1, 2, 3, and 4 in the northern portion of North Dakota having almost identical percentages of women in the workforce. 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 does 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.

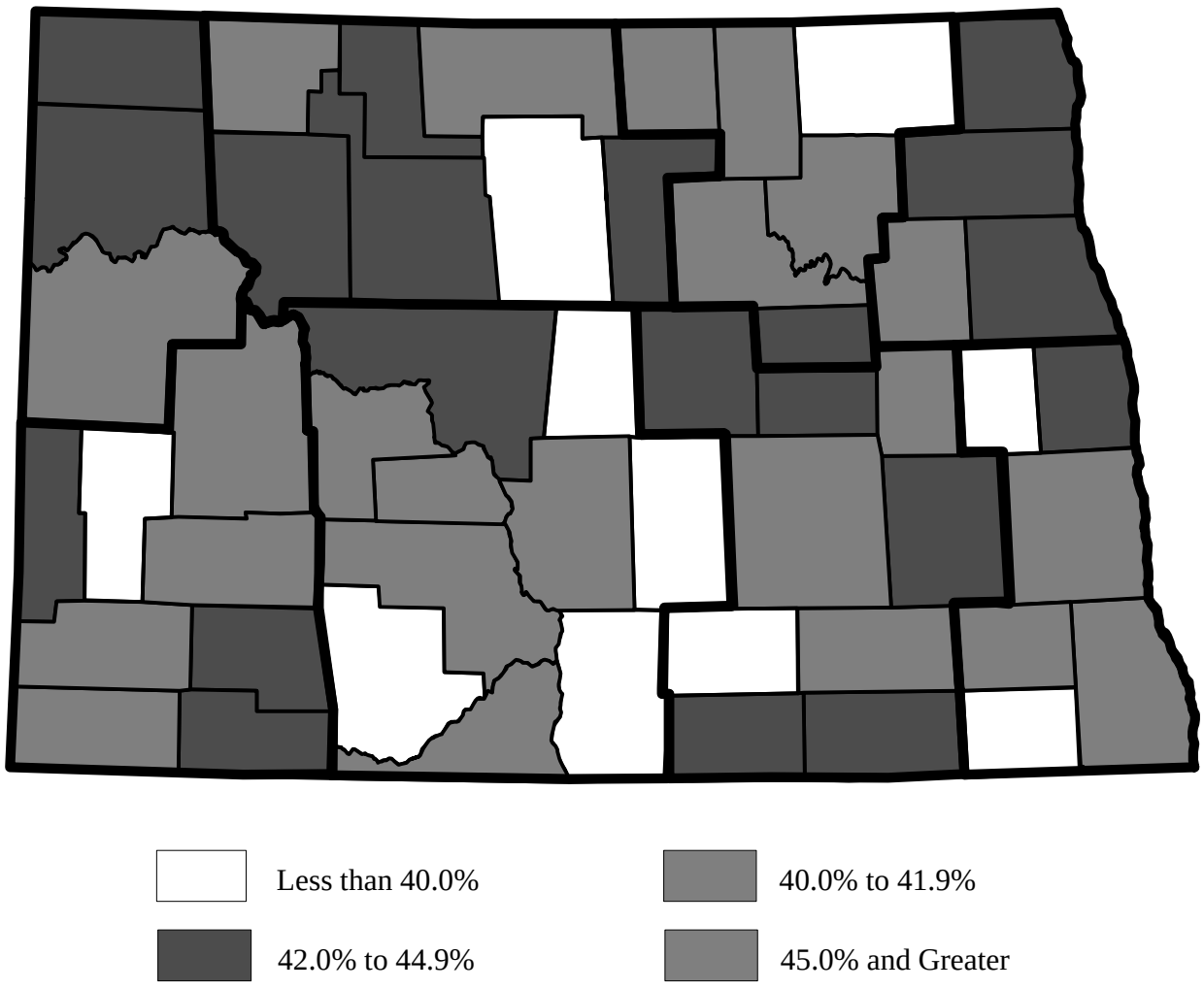
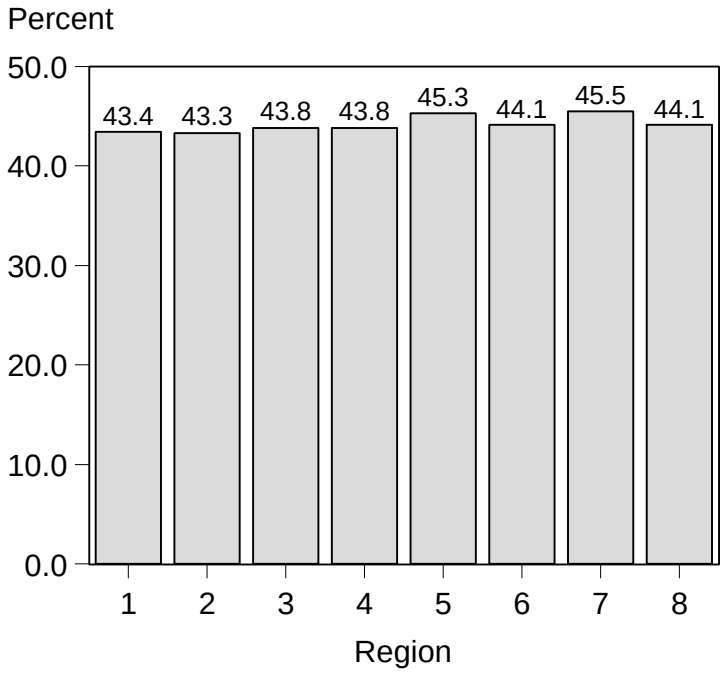
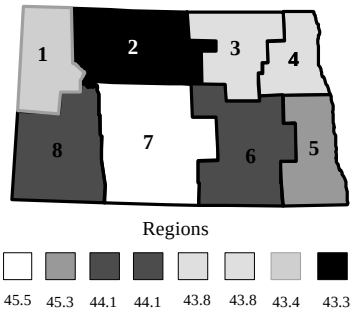
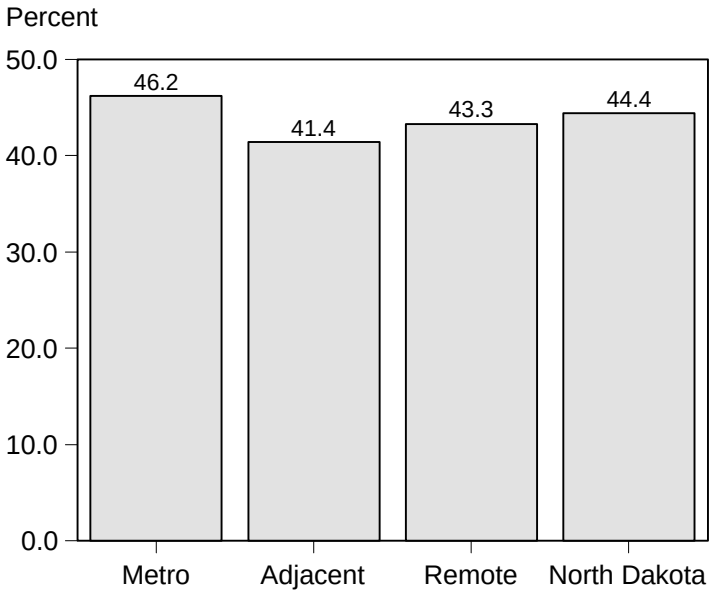


Figure 41. North Dakota Percentage of Females in the Workforce, 1989







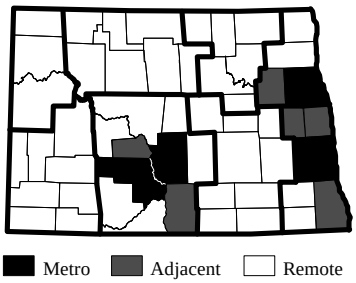


Figure 42. North Dakota Percentage of Females in the Workforce by Region and Area, 1989

POLICY IMPLICATIONS

A review of key economic indicators points out the consequences of the state's high level of dependency on activities in 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 35 percent of employment growth in Region 5, 45 percent in Region 4, and 46 percent in Region 7), Region 5 also gained more than 4,600 jobs in the retail sector and more than 3,800 in manufacturing. The retail trade and government sectors were sources of substantial employment growth in Regions 4 and 7.

Growth in manufacturing employment from 1986 to 1996 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 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 substantial 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, 1980-1996
Migration, 1980-1996
Population Age 65 and Over, 1996
Dependency Ratio, 1996
High School and College Graduates, 1990
1996-1997 High School Graduates Attending College
Population Less Than Age 18, 1996
City Populations and Trade Area Populations, 1980-1996
Population Projections, 1990-2010
Number of Farms and Average Farm Size, 1954-1992

SOURCES

Most data were derived from the decennial *Census of Population and Housing*, U.S. Bureau of the Census, Washington, D.C. (1980 and 1990). Migration rates and population projections are 1990 decennial and 1996 Intercensal Population Estimates-based, but migration rates were computed by the Census Data Center at NDSU and projections were made by the North Dakota Demographic Projection Model developed at the Department of Agricultural Economics, North Dakota State University (update 1992). 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, Updated Pull Factors For North Dakota, unpublished data, Department of Agricultural Economics, North Dakota State University, and 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 1996 populations are compared, and then one explanation of 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 policy-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. The declining numbers of school-aged children in some counties will affect school planning policies quite differently than increasing numbers of school children in others. Recent high school graduates, and the numbers of those going on to college also are provided. Decreasing farm numbers and the resultant average farm size also are presented. Farm numbers presented in this report were not updated from this report's previous version, because data from the 1997 Census of Agriculture will not be released until December, 1998. These numbers were presented again because of their significance to the North Dakota economy.

In addition, this section presents population projections through the year 2010. 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 1.4 percent of its population between 1980 and 1996 (Table 10), but not all counties lost population (Figure 43). Population growth was concentrated in Cass, Grand Forks and Burleigh Counties. Smaller levels of growth were experienced in Sioux, Mercer, Ward and Rolette Counties. All other counties lost population. Region 6 experienced the greatest percentage loss (15.9 percent) followed by Region 8 (15.0 percent), and Region 1 (12.0 percent). Population losses also were experienced in Region 2, 3, and 4, although not as large as the other declining regions. Only Regions 5 and 7 had population growth from 1980 to 1996. Although adjacent and remote counties lost a significant share of their population, the metro areas grew by 17.3 percent from 1980-1996. (Figure 44).

Table 10. North Dakota Population and Migration, 1980-1996, Dependency Ratio, and Percentage of Population Age 65 and Over, 1996

Area	Population 1980	Population 1990	Population 1996	Percentage Change 1980-96	Net Migration 1980-90 Total	Net Migration 1980-90 Rate	Net Migration 1980-96 Total	Net Migration 1980-96 Rate[a]	Net Migration 1990-96 Total	Net Migration 1990-96 Rate	1996 Dependency Ratio[b]	1996 Percent Elderly
						– % –		– % –		– % –		
DIVIDE	3,494	2,899	2,523	-27.8	-606	-17.3	-864	-24.7	-258	-8.9	50.0	28.9
MCKENZIE	7,132	6,383	5,851	-18.0	-1,808	-25.4	-2,537	-35.6	-729	-11.4	45.4	14.6
WILLIAMS	22,237	21,129	20,534	-7.7	-4,374	-19.7	-5,443	-24.5	-1,069	-5.1	43.6	15.7
REGION 1	32,863	30,411	28,908	-12.0	-6,788	-20.7	-8,844	-26.9	-2,056	-6.8	44.7	16.7
BOTTINEAU	9,239	8,011	7,538	-18.4	-1,417	-15.3	-1,750	-18.9	-333	-4.2	46.0	21.9
BURKE	3,822	3,002	2,469	-35.4	-846	-22.1	-1,289	-33.7	-443	-14.8	47.9	25.8
MCHENRY	7,858	6,528	6,161	-21.6	-1,436	-18.3	-1,662	-21.2	-226	-3.5	46.0	21.8
MOUNTRAIL	7,679	7,021	6,753	-12.1	-1,051	-13.7	-1,369	-17.8	-318	-4.5	46.7	18.3
PIERCE	6,166	5,052	4,718	-23.5	-1,246	-20.2	-1,462	-23.7	-216	-4.3	47.5	24.6
RENVILLE	3,608	3,160	2,843	-21.2	-568	-15.7	-836	-23.2	-268	-8.5	43.9	19.0
WARD	58,392	57,921	59,734	2.3	-9,134	-15.6	-10,947	-18.8	-1,813	-3.1	38.8	11.7
REGION 2	96,764	90,695	90,216	-6.8	-15,698	-16.2	-19,315	-20.0	-3,617	-4.0	41.3	15.1
BENSON	7,944	7,198	6,905	-13.1	-1,737	-21.9	-2,357	-29.7	-620	-8.6	49.0	14.8
CAVALIER	7,636	6,064	5,270	-31.0	-1,724	-22.6	-2,477	-32.4	-753	-12.4	45.4	21.4
EDDY	3,554	2,951	2,876	-19.1	-551	-15.5	-530	-14.9	21	0.7	46.5	23.8
RAMSEY	13,048	12,681	12,455	-4.5	-942	-7.2	-1,239	-9.5	-297	-2.3	43.3	18.3
ROLETTE	12,177	12,772	14,029	15.2	-1,628	-13.4	-1,528	-12.6	100	0.8	47.4	9.2
TOWNER	4,052	3,627	3,209	-2.1	-595	-14.7	-944	-23.3	-349	-9.6	48.1	23.4
REGION 3	48,411	45,293	44,744	-7.6	-7,177	-14.8	-9,075	-18.8	-1,898	-4.2	46.3	16.0
GRAND FORKS	66,100	70,683	71,450	8.1	-4,866	-7.4	-8,722	-13.2	-3,856	-5.5	35.5	9.0
NELSON	5,233	4,410	3,905	-25.4	-620	-11.9	-814	-15.6	-194	-4.4	48.4	27.5
PEMBINA	10,399	9,238	8,741	-15.9	-1,456	-14.0	-1,829	-17.6	-373	-4.0	44.4	19.1
WALSH	15,371	13,840	12,799	-16.7	-2,045	-13.3	-2,965	-19.3	-920	-6.7	44.3	19.0
REGION 4	97,103	98,171	96,895	-0.2	-8,987	-9.3	-14,330	-14.8	-5,343	-5.4	38.0	12.0
CASS	88,247	102,874	113,343	28.4	5,334	6.0	10,468	11.9	5,134	5.0	34.5	10.0
RANSOM	6,698	5,921	5,794	-13.5	-748	-11.2	-698	-10.4	50	0.8	44.0	20.7
RICHLAND	19,207	18,148	18,162	-5.4	-2,307	-12.0	-2,477	-12.9	-170	-0.9	42.3	15.2
SARGENT	5,512	4,549	4,441	-19.4	-1,068	-19.4	-1,242	-22.5	-174	-3.8	42.1	17.6
STEELE	3,106	2,420	2,277	-26.7	-732	-23.6	-839	-27.0	-107	-4.4	43.2	19.5
TRAILL	9,624	8,752	8,706	-9.5	-867	-9.0	-758	-7.9	109	1.3	43.9	19.5
REGION 5	132,394	142,664	152,723	15.4	-388	-0.3	4,454	3.4	4,842	3.4	36.7	21.8

Table 10. continued

Area	Population 1980	Population 1990	Population 1996	Percentage Change 1980-96	Net Migration 1980-90 Total	Net Migration 1980-90 Rate	Net Migration 1980-96 Total	Net Migration 1980-96 Rate[a]	Net Migration 1990-96 Total	Net Migration 1990-96 Rate	1996 Dependency Ratio[b]	1996 Percent Elderly
						– % --		– % --		– % --		
BARNES	13,960	12,545	12,114	-13.2	-1,672	-12.0	-1,929	-13.8	-257	-2.1	51.7	20.0
DICKEY	7,207	6,107	5,676	-21.2	-1,205	-16.7	-1,553	-21.6	-348	-5.7	44.3	20.8
FOSTER	4,611	3,983	3,866	-16.2	-728	-15.8	-817	-17.7	-89	-2.2	45.8	21.0
GRIGGS	3,714	3,303	2,984	-19.7	-464	12.5	-679	-18.3	-215	-6.5	47.0	24.0
LAMOURE	6,473	5,383	4,970	-23.2	-1,249	-19.3	-1,599	-24.7	-350	-6.5	46.7	22.4
LOGAN	3,493	2,847	2,443	-30.1	-749	-21.4	-1,096	-31.4	-347	-12.2	45.7	23.8
MCINTOSH	4,800	4,021	3,642	-24.1	-641	-13.4	-755	-15.7	-114	-2.8	51.6	32.6
STUTSMAN	24,154	22,241	21,338	-11.7	-3,326	-13.8	-4,454	-18.4	-1,128	-5.1	42.8	18.3
WELLS	6,979	5,864	5,271	-24.5	-1,174	-16.8	-1,523	-21.8	-349	-6.0	46.7	25.1
REGION 6	75,391	66,294	62,304	-15.9	-10,208	-13.5	-14,405	-19.1	-3,197	-4.8	46.3	21.3
BURLEIGH	54,811	60,131	65,681	19.8	-885	-1.6	1,908	3.5	2,793	4.6	38.2	11.7
EMMONS	5,877	4,830	4,443	-24.4	-1,133	-19.3	-1,494	-25.4	-361	-7.5	47.7	24.4
GRANT	4,274	3,549	3,114	-27.1	-927	-21.7	-1,289	-30.2	-362	-10.2	50.2	23.3
KIDDER	3,833	3,332	2,997	-21.8	-678	-17.7	-976	-25.5	-298	-8.9	46.8	21.9
MCLEAN	12,383	10,457	9,897	-20.1	-2,600	-21.0	-3,022	-24.4	-422	-4.0	46.8	20.5
MERCER	9,404	9,808	9,548	1.5	-1,004	-10.7	-1,562	-16.6	-558	-5.7	42.7	13.1
MORTON	25,177	23,700	24,422	-3.0	-3,827	-15.2	-3,590	-14.3	237	1.0	42.9	15.1
OLIVER	2,495	2,381	2,234	-10.5	-395	-15.8	-574	-23.0	-179	-7.5	42.4	12.3
SHERIDAN	2,819	2,148	1,859	-34.1	-735	-26.1	-1005	-35.7	-270	-12.6	46.0	25.0
SIOUX	3,620	3,761	4,095	13.1	-700	-19.3	-769	-21.2	-69	-1.8	47.8	5.2
REGION 7	124,693	124,097	128,290	2.9	-12,884	-10.3	-12,373	-9.9	511	0.4	41.4	14.1
ADAMS	3,584	3,174	2,841	-20.7	-555	-15.5	-810	-22.6	-255	-8.0	43.9	20.7
BILLINGS	1,138	1,108	1,129	-0.8	-217	-19.1	-247	-21.7	-30	-2.7	40.2	10.8
BOWMAN	4,229	3,596	3,303	-21.9	-836	-19.8	-1,114	-26.3	-278	-7.7	46.6	21.7
DUNN	4,627	4,005	3,751	-18.9	-1,122	-24.3	-1,460	-31.6	-338	-8.4	45.4	16.8
GOLDEN VALLEY	2,391	2,108	1,932	-48.0	-483	-20.2	-694	-29.0	-211	-10.0	49.6	22.1
HETTINGER	4,275	3,445	2,982	-30.2	-1,020	-23.9	-1,427	-33.4	-407	-11.8	46.3	22.9
SLOPE	1,157	907	827	-28.5	-349	-30.2	-469	-40.5	-120	-13.2	40.6	13.4
STARK	23,697	22,832	22,694	-4.3	-4,240	-17.9	-5,185	-21.9	-945	-4.1	42.6	14.7
REGION 8	45,098	41,175	39,459	-15.0	-8,822	-19.6	-11,406	-25.3	-2,584	-6.3	43.8	16.7
NORTH DAKOTA	652,717	638,800	643,539	-1.4	-71,952	-11.0	-85,294	-13.1	-13,342	-2.1	40.7	14.5

[a]Rate of migration is number of net migrants per hundred population
[b]Percentage of county population less than 18 or greater than 64
Source: U.S. Department of Commerce, Bureau of the Census. 1980 and 1990 Decennial Censuses of Population and Housing; U.S. Department of Commerce, Bureau of the Census. Intercensal Population Estimates, 1996.

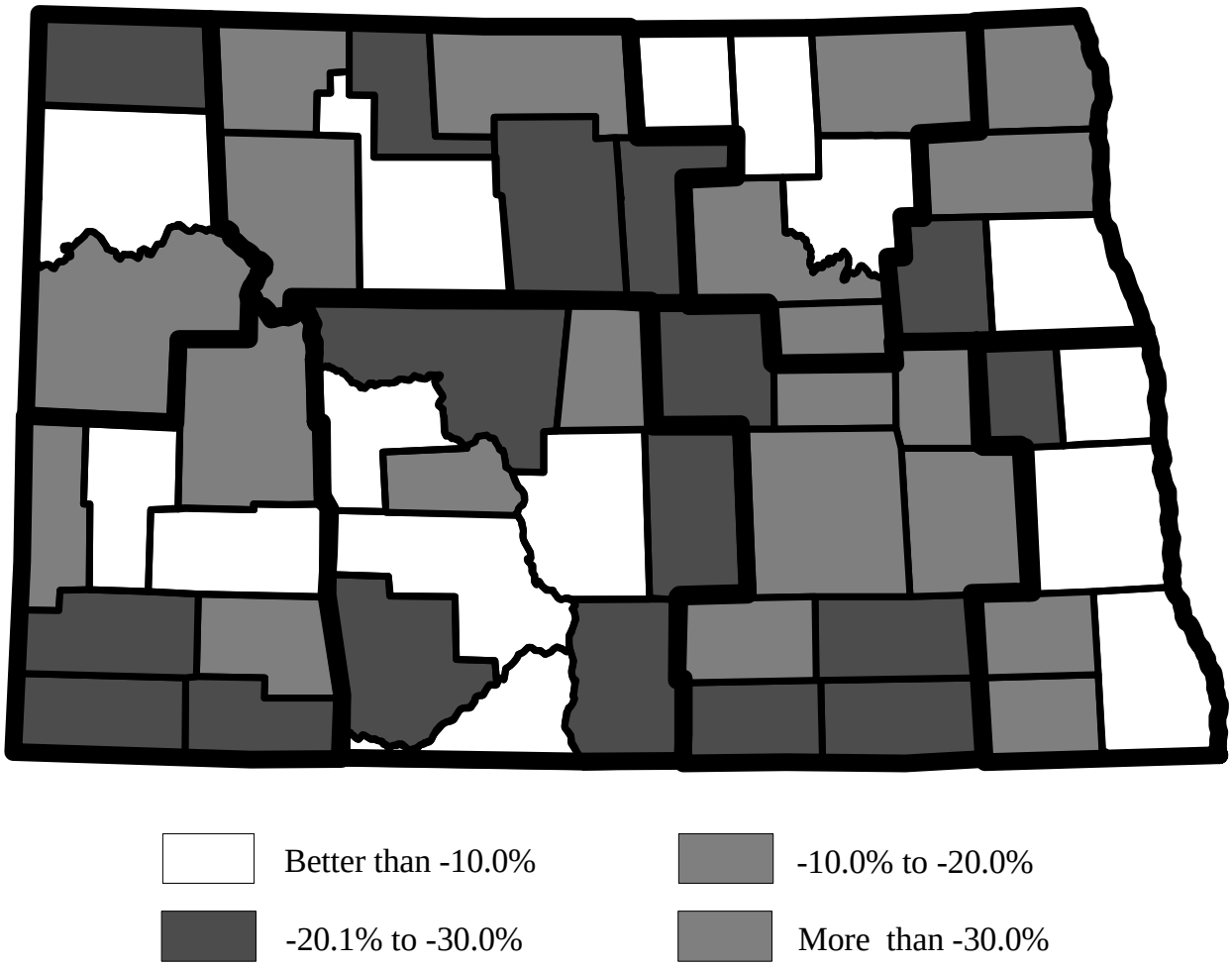
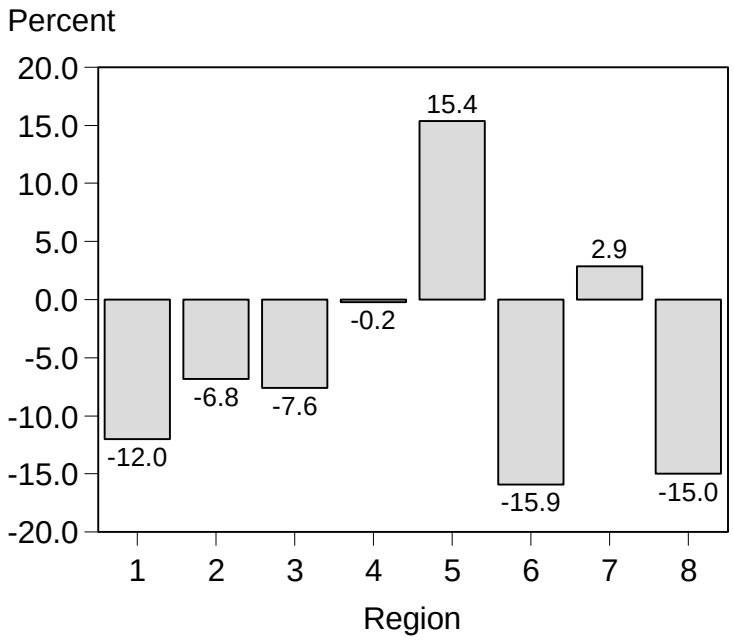
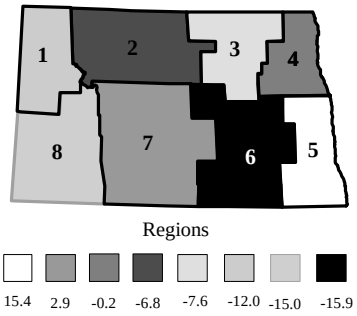
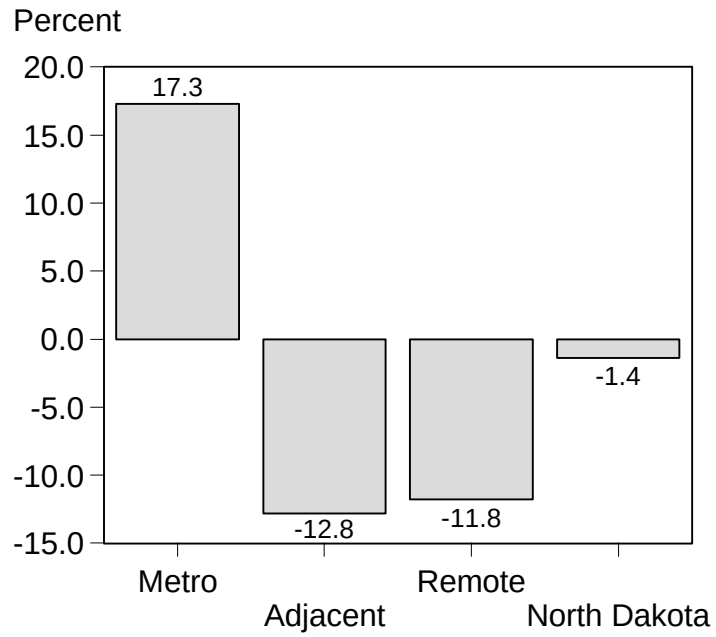


Figure 43. North Dakota Population Change, 1980-1996







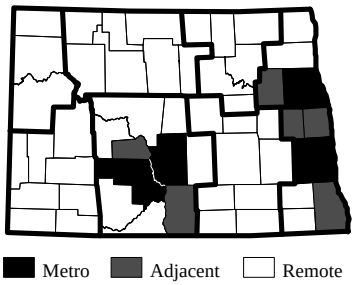


Figure 44. North Dakota Population Change by Region and Area, 1980-1996

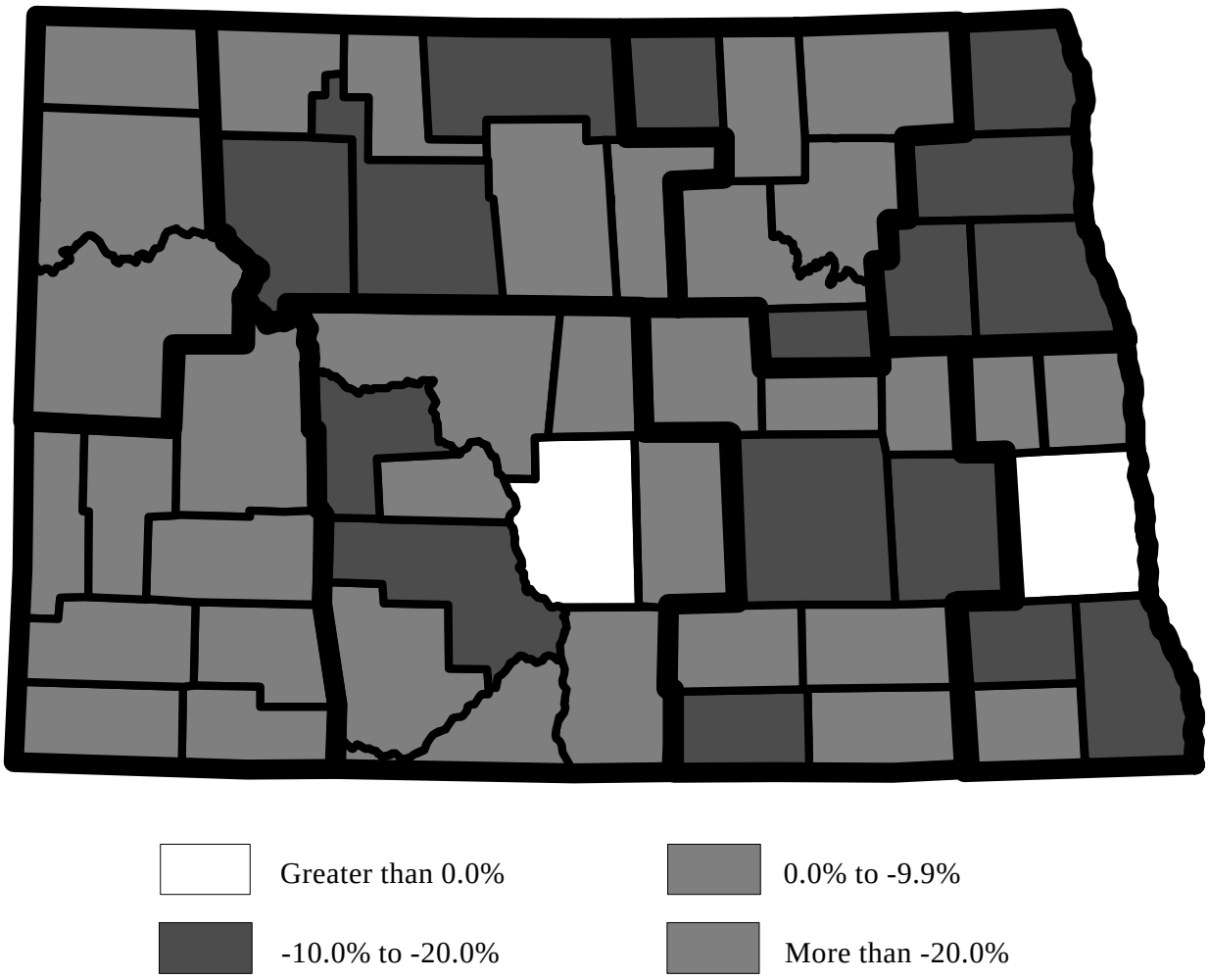


Figure 45. North Dakota Net Migration, 1980-1996

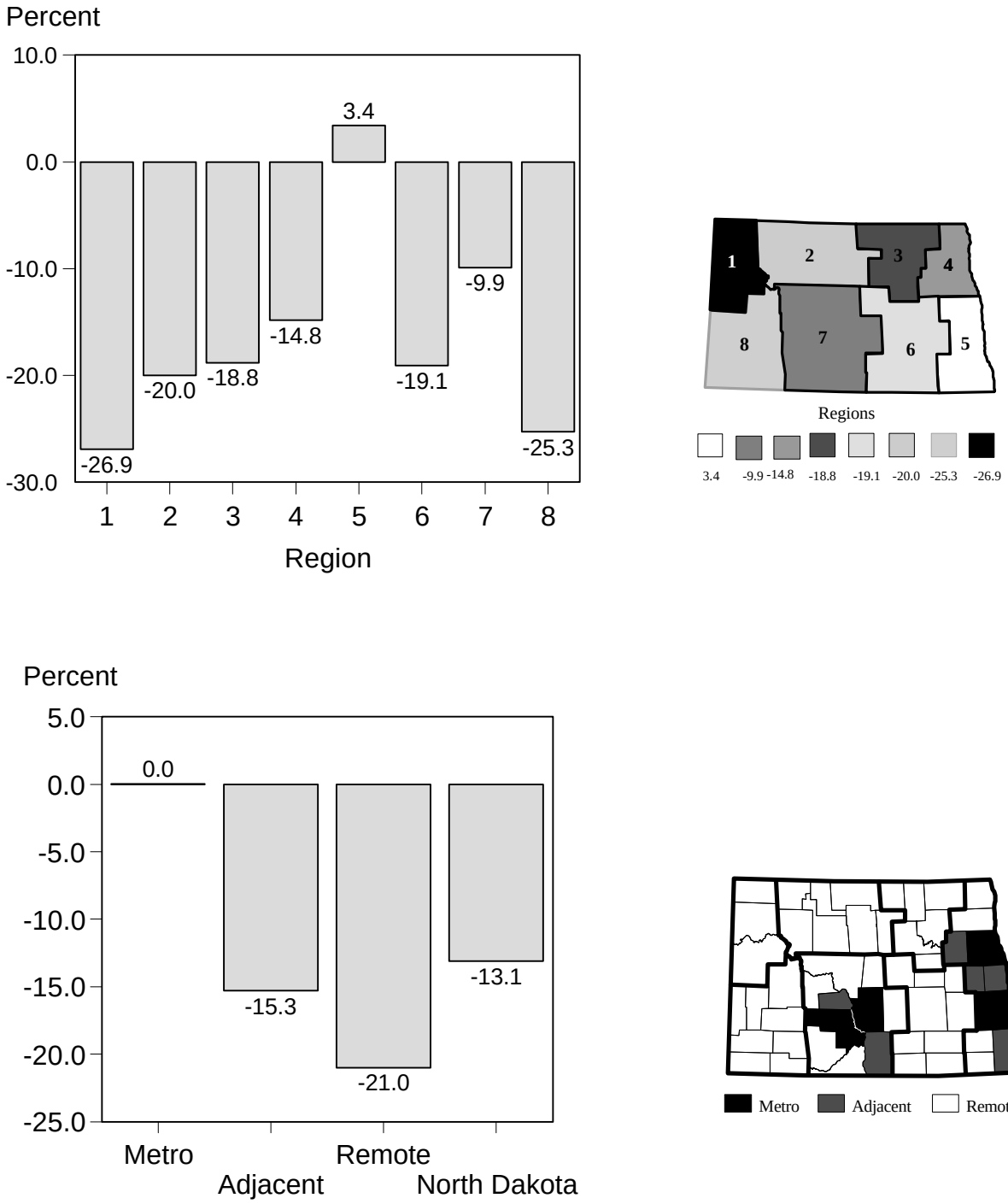


Figure 46. North Dakota Net Migration by Region and Area, 1980-1996

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 1980-96 period (Figure 45). This means that more people moved out of these counties than moved in between 1980 and 1996 (Figure 46). Out-migration was highest in Regions 1 and 8 for the 1980-1996 period. Short-term migration (1990-1996) has a very similar pattern: Cass and Burleigh Counties had positive migration; out-migration was largest for Regions 1 and 8; and Region 5 was the only one with significant in-migration. Long- and short-term migration for Region 5 was the same rate (3.4). Adjacent and remote counties had rather large out-migration rates for the 1980-1996 period, a time when metro counties had virtually no net migration. 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, 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. Divide, Grant, and McIntosh Counties each had dependency ratios in 1996 over 50.0, meaning over half of their population was outside the labor force ages of 18 to 64 (Figure 47). Regions 5 and 4 had the lowest dependency ratios (36.7 and 38.0; Figure 48). As might be expected, the metro counties had the lowest dependency ratio (36 percent) among the three types of areas. Nonmetro adjacent counties and the remote counties had dependency ratios of 44 percent or more.

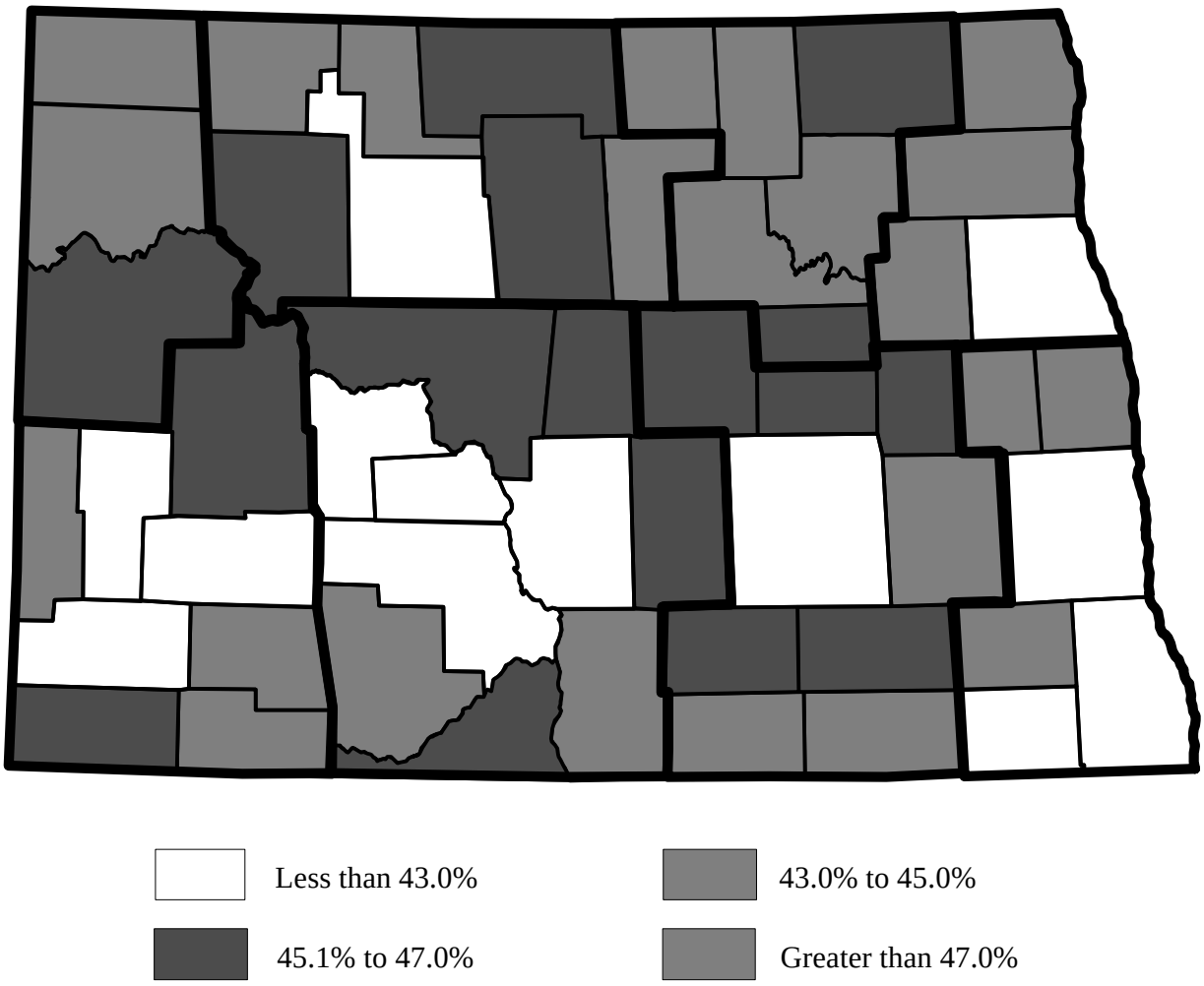
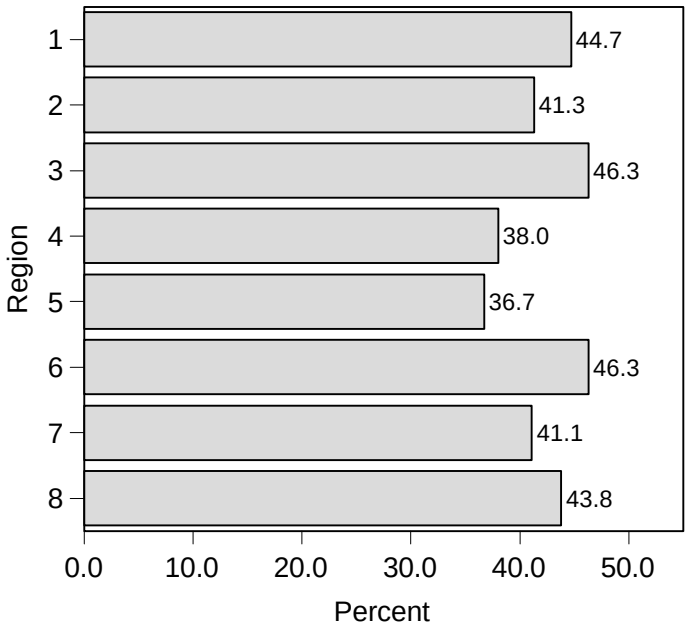
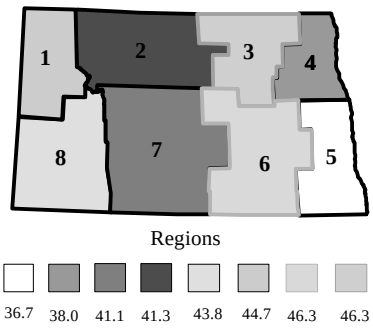
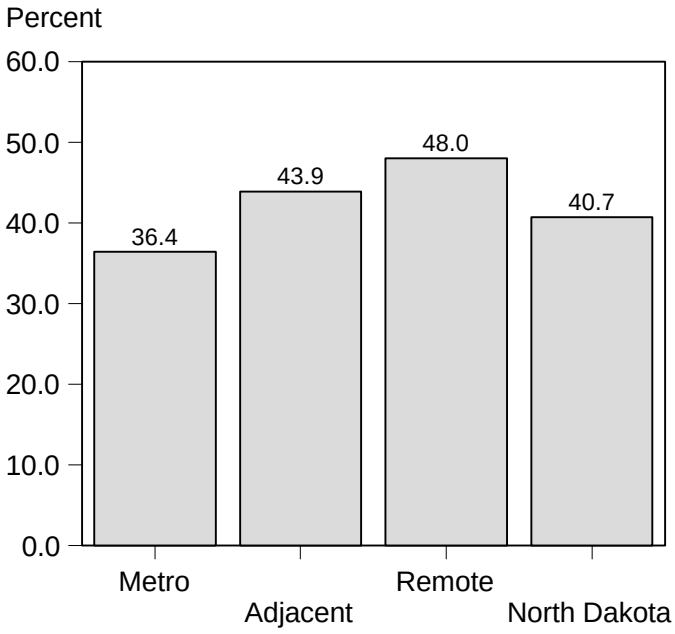


Figure 47. North Dakota Dependency Ratio, 1996







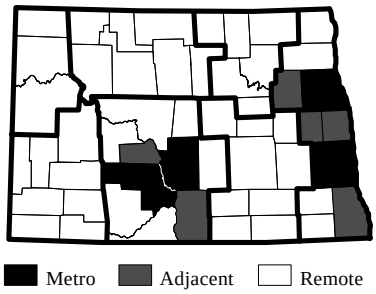


Figure 48. North Dakota Dependency Ratio by Region and Area, 1996

The Elderly

McIntosh County had the highest rate of elderly persons (32.6 percent of county population), followed by Divide (28.9 percent) and Nelson (27.5 percent) Counties (Figure 49). Sioux County had the state's lowest percentage (only 5.2 percent) in that age group. Nonmetro adjacent and remote counties had the same percentage of persons aged 65 and older--19 percent versus 11 percent for the metro areas (Figure 50). Over 21 percent of Region 6's population is elderly, compared to 12 percent for Region 4. (The U.S. Air Force Base in Grand Forks, and the University of North Dakota, are in this region, thereby lowering the effect of the aged population.) .

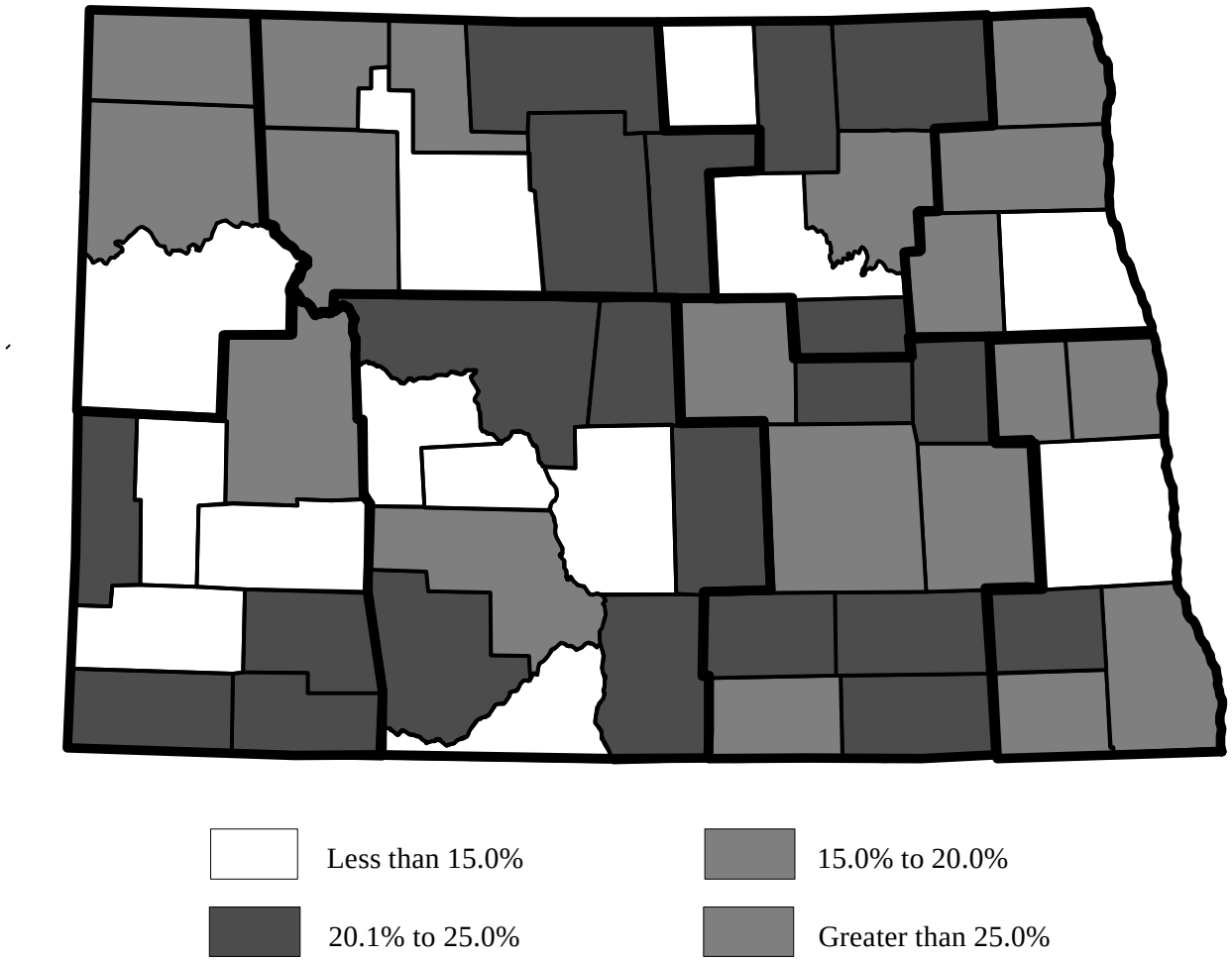
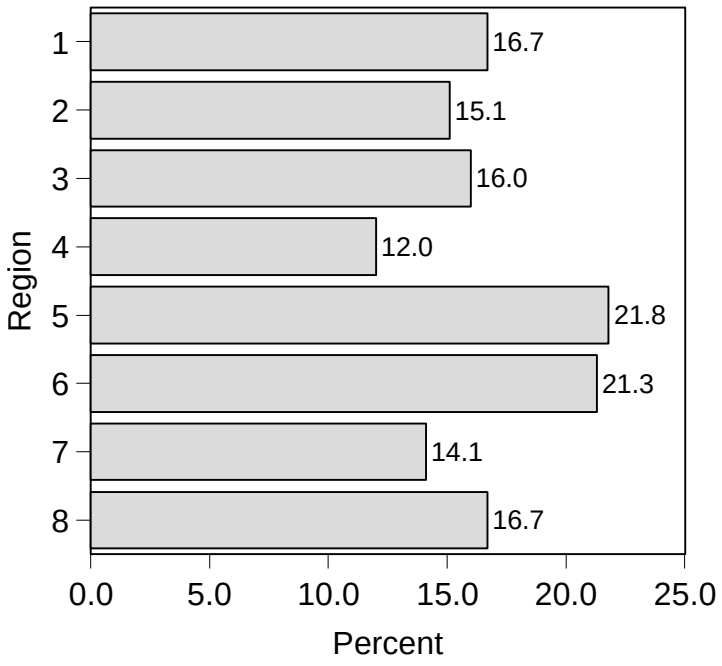
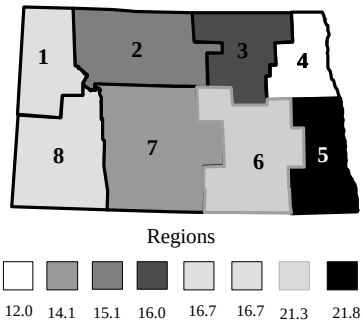
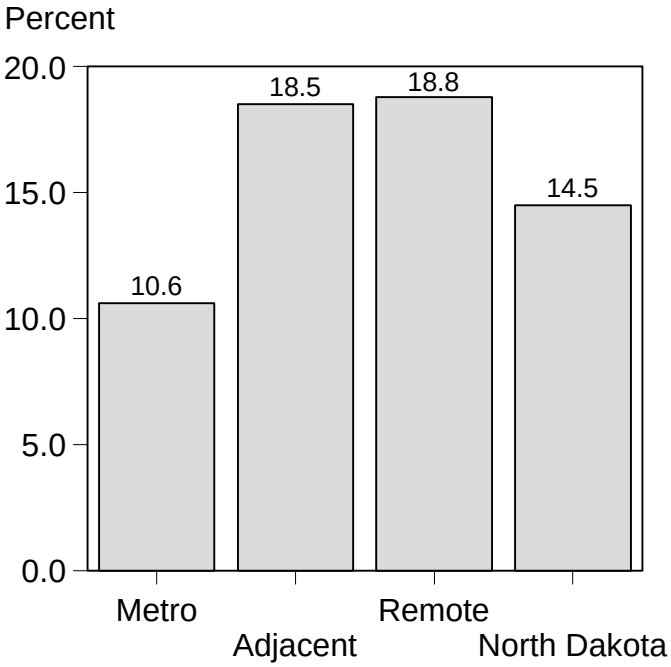


Figure 49. North Dakota Percentage of Elderly, 1996







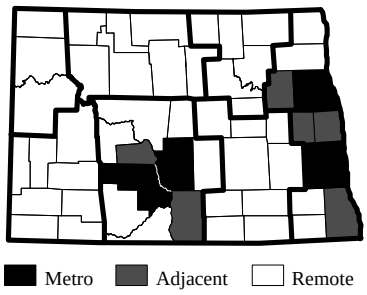


Figure 50. North Dakota Percentage of Elderly Population by Region and Area, 1996

Education

Table 11 provides data on the education level of the North Dakota population and on 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 12 years of formal education; college attainment is the percentage of persons 25 years of age or older who have completed at least 16 years of formal education.

Four counties in North Dakota had over 80 percent high school attainment; these counties (Ward, Grand Forks, Cass, and Burleigh) all had major trade centers (Figure 51). Cass County recorded the highest percentage of high school graduates (87%) and college graduates (27%); McIntosh County had the lowest percentage of high school graduates (49%) and Sheridan County had the lowest percentage of college graduates (8%). Regions 4 and 5, the regions with the largest university populations, had the highest education levels, and Regions 3 and 6, had the lowest (Figure 52). Metropolitan areas had higher percentages of high school graduates than did the rural areas (Figure 52). The adjacent and remote rural areas differed only slightly from each other. Similar to the rate of high school graduates, more college graduates are located in major trade centers (Grand Forks, Cass, and Burleigh Counties) (Figure 53). Highest levels of college attainment were in the eastern part of the state (Regions 4 and 5) (Figure 54). Again, the metro areas have the highest level of college education attainment, but the difference between metro and non-metro rates is much greater for college than for high school degrees. The data imply that the state's larger cities have a more educated population and all other things remaining equal, higher levels of education are often attractive to industry.

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% less than 18 years of age) and Sioux County (43%) had the highest (Table 11). Although much variation is seen at the county level, most counties had between 25 and 30 percent of their populations under the age of 18 in 1996 (Figure 55). Both the metro and adjacent counties had 26 percent youth population, and the remote county percentage was only 3 points higher (29%). Region 3 represented the highest rate of youth population (30%), although only 7 percentage points separated it from the lowest, Region 6 (23%) (Figure 56). 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 students may increase.

Table 11. Percentage of North Dakota High School and College Graduates Among Population Age 25 and Over, Population Less Than 18 Years of Age, Number of High School Graduates, and Percentage of Those Attending College, Selected Years 1990-1997

Area	1990 High School Graduates	1990 College Graduates	1996 Population Less Than Age 18	1996-1997 High School Graduates	1996-1997 Graduates Attending 4-Year College	Amount Attending 4-Year College
	----------%----------					-----%-----
DIVIDE	69.4	12.8	21.0	54	28	51.9
MCKENZIE	72.7	14.2	30.8	75	23	30.7
WILLIAMS	76.8	14.3	28.0	336	79	23.5
REGION 1	75.2	14.1	27.9	465	130	28.0
BOTTINEAU	74.9	14.3	24.1	111	32	28.8
BURKE	66.9	8.7	22.1	35	12	34.3
MCHENRY	66.7	9.7	24.2	106	42	39.6
MOUNTRAIL	73.0	12.9	28.4	96	44	45.8
PIERCE	65.9	13.4	23.0	82	40	48.8
RENVILLE	74.2	9.8	24.9	73	37	50.7
WARD	82.8	19.0	27.0	695	411	59.1
REGION 2	78.0	16.2	26.3	1,198	618	51.6
BENSON	65.4	9.2	34.2	79	17	21.5
CAVALIER	68.4	12.6	24.1	70	38	54.3
EDDY	66.5	11.0	22.6	37	15	40.5
RAMSEY	74.5	16.3	25.0	158	69	43.7
ROLETTE	59.4	11.7	38.2	184	46	25.0
TOWNER	71.9	12.7	24.7	52	28	53.4
REGION 3	67.8	12.9	30.3	580	213	36.7
GRAND FORKS	85.6	25.8	26.5	716	456	63.7
NELSON	69.4	10.6	20.9	65	33	50.8
PEMBINA	73.1	13.1	25.3	148	69	46.6
WALSH	68.0	13.0	25.3	173	97	56.1
REGION 4	80.5	21.6	26.0	1,102	655	59.4
CASS	87.1	26.5	24.4	1,263	722	57.2
RANSOM	73.1	11.1	23.3	102	45	44.1
RICHLAND	75.9	13.0	27.0	213	75	35.2
SARGENT	72.7	9.7	24.5	67	31	46.3
STEELE	71.9	13.7	23.7	20	8	40.0
TRAILL	76.6	17.7	24.4	158	80	50.6
REGION 5	83.6	22.7	24.7	1,823	961	52.7
BARNES	75.4	15.4	23.4	138	89	64.5
DICKEY	68.8	16.0	23.5	75	35	46.7
FOSTER	69.4	12.1	24.8	44	22	50.0
GRIGGS	67.9	12.1	23.0	57	28	49.1
LAMOURE	66.4	12.4	24.3	106	48	45.3
LOGAN	51.9	9.3	21.9	43	25	58.1
MCINTOSH	48.8	9.5	19.1	39	23	59.0
STUTSMAN	73.5	16.7	24.4	294	179	60.9
WELLS	63.2	11.3	21.6	82	40	48.8
REGION 6	68.7	14.2	23.4	878	489	55.7

- Continued -

Table 11. continued

Area	1990 High School Graduates	1990 College Graduates	1996 Population Less Than Age 18	1996-1997 High School Graduates	1996-1997 Graduates Attending 4-Year College	Amount Attending 4-Year College
	----------%----------					-----%-----
BURLEIGH	83.0	25.1	26.5	873	289	33.1
EMMONS	57.3	9.0	23.3	53	24	45.3
GRANT	62.6	8.9	23.7	30	17	56.7
KIDDER	60.5	11.3	24.9	50	27	54.0
MCLEAN	68.2	11.9	26.3	171	77	45.0
MERCER	71.2	11.2	29.6	167	85	50.9
MORTON	70.4	13.8	27.8	349	118	33.8
OLIVER	68.2	10.8	30.2	41	21	51.2
SHERIDAN	49.5	8.2	21.1	21	11	52.3
SIOUX	68.3	9.9	42.6	46	7	15.2
REGION 7	74.7	18.1	27.2	1,801	676	37.5
ADAMS	72.5	11.2	23.2	43	24	55.8
BILLINGS	71.5	12.6	29.4	--	--	--
BOWMAN	74.3	13.9	25.0	60	34	56.7
DUNN	70.5	10.1	28.6	35	22	62.9
GOLDEN VALLEY	74.6	15.7	27.6	34	21	61.8
HETTINGER	69.5	12.2	23.4	51	33	64.7
SLOPE	71.5	10.4	27.3	--	--	--
STARK	73.1	14.8	27.9	366	184	50.3
REGION 8	72.6	13.6	27.1	589	318	54.0
NORTH DAKOTA	76.7	18.1	26.2	8,436	4,060	48.1

Source: U.S. Department of Commerce, Bureau of the Census. 1992. 1990 *Census of Population*, STF3A. Washington, D.C. (percentage high school and college graduates); U.S. Department of Commerce, Bureau of the Census. Intercensal Population Estimates, 1996; North Dakota Department of Public Instruction. 1997. 1996-1997 Enrollment, Graduates, & Drop-out Report.

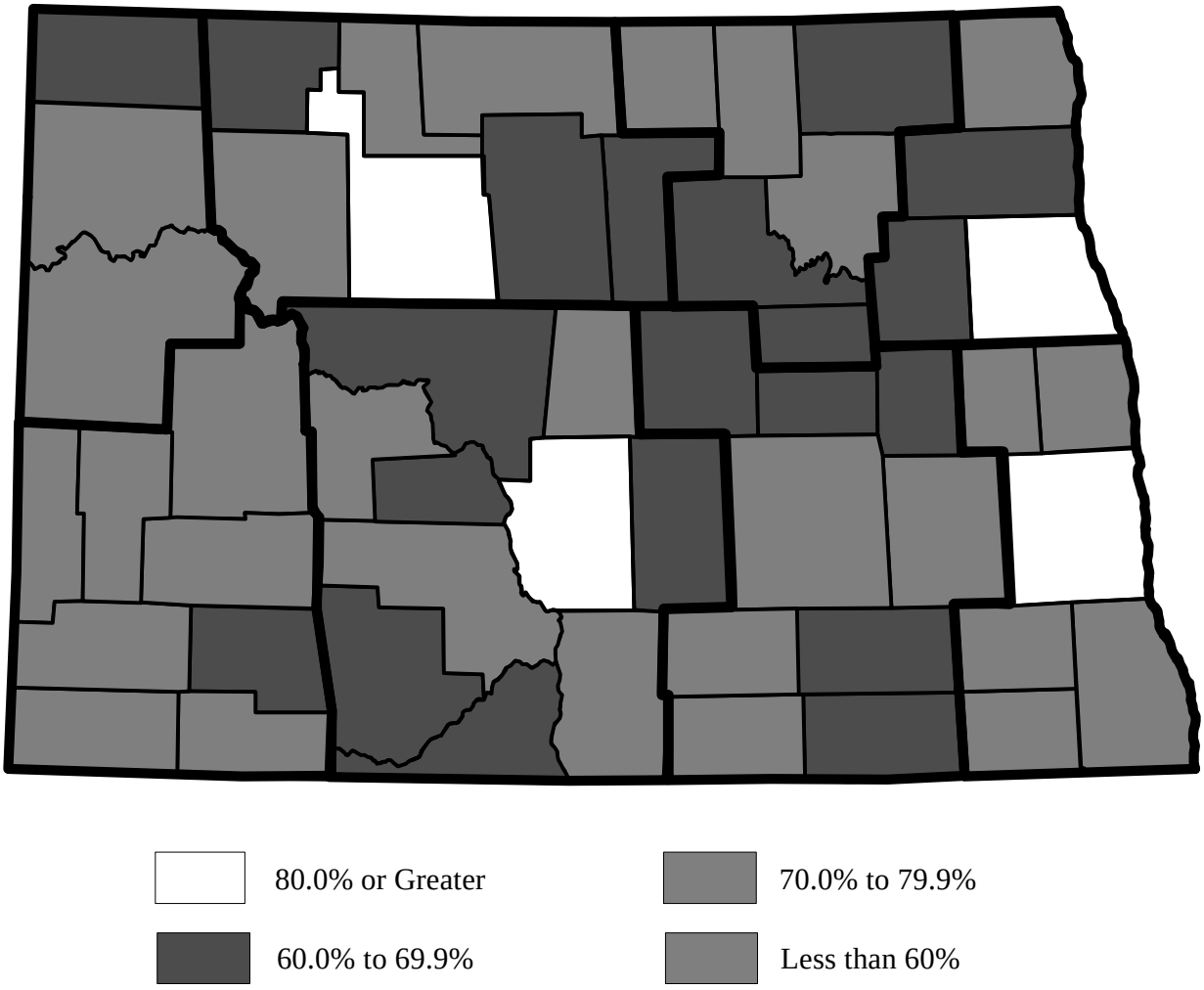


Figure 51. Percentage of North Dakota Population Age 25 and Over Who Have Attained a High School Equivalent Education, 1990

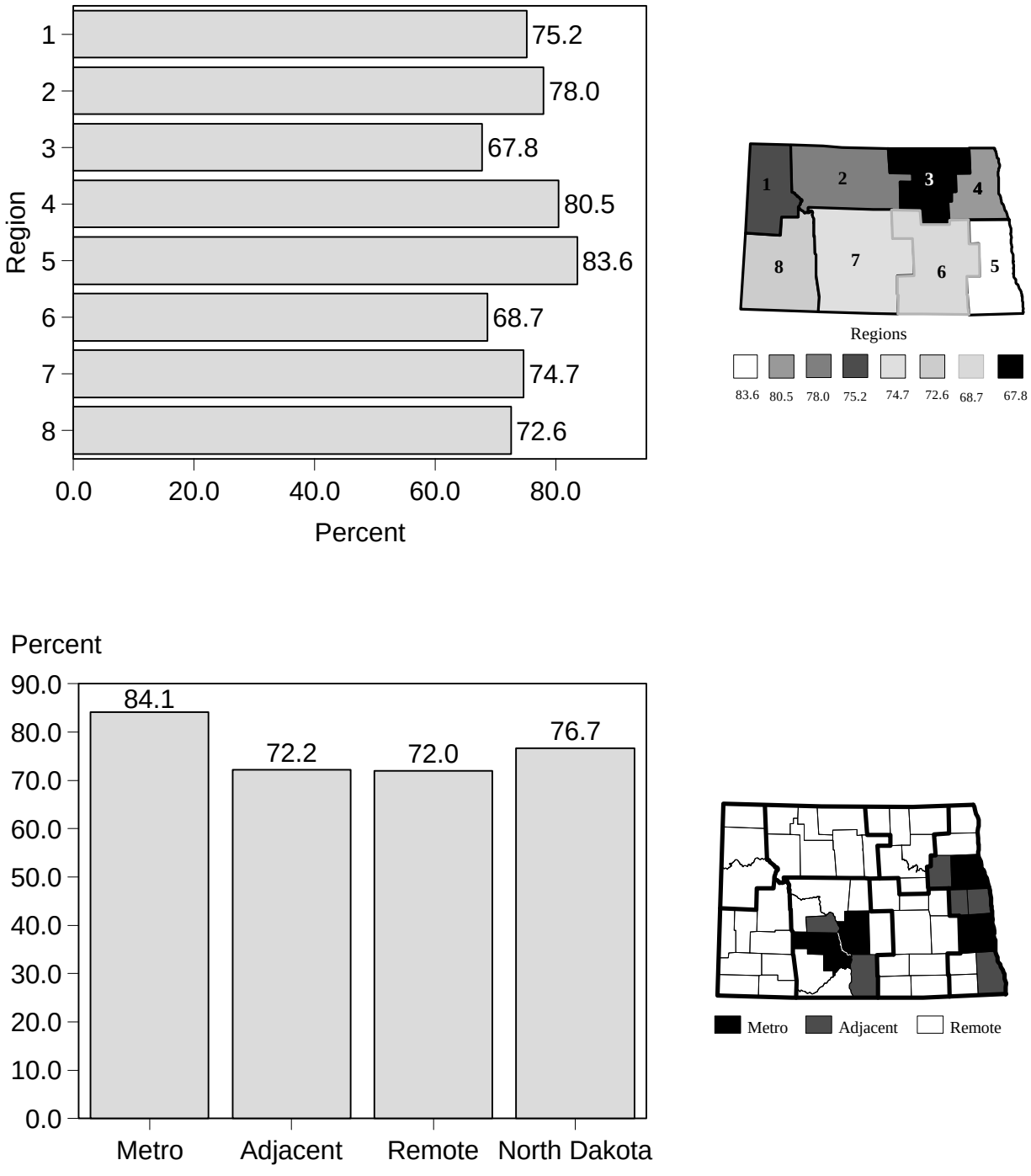


Figure 52. Percentage of North Dakota Population Age 25 and Over Who Have Attained a High School Equivalent Education by Region and Area, 1990

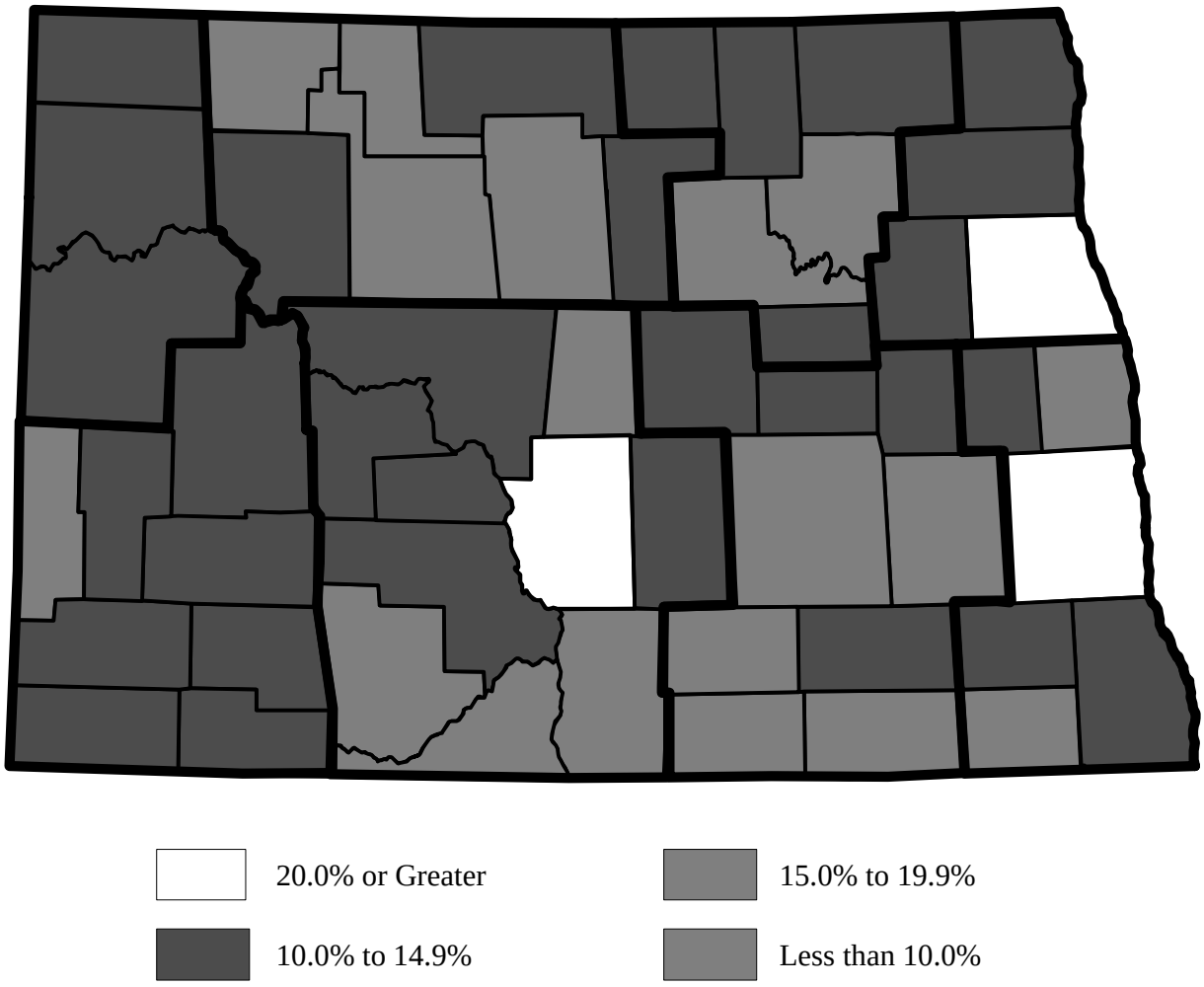
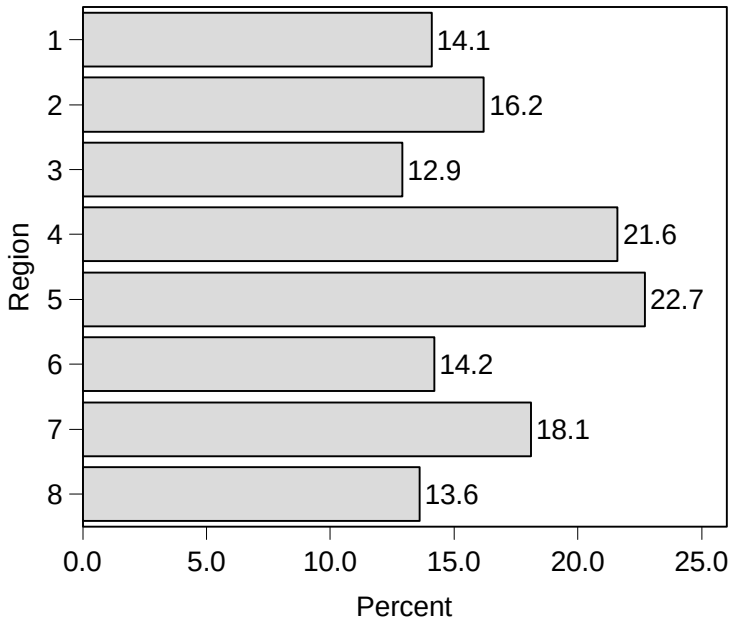
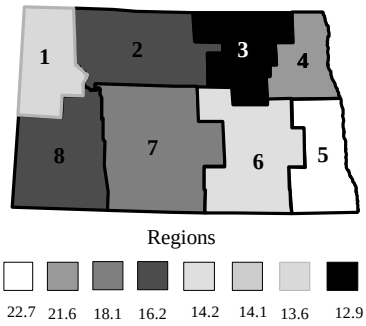
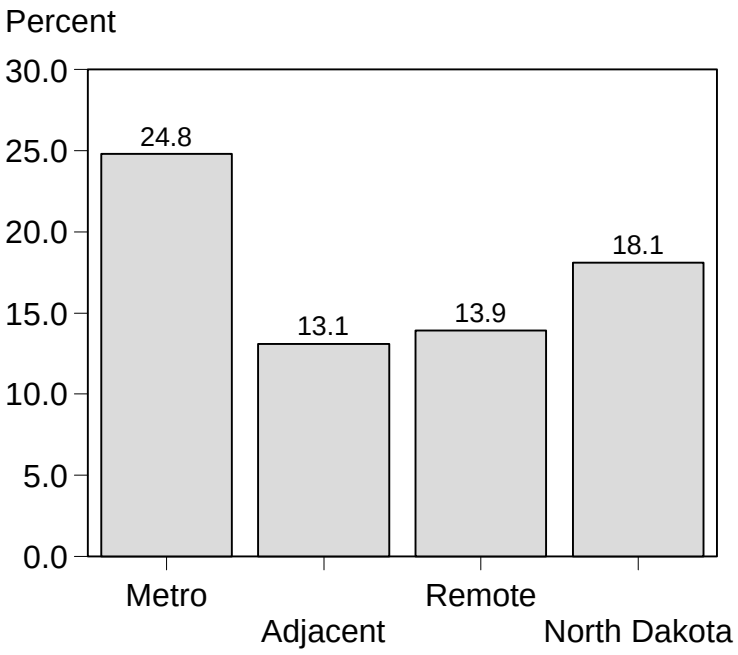


Figure 53. Percentage of North Dakota Population Age 25 and Over Who Have Attained a College Degree, 1996







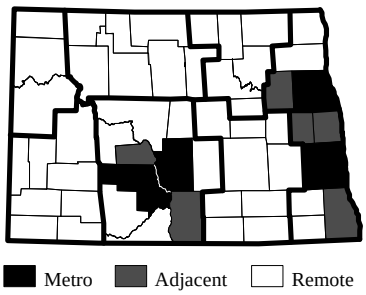


Figure 54. Percentage of North Dakota Population Age 25 and Over Who Have Attained a College Degree by Region and Area, 1990

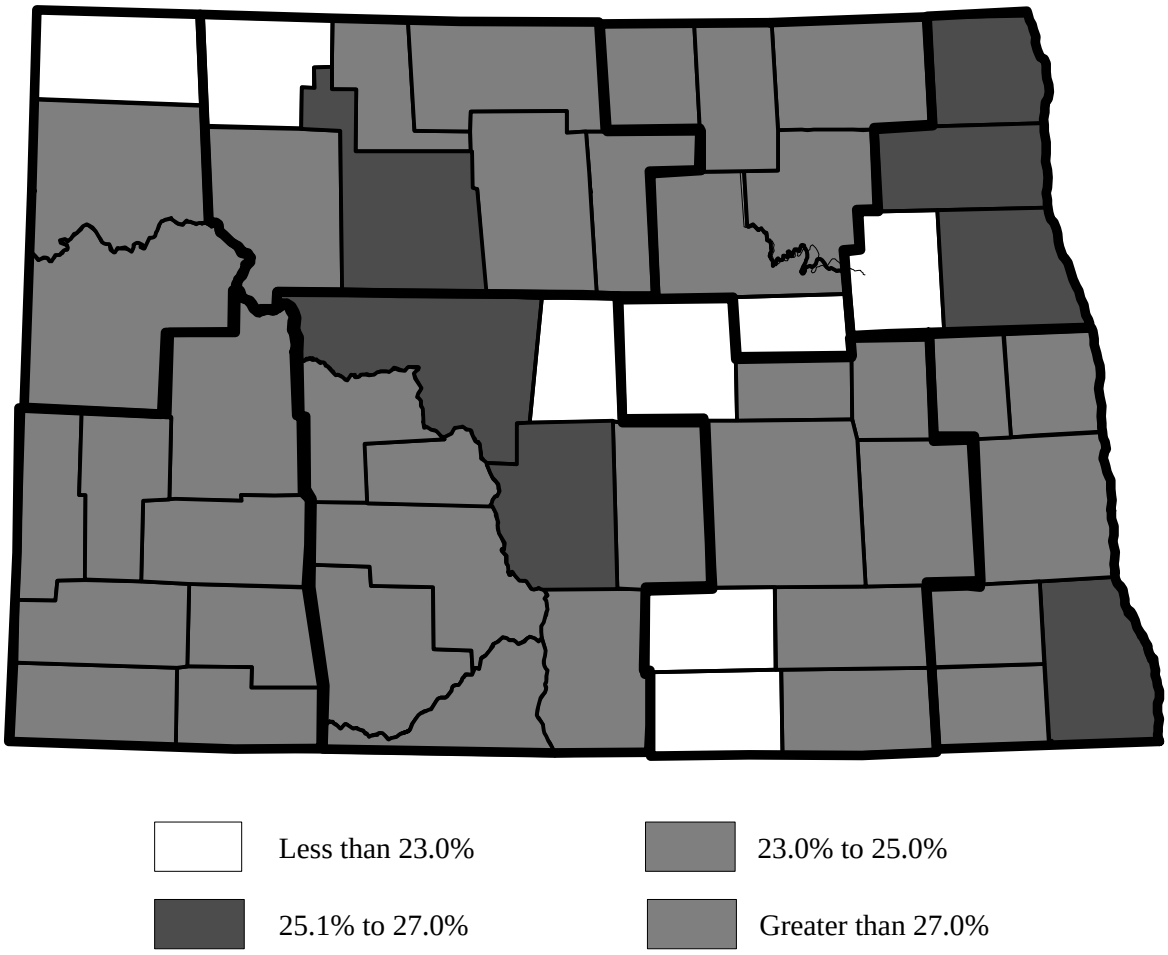
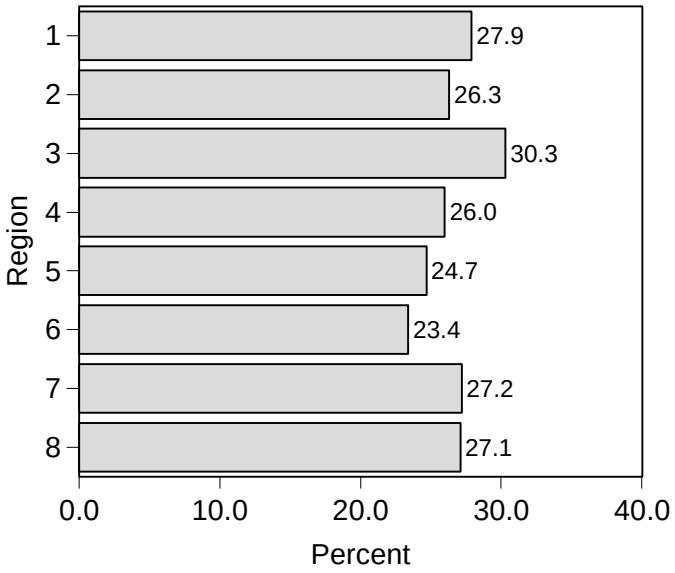
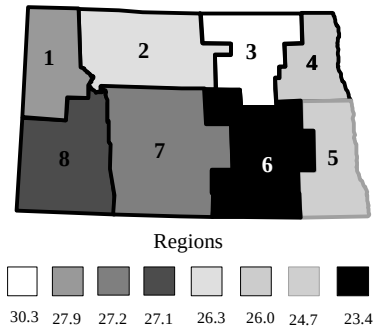
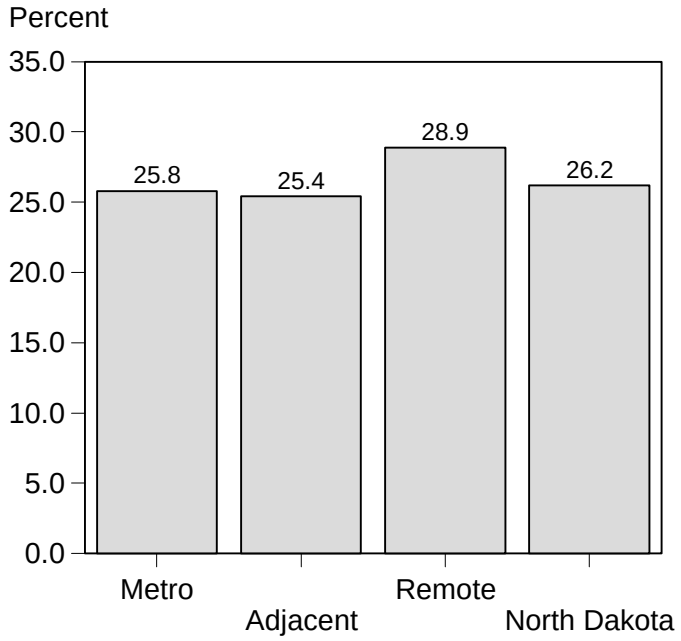


Figure 55. Percentage of North Dakota Population Less Than 18 Years of Age, 1996







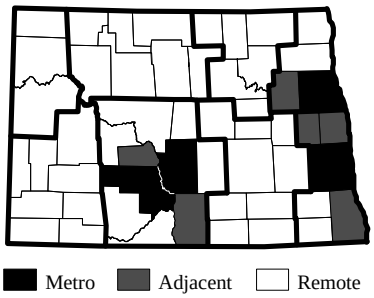


Figure 56. Percentage of North Dakota Population Less Than 18 Years of Age by Region and Area, 1996

The number of 1996-1997 high school graduates closely followed population numbers. State Region 5 had the largest number of graduates (1,823) followed by Regions 7, 2, and 4. Region 1, the region with the smallest population, had the lowest number of high school graduates (465) in 1996-1997. Five of the eight state regions had over 50 percent of their graduates attending a four-year college, led by Region 4 (59.4 %). Barnes and Hettinger Counties had 65 percent of their graduates going on to four-year colleges, although only 15 percent from Sioux County sought higher education. Overall, 48.1 percent of the states' 1996-1997 high school graduates attended 4-year colleges (Figure 57). Metro counties had the highest percentage attending college (50 %), followed by remote (48 %) and adjacent (44 %).

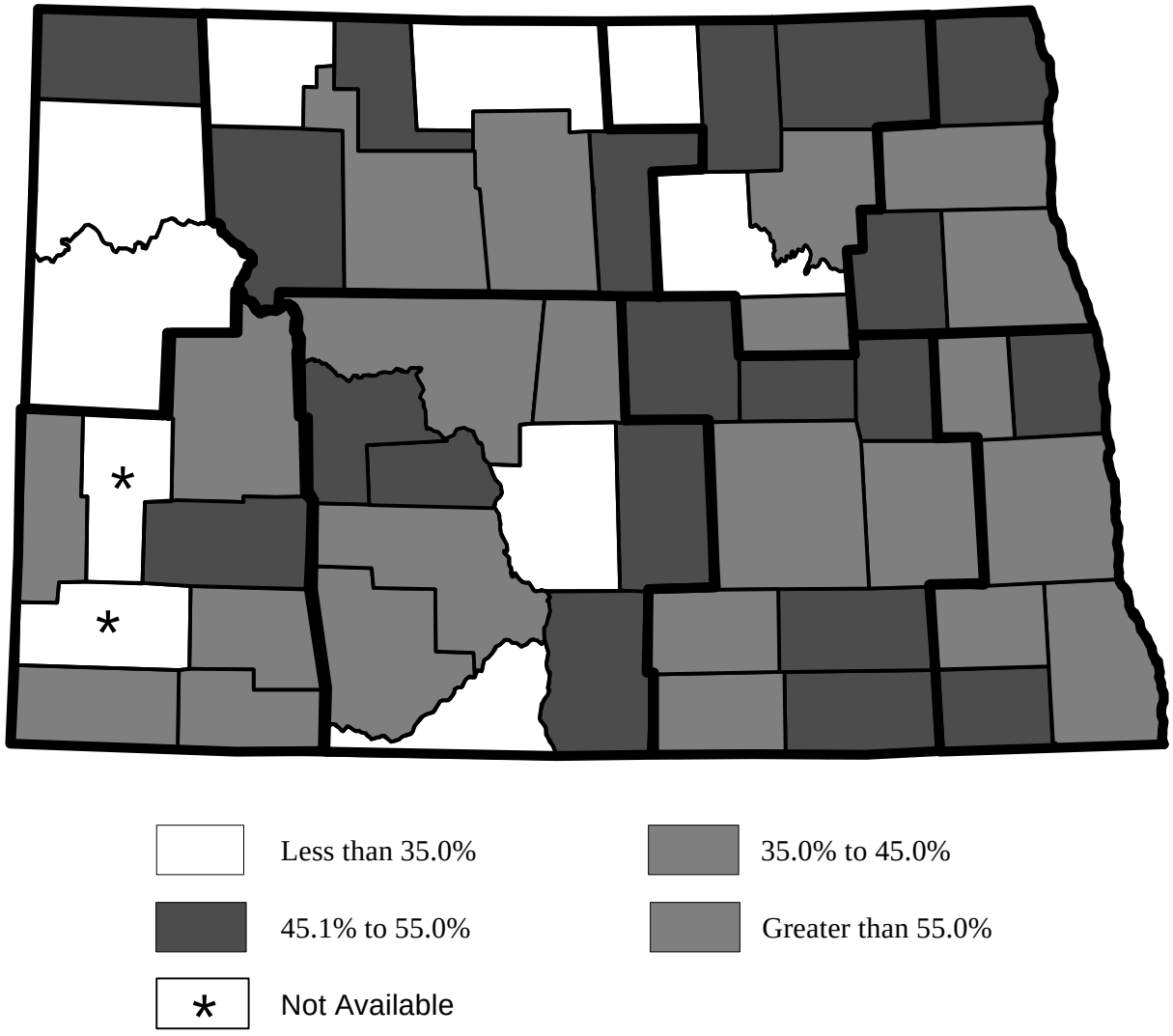


Figure 57. Percentage of North Dakota High School Graduates Attending a Four-Year College, 1996-1997

Trade Area Populations

Populations for North Dakota cities and associated trade areas are presented in Table 12. The wholesale-retail group was the only trade center class that had a population increase from 1980-1996 (Figure 58). Percentage decline in population increased as trade area classification groups went from wholesale-retail to lower shopping center classifications, except for hamlets, which lost only 9.1 percent.

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 1980-1996 trade area population increase of 13 percent (Figure 59). Trade area populations showed a larger rate of decline as they went to smaller trade centers, for example, complete shopping centers declined by 6 percent and hamlets dropped 23 percent. The Fargo trade area population was 114,143 in 1996. This was the largest in the state and almost half again as large as the second largest trade area, Bismarck. Fargo trade area population grew by 28 percent from 1980-1996, highlighting its importance as a regional trade center.

Table 12. City and Trade Area Populations by Trade Center Classifications, 1970-1996[a]

CITY	COUNTY	CITY POPULATION 1970	1980	1990	1996	CHANGE 1980-96	1990-96	TRADE AREA POPULATION 1980	1990	1996	CHANGE 1980-96	1990-96
WHOLESALE RETAIL						----------%----------					----------%----------	
BISMARCK	BURLEIGH	34,703	44,485	49,256	53,498	20.3	8.6	71,640	75,024	79,800	11.4	6.4
FARGO	CASS	53,365	61,383	74,111	83,805	36.5	13.1	89,218	103,744	114,143	27.9	10.0
GRAND FORKS	GRAND FORKS	39,008	43,765	49,425	50,683	15.8	2.6	65,713	70,275	70,956	8.0	1.0
MANDAN	MORTON	11,093	15,513	15,177	15,648	0.9	3.1	--	--	--	--	--
MINOT	WARD	32,290	32,843	34,544	35,926	9.4	4.0	67,604	65,728	66,962	-1.0	1.9
WEST FARGO	CASS	5,161	10,099	12,287	13,566	34.3	10.4	--	--	--	--	--
GROUP TOTAL		175,620	208,088	234,800	253,126	21.6	7.8	294,175	314,771	331,861	12.8	5.4
COMPLETE SHOPPING												
DEVILS LAKE	RAMSEY	7,078	7,442	7,782	7,672	3.1	-1.4	17,743	17,335	16,955	-4.4	-2.2
DICKINSON	STARK	12,405	15,924	16,097	16,094	1.1	-0.0	27,034	25,619	25,484	-5.7	-0.5
GRAFTON	WALSH	5,946	5,293	4,840	5,436	2.7	12.3	9,107	8,255	8,374	-8.1	1.4
JAMESTOWN	STUTSMAN	15,385	16,280	15,571	14,983	-8.0	-3.8	27,757	25,011	23,859	-14.0	-4.6
VALLEY CITY	BARNES	7,843	7,774	7,163	6,927	-10.9	-3.3	13,810	12,463	12,015	-13.0	-3.6
WAHPETON	RICHLAND	7,076	9,064	8,751	9,039	-0.3	3.3	14,126	13,518	13,692	-3.1	1.3
WILLISTON	WILLIAMS	11,280	13,336	13,131	12,713	-4.7	-3.2	20,057	19,300	18,594	-7.3	-3.7
GROUP TOTAL		67,013	75,113	73,335	72,864	-3.0	-0.6	129,634	121,501	118,973	-8.2	-2.1
PARTIAL SHOPPING												
BEULAH	MERCER	1,344	2,908	3,363	3,198	10.0	-4.9	4,714	4,761	4,601	-2.4	-3.4
BOTTINEAU	BOTTINEAU	2,760	2,829	2,598	2,370	-16.2	-8.8	6,338	5,660	5,315	-16.1	-6.1
BOWMAN	BOWMAN	1,762	2,071	1,741	1,602	-22.7	-8.0	4,714	3,997	3,665	-22.3	-8.3
CARRINGTON	FOSTER	2,491	2,641	2,267	2,163	-18.1	-4.6	5,653	4,874	4,690	-17.0	-3.8
CAVALIER	PEMBINA	1,381	1,505	1,508	1,453	-3.5	-3.7	4,313	4,063	3,842	-10.9	-5.4
HARVEY	WELLS	2,361	2,527	2,263	2,020	-20.1	-10.7	6,516	5,384	4,785	-26.6	-11.1
HETTINGER	ADAMS	1,655	1,739	1,574	1,427	-17.9	-9.3	3,264	2,919	2,616	-19.9	-10.4
LANGDON	CAVALIER	2,182	2,335	2,241	1,958	-16.2	-12.6	6,477	5,202	4,535	-30.0	-12.8
LISBON	RANSOM	2,090	2,283	2,177	2,171	-4.9	-0.3	5,726	4,935	4,904	-14.4	-0.6
ROLLA	ROLETTE	1,458	1,538	1,286	1,454	-5.5	13.1	8,953	9,312	10,173	13.6	9.3
RUGBY	PIERCE	2,889	3,335	2,909	2,763	-17.2	-5.0	6,710	5,520	5,197	-22.6	-5.9
TIOGA	WILLIAMS	1,667	1,597	1,278	1,279	-19.9	0.1	2,792	2,318	2,285	-18.2	-1.4
WATFORD CITY	MCKENZIE	1,768	2,119	1,784	1,614	-23.8	-9.5	3,843	3,118	3,273	-14.8	5.0
GROUP TOTAL		25,808	29,427	26,989	25,472	-13.4	-5.6	70,013	62,063	59,881	-14.5	-3.5

- Continued -

Table 12. continued

CITY	COUNTY	CITY POPULATION 1970	1980	1990	1996	CHANGE 1980-96	1990-96	TRADE AREA POPULATION 1980	1990	1996	CHANGE 1980-96	1990-96
FULL CONVENIENCE						----------%----------					----------%----------	
BEACH	GOLDEN VALLEY	1,408	1,381	1,205	1,104	-20.1	-8.4	2,597	2,299	2,129	-18.0	-7.4
CANDO	TOWNER	1,512	1,496	1,564	1,381	-7.7	-11.7	1,651	1,344	1,196	-27.6	-11.1
CASSELTON	CASS	1,485	1,661	1,601	1,597	-3.9	-0.3	3,031	2,834	2,759	-9.0	-2.7
COOPERSTOWN	GRIGGS	1,485	1,308	1,247	1,156	-11.6	-7.3	3,515	3,123	2,827	-19.6	-9.5
CROSBY	DIVIDE	1,545	1,469	1,312	1,106	-24.7	-15.7	3,292	2,796	2,418	-26.6	-13.5
GARRISON	MCLEAN	1,614	1,830	1,530	1,427	-22.0	-6.7	3,483	3,057	2,892	-17.0	-5.4
HAZEN	MERCER	1,240	2,365	2,818	2,648	12.0	-6.0	4,421	4,820	4,687	6.0	-2.8
HILLSBORO	TRAIL	1,309	1,600	1,488	1,462	-8.6	-1.8	3,205	2,827	2,789	-13.0	-1.3
KENMARE	WARD	1,515	1,456	1,214	1,256	-13.7	3.5	3,534	2,859	2,750	-22.2	-3.8
KILLDEER	DUNN	615	790	722	661	-16.3	-8.5	2,188	1,906	1,777	-18.8	-6.8
LAMOURE	LA MOURE	951	1,077	970	892	-17.2	-8.0	3,251	2,795	2,583	-20.6	-7.6
LINTON	EMMONS	1,695	1,561	1,410	1,279	-18.1	-9.3	4,368	3,671	3,375	-22.7	-8.1
MAYVILLE	TRAIL	2,554	2,255	2,092	2,098	-7.0	0.3	4,742	4,311	4,299	-9.3	-0.3
MICHIGAN	NELSON	478	502	413	360	-28.3	-12.8	874	667	590	-32.5	-11.5
MOHALL	RENVILLE	950	1,049	931	860	-18.0	-7.6	1,827	1,608	1,480	-19.0	-8.0
NORTHWOOD	GRAND FORKS	1,189	1,240	1,166	1,150	-7.3	-1.4	2,244	2,014	1,977	-11.9	-1.8
OAKES	DICKEY	1,742	2,112	1,775	1,667	-21.1	-6.1	3,943	3,151	2,947	-25.3	-6.5
PARK RIVER	WALSH	1,680	1,844	1,725	1,398	-24.2	-19.0	4,099	3,654	2,987	-27.1	-18.3
STANLEY	MOUNTRAIL	1,581	1,631	1,371	1,273	-22.0	-7.2	3,005	2,587	2,458	-18.2	-5.0
WASHBURN	MCLEAN	804	1,767	1,506	1,421	-19.6	-5.6	2,265	1,986	1,881	-17.0	-5.3
WISHEK	MCINTOSH	1,275	1,345	1,171	1,048	-22.1	-10.5	2,531	2,097	1, 877	-25.8	-10.5
GROUP TOTAL		28,627	31,739	29,231	27,244	-14.2	-6.8	64,066	56,406	52,678	-17.8	-6.6
MINIMUM CONVENIENCE												
ARTHUR	CASS	412	445	400	401	-9.9	0.3	641	543	534	-16.7	-1.7
ASHLEY	MCINTOSH	1,236	1,192	1,052	943	-20.9	-10.4	2,175	1,835	1,666	-23.4	-9.2
BELFIELD	STARK	1,130	1,274	887	869	-31.8	-2.0	2,239	1,800	1,787	-20.2	-0.7
BERTHOLD	WARD	398	485	409	416	-14.2	1.7	774	645	655	-15.4	1.6
DRAYTON	PEMBINA	1,095	1,082	961	883	-18.4	-8.1	1,678	1,419	1,305	-22.2	-8.0
DUNSEITH	ROLETTE	811	625	723	771	23.4	6.6	3,851	4,287	4,680	21.5	9.2
EDGELEY	LA MOURE	888	843	680	623	-26.1	-8.4	1,880	1,550	1,432	-23.8	-7.6
EDINBURG	WALSH	315	300	284	227	-24.3	-20.7	1,177	932	777	-34.0	-16.3
ELGIN	GRANT	839	930	765	677	-27.2	-11.5	1,277	1,036	1,198	-6.2	15.6
ELLENDALE	DICKEY	1,517	1,967	1,798	1,664	-15.4	-7.5	3,203	2,816	2,608	-18.6	-7.4
EMERADO	GRAND FORKS	515	596	483	483	-19.0	--	--	--	--	--	--
ENDERLIN	RANSOM	1,343	1,140	997	937	-17.8	-6.0	1,613	1,443	2,327	44.3	61.3

- Continued -

TABLE 12 continued

CITY	COUNTY	CITY POPULATION 1970	1980	1990	1996	CHANGE 1980-96	1990-96	TRADE AREA POPULATION 1980	1990	1996	CHANGE 1980-96	1990-96
MINIMUM CONVENIENCE CONTINUED						----------%----------					----------%----------	
FESSENDEN	WELLS	815	761	655	574	-24.6	-12.4	1,492	1,229	1,082	-27.5	-12.0
FINLEY	STEELE	809	718	543	512	-28.7	-5.7	1,548	1,162	1,092	-29.5	-6.0
FLASHER	MORTON	467	410	317	305	-25.6	-3.8	1,288	1,089	1,088	-15.5	-0.1
FORMAN	SARGENT	596	629	586	567	-9.9	-3.2	2,363	2,001	1,914	-19.0	-4.4
GLEN ULLIN	MORTON	1,070	1,125	927	879	-21.9	-5.2	1,665	1,409	1,390	-16.5	-1.4
GWINNER	SARGENT	623	725	585	629	-13.2	7.5	878	682	724	-17.5	6.2
HANKINSON	RICHLAND	1,125	1,158	1,038	1,005	-13.2	-3.2	2,236	2,020	1,955	-12.6	-3.2
HEBRON	MORTON	1,103	1,078	888	826	-23.4	-7.0	1,759	1,485	1,460	-17.0	-1.7
HOOPLE	WALSH	330	350	310	246	-29.7	-20.7	--	--	--	--	--
HUNTER	CASS	362	369	341	318	-13.8	-6.7	635	564	526	-17.2	-6.7
KINDRED	CASS	495	568	569	533	-6.2	-6.3	1,819	1,880	1,795	-1.3	-4.5
KULM	LA MOURE	625	570	514	462	-19.0	-10.1	952	818	745	-21.7	-8.9
LAKOTA	NELSON	964	963	898	803	-16.6	-10.6	1,893	1,609	1,440	-23.9	-10.5
LARIMORE	GRAND FORKS	1,469	1,524	1,464	1,409	-7.6	-3.8	2,950	2,745	2,662	-9.8	-3.0
LEEDS	BENSON	626	678	542	498	-26.6	-8.1	1,150	897	837	-27.2	-6.7
LIDGERWOOD	RICHLAND	1,000	971	799	762	-21.5	-4.6	2,128	1,742	1,665	-21.8	-4.4
MADDOCK	BENSON	708	677	559	516	-23.8	-7.7	1,625	1,297	1,225	-24.6	-5.6
MCVILLE	NELSON	583	626	559	501	-20.0	-10.4	1,214	1,019	907	-25.3	-11.0
MILNOR	SARGENT	645	716	651	641	-10.5	-1.5	1,552	1,411	1,375	-11.4	-2.6
MINTO	WALSH	636	592	560	447	-24.5	-20.2	909	851	687	-24.4	-19.3
MOTT	HETTINGER	1,368	1,315	1,019	898	-31.7	-11.9	2,269	1,758	1,539	-32.2	-12.5
NAPOLEON	LOGAN	1,036	1,103	930	798	-27.7	-14.2	2,300	1,799	1,556	-32.4	-13.5
NEW ENGLAND	HETTINGER	906	825	663	562	-31.9	-15.2	1,985	1,601	1,404	-29.3	-12.3
NEW ROCKFORD	EDDY	1,969	1,791	1,604	1,525	-14.9	-4.9	3,314	2,805	2,712	-18.2	-3.3
NEW SALEM	MORTON	943	1,081	909	863	-20.2	-5.1	2,398	2,107	2,097	-12.6	-0.5
NEW TOWN	MOUNTRAIL	1,428	1,335	1,388	1,318	-1.3	-5.0	2,997	3,341	2,889	-3.6	-13.5
PAGE	CASS	367	329	266	251	-23.7	-5.6	653	511	479	-26.7	-6.3
PEMBINA	PEMBINA	741	673	642	628	-6.7	-2.2	818	744	723	-11.6	-2.8
POWERS LAKE	BURKE	523	466	408	338	-27.5	-17.2	1,201	946	792	-34.1	-16.3
RAY	WILLIAMS	776	766	603	622	-18.8	3.2	1,030	836	848	-17.7	1.4
RICHARDTON	STARK	799	699	625	611	-12.6	-2.2	1,173	986	958	-18.3	-2.8
ROLETTE	ROLETTE	579	667	623	690	3.5	10.8	1,852	1,892	2,035	9.9	7.6
STEELE	KIDDER	696	796	762	670	-15.8	-12.1	1,656	1,532	1,371	-17.2	-10.5
STRASBURG	EMMONS	642	623	553	506	-18.8	-8.5	1,424	1,182	1,092	-23.3	-7.6
TOWNER	MCHENRY	870	867	669	602	-30.6	-10.0	2,259	1,877	1,766	-21.8	-5.9
TURTLE LAKE	MCLEAN	712	802	681	628	-21.7	-7.8	1,906	1,581	1,490	-21.8	-5.8
UNDERWOOD	MCLEAN	781	1,329	976	911	-31.5	-6.7	2,300	1,813	1,440	-37.4	-20.6

- Continued -

Table 12. continued

CITY	COUNTY	CITY POPULATION 1970	1980	1990	1996	CHANGE 1980-96	1990-96	TRADE AREA POPULATION 1980	1990	1996	CHANGE 1980-96	1990-96
MINIMUM CONVENIENCE CONTINUED						----------%----------					----------%----------	
VELVA	MCHENRY	1,241	1,101	968	874	-20.6	-9.7	2,160	1,860	1,742	-19.4	-6.3
WALHALLA	PEMBINA	1,471	1,429	1,131	1,109	-22.4	-2.0	2,201	1,797	1,716	-22.0	-4.5
WESTHOPE	BOTTINEAU	705	741	578	532	-28.2	-8.0	1,353	1,065	1,001	-26.0	-6.0
WIMBLEDON	BARNES	337	330	275	261	-20.9	-5.1	916	756	718	-21.6	-5.0
WYNDMERE	RICHLAND	516	550	501	506	-8.0	1.0	876	846	837	-4.5	-1.1
GROUP TOTAL		44,956	45,705	39,518	37,030	-19.0	-6.3	89,605	77,851	74,743	-16.6	-4.0
HAMLETS[b]												
ABERCROMBIE	RICHLAND	262	260	252	243	-6.5	-3.6	--	--	--	--	--
ADAMS	WALSH	284	303	248	205	-32.3	-17.3	689	517	428	-37.9	-17.2
ALEXANDER	MCKENZIE	208	358	216	190	-46.9	-12.0	--	--	--	--	--
ANAMOOSE	MCHENRY	401	355	277	267	-24.8	-3.6	--	--	--	--	--
ANETA	NELSON	376	341	314	280	-17.9	-10.8	521	472	420	-19.4	-11.0
BINFORD	GRIGGS	242	293	233	209	-28.7	-10.3	--	--	--	--	--
BISBEE	TOWNER	305	257	227	205	-20.2	-9.7	440	379	339	-23.0	-10.6
BOWBELLS	BURKE	584	587	498	410	-30.2	-17.7	1,183	928	763	-35.5	-17.8
BUFFALO	CASS	241	226	204	197	-12.8	-3.4	--	--	--	--	--
BURLINGTON	WARD	247	762	995	1,017	33.5	2.2	--	--	--	--	--
BUXTON	TRAIL	235	336	343	344	2.4	0.3	--	--	--	--	--
CARSON	GRANT	466	469	383	333	-29.0	-13.1	1,194	995	867	-27.4	-12.9
CENTER	OLIVER	619	900	826	770	-14.4	-6.8	1,304	1,237	1,157	-11.3	-6.5
COLUMBUS	BURKE	465	325	223	181	-44.3	-18.8	399	288	234	-41.4	-18.8
DAVENPORT	CASS	147	195	218	214	9.7	-1.8	--	--	--	--	--
DES LACS	WARD	197	212	216	223	5.2	3.2	--	--	--	--	--
DRAKE	MCHENRY	636	479	361	320	-33.2	-11.4	1,019	727	636	-37.6	-12.5
EDMORE	RAMSEY	398	416	329	303	-27.2	-7.9	752	614	584	-22.3	-4.9
FAIRMOUNT	RICHLAND	412	480	427	409	-14.8	-4.2	657	557	533	-18.9	-4.3
FORDVILLE	WALSH	361	326	299	244	-25.2	-18.4	525	473	386	-26.5	-18.4
FRONTIER	CASS	--	160	218	249	55.6	14.2	--	--	--	--	--
GACKLE	LOGAN	470	456	450	406	-11.0	-9.8	1,015	873	784	-22.8	-10.2
GILBY	GRAND FORKS	268	283	262	255	-9.9	-2.7	--	--	--	--	--
GLADSTONE	STARK	222	317	224	222	-30.0	-1.0	--	--	--	--	--
GLENBURN	RENVILLE	381	454	439	388	-14.5	-11.6	--	--	--	--	--
GOLDEN VAL	MERCER	235	287	239	222	-22.7	-7.1	--	--	--	--	--
GRANDIN	CASS	187	210	213	201	-4.3	-5.6	--	--	--	--	--
GRANVILLE	MCHENRY	282	281	236	208	-26.0	-11.9	--	--	--	--	--
GRENORA	WILLIAMS	401	362	261	247	-31.8	-5.4	--	--	--	--	--

- Continued -

Table 12. continued

CITY	COUNTY	CITY POPULATION 1970	1980	1990	1996	CHANGE 1980-96	1990-96	TRADE AREA POPULATION 1980	1990	1996	CHANGE 1980-96	1990-96
HAMLETS[b] CONTINUED						----------%----------					----------%----------	
HALLIDAY	DUNN	413	355	288	262	-26.2	-9.0	1,261	1,015	950	-24.7	-6.4
HANNAFORD	GRIGGS	244	201	204	181	-10.0	-11.3	--	--	--	--	--
HARWOOD	CASS	--	326	590	606	85.9	2.7	--	--	--	--	--
HATTON	TRAIL	808	787	800	781	-0.8	-2.4	1,246	1,197	1,168	-6.3	-2.4
HAZELTON	EMMONS	374	266	240	216	-18.8	-10.0	1,042	844	777	-25.4	-7.9
HOPE	STEELE	364	406	281	262	-35.5	-6.8	965	727	683	-29.2	-6.1
HORACE	CASS	276	494	662	834	68.8	26.0	--	--	--	--	--
LANSFORD	BOTTINEAU	296	294	249	224	-23.8	-10.0	--	--	--	--	--
LEONARD	CASS	221	289	310	295	2.1	-4.8	--	--	--	--	--
LIGNITE	BURKE	354	332	242	203	-38.9	-16.1	486	365	304	-37.5	-16.7
LINCOLN	BURLEIGH	--	656	1,132	1,615	146.2	42.7	--	--	--	--	--
LITCHVILLE	BARNES	294	251	205	191	-23.9	-6.8	--	--	--	--	--
MANVEL	GRAND FORKS	265	308	333	341	10.7	2.4	--	--	--	--	--
MAPLETON	CASS	219	306	682	644	110.5	-5.6	--	--	--	--	--
MAX	MCLEAN	301	330	301	288	-12.7	-4.3	869	756	732	-15.8	-3.2
MCCLUSKY	SHERIDAN	664	658	492	428	-35.0	-13.0	669	545	436	-34.8	-20.0
MEDINA	STUTSMAN	488	521	387	356	-31.7	-8.0	939	729	680	-27.6	-6.7
MINNEWAUKAN	BENSON	496	461	401	374	-18.9	-6.7	--	--	--	--	--
MUNICH	CAVALIER	249	300	310	260	-13.3	-16.1	701	570	487	-30.5	-14.6
NECHE	PEMBINA	451	471	434	399	-15.3	-8.1	558	500	461	-17.4	-7.8
NEW LEIPZIG	GRANT	354	352	326	286	-18.8	-12.3	705	635	556	-21.1	-12.4
NOONAN	DIVIDE	403	283	231	209	-26.2	-9.5	--	--	--	--	--
OSNABROCK	CAVALIER	255	222	214	182	-18.0	-15.0	--	--	--	--	--
PARSHALL	MOUNTRAIL	1,246	1,059	943	933	-11.9	-1.1	2,177	2,035	1,985	-8.8	-2.5
PETERSBURG	NELSON	266	230	219	191	-17.0	-12.8	373	348	305	-18.2	-12.4
PICK CITY	MERCER	119	182	203	192	5.5	-5.4	--	--	--	--	--
PORTLAND	TRAIL	534	627	602	633	1.0	5.2	--	--	--	--	--
REEDER	ADAMS	306	355	252	222	-37.5	-11.9	--	--	--	--	--
REGENT	HETTINGER	344	297	268	233	-21.6	-13.1	644	559	486	-24.5	-13.1
REILES ACRES	CASS	--	191	210	198	3.7	-5.7	--	--	--	--	--
RIVERDALE	MCLEAN	--	--	283	268	--	-5.3	--	--	--	--	--
ROCKLAKE	TOWNER	270	287	221	191	-33.5	-13.6	--	--	--	--	--
RUTLAND	SARGENT	225	250	212	206	-17.6	-2.8	522	455	437	-16.3	-4.0
S HEART	STARK	132	294	322	321	9.2	-0.3	--	--	--	--	--
SAWYER	WARD	373	417	319	326	-21.8	2.2	--	--	--	--	--
SCRANTON	BOWMAN	360	415	294	269	-35.2	-8.5	943	763	699	-25.9	-8.4
SELFRIDGE	SIOUX	346	273	242	256	-6.2	5.8	--	--	--	--	--

- Continued -

Table 12. continued

CITY	COUNTY	CITY POPULATION 1970	1980	1990	1996	CHANGE 1980-96	1990-96	TRADE AREA POPULATION 1980	1990	1996	CHANGE 1980-96	1990-96
HAMLETS[b] CONTINUED						----------%----------					----------%----------	
SHERWOOD	RENVILLE	369	294	286	252	-14.3	-11.9	530	490	434	-18.1	-11.4
SHEYEENE	EDDY	362	307	272	273	-11.1	.04	583	524	521	-10.6	-0.6
ST JOHN	ROLETTE	367	401	368	402	0.3	9.2	--	--	--	--	--
ST THOMAS	PEMBINA	508	528	444	415	-21.4	-6.5	--	--	--	--	--
STANTON	MERCER	517	623	517	482	-22.6	-6.8	--	--	--	--	--
SURREY	WARD	361	999	856	847	-15.2	-1.1	--	--	--	--	--
TAPPEN	KIDDER	294	271	239	219	-19.2	-8.4	--	--	--	--	--
THOMPSON	GRAND FORKS	291	785	930	971	23.7	4.4	--	--	--	--	--
TOLNA	NELSON	247	241	230	201	-16.6	-12.6	959	759	693	-27.7	-8.7
TOWER CITY	CASS	289	293	233	216	-26.3	-7.3	--	--	--	--	--
UPHAM	MCHENRY	272	227	205	197	-13.2	-3.9	--	--	--	--	--
WILLOW CITY	BOTTINEAU	403	329	281	271	-17.6	-3.6	--	--	--	--	--
WILTON	MCLEAN	695	950	728	504	-47.0	-30.8	1,514	1,220	1,198	-20.9	-1.8
WING	BURLEIGH	223	220	208	200	-9.1	-3.9	--	--	--	--	--
ZAP	MERCER	271	511	287	268	-47.6	-6.6	--	--	--	--	--
GROUP TOTAL		27,311	31,415	29,619	28,556	-9.1	-3.6	27,384	23,096	21,123	-22.9	-8.5
IN-STATE TOTAL		369,335	421,487	433,492	444,292	5.4	2.5	674,877	655,688	659,259	-2.3	0.5

[a] 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.
[b] Only trade centers with 200 or more people were included.
Source: Leistritz and Wanzek. 1993. North Dakota 1993: Patterns and Trends in Economic Activity, Fargo: Department of Agricultural Economics, North Dakota State University; Coon and Leistritz. 1997. Unpublished Data. Fargo: Department of Agricultural Economics, North Dakota State University.

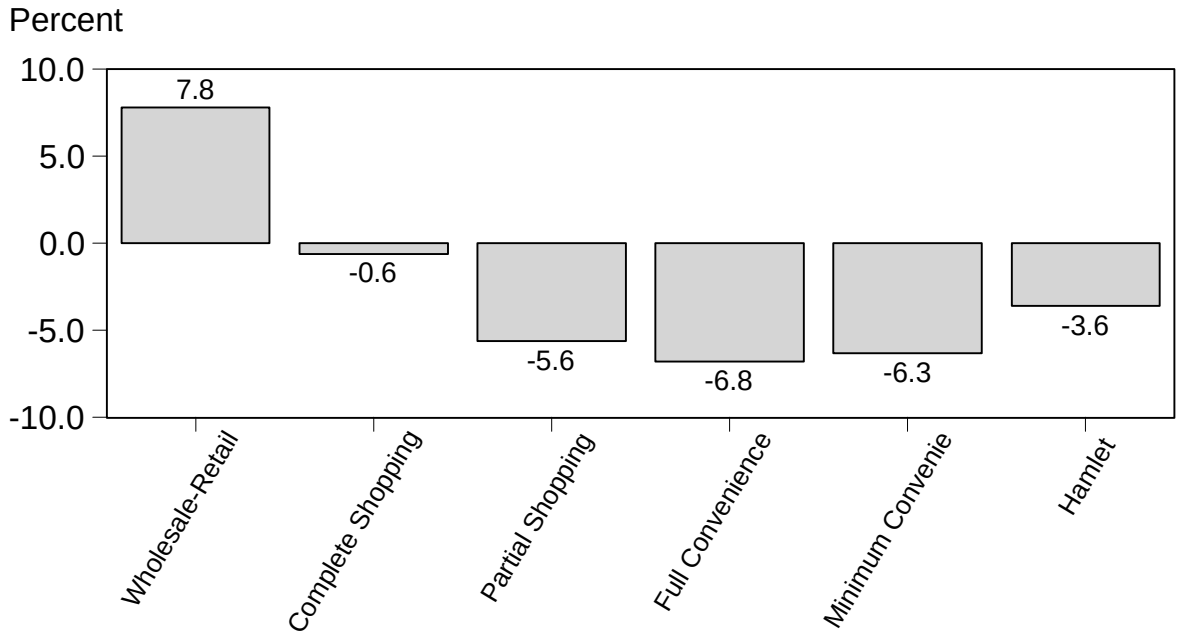


Figure 58. Population Changes for North Dakota Cities by Trade Area Classification, 1990-1996

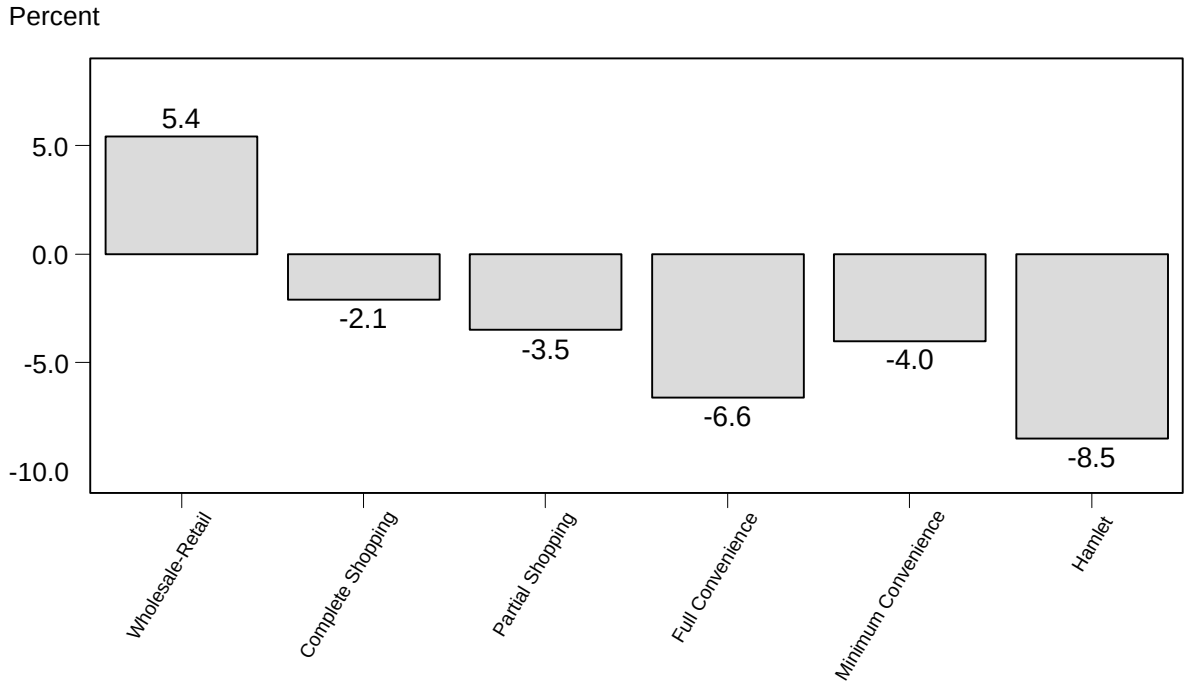


Figure 59. Percentage Change in Trade Area Population by Trade Area Classification, 1990-1996

Population Projections

Population projections are based on assumptions about the continuation of birth rates, death rates, and migration. The projection scenario given here reflects continuation of the North Dakota actual birth and death rates which occurred in 1988, 1989, and 1990 (a three-year average), and one-fourth the rate of migration experienced by each county between 1980 and 1990. 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 1990 Census populations, 1996 Intercensal estimates, and projections to the year 2010. The corresponding figures (Figures 60 and 61), however, reflect only the 1990-2000 projections. Projections tend to be more accurate for shorter periods of time, and the year 2000 will become a benchmark year for planning programs.

Figure 59 shows a decline in population for most counties in the state; only Cass, Grand Forks, Burleigh, Sioux, Mercer, and Rolette are projected to grow between the years 1990 and 2000. (These same counties were the only growth counties between 1980 and 1990; see previous data on population change.) The total projected state population change under this projection scenario is expected to be -2 percent from 1990 to 2000 (Table 13).

Regions 4 and 5 are projected to grow by 4 percent and 8 percent, respectively. Region 7 is a draw--showing a growth of only 31 people from 1990 to 2000 (Table 13). Region 6 has the largest projected percentage loss, roughly 10 percent; this is a slightly smaller loss than experienced in the previous decade (see Figure 61).

The rate of population change in the metropolitan/nonmetropolitan areas reflects a different pattern for the nonmetropolitan areas in the projected period: adjacent counties are projected to lose a smaller percentage of persons than the remote counties, a switch from the 1980-1990 period. The metro counties continue to show growth, albeit at a slightly lower rate in the future decade than experienced during the 1980-1990 period (Figure 61).

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 (e.g., Meals-on-Wheels). It also suggests that younger, working age persons have left these areas to seek employment and/or education elsewhere. However, generally most counties should 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 1990 and 1996[a] Population and Projected Population for 2000, 2005, and 2010[b]

Area	1990	1996	2000	2005	2010	Change 1990-2000
						---%---
DIVIDE	2,899	2,523	2,489	2,294	2,122	-14.1
MCKENZIE	6,383	5,851	6,040	5,862	5,696	-5.4
WILLIAMS	21,129	20,534	19,672	18,943	18,272	-6.9
REGION 1	30,411	28,908	28,201	27,099	26,090	-7.3
BOTTINEAU	8,011	7,538	7,153	6,738	6,400	-10.7
BURKE	3,002	2,469	2,544	2,367	2,206	-15.3
MCHENRY	6,528	6,161	5,803	5,487	5,235	-11.1
MOUNTRAIL	7,021	6,753	6,713	6,571	6,457	-4.4
PIERCE	5,052	4,718	4,356	4,043	3,775	-13.8
RENVILLE	3,160	2,843	2,839	2,672	2,540	-10.2
WARD	57,921	59,734	57,484	56,321	55,186	-0.8
REGION 2	90,695	90,216	86,892	84,199	81,799	-4.2
BENSON	7,198	6,905	7,160	7,211	7,317	-0.5
CAVALIER	6,064	5,270	5,377	5,058	4,808	-11.3
EDDY	2,951	2,876	2,611	2,473	2,346	-11.5
RAMSEY	12,681	12,455	12,361	12,150	11,942	-2.5
ROLETTE	12,772	14,029	14,178	14,825	15,426	11.0
TOWNER	3,627	3,209	3,265	3,130	2,987	-10.0
REGION 3	45,293	44,744	44,952	44,847	44,826	-0.8
GRAND FORKS	70,683	71,450	76,248	76,723	77,509	7.9
NELSON	4,410	3,905	3,894	3,680	3,498	-11.7
PEMBINA	9,238	8,741	8,565	8,203	7,884	-7.3
WALSH	13,840	12,799	12,944	12,480	12,082	-6.5
REGION 4	98,171	96,895	101,651	101,086	100,973	3.5
CASS	102,874	113,343	116,943	122,143	127,234	13.7
RANSOM	5,921	5,794	5,459	5,209	5,004	-7.8
RICHLAND	18,148	18,162	16,991	16,437	16,070	-6.4
SARGENT	4,549	4,441	4,166	3,974	3,805	-8.4
STEELE	2,420	2,277	2,112	1,959	1,821	-12.7
TRAILL	8,752	8,706	8,131	7,858	7,648	-7.1
REGION 5	142,664	152,723	153,802	157,580	161,582	7.8
BARNES	12,545	12,114	11,448	10,903	10,411	-8.7
DICKEY	6,107	5,676	5,353	5,037	4,731	-12.4
FOSTER	3,983	3,866	3,584	3,404	3,248	-10.0
GRIGGS	3,303	2,984	3,029	2,898	2,811	-8.3
LAMOURE	5,383	4,970	4,752	4,459	4,200	-11.7
LOGAN	2,847	2,443	2,449	2,246	2,084	-14.0
MCINTOSH	4,021	3,642	3,421	3,135	2,906	-19.4
STUTSMAN	22,241	21,338	20,623	19,715	18,903	-7.3
WELLS	5,864	5,271	5,116	4,769	4,479	-12.8
REGION 6	66,294	62,304	59,775	56,566	53,773	-9.8

- Continued -

Table 13. continued

Area	1990	1996	2000	2005	2010	Change 1990-2000
						---%---
BURLEIGH	60,131	65,681	62,973	63,748	64,370	4.7
EMMONS	4,830	4,443	4,346	4,058	3,800	-10.0
GRANT	3,549	3,114	3,138	2,943	2,804	-11.6
KIDDER	3,332	2,997	3,029	2,865	2,710	-9.1
MCLEAN	10,457	9,897	9,339	8,880	8,432	-10.7
MERCER	9,808	9,548	9,942	9,946	10,060	1.4
MORTON	23,700	24,422	23,008	22,569	22,130	-2.9
OLIVER	2,381	2,234	2,288	2,200	2,122	-3.9
SHERIDAN	2,148	1,859	1,782	1,623	1,479	-17.0
SIOUX	3,761	4,095	4,283	4,570	4,837	13.9
REGION 7	124,097	128,290	124,128	123,402	122,744	0.0
ADAMS	3,174	2,841	2,857	2,689	2,534	-18.5
BILLINGS	1,108	1,129	1,061	1,012	967	-4.2
BOWMAN	3,596	3,303	3,232	3,027	2,827	-10.1
DUNN	4,005	3,751	3,671	3,496	3,330	-8.3
GOLDEN VALLEY	2,108	1,932	1,885	1,740	1,621	-10.6
HETTINGER	3,445	2,982	3,084	2,898	2,740	-10.5
SLOPE	907	827	827	786	745	-8.8
STARK	22,832	22,694	21,606	20,891	20,206	-5.4
REGION 8	41,175	39,459	38,223	36,539	34,970	-7.2
NORTH DAKOTA	638,800	643,539	637,624	631,318	626,757	-1.9

[a]1996 populations are intercensal estimates.
[b]These projections are based on the assumption of 1/4 the 1980-90 migration rates.
Source: Department of Agricultural Economics. 1992. *North Dakota Demographic Projection Model*, Fargo: NDSU (projected populations); U.S. Department of Commerce, Bureau of the Census. 1990 Decennial Census of Population (1990 Projections); U.S. Department of Commerce, Bureau of the Census. Intercensal Population Estimates, 1996 (1996 population estimates).

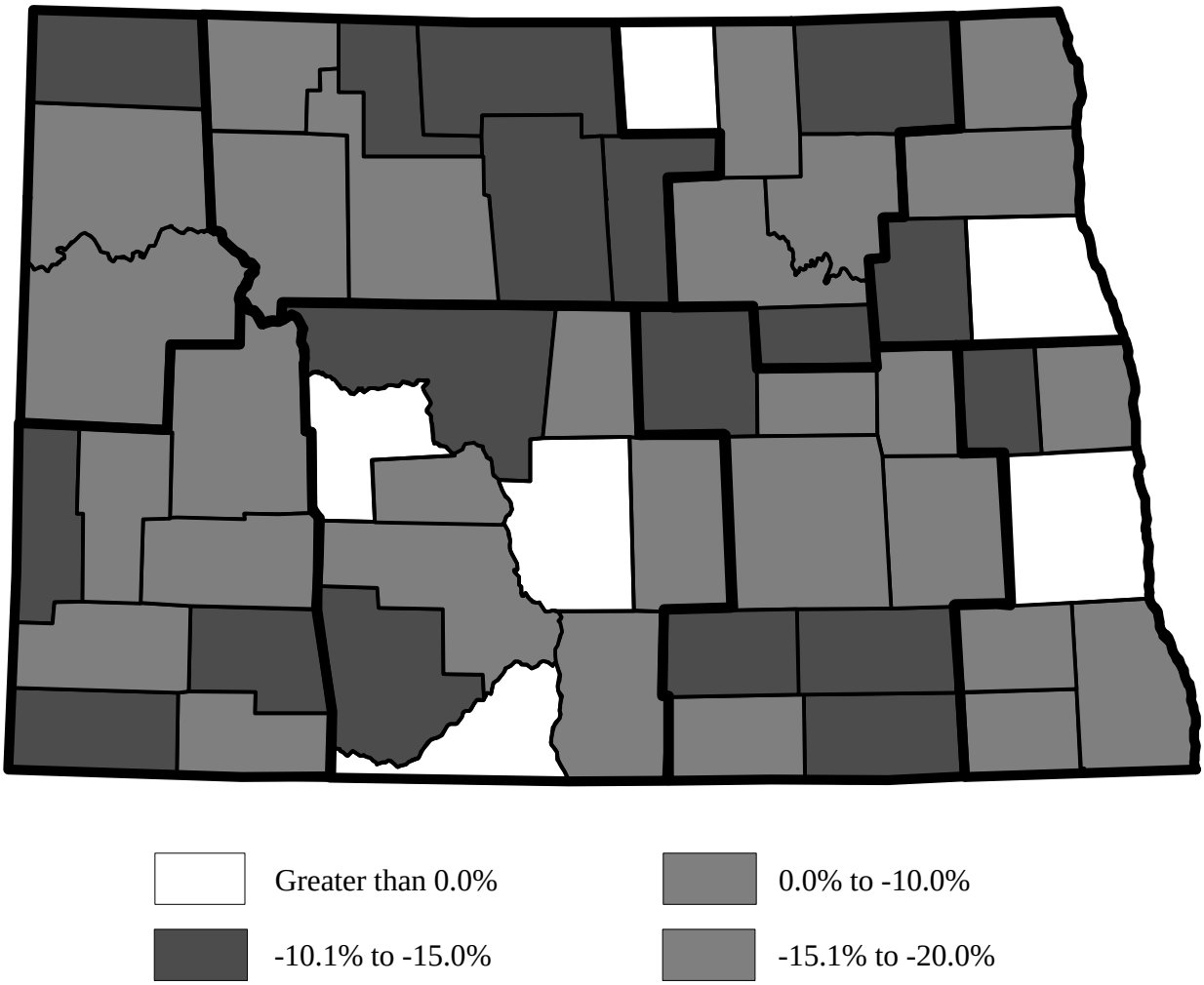


Figure 60. Projected Change in North Dakota Population, 1990-2000

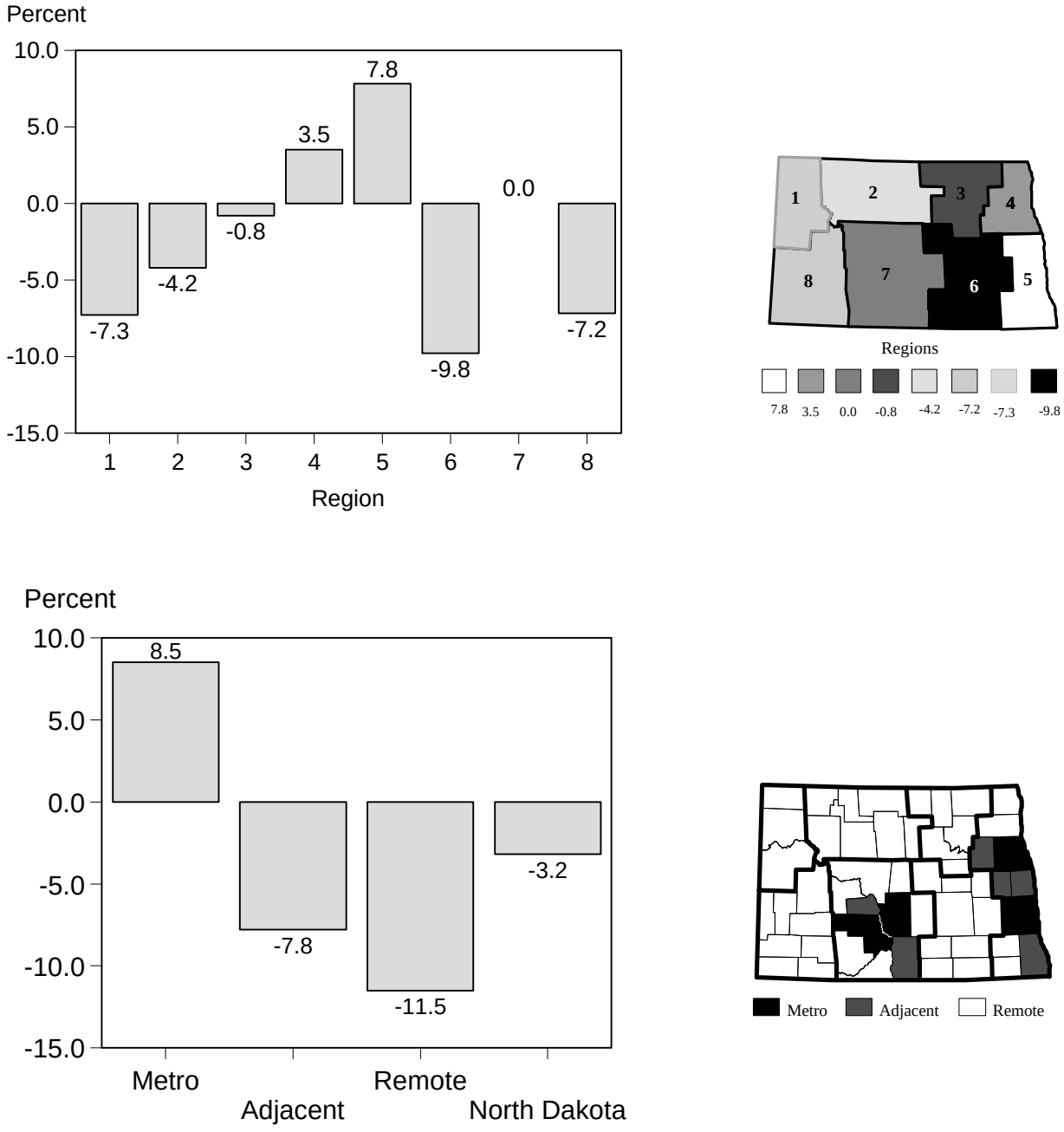


Figure 61. Projected Change in North Dakota Population by Region and Area, 1990-2000

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 1992 (5,972) and Region 1 had the fewest (2,101) (Table 14). The number of farms in North Dakota in 1992 was only one-half the number that existed in 1954. Ward County had the most farms (1,107) of any county in the state in 1992 (Figure 62).

Long run (1954-1992) decline in farm numbers has been substantial, with all regions showing a 40 percent or larger decline. Region 4 led the state with a 62 percent decrease in farms during the period (Figure 63). The four eastern state regions had larger losses of farms than the western ones during the 1954-1992 period. In the short run, the trend is not much different. From 1987-1992 all eight regions lost farms with the smallest loss being 9 percent (Region 1) and the largest loss 16 percent (Region 4) (Figure 64). The trend of farm consolidation has been substantial 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 1,267 acres in 1992, nearly double that of 1954 (Table 14). Average farm size ranged from 1,009 acres in Region 4 to 1,903 acres in Region 8 (Figure 65). Generally, the larger farms are more prevelant in the western part of North Dakota. The eastern portion of the state, where more intensive cropping occurs, had smaller farms.

Table 14. Number of Farms and Average Farm Size, by County, North Dakota, Selected Years, 1954-1992

Regions	Number of Farms					Percentage Change	
	1954	1974	1982	1987	1992	1954-1992	1987-1992
DIVIDE	907	693	612	599	527	-41.9	-12.0
MCKENZIE	1,203	884	778	752	741	-38.4	-1.5
WILLIAMS	1,536	1,106	971	948	833	-45.8	-12.1
REGION 1	3,646	2,683	2,361	2,299	2,101	-42.4	-8.6
BOTTINEAU	1,677	1,192	967	929	798	-52.4	-14.1
BURKE	892	671	580	525	462	-48.2	-12.0
MCHENRY	1,596	1,156	974	964	889	-44.3	-7.8
MOUNTRAIL	1,279	1,041	881	873	745	-41.8	-14.7
PIERCE	957	686	589	578	501	-47.6	-13.3
RENVILLE	833	547	480	454	396	-52.5	-12.8
WARD	1,983	1,425	1,256	1,215	1,107	-44.2	-8.9
REGION 2	9,217	6,718	5,727	5,538	4,898	-46.9	-11.6
BENSON	1,331	1,006	760	717	635	-52.3	-11.4
CAVALIER	1,794	1,122	971	922	743	-58.6	-19.4
EDDY	556	394	345	326	312	-43.9	-4.3
RAMSEY	1,269	785	690	633	511	-59.7	-19.3
ROLETTE	1,001	628	550	536	486	-51.4	-9.3
TOWNER	884	684	552	557	462	-47.7	-17.1
REGION 3	6,835	4,619	3,868	3,691	3,149	-53.9	-14.7
GRAND FORKS	1,886	1,136	957	893	751	-60.2	-15.9
NELSON	1,104	762	632	564	482	-56.3	-14.5
PEMBINA	1,519	920	841	763	624	-58.9	-18.2
WALSH	2,084	1,210	975	928	780	-62.6	-15.9
REGION 4	6,593	4,028	3,405	3,148	2,637	-61.5	-16.2
CASS	2,324	1,509	1,276	1,183	1,004	-56.8	-15.1
RANSOM	1,140	646	521	498	451	-60.4	-9.4
RICHLAND	2,325	1,486	1,207	1,126	956	-58.9	-15.1
SARGENT	1,168	681	590	541	481	-58.8	-11.1
STEELE	862	569	440	396	335	-61.1	-15.4
TRAILL	1,326	845	685	603	517	-61.0	-14.3
REGION 5	9,145	5,736	4,719	4,347	3,744	-59.1	-13.9
BARNES	1,798	1,248	1,015	917	839	-53.3	-8.5
DICKEY	1,171	798	611	597	552	-52.9	-7.5
FOSTER	612	372	345	377	297	-51.5	-21.2
GRIGGS	805	525	457	444	382	-52.5	-14.0
LAMOURE	1,365	924	765	738	679	-50.3	-8.0
LOGAN	827	659	536	531	472	-42.9	-11.1
MCINTOSH	982	707	595	556	483	-50.8	-13.1
STUTSMAN	2,042	1,249	1,134	1,113	988	-51.6	-11.2
WELLS	1,391	881	735	683	638	-54.1	-6.6
REGION 6	10,993	7,363	6,193	5,956	5,330	-51.5	-10.5

- Continued -

Table 14. continued

Regions	Number of Farms					Percentage Change	
	1954	1974	1982	1987	1992	1954-1992	1987-1992
BURLEIGH	1,026	845	792	803	795	-22.5	-1.0
EMMONS	1,259	951	849	868	759	-39.7	-12.6
GRANT	1,018	828	685	688	598	-41.3	-13.1
KIDDER	871	626	566	557	499	-42.7	-10.4
MCLEAN	1,859	1,322	1,149	1,058	926	-50.2	-12.5
MERCER	852	644	542	575	527	-38.1	-8.3
MORTON	1,453	1,095	956	988	923	-36.5	-6.6
OLIVER	555	391	349	367	326	-41.3	-11.2
SHERIDAN	865	565	495	470	419	-51.6	-10.9
SIOUX	319	257	219	229	200	-37.3	-12.7
REGION 7	10,077	7,524	6,602	6,603	5,972	-40.7	-9.6
ADAMS	555	481	371	410	353	-36.4	-13.9
BILLINGS	359	271	257	267	242	-32.6	-9.4
BOWMAN	537	380	377	390	343	-36.1	-12.1
DUNN	1,059	792	697	733	650	-38.6	-11.3
GOLDEN VALLEY	424	287	288	261	219	-48.3	-16.1
HETTINGER	887	609	502	525	427	-51.9	-18.7
SLOPE	447	330	295	299	270	-39.6	-9.7
STARK	1,169	889	769	822	788	-32.6	-4.1
REGION 8	5,437	4,039	3,556	3,707	3,292	-39.5	-11.2
NORTH DAKOTA	61,943	42,710	36,431	35,289	31,123	-49.8	-11.8

- Continued -

Table 14. continued

Regions	Average Farm Size (acres)					Percentage Change	
	1954	1974	1982	1987	1992	1954-1992	1987-1992
DIVIDE	852	1,151	1,205	1,228	1,378	61.7	12.2
MCKENZIE	1,085	1,385	1,506	1,493	1,573	45.0	5.4
WILLIAMS	833	1,122	1,196	1,255	1,420	70.5	13.1
REGION 1	921	1,216	1,300	1,326	1,463	58.8	10.3
BOTTINEAU	615	922	1,005	1,078	1,191	93.7	10.5
BURKE	726	986	1,105	1,162	1,211	66.8	4.2
MCHENRY	697	1,006	1,106	1,087	1,180	69.3	8.6
MOUNTRAIL	866	1,069	1,147	1,202	1,343	55.1	11.7
PIERCE	695	935	1,019	1,026	1,170	68.3	14.0
RENVILLE	647	953	1,060	1,111	1,272	96.6	14.5
WARD	650	881	958	977	1,049	61.4	7.4
REGION 2	694	961	1,050	1,082	1,186	70.9	9.6
BENSON	607	931	1,083	1,138	1,225	101.8	7.6
CAVALIER	513	802	899	995	1,151	124.4	15.7
EDDY	738	972	1,091	1,079	1,183	60.3	9.6
RAMSEY	610	950	1,086	1,143	1,252	105.2	9.5
ROLETTE	514	833	878	945	1,075	109.1	13.8
TOWNER	713	961	1,089	1,132	1,280	79.5	13.1
REGION 3	594	898	1,010	1,069	1,193	100.8	11.6
GRAND FORKS	464	762	893	904	1,024	120.7	13.3
NELSON	560	854	962	1,062	1,147	104.8	8.0
PEMBINA	437	730	801	839	963	120.4	14.8
WALSH	402	675	786	818	945	135.1	15.5
REGION 4	455	746	852	891	1,009	121.8	13.2
CASS	472	690	830	895	1,066	125.8	19.1
RANSOM	436	838	935	978	1,075	146.6	9.9
RICHLAND	372	595	734	763	836	124.7	9.6
SARGENT	466	765	872	883	1,030	121.0	16.6
STEELE	509	817	1,031	1,125	1,313	158.0	16.7
TRAILL	409	620	757	843	969	136.9	14.9
REGION 5	436	693	830	883	1,013	132.3	14.7
BARNES	523	770	890	937	1,023	95.6	9.2
DICKEY	584	856	1,008	1,049	1,137	94.7	8.4
FOSTER	678	1,089	1,118	1045	1,233	81.9	18.0
GRIGGS	545	839	921	948	1,037	90.3	9.4
LAMOURE	537	799	906	878	985	83.4	12.2
LOGAN	742	941	1,063	1,123	1,269	71.0	13.0
MCINTOSH	631	876	944	1,021	1,128	78.8	10.5
STUTSMAN	683	1,060	1,170	1,168	1,285	88.1	10.0
WELLS	583	941	1,036	1,080	1,177	101.9	9.0
REGION 6	605	899	1,007	1,033	1,141	88.6	10.5

- Continued -

Table 14. continued

Regions	Average Farm Size (acres)					Percentage Change	
	1954	1974	1982	1987	1992	1954-1992	1987-1992
BURLEIGH	972	1,163	1,101	1,099	1,104	13.6	0.5
EMMONS	746	911	958	998	1,099	47.3	10.1
GRANT	1,018	1,230	1,352	1,483	1,705	67.5	15.0
KIDDER	948	1,259	1,276	1,362	1,451	53.1	6.5
MCLEAN	697	935	1,012	1,088	1,219	74.9	12.0
MERCER	779	944	1,040	970	1,009	29.5	4.0
MORTON	854	1,131	1,166	1,242	1,337	56.6	7.6
OLIVER	767	1,072	1,076	1,052	1,179	53.7	12.1
SHERIDAN	680	990	1,052	1,112	1,244	82.9	11.9
SIOUX	2,083	3,040	3,468	3,527	3,729	79.0	5.7
REGION 7	861	1,129	1,186	1,239	1,340	55.6	8.2
ADAMS	1,055	1,298	1,583	1,525	1,684	59.6	10.4
BILLINGS	1,385	2,838	2,903	2,994	3,384	144.3	13.0
BOWMAN	1,354	1,873	1,883	1,849	1,977	46.0	6.9
DUNN	1,104	1,795	2,005	1,854	2,081	88.5	12.2
GOLDEN VALLEY	1,300	1,774	1,914	2,039	2,308	77.5	13.2
HETTINGER	840	1,244	1,530	1,381	1,612	91.9	16.7
SLOPE	1,324	2,376	2,586	2,705	2,910	119.8	7.6
STARK	764	953	1,046	978	1,068	39.8	9.2
REGION 8	1,059	1,591	1,779	1,720	1,903	79.7	10.6
NORTH DAKOTA	676	992	1,104	1,143	1,267	87.4	10.8

Source: U.S. Department of Agriculture. 1954-1992. Census of Agriculture. Washington, D.C.

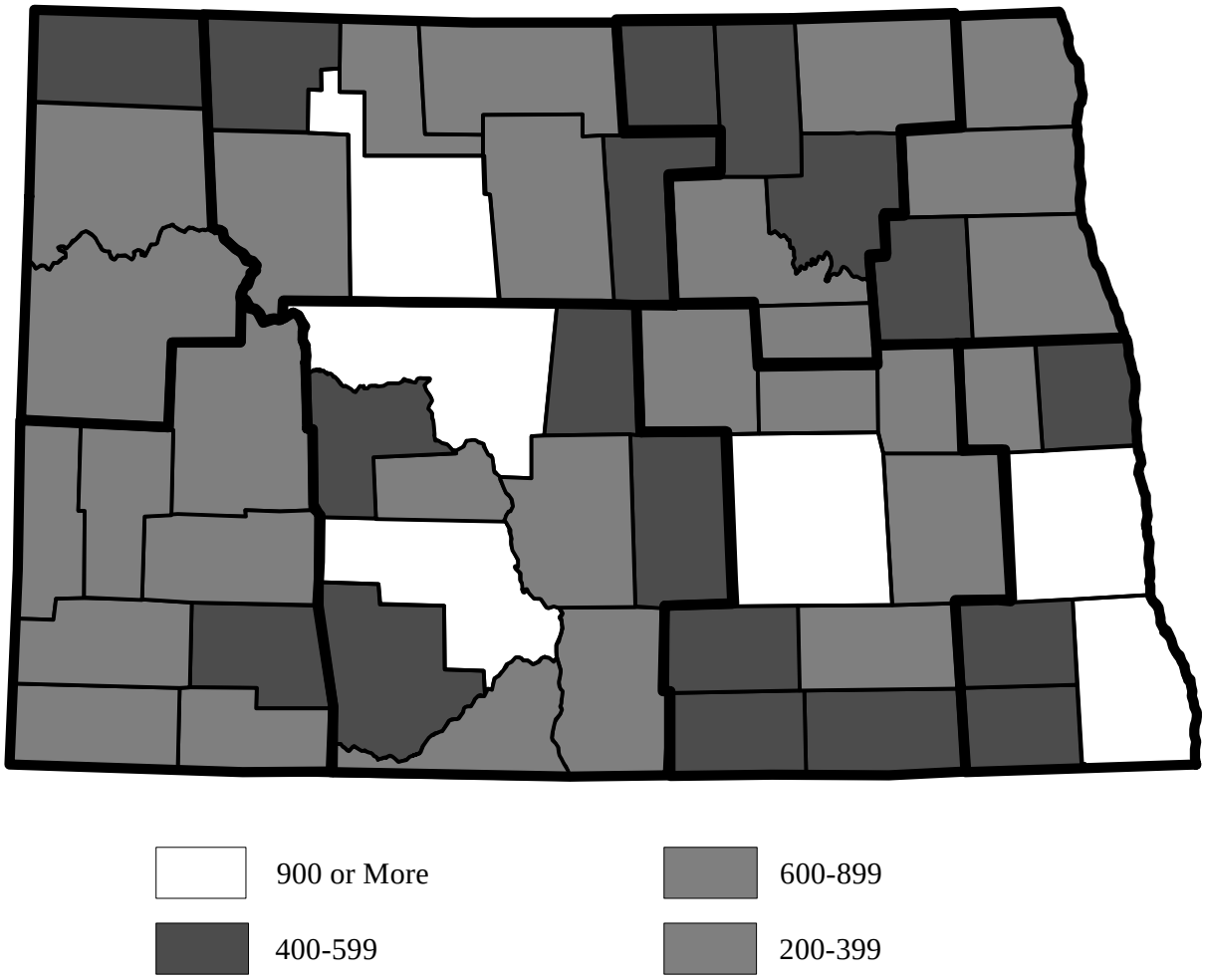


Figure 62. Number of Farms in North Dakota by County, 1992

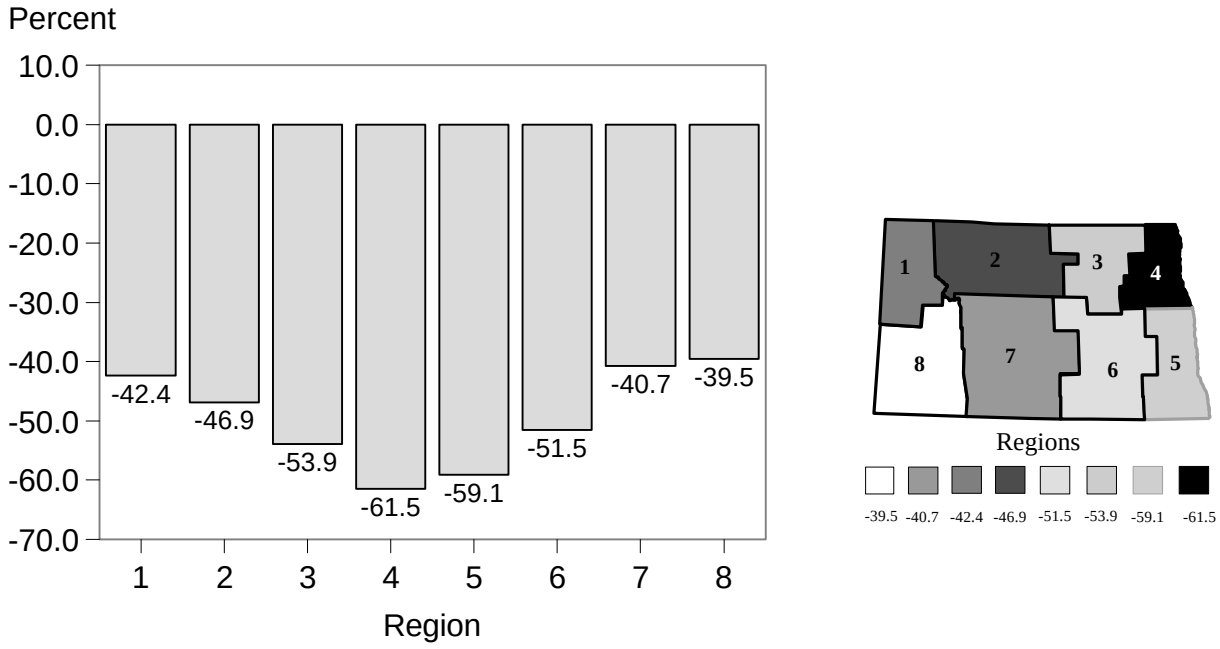


Figure 63. Change in the Number of Farms in North Dakota by State Region, 1954-1992

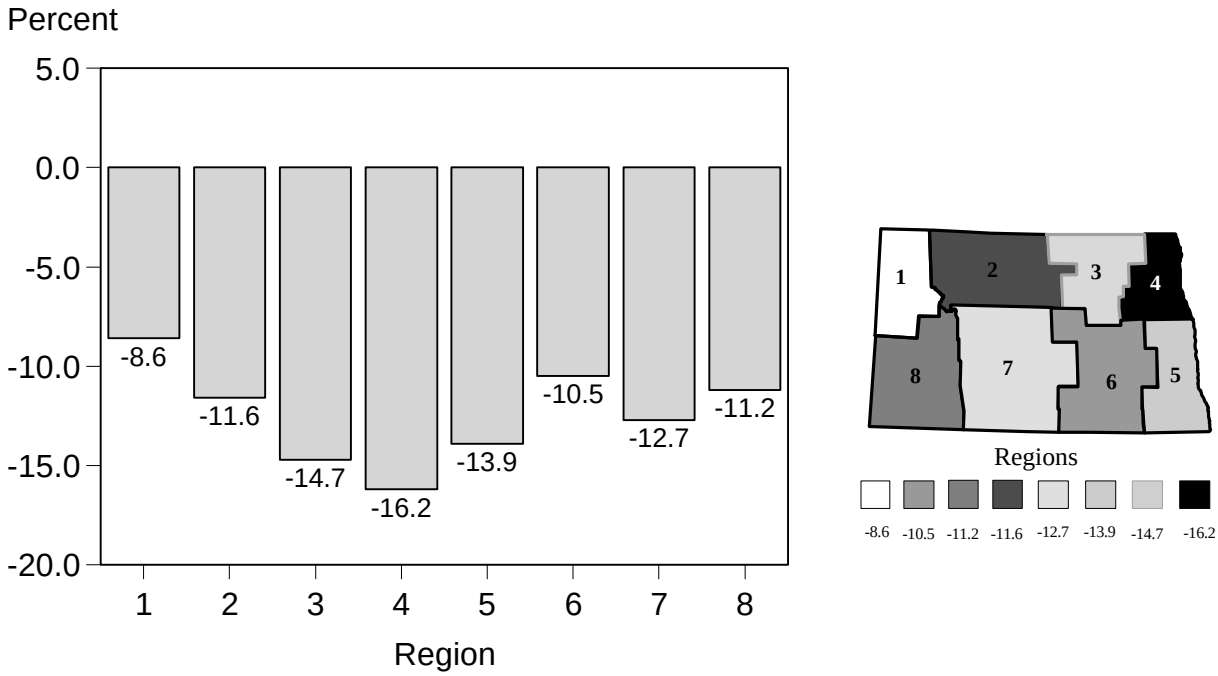


Figure 64. Change in the Number of Farms in North Dakota by State Region, 1987-1992

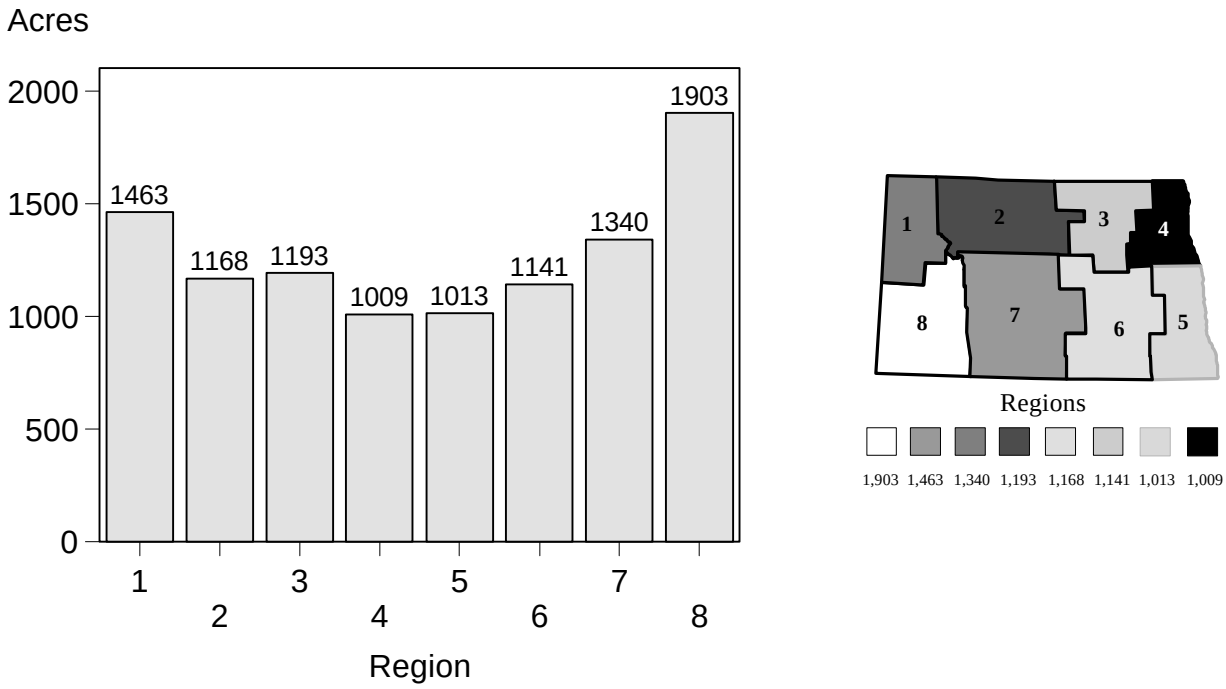


Figure 65. Average Farm Size in North Dakota by State Region, 1992

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 gives rise to new economic opportunities and service demands. In other rural areas, a dwindling population base confronts local businesses and service agencies with adjustment problems.

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. Intercensal population estimates for 1996 show a growth of over 4,700 people from 1990. This reduces the long-term decline (1980-1996) to 1.4 percent. However, many counties experienced marked population changes. For instance, 20 rural counties sustained population decreases of more than 20 percent, while one urban county had a population increase of over 28 percent from 1980-96. Cass County led the state both in the rate of growth and the absolute increase in population; the 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, greater than 34 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, 1996
Hospital Beds, 1996
Crimes, 1993-95
Housing Units, 1990
Vacancy Rates, 1990
Median Age of Housing, 1990

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, and all housing information came from the 1990 Census (U.S. Department of Commerce. 1992. *1990 Census of Population and Housing* [STF3A], U.S. Bureau of the Census, Washington, DC).

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 an indication of housing quantity, quality, and distribution.

Physicians

In general, residents in eastern North Dakota have easier access to physicians than those residents in the western part of the state (Figure 66). However, in terms of state planning regions, Region 3 has the highest number of persons per physician (1,945), followed by Region 6 (1,520) (Figure 66). Region 5 has the state's lowest average (309) compared to the state average (509) (Figure 67). A marked difference also is 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 67). Seventeen nonmetropolitan counties had no physician in 1996, but one rural county, Adams, had the lowest population per physician ratio (189) persons per physician and another rural county, McKenzie, had the highest (5,851) (Table 15). State Region 8 had only 33 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 242 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 this 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 available per person in the west (Figure 68). Regions 1, 2, 7 and 8 have the greatest number of beds per person (Figure 69). Region 3, which had the highest population-per-physician ratio, also has the lowest population-per-hospital bed ratio. In spite of the more equitable distribution of hospital beds than physicians, the metro areas still ranked highest 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 (709), and Adams County had the lowest number of persons per bed (62). Nineteen of the state's counties had no hospital in 1996 (Table 15).

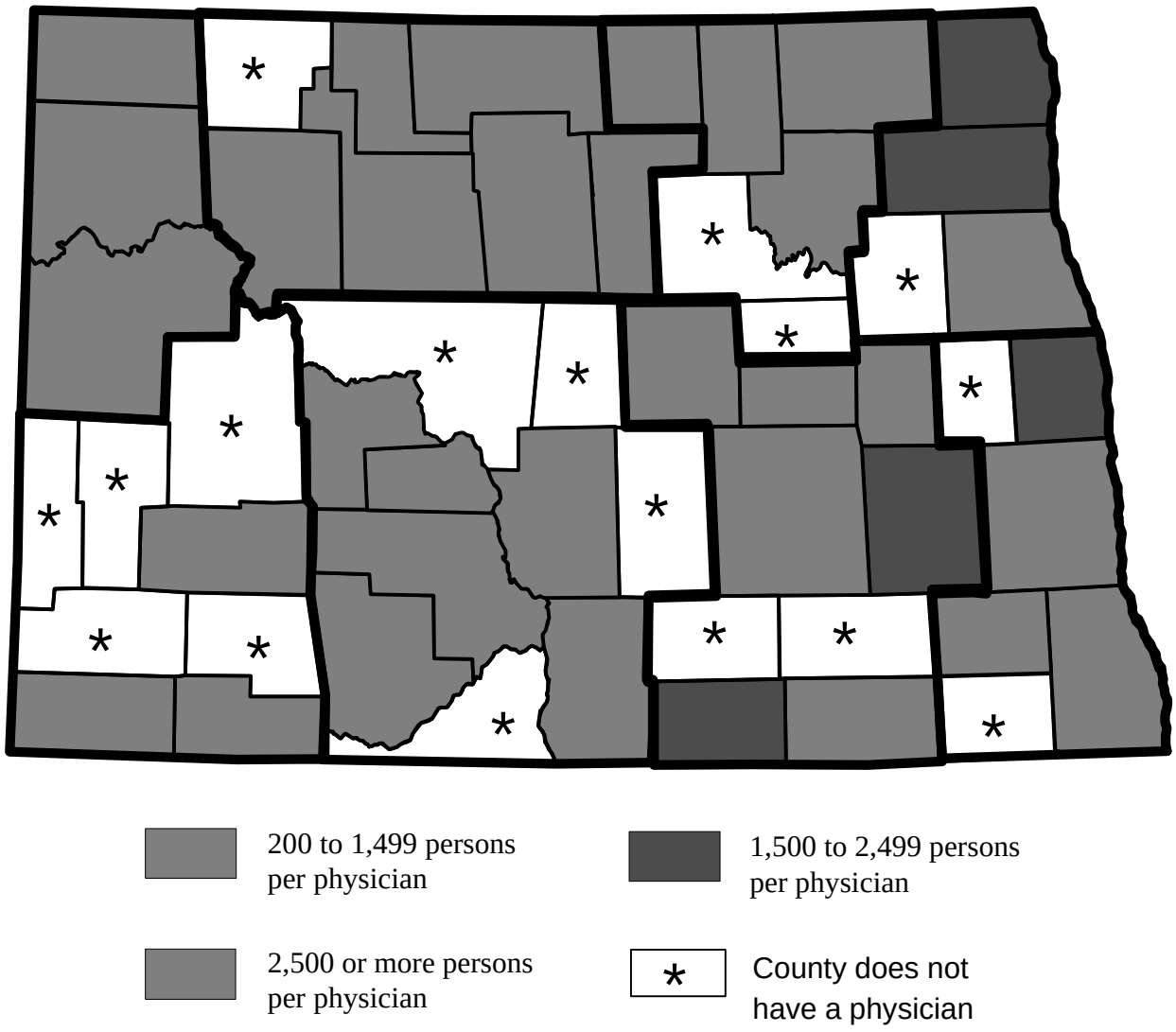


Figure 66. North Dakota Population per Physician, 1996

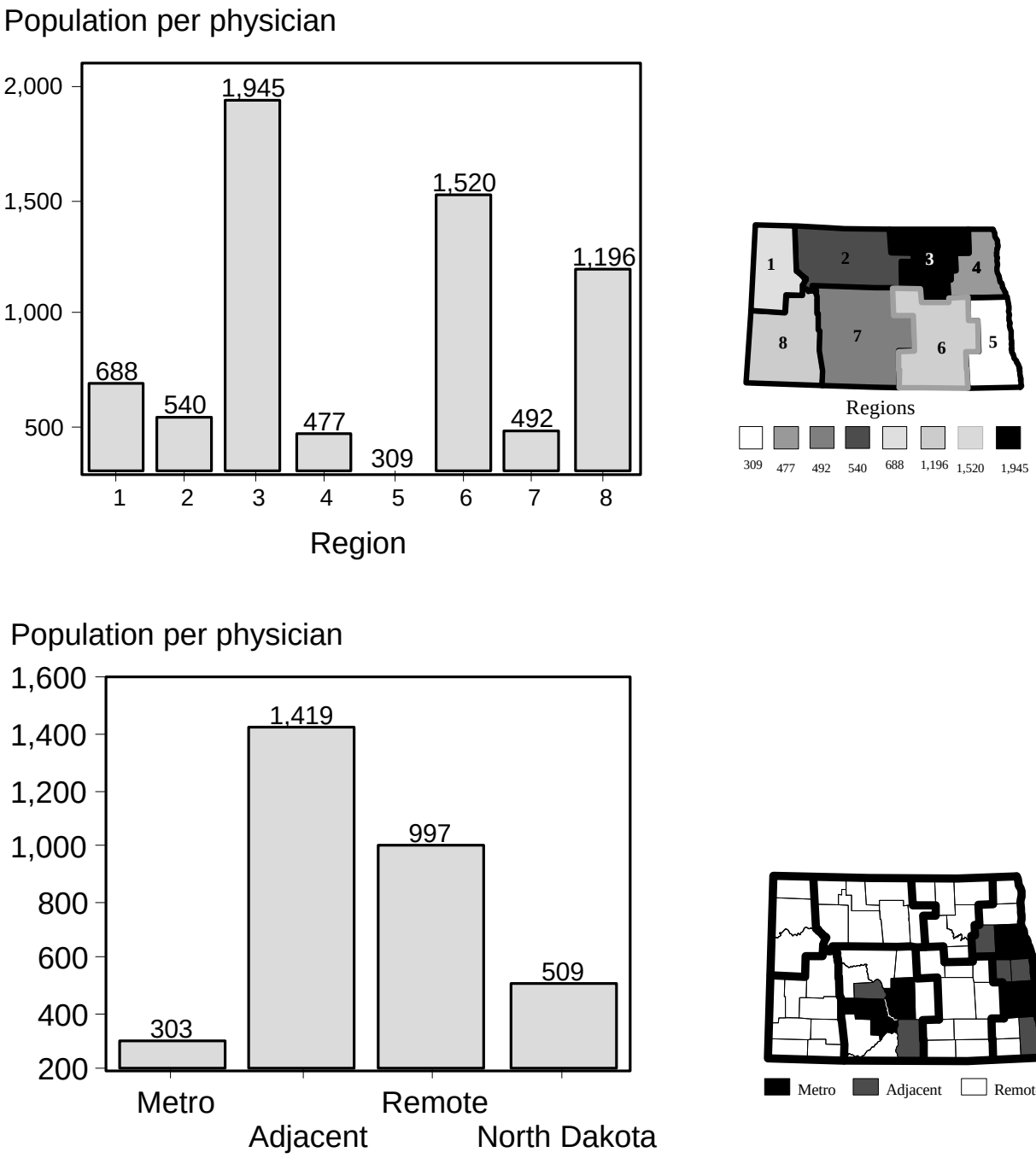


Figure 67. North Dakota Population per Physician by Region and Area, 1996

Table 15. Number of Physicians, Population Per Physician, Number of Hospital Beds, and Population Per Hospital Bed in North Dakota, 1996

Area	Number of Physicians	Population Per Physician	Number of Hospital Beds	Population Per Hospital Bed
Divide	3	841	29	87
McKenzie	1	5,851	26	225
Williams	38	540	149	138
REGION 1	42	688	204	142
Bottineau	3	2,512	35	215
Burke	--	--	--	--
McHenry	2	3,081	--	--
Mountrail	6	1,126	25	270
Pierce	10	472	38	124
Renville	2	1,422	--	--
Ward	144	415	446	134
REGION 2	167	540	544	166
Benson	--	--	--	--
Cavalier	2	2,635	38	139
Eddy	--	--	--	--
Ramsey	15	830	50	249
Rolette	3	4,676	59	238
Towner	3	1,070	22	146
REGION 3	23	1,945	169	265
Grand Forks	190	376	289	247
Nelson	--	--	19	206
Pembina	5	1,748	29	301
Walsh	8	1,600	78	164
REGION 4	203	477	415	233
Cass	469	242	709	160
Ransom	2	2,897	20	290
Richland	18	1,009	--	--
Sargent	--	--	--	--
Steele	--	--	--	--
Traill	5	1,741	55	158
REGION 5	494	309	784	195

- Continued -

Table 15. continued

Area	Number of Physicians	Population Per Physician	Number of Hospital Beds	Population Per Hospital Bed
Barnes	8	1,514	74	164
Dickey	7	811	36	158
Foster	3	1,289	30	129
Griggs	1	2,984	11	271
LaMoure	--	--	--	--
Logan	--	--	--	--
McIntosh	2	1,821	50	73
Stutsman	18	1,185	56	381
Wells	2	2,636	48	110
REGION 6	41	1,520	305	205
Burleigh	238	276	501	131
Emmons	3	1,481	27	165
Grant	1	3,114	25	125
Kidder	--	--	--	--
McLean	--	--	67	148
Mercer	8	1,194	29	329
Morton	9	2,714	54	452
Oliver	2	1,117	--	--
Sheridan	--	--	--	--
Sioux	--	--	--	--
REGION 7	261	492	703	182
Adams	15	189	46	62
Billings	--	--	--	--
Bowman	1	3,303	34	97
Dunn	--	--	--	--
Golden Valley	--	--	--	--
Hettinger	--	--	--	--
Slope	--	--	--	--
Stark	17	1,335	135	168
REGION 8	33	1,196	215	184
NORTH DAKOTA	1,264	509	3,339	193

Sources: North Dakota Medical Association. 1996. Membership Directory. Bismarck, ND; North Dakota Department of Health, Division of Health Facilities. 1997. Hospitals & Swing Beds, unpublished data, Bismarck, ND.

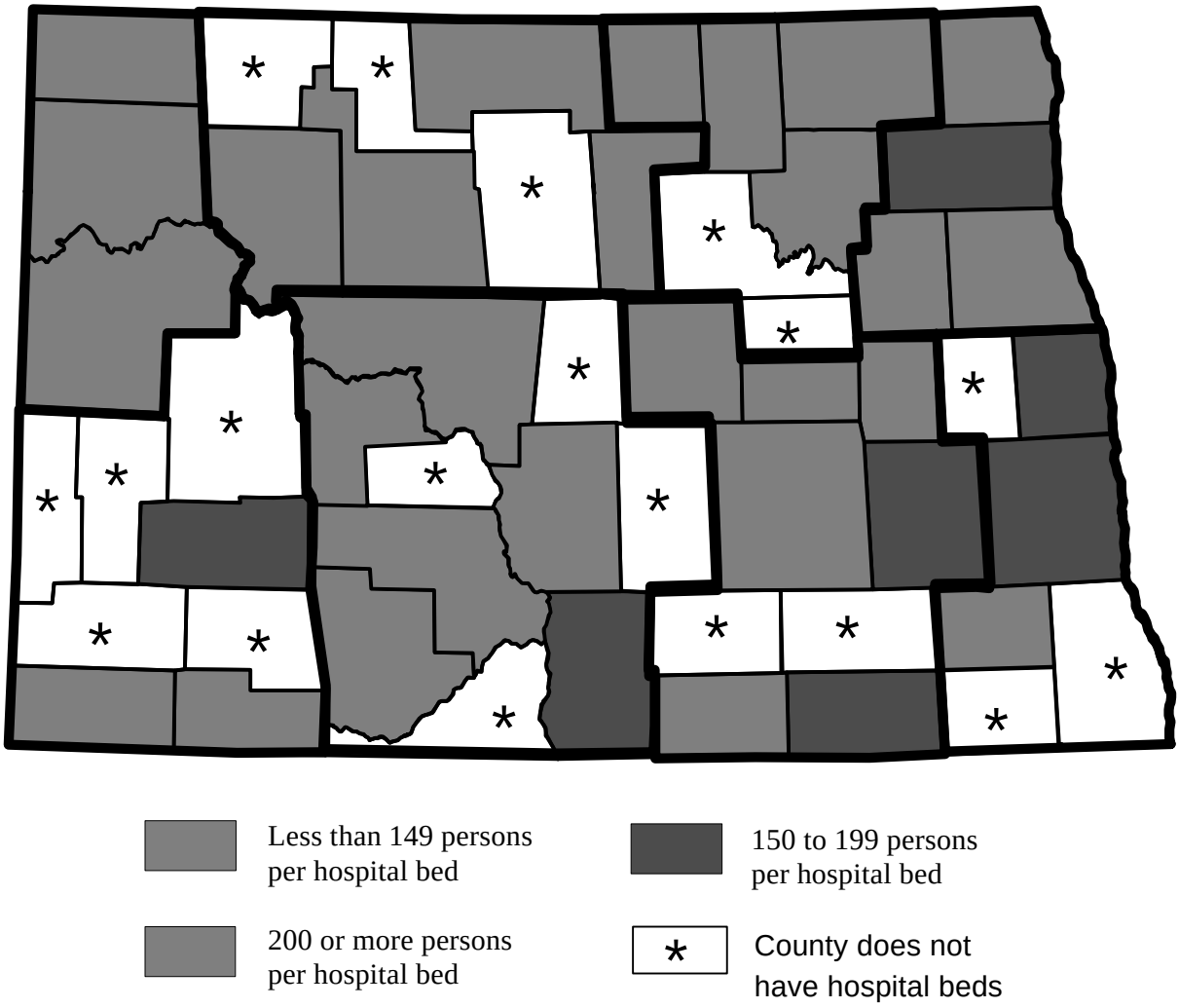


Figure 68. North Dakota Population per Hospital Bed, 1996

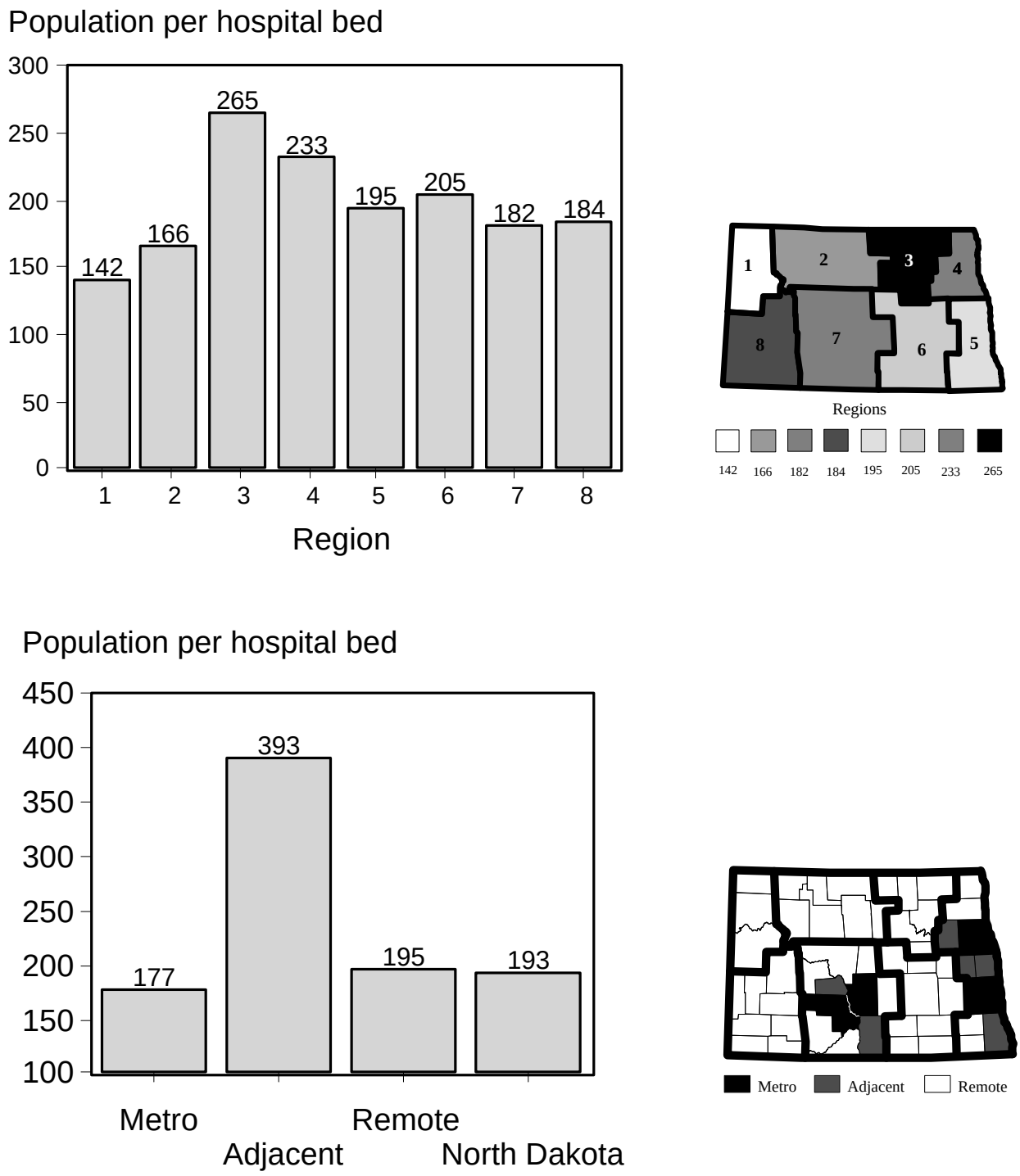


Figure 69. North Dakota Population per Hospital Bed by Region and Area, 1996

Housing

At the time of the 1990 Census, North Dakota had 276,340 housing units, nearly 13 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 70 and 71) and in remote counties (Figure 71). Bottineau County had a 33 percent vacancy rate in 1990, the state's highest, while Burleigh and Cass Counties had the state's lowest vacancy rate, 5 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 1990 Census, the median age of the housing stock in 1990 statewide was 26 years (Table 16 and Figure 72). All regions of the state averaged between 23 and 28 years of age, except Region 6 where the average age of the housing was 33; Region 6 is heavily rural (Figure 73). The nonmetro adjacent counties had the oldest housing stock (35 years), with the newest buildings in the metro areas (20 years). Region 7 has the youngest housing stock and is home of Mercer County, the county with the state's newest housing (16 years). Mercer County housing construction 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 average age (17 years), possibly due to construction of housing on 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, 1990; and Crime Rates, 1993-1995

Area	Housing			Crime 1993-1995	
	# of units 1990	Percent Vacancy 1990	Median Age 1990[a]	3-Yr. Avg. # of Crimes	Rate Per 1,000[b]
Divide	1,667	28.4	40	9	3.5
McKenzie	3,178	27.6	20	74	12.6
Williams	10,180	21.0	22	627	30.5
REGION 1	15,025	23.2	24	710	24.5
Bottineau	4,661	33.4	29	119	15.6
Burke	1,691	26.0	51	12[c]	4.7
McHenry	3,320	23.2	42	75	12.1
Mountrail	3,675	29.6	21	48	7.1
Pierce	2,355	16.2	33	81	17.1
Renville	1,558	22.4	29	28	9.6
Ward	23,585	8.9	24	1,762	30.4
REGION 2	40,845	16.4	28	2,125	23.9
Benson	3,163	23.7	27	69	9.9
Cavalier	3,038	21.8	33	47	8.5
Eddy	1,470	18.8	41	36	12.6
Ramsey	5,616	11.4	29	703	55.8
Rolette	4,742	12.5	17	46	3.4
Towner	1,770	19.0	32	9	2.7
REGION 3	19,799	16.4	28	910	20.3
Grand Forks	27,085	6.4	23	3,489	48.9
Nelson	2,261	19.0	47	22[d]	5.4
Pembina	4,294	17.2	30	95	10.8
Walsh	6,093	14.2	32	411	31.8
REGION 4	39,733	9.5	27	4,017	41.3
Cass	42,407	5.0	19	4,535	41.1
Ransom	2,569	11.1	49	75	12.8
Richland	7,394	11.9	30	363	19.9
Sargent	2,057	14.3	51	50	11.2
Steele	1,311	24.4	39	11[e]	4.8
Traill	3,770	11.8	38	69	8.0
REGION 5	59,508	7.3	24	5,103	34.1

- Continued -

Table 16. continued

Area	Housing # of units 1990	Housing Percent Vacancy 1990	Housing Median Age 1990[a]	Crime 3-Yr. Avg. # of Crimes	1993-1995 Rate Per 1,000[b]
Barnes	5,801	14.2	36	159	13.1
Dickey	2,763	16.8	30	51	8.7
Foster	1,876	17.9	33	5	1.3
Griggs	1,660	22.0	40	7[e]	2.3
LaMoure	2,434	14.8	39	14	2.7
Logan	1,335	17.9	40	26	10.1
McIntosh	2,031	16.9	35	22	5.9
Stutsman	9,770	11.4	28	514	23.8
Wells	2,869	16.1	33	50	9.3
REGION 6	30,539	14.8	33	848	13.4
Burleigh	23,803	4.7	19	2,338	36.5
Emmons	2,200	16.0	40	27	5.9
Grant	2,011	31.7	30	5	1.5
Kidder	1,672	25.4	28	37	11.9
McLean	5,515	28.7	27	147	14.8
Mercer	4,496	20.8	16	199	21.1
Morton	9,467	8.3	23	741	30.7
Oliver	968	16.4	23	20	9.0
Sheridan	1,061	19.1	50	12	6.1
Sioux	1,175	13.0	19	N/A	N/A
REGION 7	52,368	12.1	23	3,526	28.7
Adams	1,504	15.8	34	37	13.1
Billings	533	27.4	26	7	6.0
Bowman	1,691	16.0	29	29	8.8
Dunn	2,057	30.3	20	8	2.1
Golden Valley	1,035	21.6	38	25	12.9
Hettinger	1,637	18.0	36	10	3.2
Slope	481	30.8	49	3[f]	3.6
Stark	9,585	11.5	18	522	23.0
REGION 8	18,523	16.5	24	641	16.2
NORTH DAKOTA	276,340	12.8	26	17,880	28.0

[a]Based on age reported in 1990.

[b]Based on 1993-1995 averaged population estimates.

[c]Only available for 1993 and 1995.

[d]Only available for 1995.

[e]Only available for 1993 and 1994.

[f]Only available for 1994 and 1995

Sources: U.S. Department of Commerce, Bureau of the Census. 1992. 1990 *Census of Population and Housing*, STF3A. Washington, D.C.; Attorney General's Office, Bureau of Criminal Investigation. 1993-1995. *Crime in North Dakota*. Bismarck, ND.

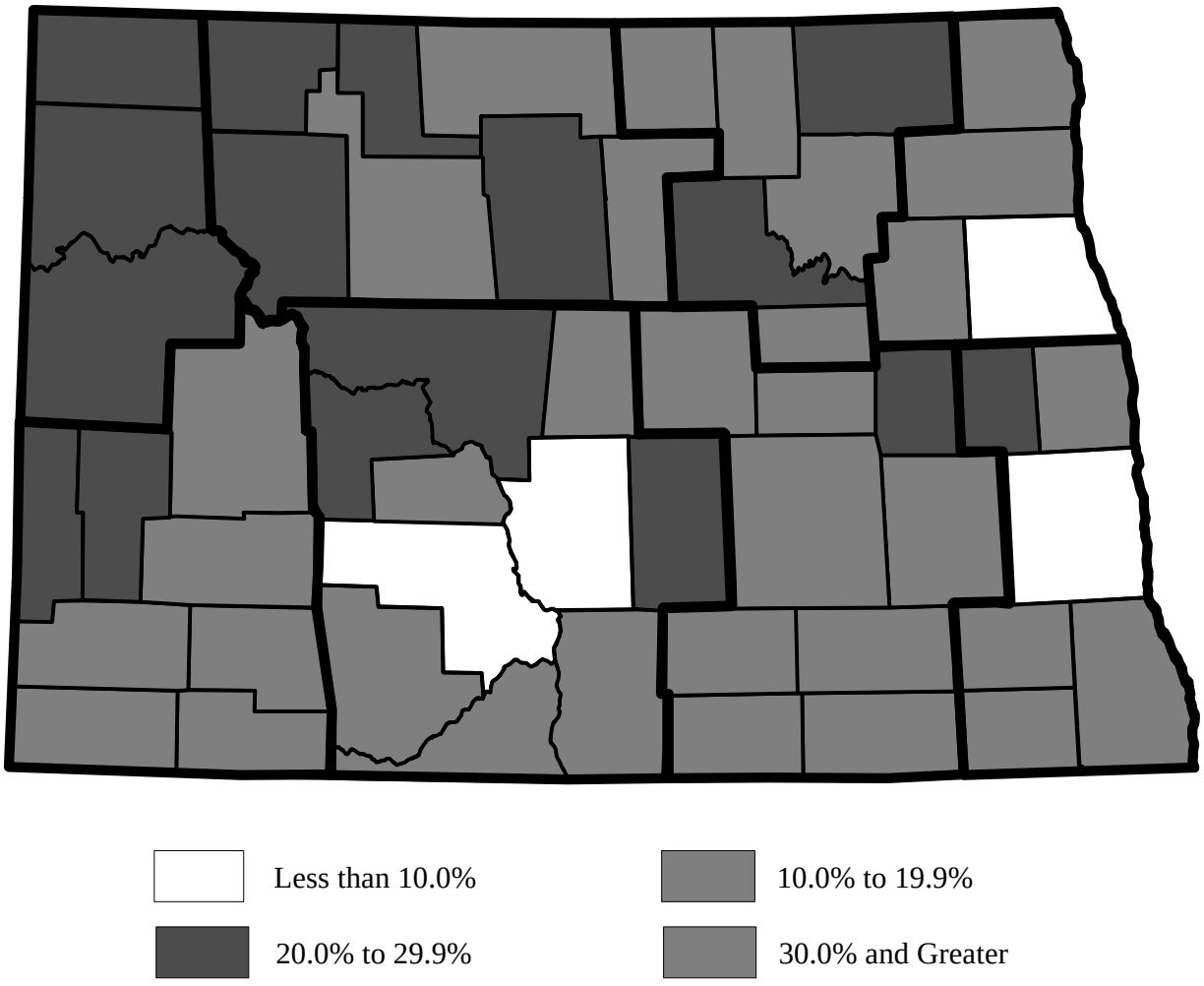


Figure 70. North Dakota Housing Unit Vacancy Rates by County, 1990

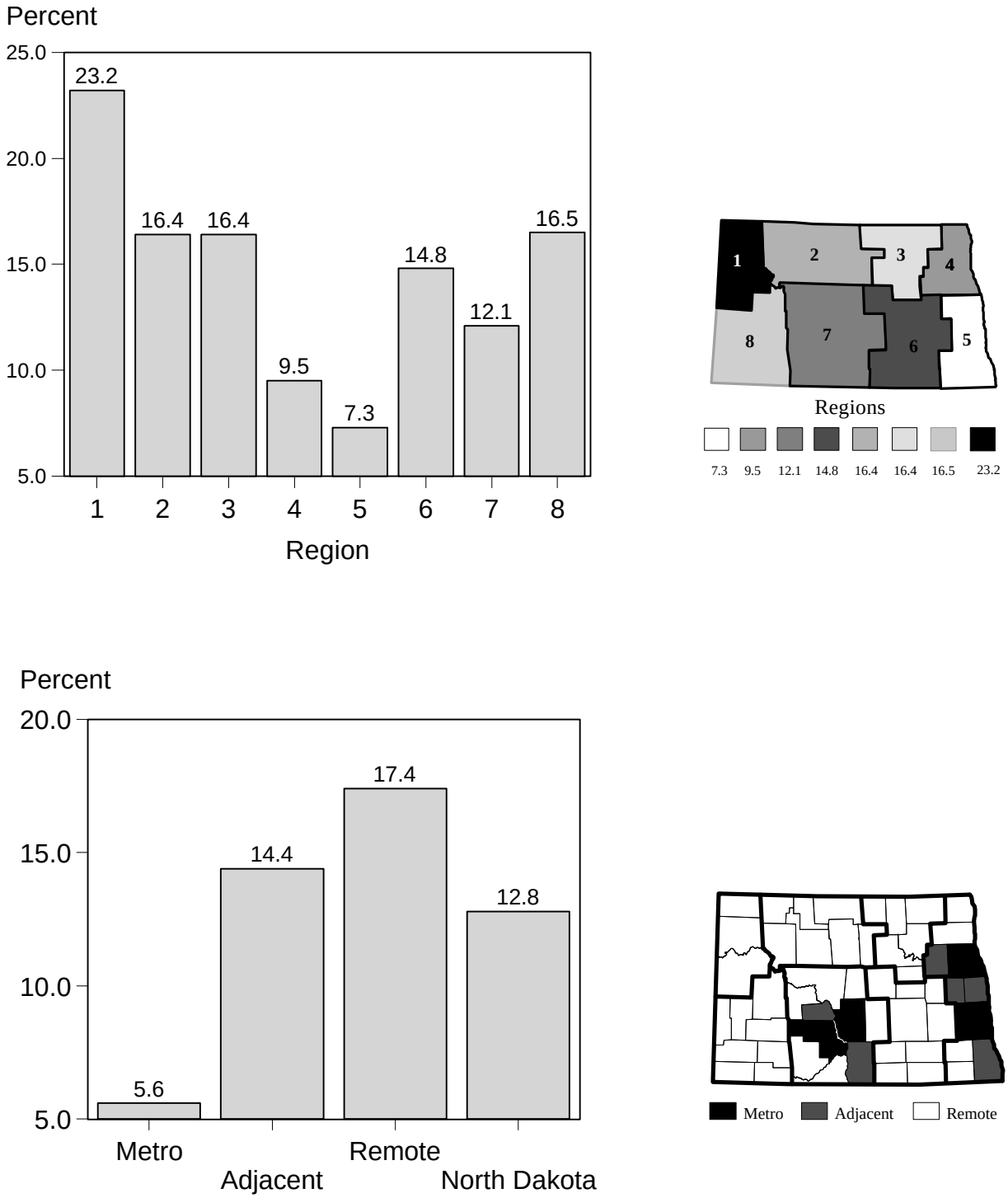


Figure 71. North Dakota Percentage Housing Unit Vacancy by Region and Area, 1990

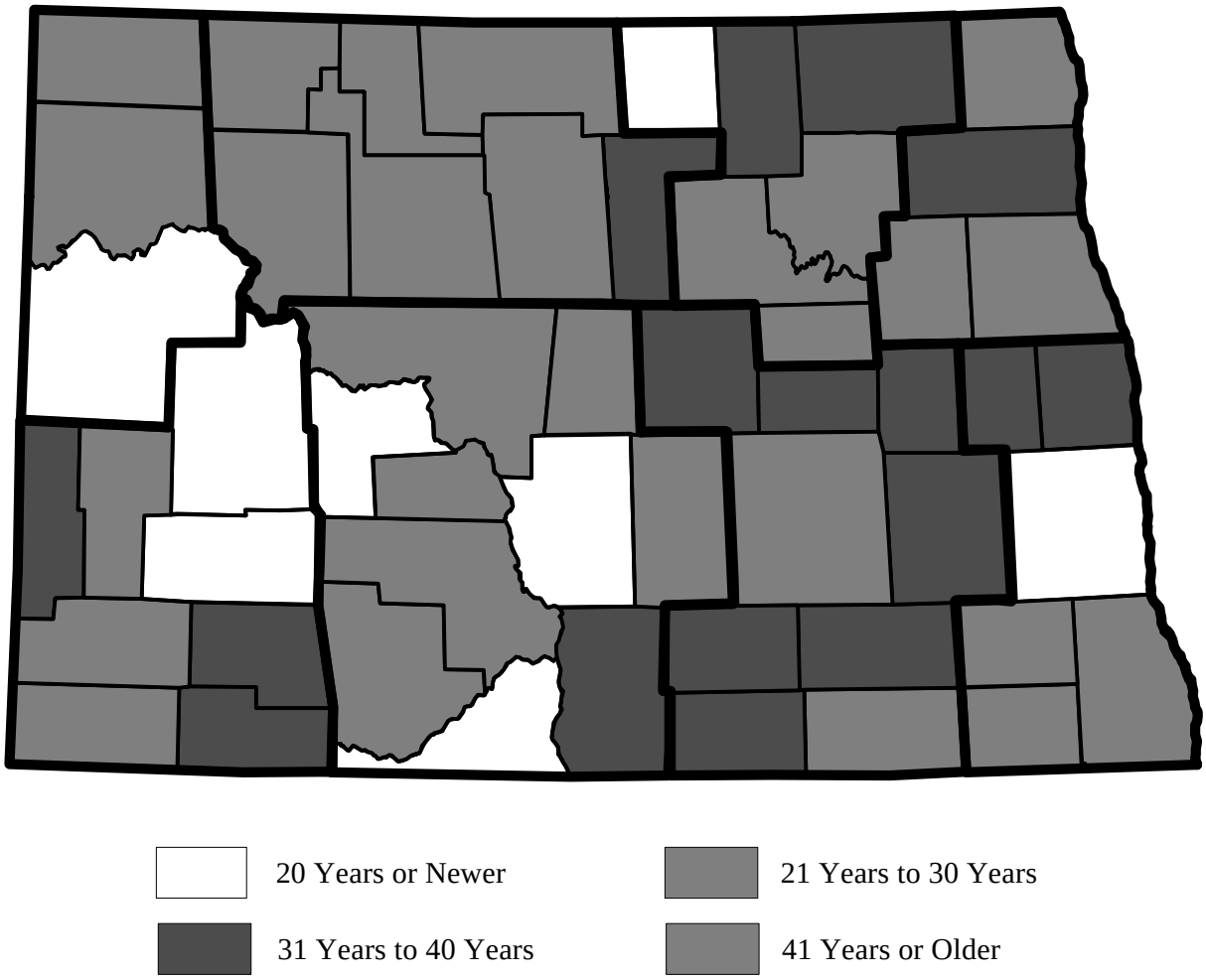


Figure 72. North Dakota Median Age of Housing Units, 1990

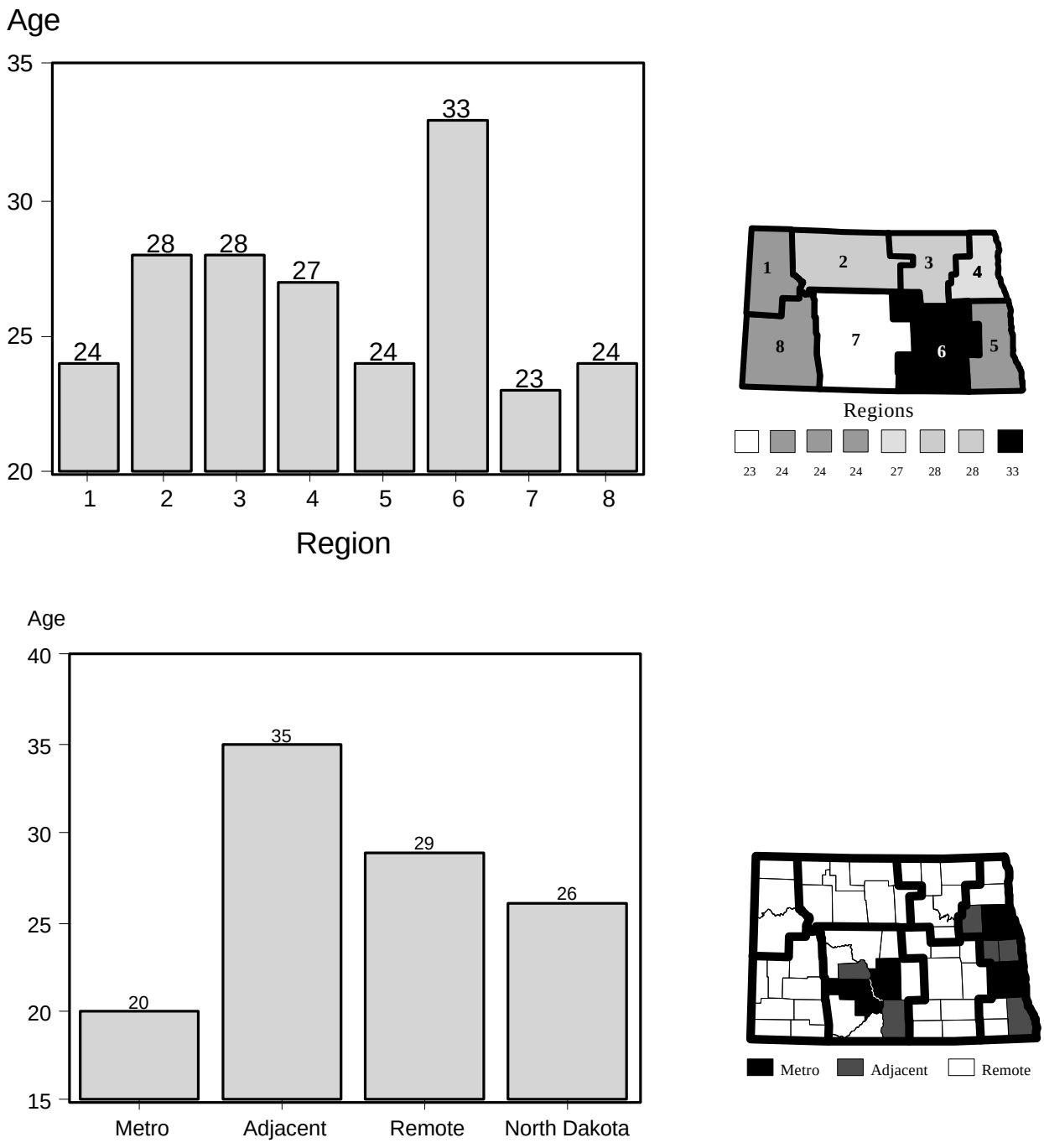


Figure 73. North Dakota Median Age of Housing Units by Region and Area, 1990

Crime

The crime statistics presented here are based on three-year averages for all crimes. Figure 74 shows that fewer crimes per 1,000 persons were committed in the western counties between 1993-1995. Counties with more than 30 crimes per 1,000 persons in the 1993-1995 period include Cass, Grand Forks, Ramsey, Burleigh, Morton, Williams, Ward and Walsh. Among these, Ramsey had the highest rate (56 per 1,000) and Morton the lowest (31 per 1,000) (Table 16). Foster County recorded the lowest crime rate, 1.3 crimes per 1,000 persons. Figures 74 and 75 indicate that crimes are a more frequent occurrence in the eastern part of the state, in the metropolitan areas/more urban regions.

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 49th among the 50 states for overall crime and 50th in violent crime in 1996.

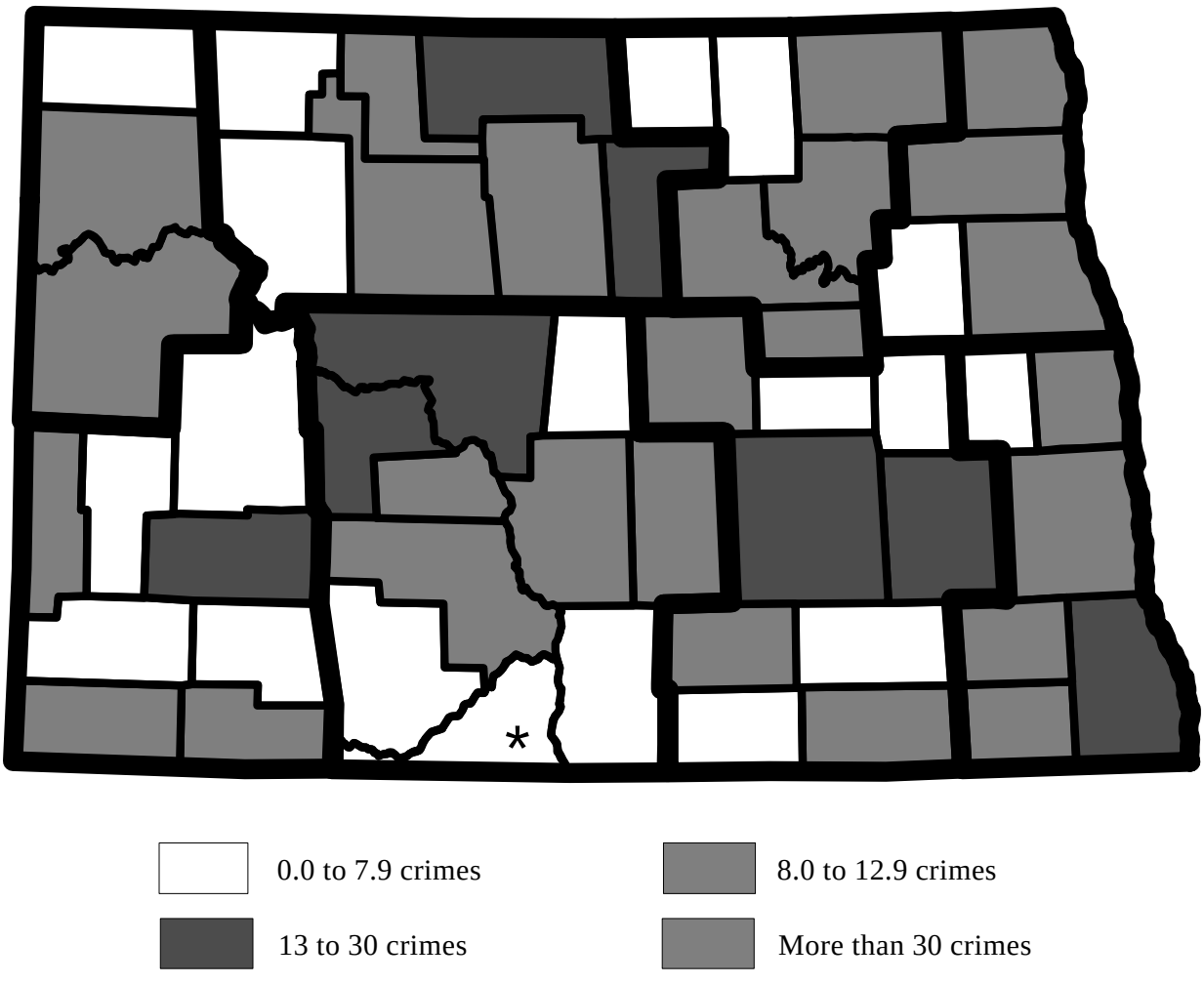


Figure 74. North Dakota Average Crime Rates per 1,000 Persons, 1993-1995

***Data not available.**

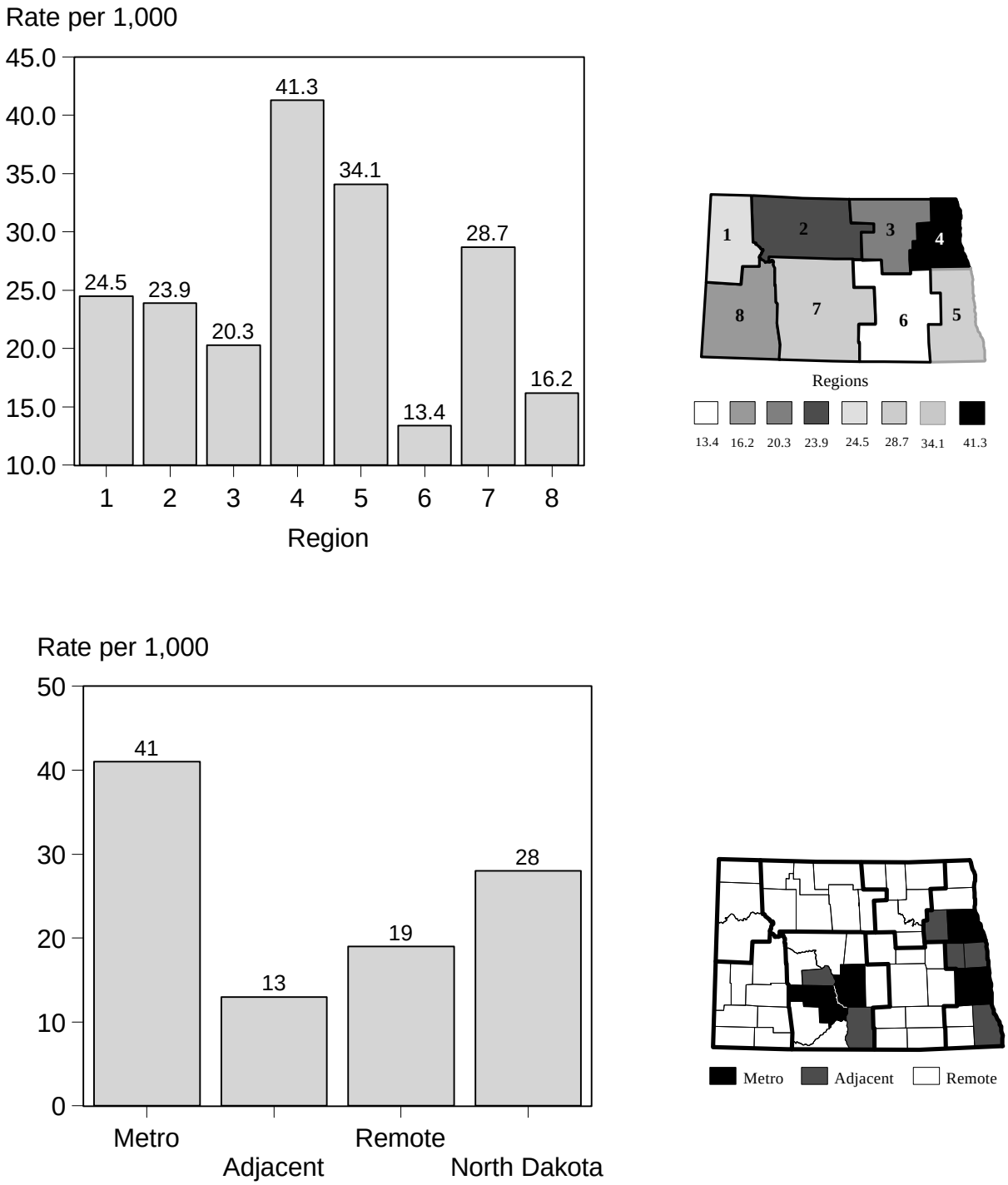


Figure 75. North Dakota Average Crime Rates per 1,000 Persons by Region and Area, 1993-1995

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 and problems 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, 1996
Local Property Taxes, 1996
Local Government Expenditures, 1992
Agricultural Land Value as Percentage of Taxable Value, 1996
Transfer Payments for Retirement and Medical Programs, 1975-1995

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, 1992. Transfer payments are from the Regional Economic Information System, Bureau of Economic Analysis, Transfer Payments for Counties and Metropolitan Areas, 1975-1995.

Overview

Local governments provide residents with services, but our system of government is complicated. North Dakota has townships within counties, cities within counties, and special districts overlaying townships, cities and counties. 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 percentage 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 is one measure of the local tax base. Two messages can be gleaned from examining taxable values. First, it is 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 above average. However, it can also suggest that the major income generating mechanism is taxes on property.

Figure 76 shows that most 1996 county taxable property valuations in North Dakota ranged between $1,500 and $2,500 per capita. The state average is $1,722 (Table 17). Billings, Slope (energy industry counties) and Steele (strong agricultural county) Counties had the highest assessed value per capita ($3,900 or more), while Rolette and Sioux had the lowest (less than $600 per capita). The variation among the regions (Figure 77) ranged from the low of $1,584 in Region 2 to the high of $2,115 in Region 6.

Overall, rural areas have higher taxable values per capita than metro areas. However, nonmetro adjacent areas have 43 percent higher taxable valuations than metro areas, whereas, remote areas vary from metro areas by only 17 percent (Figure 77).

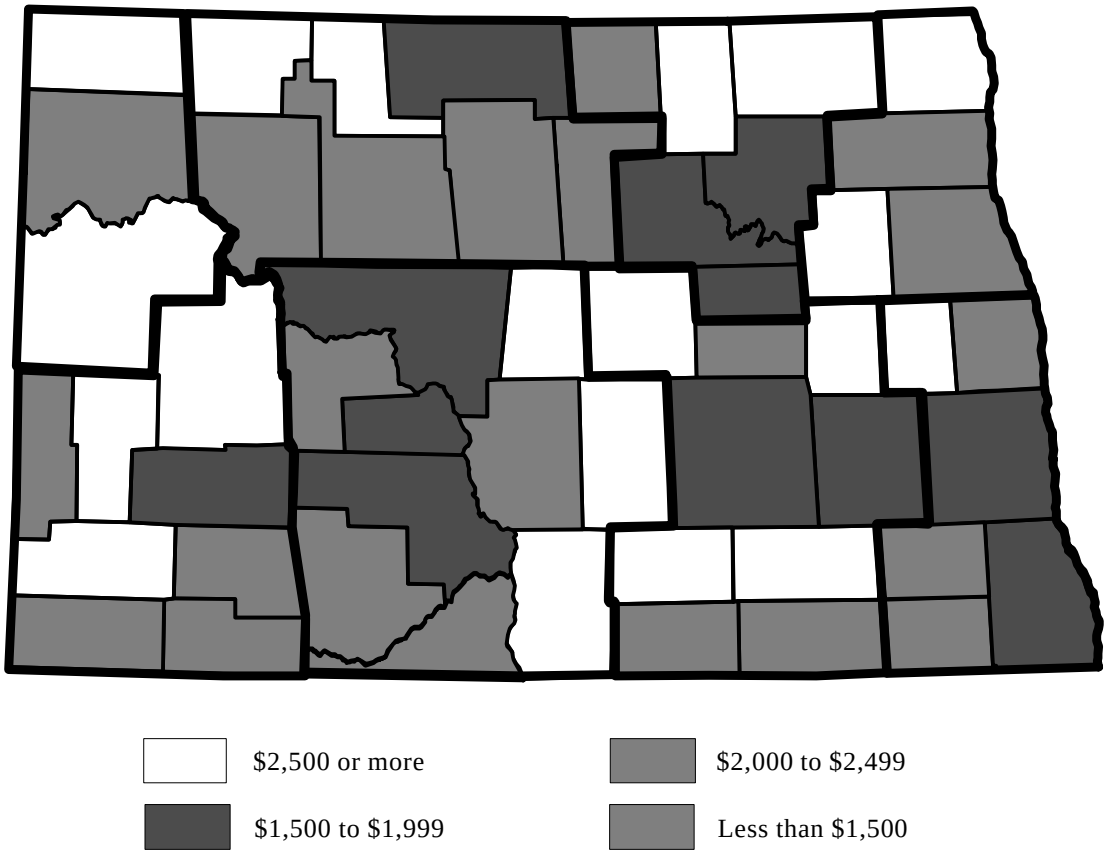


Figure 76. North Dakota Taxable Valuation per Capita, 1996

Table 17. North Dakota Per Capita Taxable Values and Property Taxes, 1996; Per Capita Local Government Expenditures, 1992; and Total Property Values and Agricultural Land as a Percentage of Total, 1996

Area	Per Capita			1996 Taxable Value	
	1996 Taxable Value	1996 Local Property Taxes	1992 Local Govt. Expenditures	Total Property Value	Ag. Land Value as % of Total
	----------dollars----------				--percent--
Divide	2,974	211	1,901	7,502,597	83.9
McKenzie	2,651	127	2,945	15,510,653	45.4
Williams	1,445	162	2,022	29,671,096	29.3
REGION 1	1,822	159	2,200	52,684,346	41.8
Bottineau	2,365	215	1,478	17,826,055	68.9
Burke	2,975	233	2,111	7,346,030	77.3
McHenry	2,105	214	1,754	12,970,221	69.4
Mountrail	1,717	165	2,665	11,594,102	69.9
Pierce	2,086	245	1,422	9,842,609	60.8
Renville	2,725	211	2,060	7,746,313	82.9
Ward	1,265	82	1,644	75,575,859	16.8
REGION 2	1,584	125	1,732	142,901,189	42.1
Benson	1,542	171	1,495	10,645,667	79.1
Cavalier	3,196	309	1,580	16,841,477	75.5
Eddy	1,879	242	1,350	5,404,417	71.9
Ramsey	1,693	177	1,829	21,091,403	42.8
Rolette	586	69	1,722	8,216,514	62.0
Towner	3,052	322	1,691	9,793,566	81.7
REGION 3	1,609	172	1,672	71,993,044	65.5
Grand Forks	1,341	112	1,614	95,780,859	17.9
Nelson	2,643	338	2,004	10,319,259	78.0
Pembina	2,745	244	2,012	23,996,645	66.4
Walsh	2,098	209	1,958	26,856,707	65.1
REGION 4	1,620	146	1,714	156,953,470	37.3
Cass	1,681	101	1,920	190,548,516	11.7
Ransom	2,130	200	1,558	12,342,299	67.9
Richland	1,855	214	1,312	33,688,774	54.4
Sargent	2,496	271	1,442	11,084,094	75.0
Steele	3,952	394	1,876	8,999,424	87.1
Traill	2,203	259	1,699	19,176,168	62.6
REGION 5	1,806	137	1,802	275,839,275	28.0

- Continued -

Table 17. continued

Area	Per Capita			1996 Taxable Value	
	1996 Taxable Value	1996 Local Property Taxes	1992 Local Govt. Expenditures	Total Property Value	Ag. Land Value as % of Total
	----------dollars----------				--percent--
Barnes	1,933	198	1,195	23,419,403	59.7
Dickey	2,220	225	1,384	12,602,135	73.7
Foster	2,214	205	1,845	8,558,693	61.8
Griggs	2,622	338	1,457	7,824,543	77.9
LaMoure	2,695	238	1,850	13,392,268	80.8
Logan	2,574	255	1,535	6,288,035	81.6
McIntosh	2,327	219	1,536	8,473,188	58.0
Stutsman	1,778	160	1,465	37,938,710	41.8
Wells	2,521	267	1,581	13,287,504	73.6
REGION 6	2,115	207	1,477	131,784,479	61.6
Burleigh	1,497	102	1,783	98,328,117	6.9
Emmons	2,530	239	1,515	11,243,114	62.4
Grant	2,336	205	1,845	7,275,014	82.9
Kidder	2,602	270	1,721	7,797,273	80.2
McLean	1,788	77	1,758	17,699,813	58.9
Mercer	1,380	71	3,219	13,171,645	28.4
Morton	1,635	187	1,876	39,918,857	19.1
Oliver	1,977	156	5,894	4,416,511	66.1
Sheridan	2,833	250	1,368	5,266,874	84.1
Sioux	467	66	1,194	1,911,191	92.4
REGION 7	1,614	127	1,946	207,028,409	27.5
Adams	2,151	265	1,792	6,109,629	63.5
Billings	4,662	187	3,894	5,263,449	36.8
Bowman	2,002	172	1,933	6,613,540	55.9
Dunn	2,674	243	1,823	10,028,997	53.8
Golden Valley	2,417	225	2,297	4,670,435	65.5
Hettinger	2,451	264	1,796	7,309,185	81.5
Slope	4,679	304	1,844	3,869,781	96.9
Stark	1,093	140	1,448	24,806,416	22.2
REGION 8	1,740	180	1,699	68,671,432	48.3
NORTH DAKOTA	1,722	147	1,777	1,107,855,693	39.4

Sources: North Dakota Tax Commissioner's Office. 1997. 1996 *Property Valuations and Property Taxes Levied in North Dakota.* Bismarck; U.S. Department of Commerce, Bureau of the Census. 1997. 1992 *Census of Governments* (GC92[4]-5), Washington, D.C..

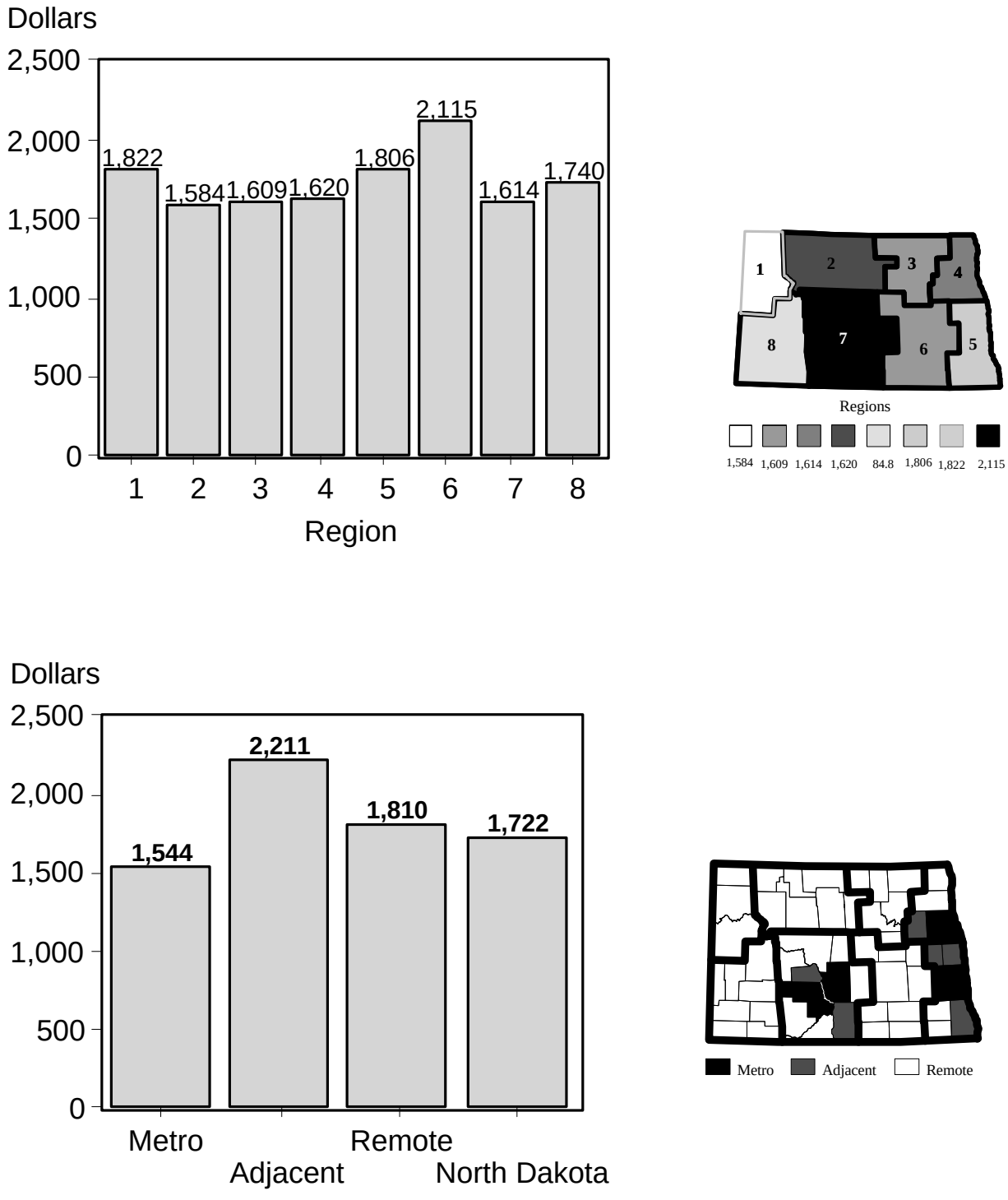


Figure 77. North Dakota Taxable Valuation per Capita by Region and Area, 1996

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. 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 are different, taxes paid on the properties would differ.

Figure 78 shows that in most counties, the per capita county property tax is between $150 and $250. Cass, Grand Forks, and Burleigh Counties had similar per capita property taxes ($120 or less per person). Rolette, Sioux, McLean and Mercer Counties' per capita property taxes were $77 or less in 1996 (Table 17) for the lowest in the state. However, per capita property taxes were $394 in Steele County, one of six counties in the state to exceed $300 per person (Table 17/Figure 78).

The regions varied from a low of $127 per capita property tax in Region 7 in 1996 to a high of $207 in Region 6 (Figure 79). The metro areas reported a $112 per capita property tax, and the adjacent and remote counties reported figures of $246 and $165, respectively. Considering the overall higher taxable valuations in rural counties, even moderate property tax rates in these areas could be a disproportionate burden.

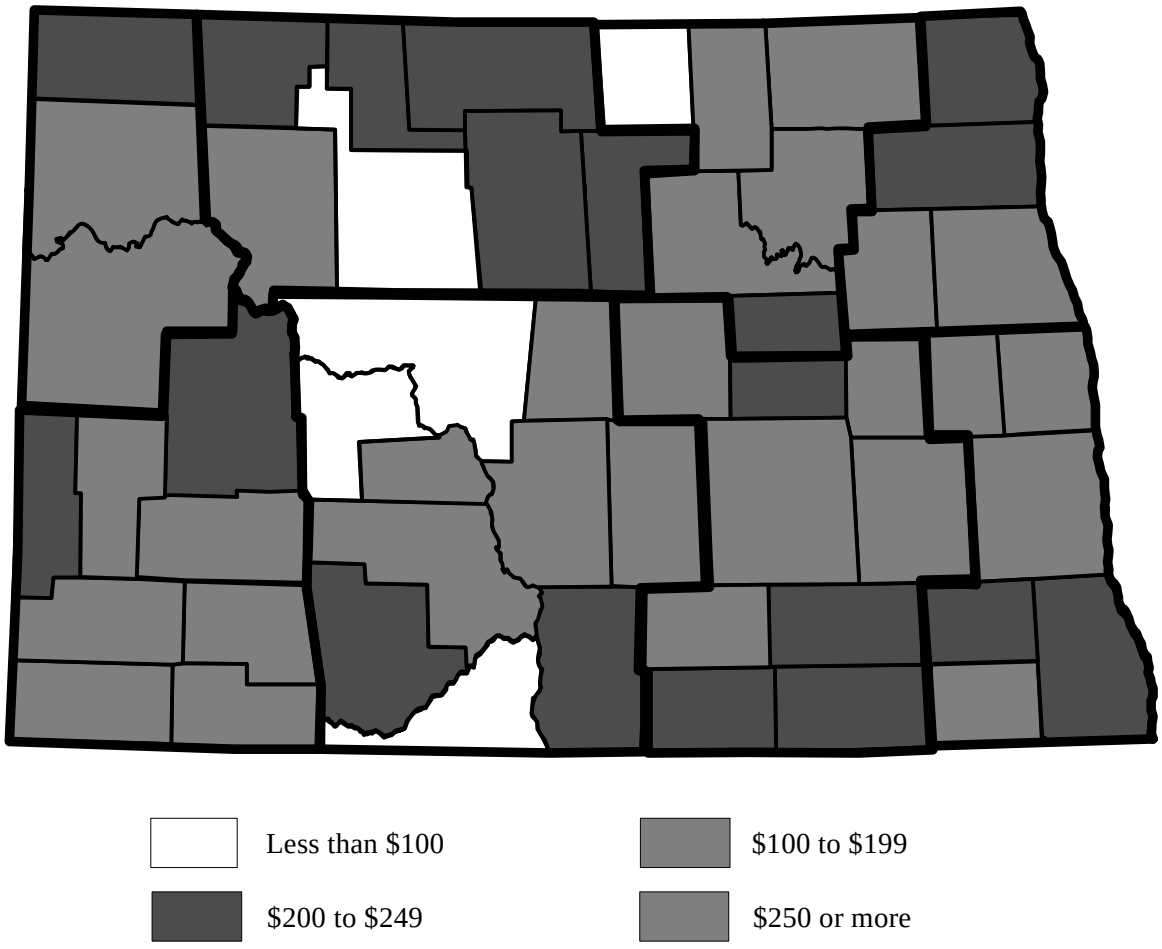


Figure 78. North Dakota Property Taxes per Capita, 1996

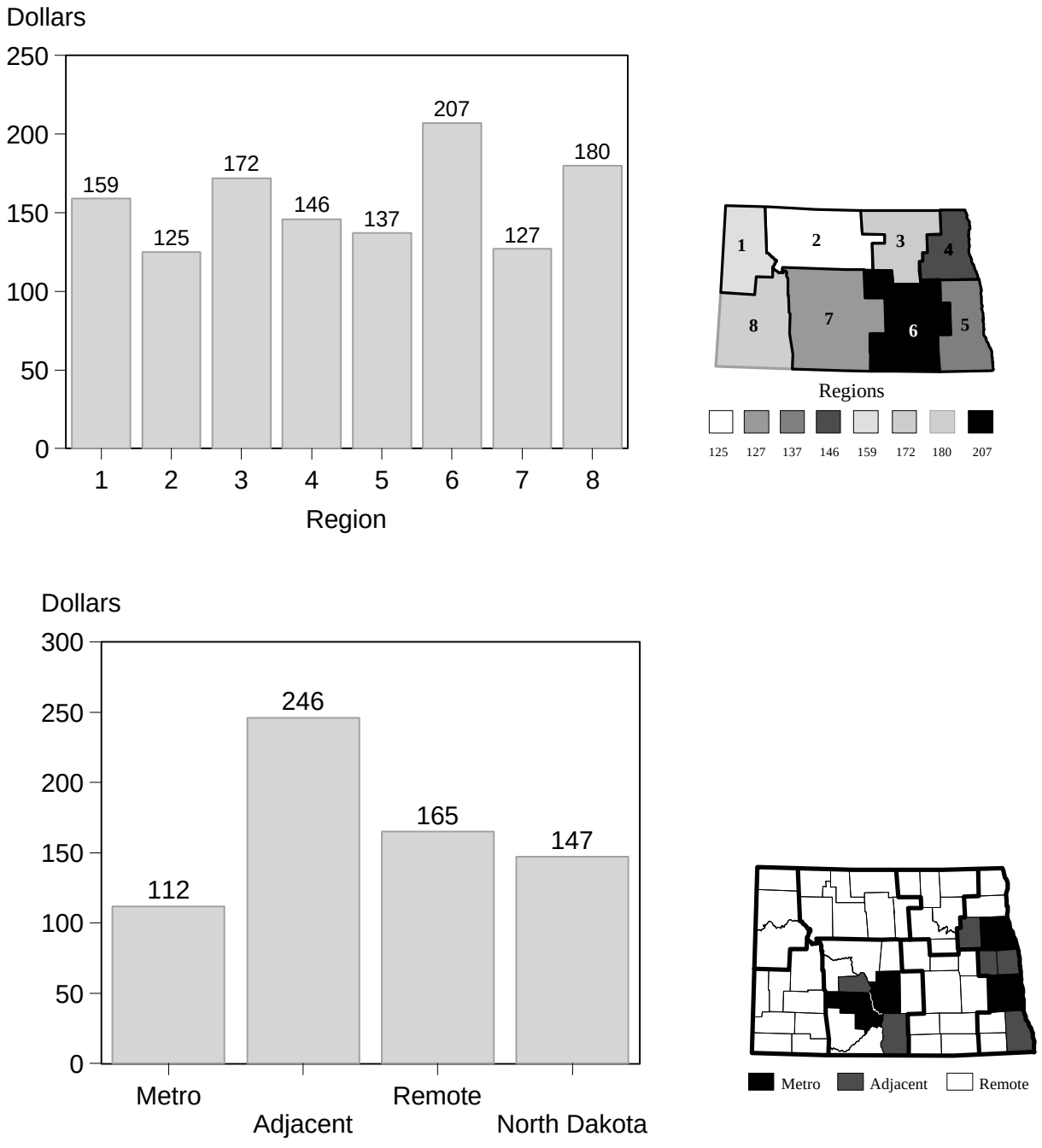


Figure 79. North Dakota Property Taxes per Capita by Region and Area, 1996

Expenditures

Counties vary less in per capita expenditures than they do in the tax base. The tax base and level of spending are not related. Figure 80 shows the pattern of expenditures is uniform throughout most of the eastern three-fourths of the state. Billings County--with an oil-based revenue--and Oliver County--with a coal-based revenue--have expenditures exceeding $2,500 per person, but overwhelmingly county per capita expenditures do not exceed $1,500.

Region 1 had the highest per capita expenditures ($2,200), while Region 6 had the lowest per capita expenditures ($1,477) (Figure 81).

Nonmetro adjacent counties and remote counties have similar per capita expenditure patterns ($1,781 vs. $1,757); rural adjacent counties have a slightly higher level of per capita expenditures, $1,801. 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 the historical dependence of North Dakota on agriculture, we present the percentage of total taxable valuation that is derived from agricultural property 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 82 reveals that in the major trade center counties, agricultural land comprises less than 20 percent of the total tax base. Regions 3 and 6 are the most dependent on agricultural taxes (Figure 83), having over 60 percent of their total taxable value from agricultural lands. Burleigh County had the lowest percentage of its taxable value coming from agricultural land (6.9 percent), followed by Cass (11.7 percent). Not surprisingly, nonmetropolitan counties are four or five times more dependent on taxes from agricultural property than metro counties (Figure 83).

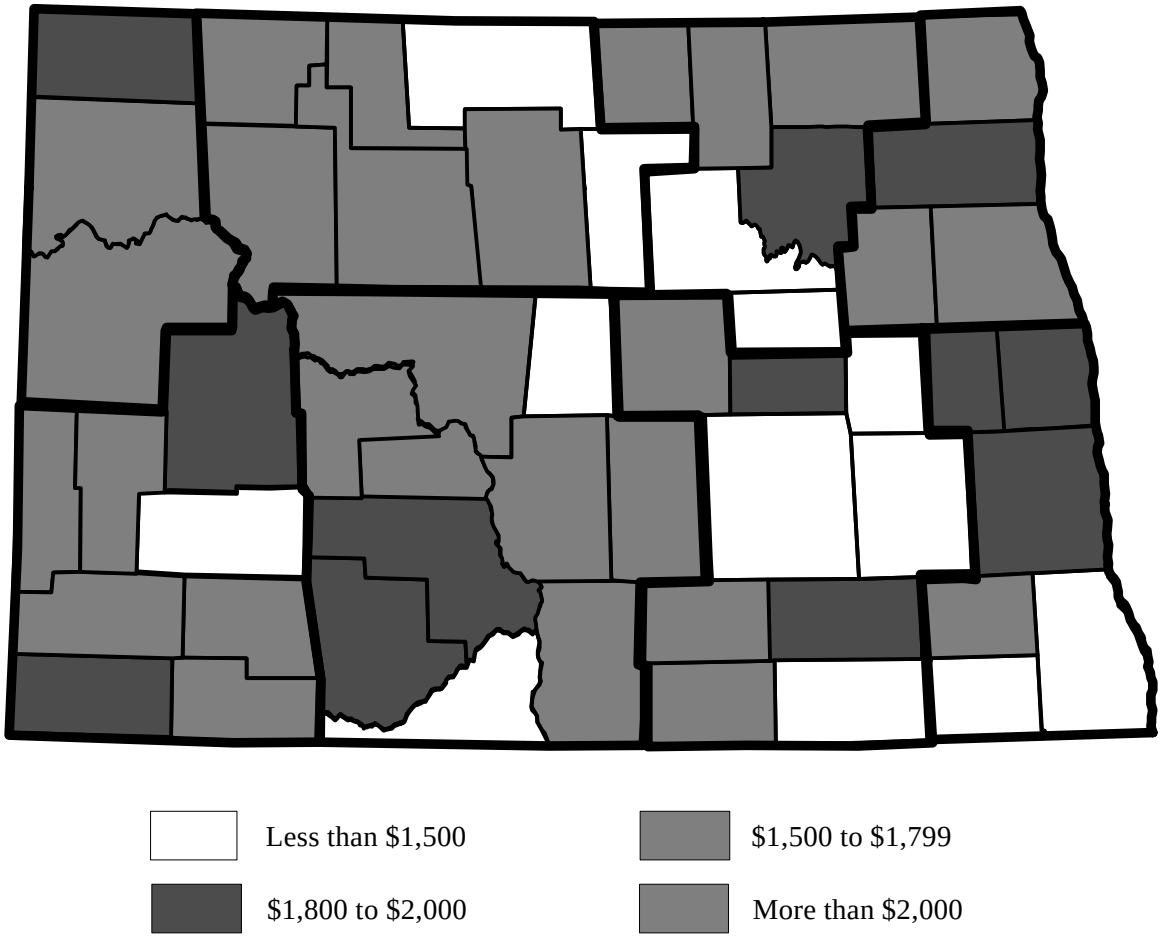


Figure 80. North Dakota per Capita Local Government Expenditures, 1992

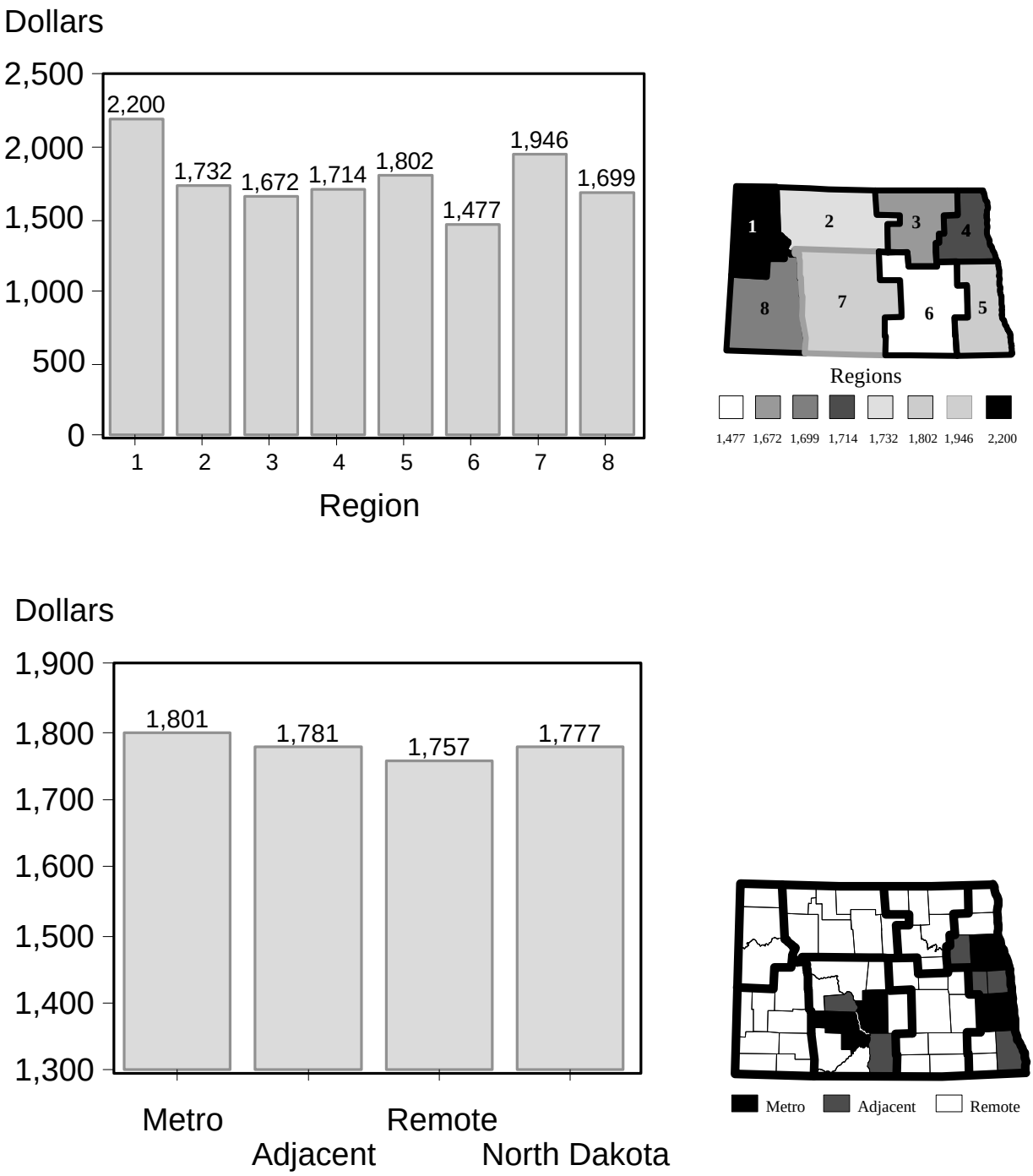


Figure 81. North Dakota per Capita Local Government Expenditures by Region and Area, 1992

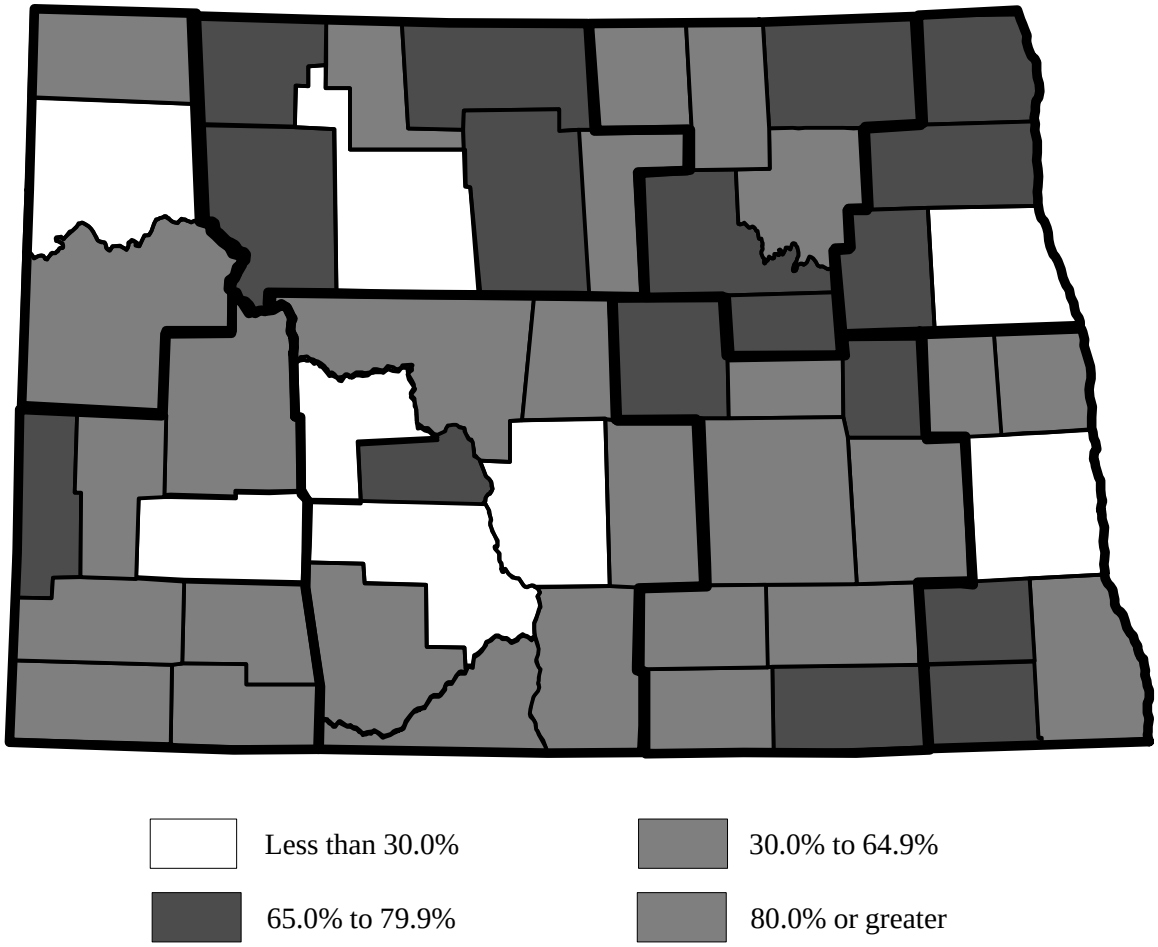


Figure 82. North Dakota Taxable Agricultural Property as a Percentage of Taxable Value of All Property, 1996

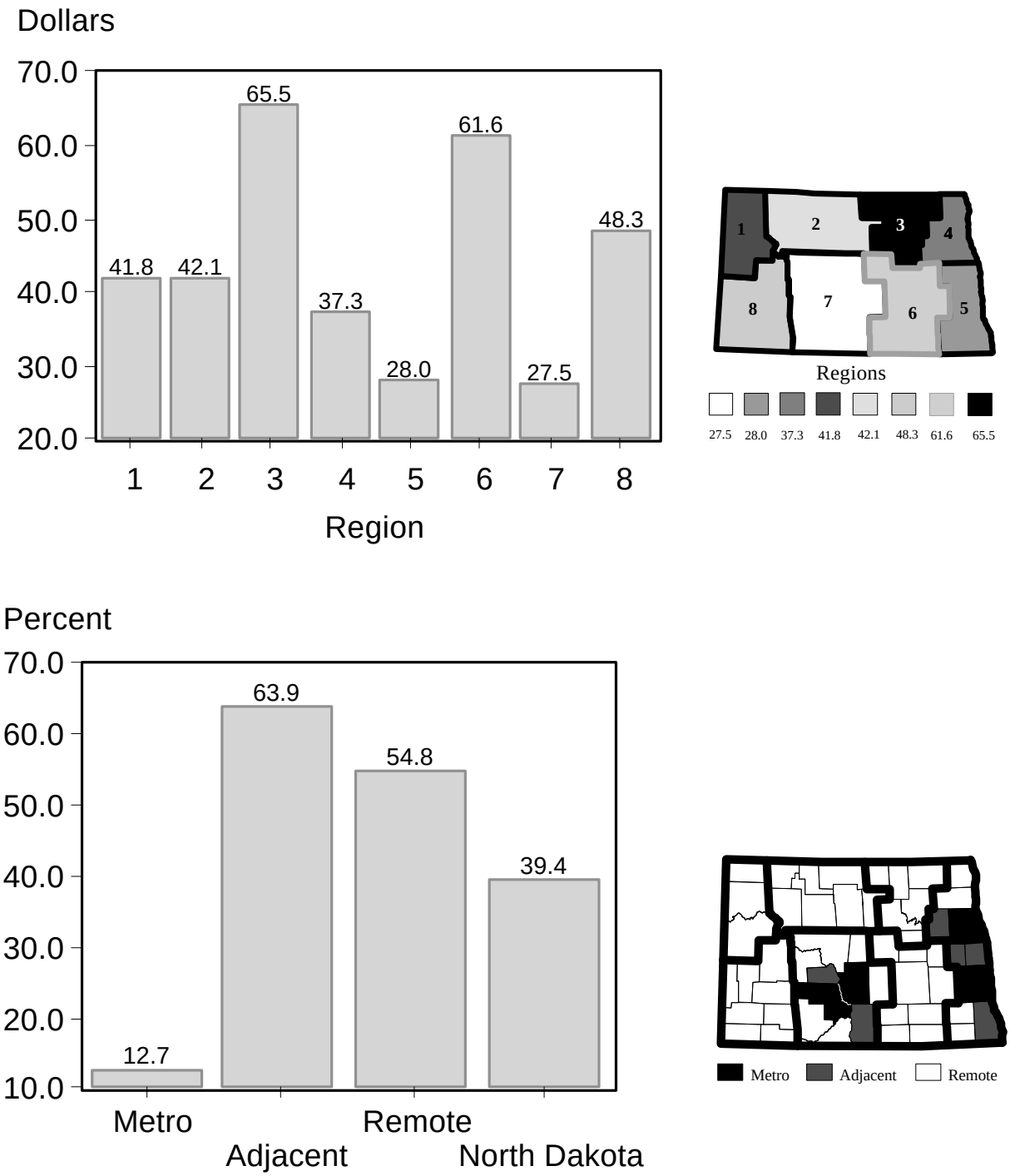


Figure 83. North Dakota Taxable Agricultural Property as a Percentage of Taxable Value of All Property by Region and Area, 1996

Transfer Payments

Federal transfer payments for retirement and medical programs account for a large amount of money entering North Dakota. Retirement transfers grew from over $663 million in 1975 to over $1.2 billion by 1995 (Table 18). Figure 84 shows the regional growth in retirement transfers for the 1975-1995 period. State Region 5 had the greatest amount of transfer retirement funds in 1995 ($257 million), but Region 7 had the fastest growth rate with 1995 values more than double the amount in 1975 (Figures 84 and 86). Metro counties grew much faster (118.6 percent) in the long run than either adjacent or remote counties. From 1975-1995 the state as a whole nearly doubled the federal transfers for retirement programs with a 82 percent increase (Figures 85 and 86).

Short run federal retirement payments grew by 28 percent for the state from 1985-1995 (Table 18). Figure 88 shows the regional growth from 1985-1995, with Region 7 (36 percent) and Region 5 (34 percent) leading the increases. During this period, Region 3 grew by 16 percent and Region 6 by 15 percent. Although the short run change was much less than long run, 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 88).

Federal government transfer payments for medical programs have also increased for North Dakota residents, and at a much faster rate than retirement transfers. In 1975, medical transfers were about 31 percent of retirement funding, but by 1995 they grew to 62 percent of that amount (Table 18). Transfers for medical programs were the largest in State Region 7 in 1995 ($153 million) (Figure 88). In the long run (1975-1995) medical transfers grew by around 250 percent for all regions except for Regions 7 and 8, which were closer to 350 percent growth (Figure 90). Metro centers grew the fastest in the long run (351 %), followed by remote counties (236 %) and adjacent counties (182 %). Short run increases were much smaller than those for the long run and showed much less variability (Figures 91-92). Region 7 had the largest increase (80 %) and Region 6 had the smallest (43 %). 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 53 percent for remote areas, 60 percent for adjacent areas, to 79 percent for metro areas (Figure 92).

Table 18. Transfer Payments to North Dakota for Retirement and Medical Payments, 1975-1995 (1995 Base Dollars)

Area	Retirement ($000)			Percentage Change	
	1975	1985	1995	1975-1995	1985-1995
Divide	4,522	6,266	6,980	54.4	11.4
McKenzie	4,468	8,333	10,524	135.5	26.3
Williams	20,679	31,903	39,176	89.4	22.8
REGION 1	29,669	46,502	56,680	91.0	21.9
Bottineau	12,177	16,430	17,220	41.4	4.8
Burke	6,171	7,382	7,477	21.2	1.3
McHenry	10,534	13,520	15,001	42.4	11.0
Mountrail	9,016	12,624	14,706	63.1	16.5
Pierce	6,842	9,709	11,443	67.2	17.9
Renville	4,721	6,408	6,423	36.1	0.2
Ward	50,957	77,832	111,197	118.2	42.9
REGION 2	100,418	143,905	183,467	82.7	27.5
Benson	9,421	11,473	10,318	9.5	-10.1
Cavalier	9,970	11,313	12,650	26.9	11.8
Eddy	5,282	6,839	6,310	19.5	-7.7
Ramsey	17,157	23,661	32,420	89.0	37.0
Rolette	9,111	13,348	16,854	85.0	26.3
Towner	5,457	7,337	7,104	30.2	-3.2
REGION 3	56,398	73,971	85,656	51.9	15.8
Grand Forks	55,419	80,353	114,696	107.0	42.7
Nelson	8,499	10,891	12,891	51.7	18.4
Pembina	13,565	17,698	20,120	48.3	13.7
Walsh	20,817	27,545	30,426	46.2	10.5
REGION 4	98,300	136,487	178,133	81.2	30.5
Cass	84,861	122,586	180,197	112.3	47.0
Ransom	9,493	11,696	12,928	36.2	10.5
Richland	20,738	26,784	31,376	51.3	17.1
Sargent	6,308	8,627	8,210	30.2	-4.8
Steele	4,020	5,139	5,088	26.6	-1.0
Traill	13,339	17,375	19,465	45.9	12.0
REGION 5	138,759	192,207	257,264	85.4	33.8

- Continued -

Table 18. continued

Area	Retirement ($000)			Percentage Change	
	1975	1985	1995	1975-1995	1985-1995
Barnes	18,424	24,350	26,152	41.9	7.4
Dickey	8,510	11,069	11,565	35.9	4.5
Foster	5,346	7,788	9,543	78.5	22.5
Griggs	5,015	6,971	7,120	42.0	2.1
LaMoure	8,203	10,384	11,885	44.9	14.5
Logan	3,764	5,480	6,730	78.8	22.8
McIntosh	6,012	8,516	10,738	78.6	26.1
Stutsman	27,790	37,710	47,109	69.5	24.9
Wells	9,914	12,746	12,567	26.8	-1.4
REGION 6	92,978	125,014	143,409	54.2	14.7
Burleigh	44,778	74,208	115,693	158.4	55.9
Emmons	5,988	7,596	8,782	46.7	15.6
Grant	3,991	5,867	6,524	63.5	11.2
Kidder	3,808	5,347	6,452	71.8	22.3
McLean	13,131	19,608	23,774	81.1	21.2
Mercer	6,467	11,577	15,467	139.2	33.6
Morton	22,719	32,251	43,706	92.4	35.5
Oliver	1,272	2,097	2,135	67.8	1.8
Sheridan	3,013	3,722	4,814	59.8	29.3
Sioux	1,994	2,413	3,351	68.1	38.9
REGION 7	107,161	164,686	230,698	109.3	36.2
Adams	4,462	6,324	5,992	34.3	-5.2
Billings	531	744	860	62.0	15.6
Bowman	4,320	6,214	7,817	80.9	25.8
Dunn	3,503	5,072	5,193	48.2	2.4
Golden Valley	3,023	4,344	4,124	36.4	-5.1
Hettinger	4,716	7,328	7,745	64.2	5.7
Slope	903	1,154	1,122	24.3	-2.8
Stark	17,910	27,657	39,899	122.8	44.3
REGION 8	39,368	58,837	72,752	84.8	23.7
NORTH DAKOTA	663,050	941,605	1,208,059	82.2	28.3

- Continued -

Table 18. continued

Area	Medical ($000) 1975	1985	1995	Percentage Change 1975-1995	1985-1995
Divide	1,415	2,693	4,231	199.0	57.1
McKenzie	2,398	4,018	6,394	166.6	59.1
Williams	6,516	15,021	25,244	287.4	68.1
REGION 1	10,329	21,732	35,869	247.3	65.1
Bottineau	3,856	8,750	11,675	202.8	33.4
Burke	1,846	2,557	4,030	211.0	57.6
McHenry	4,031	6,009	9,897	145.5	64.7
Mountrail	3,409	7,439	11,927	249.9	60.3
Pierce	2,622	5,682	7,796	197.3	37.2
Renville	1,444	2,460	4,047	180.3	64.5
Ward	14,436	37,683	59,600	312.9	58.2
REGION 2	31,644	70,580	108,972	244.4	54.4
Benson	5,109	6,923	10,044	96.6	45.1
Cavalier	3,339	4,661	6,866	105.6	47.3
Eddy	1,665	4,820	6,196	272.1	28.5
Ramsey	5,791	11,209	19,100	229.8	70.4
Rolette	6,704	14,883	22,406	234.2	50.5
Towner	2,137	3,594	5,751	169.1	60.0
REGION 3	24,745	46,090	70,363	184.4	52.7
Grand Forks	12,342	29,784	52,578	326.0	76.5
Nelson	3,244	5,650	9,129	181.4	61.6
Pembina	4,039	8,401	11,254	178.6	34.0
Walsh	4,912	11,975	18,006	266.6	50.4
REGION 4	24,537	55,810	90,967	270.7	63.0
Cass	21,081	49,069	84,224	299.5	71.6
Ransom	3,134	7,104	10,309	228.9	45.1
Richland	6,362	11,636	17,342	172.6	49.0
Sargent	2,466	4,494	6,093	147.1	35.6
Steele	1,167	1,504	2,496	113.9	66.0
Traill	3,789	7,104	12,077	218.7	70.0
REGION 5	37,999	80,911	132,541	248.8	63.8

- Continued -

Table 18. continued

Area	Medical ($000) 1975	1985	1995	Percentage Change 1975-1995	1985-1995
Barnes	5,613	10,904	14,775	163.2	35.5
Dickey	3,080	7,759	10,734	248.5	38.3
Foster	2,105	4,739	6,554	220.8	38.3
Griggs	1,630	3,635	4,585	181.3	26.1
LaMoure	2,374	4,445	6,914	191.2	55.5
Logan	1,617	2,673	4,383	171.1	64.0
McIntosh	2,635	5,987	10,003	279.6	67.1
Stutsman	7,575	21,143	31,873	320.8	50.7
Wells	3,112	7,853	8,757	181.4	11.5
REGION 6	29,741	69,138	98,578	231.5	42.6
Burleigh	11,188	34,391	67,009	498.9	94.8
Emmons	2,466	4,082	6,607	167.9	61.9
Grant	1,657	3,432	5,408	226.4	57.6
Kidder	1,919	2,783	4,902	155.4	76.1
McLean	5,252	10,377	15,820	201.2	52.5
Mercer	2,258	6,091	10,792	377.9	77.2
Morton	7,529	18,189	31,437	317.5	72.8
Oliver	420	774	1,492	255.2	92.8
Sheridan	1,299	1,985	3,240	149.4	63.2
Sioux	609	3,096	6,295	933.7	103.3
REGION 7	34,597	85,200	153,002	342.2	79.6
Adams	1,622	3,540	4,346	167.9	22.8
Billings	170	333	467	174.7	40.2
Bowman	1,288	2,825	5,304	311.8	87.8
Dunn	1,506	2,670	5,885	290.8	120.4
Golden Valley	811	1,690	2,197	170.9	30.0
Hettinger	1,390	4,218	5,121	268.4	21.4
Slope	245	377	476	94.3	26.3
Stark	5,408	16,974	29,355	442.8	90.6
REGION 8	12,440	32,627	53,151	327.3	62.9
NORTH DAKOTA	206,034	462,382	743,443	260.8	60.8

Source: Bureau of Economic Analysis. 1975-1995. *Transfer Payments for Counties and Metropolitan Areas*, Washington, D.C.

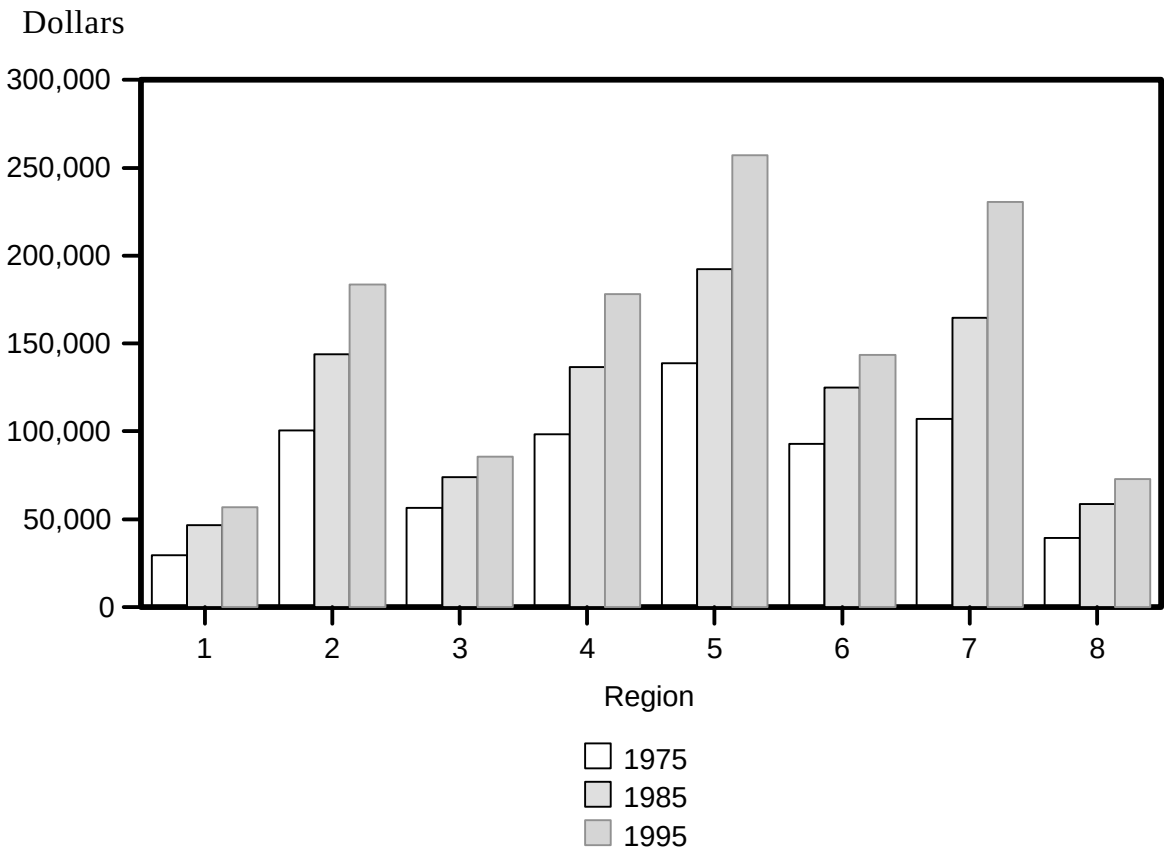


Figure 84. Federal Transfer Payments to North Dakota for Retirement Programs by Region, 1975, 1985, and 1995

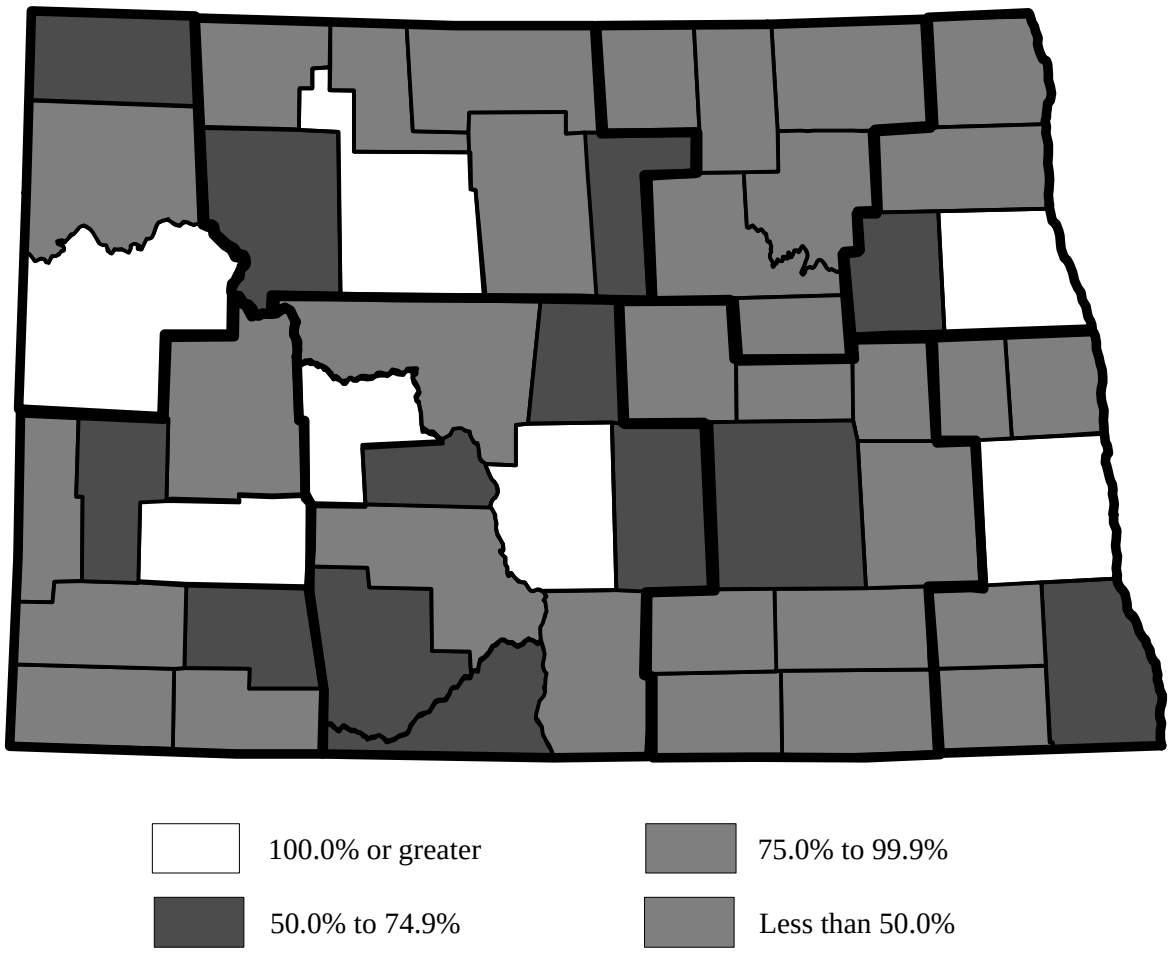


Figure 85. Long-term Change in Federal Transfer Payments to North Dakota for Retirement Programs, 1975-1995

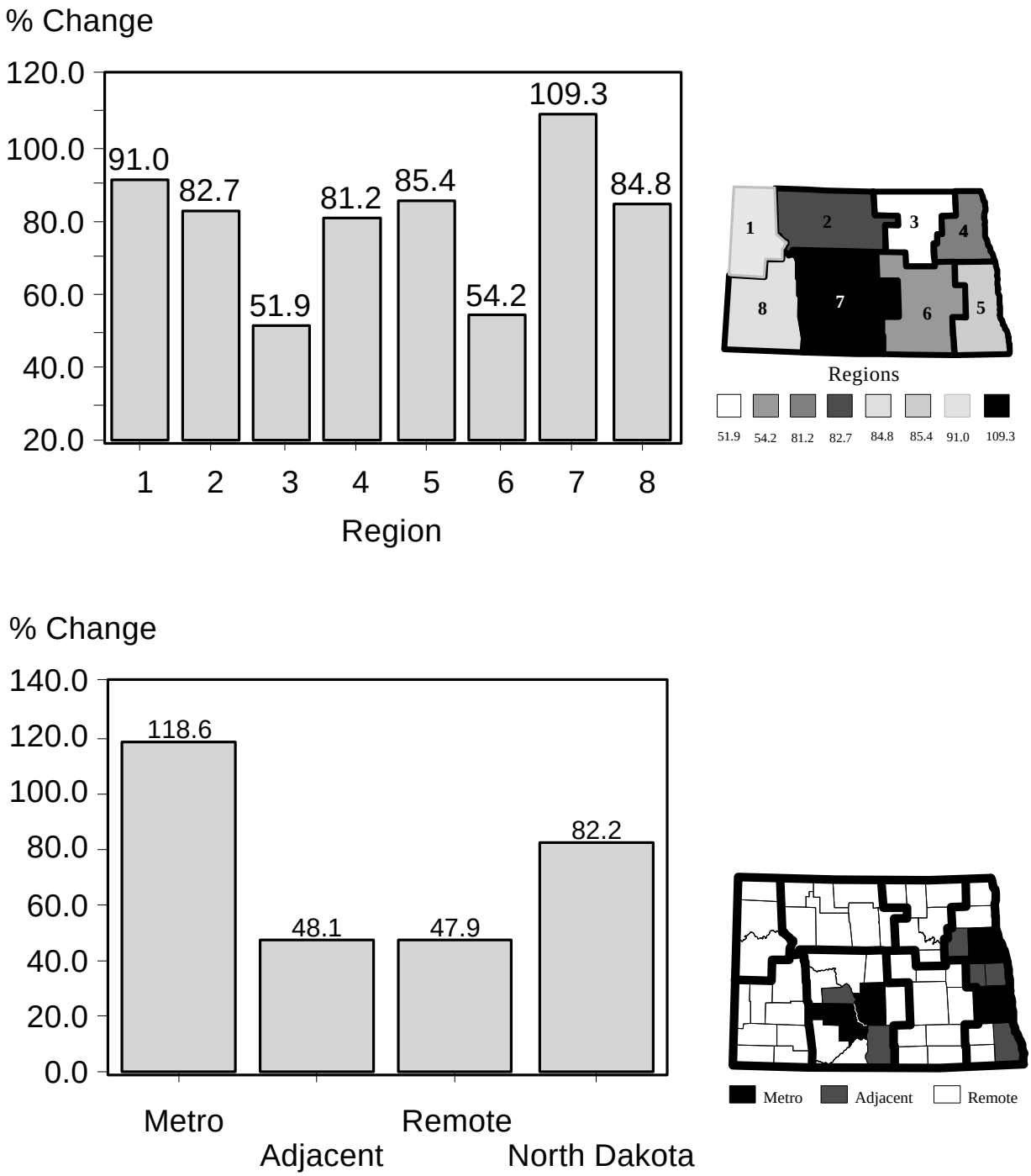


Figure 86. Long-term Change in Federal Transfer Payments to North Dakota for Retirement Programs by Region and Area, 1975-1995

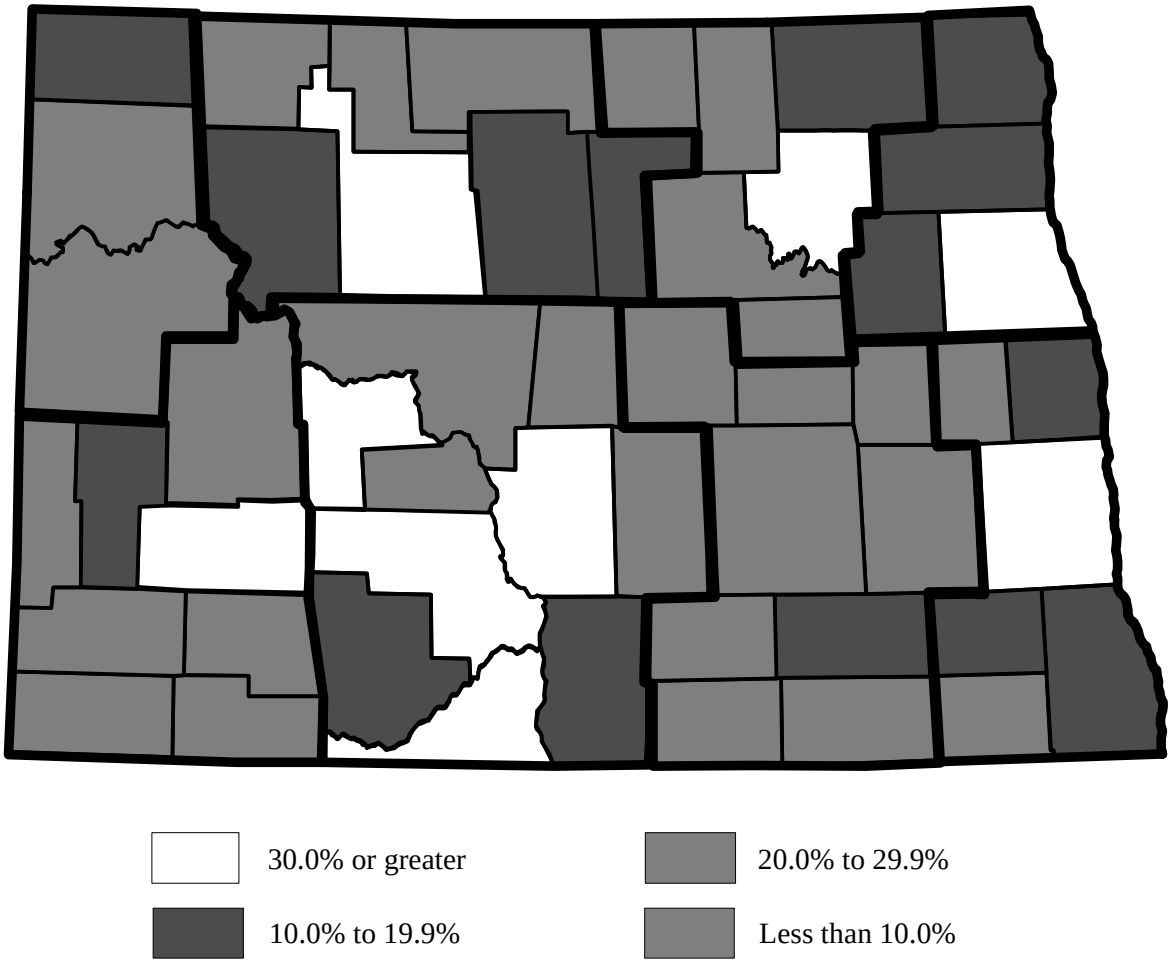
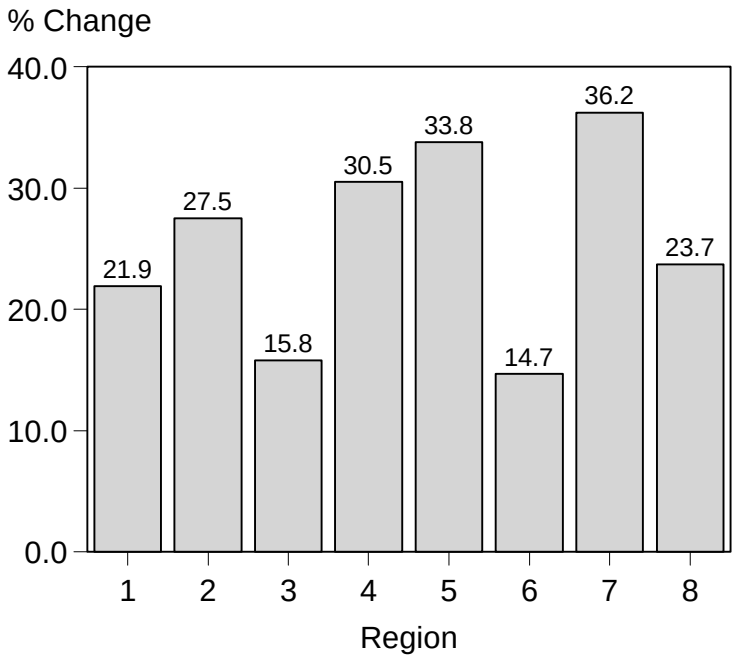
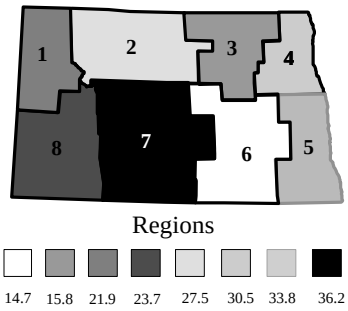
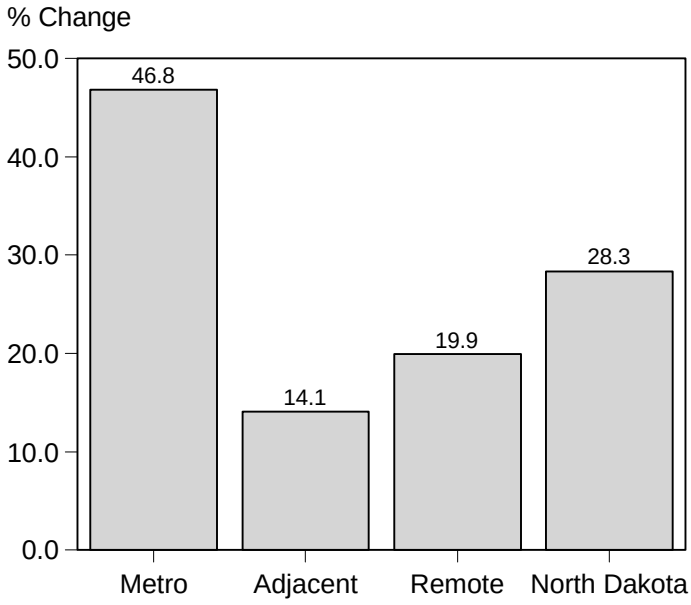


Figure 87. Short-term Change in Federal Transfer Payments to North Dakota for Retirement Programs, 1985-1995







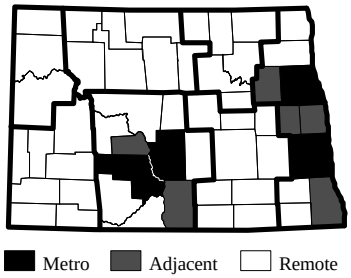


Figure 88. Short-term Change in Federal Transfer Payments to North Dakota for Retirement Programs by Region and Area, 1985-1995

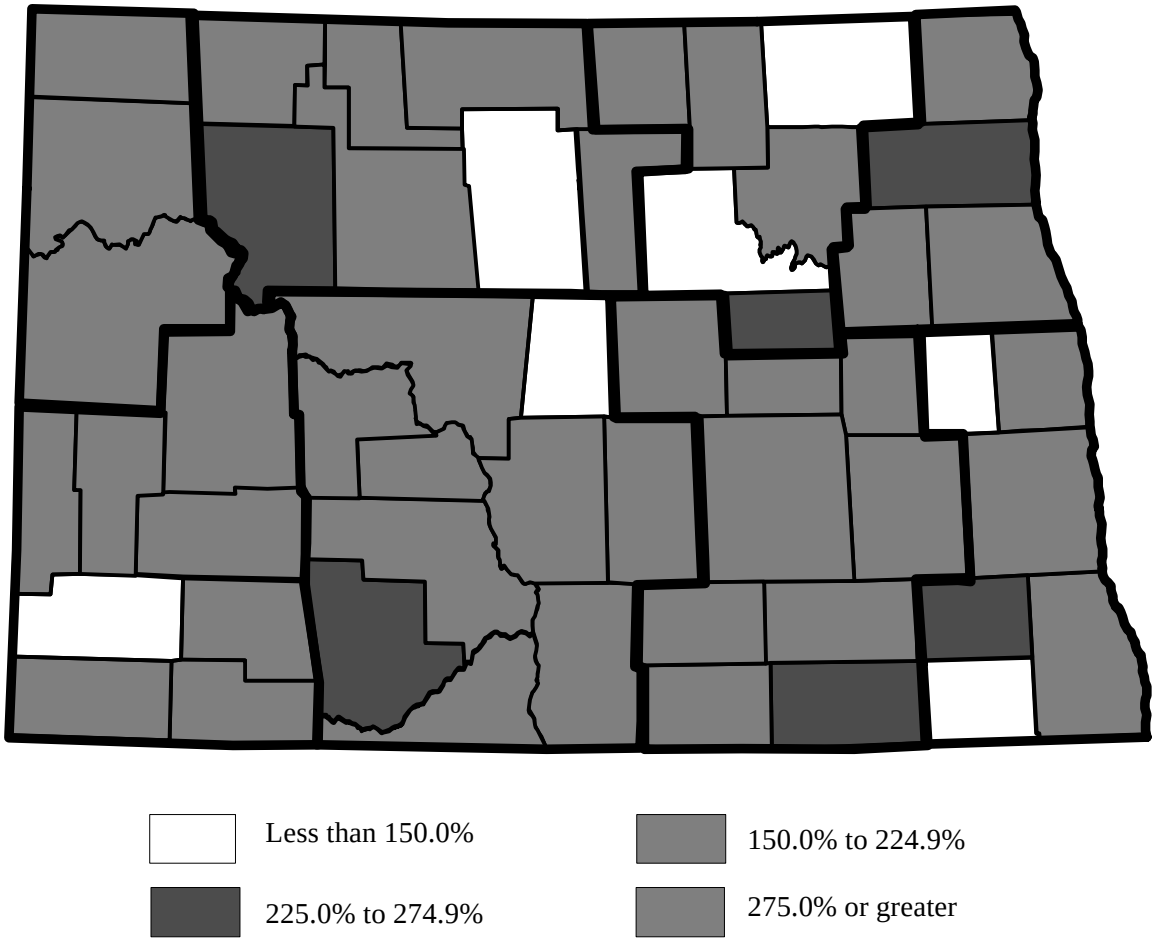


Figure 89. Long-term Change in Federal Transfer Payments to North Dakota for Medical Programs, 1975-1995

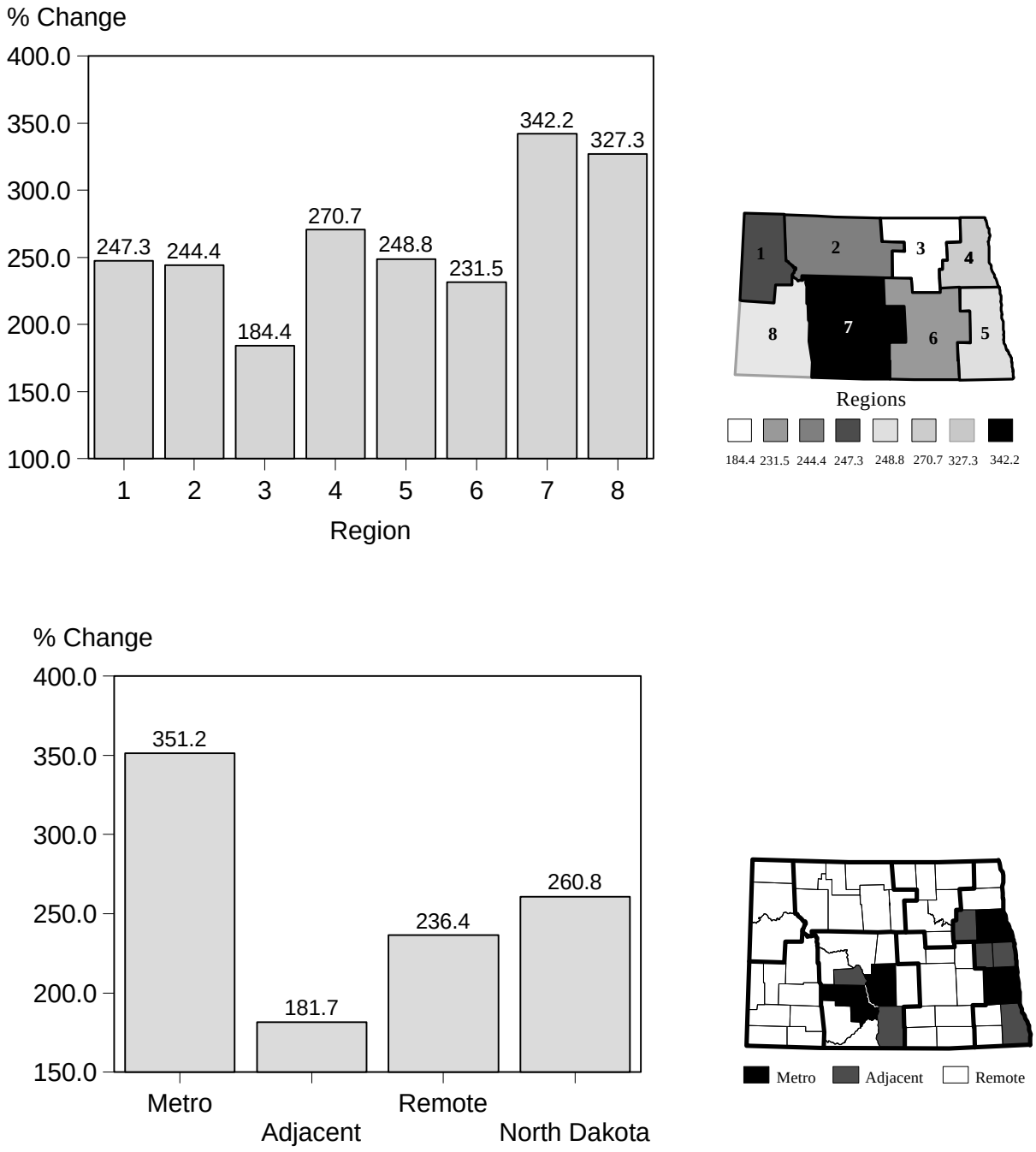


Figure 90. Long-term Change in Federal Transfer Payments to North Dakota for Medical Programs by Region and Area, 1975-1995

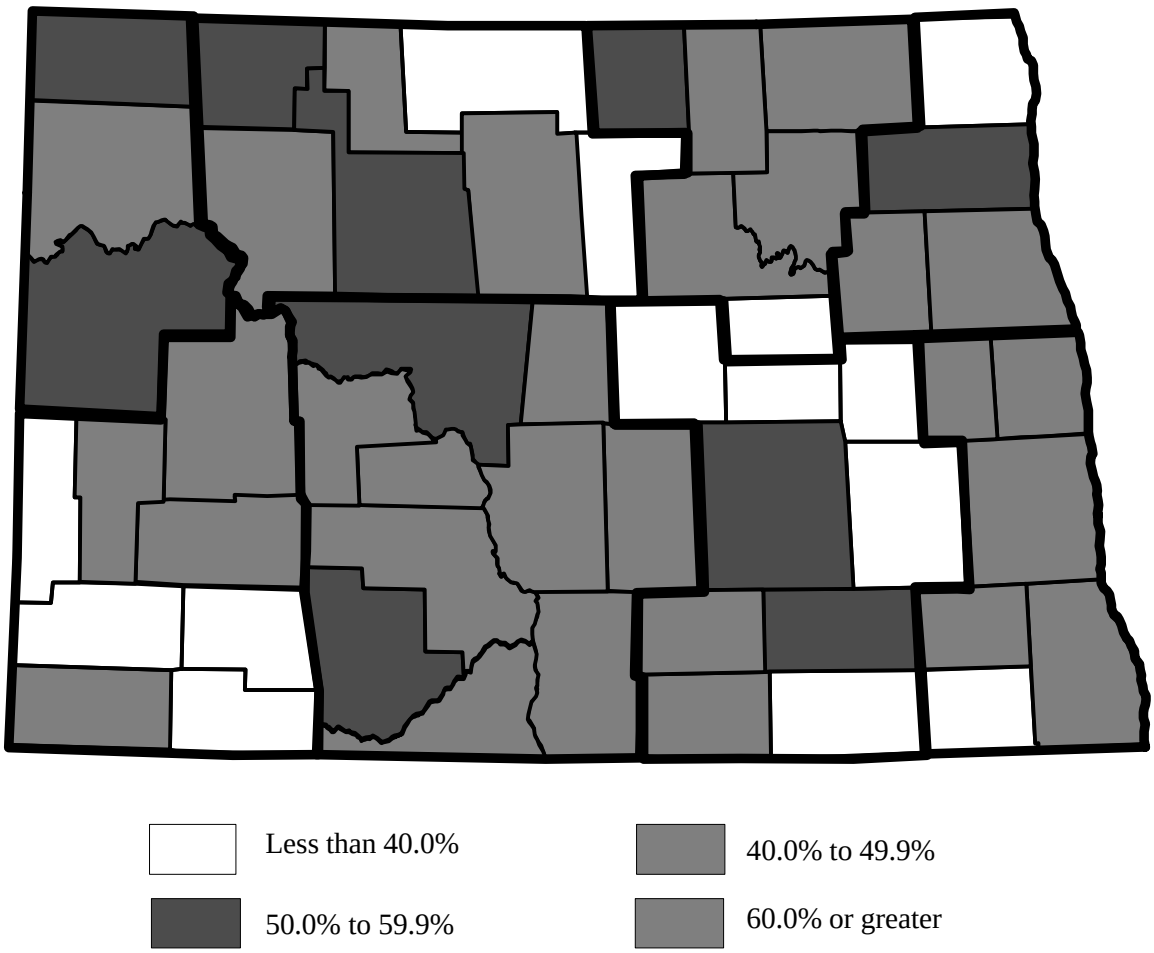


Figure 91. Short-term Change in Federal Transfer Payments to North Dakota for Medical Programs, 1985-1995

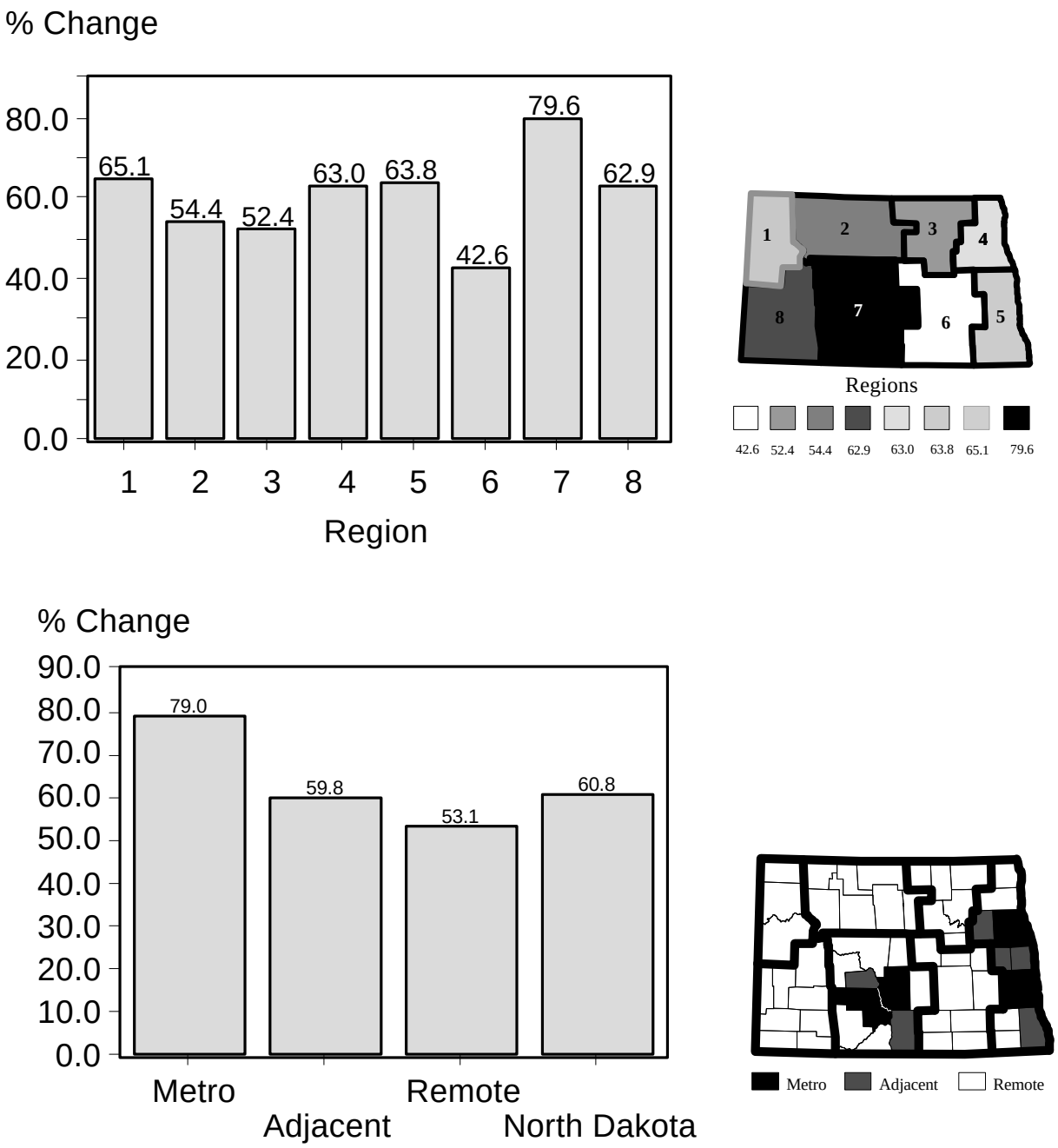


Figure 92. Short-term Change in Federal Transfer Payments to North Dakota for Medical Programs by Region and Area, 1985-1995

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 increasing population in the state coupled 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 multicommunity cooperation or innovative delivery systems, if some services are to be delivered cost effectively in the more sparsely populated sections of the state.

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APPENDIX

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

County/ REGION	Sales for Final Demand (1996 dollars) 1985	1990	1996	Change 1985-1996	Sector Share of Total, 1996 Ag.	Federal Activities	Tourism	Energy	Mfg.
	----------million$----------			----------%----------					
DIVIDE	86.2	78.5	81.4	-5.6	58.6	18.6	4.0	17.7	1.1
MCKENZIE	344.4	379.6	379.6	-32.3	24.1	12.1	5.0	57.5	1.3
WILLIAMS	429.9	380.6	365.4	-15.0	18.9	31.7	11.9	28.6	8.9
REGION 1	860.5	838.7	680.0	-21.0	25.4	23.4	8.6	37.2	5.4
BOTTINEAU	214.4	227.1	206.9	-3.5	41.4	27.7	4.2	22.7	4.0
BURKE	83.9	84.9	84.8	1.1	50.6	25.2	7.1	14.9	2.2
MCHENRY	114.2	123.3	116.4	1.9	57.2	34.0	3.3	0.7	4.8
MOUNTRAIL	127.9	174.6	154.5	20.8	44.3	32.6	8.2	6.3	8.6
PIERCE	76.5	98.5	102.5	34.0	41.9	37.7	7.3	--	13.1
RENVILLE	101.5	114.6	107.0	5.4	54.7	20.6	3.1	20.6	1.0
WARD	555.6	697.5	852.4	53.4	12.5	59.4	14.2	0.4	13.5
REGION 2	1,274.0	1,520.5	1,624.5	27.5	29.0	45.3	10.1	5.9	9.7
BENSON	126.7	138.5	131.6	3.8	52.3	34.0	5.7	--	8.0
CAVALIER	147.4	160.9	171.6	16.4	62.0	30.6	6.9	--	0.5
EDDY	60.7	64.2	55.5	-8.6	51.2	41.1	6.3	--	1.4
RAMSEY	165.8	201.8	248.8	50.1	27.4	52.6	16.8	--	3.2
ROLETTE	98.8	126.3	156.6	58.6	20.3	59.5	10.5	--	9.7
TOWNER	88.0	96.2	95.3	8.3	55.8	28.1	10.6	--	5.5
REGION 3	687.4	787.9	859.4	25.0	41.5	43.2	10.6	--	4.7
GRAND FORKS	555.6	740.7	909.8	63.8	18.0	56.3	13.7	--	12.0
NELSON	81.9	109.8	86.7	5.9	65.3	27.2	6.6	--	0.9
PEMBINA	251.0	291.1	335.8	33.8	51.1	23.3	2.4	--	23.2
WALSH	268.6	269.7	288.1	7.3	59.9	32.0	2.5	--	5.6
REGION 4	1,157.1	1,411.2	1,620.4	40.0	34.8	43.6	9.0	--	12.6
CASS	665.9	822.4	1,057.0	58.7	24.6	41.5	16.1	--	17.8
RANSOM	81.4	91.9	117.4	44.2	77.1	15.3	3.5	--	4.1
RICHLAND	276.2	306.1	360.3	30.5	62.6	15.9	2.7	--	18.8
SARGENT	127.2	122.6	152.1	19.6	58.7	10.3	1.9	--	29.1
STEELE	57.7	72.1	66.8	15.8	85.2	10.2	2.8	--	1.8
TRAILL	152.2	164.0	168.3	10.6	73.0	16.7	3.3	--	7.0
REGION 5	1,360.6	1,579.0	1,921.9	41.3	44.0	29.4	10.1	--	16.5

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Appendix Table 1. continued

County/ REGION	Sales for Final Demand (1996 dollars) 1985	1990	1996	Change 1985-1996	Sector Share of Total, 1996 Ag.	Federal Activities	Tourism	Energy	Mfg.
	----------million$----------			----------%----------					
BARNES	152.7	217.0	232.8	52.5	54.5	27.4	12.9	--	5.2
DICKEY	108.4	116.1	142.4	31.4	68.8	20.8	6.5	--	3.9
FOSTER	62.3	80.1	87.2	39.9	56.2	22.4	10.4	--	11.0
GRIGGS	56.2	72.8	66.9	19.0	65.2	20.5	7.9	--	6.4
LAMOURE	101.2	123.8	146.8	45.0	73.5	17.1	8.4	--	1.0
LOGAN	51.1	61.4	58.0	13.4	73.8	20.7	5.0	--	0.5
MCINTOSH	54.6	68.0	66.3	21.4	63.8	24.4	8.3	--	3.5
STUTSMAN	232.2	329.3	388.3	67.2	34.4	32.4	17.6	--	15.6
WELLS	101.4	125.5	126.3	24.6	68.5	23.4	7.1	--	1.0
REGION 6	920.2	1,193.9	1,315.0	42.9	55.5	25.5	11.6	--	7.4
BURLEIGH	406.4	534.4	692.8	70.5	6.2	60.6	17.2	--	16.0
EMMONS	67.2	80.0	90.8	35.2	76.2	18.7	4.1	--	1.0
GRANT	62.5	62.7	57.8	-7.5	74.9	16.3	7.1	--	1.7
KIDDER	61.6	63.5	56.0	-9.1	74.3	17.7	7.1	--	0.9
MCLEAN	187.5	293.8	324.7	73.2	28.5	16.4	3.4	51.1	0.6
MERCER	230.4	628.2	675.3	193.0	3.9	9.3	1.6	85.1	0.1
MORTON	552.2	702.3	653.4	18.3	10.8	19.1	3.4	57.6	9.1
OLIVER	108.7	140.0	143.9	32.4	16.3	6.7	0.8	76.0	0.2
SHERIDAN	45.6	48.3	46.6	2.2	78.3	18.5	2.8	--	0.4
SIOUX	31.2	32.5	29.1	-6.7	58.1	37.4	4.5	--	--
REGION 7	1,753.3	2,585.6	2,770.4	58.0	16.7	26.2	6.5	44.3	6.3
ADAMS	41.1	40.5	47.6	15.9	65.1	26.1	6.5	--	2.3
BILLINGS	403.9	228.9	159.0	-60.6	8.7	2.0	10.6	78.7	--
BOWMAN	105.9	94.8	169.6	60.1	15.8	9.7	3.0	69.6	1.9
DUNN	141.6	108.0	94.9	-33.0	47.2	12.4	7.7	25.6	7.1
GOLDEN VALLEY	41.8	47.2	42.0	0.5	51.7	16.9	3.6	21.9	5.9
HETTINGER	48.2	57.6	79.0	63.8	76.0	18.2	3.0	--	2.8
SLOPE	26.1	27.5	29.2	12.0	88.1	6.9	2.4	1.7	1.0
STARK	209.3	218.3	339.9	62.4	18.7	31.6	12.0	22.1	15.6
REGION 8	1,017.9	822.7	961.2	-5.6	29.9	18.2	8.1	36.6	7.2

SOURCE: Coon and Leistritz. 1995. An Updated Economic Base Data Set for North Dakota. Fargo: Department of Agricultural Economics, NDSU. Coon and Leistritz, 1997. Sales For Final Demand By Economic Sector, unpublished data. Fargo: Department of Agricultural Economics, NDSU.

Appendix Table 2. Direct Federal Expenditures or Obligations to North Dakota Counties, 1996

County	1996 Total Expenditures	Per Capita 1995[a]	Per Capita 1996	Change 1995-96	Total Federal Expenditures/Obligations: Grants	Salaries	Payments	Procurement	Other	Percent Defense
	-----$000-----	----------$----------		----%---	----------%----------					
Adams	14,559	6,825	5,125	-24.9	14.5	5.3	56.5	0.9	22.7	1.4
Barnes	52,536	5,592	4,337	-22.4	12.8	8.3	70.5	3.0	5.4	5.4
Benson	51,949	9,038	7,523	-16.8	38.3	9.0	34.7	13.3	4.7	10.5
Billings	3,790	5,991	3,357	-44.0	13.9	26.8	33.4	1.5	24.5	0.9
Bottineau	39,093	6,057	5,186	-14.4	17.7	7.0	63.4	1.4	10.4	2.2
Bowman	17,723	6,202	5,366	-13.5	12.4	4.0	60.3	0.8	22.5	0.3
Burke	16,234	8,684	6,575	-24.3	10.7	13.7	60.3	1.1	14.1	0.4
Burleigh	428,346	6,813	6,522	-4.3	49.0	10.8	37.7	1.1	1.4	5.6
Cass	456,876	4,394	4,031	-8.3	14.8	20.0	48.2	5.8	11.3	6.8
Cavalier	23,452	7,641	4,450	-41.8	15.9	7.0	68.6	1.3	7.2	1.6
Dickey	29,765	6,061	5,244	-13.5	18.6	5.4	61.5	0.9	13.5	1.5
Divide	17,647	7,793	6,994	-10.2	11.3	5.5	54.2	0.7	28.3	0.5
Dunn	13,796	4,465	3,678	-17.6	22.3	7.2	58.4	2.6	9.5	0.9
Eddy	16,583	6,841	5,766	-15.7	15.5	5.5	62.3	1.5	15.1	0.7
Emmons	20,577	5,377	4,631	-13.9	11.9	4.8	68.3	0.9	14.1	1.1
Foster	33,425	12,001	8,646	-28.0	47.7	3.9	37.2	7.2	4.1	1.0
Golden Valley	9,863	7,908	5,105	-35.4	5.2	4.3	67.5	0.8	22.2	1.6
Grand Forks	440,339	5,892	6,163	4.6	13.8	43.2	28.4	13.4	1.2	52.8
Grant	16,416	5,590	5,272	-5.7	15.8	5.5	62.4	1.1	15.2	0.8
Griggs	16,890	6,305	5,660	-10.2	13.7	6.2	59.4	1.2	19.6	0.8
Hettinger	17,379	7,180	5,828	-18.8	10.2	6.3	60.3	0.8	22.4	1.5
Kidder	16,851	6,070	5,623	-7.4	12.2	6.0	53.6	1.1	27.2	0.1
LaMoure	23,282	5,813	4,685	-19.4	10.4	8.9	67.6	1.4	11.7	1.5
Logan	13,280	6,490	5,436	-16.2	16.4	5.1	56.9	1.0	20.5	0.2
McHenry	34,106	6,180	5,536	-10.4	11.2	7.1	65.4	1.2	15.1	1.5
McIntosh	22,875	6,760	6,281	-7.1	16.9	4.3	68.2	0.8	9.8	1.3
McKenzie	29,618	4,294	5,062	17.9	39.4	8.1	41.6	2.1	8.9	0.7
McLean	52,642	5,912	5,319	-10.0	15.5	8.1	62.4	3.4	10.6	6.3

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Appendix Table 2. continued

County	1996 Total Expenditures	Per Capita			Total Federal Expenditures/Obligations					Percent Defense
		1995[a]	1996	Change 1995-96	Grants	Salaries	Payments	Procurement	Other	
	-----$000-----	----------$----------		----%---	----------%----------					
Mercer	26,435	3,012	2,769	-8.1	15.1	6.7	73.3	1.2	3.7	1.1
Morton	95,944	3,901	3,929	0.7	25.9	5.4	65.0	0.9	2.8	1.6
Mountrail	45,833	7,685	6,787	-11.7	33.7	9.2	45.6	0.6	10.9	0.5
Nelson	26,684	8,302	6,833	-17.7	17.0	5.4	63.6	1.2	12.8	1.1
Oliver	5,400	3,055	2,417	-20.9	17.4	2.9	67.7	0.4	11.6	0.2
Pembina	65,597	6,923	7,505	8.4	19.6	8.9	40.0	23.2	8.2	5.2
Pierce	22,224	5,467	4,710	-13.8	14.3	5.2	67.7	0.9	11.9	1.4
Ramsey	77,043	6,185	6,186	0.0	22.2	10.5	53.4	2.6	11.3	6.9
Ransom	32,768	6,594	5,656	-14.2	17.5	5.0	54.9	11.0	11.6	1.2
Renville	12,289	6,468	4,323	-33.2	9.0	7.6	76.1	1.5	5.9	5.4
Richland	70,534	3,893	3,884	-0.2	24.2	4.5	60.0	1.0	10.4	0.7
Rolette	112,475	9,206	8,017	-12.9	31.2	16.0	27.4	23.1	2.3	2.8
Sargent	19,740	5,161	4,445	-13.9	16.0	7.8	59.5	2.3	14.4	1.3
Sheridan	11,804	6,876	6,350	-7.7	8.8	3.7	55.0	1.8	30.7	0.0
Sioux	39,548	9,011	9,658	7.2	62.4	13.9	18.5	2.7	2.5	2.3
Slope	9,591	6,318	11,597	83.6	74.0	1.0	12.1	0.3	12.6	0.0
Stark	83,035	4,041	3,659	-9.5	17.4	7.3	70.8	1.4	3.2	1.5
Steele	10,893	8,358	4,784	-42.8	10.0	8.2	67.7	7.3	6.8	7.4
Stutsman	105,436	5,479	4,941	-9.8	17.6	8.2	60.6	6.0	7.6	5.7
Towner	20,565	8,707	6,409	-26.4	13.3	4.6	50.3	21.1	10.6	0.9
Traill	43,186	5,651	4,960	-12.2	23.4	4.3	60.0	3.7	8.6	1.9
Walsh	61,125	5,599	4,776	-14.7	23.6	4.6	64.6	1.1	6.1	1.0
Ward	403,667	6,900	6,758	-2.1	7.9	46.5	36.2	8.6	0.9	54.4
Wells	32,951	6,889	6,251	-9.3	24.6	4.4	60.0	1.2	9.7	0.4
Williams	79,705	4,349	3,882	-10.8	16.8	5.5	71.8	1.0	4.8	1.4
Undistributed	160,927	--	--	--	--	--	--	--	--	--
North Dakota	3,605,287	6,066	5,602	-7.6	22.5	17.9	47.0	5.8	6.8	15.3

[a]1995 dollars have been inflated to their 1996 values using the Consumer Price Index.

Source: U.S. Bureau of the Census. *Consolidated Federal Funds Report: Fiscal Year 1995 and 1996*, CFFR/95 and CFFR/96. (compiled by North Dakota State Data Center).

Appendix Table 3. Employment by Economic Sector, North Dakota And Regions, 1985, 1990, and 1996[a]

Region and Year	(1) & (2) Ag	(3) Non-metal Mining	(4) Con-struct-ion	(5) Transp	(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																	
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
1996	44,870	342	17,657	8,775	10,962	38,669	69,680	13,483	48,231	51,905	--	66,196	1,156	974	2,341	384	375,625
Region 1																	
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
1996	2,866	--	399	297	460	1,136	2,579	511	2,018	1,781	--	1,939	19	--	951	73	15,029
Region 2																	
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
1996	6,419	15	1,604	646	1,063	3,519	9,868	1,340	5,272	6,257	--	11,818	24	--	335	--	48,180
Region 3																	
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
1996	4,901	29	740	480	596	1,949	3,219	579	2,315	2,768	--	3,540	--	--	--	--	21,116
Region 4																	
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
1996	4,387	116	2,548	1,048	1,558	5,350	12,061	1,530	6,702	7,344	--	16,555	--	--	--	--	59,199
Region 5																	
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
1996	5,988	62	6,733	3,578	2,376	16,709	20,533	6,002	17,561	13,928	--	13,145	--	--	--	--	106,615
Region 6																	
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
1996	7,750	81	981	707	639	3,358	5,359	942	3,504	5,411	--	4,308	--	--	--	--	33,040
Region 7																	
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
1996	8,817	15	4,004	1,671	3,760	4,916	12,669	2,043	9,031	11,801	--	12,375	887	975	223	311	72,868
Region 8																	
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
1996	4,373	23	649	349	509	1,734	3,391	536	1,916	2,616	--	2,512	225	--	832	--	19,665

[a] 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., 1970-1996

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	11,618,143	18,162	22,180	81.9
1995	11,938,828	18,611	23,348	79.7
1996	13,159,000	20,448	24,426	83.7

Source: U.S. Department of Commerce, Bureau of Economic Analysis. 1995. Table CA05. U.S. Department of Commerce, Bureau of Economic Analysis. 1997. Survey of Current Business. Volume 77, No. 10. Washington, D.C.