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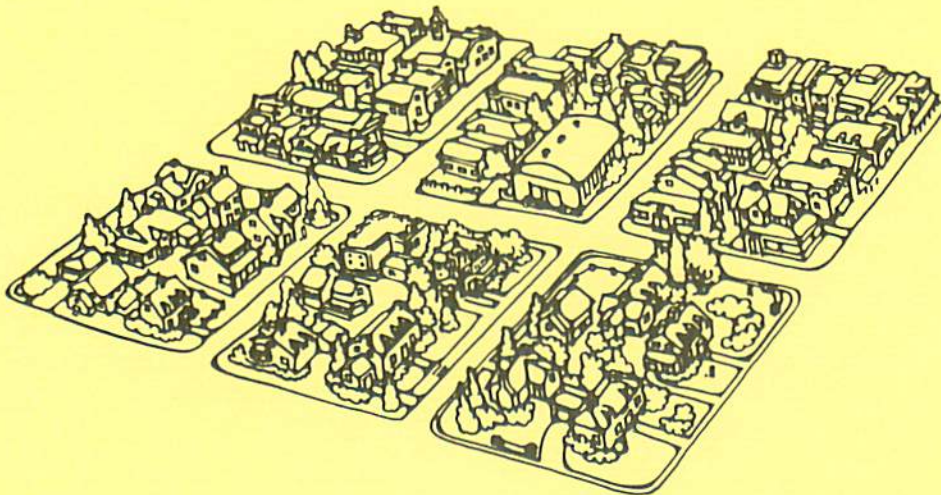
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RETAIL TRADE AREA ELLENDALE, NORTH DAKOTA



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FOREWORD

This report is an update of the retail trade survey conducted in 1971 for the community of Ellendale. It was conducted in March, 1980, at the request of the cities of Oakes and Ellendale. It will be used to depict the changes in trade patterns that have occurred and to determine the necessity of conducting similar studies in other areas of the state.

ACKNOWLEDGMENTS

Appreciation is expressed to Harvey Vreugdenhil for providing the computer analysis. The authors gratefully acknowledge the valuable assistance of Dr. Thor Hertsgaard, Dr. John P. Smith, and Dr. Del Helgeson for providing editorial comments and Sheila Preszler for assisting with the data compilation.

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RETAIL TRADE AREA SURVEY OF ELLENDALE, NORTH DAKOTA

by

Dale Zetocha, Elmer C. Vangsness, and Eddie Dunn*

Ellendale, with a population of 1,920, is the county seat in Dickey County. It has a main trade area of approximately 17 townships. Monango and Forbes are smaller towns located within the Ellendale main trade area.

One of the main reasons that Ellendale and most cities and towns in North Dakota were established was to supply goods and services to the residents of the surrounding area. Originally, needs for family living and operation of a farm business were limited and were generally supplied at the closest trading center. Adjustments have taken place. There has been a decrease in farm numbers and employment, which has limited the number of potential customers for consumption items at small farm service centers. This, in turn, has caused a decline in nonfarm employment in these centers. Development of technology has increased the demand for some goods and services, but often these items are not available in the small centers. Specialized goods and services have tended to become located in larger centers. Improved transportation and good roads have made people more mobile and have time-wise made the larger towns as close as the small town was to rural customers at the time of settlement. New methods of communication keep people informed of products available at different trading centers. For these reasons, people often patronize more than one trade center to make purchases for family living and business operations. The above changes have resulted in the decline of economic activity in many towns.

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In March, 1971, a retail trade area study was conducted in twelve southern eastern North Dakota counties. A similar retail trade area study in Dickey and parts of Sargent, Ransom, and LaMoure counties was conducted in March 1980. This report is based on the information secured in the 1980 mail survey. The survey area in the 1980 survey is smaller than the 1971 survey but contains a larger sample from the area surveyed. The 1980 survey results represent a 21 percent sample of all households in the area compared to about a 10 percent sample in 1971.

The main purpose of the survey was to identify the primary and greater trade area of Ellendale. It was not intended to provide an analysis of the full array of trade and service functions.

The purpose of this report is to present information on retail trade and services of the Ellendale trade center obtained from the survey. The material contained in this report should assist business people and community leaders in making plans for the future. Individual updated reports for Ellendale and Oakes have been prepared and are available from the Cooperative Extension Service, North Dakota State University.

Retail Trade

Types of Trade Centers

A trade area consists of a trade center and the surrounding area which the center supplies with goods and services. Each trade center and trade area is a part of an inter-dependent system of trade centers and trade areas covering an entire region. The number and size of businesses a trade center can support is dependent on the number, characteristics, and income of the people in its trade areas and its location in relation to other trade centers. People are attracted to a trade center for a variety of reasons, such as convenience, selection of goods and services, quality, price, preference for brand name, traditional shopping patterns, and personal relationships.

For this study, hamlets are defined as small centers that contain a limited number of business establishments, such as a grocery store, gasoline service station, tavern and lunchroom. Retail trade centers, which are larger than hamlets, are distinguished by the addition of specialized shops and a larger volume of retail business. Hamlets offer limited types of goods and services, while the larger retail centers are characterized by a greater degree of specialized functions. They offer a wider range of business and professional services, in addition to more retail outlets, than do the small centers.

Classification of Goods and Services

Retail trade is composed of convenience and specialty items. Convenience items are purchased frequently and can generally be purchased with a minimum of effort and travel. Examples are food, drugs, hardware, banking services and gasoline. Specialty items are those that: (1) are purchased infrequently; (2) have a wide range of selection in price, quality, color, or model; (3) are generally major purchases; and (4) are usually available only at larger centers. However, some small centers have developed a reputation for excellence for a particular specialized good or service which draws customers from beyond their normal trade area. Examples of specialty items are women's clothing, furniture, women's accessories, television sets, larger appliances, cameras and plumbing and heating supplies. Medical doctor, dental and hospital services are examples of specialty services, as they require a high degree of specialized training for the professional staff and sophisticated equipment in the facilities.

Population of Area Counties

Twelve North Dakota counties were included in the retail trade area study conducted in 1971. The current retail trade area study in 1980 includes: Dickey County and parts of Sargent, Ransom, and LaMoure counties.

The population estimates for 1960, 1970, and 1980 of the counties included in this study and the previous one are shown in Table 1 for comparison purposes.

TABLE 1. POPULATION CHANGES IN TWELVE NORTH DAKOTA COUNTIES (1960-1980)*

	1960	1970		1980	
	Population	Population	% change (1960-1970)	Population	% change (1970-1980)
Barnes	16,719	14,669	-12.3	13,831	- 5.7
Cass	66,947	73,653	+10.0	86,411	+17.3
Dickey	8,147	6,976	-14.4	7,055	+ 1.1
Foster	5,361	4,832	- 9.9	4,521	- 6.4
Griggs	5,023	4,184	-16.7	3,674	-12.2
LaMoure	8,705	7,117	-18.2	6,396	-10.1
Ransom	8,078	7,102	-12.1	6,571	- 7.5
Richland	18,824	18,089	- 3.9	18,971	+ 4.9
Sargent	6,856	5,937	-13.4	5,475	- 7.8
Steele	4,719	3,749	-20.6	3,059	-18.4
Stutsman	25,137	23,550	- 6.3	23,823	+ 1.2
Traill	10,583	9,571	- 9.6	9,459	- 1.2
Total for Twelve Counties	185,099	179,429	- 3.1	189,246	+ 5.5
North Dakota	632,446	617,761	- 2.3	635,916	+ 2.9

*Source: U.S. Census of Population. 1980 figures are preliminary.

The population of Dickey County increased by 1.1 percent from 1970 to 1980. Sargent County decreased by 7.8 percent, Ransom County by 7.5 percent, and LaMoure County by 10.1 percent.

Delineation of Trade Areas

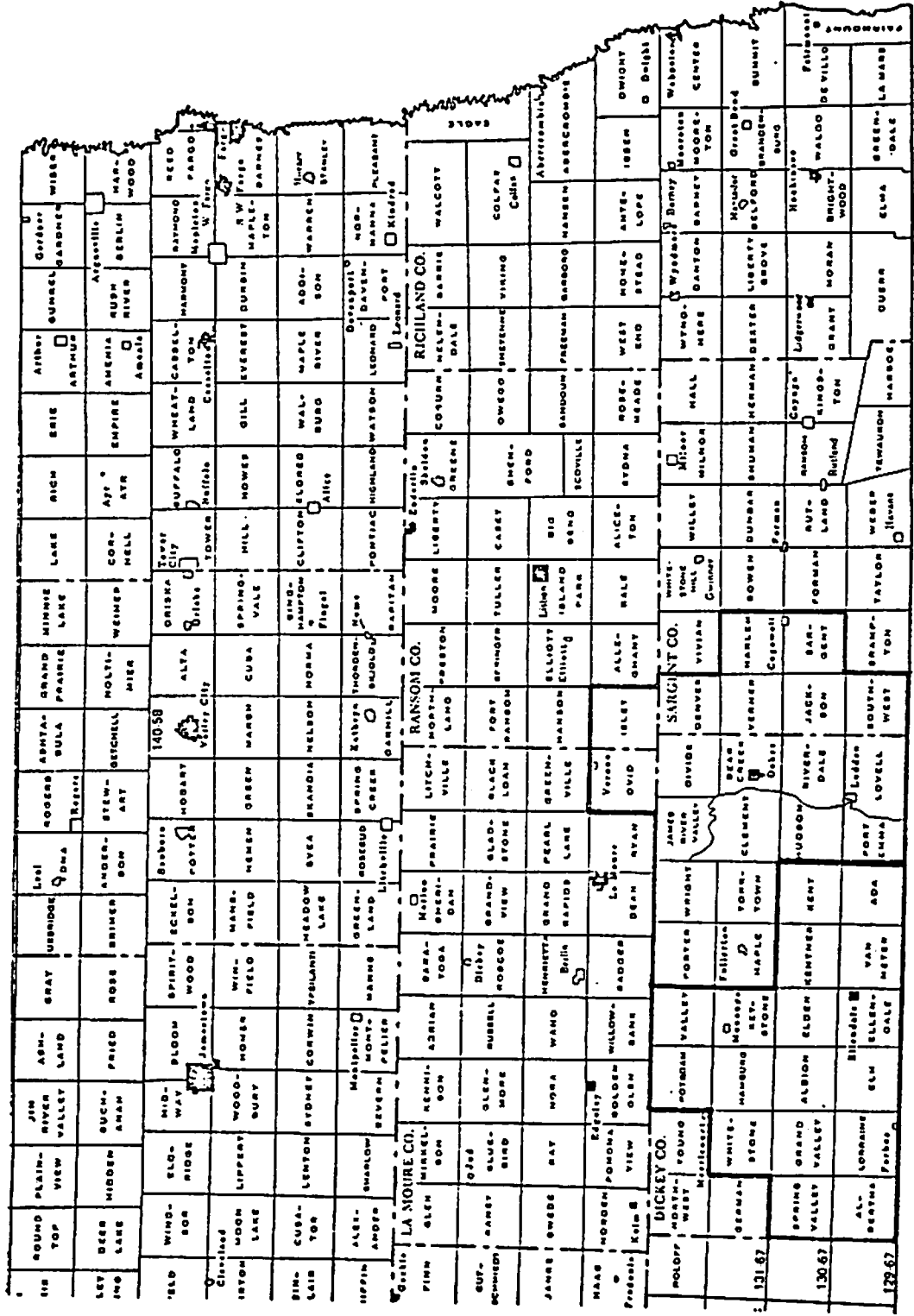
Ellendale Main Trade Area

Main trade areas were delineated by two criteria. Respondents were asked to name the trade center which they considered to be their main trade center. Further determination was made by tabulating where most respondents of an area purchased 50 percent or more of most items listed on the survey form. The trade areas for Ellendale and Oakes are shown on Map 1. The solid dark line surrounding the trade center indicates the main trade area. These solid dark lines (boundaries) surrounding the trade center are transition lines.

Ellendale's main trade area includes an area of approximately 20 townships with an estimated population of 3,700. It extends about 24 miles from north to south and about 36 miles from east to west. Residents in border South Dakota counties were not surveyed so Ellendale's penetration into that area was not determined.

Distance Ellendale Patrons Travel

The distance patrons travel to shop in Ellendale is shown in Table 2. Fifty-six percent of the farm patrons live within 20 miles of Ellendale and all live within 40 miles. Fifty-one percent of the nonfarm patrons live in or within five miles of Ellendale while seventy-five percent of the nonfarm patrons live within 20 miles. Table 2 provides information showing that Ellendale serves patrons from a wide area. Sixty-eight percent live at a distance greater than five miles. Farmers travel an average of 19 miles and nonfarmers, travel an average of 12 miles.



Map 1. Trade Areas for Ellendale and Oakes.

TABLE 2. DISTANCE TRAVELED BY ALL RESPONDENTS PURCHASING AT LEAST ONE ITEM IN ELLENDALE (414 RESPONDENTS - 195 FARM AND 219 NONFARM)

Distance	Farmers		Nonfarmers		Total	
	No.	%	No.	%	No.	%
Under 5 miles	23	12	112	51	135	32
5 - 9.9 miles	24	12	8	4	32	8
10 - 19.9 miles	61	32	46	21	107	26
20 - 39.9 miles	87	44	53	24	140	34
40 - 75 miles	-	-	-	-	-	-
Total	195	100	219	100	414	100
Average miles traveled	19		12		15	

Towns Patronized by Ellendale Main Trade Area Respondents

Data supplied by the 269 respondents¹ living within the Ellendale main trade area were studied to determine where the respondents purchase 50 percent or more of each of 29 consumer and farm production items and where farmers market 50 percent or more of their grain and livestock. The results are shown in Table 3. Also shown is the number of respondents from outside the Ellendale main trade area who purchase 50 percent or more and less than 50 percent of each item in that city. For example, 187 of the 269 Ellendale main trade area respondents purchase half or more of their food there; 40 purchase half or more of their food in Aberdeen; 11 purchase half or more of their food in Oakes; six at Edgeley, one at Fargo, one at Ashley, and 27 at hamlets (Table 3). Eight from outside the main trade area purchase half or more of their food in Ellendale and 49 purchase some but less than 50 percent of there food there.

¹There were a total of 414 respondents purchasing at least one item in Ellendale. Of that number 269 resided within its main trade area.

TABLE 3. TRADE CENTER WHERE RESPONDENTS FROM ELLENDALE MAIN TRADE AREA PURCHASED 50 PERCENT OR MORE OF EACH ITEM PLUS PURCHASES FROM OUTSIDE ELLENDALE MAIN TRADE AREA IN ELLENDALE (269 ELLENDALE MAIN TRADE AREA RESPONDENTS - 108 FARM AND 161 NONFARM) AND FARM MARKETING OF GRAIN AND LIVESTOCK IN ELLENDALE

Item	Trade Center Where Ellendale Main Trade Area Respondents Purchased 50 Percent or More of Item				Respondents Outside Ellendale Main Trade Area Purchasing Items in Ellendale	
	Ellendale	Aberdeen	Oakes	Others	50% or More	Less Than 50%
<u>Convenience Items</u>						
Food	187	40	11	Edgeley 6, Fargo 1, Ashley 1, Hamlet 27	8	49
Restaurant	158	97	10	Jamestown 3, Edgeley 3, Fargo 1, Ashley 1, Hamlets 3	15	30
Appliances	176	76	6	Edgeley 11, Fargo 2, Out of Area 1, Mpls.-St. Paul 1, Jamestown 1, Ashley 1, Kulm 1	17	17
Auto Repair	209	33	8	Edgeley 12, Jamestown 1, Ashley 1, Kulm 1, Leola 1, Hamlets 12	21	16
Electrical Repair	194	27	10	Edgeley 24, Leola 1, Hamlets 3	12	12
Barber	150	37	17	Edgeley 8, Ashley 4, Jamestown 1, Hecla 1, Hamlets 14	11	6
Beautician	143	43	9	Edgeley 5, Jamestown 2, Bismarck 1, Ashley 1, Kulm 1, Hecla 1, Hamlets 18	16	7
Legal Services	217	13	3	Jamestown 6, LaMoure 5, Ashley 4, Edgeley 3, Out of Area 1, Wahpeton 1, Lakota 1	56	5
Drugs	218	14	4	Edgeley 4, Out of Area 2, Ashley 2, Fargo 1, Mpls.-St. Paul 1, Jamestown 1	46	14

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TABLE 3. TRADE CENTER WHERE RESPONDENTS FROM ELLENDALE MAIN TRADE AREA PURCHASED 50 PERCENT OR MORE OF EACH ITEM PLUS PURCHASES FROM OUTSIDE ELLENDALE MAIN TRADE AREA IN ELLENDALE (269 ELLENDALE MAIN TRADE AREA RESPONDENTS - 108 FARM AND 161 NONFARM) AND FARM MARKETING OF GRAIN AND LIVESTOCK IN ELLENDALE, (CONTINUED)

Item	Trade Center Where Ellendale Main Trade Area Respondents Purchased 50 Percent or More of Item				Respondents Outside Ellendale Main Trade Area Purchasing Items in Ellendale	
	Ellendale	Aberdeen	Oakes	Others	50% or More	Less Than 50%
Banking	221	11	15	Edgeley 13, Ashley 5, Jamestown 3, Kulm 2, Out of Area 1, Moorhead 1, Lakota 1, Hamlets 10	24	4
Savings	195	7	13	Fargo 5, Jamestown 5, Edgeley 5, Out of Area 4, Ashley 4, Mpls.-St. Paul 3, Grand Forks 1, Lakota 1, Hecla 1, Hamlets 7	26	6
Building Supplies	183	75	10	Edgeley 8, Leola 3, Ashley 2, Out of Area 1, Fargo 1, Jamestown 1, Wahpeton 1, Kulm 1, Groton, SD 1, Hamlets 2	13	11
Hardware	224	32	10	Edgeley 9, Out of Area 1, Fargo 1, Jamestown 1, Wahpeton 1, Ashley 1	17	22
<u>Specialty Items</u>						
Furniture	185	78	9	Jamestown 3, Out of Area 2, Fargo 1, Mpls.-St. Paul 1, Ashley 1	30	21
Clothing	116	151	6	Out of Area 7, Mpls.-St. Paul 3, Jamestown 2, Bismarck 1, Ashley 1	12	28
Women's Coats	47	179	3	Out of Area 9, Fargo 8, Jamestown 7, Mpls.-St. Paul 2, Edgeley 1	3	6

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TRADE 3. TRADE CENTER WHERE RESPONDENTS FROM ELLENDALE MAIN TRADE AREA PURCHASED 50 PERCENT OR MORE OF EACH ITEM PLUS PURCHASES FROM OUTSIDE ELLENDALE MAIN TRADE AREA IN ELLENDALE (269 ELLENDALE MAIN TRADE AREA RESPONDENTS - 108 FARM AND 161 NONFARM) AND FARM MARKETING OF GRAIN AND LIVESTOCK IN ELLENDALE, (CONTINUED)

Item	Trade Center Where Ellendale Main Trade Area Respondents Purchased 50 Percent or More of Item				Respondents Outside Ellendale Main Trade Area Purchasing Items in Ellendale	
	Ellendale	Aberdeen	Oakes	Others	50% or More	Less Than 50%
Eye Doctor	94	143	32	Jamestown 9, Fargo 7, Out of Area 1, Sioux Falls 1, Edgeley 1	13	2
Medical Doctor	198	66	4	Fargo 7, Jamestown 23, Ashley 3, Edgeley 3, Out of Area 1, Mpls.-St. Paul 1, Bismarck 1	57	6
Hospital	194	75	5	Fargo 8, Jamestown 4, Ashley 3, Mpls.- St. Paul 1, Bismarck 1, LaMoure 1	56	7
Dental	150	93	15	LaMoure 6, Jamestown 5, Ashley 4, Out of Area 1, Fargo 1, Moorhead 1, Detroit Lakes 1, Breckenridge 1, Edgeley 1	71	11
<u>Farm Production Items</u>						
Farm Machinery	71	19	6	Edgeley 10, Out of Area 3, Hecla 3, Ashley 2, Kulm 2, LaMoure 1, Hamlets 2	19	22
Farm Machinery Repair	69	14	5	Edgeley 8, Kulm 3, Hecla 3, Out of Area 1, Leola 1, Hamlets 8	18	21
Tractor Fuel and Oil	86	2	12	Edgeley 6, Leola 2, Mpls.-St. Paul 1, Ashley 1, Hamlets 8	11	2
Commercial Feed	51	5	1	Edgeley 4, Ashley 1, Hamlets 36	1	1

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TRADE 3. TRADE CENTER WHERE RESPONDENTS FROM ELLENDALE MAIN TRADE AREA PURCHASED 50 PERCENT OR MORE OF EACH ITEM PLUS PURCHASES FROM OUTSIDE ELLENDALE MAIN TRADE AREA IN ELLENDALE (269 ELLENDALE MAIN TRADE AREA RESPONDENTS - 108 FARM AND 161 NONFARM) AND FARM MARKETING OF GRAIN AND LIVESTOCK IN ELLENDALE, (CONTINUED)

Item	Trade Center Where Ellendale Main Trade Area Respondents Purchased 50 Percent or More of Item				Respondents Outside Ellendale Main Trade Area Purchasing Items in Ellendale	
	Ellendale	Aberdeen	Oakes	Others	50% or More	Less Than 50%
Crop Seed	66	2	2	Edgeley 4, Out of Area 1, Hamlets 37	8	7
Fertilizer	69	8	4	Edgeley 4, Hamlets 17	3	1
Farm Chemicals	54	5	6	Edgeley 7, Ashley 1, Hamlets 24	3	4
Veterinarian Services	75	1	7	Kulm 3, Ashley 2, Lisbon 1, Hamlets 21	8	6
Veterinary Supplies	66	18	7	Kulm 4, Out of Area 3, Edgeley 3, Ashley 2, 9 Hamlets 15		2
<u>Farm Marketing Items^{1/}</u>						
Grain	44	-	3	Edgeley 5, Out of Area 1, Breckenridge 1, Valley City 1, Kulm 1, Hamlets 49	2	4
Livestock	1	58	4	Edgeley 25, Wishek 12, Out of Area 8, Ashley 3, Leola 3, Sisseton 2, West Fargo 1, Hamlets 1	-	-

^{1/} Sales, rather than purchases.

NOTE: The response of "Out of Area" refers to mail order responses or responses indicating other locations in South Dakota.

The convenience items purchased by the largest number of Ellendale main trade area respondents are hardware, banking, drugs, and legal services. The items which attracted the most patrons from outside the main trade area are legal services and drugs. Ellendale attracts a considerable number of patrons from outside its main trade area for convenience items. Aberdeen, Oakes, and Edgeley are its main competitors for convenience item sales.

The specialty items supplied in Ellendale that attract the most people are medical doctor, hospital, furniture, and dental services. Dental, medical doctor, and furniture attract the largest number of patrons from outside the main trade area. Aberdeen, Fargo, and Ellendale are major competitors for specialty items. Hamlets do not supply many specialty items.

Tractor fuel and oil, veterinarian services, and farm machinery are the farm production items which attract the most farm patrons to purchase 50 percent or more of the items in Ellendale. Hamlets in the area are Ellendale's main competitors for the sale of most farm production items. Aberdeen and Oakes are not major competing centers for the purchase of these items for respondents in the Ellendale main trade area.

Forty-four of the farm respondents market their grain in Ellendale. Hamlets are the main competitors by attracting the grain marketing of 49 of the farm patrons. Aberdeen, Edgeley, and Wishek are the trade centers where livestock is marketed by the largest number of farm respondents.

Table 4 supplements Table 3 by showing where respondents from the Ellendale main trade area purchase some but less than 50 percent of each item. This shows that when respondents go to larger centers to secure specialty items, they also purchase some convenience items.

TABLE 4. TRADE CENTER WHERE RESPONDENTS FROM ELLENDALE MAIN TRADE AREA PURCHASED SOME BUT LESS THAN 50 PERCENT OF EACH ITEM (269 RESPONDENTS-108 FARM AND 161 NONFARM) AND FARM MARKETING OF GRAIN AND LIVESTOCK BY THE FARM RESPONDENTS

Item	Number of Respondents and Trade Center Where Ellendale Main Trade Area Respondents Purchased Some But Less Than 50 Percent of Items			
	Ellendale	Aberdeen	Oakes	Others
<u>Convenience Items</u>				
Food	52	110	26	Edgeley 11, Jamestown 9, Fargo 6, Ashley 3, Kulm 2, Wahpeton 1, Hecla 1, Hamlets 13
Restaurant	74	86	26	Fargo 12, Jamestown 10, Edgeley 7, Kulm 4, Bismarck 3, Ashley 3, Wahpeton 1, LaMoure 1, Hecla 1, Hamlets 8
Appliances	37	50	11	Fargo 9, Edgeley 9, Out of Area 3, Mpls.-St. Paul 1, Bismarck 1
Auto Repair	20	41	9	Edgeley 7, Jamestown 3, Ashley 3, Fargo 1, Kulm 1, LaMoure 1, Hamlets 9
Electrical Repair	22	20	4	Edgeley 10, Fargo 1, Hamlets 2
Barber	6	15	11	Edgeley 4, Ashley 1
Beautician	13	30	5	Edgeley 3, Hamlets 1
Legal Services	8	7	1	Jamestown 3, LaMoure 3, Fargo 1, Edgeley 1
Drugs	23	40	6	Fargo 4, Edgeley 2, Out of Area 1, Bismarck 1, Hamlets 1
Banking	7	6	5	Jamestown 3, Edgeley 3, Fargo 1, Hecla 1, Hamlets 2
Savings	14	12	6	Fargo 7, Mpls.-St. Paul 13, Edgeley 3, Jamestown 2, Ashley 2, Kulm 1, LaMoure 1, Hecla 1, Hamlets 7
Building Supplies	39	50	12	Edgeley 8, Fargo 4, Ashley 2, Out of Area 1, Mpls.-St. Paul 1, LaMoure 1, Hecla 1, Hamlets 1
Hardware	24	74	14	Edgeley 9, Ashley 4, Fargo 3, Jamestown 3, LaMoure 2, Kulm 1, Hecla 1, Hamlets 3

TRADE 4. TRADE CENTER WHERE RESPONDENTS FROM ELLENDALE MAIN TRADE AREA PURCHASED SOME BUT LESS THAN 50 PERCENT OF EACH ITEM (269 RESPONDENTS-108 FARM AND 161 NONFARM) AND FARM MARKETING OF GRAIN AND LIVESTOCK BY THE FARM RESPONDENTS, (CONTINUED)

Item	Number of Respondents and Trade Center Where Ellendale Main Trade Area Respondents Purchased Some But Less Than 50 Percent of Items			
	Ellendale	Aberdeen	Oakes	Others
<u>Specialty Items</u>				
Furniture	29	51	10	Fargo 4, Jamestown 3, Edgeley 3, LaMoure 2, Out of Area 1
Clothing	113	71	26	Fargo 18, Out of Area 11, Jamestown 8, Bismarck 7, Mpls.-St. Paul 4, Ashley 2, Edgeley 2, Wahpeton 1, LaMoure 1, Hamlets 2
Women's Coats	33	10	7	Fargo 9, Out of Area 1, Jamestown 2, Bismarck 1, Hamlets 1
Eye Doctor	4	7	2	Fargo 3, Jamestown 1
Medical Doctor	34	53	3	Fargo 10, Jamestown 4, Bismarck 2, Edgeley 2, Dickinson 1
Dental	17	12	1	Fargo 9, Bismarck 2, Out of Area 1, Jamestown 1, LaMoure 1
<u>Farm Production Items</u>				
Farm Machinery	20	34	11	Edgeley 7, Jamestown 2, Eureka 1, Kulm 1, Hecla 1, Hamlets 3
Farm Machinery Repair	26	36	12	Edgeley 7, Ashley 2, Fargo 1, Jamestown 1, Wahpeton 1, Kulm 1, Hamlets 7
Tractor Fuel and Oil	5	-	3	Edgeley 1
Commercial Feed	14	12	1	Hecla 3, Edgeley 2, Hamlets 6
Crop Seed	6	5	2	Edgeley 1, Hamlets 3
Fertilizer	6	3	2	Ashley 1, Edgeley 1, Hamlets 7

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TRADE 4. TRADE CENTER WHERE RESPONDENTS FROM ELLENDALE MAIN TRADE AREA PURCHASED SOME BUT LESS THAN 50 PERCENT OF EACH ITEM (269 RESPONDENTS-108 FARM AND 161 NONFARM) AND FARM MARKETING OF GRAIN AND LIVESTOCK BY THE FARM RESPONDENTS, (CONTINUED)

Item	Number of Respondents and Trade Center Where Ellendale Main Trade Area Respondents Purchased Some But Less Than 50 Percent of Items			
	Ellendale	Aberdeen	Oakes	Others
Farm Chemicals	14	8	1	Edgeley 3, Fargo 1, Hamlets 3
Veterinarian Services	12	3	5	Ashley 1, Hamlets 4
Veterinary Supplies	14	20	4	Out of Area 2, Fargo 1, Jamestown 1, Ashley 1, Edgeley 1, Hamlets 9
<u>Farm Marketing Items</u> ^{1/}				
Grain	27	12	4	Edgeley 10, Hecla 3, Duluth 1, Breckenridge 1, Valley City 1, Cando 1, Hamlets 22
Livestock	1	21	2	Edgeley 15, Wishek 5, Leola 4, Out of Area 4, Ashley 3, West Fargo 1, Napoleon 1

^{1/} Sales, rather than purchases.

Penetration of Various Businesses into Ellendale Trade Area

Table 5 is a summary of purchasing and farm marketing by all Ellendale patrons for various convenience, specialty, farm production goods and services and farm marketing. There are 414 respondents who purchase at least one of the listed items in Ellendale. One hundred ninety-five are farmers and 219 are nonfarmers.

Column one in Table 5 shows the percentage who purchase some of the listed items in Ellendale; Column two shows the percentage who purchase 50 percent or more of the item there; and Column three shows the estimated percent of total potential business which the Ellendale concerns secure for each of the 31 items. For example, 72 percent of the patrons purchase some food in Ellendale, 47 percent purchase half or more of their food there; and food stores secure approximately 45 percent of the food business from respondents who trade in Ellendale (Table 5).

Drugs, food, legal services, and hardware are the convenience items which attract the greatest number of patrons. Legal services and drugs attract the largest number of convenience item customers who purchase half or more of the item in Ellendale. These same two items have the highest percentage of the potential that business firms secure.

Medical doctor and hospital services are the specialty items which attract the highest percentages of patrons, of patrons who purchase over half of the item in Ellendale, and of the total potential business which firms secure. Most Ellendale patrons purchase their clothing, women's coats and eye doctor services at other centers.

Farm machinery repairs, farm machinery, tractor fuel and oil and veterinarian services are the farm production items which attract the highest percentage of farm patrons to trade in Ellendale. These same items attract

TABLE 5. PERCENT OF ALL PATRONS MAKING ANY PURCHASE AND PERCENT PURCHASING HALF OR MORE OF ITEM IN ELLENDALE AND ESTIMATED PERCENT OF BUSINESS SECURED BY ELLENDALE FIRMS FROM ALL RESPONDENTS (414 RESPONDENTS PURCHASED SOME ITEM IN ELLENDALE--195 FARM AND 219 NONFARM) AND FARM MARKETING OF GRAIN AND LIVESTOCK BY ELLENDALE FARM PATRONS

Item	Percent of All Elleendale Patrons		Estimated Percent of Business Secured by Elleendale Firms ^{1/}
	Making Any Purchase	Purchasing 50 Percent or More of Item	
<u>Convenience Items</u>			
Food	72	47	45
Restaurant	67	42	39
Appliances	60	47	42
Auto Repair	64	56	48
Electrical Repair	58	50	44
Barber	43	39	34
Beautician	43	38	34
Legal Services	69	66	57
Drugs	73	64	56
Banking	62	59	52
Savings	58	53	47
Building Supplies	60	47	40
Hardware	70	58	51
<u>Specialty Items</u>			
Furniture	64	52	45
Clothing	65	31	31
Women's Coats	22	12	11
Eye doctor	28	26	22
Medical Doctor	71	62	53
Hospital	67	60	51
Dental	60	53	46
Number of Patrons	(414)	(414)	(414)
<u>Farm Production Items</u>			
Farm Machinery	68	46	41
Farm Machinery Repair	69	45	42
Tractor Fuel & Oil	53	50	44
Commercial Feed	34	27	24
Crop Seed	45	38	32
Fertilizer	41	37	32
Farm Chemicals	38	29	27
Veterinarian Services	52	43	38
Veterinarian Supplies	47	38	32
<u>Farm Marketing^{2/}</u>			
Grain Marketing	39	24	23
Livestock Marketing	1	1	1

^{1/} Estimated percent of business may be 12 percent high or low due to coding procedures.

^{2/} Sales, rather than purchases.

the highest percentage of farm patrons who purchase over half of such items there and represent the highest percentage of the total potential business.

Almost 40 percent of the Ellendale farm patrons market some grain in Ellendale. Nearly one-fourth market 50 percent or more of their grain there. Ellendale secures approximately 23 percent of the potential grain marketing business of these patrons. There is essentially no livestock marketing in Ellendale by farm patrons. Much of the farm production and grain marketing business is attracted to hamlets in the area.

Newspapers Subscribed to by Ellendale Patrons

Respondents were asked to indicate the names of the daily and weekly newspapers to which they subscribe. The Fargo Forum and Aberdeen American News are the predominant daily newspapers and are subscribed to by 44 and 31 percent, respectively, of the Ellendale patrons. The Jamestown Sun is subscribed to by 3 percent of the Ellendale patrons, while the Grand Forks Herald, Minot Daily News, Bismarck Tribune and Minneapolis-St. Paul Dailies are listed by less than one percent of the patrons. Twenty-one percent do not list a daily newspaper.

The Dickey County Leader is the predominant weekly newspaper, being listed by 58 percent of the Ellendale patrons. Other weekly newspapers listed and the percentage of patrons listing them are: The Oakes Times, 20; Edgeley Mail, 3; Kulm Messenger, 3; Ashley Tribune, 2; and LaMoure Chronicle, 1. Others listed are published out of the area, while ten percent do not list a weekly newspaper.

Radio Stations

Respondents were asked to name the radio station they listen to most often for weather, news, and other information. KSJB, Jamestown, and KDDR, Oakes, are the predominant radio stations being listed by 36 and 21 percent, respectively, of the Ellendale patrons. Percentages of patrons listing

other radio stations are as follows: KFYZ, Bismarck, 10; WDAY, Fargo, 7; KSDN, Aberdeen, 6; KDIO, Ortonville, 5; KFGO, Fargo 4; and KFNW, Fargo,

2. Other radio stations are listed by 1 percent or less of the Ellendale patrons, while five percent of the respondents do not list a radio station.

Summary

Ellendale's main trade area covers 17 townships and extends 24 miles from north to south and 36 miles from east to west. Monango and Forbes are smaller towns located within the main trade area. The extent of trade area penetration into South Dakota was not determined.

Ellendale has increased in population from 1,517 in 1970 to 1,920 in 1980. Dickey County has increased in population by 1.1 percent between 1970 and 1980.

The convenience items which attract the largest number of main trade area patrons are hardware, banking, drugs, and legal services. The convenience items attracting the most patrons from outside Ellendale's main trade area are legal services and drugs.

Medical doctor, hospital, furniture, and dental services are the specialty items purchased locally by most main trade area patrons. Aberdeen and Oakes are the main competitors for specialty item patronage but are not major competitors for farm production items. Small towns in the area are the main competitors for most farm production items.

Ellendale is part of a complex system of trade centers and trade areas. It supplements the convenience and farm production items supplied by smaller trade centers in the area and supplies most of the convenience and specialty needs of its customers. Aberdeen and Oakes supplement Ellendale in supplying specialty goods and services to Ellendale patrons.

Conclusion

It is expected that Ellendale's main trade area will not expand to any great extent unless centers such as Aberdeen, Ashley, Kulm, Edgeley, LaMoure, or Oakes decline in their ability to adequately serve their main trade areas. Any increase in retail business or service trade depends on several factors. First, a continued decrease in economic activity in hamlets may result in a transfer of business to Ellendale. However, if smaller towns in the area decline in population and these residents do not relocate in Ellendale then it would lose trade from nonfarm customers. This loss may offset increases in business from farmers who presently trade at the hamlets. Second, the extent and nature of economic or social developments in Ellendale or the surrounding area, which provide more jobs and attract more people to the area, would create an additional demand for goods and services. Third, an increase in per capita income in the area would create additional demand for consumer goods and services, especially for recreational and specialty items and fourth, upgrading or expanding goods or services to secure trade now leaving the area could increase business volume conducted in Ellendale.

If Ellendale is to grow or maintain itself, it will be necessary for community leaders to assess the city's strengths and weaknesses in relation to its trade area and surrounding centers. It will be necessary for Ellendale to continue to use a planning and action program.