



Credit as an influence upon trade center patronage patterns in central Montana
by Earl B Peterson

A thesis submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree of
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Abstract:

The objectives of this study were (1) to determine present market and patronage patterns, (2) to find out why -people went to one center over another, (3) to record the frequency of visits and distances traveled to various trade centers, (4) to determine if any differentiating characteristics existed for farm or ranch operators who patronize small or large trade centers and (5) to determine if credit usage, or availability has any influence upon trade center patronage patterns.

A six-county area in Central Montana was selected as the survey area and interviews were made with 243 farm, and ranch operators, Data is presented in tabular and descriptive form to show the influence of Lewistown, Billings and Great Falls as well as smaller centers upon patronage patterns and marketing patterns of residents in the survey area.

Some degree of influence is felt to exist between the availability and use of credit and patronage patterns in general. It was not determined which was the causal factor however. Credit is used by all types and sizes of farm and ranch units. The most frequent use of credit is for farm or ranch business including real estate, machinery or equipment purchases and production items. Nearly as many families utilized credit for family consumption items.

Rural trade centers once relied upon isolation for their patronage from agricultural units. Accessibility was the primary reason for going to one town rather than another. Improved transportation and communication systems as well as changing needs of farm and ranch families have caused patronage patterns to shift from accessible rural centers to more diversified larger urban centers. People now trade at a town because it is a good place to buy or sell and not because of distance alone.

Small towns and small farms or ranches are facing problems of increased competition and ultimate survival. This study was designed to measure the extent to which larger centers were presently serving the needs of farm and ranch people—the same people who previously patronized the small rural trade center.

CREDIT AS AN INFLUENCE UPON TRADE CENTER
PATRONAGE PATTERNS IN CENTRAL MONTANA

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Earl B. Peterson

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of

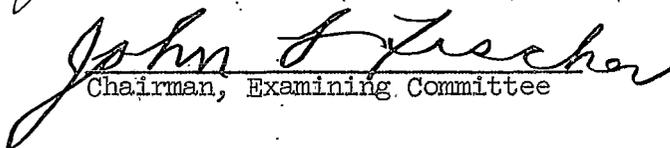
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The author accepts responsibility for any errors or omissions.

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ABSTRACT

The objectives of this study were (1) to determine present market and patronage patterns, (2) to find out why people went to one center over another, (3) to record the frequency of visits and distances traveled to various trade centers, (4) to determine if any differentiating characteristics existed for farm or ranch operators who patronize small or large trade centers and (5) to determine if credit usage or availability has any influence upon trade center patronage patterns.

A six-county area in Central Montana was selected as the survey area and interviews were made with 243 farm and ranch operators. Data is presented in tabular and descriptive form to show the influence of Lewistown, Billings and Great Falls as well as smaller centers upon patronage patterns and marketing patterns of residents in the survey area.

Some degree of influence is felt to exist between the availability and use of credit and patronage patterns in general. It was not determined which was the causal factor however. Credit is used by all types and sizes of farm and ranch units. The most frequent use of credit is for farm or ranch business including real estate, machinery or equipment purchases and production items. Nearly as many families utilized credit for family consumption items.

Rural trade centers once relied upon isolation for their patronage from agricultural units. Accessibility was the primary reason for going to one town rather than another. Improved transportation and communication systems as well as changing needs of farm and ranch families have caused patronage patterns to shift from accessible rural centers to more diversified larger urban centers. People now trade at a town because it is a good place to buy or sell and not because of distance alone.

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CHAPTER I

Introduction

The technological revolution in agriculture has characteristics of both a blessing and a curse. In general, the agricultural sector has become increasingly productive. For example, "Today, one farm worker... produces enough food and fiber for 27 people, compared with 14 in 1947-49." 1/ The increase in productivity has been accomplished at the expense of a rapid change in the structure of agriculture, both in size and number of farms along with accompanying changes at the community level. The economic and social import at the community level is of major interest to those concerned with the welfare of the rural sector of the national economy. At the farm level, financing the improved seeds, feeds, breeding livestock, better and more abundant fertilizers, insecticides, herbicides, larger more efficient machinery or specialized equipment, expanding land acreage, building improvements or additions, often presents problems. In addition to the problem of financing new technology, prices of farm products are declining while prices of farm purchases are rising. Since 1947 farm output has increased 33 percent, farm production costs have climbed 63 percent, gross farm income has increased 18 percent, but realized net farm income has dropped 25 percent. 2/ The result is that within a relatively short period of time, agriculture has become one of the higher-capital-using industries with average investment in production assets per farm worker in 1962 of \$23,259 and the average investment per farm of \$47,632. 3/

1/ United States Department of Agriculture, Upswing in Rural America, Washington, D. C., March, 1963, p. 30.

2/ Ibid., p. 31.

3/ Ibid., p. 30.

As farming becomes a higher-capital-using industry, more credit is being utilized. Leaders in the field of agriculture are pointing up the increasing use being made of borrowed capital or credit. Dr. Robert Tootell, Washington, D. C., Governor of the Farm Credit Administration, has stated that: "Agricultural debt in the nation has increased more than three times since World War II. ^{4/} (See Table I) However, the ability of the agricultural sector to secure the needed capital has often not kept pace with the need. The result is that marginal productivity of capital appears to be greater than its cost, reflecting capital rationing. In the words of a group who undertook an extensive review of this problem:

"Studies dealing with farm adjustments throughout the United States indicate that capital is a crucial limiting factor which prevents farm operators from obtaining desirable returns for their management, labor and investment". ^{5/}

The farmer in order to progress or even survive in modern agriculture must find credit in the amounts and on terms and conditions he requires. Frequently this means looking for credit outside of his home community. A shift in patronage for one vital service from the home community to a larger center is likely to result in a shift in patronage for other goods and services. The impacts that changing capital and credit needs and shifts in patronage patterns have upon the small rural trade centers is of major concern in this study.

^{4/} Better Farming Methods, October, 1962, p. 12.

^{5/} E. L. Baum, Howard G. Diesslin, and Earl O. Heady, Capital and Credit Needs in a Changing Agriculture, Ames, Iowa, The Iowa State University Press, 1961, p. 4.

TABLE I. COMPARATIVE BALANCE SHEET OF AGRICULTURE, UNITED STATES, JANUARY, 1, 1940, 1950, 1960 and 1962. *

Item	1940 (Billions)	1950 (Billions)	1960 (Billions)	1962 (Billions)
Assets				
Real Estate	33.6	75.3	130.2	138.0
Nonreal Estate	15.2	40.4	51.6	51.7
Financial Assets	4.2	15.9	17.9	17.8
Total	53.0	131.6	199.7	207.5
Claims				
Real Estate Debt	6.6	5.6	12.3	14.2
Nonreal Estate Debt	3.0	5.2	10.6	11.6
Commodity Credit Corp.	.4	1.7	1.2	1.9
Total	10.0	12.5	24.1	27.7

* Source: United States Department of Agriculture, Agricultural Finance Review, Volume 23, Supplement, Economic Research Service, Farm Production Economics Division, Washington, D. C., December, 1962, p. 69.

Rural population of the United States has changed little in total since 1930. The dramatic change has been in the percent of rural population compared with the total population. (See Table II.)

TABLE II. COMPOSITION OF RURAL POPULATION, 1930, 1940, 1950 and 1960. *

Year	Farm (Millions)	Nonfarm (Millions)	Total (Millions)	Percentage Farm
1930	30.5	23.3	53.8	57
1940	30.5	26.7	57.2	53
1950	23.0	31.2	54.2	42
1960	15.6	38.4	54.0	29

* Source: United States Department of Agriculture, Upswing in Rural America, Washington, D. C., March, 1963, p. 29.

Of the 38.4 million rural nonfarm people counted in 1960, about 10.4 million lived in places with less than 2,500 population and the remaining 28 million resided in the open country. 6/ Between 1950 and 1960, most towns under 2,500 lost population.

Another significant point to consider is composition of the rural population. Rural people aged 60 to 69 outnumber those who are 20 to 29. In urban areas, people aged 20 to 29 exceed those aged 60 to 69 by 64 percent.

The combined factors of increasing age of rural people, decreasing number of farms, increased size of units, and much improved transportation systems have created a problem for many of the small rural trade centers. These rural centers are largely dependent upon farm income for their survival.

The Problem Situation

Trade centers originated because of the surrounding rural population. Farm people needed a central point at which to market their production and from which they could get necessary supplies and fundamental services. Since roads were generally poor and transportation meager, distance was a limiting factor. Historically, rural people have traded at the most convenient center. C. J. Galpin states that "accessibility seemed to be the largest factor in determining the regular trade center for any farm home" in his original studies dealing with trade areas and community concepts. 7/

6/ Ibid., p. 29.

7/ C. J. Galpin, The Social Anatomy of an Agricultural Community, Wisconsin Agricultural Experiment Station, University of Wisconsin Research Bulletin 34, 1915.

Later studies began to show that trade centers were undergoing change. Changes in transportation and communication made significant impacts upon rural communities. C. E. Lively made a study in Minnesota where the importance of these two factors on the reorganization of rural life was measured. ^{8/} Generally the results indicated that increased use of communications and better methods of transportation would result in: (a) A realignment in rural living processes, techniques and loyalties, both economic and social, (b) a regrouping of farms and the rise of larger units and (c) the decline and disappearance of many smaller centers and service agencies whose chief basis of existence was found in isolation. ^{9/}

Another analysis dealing with retail services and merchandising indicated that larger trade centers were taking advantage of higher living levels of farm families to draw trade away from smaller rural centers. ^{10/} The size of the trade center and the quality and variety of services offered was felt to be an important aspect of the problem.

"Farmers are not satisfied with incomplete trading services. Sometimes the dissatisfaction is expressed openly, but more frequently it is shown by the farmer's shopping trips to a larger center or by his patronage of a mail-order house." ^{11/}

^{8/} C. E. Lively, Growth and Decline of Farm Trade Centers in Minnesota, 1905-1930, Minnesota Agricultural Experiment Station, University of Minnesota, Bulletin 287, 1932.

^{9/} Ibid.

^{10/} H. Bruce Price and C. R. Hoffer, Services of Rural Trade Centers in Distribution of Farm Supplies, Minnesota Agricultural Experiment Station, University of Minnesota, Bulletin 249, 1928.

^{11/} Ibid.

As a follow-up to the work started in 1910 by C. J. Galpin in Wisconsin, J. H. Kolb restudied the same area in 1958 and reported his findings in the book, "Emerging Rural Communities." ^{12/} Kolb studied 12 centers in an effort to isolate the dispersion of patronage and marketing by the people of the open country. He identified farm families, location and names of villages and where the family went for eight services: (a) banking, (b) dry goods, (c) groceries, (d) sales of milk, (e) high school, (f) church, (g) library and (h) weekly newspaper. The findings indicated that family loyalties to community trade centers tended to break down; patronage was spread among several centers rather than concentrating on the nearest one as observed by Galpin. ^{13/} Trade centers as studied by Kolb tended to specialize in the type of services offered. This aided them in maintaining sufficient business volume providing a neighboring center did not specialize in the same service.

Conditions in the Great Plains region intensify the situation which small trade centers are facing. The problem has been narrowed to one of ultimate survival in some cases. Original settling of this area was done via crudely drafted and improperly adopted homestead laws. Walter Prescott Webb writes in "The Great Plains" that:

"It is not too much to say. . . that no law has ever been made by the federal government that is satisfactorily adopted to the arid region." ^{14/}

^{12/} John H. Kolb, Emerging Rural Communities, Madison, Wisconsin, The University of Wisconsin Press, 1959.

^{13/} Galpin, op. cit.

^{14/} Walter Prescott Webb, The Great Plains, New York, New York, Grosset and Dunlap, 1931, p. 399.

Several attempts were made at establishing a base for homestead sizes. Provisions were made in various laws for units of 100 acres up to areas 10 miles square. Further efforts reduced the tract size to 640 acres and then 320 acres. In 1804 the law reduced land size to 160 acres. This was again changed in 1820 to 80-acre tracts.

"When viewing the land laws from 1789 to 1862, the date of the passage of the Homestead Act, we see two tendencies operating: The first was a tendency to reduce the price of land; the second, a tendency to reduce the size of the tract offered for sale." 15/

Possibly the most significant point regarding settlement of the Plains region is that one proposal was made which would have been suited to semi-arid conditions. Webb reports on the famous, "Report on the Lands of the Arid Region of the United States", by Major John Wesley Powell. 16/ Some of the more important features of the Powell report as presented to Congress in the form of a bill follow.

1. The land unit in the irrigation district was not to exceed 80 acres; the land unit in the pasturage district was to be 2,560 acres.
2. In either case the settler was to be permitted to take land under the Homestead Act (that is free)--80 acres in one case and 2,560 acres in the other.
3. In both cases water for irrigation was to inhere in the land, and title to water was to pass with title to land. The irrigation homestead was to have water presumably sufficient to irrigate the whole farm or as much of it as might be agreed upon by members of the district; but the pasture homestead holder was not permitted to irrigate more than 20 acres. In either case, if the water should not be utilized within five years, right to it and to the land should lapse.

15/ Ibid., p. 403.

16/ Ibid., p. 419.

4. The rectangular system of surveys was to be abandoned, and the settlers of the district were to be permitted to parcel the lands themselves. The land would be in such shape that each person would have access to water, and with the rectangular system this could not be done.
5. Incidentally, in connection with the parceling of lands according to topographic basins and not by the rectangular system, Major Powell asserted that practically all values inhered in water in the arid region.

The influx of settlers onto the Plains region called for establishment of trade centers. Business centers grew up around the post office, trading post, the depot and the grain elevator. Neighborhoods began to take shape, and communities were organized. The basic function of the trade center was to service the outlying rural population. Many communities had their beginning in the homestead era only to see almost immediately the decline of population, enlargement of land holdings, better transportation available and competition from larger or more serviceable centers.

Trade centers are heavily dependent upon agricultural income. In the Plains region the rural towns must not only compete among each other for the patronage of agriculture but they have the task of dealing with specialized risks and hazards which are part of the Great Plains make-up.

It is a semi-arid region, with fertile soils and inconsistent rainfall. As Carl F. Kraenzel states in his book, "The Great Plains in Transition",

"The Plains. . . are not semi-arid in that the climate is halfway between humid and arid. They are not half dry and half wet; rather, some years they are dry and even arid; other years they are very wet; and still other years they are wet or dry at the wrong times from the standpoint of agricultural production and yields." ^{17/}

^{17/} Carl F. Kraenzel, The Great Plains In Transition, Norman, Oklahoma, University of Oklahoma Press, 1955, p. 12.

Other characteristics of the Plains region which make agriculture a hazardous occupation include great fluctuations in weather conditions, the social cost of space, lack of good alternatives for agricultural income and great distances from markets and industrial production centers.

Finally another critical problem in light of today's demands upon agricultural inputs is the fact that the Great Plains is considered to be a capital short region. The financial centers are outside the Plains. Sources of capital and credit to support agricultural investment are an important factor in this vast land. Availability of this input could be expected to influence patronage patterns in trade centers within the region.

The Research Problem

Central Montana has the characteristics typical of much of the Great Plains region. The types of agriculture predominant throughout the region are expressed here namely as livestock, grain, and livestock grain combination units. It is an area in which: (a) many homesteads were taken, (b) numerous rural trade centers were established, (c) transportation facilities were rapidly improved, (d) distance was a factor in trade center selection and (e) a choice existed between small, rural centers and larger, urban centers for goods and services.

Table III shows the story of numbers of units and size of farms and ranches in Montana.

TABLE III. SIZE AND NUMBER OF MONTANA FARMS AND RANCHES, 1945, 1950, 1955, 1960. *

		1945	1950	1955	1960
Farms	Number	37,747	35,085	33,061	28,957
Average Size	Acres	1,557	1,689	1,859	2,214

* Source: Cooperative Extension Service and Agricultural Experiment Station, Montana Agriculture Basic Facts, Montana State College, Bozeman, Montana, Bulletin 293, June, 1962, p. 28.

Numbers of units have decreased from 37,747 to 28,957 or 23.3 percent. Sizes of units have increased 29.7 percent from 1,557 acres to 2,214 acres. The larger sizes through economies of scale have partially enabled the operators to maintain income levels. Improved technology would account for the remainder.

Population of towns in Montana also reflects the fewer yet larger farm and ranch units. Table IV shows the various changes in population for trade centers in the Plains area of Montana.

TABLE IV. POPULATION IN THE PLAINS COUNTIES OF MONTANA LIVING IN INCORPORATED PLACES AND OUTSIDE INCORPORATED PLACES, 1930 AND 1960. *

	1930	1960	% Change
Total Number	314,714	387,358	23.1
Urban Places	85,153	179,079	110.3
Centers 1,000-2,500 population	22,304	35,566	59.5
Outside Incorporated Centers	207,257	172,713	-16.7

* Source: Harald A. Pedersen, Montana's Human Resources, Montana Agricultural Experiment Station, Montana State College, Bozeman, Montana, Circular 231, September, 1960, p. 3.

Urban places or centers with 10,000 people or more numbered 15, and in the three decades more than doubled their population. Twenty-one trade centers were included in the 1,000 to 2,500 population category, and they had a growth rate of one-half that of the urban centers. Those living outside incorporated centers, which includes farm population, lost population to the extent of 16.7 percent.

Not only are changes in size taking place within towns of Montana, but the age distribution is showing a significant trend. According to Harald A. Pedersen people from age 20 to 34 constituted one-third of the

total population prior to 1910.^{18/} The reason for this was that homesteading was at its height in the 1900-1910 decade, and many young men came to Montana to take up homesteads and buy cheap land. In 1960 the population was divided somewhat differently than in 1910. People under 18 years of age now made up 38.6 percent of the total while those over 65 years of age accounted for 9.7 percent. The 18 to 64 years of age group constituted 51.7 percent of the total for the year 1960.^{19/} Looking at this in terms of trade center size, Figure 1 presents a descriptive analysis.

Particular attention should be directed toward the composition of small towns (1,000 to 2,500 people) and the open country area. Small towns are retirement towns. The original homesteaders have moved into these towns which they helped establish years ago. On the other hand, the open country has a large number of youth in its total population. This indicates some trends in patronage patterns since a school is of vital concern.

Trade centers in Central Montana are facing several problems in terms of patronage from agricultural units. The size of unit is increasing, but numbers are declining. Improved technology, more reliance on machines and equipment, and increased specialization have altered the types of services required for farm operators. Small, rural trade centers must keep pace in providing these essential service functions or lose patronage. Agriculture in Montana faces a capital shortage, and use of credit is increasing. Competition for patronage in Montana may be influenced by willingness to extend or availability of credit services.

^{18/} Harald A. Pedersen, Montana's Human Resources, Montana Agricultural Experiment Station, Montana State College, Circular 234, June, 1961, p. 5.

^{19/} Ibid., p. 8.

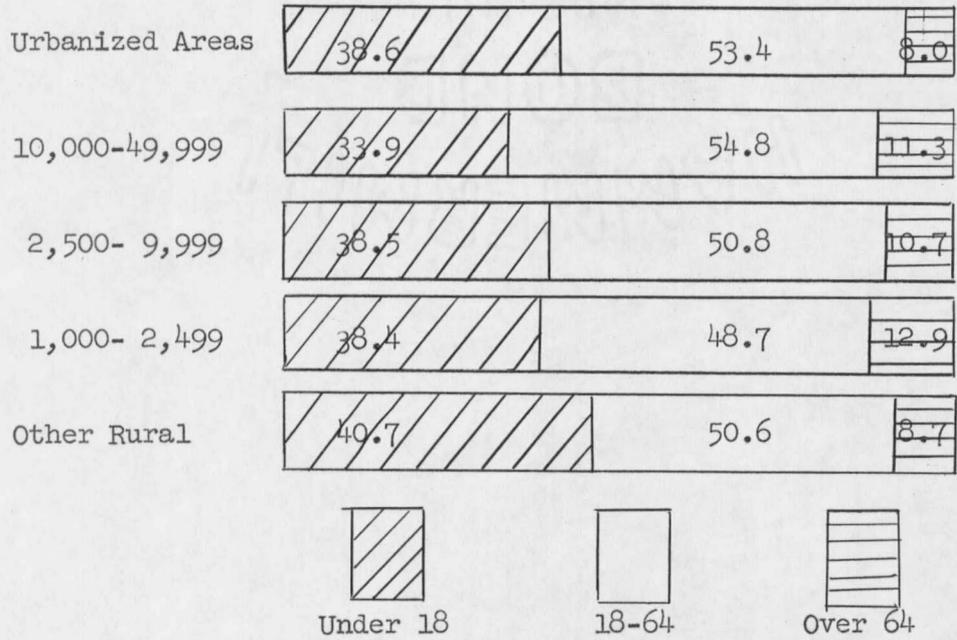


Figure 1. Distribution of Montana's Population in Broad Age Categories by Residential Groups, 1960. *

* Source: Harald A. Pedersen, Montana's Human Resources, Montana Agricultural Experiment Station, Montana State College, Bozeman, Montana, Circular 231, September, 1960, p. 11.

Purpose of the Study

This study is designed to test the hypotheses that access to credit is a major factor in determining trade center patronage patterns for goods and services used by Montana farmers and ranchers. The objectives are as follows: (1) to determine present market and patronage patterns, (2) to find out why people went to one center over another, (3) to record the frequency of visits and distances traveled to various trade centers, (4) to determine if any differentiating characteristics existed for farm or ranch operators who patronize small or large trade centers and (5) to determine if credit usage or availability has any influence upon trade center patronage patterns.

Procedures

The above objectives will be accomplished by finding which trade centers are providing credit to farm and ranch units. The types of credit used will be identified and divided into categories. A further analysis will be made to identify characteristics of farms and ranches which use credit. Important consideration will be given to the different types of credit used by varying sizes and types of farm units as well as the sources of the credit used in each case.

Central Montana was selected for the survey area because of its general representation of conditions found throughout much of the

Plains region. Lewistown is found somewhat in the center of an expanded trade area. Many small rural centers are scattered throughout. Several natural boundaries are found which aid in focusing attention to specific patronage patterns. There are no problems created by State or International boundaries, existence of Indian Reservation land or untypical land usage patterns. Two urban centers are within reasonable driving distances, so the patronage to small, medium or large centers can be determined.

The survey area consists of the counties Fergus, Golden Valley, Judith Basin, Musselshell, Petroleum and Wheatland. The six-county area is bordered by natural barriers or boundaries. To the North lies the Missouri River itself, the rough Missouri breaks and Fort Peck reservoir. West of the area are the Highwood, Belt and Crazy Mountains. East of Petroleum County is the Musselshell River and an extended area of open country with sparse population. Within this six-county area there were 2,106 farms and ranches in 1960. The count in 1930 showed 4,448 units which means a decrease of approximately 53 percent.

Occupied farm dwellings were shown on the 1956 revised version of county highway maps. Segments containing approximately 10 units each were numbered and a 15 percent area sample was drawn using a table of random numbers to select the specific sample segments. Farms were numbered within each segment and every other unit was designated as the interviewee unit. The alternate farms were used in the event the first unit was unoccupied, unavailable or did not exist.

A questionnaire was then developed and questions were to be asked of the head of each household. This was to be the person responsible for making the day-to-day decisions concerning the farm business and household. The questionnaire was reviewed by staff members within the Department of Agricultural Economics and Rural Sociology and pretested

within the Gallatin County vicinity. Interviewers were selected from junior, senior or graduate students at Montana State College. They were instructed regarding procedures, techniques and objectives of the study. Each interviewer also pretested one schedule before actually beginning the survey.

Questions were asked concerning towns usually visited for goods, services or other reasons, where grain or livestock was marketed, where major purchases were made and the use of or availability of credit for various items. The social influences such as schools, churches, politics, and social organizations were not specifically included in the questionnaire. Since these factors are important reasons for patronage patterns, they were listed often in the answers given by interviewees and show up in the analysis of the data. Since only the patronage of farmers and ranchers was under study, no effort was made to obtain information from residents within the rural trade centers unless they operated a farm or ranch unit in a sample segment already selected.

The field work for this study was performed in the spring of 1962. Approximately 20 percent of the houses shown on the 1956 version of the county highway maps were no longer occupied. Six of the sample segments were abandoned, and no schedules were completed. This was due to heavy rains prior to and during the interviewing period which made many roads completely impassable. Several units were omitted because of the inability to obtain an interview even after frequent calls. However, in nearly every case an alternate was available. Several units did not appear on the maps but were included in the survey. A final count of 243 usable schedules resulted from the original potential of 316 survey units. This yielded a 76.9 percent achievement for all possible interviewees. The 243 schedules accounted for 11.5 percent of the 2,106 farms enumerated in the six-county survey area by the 1960 census.

Definitions

In this study, urban centers are defined as cities with more than 15,000 population. An intermediate trade center is one with a population between 3,000 and 14,999 while small trade centers are those from 300 to 2,999 people. The terms trade center, town, rural trade center or city are used at will and do not specify different measures of population. All are used to indicate the focal point where residents from the surrounding countryside come to carry on buying or selling activities. Trade areas are not specific geographic areas but indicate the land region from which a trade center derives its patronage. Trade areas are not limited by distances, are subject to change and can be overlapping. Reference is made at times to farms, ranches, farm units or farmers. These terms are not separate identities but indicate a family unit which derives its livelihood from farming or ranching activities.

In order to separate farms and ranches into type categories for analysis, the following criteria was used. Three general types were established, namely grain-only, livestock-only and combination grain-livestock units. A fourth type, that of miscellaneous, was added to include those unsuited for the general types. Since very few farm units have absolutely no livestock, it was decided to include all farms with less than 20 animal units in the grain-only category. Conversely, those livestock units which raised grain but did not market any were left in the livestock-only type. Several of the farms in the survey were expected to have hogs or poultry, so the following classification of animal units were employed. One cow and calf pair, five sheep or fifty laying hens were considered equivalent to one animal unit. A yearling calf was equal to eight tenths of an animal unit, a bull equal to one and a quarter animal units and a sow and litter were considered two animal units. In

cases where only a few laying hens or up to 150 chickens were involved, the enterprise was considered inconsequential and not included in tabulation of animal units. The same applies to those farms with less than three sows and their litters.

Considerable information about credit sources and usage was obtained when respondents were interviewed. For purposes of this study, credit is defined to be anything carried as consumer credit, merchant dealer credit or institutional credit for a period of more than 30 days. Those accounts which are paid monthly or when monthly statements are prepared were felt to be so near cash dealings that they could be ignored as an influencing factor in patronage patterns for trade centers.

Tenure of the interviewee was divided into five categories--owner, owner-operator, renter, part owner-operator or other. Some elderly people reside on farm units and make the management decisions but have others do the actual work. These people were considered as owners only. Renters, and owner-operators are the two extremes of land ownership. Those renting owned none at all while owner-operators rented or leased none at all. The part owner-operator category included those who owned a portion and rented or leased a portion of their land. The "other" category was again included for those who could not fit in any of the above-mentioned divisions.

CHAPTER II

ANALYSIS OF DATA

Classification of Responses

Questions were asked of interviewees regarding the town they visited most often, why they went there, the town in which they spent the most money and where they marketed their grain or livestock. In addition specific questions were directed to find out where items under major categories were purchased, the date purchased and whether or not credit was involved in the purchase of the item. The major categories included were: (a) home utilities, (b) family consumption items, (c) family-type services, (d) real estate, (e) machinery and equipment and (f) production items. Under each category the following items were included:

1. Home utilities--water system, bathroom fixtures, laundry room equipment, heating system, food storage, kitchen appliances, television set, and high fidelity or stereophonic set.
2. Family consumption items--groceries, work clothes, dress clothes, drugs, and hardware supplies.
3. Family-type services--doctor, hospital, dentist, insurance, lawyer, haircut, and recreation.
4. Real estate--land purchases only.
5. Machinery and equipment--tractors, trucks, autos, combines, other farm machinery.
6. Production items--gasoline or fuel for farm and personal use, machinery or vehicle repairs, fertilizer, commercial feed, purebred sires and buildings for livestock, grain or other uses.

Where more than one town was named for items within a major category, the one patronized most frequently was used to represent the farmer's

choice of trade center. In cases where two towns were given equal preference, the town larger in population was selected. Figure 2 shows the 35 towns named within the survey area as well as Great Falls and Billings which lie outside the six-county area.

Towns Which Provide Credit

Table V presents the tabulation of towns in the survey area as sources of credit for various categories of purchases. Lewistown ranks far above any other center as a source of credit for farm and ranch purchases. No other center even approaches the frequency of mentions by each category of credit. Lewistown is mentioned a total of 279 times in a total of 605 possibilities or 46.1 percent of the time as the credit source.

Three towns out of 26 can be considered as full service towns in that all six categories of credit were utilized. In addition to Lewistown, Roundup and Great Falls came under this classification. Three towns were available for supplying all but one type of credit. These were Billings, Harlowton and Stanford. Those providing four categories of credit included Denton, Hobson and Winnett. These nine towns were among the top 10 in rank order as sources of credit. The other center being Geyser which provides credit in two categories and tied with Winnett for ninth place. The first 10 centers had a cumulative score of 542 out of a total of 605 or 89.6 percent of the credit patronage.

★ GREAT FALLS

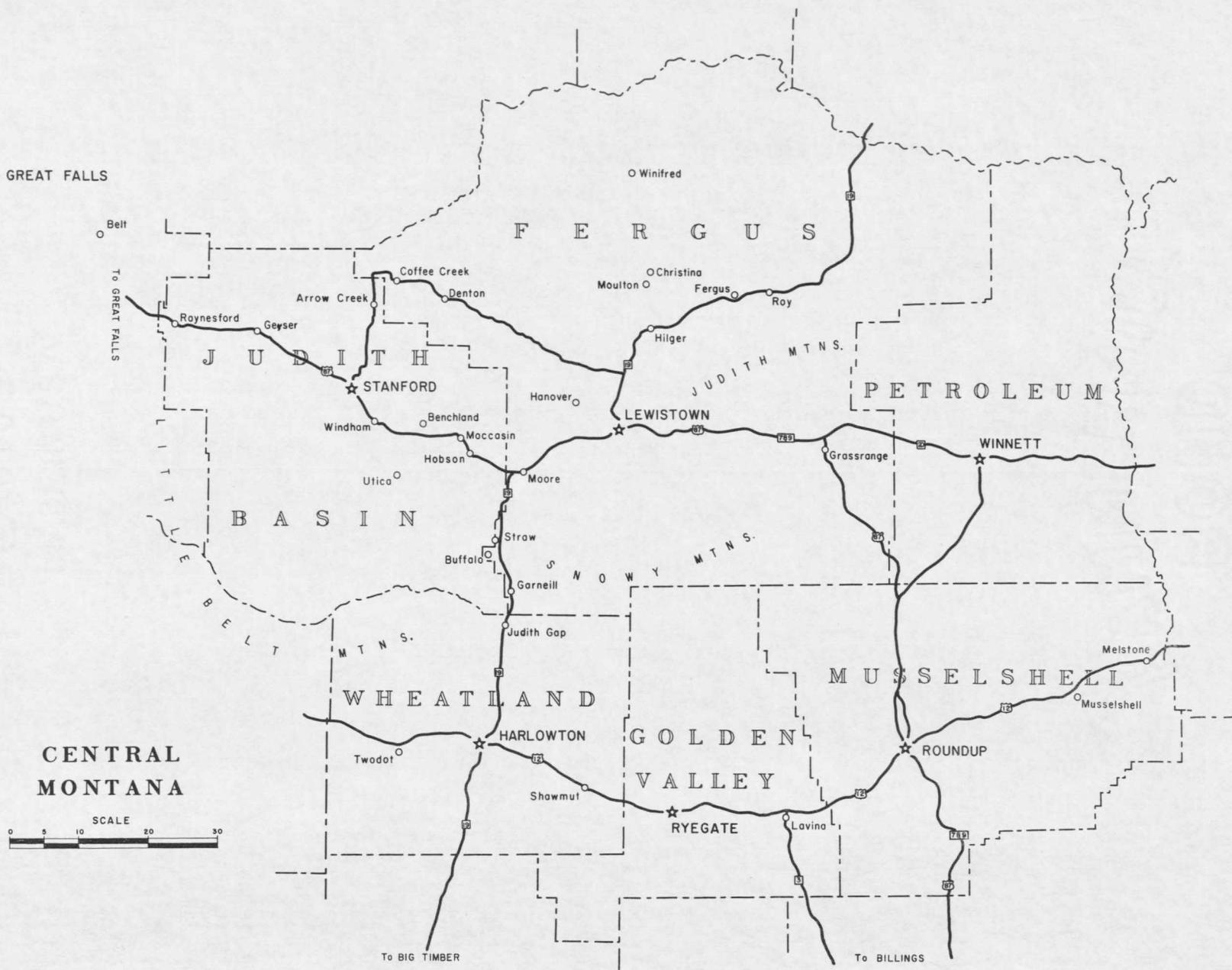


Figure 2. Survey Area, Central Montana Study, 1962.

TABLE V. TOWNS RANKED BY NUMBER OF MENTIONS AS SOURCE OF CREDIT FOR VARIOUS MAJOR CATEGORIES.

Towns	1960 Census	Home Utilities	Family Consumption	Services	Real Estate	Machinery and Equip.	Production	Total
Lewistown	7406	32	37	54	28	85	43	279
Roundup	2842	12	13	5	2	11	14	57
Harlowton	1734	5	11	12	0	10	16	54
Great Falls	55357	3	6	10	3	9	1	32
Denton	410	0	13	0	2	4	7	26
Hobsen	207	1	6	0	0	7	12	26
Billings	52851	1	1	8	3	7	0	20
Stanford	615	2	7	0	2	2	5	18
Winnett	360	1	3	0	0	1	10	15
Geyser	300	0	5	0	0	0	10	15
Coffee Creek	100	0	3	0	0	0	8	11
Judith Gap	185	0	5	0	0	2	2	9
Winifred	220	0	3	0	0	1	4	8
Moore	216	0	2	0	0	0	4	6
Melstone	266	0	1	0	0	0	4	5
Towns not in area		0	0	0	2	1	2	5
Ryegate	314	0	1	0	0	0	3	4
Raynesford	50	0	0	0	0	0	3	3
Christina	15	0	2	0	0	0	0	2
Lavina	212	0	1	0	0	0	1	2
Roy	175	0	1	0	0	0	1	2
Utica	50	0	2	0	0	0	0	2
Belt	757	0	0	0	1	0	0	1
Grassrange	222	0	1	0	0	0	0	1
Musselshell	150	0	0	0	0	0	1	1
Windham	125	0	1	0	0	0	0	1
Totals		57	125	89	43	140	151	605
Number of Towns Extending Each Type		8	22	5	8	12	20	

The first category of service to be discontinued by a center or to demand no patronage by farm families was that of family type services. Next to be dropped was real estate credit. This indicates that either larger centers are providing superior customer service, or the smaller centers do not have the facilities to attract or handle these categories. If a trend could be established for elimination of categories of credit for trade centers, it would be in the following order beginning with the first to be discontinued: (a) family type services, (b) real estate, (c) home utilities, (d) machinery and equipment, (e) production items and (f) family consumption items.

The urban centers, Great Falls and Billings, are both outside the survey area, but they do serve as a source of 8.6 percent of the credit. Family type services and machinery or equipment are the most frequently mentioned categories of credit utilized. Lewistown is the only center falling in the intermediate size, and it functions as one of the six county seats. The other county seats, Roundup, Harlowton, Stanford, Winnett and Ryegate, are among the leaders in serving as sources of credit. The one deviant is Ryegate which is far down in rank score and supplies only 0.7 percent of the credit surveyed. The population of Ryegate according to the 1960 census is 314 and the number of farms within Golden Valley County only 168 in 1959. Thus the potential business base for patronage is not too great. Other small rural centers do not serve as sources of credit other than for family consumption and production items.

One further approach to the towns as a source of credit is to compare the total number of farm units utilizing each category of credit with the number of trade centers from which the patronage is acquired. As seen from Table V only 57 farm or ranch units used credit for home utilities and eight towns were listed as the source. The eight towns were among

the first nine in rank order. Out of 26 towns, 22 were sources of family consumption credit. A total of 125 farm units out of the 243 surveyed utilized this type of credit service. Family type services came from five towns, the largest five towns in population in the study, and were used by 89 family units. Eight towns provided the real estate credit used by 43 farm units. A major source of real estate credit is from individuals, and this will be discussed later. Machinery and equipment purchases are financed for 140 farms or ranches who patronize 12 towns for this category of credit. The largest category of credit utilized was production credit. This was secured by 151 operators from 20 trade centers. Many of the smaller and less accessible towns or those farther from the larger centers appeared to provide a major portion of this type of credit.

Characteristics of Farms and Ranches Using Credit

The 243 farms and ranches surveyed were divided into four broad types as discussed previously. A total of 37 units came under the "grain-only" type description, 63 were described as "livestock-only", 130 served as grain-livestock combination units while 13 were unsuited for any of the above and were included in a miscellaneous group. See Table VI.

TABLE VI. SIZE OF FARM AND RANCH UNITS IN TYPE CATEGORIES WITH TENURE STATUS.

Size and Type	Owner	Operator	Renter	Part Owner		Total
				Operator	Other	
Grain Only						37
0 to 899 Units	1	8	4	5	0	18
900 Units or more	2	2	6	9	0	19
Livestock Only						63
0-579 Units	0	13	4	15	1	33
580-1,499 Units	2	2	0	14	0	18
1,500 Units or more	0	4	0	7	1	12
Combination						130
0-579 Units	0	12	1	18	0	31
580-1,499 Units	1	18	10	40	0	69
1,500 Units or more	0	3	2	25	0	30
Miscellaneous						13
All other categories	5	2	1	2	3	13
Total All Combinations						243

Grain-Only Units

The 37 units in the "grain-only" type were divided into two size categories. For the "livestock-only" and combination grain-livestock units, three size categories were established. Using the animal unit definitions discussed previously and total acres of cropland, a size score was established for each farm or ranch unit. Since the analysis dealt with farms and ranches which produce both grain and livestock, it was decided to allow one animal unit be equal to four acres of cropland. The reasoning behind this came from an assumed return per animal unit of approximately \$40.00 per year whereas an acre of cropland was assumed to

return \$10.00 per year. Acres of cropland included all tillable acres whether in summerfallow or actual crop. Using this formula of one to four, the aggregate score was computed by multiplying animal units by four and adding acres of cropland.

Small Grain-Only Units

Farms in the "grain-only" category, small size numbered 18 and had a range of 110 to 868 in aggregate score with the mean size being 497.5. The tenure status of these farmers fell in the following classification: (1) one owner, (2) eight owner-operators, (3) four renters, and (4) five part owner-operators. Ages of the decision-makers ranged from 24 to 86 years with the mean being 56.7 years. Only one out of the eighteen operators interviewed indicated that he used no credit whatsoever. Table VII shows the detail of types of credit used and source of each credit category.

TABLE VII. CREDIT SOURCES AND USAGE FOR SMALL GRAIN-ONLY FARMS.

Source of Credit	U S A G E O F					C R E D I T	
	Home Utilities	Family Cons.	Family Serv.	Real Estate	Mach & Equip.	Pro-duction	Total
Lewistown	5	2	6	1	10	1	25
Great Falls	1	0	2	0	1	0	4
Billings	0	0	1	0	0	0	1
Other County Seats	1	2	0	0	0	0	3
Other Centers	0	5	0	0	1	6	12
Individuals	0	0	0	6	0	0	6
No Credit Used	11	9	9	11	6	11	57
Total	18	18	18	18	18	18	108

Many of the operators used very little credit with machinery and equipment credit being the predominant type utilized. A total of 12 out of 18 of these farmers financed their machinery, and Lewistown served as the trade center source for 10 of the 12 requiring this form of credit. Lewistown appears to dominate the category in supplying credit for all but three types. These are family consumption, real estate and production items. Only seven operators used production credit and six of these patronized the "other town" grouping for this service. Credit for family consumption was provided by the smaller rural trade center for farm families in the small "grain-only" group. Nine operators out of eighteen did not use family consumption credit. Of those who did, five received this service from the rural small towns.

In aggregate terms, Lewistown provides approximately half of the credit being used by farmers in this size group. The situation in real estate credit shows that seven of these operators were using real estate credit and individuals were the lending source for six of the seven cases. A relatively large portion, 44.4 percent, of these operators owned all of their holdings while 22.2 percent were renters only.

Large Grain-Only Units

Nineteen farm units were included in the large "grain-only" category. These units ranged in aggregate score size from 1,006 to 3,500 with the mean size being 1,580. The ages of the operators ranged from 21 to 74 years and the mean age was 42.9. This is 13.8 years younger than the mean age for operators in the small "grain-only" category. The tenure status of these 19 farm operators was as follows: (a) two owners only, (b) two owner-operators, (c) six renters and (d) nine part owner-operators. Two of the decision-makers indicated no credit usage for any of the credit categories. The seventeen others indicated use of one or more

of the six credit types. Table VIII shows the detail analysis.

TABLE VIII. CREDIT SOURCES AND USAGE FOR LARGE GRAIN-ONLY FARMS.

Source of Credit	U S A G E			O F			C R E D I T
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip.	Produc-tion	Total
Lewistown	1	1	6	4	6	2	20
Great Falls	0	1	3	0	2	0	6
Billings	0	0	0	0	0	0	0
Other County Seats	1	1	0	0	0	1	3
Other Centers	1	8	0	1	3	10	23
Individuals	0	0	0	5	0	0	5
No Credit Used	16	8	10	9	8	6	57
Total	19	19	19	19	19	19	114

Lewistown does not appear to have the overwhelming influence on credit patronage for operators in the large "grain-only" category. It is the only center which supplies credit of all types, however. Very few operators (three out of 19) utilized credit when purchasing home utilities. The small rural trade center appears to be providing the major share of credit for family consumption items. Eight of the nineteen do not use this type credit. The intermediate or urban center continues to provide all the credit for family services. This same pattern was true for small "grain-only" operators. Individuals were a more prolific source of real estate credit than any other providing credit to half the operators using it. Lewistown supplies credit to more than half of the operators who use it for purchase of machinery and equipment. Production items follow the same pattern as found in the smaller sized farms. The small rural trade center serves as the source for 10 out of the 13 users. More operators of this size group use credit for production items than any other type of credit. The operators in the small "grain-only" category used more machinery and equipment credit than any of the other five types.

As an overall source of credit for farmers of the large "grain-only" units, the small rural trade centers function best according to Table VIII. They supply 40.4 percent of the credit to operators utilizing it, while Lewistown provides over 35.1 percent. This is a deviation from the anticipated pattern but may be partially due to the fact that only 50 percent of all the operators used credit. This is slightly more than the 47.2 percent of the operators in the small "grain-only" category who used credit of any type.

Livestock-Only Units

Those units which came under the "livestock-only" category numbered 63 and fell into three size groupings.

Small Livestock-Only Units

The small livestock-only units, those with less than 580 units, ranged in size from 60 to 564 units with 316.4 the mean size. Operators were slightly older than those on large grain units but younger than the operators of small grain units. Ages ranged from 26 to 76 with a mean of 49.2 years. The tenure status of these operators was as follows: (a) 13 owner-operators, (b) 4 renters, (c) 15 part owner-operators and (d) one who came under the unclassified type. A total of six out of the thirty-three operators did not use credit of any type. Apportionment of the credit types follows in Table IX.

TABLE IX. CREDIT SOURCES AND USAGE FOR SMALL LIVESTOCK-ONLY RANCHES.

Source of Credit	U S A G E			O F		C R E D I T	
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip.	Produc-tion	Total
Lewistown	2	2	3	2	5	3	17
Great Falls	0	0	0	1	1	0	2
Billings	0	0	0	0	2	0	2
Other Cty. Seats	7	10	4	1	5	13	40
Other Centers	0	1	0	0	1	4	6
Individuals or Other	1 ^{a/}	0	0	6	1	0	8
No Credit Used	23	20	26	23	18	13	123
Total	33	33	33	33	33	33	198

a/ Mail Order

Upon first inspection, it can be seen that fewer operators in the small livestock category are using credit than was the case for operators in either the large or small grain categories. Whereas 47.2 percent of the small grain operators and 50 percent of the large grain operators utilized credit of one type or another, only 37.9 percent of the small livestock decision-makers were using any available credit. Use of credit for the family was relatively small for this category of ranch operation. County seats other than Lewistown in the survey area, provided a majority of the credit used while Lewistown was only a minor source. Individuals again supplied a major portion, 60 percent, of the real estate credit. It was anticipated that in the case of livestock versus grain units, fewer livestock operators would require credit for machinery and equipment or production items than do grain farmers, but this did not prove to be uniformly true. Whereas for grain-only units, 66.8 percent of the small operators and 57.9 percent of the large operators used machinery and equipment credit, only 45.5 percent of the small livestock

units used this type of credit. Conversely for production items, 60.6 percent of the livestock operators and 68.4 percent of the large grain operators utilized this type credit while only 39 percent of the small grain units required or used production credit.

Lewistown loses the first place position as a source of credit for small livestock ranches, since only 8.6 percent of the operators patronized it as a trade center. Of the operators using credit 20.2 percent relied upon the other county seats and three percent went to the small rural center. One explanation for this is that the majority of livestock ranches are located in the southeastern portion of the survey area away from Lewistown.

Medium Livestock-Only Units

Fewer units were included in the medium livestock size group than the small size. Only 18 ranches were included in the 580 to 1,500 aggregate score size. The 18 ranged in size from 624 to 1,472 with the mean size being 1,016. The ages of these operators were very close to those on small ranches. They ranged from 28 to 78 years with the mean falling at 49.6 years. There were no renters in this category. Tenure status of the 18 operators were: (a) 2 owners, (b) 2 owner-operators and (c) 14 part owner-operators. All of the units availed themselves of one type of credit or another and Table X shows the disbursement as to type of credit and source.

TABLE X. CREDIT SOURCES AND USAGE FOR MEDIUM LIVESTOCK-ONLY RANCHERS.

Source of Credit	U S A G E					C R E D I T	
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip.	Produc-tion	Total
Lewistown	0	1	2	3	3	1	10
Great Falls	0	0	0	0	0	0	0
Billings	0	1	1	0	0	0	2
Other Cty. Seats	2	5	2	1	5	9	24
Other Centers	0	1	0	0	1	3	5
Individuals	0	0	0	5	0	0	5
No Credit Used	16	10	13	9	9	5	62
Total	18	18	18	18	18	18	108

The pattern of credit patronage typical of the small ranches appears also to prevail in the medium size category. Other county seats are providing credit to 52.2 percent or 24 out of 46 cases of the credit-using operators, while Lewistown is only able to secure patronage from 10 out of 46. On an aggregate basis, 42.6 percent of the operators were not using all the credit available. Use of credit for the ranch business is considerably heavier than that for the family or home. Operators using production credit number 13 out of 18, and only two operators indicated the employment of credit for home utilities. One half of the operators had not used real estate credit since 1945. This is somewhat misleading since 77.8 percent of all operators fell into the part owner-operator tenure status. The leasing of rangeland may account for some of this.

Large Livestock-Only Units.

As size of the ranches or farms increase, we would expect to find fewer units, and this holds true for this sample of ranches. Large

livestock ranches numbered only 12 and ranged in aggregate unit size score from 1,568 to 4,948 with the average being 2,725.7 units. Ages were similar to the other ranch operators with an average of 49.2 years from a range of 22 to 84. One-third or four out of the 12 operators indicated they used no credit at all. Tenure status revealed four owner operators, seven part owner-operators and one unclassified. Table XI portrays the credit picture for this size category.

TABLE XI. CREDIT SOURCES AND USAGE FOR LARGE LIVESTOCK-ONLY RANCHES.

Source of Credit	U S A G E			O F		C R E D I T	
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip.	Produc-tion	Total
Lewistown	0	1	1	1	2	2	7
Great Falls	0	1	1	1	0	0	3
Billings	0	0	0	0	0	0	0
Other Cty Seats	0	2	1	0	1	2	6
Other Centers	0	0	0	1	1	1	3
Individuals	0	0	0	2	0	0	2
No Credit Used	12	8	9	7	8	7	51
Total	12	12	12	12	12	12	72

Out of a grand total of 72 possible credit use opportunities, only 21 cases or 29.2 percent were being utilized. None of the operators indicated the use of credit for home utilities. Lewistown receives the credit patronage of 33.3 percent of the operators and the five other county seats account for 28.6 percent. Use of the various types of credit appears well distributed but minor in each event. This analysis shows that at present operators of large ranches are not only few in number but do not rely very heavily upon credit in their home or ranch operation.

Grain-Livestock Combination Units

One hundred thirty units were of the grain-livestock combination type. This accounts for more than one half (53.5 percent) of the 243 samples in the survey. These units were broken into small, medium and large categories with a normal distribution of 31, 69 and 30 units respectively.

Small Combination Units.

Aggregate score sizes for the small group ranged from 154 to 577 or an average of 428.8 units. Tenure status of the operators was as follows: Owner-operator, 12 cases; renter, one case; and part owner-operator, 18 cases. Ages of the operators ranged from 27 to 73 years with the mean falling at 54.1. This is a little above the small ranchers average age but still younger than that of the small grain operator. Credit usage was widely distributed, and none of the decision-makers were operating entirely without one or another type of credit. Table XII shows the breakdown of credit for the operators in this size category.

Lewistown regains its leadership in serving as the major source of credit for all users of credit other than real estate. One hundred out of the possible 186 credit use opportunities were not made. For the remaining 86 instances in which credit was utilized, Lewistown was the source for 42 respondents or 48.8 percent, other county seats were the source in 15.1 percent or 13 cases and individuals supplied 12.8 percent, all of the latter being for real estate purposes.

TABLE XII. CREDIT SOURCES AND USAGE FOR SMALL GRAIN-LIVESTOCK COMBINATION UNITS.

Source of Credit	U S A G E				O F		C R E D I T	
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip.	Produc-tion	Total	
Lewistown	6	5	8	4	10	9	42	
Great Falls	0	0	0	0	1	0	1	
Billings	0	0	4	0	3	0	7	
Other Cty Seats	3	3	1	0	2	4	13	
Other Centers	0	3	0	0	1	5	9	
Individuals or Other	1 ^{a/}	0	0	13 ^{b/}	0	0	14	
No Credit Used	21	20	18	14	14	13	100	
Total	31	31	31	31	31	31	186	

a/ Mail Order.

b/ Insurance Company (two cases).

This category of operators continues the trend towards more credit usage in the farm business over that utilized for family or home purposes. Real estate credit was used by 54.8 percent of the operators, as was machinery and equipment credit. Slightly more of these decision-makers, actually 58 percent, used production credit.

Medium Combination Units

The type of farm-ranch unit organization having the largest number of operators was the medium sized grain-livestock combination unit. These ranged in aggregate score size from 599 to 1,444 with the mean size being 938.9 units. The 69 operators ranged in age from 24 to 75 with the average being 45.4 years. Tenure status centered largely around the part owner-operator classification with 40 cases out of 69. Next in frequency was the owner-operator with 18, followed by 10 individuals who

were renters and one person who was an owner only. A rather small proportion, 2.9 percent (2 cases out of 69) reported using no credit whatsoever. Table XIII follows with the distribution of credit usage.

TABLE XIII. CREDIT SOURCES AND USAGE FOR MEDIUM GRAIN-LIVESTOCK COMBINATION UNITS.

Source of Credit	U S A G E			O F		C R E D I T	
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip.	Production	Total
Lewistown	11	18	20	10	37	18	114
Great Falls	2	2	2	1	3	0	10
Billings	0	0	1	3	2	0	6
Other Cty Seats	5	6	7	1	8	10	37
Other Centers	0	18	0	1	3	21	43
Individuals or Other	0	0	0	29 ^{a/}	0	0	29
No Credit Used	51	25	39	24	16	20	175
Total	69	69	69	69	69	69	414

a/ Insurance (2 cases)

Total credit use opportunities numbered 414 for this category of farm-ranch combination units. One hundred seventy-five responses were made indicating no use of credit. This accounted for 42.3 percent of all possible cases. For the 239 instances of credit use opportunities that were utilized, Lewistown provided 114 or 47.7 percent, the urban centers of Billings and Great Falls, 16, other county seats 37 or 15.5 percent and small rural trade centers 43 or 18 percent. The credit for home or family use remains lower in frequency of use than does credit for the farm business. Lewistown serves as a major credit source for home utilities, family services and machinery or equipment. Individuals again are the major source of financing for real estate purchases, 60.2 percent of that used. In the credit types for family consumption use and for

production use, the small rural trade centers compete strongly with Lewistown. The smaller centers equal Lewistown as a credit source for family consumption items and also are able to provide 42.9 percent of the production credit as compared to 36.7 percent for Lewistown.

The least used type of credit for farm units of medium size in the grain-livestock combination type is home utilities with only 18 operators out of 69 indicating utilization. The most used type of credit is for machinery or equipment where 53 operators or 76.7 percent indicated usage. Production credit follows closely with 61 percent of the operators using this type of credit. Billings and Great Falls appear to be a more significant source of credit for this type and size of unit than has been found for other type units.

Large Combination Units

A much greater number of large operators are found in the combination category than in either the livestock-only or grain-only groups. The average sized units in the three categories were as follows: (a) large grain units, 1,580.1 units, (b) large livestock units, 2,725.7 units and (c) large combination units, 2,322.7 (based on a range of 1,548 to 3,884 units). The 30 operators of the combination units ranged in age from 24 to 80 years with the mean age being 44.4 years. Tenure status was concentrated heavily in the part owner-operator category with 25 cases. Renters only accounted for two units and owner-operators were represented in three instances. Only one of the 30 operators indicated the use of no credit in any of the six categories.

Table XIV shows how credit usage was represented in this size-type group.

TABLE XIV. CREDIT SOURCES AND USAGE FOR LARGE GRAIN-LIVESTOCK COMBINATION UNITS.

Source of Credit	U S A G E			O F		C R E D I T	
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip.	Produc-tion	Total
Lewistown	4	4	2	3	7	4	24
Great Falls	0	2	1	0	1	1	5
Billings	0	0	1	0	0	0	1
Other Cty Seats	1	5	1	1	1	6	15
Other Centers	0	7	0	2	4	8	21
Individuals	0	0	0	17	0	0	17
No Credit Used	25	12	25	7	17	11	97
Total	30	30	30	30	30	30	180

Use of credit by operators of large combination units is not very great. Out of 180 possible uses only 83 cases or 46.1 percent are recorded. Lewistown serves as the source of credit for 28.9 percent of those utilizing it on an aggregate basis. The rural centers manage to receive 25.3 percent of the credit patronage with other county seats attracting 18.1 percent. Very little use is made of credit for either home utilities or family services, the amount being 16.6 percent in each instance. With 83.3 percent of the operators in the part owner-operator tenure category, it is reasonable to find that 76.7 percent of them are using real estate credit. Production credit and family consumption credit received usage by approximately 60 percent of the operators.

Miscellaneous Units

Thirteen respondents were not easily fitted into the previous categories and were, therefore, included in a miscellaneous group. Included in this group were the following: (a) two very old retired couples,

(b) five widows who resided on the farms but whose households were not considered typical farm units and (c) six cases of specialized interests including a veterinarian, deputy sheriff, real estate broker, mink ranch and other off-farm work. As seen in Table XV, the use of credit by persons in this category is somewhat sporadic and does not lend itself to a detailed analysis or discussion. The presentation is made, however, that the total analysis can be made of the entire sample taken from the survey area.

TABLE XV. CREDIT SOURCES AND USAGE FOR OPERATORS IN MISCELLANEOUS CATEGORY.

Source of Credit	U S A G E O F C R E D I T						Total
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip.	Produc-tion	
Lewistown	3	3	6	0	5	3	20
Great Falls	0	0	1	0	0	0	1
Billings	1	0	0	0	0	0	1
Other Cty Seats	0	1	1	0	2	3	7
Other Centers	0	3	0	0	0	1	4
Individuals	0	0	0	3	0	0	3
No Credit Used	9	6	5	10	6	6	42
Total	13	13	13	13	13	13	78

When Table V showing source of credit by towns is consolidated into the summary of all types and sizes of units, credit patronage on an aggregate scale can be seen. In Table XVI, the county seat towns other than Lewistown are consolidated as are other trade centers.

TABLE XVI. COMPOSITE CREDIT SOURCES AND USAGE FOR ALL RESPONDENTS.

Source of Credit	U S A G E						C R E D I T Total
	Home Utilities	Family Cons.	Family Services	Real Estate	Mach & Equip. Produc-	tion	
Lewistown	32	37	54	28	85	43	279
Great Falls	3	6	10	3	9	1	32
Billings	1	1	8	3	7	0	20
Other Cty Seats	20	35	17	4	24	48	148
Other Centers	1	46	0	5	15	59	126
Individuals or Other	2 ^{a/}	0	0	86 ^{b/}	1	0	89
No Credit Used	184	118	154	114	102	92	764
Total	243	243	243	243	243	243	1,458

a/ Mail Order

b/ Insurance Company (4 cases)

A total of 1,458 credit use opportunities are possible if every operator had utilized each of the six types of credit. From Table XVI, it is apparent that 764 respondent choices indicate no use of credit so that only 47.6 percent of the possible credit use opportunities were utilized. As noted in Table V, Lewistown provided the major share, 40.2 percent of this credit. Table V differs slightly from Table XVI in that individuals as a source of credit are included in the latter. In this respect, individuals provide 63.5 percent of all credit used for real estate purposes.

The small trade centers and other county seats are a significant source for the credit business when considered as an aggregate. The five county seats were able to supply 21.3 percent of all credit use opportunities and the rural trade centers provide 18.2 percent. This would indicate a fair amount of patronage if consolidated into fewer numbers of centers. However, as seen in Table V, each individual trade

center does not command a very large portion of the total credit patronage from the farms and ranches in the survey area.

Real Estate Credit Sources

Additional analysis of the sources of credit to buy real estate is shown in Table XVII. By using the figures in Table XVI for each town or category of towns and breaking this down into source of credit to finance purchases of real estate within the town, it is possible to see how individuals compare with commercial agencies such as the Federal Land Bank, commercial banks and others.

TABLE XVII. SOURCES OF REAL ESTATE CREDIT

Source of Credit	TYPE OF INSTITUTION					
	Federal Land Bank	Prod. ^{a/} Credit	Farmers Home Adm.	Commercial ^{b/} Bank	Indivi- dual	Insur- ance
Lewistown	23	2	2	1		
Great Falls	2	0	0	1		
Billings	1	0	1	1		
Other Cty Seats	2	0	0	2		
Other towns	1	1	0	3		
Totals	29	3	3	8	82	4

a/ Technically Production Credit Associations do not lend money for real estate purchases. They may, however, take a real estate mortgage to add security for loans made on chattel property.

b/ Commercial banks are limited by law in making loans on real estate to any one borrower. The total outstanding loans cannot exceed a certain percent of the capital structure of the bank. This makes the participation by banks in the field of real estate lending quite limited.

Federal Land Bank offices within the various towns supply 22.5 percent of all the credit used to buy real estate. The Farmers' Home Administration and Production Credit Associations provide 2.3 percent each and commercial banks provide 6.3 percent. Insurance companies serve as the source of real estate credit in 3.1 percent of the cases, and as mentioned previously, individuals are the major source, namely for 63.5 percent. One hundred fourteen respondents, or 46.9 percent of those surveyed, indicated they did not use this type of credit.

Credit sources to buy real estate in the survey area differ from those reported by all types of lenders for the United States as a whole. Table XVIII shows how farm mortgage debt, namely loans outstanding, reported by principal lenders on real estate security, is distributed for the nation.

TABLE XVIII. FARM MORTGAGE DEBT. PERCENT AND AMOUNT OF OUTSTANDING LOANS REPORTED BY PRINCIPAL LENDERS, UNITED STATES, 1962. *

	Federal Land Bank	Farmers Home Adm.	Life Ins. Companies	Commercial and Savings Banks	Other Farm Mortgage Debts	Total
Percent	19.7	4.0	22.3	12.6	41.4	100.0
Amount (Millions of Dollars)	2,803	569	3,162	1,789	5,881	14,204

* Source: United States Department of Agriculture, Agricultural Finance Review, Volume 23, Supplement, December, 1962, p. 9.

a/ Includes individuals and all other non-reporting lenders.

When the two Tables, XVII and XVIII are compared, a contrast is possible for credit sources for real estate in the survey area and for the entire United States. Table XIX shows this comparison.

TABLE XIX. SOURCES OF REAL ESTATE CREDIT IN THE SURVEY AREA AND THE UNITED STATES AS A WHOLE.

	Federal Land Bank	Farmers Home Adm.	Live Ins. Companies	Commercial Banks	Other Lenders*	Total
	%	%	%	%	%	
Survey Area	22.5	2.3	1.6	6.3	67.3	100.0
United States	19.7	4.0	22.3	12.6	41.4	100.0

* Source: Includes individuals, Production Credit Associations and all other miscellaneous sources.

General Usage of Credit

Figure 3 is a histogram arrangement which shows how patrons in the survey area distribute their credit use as to number of credit sources. The range is from one to six types, with three types the ones used most frequently.

A total of 18 operators used no credit at all while 12 utilized credit of all six types. Nearly one-fourth or 60 of the 243 interviewees used credit of three types. For the 34 respondents who used only one type of credit, the majority indicated that real estate was the type of credit utilized. The next most frequently used type was for production items followed by the machinery and equipment category. These farm business uses of credit accounted for 29 out of the 34 responses in the instance where only one category of credit was used.

The same pattern is true for those operators using two or three types of credit. Use of credit in the purchase of farm business items far outranked the use of credit in purchase of home or family items, the only exception being the category of family consumption items. Credit is utilized in buying these items nearly as often as any of the farm business categories.

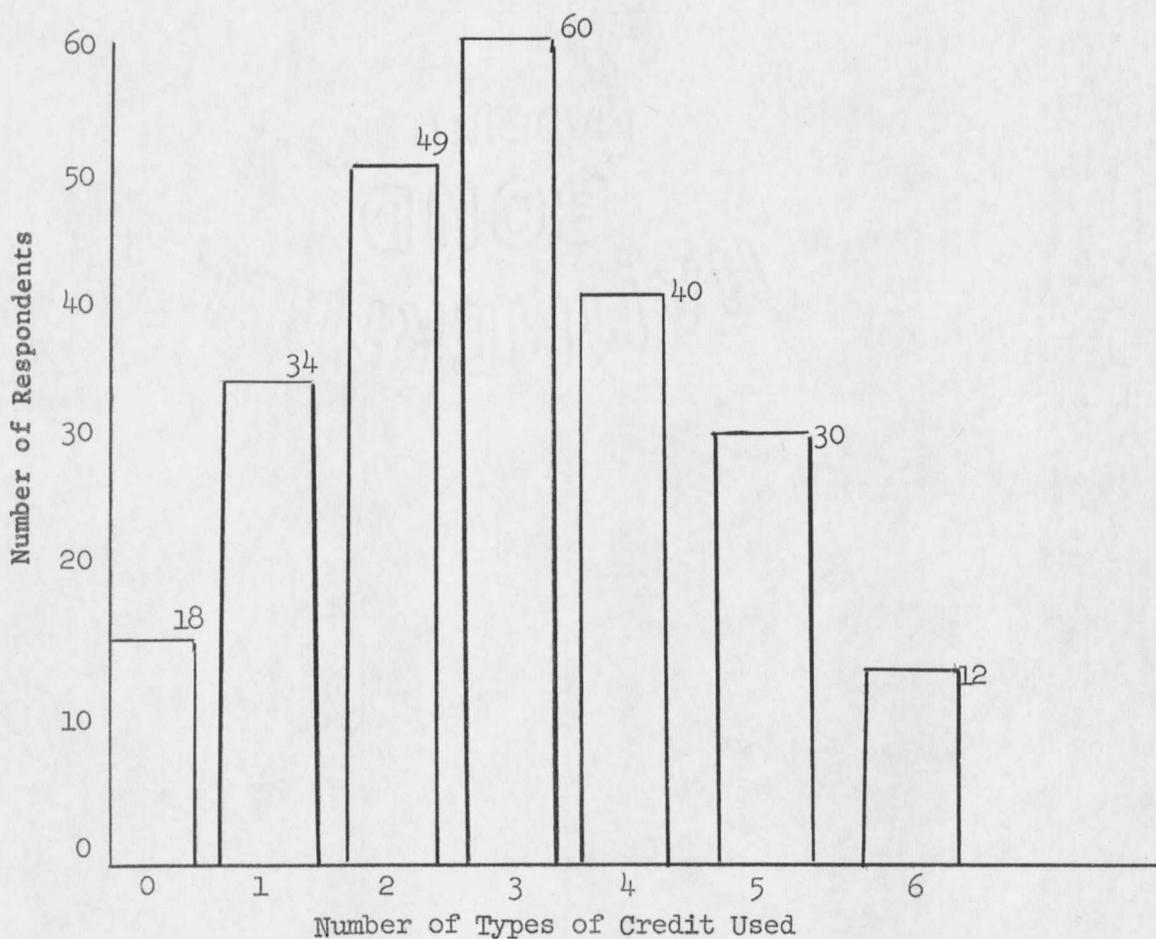


Figure 3. Number of Respondents Using No Credit or One Type to Six Types.

No specific patterns could be established for the 18 operators who did not use credit of any type. Several did use credit for less than 30 days or paid monthly and this has been excluded from the analysis of credit in this study. The fact that 10 of the 18 who do not utilize credit of any type fall into the livestock-only category may be significant. The 63 operators in the three size groups for livestock-only units tended to use fewer types of credit than did grain-only operators or combination grain-livestock units. Table XX shows how credit usage is distributed among the various sized units in each type for the size categories of credit and those using no credit.

TABLE XX. DISTRIBUTION OF RESPONDENTS FOR VARIOUS NUMBERS OF CREDIT CATEGORIES.

Number of Categories Credit Used	TYPE OF AGRICULTURAL ORGANIZATION UNIT									Total
	Small Grain	Large Grain	Small Lvstk.	Med. Lvstk.	Large Lvstk.	Small Comb.	Med. Comb.	Large Comb.	Misc.	
None	1	2	6	0	4	0	2	1	2	18
One	1	2	6	3	1	8	7	5	1	34
Two	6	3	9	7	2	5	8	6	3	49
Three	4	4	3	6	4	10	16	11	2	60
Four	4	5	5	0	1	2	17	4	2	40
Five	2	1	2	1	0	5	14	2	3	30
Six	0	2	2	1	0	1	5	1	0	12
Totals	18	19	33	18	12	31	69	30	13	243

This analysis would indicate that people are still somewhat reluctant to utilize all of the categories of credit available to them. Operators are more likely to employ credit for farm or ranch business reasons than for home or personal reasons. However, since they do pay cash for home or personal business, this may be a cause for needing credit in the business operation. The data is not complete enough to isolate a definite pattern.

Patronage Patterns In General ^{20/}

An attempt was made to measure the extent to which respondents in the survey area were giving patronage to large trade centers rather than smaller and closer rural towns. Four measures were used to determine patronage patterns; town visited most frequently, town where the most money is spent, usual center for marketing livestock and usual delivery point for grain. In addition to naming these centers, interviewees were asked to give the distances traveled for the patronage and indicate how frequently they went to towns of first, second, third or fourth choice.

The prevailing pattern was for respondents to visit more than one center with some degree of regularity. A grand total of 710 towns were named by the 243 interviewees which indicates an average of nearly three (2.9) towns visited by each family. Ten families said they patronized only one town, and five families listed a total of five towns visited regularly. The greatest number, 83 respondents or 34.2 percent, indicated two towns were patronized. Three towns were named by 71 families (29.2 percent) and 74 families (30.5 percent) went regularly to four towns.

Town Visited Most Frequently

More than 80 percent of the farmers and ranchers went most frequently to a nearby town. Figure 4 gives a visual picture of the dispersion of patronage in terms of frequency of visits to the town of first choice.

^{20/} The information contained in this section is reported more fully in Bulletin 578, "Patronage Patterns in Central Montana", May, 1963, written by Dr. Harald A. Pedersen and the author of this thesis.

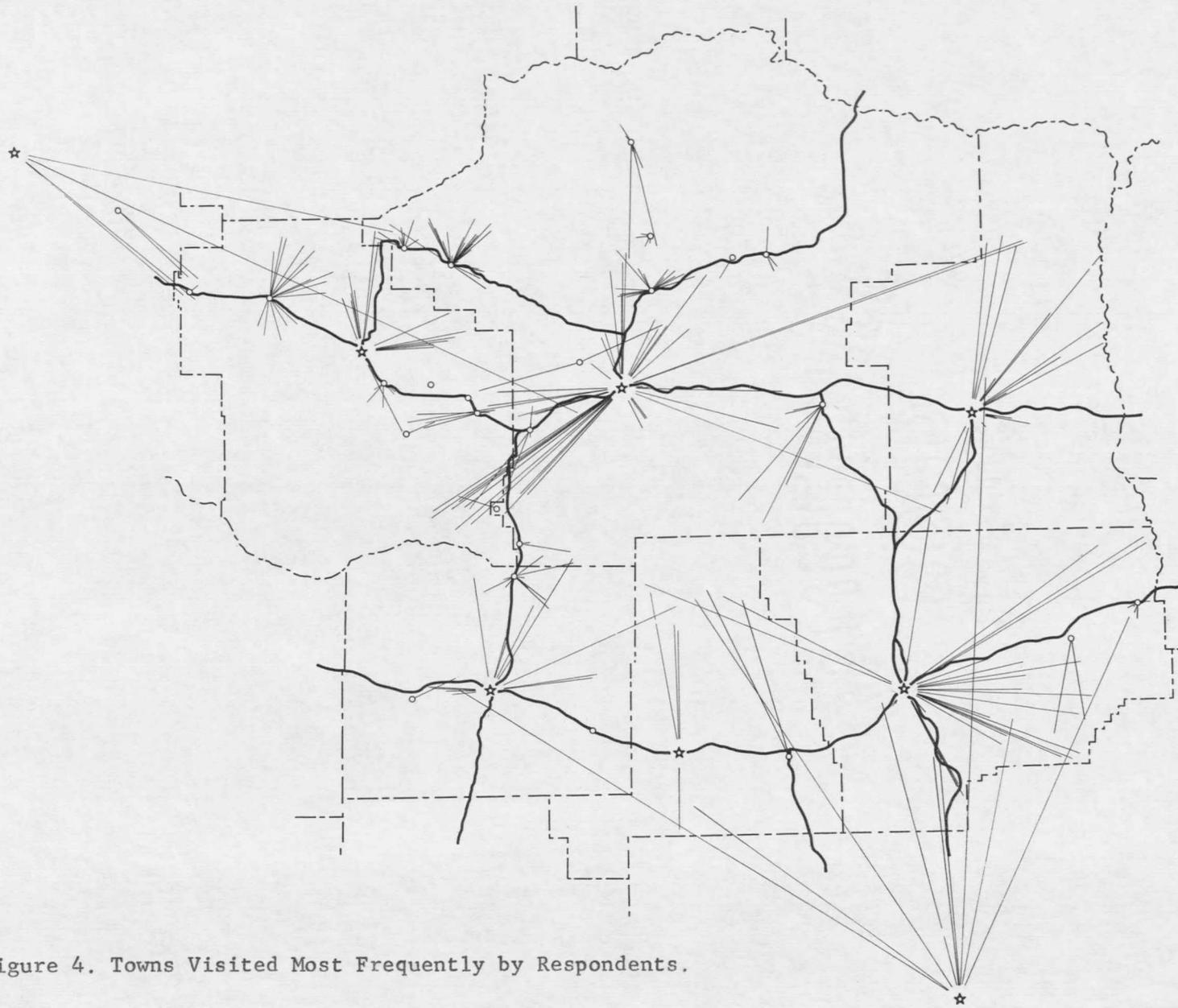


Figure 4. Towns Visited Most Frequently by Respondents.

Table XXI shows how farm operators ranked various towns in response to the question of where they went most often.

TABLE XXI. NUMBER OF OPERATORS MENTIONING SELECTED TOWNS AS CENTERS VISITED MOST FREQUENTLY.

Town	Number	Percent
Lewistown	40	16.4
Great Falls or Billings	6	2.5
Other County Seats	76	31.3
Other Centers	121	49.8
Total	243	100.0

County seats including Lewistown are visited most frequently by 47.7 percent of the respondents. Figure 4 shows from the cluster patterns that only Lewistown draws many patrons from outside its own county. Ryegate, county seat of Golden Valley County, is the only one which loses many of its patrons to towns outside the county. The trade areas in terms of town of first choice are overlapping, and it becomes evident that some families will pass through one or more small centers to patronize a larger center.

Interviewees were asked to give their reasons for going most often to the town of their first choice. In this discussion only the primary reason is used. The most frequently listed reply was: "This is just a good town in which to do business." Respondents were asked to list specifically what it was that prompted them to reply in this manner. Factors such as wider choice of articles, better service or repairs, latest models or styles, friendlier business people, greater variety of stores to shop in and the ability to do all the buying at one time were listed frequently. The next most frequent reason listed was that it was the town where they went to get the mail. Other reasons and percentages of responses are given in Table XXII.

TABLE XXII. PERCENTAGE DISTRIBUTION OF REASONS FOR GOING MOST OFTEN TO SPECIFIED TOWNS.

Town	Mail	Access- ibility	Insti- tution	Business	Residence	Other	Total
Lewistown	0	2.3	11.6	72.1	4.7	9.3	100
Great Falls & Billings	14.0	0	0	57.0	0	29.0	100
Other County Seats	6.6	30.3	16.4	22.4	15.2	9.1	100
Other Centers	39.3	17.1	18.0	16.2	3.4	6.0	100
Total	21.4	18.1	16.5	29.2	6.6	8.2	100

When size and function of trade centers are considered in respect to the primary reason for going there most often, the larger centers receive their patronage because of their being a better place in which to do business. This was true for 72 percent of those patronizing Lewistown but for a lower percentage of the patrons of Great Falls and Billings, 57 percent in each case. One reason for this being that the patrons traveled a further distance to do business for Great Falls or Billings than for Lewistown. Other county seats and the rural centers did not command the patronage because they were good places to do business. In fact the major reason listed for going to the other county seats was accessibility. In the case of the small rural center the major reason was to get the mail. Institutional reasons or location of school, church or courthouse appeared to be prominent factors for the county seat and rural towns.

Town Where Most Money Is Spent

After indicating which town they visited most frequently, the respondents were asked to name the center in which they spent most of their money. Figure 5 shows the patterns as indicated by the responses.

The influence of larger trade centers becomes more intense and areas of patronage begin widening out. Table XXIII gives the distribution for selected towns in response to the question of where the most money was spent.

TABLE XXIII. TOWNS IN WHICH FARM FAMILIES SPENT MOST OF THEIR MONEY.

Town	Number	Percent
Lewistown	97	39.9
Great Falls or Billings	37	15.2
Other County Seats	65	26.8
Other Centers	44	18.1
Total	243	100.0

Whereas only 16.4 percent of the operators indicated Lewistown as their most frequently visited center, 39.9 percent spent most of their money there. In Great Falls and Billings more than six times as many spent most of their money there as went there most often, 15.2 percent and 2.5 percent respectively. By contrast, the rural trade centers were named by 49.8 percent of the respondents as being visited most frequently, but only 18.1 percent indicated that most of their money was spent there. Other county seats just about hold their own with 31.3 percent of the most frequent visits and 26.8 percent of the most money spent.

Livestock Marketing Center

When asked to indicate the center where livestock was marketed, respondents named two centers, Lewistown and Billings, nearly three fourths of the time. Table XXIV indicates the total responses of the 219 operators who marketed livestock.

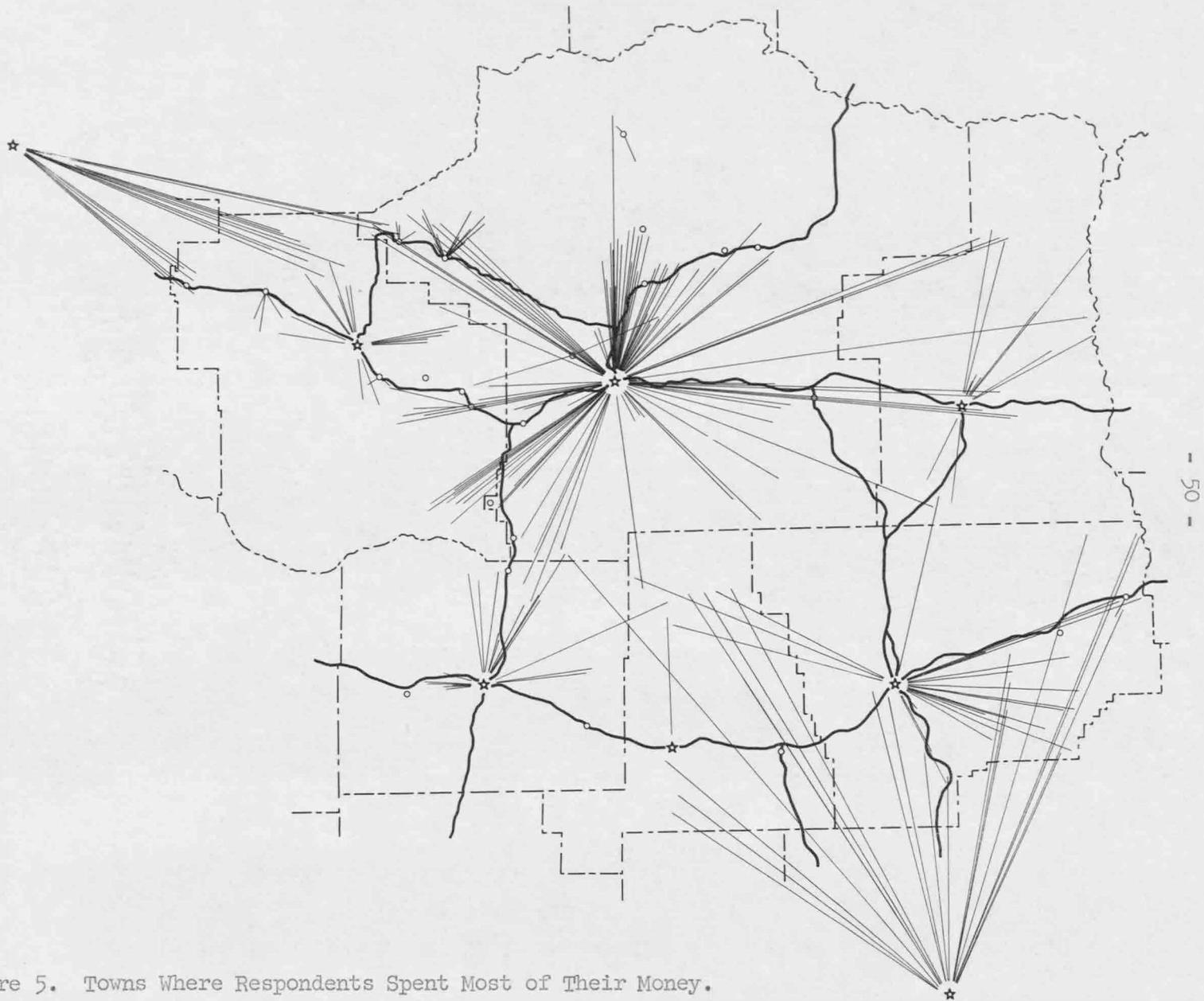


Figure 5. Towns Where Respondents Spent Most of Their Money.

TABLE XXIV. TOWNS IN WHICH RESPONDENTS MARKET LIVESTOCK

Town	Number	Percent
Lewistown	113	51.6
Great Falls or Billings	55	25.1
County Seat Towns	4	1.8
Other Centers	3	1.4
On Farm Contract	44	20.1
Total	219	100.0

Over half (51.6 percent) of the operators patronized the Lewistown market while 25.1 percent went to either Billings or Great Falls. The only serious competitor would be direct sale of livestock from the farm. One fifth or 20.1 percent of the operators were utilizing this method of livestock selling. Billings had the major share of patronage indicated for the two urban centers. Only four of the 55 operators sold livestock in Great Falls. Many operators were closer to Lewistown but marketed in Billings. Figure 6 shows the influence of each center for livestock marketing patronage. Presence of natural barriers such as the Snowy Mountains south of Lewistown made distance a secondary factor for some operators.

Grain Marketing Center

The grain marketing pattern sharply contrasts with that of marketing livestock. The county elevator continues to function as the primary delivery point for grain. Generally, patronage was drawn from within a 15-mile radius of the elevator, although a few deviations can be noted. Fewer respondents indicated they marketed grain than those selling livestock, 147 and 219 respectively. Table XXV shows the pattern of grain marketing by selected towns.

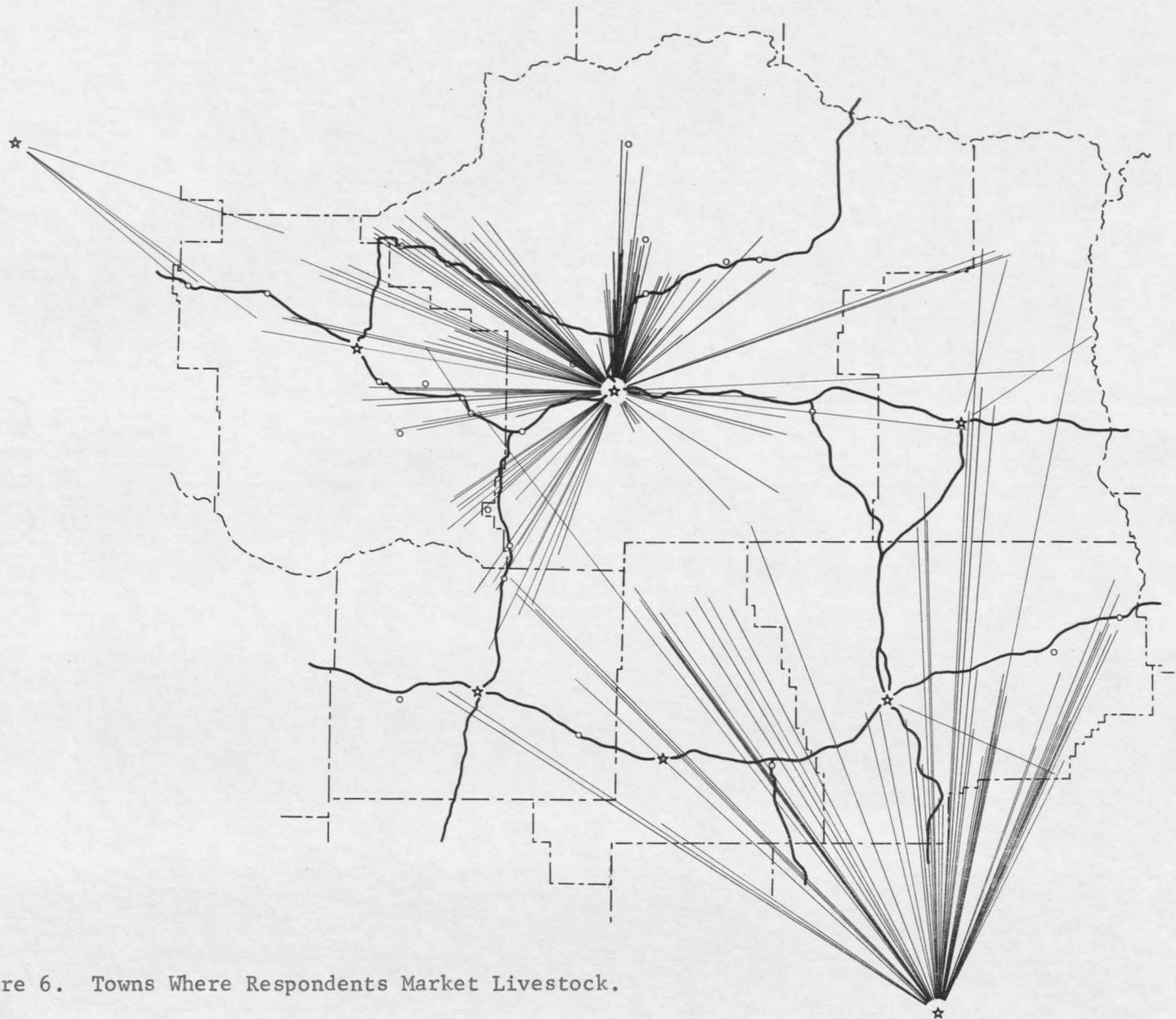


Figure 6. Towns Where Respondents Market Livestock.

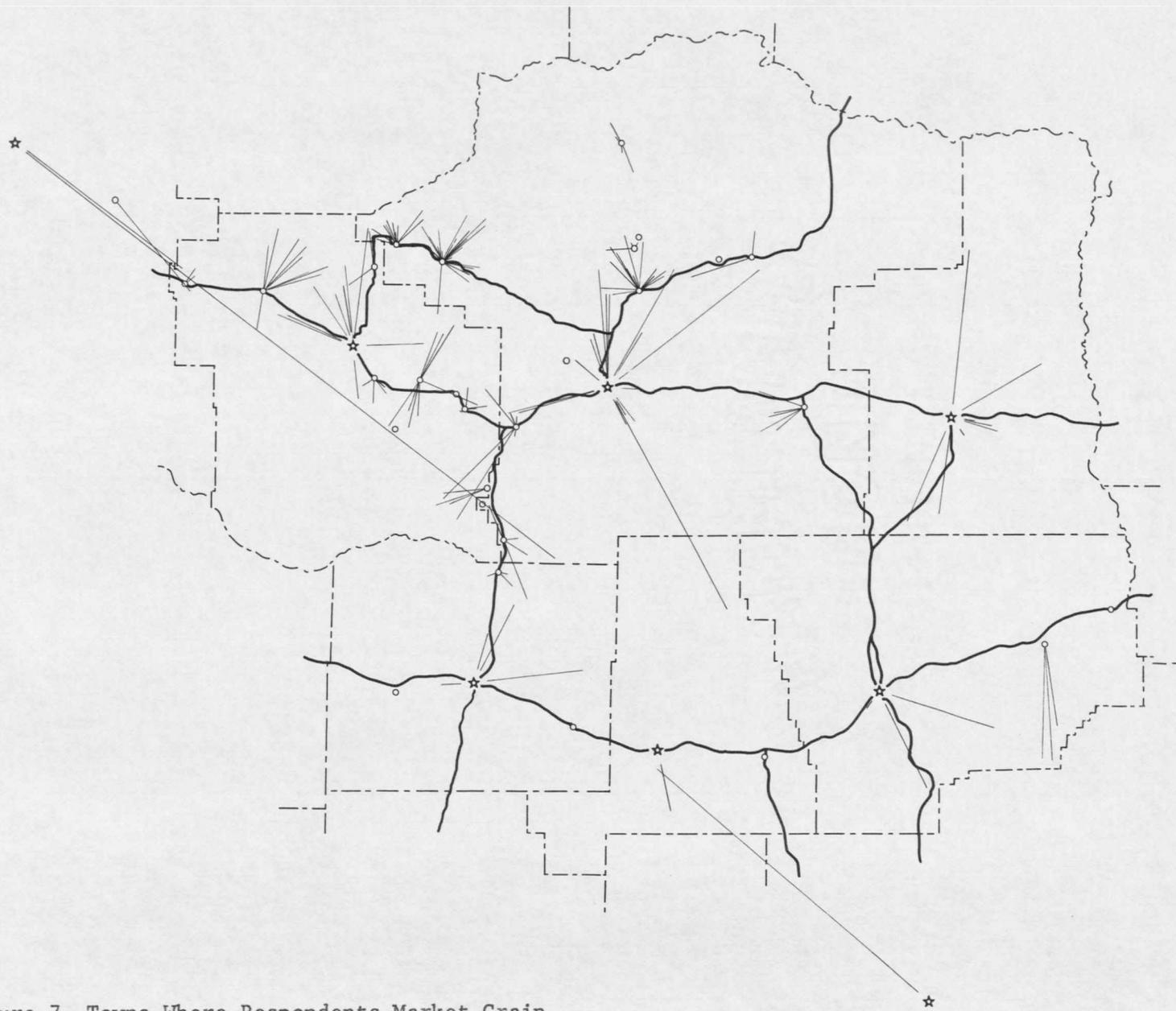
TABLE XXV. TOWNS IN WHICH GRAIN WAS MARKETED BY RESPONDENTS.

Town	Number	Percent
Lewistown	17	11.6
Great Falls or Billings	3	2.0
Other County Seats	25	17.0
Other Centers	84	57.1
Contractor Buyer	16	10.9
Fed to Livestock	2	1.4
Total	147	100

More than half (57.1 percent) of the operators delivered grain to the small rural town, and 17 percent patronized a county seat town other than Lewistown. Nearly 90 percent of the respondents delivered to the nearest grain elevator. The influence of truckers or other buyers is not as large in grain marketing as with livestock. Apparently the rural centers are continuing to function strongly as grain handling centers. (See Figure 7).

Dominant Centers in Survey Area

When the different functions of towns are consolidated into one table, the comparisons become evident as to which are serving the needs and gaining the patronage of farms and ranches in the area. Table XXVI shows this comparison.



- 53a -

Figure 7. Towns Where Respondents Market Grain.

TABLE XXVI. RANK ORDER SUMMARY OF TOWNS VISITED MOST OFTEN FOR VARIOUS SERVICES BY FARMERS AND RANCHERS IN SURVEY AREA.

Town Visited as 1st Choice	Town Where Most Money Spent	Town Visited For Total Patronage	Town Providing Credit Services
Lewistown	Lewistown	Lewistown	Lewistown
Roundup	Billings	Billings	Roundup
Denton	Roundup	Great Falls	Harlowton
Winnett	Harlowton	Stanford	Great Falls
Geysler	Denton	Roundup	Denton
Harlowton	Great Falls	Denton	Hobson
Stanford	Stanford	Harlowton	Billings
Hilger	Coffee Creek	Winnett	Stanford
Judith Gap	Hobson	Geysler	Winnett
Coffee Creek	Winifred	Hilger	Geysler
Hobson		Coffee Creek	Coffee Creek
Grassrange		Hobson	

Lewistown is the dominant center of the area. Billings and Great Falls are also leaders and have a definite influence even though they are outside the survey area. The four county seat towns, Roundup, Harlowton, Winnett and Stanford are able to rank high in all of the categories listed. The smaller centers which are not county seat towns do not have a definite pattern with the exception of Denton, Coffee Creek and Hobson. These three towns are located in the grain farming or combination grain-livestock portion of the area. They appear well down the rank order list but do indicate that smaller centers can compete on a smaller scale. When the pattern for visits to towns of second, third and fourth choice are included, however, Hobson and Coffee Creek fall rapidly behind. With this in mind, it becomes difficult to classify them on the same basis as Denton. To obtain a visual image of the trade area for each center, Figure 8 was prepared. This shows the median and mean distance traveled by patrons to the town where they spent most of their money.

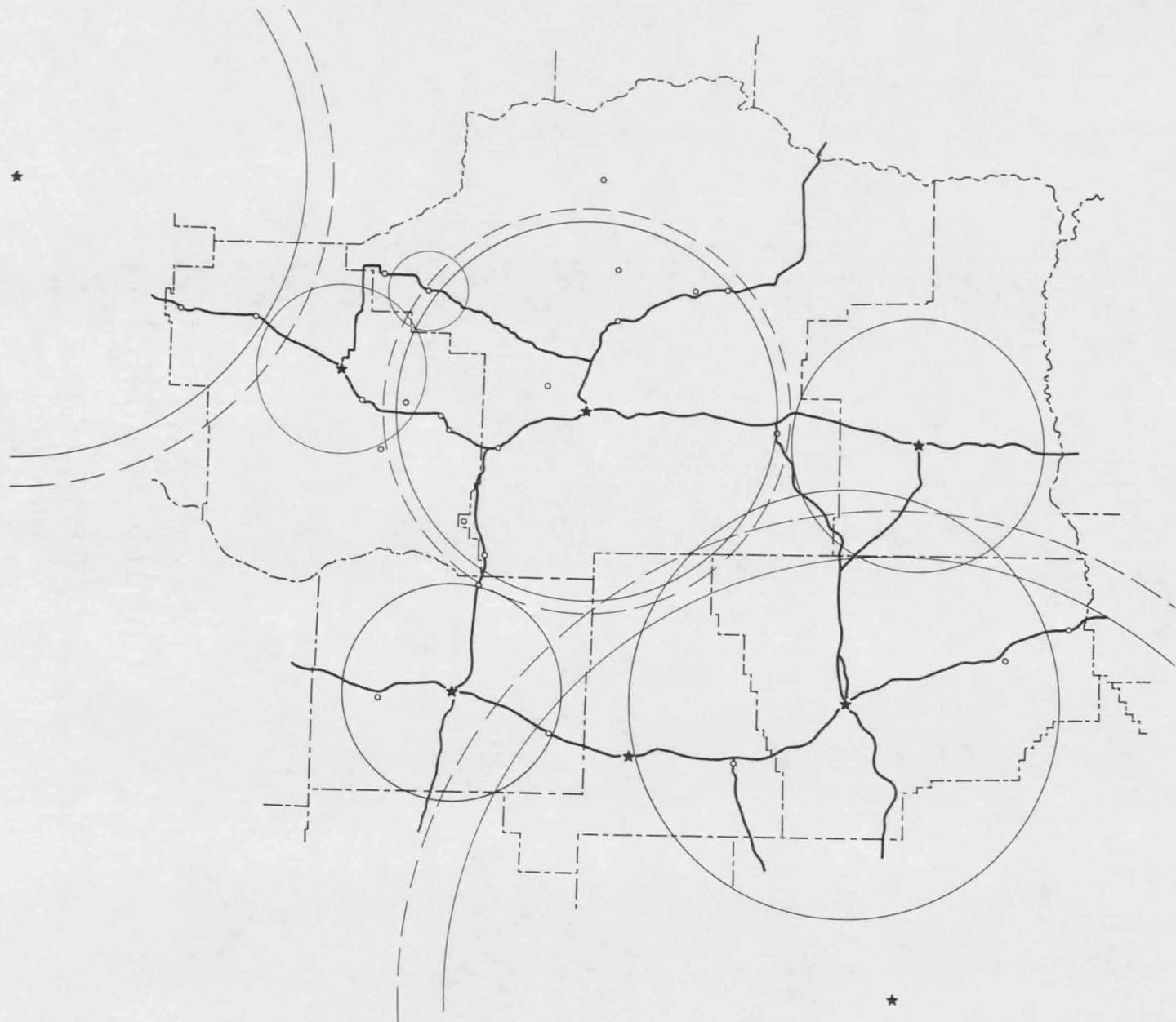


Figure 8. Distance Traveled by Respondents to Towns Where They Spent Most of Their Money.

Other county seats and Denton are centers for relatively consolidated communities since the mean and median distances traveled are essentially the same. Patrons of Lewistown, Billings and Great Falls indicate that they will travel farther on the average to take advantage of facilities, services or whatever else attracts them to the larger centers. The maximum distance traveled to each center is 88, 136 and 80 miles respectively. This shows that people will drive a considerable distance to spend money. It also has implications in that people are not as concerned about distance as they are in getting satisfaction, service and other intangible returns.

Comparison Between Credit Usage And Where Money Is Spent

To further point up the relationship of credit and patronage patterns, a comparison was made between the town where most of the money is spent and uses made of credit facilities within the town. Table XXVII shows that if one of the larger centers is named as the recipient of most of the money, there is a relationship which shows that at least some of the credit facilities in that center are utilized.

Over one-half (64 out of 100 cases) used only one or two types of credit within the trade center where most of the money was spent. Slightly over one-fourth (26 out of 100) used three or four types of credit. This appears to substantiate the information presented in Figure 3 which shows that respondents used one to four types of credit much more frequently than they did five or six types.

Lewistown has the greatest correlation between credit usage and where money is spent. This is confirmed when looking at overall trade patterns and sources of credit within the survey area. The combination units appear to dominate the usage of credit and center where money is spent

TABLE XXVII. COMPARISON OF CREDIT USAGE AND TOWN WHERE MOST MONEY IS SPENT.

Type of Unit	Center	Number of Credit Types Used						Total	Naming Center for Money
		One	Two	Three	Four	Five	Six		
Small Grain	Lewistown	2	1	2	1	--	--	6	7
	Great Falls	1	--	--	--	--	--	1	1
	Billings	--	--	--	--	--	--	0	1
Large Grain	Lewistown	4	2	--	--	--	--	6	7
	Great Falls	--	--	--	--	--	--	0	0
	Billings	--	--	--	--	--	--	0	1
Small Lvstk	Lewistown	2	2	--	1	--	--	5	7
	Great Falls	--	--	--	--	--	--	0	2
	Billings	--	--	--	--	--	--	0	8
Med. Lvstk	Lewistown	2	--	1	--	--	--	3	4
	Great Falls	--	--	--	--	--	--	0	0
	Billings	1	--	--	--	--	--	1	3
Large Lvstk	Lewistown	--	--	1	1	--	--	2	4
	Great Falls	--	1	--	--	--	--	1	1
	Billings	--	--	--	--	--	--	0	1
Small Comb.	Lewistown	3	6	1	3	2	--	15	17
	Great Falls	1	--	--	--	--	--	1	1
	Billings	--	3	--	--	--	--	3	4
Med. Comb.	Lewistown	8	10	4	6	5	1	34	37
	Great Falls	1	1	--	--	--	--	2	7
	Billings	--	1	1	--	--	--	2	4
Large Comb.	Lewistown	5	3	1	1	--	--	10	12
	Great Falls	--	2	--	--	--	--	2	3
	Billings	1	--	--	--	--	--	1	1
Misc.	Lewistown	1	--	2	--	2	--	5	6
Totals		32	32	13	13	9	1	100	139

in comparison. This again would be expected since combination units comprise the largest category of operators.

The implications of this analysis do not verify the fact that credit usage and spending of money are directly related. A more meaningful analysis could be made if types of credit were considered rather than number of types utilized.

CHAPTER III

SUMMARY AND CONCLUSIONS

Summary

Trade center patronage in former years was limited by easy accessibility and lack of communication with other centers. Once the transportation system was improved many formerly non-accessible rural centers were no longer isolated. Spheres of influence from larger urban centers began reaching out. Competition for patronage by rural people became the major concern of rural towns not only in this area but all throughout the Great Plains.

Problems associated with trade centers have been magnified by unusual conditions existing in the Plains region of our country. This region is one of great risks and uncertainties. Survival is a critical issue in all types of endeavors.

Farm operators of today are still adjusting to problems brought on by World War II. Advancements in technology have been fast and far reaching with some phases of agricultural production keeping pace and others lagging behind. Providing capital for the farm or ranch is a demanding and difficult task today. One approach being used by many today to cope with the capital shortage situation is the use of credit--not only for the farm or ranch business but also for family living.

It was intended that this study would determine the influence, if any, that source or use of credit has upon trade center patronage patterns. The study area reveals a growing tendency towards concentration of patronage patterns into the larger, more centrally-located towns and cities. Different centers serve different functions as evidenced by farmer and rancher responses to the query of why they go to one town or another. Earlier studies found that accessibility or geographic proximity was the primary reason for selecting the trade center to which farm or

ranch people would go for business activities. The changes in communication and improvements in transportation which have taken place plus the new demands which higher levels of living have created influence the farmer of today to select a trade center for reasons other than accessibility. Trade centers of today are receiving patronage because they are good places in which to do business or because they offer services which are desired by rural people. Patterns reveal that the larger centers are the ones visited most often for these purposes. Smaller centers still receive visits, but reasons are related to convenience and factors of daily services. People go there to pick up the mail, take children to school or attend meetings. The fact that the town is only a few miles away is of secondary importance.

The results of the research revealed that for all practical purposes 10 centers were serving as the major providers of the credit utilized by farm and ranch families. Nine of these ten towns were in the top ten for overall patronage by the farm and ranch families. Eight were selected as being the trade center where the farm families spent most of their money and eight were named as being the center which was visited most frequently. Some correlation was found to exist between the town where the most money was spent and usage of credit. Lewistown scored highest among the large centers and combination grain-livestock units had the highest usage of credit at the center where they spent most of their money.

Characteristics of the farms and ranches within the survey area indicate that more than half (53.5 percent) of those interviewed are of the combination grain-livestock type. Only 15.2 percent are grain-only as compared to 25.9 percent who are livestock-only. No differences were found in the use or non-use of credit by type or size of unit except that livestock units had the greatest number of those using no

credit whatsoever. Tenure patterns for the entire sample show the majority (55.6 percent) to be part owner operators while 26.3 percent are full owner operators. When comparing the mean age among the small, medium or large sized units, it was found that small units had operators whose average age was 53.3, medium units 46 years and large units 46.8 years. Those operators using credit within the three sizes of units, small, medium and large had mean ages of 51.0, 46.3 and 41.8 years respectively.

The one deviation most notable in source of credit use was that of real estate credit. Individuals provided funds for 63.5 percent of the operators using real estate credit. This is over 50 percent more than the amount provided by individuals throughout the rest of the nation.

Conclusions

Montana farms and ranches are becoming larger in size and smaller in number. The ages of large versus small operators indicate that relative youthfulness of the operator is associated with developing of larger units. Diversification is an important characteristic in present day agriculture measured by the prevalence of combination units in contrast with single purpose units.

Use of credit for the home and farm or ranch business is widespread among all types of operators of different tenure levels. Sources of credit are less widespread than are the usage patterns. Patronage patterns for goods and services indicate the smaller towns function as convenience centers for daily services and larger centers are patronized for general business reasons. Small towns are visited more frequently, but most of the money is spent in the larger towns. A definite similarity exists between towns where the most money is spent, where the major amount of patronage is taken and where credit is obtained by operators.

The small rural centers appear to have great appeal in providing grain marketing services, supplying credit for production items, supplying credit for family consumption purchases and as the town visited most often. The latter, however, was mainly because of institutional services that were provided or to accomplish daily chores such as picking up the mail.

Geographically, the trade patronage can be channeled into approximately eight of the thirty-five towns in the survey area. The smaller towns are facing a definite struggle for existence. Competition is intensified because of a declining population which at the same time is demanding more specialized services. It was the intent of this study to determine whether or not credit had an influence upon trade center patronage patterns. The evidence appears to indicate that credit availability and patronage patterns are related. Which is the cause and which the effect cannot be stated. It cannot be said that to increase patronage it is necessary to simply provide more credit services or vice versa. Many other factors are involved.

In earlier eras, the factor of accessibility was a primary reason why rural people patronized rural centers. Today accessibility is not the primary reason in the minds of farm and ranch people. Trade centers have either not faced up fully to the fact that they must compete for patronage which once was theirs due to isolation or they have been unable to meet the competition.

Suggestions For Further Research

The results of this study leave many alternatives and implications for the small, rural trade centers. A trend seems to be establishing itself, whereby as older generations pass on, their places are not taken by new families. This holds true for small businessmen, farmers and

ranchers alike. The needs of elderly people are not likely to be the same as young growing families. Farmers need financial aid as they become older, less productive and unable to shift to other types of employment or less able to compete with younger operators on larger units. Credit services for an aging and declining farm operator population are many and difficult to solve. Such older age operators may not be operating as economic sized units as the younger men, and they do not have an obvious successor in many cases. Some reasonable solution needs to be found whereby these older operators can maintain themselves in a reasonable and respectable manner and yet keep their units together for younger men to take over and operate without unreasonable debt burdens or inefficient sized units.

Rural trade centers are facing as great or perhaps even greater problems than are the small farms of the Plains. Age seems to be a common denominator in both problems. An obsolete small town has probably a lower salvage value than an obsolete small farm. The unnecessary older merchant in a small town is faced with problems of continued assimilation into modern society just as much as older, small farm operators. As agriculture becomes a smaller and smaller portion of gross national production, the opportunity of dealing with rural adjustments becomes more difficult. Urban problems will demand and receive priority over agricultural adjustments as the population of the country continues its trend towards less rural people.

Rural communities are faced with the problem of adjusting to a declining population. The needs of modern agriculture have changed greatly due to technological advances. Isolation of trade centers or farm units is nearly obsolete due to much improved transportation and communication systems. Much of the Plains area is overcrowded with small towns offering few choices in goods and services. However, the constructive

adaptations in agricultural production methods are placing farm or ranch operators in a position of greater reliance upon commercial services. Apparently a trade center organization pattern involving interdependence of large and small centers is emerging to provide these services. Rural centers may be able to specialize in one or several types of marketing, assembling or distributing of agricultural goods and services. As long as two adjacent centers do not compete for the specialty service, the probability of survival is enhanced. Another possibility for rural trade centers is to update the obsolete general store idea. Urban centers have their "one-stop" shopping centers and these are exhibiting great success. The need for new ideas in research along these lines appears evident.

LITERATURE CITED

Baum, E. L., Howard G. Diesslin, and Earl O. Heady, Capital and Credit Needs in a Changing Agriculture, Ames, Iowa, The Iowa State University Press, 1961.

Better Farming Methods, October, 1962.

Galpin, C. J., The Social Anatomy of an Agricultural Community, Wisconsin Agricultural Experiment Station, University of Wisconsin Research Bulletin 34, 1915.

Kolb, John H., Emerging Rural Communities, Madison, Wisconsin, The University of Wisconsin Press, 1959.

Kraenzel, Carl F., The Great Plains in Transition, Norman, Oklahoma, University of Oklahoma Press, 1955.

Lively, C. E., Growth and Decline of Farm Trade Centers in Minnesota, 1905-1930, Minnesota Agricultural Experiment Station, University of Minnesota Bulletin 287, 1932.

Pedersen, Harald A., Montana's Human Resources, Montana Agricultural Experiment Station, Montana State College, Circular 234, June, 1961.

Pedersen, Harald A. and Peterson, Earl B., Patronage Patterns In Central Montana, Montana Agricultural Experiment Station, Montana State College, Bulletin 578, May, 1963.

Price, H. Bruce and C. R. Hoffer, Services of Rural Trade Centers in Distribution of Farm Supplies, Minnesota Agricultural Experiment Station, University of Minnesota, Bulletin 249, 1928.

United States Department of Agriculture, Upswing in Rural America, Washington, D. C., March, 1963.

Webb, Walter Prescott, The Great Plains, New York, New York, Grosset and Dunlap, 1931.



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