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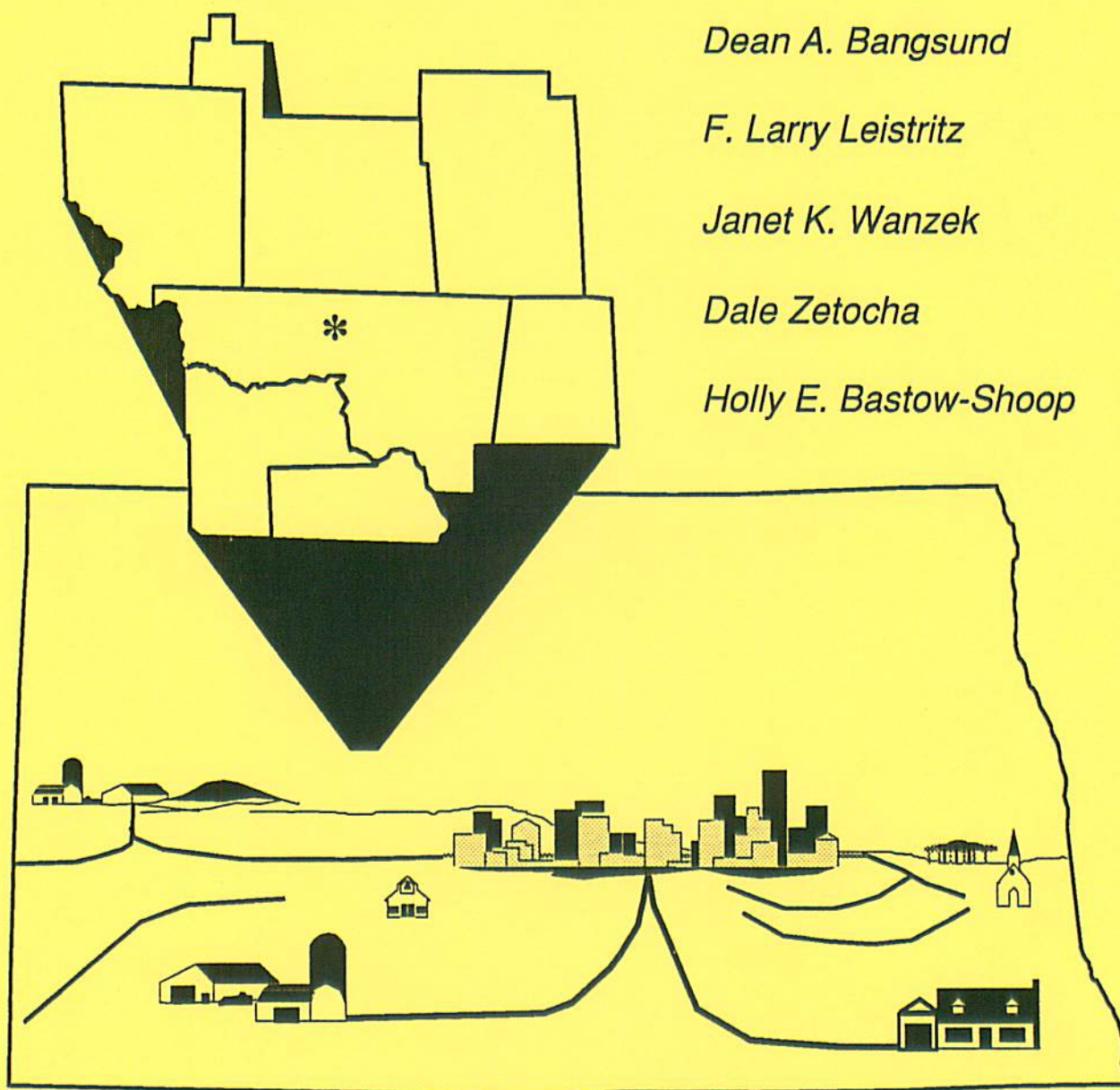
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Retail Trade Area Analysis

Garrison

North Dakota



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The authors accept sole responsibility for any remaining errors or omissions.

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HIGHLIGHTS

This report is intended to provide an indepth trade area analysis of Garrison, North Dakota. Specific analyses included determining Garrison's main and greater trade areas, identifying the demographic profile of Garrison shoppers, examining important and less important services for patron shoppers of Garrison, identifying neighboring cities that area shoppers patronize, determining distances area shoppers traveled to Garrison, and listing popular newspapers and radio stations among area residents.

Current trade area information for Garrison was obtained from a statewide trade area survey conducted by the Department of Agricultural Economics at North Dakota State University in 1989.

Recent trends (1980 to 1989) in Garrison population, retail sales, per capita income, pull factors, and McLean County population and employment were identified and discussed. Garrison's population, trade area population, retail sales, and pull factor along with McLean County population and average annual employment have all decreased throughout the 1980s. Most demographic and economic measurements have decreased with Garrison faring slightly worse than other North Dakota cities with similar populations. The economic situation found in Garrison and McLean County in the 1980s is somewhat typical of the problems found with energy dependent areas in rural North Dakota.

Garrison's trade areas were broken down into main and greater trade areas. A main trade area (MTA) was defined as an area where the majority of township residents purchase a majority of selected goods and services in one city. A greater trade area (GTA) was defined as the area beyond the MTA where some township residents purchase some selected goods and services in one city. Garrison's MTA decreased in size by five townships, compared to MTA boundaries determined in 1973.

The typical household for survey respondents appears to be a middle-aged married couple, who have completed high school, have few children at home, primarily are employed in agriculture and professional/technical professions, and have resided in the area a large portion of their lives.

Main trade area residents traveled an average of about 14 miles to Garrison to purchase selected convenience and specialty goods and services. Nearly half (49.7 percent) of the respondents who purchased 50 percent or more of convenience and specialty goods in Garrison traveled over 16 miles to purchase the items.

Garrison appears to be an important source of goods and services for those who shop in Garrison; however, Garrison could capture much more of the available market for three-fifths of the nonagricultural and about half of the agricultural goods and services included in the survey questionnaire.

Minot, Bismarck, Underwood, Max, Ryder, and Turtle Lake were the most popular cities for the purchase of nonagricultural goods and services by Garrison MTA residents who did not purchase a majority of the good or service in Garrison. Makoti, Ryder, and Minot were popular for purchasing agricultural goods and services.

Outshopping analysis revealed no substantial demographic or socioeconomic differences between Garrison MTA residents purchasing 50 percent or more and those purchasing less than 50 percent of selected goods and services in Garrison. Slight differences between groups were evident only in miles traveled.

The Minot Daily News and The Bismarck Tribune were the most popular daily newspapers for both Garrison MTA and GTA residents. The McLean County Independent was the most popular weekly newspaper for Garrison MTA and GTA residents. The most popular radio stations for Garrison MTA residents included KCJB of Minot, KFYZ of Bismarck, and KZPR of Minot.

Economic times have been difficult for energy dependent areas in North Dakota during the 1980s. Garrison appears to have strong trade center loyalty among its patrons; however, Garrison could improve the market capture for a wide array of convenience, specialty, and agricultural goods and services. Even though Garrison has lost some of its past trade area, it should remain an important trade center for residents of McLean County and the surrounding area.

RETAIL TRADE AREA ANALYSIS: GARRISON, NORTH DAKOTA

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INTRODUCTION

North Dakota has witnessed considerable demographic and economic change in the 1980s. Rural population in North Dakota has continued to decline, due, in part, to instate migration to larger cities and outmigration of state residents. The economic base for many of North Dakota's smaller cities has continued to decline due to economic stress in both the farm sector and the energy industries. The combination of rural economic stress and reduced population has had significant impacts on retail trade for most geographic areas of North Dakota.

In addition to demographic and economic influences on retail activity in North Dakota, relative income levels, improved transportation, and changes in consumer tastes and preferences contribute to changes in retail trade patterns. The number and severity of factors influencing retail activity in North Dakota during the 1980s make trade area information crucial to concerned businesses and policymakers interested in developing effective strategies to cope with changing economic conditions. Dissemination of trade area information to rural cities and towns can help communities meet the challenges of the 1990s.

Purpose

The Department of Agricultural Economics at North Dakota State University has prepared two levels of trade area reports. An indepth report was prepared discussing previous trade area work, outlining the methods and procedures used to determine trade areas for all cities in North Dakota, determining trade areas for the 11 largest North Dakota cities, and comparing purchases of services by patrons of different sized trade centers within the state (Bangsund et al. 1991). Other reports have been prepared to disseminate specific trade area information for individual cities.¹ The purpose of this report is to provide specific information about the Garrison trade area.

This report will describe Garrison's main and greater trade areas, provide information on the demographic characteristics of

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¹ Copies of individual city reports can be obtained from the Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota, 58105, (701) 237-7441.

Garrison area shoppers, and identify essential and nonessential services Garrison businesses provide.

Methods and Scope

The data for this report were obtained from a statewide trade area survey which the Department of Agricultural Economics at NDSU conducted in 1989. The NDSU Extension Service and the North Dakota Agricultural Experiment Station, through their respective Rural Development Center projects, partially financed the study.

The survey was designed to obtain information about geographic shopping preferences for 37 nonagricultural and 12 agricultural goods and services and selected demographic characteristics of those responding. Although the survey provided information on all North Dakota cities and towns where people purchase goods and services, the material presented in this report primarily covers the Garrison trade area.

This report is organized into four sections: (1) population and other demographic information about Garrison, (2) trade area delineation criteria and boundaries, (3) trade patterns of Garrison area shoppers, and (4) summary and conclusions.

GARRISON AND SURROUNDING AREA PROFILE

Understanding changes in population and economic activity is helpful to businesses and community planners. Much of the prosperity of rural trade areas hinges on the population base. The following briefly highlights the patterns and trends from 1980 to 1989 in Garrison population, retail sales, market share, per capita income, pull factors, and McLean County population and employment.

Population figures presented in this section are based on the 1980 Decennial Census count, with population estimates for years 1981 through 1989 reflecting adjustments to the 1980 Census count. Population figures from the 1990 Decennial Census count were not available for use in this report. Trade area information in this section is based on trade area boundaries which were determined in the 1970s. Although population and trade area information in this section was not adjusted for current findings (i.e., 1990 Census numbers and new trade area boundaries), the economic information used was current and the general condition of rural communities can be described using this information.

Garrison's population declined about 5 percent from 1980 to 1988 (Table 1). Of the North Dakota cities in the population range 1,500 to 2,500, only five had population increases from 1980 to 1988. If Hazen, the population of which increased almost 42 percent, was removed from the group, population for the size category would have decreased nearly 7 percent. Garrison's trade

TABLE 1. CITY AND TRADE AREA POPULATION FOR GARRISON AND SELECTED CITIES, NORTH DAKOTA, 1980 AND 1988

City	County	City Population		Percent Change	Trade Area Population ^a		Percent Change
		1980	1988	1980-88	1980	1988	1980-88
Population over 10,000							
Minot	Ward	32,843	35,080	6.81	69,844	72,388	3.64
Group Total		253,628	274,280	8.14	--	--	--
Population 2,500 to 10,000							
Beulah	Mercer	2,908	5,520	89.82	4,720	7,525	59.43
Hazen	Mercer	2,365	3,350	41.65	4,598	5,893	28.16
Group Total		43,813	45,650	4.19	9,602	9,579	2.52
Population 1,500 to 2,500							
Garrison	McLean	1,830	1,740	-4.92	3,527	3,322	-5.81
Washburn	McLean	1,767	1,740	-1.53	2,129	2,055	-3.48
Group Total		39,095	37,540	-3.98	--	--	--
Population 1,000 to 1,500							
New Town	Mountrail	1,335	1,310	-1.87	1,848	1,930	4.44
Parshall	Mountrail	1,059	1,020	-3.68	2,012	1,985	-1.34
Underwood	McLean	1,329	1,250	-5.94	2,300	2,088	-9.22
Velva	McHenry	1,101	1,030	-6.45	2,699	2,590	-4.04
Group Total		29,622	27,540	-7.03	--	--	--
Population 500 to 1,000							
Stanton	Mercer	623	670	7.54	--	--	--
Turtle Lake	McLean	802	670	-16.46	1,892	1,685	-10.94
Group Total		32,154	31,200	-2.97	--	--	--
Population 200 to 500							
Drake	McHenry	479	400	-16.49	1,436	1,243	-13.44
Group Total		28,746	27,373	-4.78	--	--	--
All Population Categories							
State Total		427,058	443,583	3.87	--	--	--

^aTrade areas were based on previous work by North Dakota State University Extension Service.

SOURCE: Leistritz et al. 1990.

area population decreased about 5.8 percent from 1980 to 1988. The population of Garrison's competing trade centers and their trade area populations also decreased, except for Beulah and the Beulah and New Town trade areas.

Since Garrison's trade area covers parts of counties other than McLean County, population, average annual employment, and per capita income have been identified for surrounding counties (Table 2). Population in McLean County decreased about 4.7 percent from 1980 to 1988. Four surrounding counties experienced population growth (ranging from 43.5 to 3.4 percent) and the other surrounding counties lost population (ranging from -1.0 to -8.4 percent).

Average annual employment in McLean County decreased 17 percent from 1980 to 1989. Employment declined in most counties surrounding McLean, except Burleigh and Ward Counties, where average annual employment increased. Along with declines in

TABLE 2. POPULATION, AVERAGE ANNUAL EMPLOYMENT, AND PER CAPITA INCOME FOR MCLEAN AND SURROUNDING COUNTIES, NORTH DAKOTA, 1980 TO 1989

County	1980	1982	1984	1986	1988	1989	Percent Change 1980-88/89
----- Population -----							
McLean	12,383	12,400	12,900	12,200	11,800	---	-4.71
Surrounding Counties							
Burleigh	54,811	56,600	59,000	60,500	60,400	---	10.20
Dunn	4,627	5,000	5,200	4,800	4,500	---	-2.74
McHenry	7,858	7,600	7,700	7,500	7,200	---	-8.37
Mercer	9,404	11,600	14,700	13,900	13,500	---	43.56
Mountrail	7,679	7,900	8,200	7,900	7,600	---	-1.03
Oliver	2,495	2,600	2,700	2,700	2,600	---	4.21
Sheridan	2,819	3,000	2,700	2,600	2,600	---	-7.77
Ward	58,392	59,800	61,900	61,700	60,400	---	3.44
North Dakota	652,717	672,000	687,000	679,000	667,000	---	2.19
----- Average Annual Employment ^a -----							
McLean	5,035	5,051	4,550	4,267	4,232	4,175	-17.08
Surrounding Counties							
Burleigh	24,935	24,870	28,245	30,748	32,499	33,524	34.45
Dunn	2,087	2,269	1,999	1,740	1,526	1,602	-23.24
McHenry	2,901	2,975	2,717	2,588	2,331	2,313	-20.27
Mercer	5,393	6,910	7,823	5,370	5,395	5,322	-1.32
Mountrail	3,363	3,425	3,124	3,142	3,050	3,086	-8.24
Oliver	1,134	1,108	1,040	1,047	1,053	1,004	-11.46
Sheridan	1,186	1,184	1,226	1,156	1,108	1,114	-6.07
Ward	22,350	22,606	23,658	24,189	24,884	24,692	10.48
North Dakota	288,002	297,002	310,953	313,001	316,000	317,000	10.07
----- Per Capita Income ^b -----							
	1979 ^c		1987		Percent Change 1979 to 1987		
McLean	\$9,495		\$8,815		-7.2		
Surrounding Counties							
Burleigh	12,665		11,503		-5.4		
Dunn	8,841		7,724		-12.6		
McHenry	7,744		7,199		-7.0		
Mercer	11,067		10,310		-6.8		
Oliver	9,363		9,155		-2.2		
Sheridan	7,723		7,425		-3.9		
Ward	9,997		9,196		-8.0		
North Dakota	10,041		9,641		-4.0		

^aJob Service North Dakota. Various Issues. North Dakota Labor Force by County, by Region. Bismarck.

^bU.S. Department of Commerce, Bureau of the Census, "Current Population Reports," Series P-26 (Spring 1990).

^cReal Dollars, 1979 dollars inflated to 1987 dollars using Consumer Price Index inflators (U.S. Department of Labor, Bureau of Labor Statistics).

SOURCE: Leistritz et al. 1990.

population and employment in McLean County, real per capita income (i.e., adjusted for inflation) also decreased from 1979 to 1987. Per capita income decreased in all of the surrounding counties.

Garrison's deflated taxable sales (i.e., adjusted for inflation) decreased 47.1 and 17.5 percent from 1980 to 1989 and

1987 to 1989, respectively (Table 3). Garrison had the fourth largest decrease in taxable sales of any city in the population range 1,500 to 2,500 from 1987 to 1989. Garrison's decreases in taxable sales were larger than the group averages for the time periods 1980 to 1989 and 1987 to 1989. Average taxable sales for the group decreased 45.56 and 10.06 percent from 1980 to 1989 and 1987 to 1989, respectively. Competing cities also suffered large decreases in their adjusted taxable sales for the same time periods. Statewide, taxable sales decreased 17.77 and 0.24 percent from 1980 to 1989 and 1987 to 1989, respectively.

Pull factors measure a community's success in capturing the potential purchasing power of residents in its trade area. Pull factors greater than 1.0 mean a community's retail sales are greater than the purchasing power of its trade area, suggesting the community may be "pulling" customers from outside its normal trade area. Conversely, if a pull factor is less than 1.0, the community is not capturing its share of the purchasing power in its trade area.

TABLE 3. DEFLATED TAXABLE SALES AND PURCHASES FOR GARRISON AND SELECTED CITIES, NORTH DAKOTA, 1980 TO 1989

City	Deflated Taxable Sales and Purchases (1989 Dollars)			Percent Change	
	1980	1987	1989	1980-89	1987-89
----- dollars -----					
Population over 10,000					
Bismarck	473,728,420	434,129,473	458,447,623	-3.23	5.60
Mandan	103,775,472	82,527,988	78,038,107	-24.80	-5.44
Group Total	2,578,781,160	2,337,648,605	2,396,999,678	-7.05	2.54
Population 2,500 to 10,000					
Beulah	21,109,496	13,690,513	13,789,391	-34.68	0.72
Hazen	15,750,869	11,771,841	10,495,380	-33.37	-10.84
Group Total	398,731,612	315,496,552	298,875,168	-25.04	-5.27
Population 1,500 to 2,500					
Garrison	15,231,714	9,777,949	8,063,061	-47.06	-17.54
Washburn	12,428,970	10,210,881	8,432,312	-32.16	-17.42
Group Total	415,612,668	251,583,986	226,276,758	-45.56	-10.06
Population 1,000 to 1,500					
New Town	4,145,557	3,262,502	2,629,201	-36.58	-19.41
Parshall	3,471,710	1,817,812	1,621,848	-53.28	-10.78
Underwood	7,915,982	4,657,858	3,092,794	-60.93	-33.60
Velva	6,537,160	4,635,494	4,623,679	-29.27	-0.25
Group Total	222,752,746	141,859,953	130,721,134	-41.32	-7.85
Population 500 to 1,000					
Stanton	743,428	609,934	495,401	-33.36	-18.78
Turtle Lake	4,205,187	2,972,621	2,360,047	-43.88	-20.61
Group Total	197,005,522	124,426,751	123,454,776	-37.33	-0.78
Population 200 to 500					
Drake	2,533,862	812,615	550,394	-78.28	-32.27
Group Total	150,696,574	96,258,478	83,084,913	-44.87	-13.69
All Population Categories					
State Total	3,963,580,282	3,267,274,325	3,259,412,427	-17.77	-0.24

SOURCE: Leistrutz et al. 1990.

Garrison's pull factor decreased about 38.4 percent from 1980 to 1989 (Table 4). Only four cities in the population group 1,500 to 2,500 increased their pull factor from 1980 to 1989. Garrison's pull factor is below the group average, indicating the community captures less of its trade area purchasing power than most of the cities with similar population. Pull factors for competing cities decreased substantially from 1980 to 1989. Pull factors in 1989 for cities competing with Garrison were less than Garrison's pull factor, except Bismarck-Mandan and Washburn, suggesting Garrison does a better job of capturing its available market than most of its neighboring cities.

Both city and county populations have declined in the geographic area near Garrison. Half of the surrounding counties had population decreases from 1980 to 1988. Garrison's pull factor and deflated taxable sales have decreased substantially in the 1980s. Average annual employment and real per capita income in McLean County also decreased in the 1980s. Changes in economic activity and population for Garrison have been similar, if not slightly more severe than other North Dakota cities in the 1,500 to 2,500 population range, suggesting Garrison may be slightly worse off than other cities of comparable size.

TABLE 4. PULL FACTORS FOR GARRISON AND SELECTED CITIES, NORTH DAKOTA, 1980 TO 1989

City	Pull Factor			Percent Change		
	1980	1987	1989	1980-87	1980-89	1987-89
Population over 10,000						
Bismarck	1.15	1.21	1.81	5.12	57.26	49.60
Mandan	0.75	0.74	0.60	-0.58	-20.14	-19.68
Group Average	1.12	0.96	1.01	-14.20	-9.63	5.32
Population 2,500 to 10,000						
Beulah	0.63	0.33	0.39	-47.36	-37.67	18.41
Hazen	0.48	0.37	0.38	-23.05	-20.91	2.78
Group Average	0.79	0.73	0.64	-8.40	-19.82	-12.47
Population 1,500 to 2,500						
Garrison	0.72	0.61	0.45	-16.18	-38.36	-26.46
Washburn	0.98	1.05	0.76	7.32	-22.91	-28.17
Group Average	0.89	0.65	0.52	-26.93	-42.26	-20.99
Population 1,000 to 1,500						
New Town	0.42	0.38	0.24	-10.77	-44.20	-37.47
Parshall	0.32	0.21	0.14	-36.46	-56.49	-31.53
Underwood	0.58	0.44	0.27	-24.05	-52.80	-37.85
Velva	0.50	0.47	0.27	-5.57	-45.98	-42.80
Group Average	0.65	0.53	0.43	-18.35	-34.55	-19.84
Population 500 to 1,000						
Stanton	*	*	*	*	*	*
Turtle Lake	0.37	0.34	0.26	-1.64	-30.88	-29.73
Group Average	0.60	0.49	0.42	-18.94	-29.78	-13.38
Population 200 to 500						
Drake	0.36	0.16	0.07	-54.49	-81.61	-59.59
Group Average	0.41	0.35	0.28	-14.30	-30.65	-19.07

SOURCE: Leistritz et al. 1990.

Although Garrison suffers from decreased economic activity and population declines, the city is doing better compared to its smaller competing cities. Smaller cities and towns competing with Garrison also faced tough economic pressures and appear to be suffering as much economic decline as is evident in larger cities. Although Garrison suffers from decreased economic activity and population declines, the city is doing better than some of its competing cities. Large decreases in population, average annual employment, and taxable sales in Garrison and McLean County suggest the area is economically depressed. However, the economic pressures and population declines of the 1980s, which were evident in Garrison and McLean County, can be found in many North Dakota communities which are dependent upon the energy industry.

TRADE AREA DELINEATION

A trade area can be loosely defined as the geographic area from which a business or city draws its customers. Determining a trade area depends heavily on the city size, location of the city with respect to other trade centers, and the criteria used to distinguish the trade area boundaries. Trade area criteria can vary according to trade center classification and type of trade area, and these trade areas can be broken down into primary and secondary trade areas.

Generally, primary (main) trade areas (MTAs) are those geographic regions where a trade center draws a significant portion of its retail activity. Secondary (greater) trade areas (GTAs) are geographic areas outside of the primary trade area where the trade center still extends some retail influence; however, only limited retail or service activity is generated from this region.

A primary trade area (main) was defined as an area where the majority of the people purchase a majority of their goods and services at one location. A secondary trade area (greater) was defined as an area where some of the people purchase some of their goods and services at one location.

Two major criteria were used in determining trade areas in North Dakota. The first criterion was to classify each trade center according to the level of retail activity and use the trade center classification to determine a mix of goods and services, and the second criterion determined how townships were included in the main trade area and greater trade area (Bangsund et al. 1991). The scope of this report does not permit the detailed discussion of all the procedures involved in determining a city's main and greater trade area; however, a brief synopsis is included of the trade area criteria used for Garrison.

North Dakota cities were put in seven size classifications, and the types of services expected to be provided by each size classification were outlined (Bangsund et al. 1991). Each size

of trade center was expected to provide a different number of goods and services and different amounts of similar services across trade center sizes. Thus, trade area boundaries were defined by using a mix of goods and services most appropriately provided by a city of that size.

Garrison was classified as a full convenience center based on average retail sales from 1987 to 1989. The mix included some convenience, specialty, and agricultural goods and services. Convenience goods and services are those that typically have a small unit value, are frequently purchased with a minimum of effort, and are purchased soon after the idea of the purchase enters the buyer's mind. Specialty goods are those nonstandardized goods and services that typically have a large unit value, are purchased only after comparing price, quality, features, and type among stores, and customers are willing to travel and exert more energy to secure the good or service than convenience items.

Convenience Goods and Services

Banking and savings
Hardware

Groceries

Specialty Goods and Services

Barber
Doctor
Florist
Heating fuel and propane

Legal services
Mortician
Plumber

Agricultural Goods and Services

Farm machinery

Farm supplies

The main trade area for Garrison was defined by townships where 50 percent or more of the residents purchased 50 percent or more of the selected mix of goods and services in Garrison. The greater trade area was defined by townships where 10 percent or more of the residents purchased at least 10 percent of a selected mix of goods and services in Garrison.

Several problems arise when trying to define trade areas using survey information. The most common problems were lack of usable responses from some townships and unclear distinction of purchase behavior in some townships, i.e., respondents diversified their shopping equally among several trade centers. Bangsund et al. (1991) discussed the procedures and criteria for handling townships which did not clearly meet the requirements for the main and greater trade areas.

Garrison's MTA lies almost entirely to the west of the town; however, the GTA extends beyond Garrison in all directions except beyond Lake Sakakawea (Figure 1). Garrison's ability to attract customers from the southwest appears limited due partially to a

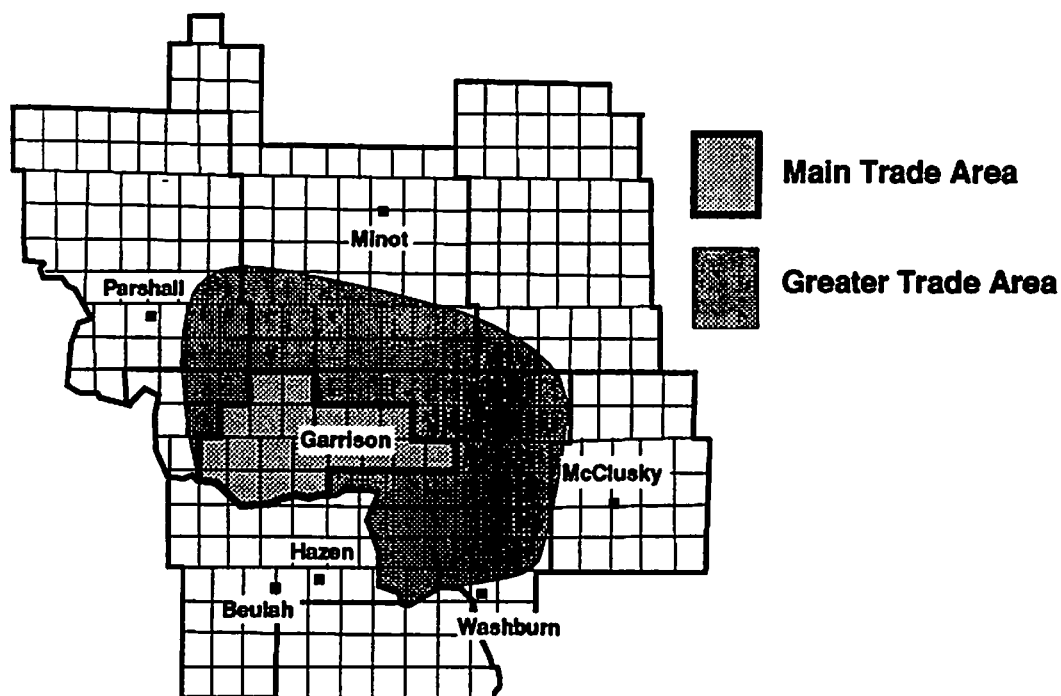


Figure 1. Main and Greater Trade Areas for Garrison, North Dakota, 1989

natural barrier created by Lake Sakakawea and competition from other trade centers, including Underwood, Washburn, Hazen, and Beulah.

CHARACTERISTICS OF GARRISON AREA RESIDENTS

Business people and community leaders usually are interested in the characteristics of local shoppers and shopping patterns. The characteristics of Garrison shoppers were analyzed, using 134 survey responses from the Garrison MTA. Other analyses included examination of important and less important services for patron shoppers of Garrison, identification of neighboring cities area shoppers patronize, determination of distances area shoppers traveled to Garrison, and listing popular newspapers and radio stations among area residents.

Demographic Profile of Shoppers in Garrison Main Trade Area

Demographic characteristics of the survey respondents for the Garrison MTA were identified (Table 5). The typical household for survey respondents appears to be a middle-aged married couple who have completed high school, have few children

TABLE 5. DEMOGRAPHIC PROFILE OF RESPONDENTS IN MAIN TRADE AREA, GARRISON, NORTH DAKOTA, 1989

Demographic Characteristic	Average of Survey Responses	
Age (Years)	52.9	
Education (Years)	12.0	
Lived in County (Years)	40.7	
Household Size (People)	2.7	
Average Household Income	\$25,350	
Occupation	Respondent	Spouse
	---%---	---%---
Farming	32.2	31.2
Retired	23.5	16.1
Professional	12.2	12.9
Tech/Sales/Admin	11.3	20.4
Craft/Repair	7.0	5.4
Service Jobs	6.1	5.4
Housewife	3.5	6.5
Equipment Operator	1.7	1.1
Other	2.6	1.1
Martial Status	--- % ---	
Single	6.9	
Separated/Divorced	3.1	
Married	79.2	
Widowed	10.8	
Male	57.3	
Female	42.7	

at home, are primarily employed in agriculture and professional/technical professions, and have resided in the area a large portion of their lives.

Distance Traveled Garrison Area Shoppers

Average distances that area residents traveled to Garrison were determined for each good or service in the 12-item goods and services mix (Table 6). Distances were determined by averaging respondents' estimated miles between Garrison and their home residence. Garrison residents and any respondents who lived one mile or less from Garrison were not included in the analysis. Once the average distance was determined for each township, the number of respondents purchasing 50 percent or more of the item in Garrison was multiplied by the average distance to determine total miles of travel for that township (for the specific good or service).

Townships included in the distance analysis were not limited to those in the MTA; instead distances traveled were included for anyone (living in surrounding counties) who purchased 50 percent

TABLE 6. AVERAGE DISTANCE TRAVELED BY AREA RESIDENTS WHO PURCHASED 50 PERCENT OR MORE OF SELECTED SERVICES IN GARRISON, NORTH DAKOTA, 1989^a

<u>All Respondents Purchasing 50 Percent or More of the Service in Garrison</u>			
<u>Convenience Items</u>		<u>Specialty Items</u>	
Goods and Services	Average Miles Traveled	Goods and Services	Average Miles Traveled
Groceries	13.5	Barber	15.3
Banking and Savings	16.4	Doctor	15.4
Hardware	13.8	Florist	14.5
		Heating Fuel	15.2
		Legal Services	15.3
		Mortician	15.5
		Plumber	11.4
<hr/>		<hr/>	
Average	14.8	Average	14.8
<u>MTA Respondents Only Who Purchase 50 Percent or More of the Service in Garrison</u>			
<u>Convenience Items</u>		<u>Specialty Items</u>	
Goods and Services	Average Miles Traveled	Goods and Services	Average Miles Traveled
Groceries	12.8	Barber	14.4
Banking and Savings	14.7	Doctor	14.2
Hardware	13.4	Florist	13.4
		Heating Fuel	14.5
		Legal Services	13.1
		Mortician	14.1
		Plumber	11.3
<hr/>		<hr/>	
Average	13.7	Average	13.7

^aOne-way distance to Garrison only.

or more of the selected good or service in Garrison. Total miles of travel were summed for all townships for that good or service and divided by the total number of respondents who purchased 50 percent or more of that item in Garrison.

The average distance traveled to Garrison to purchase convenience goods and services was identical to that traveled for specialty goods and services for all respondents (regardless of residence location). The average distance traveled to purchase convenience goods and services was also identical to that traveled for specialty goods and services for respondents in the MTA who purchased 50 percent or more of the item in Garrison.

Distance traveled by type of good or service (convenience and specialty) was broken down into distance categories. Nearly half (49.7 percent) of the respondents (regardless of residence

location) who purchase 50 percent or more of a convenience and specialty good or service traveled over 16 miles to purchase the item in Garrison (Table 7). For those living in the MTA, 44.1 percent of the respondents traveled 10 miles or less to purchase items in Garrison.

Area Shoppers' Utilization of Goods and Services Provided in Garrison

The importance of Garrison as a trade center for those who shop in Garrison and the ability of Garrison to capture the MTA market for selected goods and services were determined (Table 8). The importance of shopping in Garrison was determined by examining the number of respondents who purchased some of their goods and services in Garrison and comparing those responses to the number who purchased a majority of their goods and services in Garrison. A high percentage meant if respondents shopped in Garrison, they likely would purchase a majority of those goods and services in Garrison. A low percentage meant that, although some of the goods and services were purchased in Garrison, the majority of the goods and services was purchased elsewhere.

TABLE 7. MILEAGE BREAKDOWN FOR AREA SHOPPERS PURCHASING 50 PERCENT OR MORE OF A CONVENIENCE AND SPECIALTY SERVICE IN GARRISON, NORTH DAKOTA, 1989

<u>All Respondents Purchasing 50 Percent or More of a Service in Garrison</u>				
Distance (Miles) ^a	<u>Convenience Goods</u>		<u>Specialty Goods</u>	
	Number	Percent	Number	Percent
1 to 5	15	18.3	15	16.9
6 to 10	13	15.9	13	14.6
11 to 15	14	17.1	16	18.0
16 to 20	15	18.3	18	20.2
21 to 25	11	13.4	11	12.4
over 25	14	17.1	16	18.0
<u>MTA Respondents Only Who Purchase 50 Percent or More of a Service in Garrison</u>				
Distance (Miles) ^a	<u>Convenience Goods</u>		<u>Specialty Goods</u>	
	Number	Percent	Number	Percent
1 to 5	14	24.1	14	23.3
6 to 10	12	20.7	12	20.0
11 to 15	7	12.1	8	13.3
16 to 20	7	12.1	9	15.0
21 to 25	7	12.1	6	10.0
over 25	11	19.0	11	18.3

^aThose living in Garrison or traveling less than one mile to Garrison were not included in the analysis.

TABLE 8. RELATIVE IMPORTANCE OF GARRISON TO SHOPPERS PURCHASING SOME GOODS AND SERVICES AND FOR THOSE PURCHASING A MAJORITY OF THEIR GOODS AND SERVICES IN GARRISON, NORTH DAKOTA, 1989

Goods and Services	Responses in Garrison Main Trade Area					
	Purchase the Goods & Services Somewhere	Purchase Some of the Goods & Services in Garrison	Purchase Majority of the Goods & Services in Garrison	Measure of Market Capture		
		No.	% ^a	No.	% ^b	% ^c
Computers	21	3	14.3	3	100.0	14.3
Mortician	94	87	92.6	87	100.0	92.6
Heating Fuel/Propane	103	95	92.2	94	98.9	91.3
Plumber	101	89	88.1	88	98.9	87.1
Chiropractor	69	49	71.0	48	98.0	69.6
Barber	103	93	90.3	91	97.8	88.3
Gas/Diesel Service	126	118	93.7	111	94.1	88.1
Optometrist	128	72	56.3	67	93.1	52.3
Banking and Savings	132	126	95.5	117	92.9	88.6
Florist	102	94	92.2	87	92.6	85.3
Hardware	120	114	95.0	105	92.1	87.5
Accounting Services	77	44	57.1	40	90.9	51.9
Auto Repair	128	108	84.4	98	90.7	76.6
Prescription Drugs	127	113	89.0	101	89.4	79.5
Family Doctor	131	112	85.5	100	89.3	76.3
Beautician	117	102	87.2	91	89.2	77.8
Legal Service	108	75	69.4	66	88.0	61.1
Drinking Places	58	54	93.1	47	87.0	81.0
Dentist	127	65	51.2	56	86.2	44.1
Auto Sales	106	45	42.5	38	84.4	35.8
Groceries	133	128	96.2	108	84.4	81.2
Building Supplies	118	114	96.6	96	84.2	81.4
Appliance/Elec Repair	110	82	74.5	69	84.1	62.7
Hospital	125	94	75.2	77	81.9	61.6
Nursery (Plants)	104	80	76.9	62	77.5	59.6
Sporting Goods	97	80	82.5	61	76.3	62.9
Eating Places	131	124	94.7	93	75.0	71.0
Radios, TVs, VCRs	120	55	45.8	38	69.1	31.7
Major Appliances	122	64	52.5	43	67.2	35.2
Furniture	114	14	12.3	6	42.9	5.3
Women's Clothing	122	68	55.7	24	35.3	19.7
Women's Coats	111	24	21.6	8	33.3	7.2
Jewelry	80	27	33.7	9	33.3	11.2
Men's Clothing	118	67	56.8	19	28.4	16.1
Shoes	123	35	28.5	8	22.9	6.5
Teenage Clothing	44	19	43.2	4	21.1	9.1
Veterinarian (Sm Animals)	63	3	4.8	0	0.0	0.0
----- Agricultural Goods and Services -----						
Fertilizer	40	27	67.5	26	96.3	65.0
Farm Machinery	45	39	86.7	37	94.9	82.2
Farm Fuel & Lubricant	47	39	83.0	37	94.9	78.7
Other Farm Chemicals	41	33	80.5	30	90.9	73.2
Other Farm Supplies	41	37	90.2	33	89.2	80.5
Farm Mach Repair/Parts	47	42	89.4	37	88.1	78.7
Grain Marketing	49	42	85.7	37	88.1	75.5
Crop Consultants	13	7	53.8	6	85.7	46.2
Commercial Feeds	29	23	79.3	19	82.6	65.5
Crop Seeds	38	27	71.1	21	77.8	55.3
Veterinary Services	29	3	10.3	2	66.7	6.9
Livestock Marketing	33	3	9.1	2	66.7	6.1

^aDetermined by dividing number of responses of those who purchase some of the service in Garrison by the number who purchase some of the service anywhere. Number indicates how many buyers of the service are willing to purchase some of the service in Garrison.

^bDetermined by dividing number of responses of those who purchase majority of the service in Garrison by the number who purchase some of the service in Garrison. Number is proxy for relative importance of Garrison as a provider of the service for those purchasing the item.

^cDetermined by dividing number of responses who purchase majority of the service in Garrison by the number who purchase some of the service anywhere. Number is proxy for ability of Garrison to capture potential market for that service.

Goods and services that appear to be most utilized by those shopping in Garrison include computers, mortician, heating fuel and propane, plumber, chiropractor, barber, and fertilizer (services where 95 percent of those buying the service in Garrison purchase a majority of the service in Garrison). The goods and services that people are less likely to purchase a majority of in Garrison include shoes, teenage clothing, women's clothing and coats, veterinarian (small animals), jewelry, and furniture.

The ability of Garrison to capture the potential market within the MTA was determined by comparing those who purchase the good or service (not necessarily in Garrison) to the number of respondents who purchase a majority of the good or service in Garrison. A high percentage meant that Garrison captures a large amount of the potential market for the good or service. A low percentage meant that Garrison does not capture much of the market for that good or service.

Goods and services for which Garrison is capturing a large amount of the potential market (85 percent or more) within the MTA include mortician, heating fuel and propane, plumber, barber, banking and savings, florist, and hardware. Goods and services for which Garrison does not capture the existing market (less than 60 percent) include shoes, women's coats and clothing, computers, veterinarian (small animals and livestock), teenage clothing, jewelry, furniture, major appliances, radios-TVs-VCRs, nursery, auto sales, dentist, optometrist, men's clothing, accounting, crop consultants, crop seeds, and livestock marketing.

Goods and services that are important to Garrison shoppers and those for which Garrison is capturing a large percentage of the market include mortician, heating fuel and propane, plumber, and barber. Computers, chiropractor, optometrist, accounting services, dentist, and auto sales are important to shoppers in Garrison, but few of the potential buyers purchase a majority of those goods and services in Garrison.

Many patrons purchase a majority of their goods and services in Garrison; however, Garrison could capture much more of the potential market for many items. This phenomenon suggests some strong trade center loyalty exists for those shopping in Garrison, but at the same time a large portion of the market is being lost to other trade centers. Garrison appears to be an important source of services for those shopping in Garrison, but Garrison could improve its market capture for three-fifths of the convenience and specialty items, and half of the agricultural items.

Where Services Are Purchased When Not Purchased In Garrison

For most of the goods and services listed in the survey, some respondents did not purchase any of the good or service in Garrison or purchased more of the good or service in other cities. For people living in the Garrison MTA and not purchasing a majority of the services in Garrison, the cities where the majority of those services were purchased were identified (Table 9). Minot was the most popular choice for services purchased outside of the Garrison MTA. Other popular cities included Bismarck, Underwood, Max, Ryder, and Turtle Lake. Makoti, Ryder, and Minot were popular for purchasing agricultural goods and services.

Garrison will always lose some shoppers to surrounding cities and towns for several reasons. First, many shoppers in the Garrison MTA live close to other towns where it may be more convenient to shop for some goods and services (e.g., some agricultural services and convenience items). Second, Minot, because of its size, will have an image of greater variety and more favorable prices for many goods and services. Thus, many people will travel to Minot to shop even if the same merchandise is available locally and is competitively priced. Third, some towns have businesses which have a reputation for providing excellent service and/or quality products, often drawing customers from areas not normally considered within its trade area. Finally, when people travel to other towns, primarily for reasons other than shopping, they likely may spend some time shopping (e.g., when parents/students travel to a state basketball tournament in Bismarck, Fargo, Minot, etc., they are likely to shop while in town; also trips to larger trade centers to see medical specialists or attend recreational events can result in considerable outshopping).

Analysis of Outshoppers in Garrison Main Trade Area

Responses were analyzed to determine if those who bought 50 percent or more of selected goods and services in Garrison differed from those who bought less than 50 percent. Differences between the two groups also were analyzed by convenience and specialty services.

According to selected demographic characteristics, little difference exists between those who purchase a majority of their goods and services in Garrison and those who purchase a majority of their goods and services elsewhere (Table 10). The group purchasing less than 50 percent of the four goods and services in Garrison traveled farther (for each of the services) than the group purchasing 50 percent or more of the same goods and services in Garrison.

TABLE 9. MOST POPULAR CITIES FOR THE PURCHASE OF GOODS AND SERVICES BY GARRISON MAIN TRADE AREA RESIDENTS WHO DID NOT PURCHASE A MAJORITY OF THE GOOD OR SERVICE IN GARRISON, NORTH DAKOTA, 1989

Goods and Services	Most Popular Cities	Responses Per City	Percent Purchased	Goods and Services	Most Popular Cities	Responses Per City	Percent Purchased
Grocery	Minot Max	14 3	65.4 70.0	Eating Places	Minot Max Bismarck	22 5 5	59.7 67.0 44.0
Drinking Places	Minot Max Makoti	6 2 2	52.3 77.5 75.0	Men's Clothing	Minot Bismarck	84 11	77.9 54.5
Women's Clothing	Minot Bismarck	82 13	73.3 57.3	Women's Coats	Minot Bismarck	81 15	80.7 58.0
Teen Clothing	Minot Bismarck	34 5	75.5 58.0	Shoes	Minot Bismarck	96 15	79.5 68.7
Jewelry	Minot Bismarck	58 11	74.7 60.5	Major Appliances	Minot Bismarck	68 6	78.8 71.7
Radios, TVs, VCRs	Minot Bismarck Underwood	67 7 3	79.9 80.0 86.7	Appliance Repair	Minot Underwood Bismarck	32 3 2	77.8 70.0 60.0
Florist	Minot	10	70.0	Nursery (Plants)	Minot Bismarck	38 3	69.2 50.0
Furniture	Minot Bismarck	96 10	87.9 72.4	Auto Sales	Minot Bismarck	48 11	77.1 67.3
Auto Repair	Minot Makoti Max	14 4 4	63.9 83.7 83.7	Gas Station	Ryder Max	7 5	85.0 92.0
Heating Fuel/Propane	Ryder	4	93.8	Plumber	Max Ryder Four cities with one response	6 3	84.2 93.3
Barber	Minot	6	88.3	Beautician	Minot Bismarck	17 4	80.8 96.3
Legal Service	Minot Washburn Bismarck	25 7 6	90.6 87.1 98.3	Accounting Service	Minot Ryder Bismarck	16 10 6	94.4 98.0 90.0
Computers	Minot Bismarck	15 2	80.0 65.0	Optometrist	Minot Bismarck	41 18	90.9 90.6
Family Doctor	Minot Bismarck	21 8	92.9 80.0	Chiropractor	Minot Bismarck Turtle Lake	14 3 3	85.0 100.0 100.0
Dentist	Minot Turtle Lake Parshall Bismarck	21 19 17 7	86.4 91.6 92.1 96.4	Hospital	Minot Bismarck	33 14	83.5 80.7
Mortician	Minot Three cities with one response	4	98.7	Prescription Drugs	Minot Parshall	18 4	79.9 93.8
Vet (Small Animals)	Minot Turtle Lake	42 18	91.9 83.9	Banking and Saving	Minot Bismarck	8 3	84.4 75.0
Building Supply	Bismarck Minot Ryder	8 7 6	54.4 60.7 74.2	Hardware	Minot Max Ryder	7 3 2	57.1 93.3 77.5
Sporting Goods	Minot Bismarck	31 5	70.3 60.0	Farm Machinery	Three cities with two responses		
Farm Mach Repair	Minot Makoti	4 2	71.3 75.0	Farm Fuel/Lubrication	Ryder Max	4 3	86.3 100.0
Commercial Feed	Minot Ryder Max	4 2 2	85.0 90.0 45.0	Crop Seeds	Minot Max Three cities with two responses	7 3	77.1 83.3
Crop Consultant	Minot	5	95.0	Fertilizer	Ryder Max	9 2	86.1 95.0
Farm Chemicals	Ryder	6	80.8	Veterinary Service	Minot	26	91.0
Farm Supplies	Ryder Minot	3 2	43.0 100.0	Grain Marketing	Max Ryder	7 3	79.9 65.0
Livestock	Minot	24	92.1				

TABLE 10. DEMOGRAPHIC CHARACTERISTICS FOR PEOPLE IN THE MAIN TRADE AREA WHO PURCHASE LESS THAN 50 PERCENT AND THOSE WHO PURCHASE MORE THAN 50 PERCENT OF THEIR SERVICES IN GARRISON, NORTH DAKOTA, 1989

Attribute	Group Purchasing 50 Percent or More of Goods in Garrison				Group Purchasing Less Than 50 Percent of Goods in Garrison			
	Radios TVs&VCRs	Gas Station	Building Supplies	Prescrip. Drugs	Radios TVs&VCRs	Gas Station	Building Supplies	Prescrip. Drugs
Age	56.1	51.6	52.4	43.3	49.3	57.3	45.4	50.8
Education	11.9	12.2	12.2	12.0	12.3	11.6	11.6	12.3
Years Lived In County	40.1	38.7	40.5	41.0	37.5	47.7	31.2	40.7
Number in Household	2.5	2.8	2.8	2.6	2.9	2.4	3.1	3.1
Number in Grade School	0.3	0.4	0.4	0.3	0.4	0.4	0.5	0.5
Number in High School	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3
Average Miles Traveled ^a	6.35	13.8	12.5	13.0	47.8	15.6	22.3	38.9
Household Income	\$21,640	\$26,550	\$25,925	\$25,800	\$27,600	\$23,050	\$28,260	\$25,000

^aThose living in Garrison and those traveling less than one mile to Garrison were not included in the analysis.

Both the average age and years resided in county were very high, suggesting either that the survey respondents were older individuals or the MTA is composed of older clientele (providing the survey is a representative sample of the MTA). Other demographic variables suggest that households in the Garrison MTA are small, with few school children. Only slight differences were evident between the two main groups, with no substantial differences appearing between those purchasing 50 percent or more and those purchasing less than 50 percent of the goods and services in Garrison.

Newspaper Subscriptions of Garrison Area Residents

Newspaper subscriptions of respondents in the Garrison main and greater trade areas were identified (Table 11). Newspaper subscriptions were divided into daily and weekly papers for both main and greater trade area respondents. The most popular daily newspapers for both the main and greater trade areas were *The Minot Daily News* and *The Bismarck Tribune*. The most popular weekly paper for the main and greater trade areas was *The McLean County Independent*. Other popular weekly newspapers for respondents included *The Underwood News*, *Mountrail County Promoter*, *McLean County Journal*, and *AgWeek-Grand Forks*.

TABLE 11. NEWSPAPER SUBSCRIPTIONS FOR MAIN AND GREATER TRADE AREA RESPONDENTS, GARRISON, NORTH DAKOTA, 1989

Main Trade Area			Greater Trade Area		
Newspaper	Numbers of Respondents	Percent	Newspaper	Number of Respondents	Percent
----- Daily Newspapers -----					
Minot Daily News	73	73.8	Minot Daily News	98	71.5
Bismarck Tribune	21	21.2	Bismarck Tribune	33	24.1
Fargo Forum	2	2.0	USA Today	5	3.6
Wall Street Journal	2	2.0	Wall Street Journal	1	0.7
USA Today	1	1.0			
Total	99 ^a		Total	137 ^b	
----- Weekly Newspapers -----					
McLean Co. Independent	120	86.3	McLean Co. Independent	98	51.9
AgWeek-Grand Forks	4	2.9	Underwood News	33	17.5
Others ^c	15	10.8	Mountrail Co. Promoter	23	12.2
			McLean Co. Journal	12	6.3
			AgWeek-Grand Forks	3	1.6
			Others ^c	20	10.5
Total	139 ^d		Total	189 ^e	

^a90 respondents subscribe to a daily paper with 9 respondents subscribing to more than one paper.

^b132 respondents subscribe to a daily paper with 5 respondents subscribing to more than one paper.

^cOther weekly newspapers included Golden Valley News, Cass County Reporter, Edmore Herald, Hazen Star, LaMoure Chronicle, Wilton News, New Town News, Washburn Leader, New Salem Journal, Oakes Times, and Sheldon Mail.

^d124 respondents subscribe to a weekly paper with 15 respondents subscribing to more than one paper.

^e149 respondents subscribe to a weekly paper with 40 respondents subscribing to more than one paper.

Radio Stations of Garrison Area Residents

The most popular radio stations that respondents in Garrison's main trade area listened to were KCJB of Minot, followed by KFYR of Bismarck and KZPR of Minot (Table 12).

Comparison of Current and Previous Garrison Trade Area Boundaries

Owens and Vangsness (1969) discussed general information on retail trade and identified both main and greater trade areas for Garrison. Information from the past Garrison retail trade report was based on a different questionnaire; however, some comparisons to information in this report can be made. Probably the most valid and worthwhile comparison is to examine changes in

TABLE 12. MOST POPULAR RADIO STATIONS FOR
RESPONDENTS IN THE MAIN TRADE AREA,
GARRISON, NORTH DAKOTA, 1989

Radio Station	Number of Respondents	Percent
KLJB-Minot	54	46.2
KEYR-Bismarck	22	18.8
KZPR-Minot	14	12.0
KHRT-Minot	5	4.3
KQDY-Bismarck	3	2.6
Others	19	16.1

Garrison's main and greater trade areas. Although trade area delineation criteria used in the previous Garrison trade area report differ, enough similarity exists to make comparisons with the trade area boundaries determined in this report.

The main trade area for Garrison has changed some from 1969. Garrison lost five townships to Minot (two on the north edge and three on the west edge of the old trade area). The greater trade area appears to have remained unchanged. Some of the differences in trade areas may be attributed to different trade area delineation criteria and to changes in the relative strength of the Minot trade center.

SUMMARY AND CONCLUSIONS

Trade area analysis was conducted for Garrison based on a statewide trade area survey which the Department of Agricultural Economics at NDSU conducted in 1989. The demographic and economic profile for Garrison was discussed. Garrison has suffered in the 1980s from decreased population, reduced taxable sales, and lower pull factors. Changes in economic activity and population for Garrison have been somewhat more severe than other North Dakota cities in the 1,500 to 2,500 population range, suggesting Garrison, during the 1980s, fared slightly worse than other cities of comparable size. Although Garrison suffers from decreased economic activity and population declines, the city is doing relatively better than its smaller competing cities. The depressed economic conditions Garrison experienced in the 1980s were common for energy dependent cities in North Dakota.

Main and greater trade areas were defined for Garrison, using several delineation criteria. Townships where the majority of the respondents purchased 50 percent or more of a mix of goods and services in Garrison were included in the main trade area. Townships where 10 percent of the respondents purchased at least

10 percent of the goods and services mix in Garrison were included in the greater trade area (not including main trade area townships). The goods and services mix contained three convenience, seven specialty, and two agricultural items.

Garrison's main trade area appears to have decreased by five townships since 1969. Garrison lost all five townships to Minot. The greater trade area appears to have remained unchanged from 1969. The shape of the greater trade area appears to reflect a natural barrier imposed by Lake Sakakawea.

Garrison appears to be doing a fair job of capturing the available market (those respondents who purchase a majority of the service in Garrison divided by the total number of respondents in the Garrison main trade area who purchase the service) for only about two-fifths of the services listed on the survey questionnaire. Garrison appears to be an important source of services for those shopping in Garrison (i.e., of those shopping in Garrison, most individuals will purchase a majority of the item from Garrison retailers); however, Garrison could improve its market capture for most convenience and specialty items, and half of the agricultural items.

Minot, Bismarck, Underwood, Max, Ryder, and Turtle Lake provide most of the shopping locations for area residents who do not purchase the good or service in Garrison. No substantial differences were found in the demographic characteristics of those purchasing less than 50 percent and those purchasing more than 50 percent of selected convenience and specialty goods and services in Garrison. Those purchasing 50 percent or more of one or more convenience or specialty goods or services in Garrison traveled an average distance of about 15 miles.

The 1980s have been difficult for rural North Dakota cities and Garrison appears to have suffered as much, if not more than other cities of comparable size. An analysis of its market capture indicates Garrison has good trade center patronization by area residents, but at the same time it is losing much of its potential market for many goods and services to competing trade centers. Although economic times have been difficult, Garrison appears to be doing an average job of retaining its past trade area and should remain an important trade center for residents in McLean County and the surrounding area.

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APPENDIX

TRADE AREA STUDY
CONFIDENTIAL

- Please fill out both sides of the page.
- Any adult in your household may complete the survey.

BEGIN HERE...

LOCATION OF RESIDENCE

Town:

Township Name (or range #):

(township information is critical to the survey; please enter)

County:

To what daily newspapers do you subscribe?

To what weekly newspapers do you subscribe?

What are the call letters of the radio station you listen to most for weather, news, and other information?

_____ in _____
(town)

DIRECTIONS:

For each item below indicate up to three towns where you do a great deal of shopping and the percentage of spending made at each town by your household. Totals do not have to add up to 100% across each category.

- ## #. EXAMPLE: Groceries

1. Groceries
2. Eating places
3. Drinking places (alcoholic)
4. Men's clothing
5. Women's clothing

6. Women's coats
7. Teenage clothing
8. Shoes
9. Jewellery
10. Major appliances

11. Radios, TVs, VCRs
12. Appliance/electronic repair
13. Florist
14. Nursery (plants)
15. Furniture

16. Auto sales
17. Auto repair
18. Gas or diesel service sta.
19. Heating fuel/propane
20. Plumber

21. Barber
22. Beautician
23. Legal services
24. Accounting services
25. Computers

26. Eye doctor
27. Family doctor
28. Chiropractor
29. Dentist
30. Hospital
31. Mortician (funeral home)

[illegible]

Please continue on the next page →

Please continue here

32. Prescription drugs
33. Veterinarian (sm. animal)
34. Banking & savings
35. Building supplies
36. Hardware
37. Sporting goods

TOWN NAME	%	DO NOT WRITE IN THIS AREA

TOWN NAME	%	DO NOT WRITE IN THIS AREA

TOWN NAME	%	DO NOT WRITE IN THIS AREA

38. Overall, what are your three main trading centers and the distance to each from your residence?

Town Name	Miles

39. What town do you consider to be your main trade center?

40. Are you ..

- ☐ single, never married ☐ separated or divorced
☐ married ☐ widowed

41. What is your age? _____

42. What is your gender? ☐ male ☐ female

43. How many years of formal education have you had? _____

44. How many years have you lived in the county? _____

45. If employed (other than farming), in what town do you work?

46a. How many people live in your household, including yourself? _____

b. How many of these people are in grade school? _____

c. How many of these people are in high school? _____

Please continue with question 47

47. Please check the category that best fits your occupation (and your spouse's):

- | Respondent | Spouse |
|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> farming (also forestry, fishing) |
| <input type="checkbox"/> | <input type="checkbox"/> professional/management (e.g., teachers, registered nurses) |
| <input type="checkbox"/> | <input type="checkbox"/> technical, sales, or administrative support (e.g., office workers, salespersons, nurses-LPNs, mail carriers, health care support jobs) |
| <input type="checkbox"/> | <input type="checkbox"/> service jobs (e.g., health care aides, policemen, firemen, cooks, barbers, janitors) |
| <input type="checkbox"/> | <input type="checkbox"/> precision production, craft, and repair jobs (e.g., mechanics, welders, construction trades) |
| <input type="checkbox"/> | <input type="checkbox"/> equipment operators and fabricators (e.g., bus/truck drivers, laborers) |
| <input type="checkbox"/> | <input type="checkbox"/> other (explain) _____ |

48. What was your total family net income before taxes last year?

- | | |
|--|--|
| <input type="checkbox"/> under \$5,000 | <input type="checkbox"/> \$25,001-\$30,000 |
| <input type="checkbox"/> \$5,000-\$10,000 | <input type="checkbox"/> \$30,001-\$35,000 |
| <input type="checkbox"/> \$10,001-\$15,000 | <input type="checkbox"/> \$35,001-\$40,000 |
| <input type="checkbox"/> \$15,001-\$20,000 | <input type="checkbox"/> \$40,001-\$45,000 |
| <input type="checkbox"/> \$20,001-\$25,000 | <input type="checkbox"/> over \$45,000 |

IF YOU ARE A FARMER, PLEASE COMPLETE QUESTIONS 49-60 TO THE LEFT

If you are a farm operator (not strictly a landlord), please continue with question 49 below.

49. Farm machinery
50. Farm mach. repair/parts
51. Farm fuel & lubricants
52. Commercial feeds
53. Crop seeds

54. Crop consultants
55. Fertilizer
56. Other farm chemicals
57. Veterinary services
58. Other farm supplies

WHERE ARE YOUR FARM PRODUCTS MARKETED?

59. Grain
60. Livestock

TOWN NAME	%	DO NOT WRITE IN THIS AREA

TOWN NAME	%	DO NOT WRITE IN THIS AREA

TOWN NAME	%	DO NOT WRITE IN THIS AREA

