

UNIVERSITY OF MINNESOTA  
AGRICULTURAL EXPERIMENT STATION

FARM TRADE CENTERS IN  
MINNESOTA, 1905-29

A STUDY IN RURAL SOCIAL ORGANIZATION

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# FARM TRADE CENTERS IN MINNESOTA

## A Study in Rural Social Organization<sup>1</sup>

C. C. ZIMMERMAN

### INTRODUCTION

This study deals with Minnesota farm trade centers between the years of 1905 and 1929. It analyzes the structure, the trading facilities, and the contributions to the farm standards of living of these trade centers. It attempts to discover the influences of the automobile and modern transportation facilities upon these centers and upon farm standards of living. In previous studies the Minnesota Agricultural Experiment Station has approached the standards of living of farm families from the standpoint of the farm family budgets of incomes and expenditures. This study approaches these standards of living from the viewpoint of the trading center.

The study deals with all types of farm trading centers in Minnesota from the crossroads store to the large metropolitan towns—excluding the cities of Minneapolis, St. Paul, and Duluth. These trade centers are the units about which the isolated farms are organized. Minnesota is primarily a state of isolated farms. These farms are grouped around certain commercial centers which furnish facilities for processing and selling of farm products and are the immediate sources of most of the goods and services which the farm families buy.

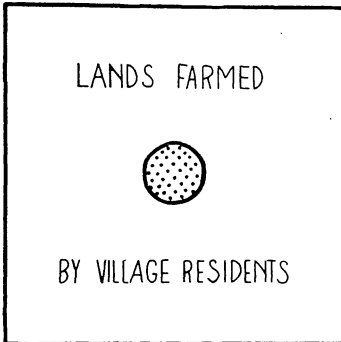
From the standpoint of the geographic closeness, of relationship between the farms and the trading and administrative facilities, agriculture has had four general types of social organization. The extremes of these types are represented by the farm village in which the families have their residences within the confines of the village along with the commercial and administrative facilities and by the pure isolated farm type where the farm houses are located each on their individual plots of land and the trading and administrative facilities are located sépa-

<sup>1</sup> The author gratefully acknowledges the assistance of Thomas Lynn Smith, now a social science research fellow at Harvard University, for help in carrying out many of the technical details of the study. A committee composed of Andrew Boss, vice-director of the Minnesota Agricultural Experiment Station, O. B. Jesness, chief of the Division of Farm Management and Agricultural Economics, R. A. Stevenson, dean of the School of Business Administration, and Morris Lambie of the Department of Political Science and of the League of Minnesota Municipalities aided in the development of the study.

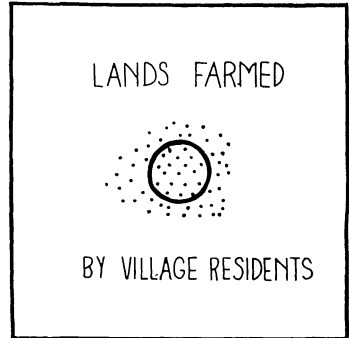
rately in the village or trade center. Those are types 1 and 4 on Chart I.<sup>2</sup> The intermediate types are represented by the "nebulous

## MAJOR GEOGRAPHIC TYPES OF RURAL ORGANIZATION

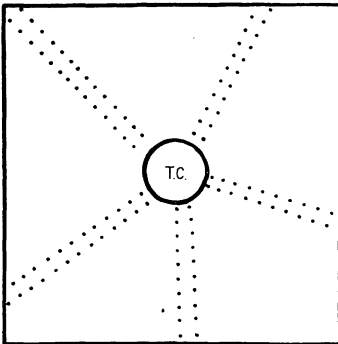
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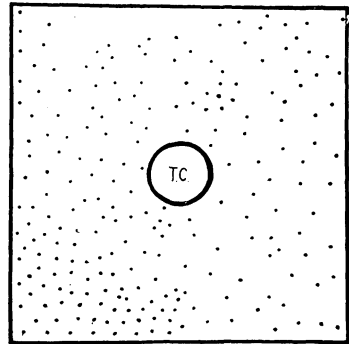
1. FARM VILLAGE TYPE  
• = FARM FAMILY.



2. NEBULOUS FARM VILLAGE TYPE.  
• = FARM FAMILY.



3. ARRANGED ISOLATED FARM TYPE.  
T.C. = TRADE CENTER ONLY.  
• = FARM FAMILY



4. PURE ISOLATED FARM TYPE.  
T.C. = TRADE CENTER.  
• = FARM FAMILY

Chart I. Principal Types of Geographic Cohesion and Dispersion of Farm Peoples in Relationship to the Trade Centers

This bulletin deals with a study of the nucleus or trade center in a state organized largely upon the "pure isolated form type" as given in illustration 4 of this chart.

<sup>2</sup> Chart I was adapted from M. A. Le Fevre, "L'habitat rural en Belgique," p. 11; see also, J. Flach, "L'origine historique de l'habitation et des lieux habités en France," Paris, 1899; A. Meitzen, "Siedelung und agrarwesen der west- und ost-Germanen, der Kelten, Römer, Finnen und Slaven," Berlin, 1895 (in 4 vols.) Vol. I, p. 434 and ch. VI; Arrouseau, M., "The arrangement of the rural population," *Geographical Review*, 10:223-40, 1920; Brunhes, J., "La Géographie Humaine," Paris, 1925 (3rd ed.); Sten de Geer, "La distribution de la population en Suède," *La Géographie*, 37:517-24, 1922; Demangeon, A., "L'habitation rurale en France," *Annales Géographiques*, 29:352-75, 1920; "La géographie de l'habitat rurale," *ibid*, 1926 (translated and reprinted with permission in P. Sorokin, C. C. Zimmerman, and C. J. Galpin, "Source book in rural sociology," Vol. I, University of Minnesota Press, 1930).

farm villages" in which most of the farm houses are located in the village but with some tendencies for the houses to disperse on isolated farms; and by the "arranged isolated farm type" in which most of the houses are on separate farms but showing a tendency for the farms to be located along roads leading into the village. These types are given in illustrations 2 and 3 in Chart 1. The Minnesota communities are primarily of type 4, "the pure isolated farm type." This study deals with individual farm units only in their relationships to the trading centers for the rural communities in Minnesota.

The trade center may be thought of as the nucleus of the farm community in Minnesota. This study can then be called an analysis of the economic and social structure of some phases of the nuclei of the Minnesota farm communities.

### Importance of the Study

This study becomes of significance particularly because of three general changes which have come over American agriculture in the last 30 years. One of these has been the introduction of more rapid methods of transportation and communication. The good roads movement and the automobile are products of this century. The rural free delivery of mail and the telephone have come at the same time.<sup>3</sup> This change in methods of transportation and communication has struck at one of the fundamental forces influencing the organization of the rural trade area community—the time it takes to "go to town." Farms that were once a day's journey from the trade center are now only a few minutes away by telephone, automobile, or truck. Farms that were once located within the trade area of only one village or trade center are now within the areas of several. The volume of contact between the farm home and the trade center has increased.<sup>4</sup> The number of trade centers influencing the farm family has increased because the farm family is in contact with more of them. These trade centers have added to their competition for the allegiance of the farmer because, to a great extent, the commercial success and size of a trade center is dependent upon the volume of agricultural service it is called upon to handle.

Along with the changes in communication and transportation has come a rapid change in the economic characteristics of farming itself. Once agriculture was self-sufficing. Things were produced and consumed at home without entering the ordinary commercial markets. Whereas, to some extent, the agricultural economy of America has always been a commercial economy, the last 30 years has seen a rapid

<sup>3</sup> Detailed proofs of this are given in Carl C. Taylor, "Rural Sociology," New York, 1928.

<sup>4</sup> See Helen Canon, "Sizes of purchasing centers of New York farm families," Cornell Agr. Expt. Sta. Bull. 472, November, 1928; H. B. Price, and C. R. Hoffer, Minnesota Agr. Expt. Sta. Bull., 249, October, 1928; C. R. Hoffer, Michigan Sta. Special Bull., 181, October, 1928; J. H. Kolb, Wisconsin Sta. Research Bull., 58, December, 1923.

change in the amount of buying and selling carried on from the average farm. In no type of goods used on the farm is there as much home production for home consumption as there was 30 years ago. The standards of living of the farm families, which were once largely the results of creation by the members upon the home farm or by spontaneous organizations of groups of families, are now purchased to a much greater extent than formerly.<sup>5</sup> The simpler tools of agriculture of 30 years ago were made upon the farm itself to a greater extent; today they are purchased in the trade center. Butter was once churned at home; now it is delivered as milk or cream to the creamery located in the trade center, where it is manufactured into butter or cheese. An increasing number of the farm families no longer make butter at home for their own use—preferring rather to secure it when delivering the milk or cream to the factory. Religious contacts, recreation, even the ideas of science which are coming to be an increasing factor in the management of the home farm—all these are secured from agencies located in the trade center. These agencies are illustrated by churches, recreational institutions, and various official or non-official agricultural advisers. As a result of this, the trade center is becoming more and more an important factor in the economy of farming and the life of agriculture. The new agriculture is bringing a different trade center. This study is an attempt to discover what this new trade center is tending to become.

The third general change is in the methods of merchandising used in the village. Highly specialized shops and retail stores are tending to develop in some of the trade centers. These carry brands and types of goods not sold in the general stores which have been very prevalent in some types of trade centers. The chain store is developing in certain lines where it once did not operate. These changes in methods of handling consumer goods, and in the types of consumer goods, have helped certain favored retail centers to grow, at least relatively, more rapidly than others. The problem of relative differences between the types of services offered by different sizes of trade centers has become of significance to agriculture.

These three rapid changes in rural communication and transportation, in standards of living, and in methods of distribution of consumer goods have brought the problem of the farm retail trade center more and more into the public eye. They have made it necessary for a careful study of the farm retail trade center during the period of these changes in agriculture and economic life affecting agriculture.<sup>6</sup>

<sup>5</sup> See Minnesota Agricultural Experiment Station Bulletins Nos. 234, 240, 246, 253, and 255.

<sup>6</sup> See Melvin T. Copeland's section on "Marketing" in Volume 1 of "Recent economic changes in the United States," National Bureau of Economic Research, Inc., N.Y., 1929, pp. 331-42.

### Purposes of the Study

This study attempts to picture the farmers' trading facilities about 1905, a period representative of agriculture in the northern sections of the United States before the changes discussed above. Following, an attempt is made to trace the changes which have come in the trading center between 1905 and 1930, with particular reference to the changes in communication, standards of living, and merchandising methods discussed above. On the basis of these pictures, some foundation is created for the outlining of the agricultural trading center as it will develop in the near future—probably the next 25 or 50 years—in Minnesota and in similar sections of the United States and Canada. It may indicate some future changes in the geographic and economic phases of social organization of the farm community. It may suggest what have been the advantages and the disadvantages in the new forms of trade centers for the individual farm families.

It has been suggested that the farm family should abandon the smaller trade centers immediately and give their economic and social allegiance to the larger trading centers because of the superior economic and social facilities offered there. If there are any reasons why the farmer will not and ought not abandon the smaller centers entirely, these should be found out and presented to the agricultural public. Little is known about the probable influence and success of the forms of merchandising which have been developing in the larger retail centers in rural Minnesota. Should the smaller agricultural trade center be permitted to die? If not, what changes should farm families make to prevent the disappearance of these centers?

Is the trading community in rural Minnesota of the future going to be one of greater centralization about a few favored retail towns or is it going to be one of greater confusion in which farm families give part of their allegiance to each of several different types of trade centers? If the smaller villages continue, how are they going to support certain necessary services such as paved streets, electric lights, sewer systems, newspapers, libraries, physicians, dentists, and others? These are often said to be essential to a good farm trading town or to a modern rural community center. A beginning search for the answers to these and many other questions forms the major purpose of this study.

In addition to the above purposes, from the standpoint of a pure science of sociology, it is evident that some clearer pictures of many phases of the structure of the agricultural trading community as it exists in Minnesota are needed. There have been many claims as to the influence of this form of social structure upon the mental life of the farm people. Some have claimed that good citizenship, the proper

development of agricultural co-operation, and the best forms of agricultural life are developed primarily in the farm village where farm families live in close contact with each other and go out as necessary to farm the lands which are separated a considerable distance from the residences. Others have claimed the opposite. If possible, more about the form of village social structure as it exists in Minnesota and the influences it has had upon the mental life of the farm people themselves should be discovered.<sup>7</sup>

### Sources of Information and Methods Used

The records of two important agencies, Bradstreet's "Book of Commercial Ratings of Bankers, Merchants, Manufacturers, etc.," and the data of the League of Minnesota Municipalities, have been used in this study. Bradstreet's is a firm that, since the beginning of the last half of the nineteenth century, has given credit ratings to all possible agencies (in the United States and Canada) that might need commercial credit. Their books give the name of the trade center, its size, location, relationship to railroads, highways, telephone, telegraph, and express services, and the presence of hotels and banks. Following they give a list of the merchant and manufacturing firms with a rating as to net worth of each and a moral rating as to the past experience of each with creditors. A check of their records has found them very accurate concerning the existence of a type of firm in a village and the kinds of business carried on by that firm. These types of information were used particularly. It is important to note that Bradstreet's had been furnishing credit ratings on firms located in Minnesota villages and towns for more than 30 years before the first records used in this study. Early inaccuracies of their work have been eliminated to a great extent. In every case where there was a question as to the accuracy of the reports as to existence of, or type of, business carried

<sup>7</sup> For a discussion of these points, see J. M. Gillette, "Rural Sociology" (rev. ed.), New York, 1928, ch. 24; N. L. Sims, "Elements of rural sociology," New York, 1928, ch. 26; Lowry Nelson, Brigham Young University Studies of Ephraim, Escalante, American Fork and other Mormon communities; A. Demangeon, "La Geographie de l'habitat rural," *Annales de Geographie*, 1926; and Andre Siegfried, "Tableau Politique de la France de l'ouest sous la Troisième Republique," Paris, 1913, ch. 34. See further the works upon the agricultural village by H. S. Maine, J. B. Phear, B. H. Baden-Powell, Jan St. Lewinski, D. Serrigny, Fustel de Coulanges, H. Maurer, E. Nasse, F. Seebohm, C. M. Andrews, G. L. Gomme, H. B. Adams, A. S. Altekar, P. Vinogradoff, Harold Peake, I. A. Hourwich, K. Asakawa, A. H. Smith, Y. K. Leong, L. K. Tao, Edmund de S. Brunner, C. L. Fry, J. H. Kolb, Carl C. Taylor, C. C. Zimmerman, Dwight Sanderson, C. R. Hoffer, B. L. Melvin, E. L. Morgan, D. H. Kulp, Perry Denune, E. A. Taylor, F. R. Yoder, H. B. Price, A. W. Hayes, J. M. Williams, N. L. Sims, Warren H. Wilson, and numerous others. This topic of the village and its influence upon inhabitants probably has been the subject of as much discussion and research as any section of the sociology of farm life. Leopold V. Wiese even suggests that the name of "rural sociology" should be "village organization." In that sense he is following somewhat the work of the American "Institute for Social and Religious Research" by E. de S. Brunner and others. See "Das Dorf als Soziales Gebilde," supplement to the *Kölner Vierteljahrshefte für Soziologie*, No. 1, p. 3, Munich, 1928.



on by a firm located in the villages, Bradstreet's data were substantially accurate. These data of Bradstreet's for the years 1905, 1910, 1915, 1920, 1925, and 1929 were used in this study.

The League of Minnesota Municipalities was organized in 1913 and recognized by the Minnesota legislature in 1923 (Session Laws, ch. 211). Its purpose has been to perpetuate and develop an agency for the co-operation of Minnesota cities and villages in the practical study of village and city affairs. It includes in its membership 333 Minnesota cities and villages, 331 of which (excepting St. Paul and Duluth) are included in this study. In addition, it has its annual publications and special studies which compile and analyze data concerning the various problems of these trade centers. These 331 villages and cities include all of the larger trade centers included in this study. The records of the League have been gathered carefully and are exceedingly accurate.

### What Is a Trade Center?

The first task is to give a clear idea of what is meant by the term *trade center*. In essential elements, the trade center arises at the beginning of village or town or urban life. Comprehensive studies show that when agriculture is self-sufficing, there is no trading or trade center other than the grouping of the houses about the manor or plantation house, the religious center, or some central service or administrative institution. However, the agriculture that is known today is a trading economy. And when trading institutions begin, then the trade center or commercial nucleus appears. The crossroads store itself is the first sign of the appearance of non-agricultural activities and forms the first and most elementary variety of the trade center.<sup>8</sup>

However, a description of the beginning of a trade center does not show the total forms it may take. There are two or three customary forms of description of the total trade center that deserve consideration. One of these is the number of the population residing in the trade center and engaged, in most instances in the Minnesota trade centers at least, in non-agricultural activities. A second classification has been in terms of the number of commercial units located in the

<sup>8</sup> For studies as to the component elements of trade centers and the beginnings of non-agricultural enterprises and urban agglomerations, see H. Pirenne, "Medieval Cities," (translated by F. D. Halsey), Princeton University Press, 1925; E. de S. Brunner *et al.*, "American Agricultural Villages," New York, 1927; C. L. Fry, "American Villagers," New York, 1924; E. C. Miller, "Town and Country," University of North Carolina Press, 1928; Rene Maunier, "L'origine et la fonction économique des villes" (étude de morphologie sociale), Paris, 1910; P. Sorokin and C. C. Zimmerman, "Principles of Rural-Urban Sociology," New York, 1929, ch. 2; B. L. Melvin, "Village service agencies in New York, 1925," Cornell Bull. 493, 1929, uses as his definition of the village, "any place having a population of 50 to 2,499 inclusive." From 2,500 to 9,999 he calls towns, and above 10,000 cities. But our study is of the trade center, and without regard to population, we may think of the elementary trade center beginning with places of no pure non-agricultural population and extending even to the largest cities—from the crossroads part-time store to the metropolitan center.

trade center. Thus there are one-store communities and multi-store communities. Third, trade centers have been divided into primary and secondary or independent and dependent according to whether or not they offered a full selection of certain necessary communication services. For instance, a trade center lacking railway facilities, a community newspaper or postal, telegraph, express, or banking accommodations may be classified as a dependent or secondary type of trade center in Minnesota. Because the entire population depends, to some extent, upon the services furnished by these facilities, any community that lacks one of them is to that extent dependent upon another for primary services.

All three classifications of trade centers have some justification and use.<sup>9</sup> Accordingly, this study deals with the trade centers classified by the number of non-agricultural population, or by the number of businesses located within the community or by the factors of independency or dependency. In this study the presence of all of five important services as outlined following, was used as the criterion of the independency of the town. Those having all of these facilities were classified as independent and those lacking any one of them were classified as dependent or "elementary."

### Types of Trade Centers in Minnesota 1905 Through 1929

Table I in the Appendix gives a classification of the trade centers in Minnesota in 1905 and for intervening periods down to 1929. The first section of the table shows the gross number of all trade centers, which totalled 1,535 for the state in 1905, rose to 1,635 by 1915, and declined to 1,564 by 1929. The second section gives the number of "independent" trade centers for each period. For purposes of classification as an independent trade center, the village was required to have a post office, a telegraph office, an express office, a publisher, and a bank. Charts 2 and 3 show the location of these independent trade centers in 1929. Under exceptional circumstances, such as is seen in the iron range northwest of Duluth, the development of mining or industry that gives other than agricultural reasons for the accumulation of a non-agricultural population, enables several large independent towns to appear close together. However, for the great portion of the sections of Minnesota, the development of the trade center is primarily an agricultural function. Hence, the independent centers seem dispersed in relationship to each other in a competing fashion.

These independent towns or trade centers increased from 304 in 1905 to 365 in 1915 and decreased to 352 in 1929.

<sup>9</sup> For a composite classification, see J. H. Kolb, Wisconsin Exp. Sta. Research Bull. No. 58, 1923, pp. 5ff.

In Chart 2 the independent towns are arranged by population, 5,000 or more, from 1,000 to 5,000, and less than 1,000. In Chart 3 the towns are arranged by number of business units listed for those towns; 68 had more than 75 business units, 73 from 50 to 75 business centers and 211 less than 50.

In addition to these independent towns, there were 1,211 elementary trade centers in 1929. These smaller places perform the first com-

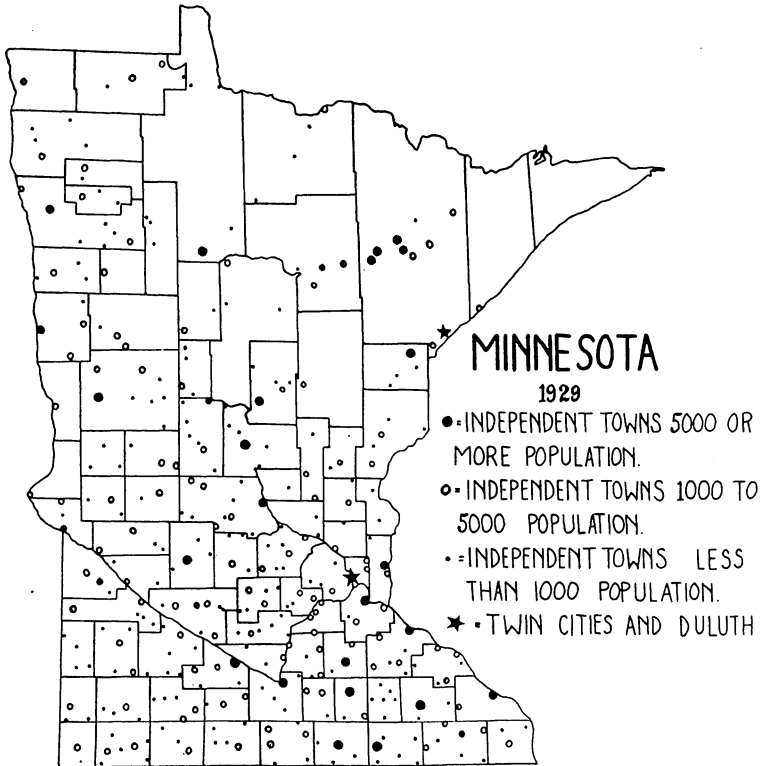


Chart 2. "Independent" Farm Trade Centers in Minnesota, 1929

On this map are plotted all 352 "independent" trade centers in Minnesota in 1929. Independent trade centers are those having a bank, a post office, an express office, a telegraph office, and a publisher. The centers are divided into three groups: those with 5,000 or more population; those with 1,000 to 5,000 population, and those with less than 1,000 population. As might be expected, the trade centers are more numerous in the southern part of the state. Furthermore, they are arranged in rows following railroads. This suggests the great importance of railway transportation in the growth of towns. There also seems to be a slight dearth of smaller towns in the near neighborhood of the larger ones. Two things might explain this: either towns were never formed there; or, with the growth of a large town, the smaller places in the vicinity have been smothered. This map does not include the 1,211 elementary trade centers that form the first commercial nucleus of the isolated farms. It shows also that population not engaged in agriculture is a poor measure of the adequacy of a farm trade center. (Compare Chart 2 with Chart 3.) Rather, number of business units is a better measure of adequacy. Population in a trade center, once there is a sufficient number to carry on the business units, depends largely upon industrial opportunities and not upon the surrounding agriculture.

mercial services to agriculture and are the nuclei which arrange the isolated farms into economic or elementary trading and administrative communities. The majority of the first services to agriculture are performed in these smaller trade centers. In number they increased from

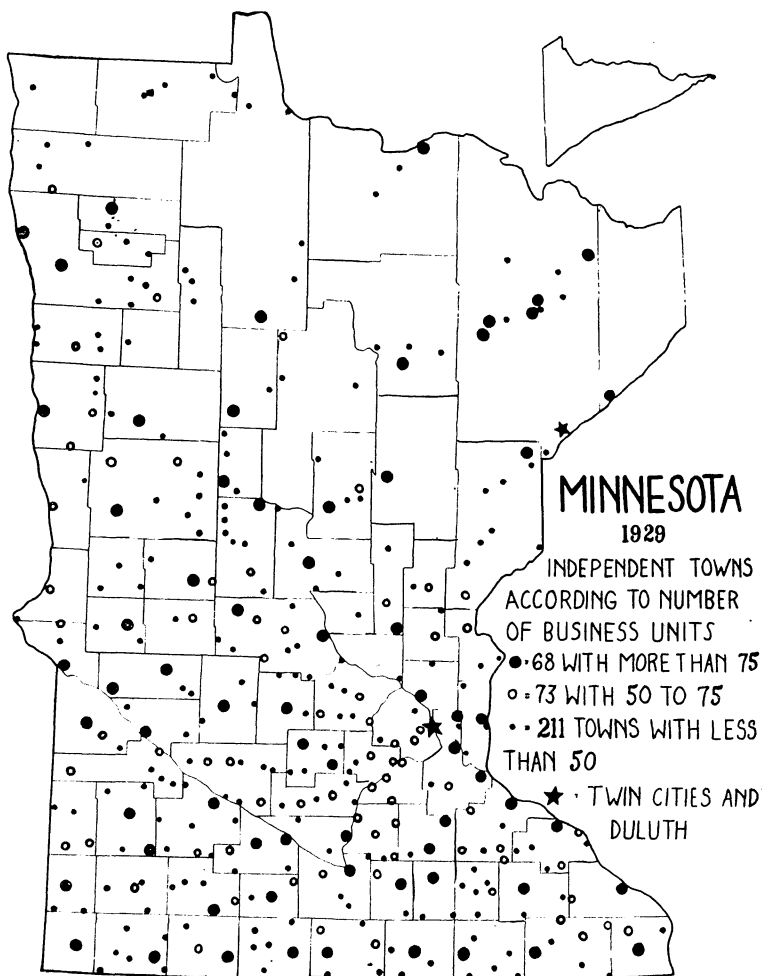


Chart 3. Distribution of the 352 Independent Trade Centers in Minnesota According to the Number of Business Units in Each

Sixty-eight had more than 75 units, 73 from 50 to 75, and 211 less than 50. This map does not include the 1,211 elementary trade centers which form the first commercial nucleus of the isolated farms. The map shows that distribution of business units is a better measure of the adequacy of a trade center than the size of the population in the trade center. The towns with more than 75 business units are located over the state in close approximation to the distribution of the agricultural population. The towns with less than 76 businesses are dispersed between the major centers. The fewer the business units, the more numerous are the centers, and the closer do they come to the isolated farms.

1,231 in 1905 to 1,270 in 1915 and decreased to 1,211 by 1929. The trends in number of elementary centers and in independent towns were the same—increasing to a peak in 1915 and decreasing steadily until 1929. In Charts 4 and 5, the 1,211 elementary trade centers are superimposed upon the independent towns arranged by size of population and by number of commercial credit ratings. Chart 6 shows these elementary trade centers by themselves—the 352 independent trade centers are omitted from this map.

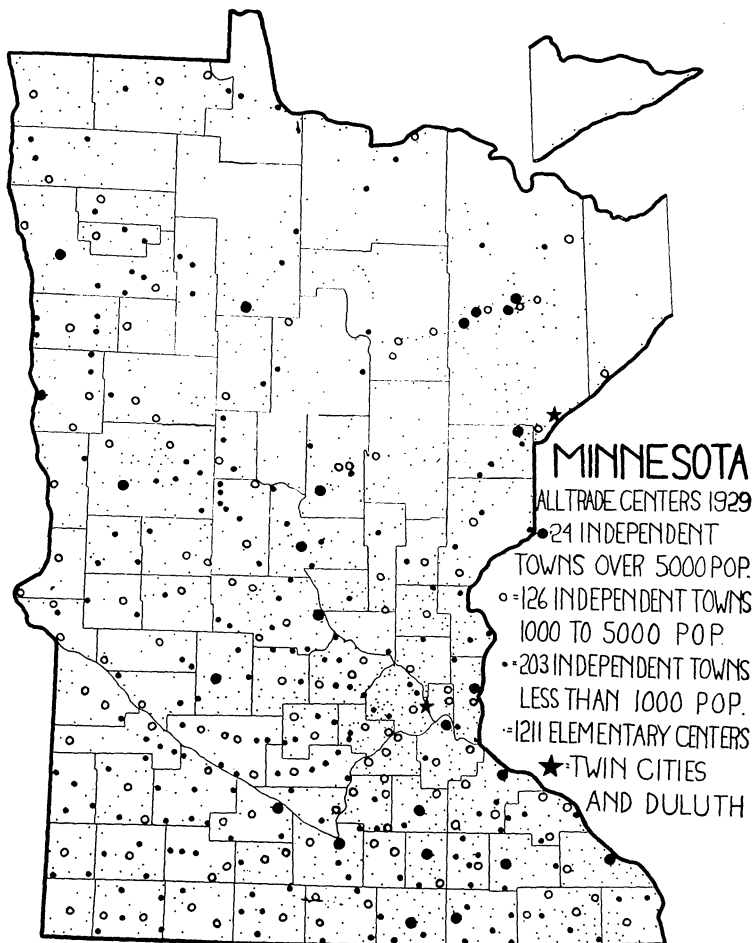


Chart 4. The 1,211 Elementary and Dependent Trade Centers Superimposed upon the 352 Independent Trade Centers Arranged by Population as in Chart 2

### Preliminary Analysis

The maps and other materials suggest a few principles that are of importance to an understanding of the farm trade center. First of all *the type of service which the farm families call upon the agricultural*

trade center to perform seems to be the primary factor in determining the size, structure, and growth of the farm service center. Those types of services desired by the farm families seem to set the outer limits of the size and structure of the agricultural trade center. Any growth beyond these limits within any given center seems to come from non-agricultural industries and thus will rise and fall with the fluctuations of the profitableness of the non-agricultural industries concerned.

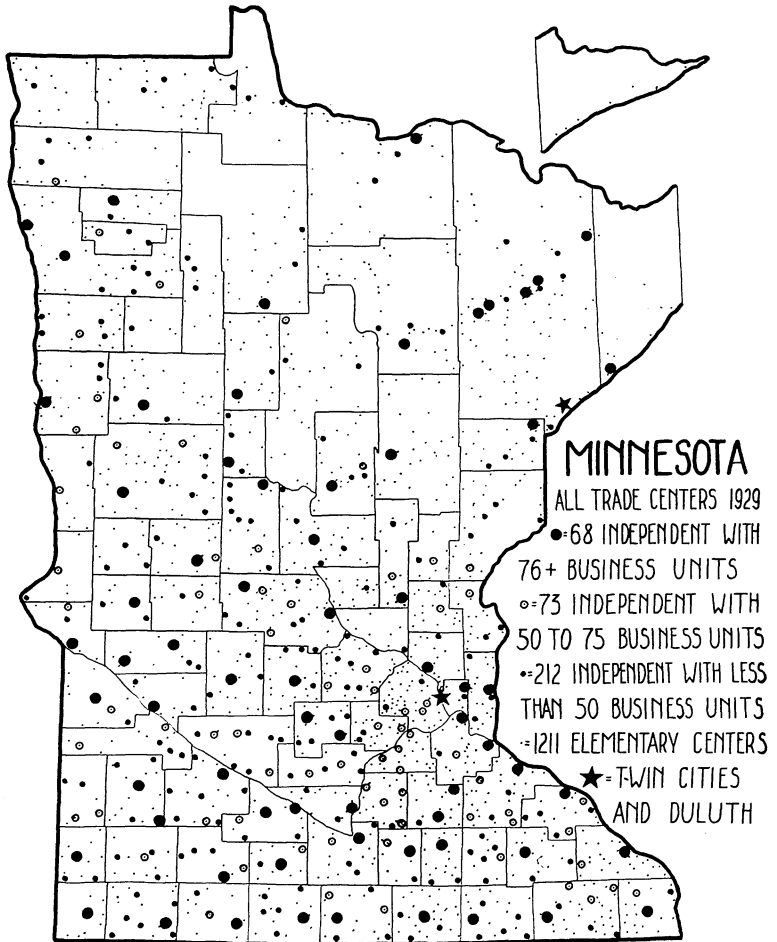


Chart 5. The 1,211 Elementary and Dependent Trade Centers of 1929 Superimposed upon the 352 Independent Trade Centers Arranged According to Number of Businesses in These Independent Centers as Given in Chart 3

Minnesota farm families, during the period under discussion, have demanded multiple types of services from their trade centers. *This has led to the development or preservation of a division of labor between trade centers performing different types of services and competition between those furnishing the same types of services.* Services in which

proximity or nearness are the most important factor are furnished by all types of farm trade centers. The elementary centers or crossroads communities furnish these types of services alone; the independent towns furnish the elementary services to the populations located closely about them and, in addition, furnish other services to populations

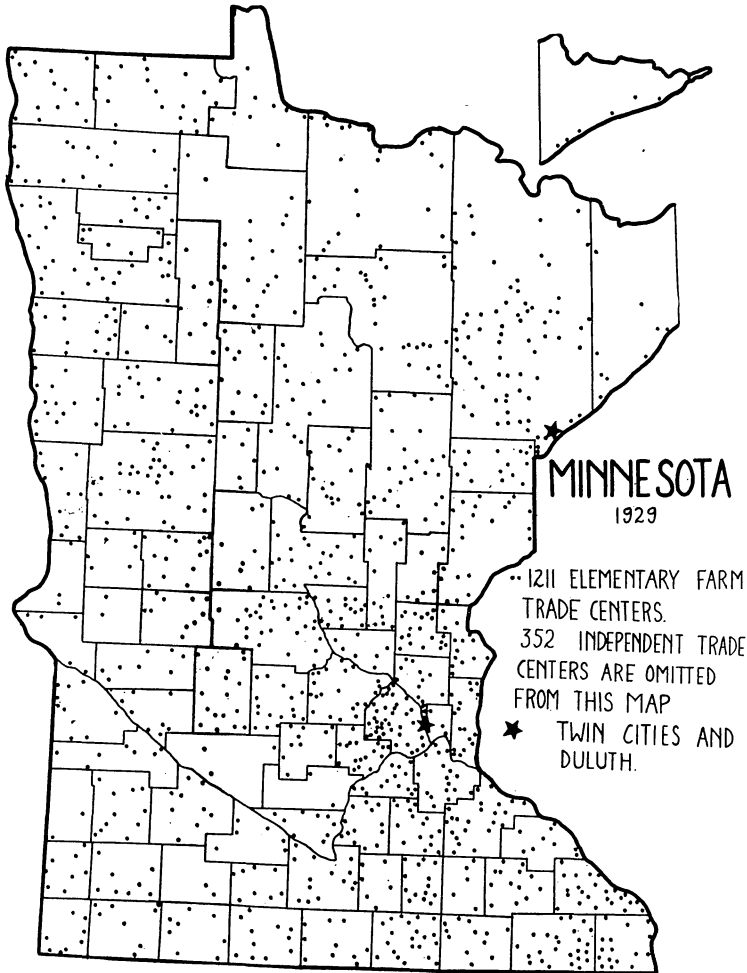


Chart 6. The 1,211 Elementary Trade Centers of Minnesota Without the 352 Independent Towns

The map shows that these elementary centers form a system of trade agencies uniting the farm population into their first commercial aggregates. In the larger towns and centers, the elementary functions fulfilled by these 1,211 places are carried on by neighborhood stores and local service centers.

farther away. Populations farther away from the independent towns seem to secure their elementary services from the crossroads centers.

*The significant competition between trade centers does not seem to be for the furnishing of satisfactions for physical wants but for the*

performing of certain other services which may be called "secondary" or non-physical. The purchase of most food products, work clothing, lumber and materials for housing or shelter, the collection of farm products for shipping in carload lots, the making of cheese or butter or the collection of dairy products into truckloads to deliver to the larger creameries—all these are primary functions in which distance of movement is an important consideration. These functions, along with others such as elementary schools, churches, club meetings, residences of retired farmers near their farms, gasoline filling stations, etc., form the basis of the elementary centers. Competition between trade centers for the furnishing of these services exists but is not of great significance.

On the other hand, there is a group of services that seems to form the basis of competition between trade centers. The purchase of shopping goods, fashionable clothing, millinery, hats, expensive furniture, rugs, new and expensive machinery, mechanical appliances, hospital facilities, services of physicians, lawyers, dentists, community newspapers, banking, and hotel facilities—in fact all services that increase efficiency rapidly with large volumes of business, large areas of population, or in which the difference between the wholesale and retail price is considered important—may be classified as some of these competitive factors.

The success of the independent town as well as its size, growth, and structure, as far as these are determined by agriculture, seems to depend upon the ability of the town to entice the surrounding farm populations to purchase these items in that particular town or trade center. Since the populations can afford to travel some distance to purchase these goods, or since these can be furnished over large areas from one center, their distribution furnishes the basis of the strongest competition between towns.

In the same way, *the development of these larger and more luxurious independent towns or trade centers is a measure of the material level or the material standards of living of the surrounding farm populations.*

The development of these larger trade centers has been associated with considerable improvement in the luxuriousness of the farm standard of living in America since 1905. This "correlation" is the basis for the popular belief that "the way to improve the farmer's standards of living is to get him to trading in larger centers."

However, it is evident that such a relationship between the size of the trading center and the improvement of the farmers' material standards of living *does not apply at all to his cultural life* such as his religion, his morals, his peace of mind, and other factors that also make life worth living. The claim that the most important method of improving the farmers' standards of living is to promote increased trading in the larger trading towns seems to have a number of fallacies in it.



The three important factors in the growth of these luxurious agricultural trading centers seem to be means of communication, the size of the agricultural income, and the way the agricultural income is spent. If the farmer has an automobile and a good road he can get to the new center. If he has a large income, more than enough to supply the physical wants of himself and his family, he will go there to purchase some of the items of luxury which are merchandized in the larger centers. But some of this surplus income will be spent to acquire farm lands or to pay off mortgages. It appears that the growth of the larger centers and the investment phases of the farm family budgets, land ownership principally, are somewhat in conflict. Because land values at the present seem fairly constant, fluctuations in the trading volume of the larger towns will be closely related to the incomes from agriculture. The increasing mechanization of agriculture is also tending to add to the proportion of the farm dollar spent in the larger trade center.

### **HISTORICAL CHANGES IN THE TRADE CENTERS, 1905-29**

The present conditions of social organization of the Minnesota agricultural trading center did not appear over night. Neither are they constant. They change from time to time. The data used in this study were secured to enable analysis of changes which have occurred since 1905. The period around 1905 was chosen because it represented a time when Minnesota was fully settled and before the introduction of good roads and the automobile.

The years following 1905-29 permit the analysis of trade center structure before the war, during the time of the war, in the depression following, and for the reconstruction period since 1925. Each of these periods is particularly interesting because it represents the attempts of Minnesota rural life to adjust itself to different conditions. Through all of these periods run several constant factors—the increase in number of automobiles, use of improved machinery, and more power on the individual farm and the improvement of roads. The combination of these changing and constant factors with the needs and desires of Minnesota farm families has resulted in the Minnesota trading center of today.

#### **Changes in Allegiance to Major Types of Trade Centers**

Tables II to IX, inclusive, in the Appendix, give information that enables one to picture the structure of Minnesota farm trade centers for each five-year period, 1905 through 1925, and on July 1, 1929. Tables II to VII, inclusive, give an analysis of the structure of the trade centers in which all so-called chain organizations (those giving

financial responsibility to another address, excluding "divided responsibility" and "mother stores") are classified separately. These cover each period of five years. Tables IX and XIII give the data for 1905 and 1929 in which each business unit is classified according to its functional character without reference to chain or non-chain types. The data for each period is arranged according to the sizes of the populations in the communities—less than 500, 501 to 1,000, 1,001 to 2,500, 2,501 to 5,000, 5001 to 7,500, 7,501 to 10,000, and above 10,000.

In 1905 there were 24,066 commercial credit ratings in Minnesota excluding the three large cities. These were located in 1,535 trade centers; 9,277 of them were located in villages of less than 500 population. At that time there were about 58 persons per commercial credit rating in the state, excluding the three large cities. This ratio of about one commercial credit rating for each 58 persons maintained itself through 1920, and from preliminary estimates of population for 1930 seems to have maintained itself since.

Apparently the important changes which have taken place are changes in allegiance to types of villages and trading centers rather than in the ratio of population to business units.

Some of these interchanges are as follows: The elementary communities or trading centers have almost maintained their relative significance, tending to fluctuate more or less constantly with the populations in their respective areas. Altho there have been considerable changes internally within these elementary trade centers, but relative to the larger trade centers, their total significance has remained almost constant.

Table I summarizes the numbers of these centers, the relative business units per center, and the per cent they are of the total trading centers demonstrating the above claims.

TABLE I  
SUMMARY OF CHANGES IN MINNESOTA ELEMENTARY TRADE CENTERS  
(POPULATIONS LESS THAN 500) SINCE 1905

Year	Number of villages 500 or less	Number of larger places	Per cent villages are of total	Average business units per village of 500 or less
1905	1307	228	85	7.1
1910	1323	256	84	6.9
1915	1371	264	84	7.2
1920	1339	268	83	8.0
1925	1307	292	82	7.9
1929	1272	292	81	7.8

The chief general change that has taken place has been the increase in business superiority of the places more than 2,500 in population to the relative loss of the places between 500 and 2,500 in population. Practically all of these villages and towns with more than 500 popula-

tion are independent trade centers. As they furnish services for which populations will travel long distances, they are in direct competition with each other. The trade centers above 2,500 in size have grown more rapidly in number than the places between 500 and 2,500. In average number of business units per center, the places of more than 2,500 have grown constantly with the single exception of a slight setback between 1925 and 1929. The places between 500 and 2,500 in population have decreased constantly with the exception that they held their own during the good agricultural conditions of the war period.

If these figures could be weighted by the volume of business carried on by each unit as well as the number of business units, the relative growth in strength of the larger independent towns over that of the smaller independent towns would be still more striking. Table II gives this relative growth of the larger independent towns in detail.

TABLE II  
RELATIVE GROWTH OF VILLAGES BETWEEN 500 AND 2,500 AND THOSE MORE THAN  
2,500 SINCE 1905

Year	Number of villages and towns		Average business units per center	
	501-2,500	2,501 and more	501-2,500	2,501 and more
1905	192	36	49.2	148.5
1910	215	41	46.1	150.3
1915	221	43	47.2	160.8
1920	221	47	47.9	163.5
1925	237	55	47.1	169.3
1929	238	54	45.9	165.8

Table II shows that the increase in towns of more than 2,500 has been from 36 in 1905 to 54 in 1929 and the average number of business units has been from 148.5 in 1905 to 165.8 in 1929. Along with these changes in number, the volume of business handled by the average unit in these towns has increased rapidly. Unquestionably, the decline in average number of business units in the period 1925-29 primarily represented consolidation into larger units.

On the other hand, the villages from 501 to 2,500 have gained slowly in numbers, chiefly because certain elementary trade centers have crept into this list from the bottom. There has been a slight decrease in average business units per trade center from 49.2 to 45.9. The information seems to suggest that this decline in average number of businesses in these smaller competitive centers has been associated with a stable and even declining smaller average volume of business per unit.

There has been a severe selection and competition going on between these two types of centers since 1905. The increase in good roads and the use of automobiles have enabled the farm families to travel farther to purchase the kinds of goods that tend to be handled especially

in these towns. The superior merchandising methods in some towns, certain advantages in location, and the ability to take advantage of all opportunities have enabled them to grow, particularly in volume of business, more rapidly than others.

It seems rather clear that one of the types of "problem villages" to be found in Minnesota agricultural regions is the competitive village which can not survive as a competitive institution. If it can not advance and improve its business standing and secure the necessary agricultural allegiance, inevitably it must be forced back more and more into the level of the elementary farm trade center. It may cling on for several decades, but as the present population passes, and as the present businesses exhaust themselves, there will be fewer and fewer replacements. This represents a social loss to these villagers; at the same time it may represent a social gain to the trading facilities of agriculture and to the countryside as a whole.

Another problem is that some of these villages that seem destined by favorable location to become major trading centers have not done so because of internal strictures that have handicapped their competition. Chart 8 enables one to locate certain areas where favorably located villages are marking time instead of advancing.

From the standpoint of many smaller competitive centers that inevitably seem to be going backward, their problem is to decline as painlessly as possible. In many ways they can make their life more comfortable and more worth while without the expenditure of great sums of money.<sup>10</sup>

### Changes in the Structure of the Trade Centers

A number of changes have taken place in the internal structure of the trade centers. One of these is an increased complexity of the center. This is to be measured by the increase in number of businesses in the average center, and by the development of newer types of business units. The increase in the number of business units in the average trade center has been due to the great increases in a few favored retail towns or independent centers. These increases make up for the decreases in average business units in some of the less favored and less successful centers. The elementary centers have kept almost the same average number of business units that they had in 1905. The only changes in these centers have been substitutions of some types of business for others.

Newer business units may be represented by the automobile industry and by the development of chain stores of certain types that were not present in 1905. At the earlier date, chain organizations were

<sup>10</sup> For a summary of these methods, see the suggestions by A. J. Veigel in "The small city and town," University of Minnesota Press, 1930.

represented primarily by line elevators and line lumber yards. Today new chain stores and other new types are appearing in some, principally the larger, trade centers. Chain banking, co-operative marketing associations, and numerous specialized retail stores represent new additions.

Hotels have declined in number and have been concentrated in a few of the larger trading centers. Banks grew to a maximum of 1,366 in 1920 and had declined to 1,005 by 1929. The banks have left the smaller communities very rapidly and have concentrated in the larger ones.

General stores have remained constant or declined in numbers and specialized retail stores have grown rapidly. The general store has maintained itself in the smaller elementary centers and the specialized stores have grown rapidly in the larger independent towns.

There has been an increase in complexity of the average business unit. At the same time as the decline of the general store, other business units have added functions to their work. The proportions of businesses which list themselves as having two or three or more major functions have increased and the one-function businesses have decreased. This change has gone on in all types of trade centers. In the smaller centers, diversification of business was necessary to keep trade and to maintain a sufficient volume of business. The competition of the larger centers forced diversification of business units in the smaller centers. In the larger centers, internal competition attempts to eliminate seasonal factors in business, better knowledge of merchandising methods, and the fundamental economic laws of business organization, competition among the larger centers—all these and other reasons tended to bring about greater diversification of the average business unit.

These facts suggest that the nuclei of the agricultural trading communities have become more complex. Not only is there a clear differentiation of functions between types of centers—a difference which formerly existed much less—but within the trading center and within the individual business units themselves, there has come an increasing complexity of organization.

### **Changes in the Relationships Between the Farm and the Trade Center**

The farm family has changed in its relationships to the trade center. The principal changes may be outlined as follows: (1) The volume and the number of contacts between the individual farm and the trade center have increased. (2) The average time between trips to the trade center has decreased.

The causes have been numerous. Communication facilities have increased in volume and rapidity. Self-sufficing agriculture has de-

creased on most farms. Factory-made goods are being substituted for home-made goods. Recreation, particularly commercialized recreation, has centered more in the trade center. The habits of farm families as to recreation are changing. Shows, theaters, things of the village or trade center are being substituted for the one-time local community gatherings. Schools and churches are being consolidated in the trade centers. In Minnesota, in particular, the number of deliveries of farm products to the trade center has increased. Farms which were once producing yearly crops are now producing butterfat and poultry. Farms which once produced dairy products from sour cream are now delivering sweet cream and whole milk to the trade center. There are numerous other causes that need not be repeated.

The number of centers having contact with the average farm has increased. Farmers that once gave all their business to one center now go to several. The causes of this need not be restated.

Within the trade center, the number of business units having contact with the farm family has increased. Where once the family did business with one general store or with one store handling products in each line, now the average family does business with several. The farm family that once purchased only a few lines of commercial products now purchases several lines.

A first cause has been the growth in complexity of the trade center itself. This has been a mutual cause and effect. The village or trade center could not become complex unless the farm trading facilities became more complex at the same time.

A second cause has been the growth in the luxuriousness of the material standards of living on the farms. Altho students may differ in opinion as to the relative status of the farm real income now in comparison with that of city people or of other occupational classes, all seem to agree that compared with the past, the luxury of the farmers' material standard of living has increased.

Previous studies of farm family budgets show that the increase in proportions of the family budget, or of the total amounts spent for luxuries, are associated with increased randomness and complexity of trading behavior.<sup>11</sup> In other words, a man will not "shop" as much to buy a sack of sugar or a pair of overalls as he will to buy an automobile, a camera, a dress hat, or any item of luxury. The growth in luxuriousness of farm standards of living has been associated with a complexity of the farmer's trading behavior.

<sup>11</sup> Proofs of this and a summary of the important existing literature are given in Carle C. Zimmerman, "The family budget as a tool for sociological analysis," *The American Journal of Sociology*, May, 1928, pp. 901-11. The term "luxury" is used above in the technical sense as applying generally to economic goods of elastic demand. See also Carle C. Zimmerman, "Standards of living and the American farm program," *Rural American*, May, 1930.

A third important factor has been the decline in the unity of the farm family. Once the husband and wife decided together what to purchase for the whole family and either or both together did all of the buying. Now the individual members do more of the purchasing and make their own decisions to a greater extent than formerly. Where once the family went to town as a unit, now more often the individuals go separately.

The declining unity of the farm family is shown by the increase in the farm family divorce rate and the decreasing control of the children by their parents, both in earlier and in later years. The increasing departmentalization of the farm papers, which now offer separate columns and suggestions concerning the consumption habits of different members of the family also shows this. Further there is the increasing individualization of America, the increase in numbers and circulation of books and pamphlets attacking the integrity of the family. Suicide and mental disease, which tend to increase with the decreasing power and cohesion of social units, such as the family, are on the increase in the rural districts.

Altho all of these factors of individualization have not permeated into the farm families and the agricultural districts to the same extent as they have debauched the social life of the cities, yet all evidence points to the fact that they have made some inroads.

To some extent the increase in the rôle played by the individual has been a net social gain; but like all other social practices it has its limitations. Farm families seem to be approaching these limitations. Recent tendencies in city life seem to indicate that the non-farming people have passed the limits of desirable individualization.<sup>12</sup>

### Changes in the Structure and Organization of the Total Trading Community

Following this analysis of the various aspects of the trade center, the structural changes in the whole trading community engage our attention. In order to do this carefully, Tables X through XV are introduced in the Appendix. These tables give a structural analysis of the trading organizations in southern Minnesota. They cover eight counties centered around Mankato. This is an older settled area of the state and any changes there are free from the influences of colonization, as in northern Minnesota.

<sup>12</sup> See the proofs in P. Sorokin, C. J. Galpin, and C. C. Zimmerman, "Source Books in Rural Sociology," University of Minnesota Press, 1930 and 1931. The Minnesota Agricultural Experiment Station has been one of the agencies contributing to the development of these source books. See also Emile Durkheim, "De la division du travail social" (2nd ed.), Paris, 1902; L. W. Weber, "Lässt sich eine zunahme der geisteskranken feststellen?" *Archiv für Rassen-und Gesellschaften-Biologie*, vol. 7, Berlin, 1910, pp. 704-21; Ernst Rüdin, "Über den zusammenhang zwischen Geisteskrankheit und Kultur," *ibid.*, pp. 722-48.

The important farm retail towns in the eight counties include New Ulm, which is between 5,000 and 10,000 population, and Mankato, which is more than 10,000. In all other aspects, this area approximates

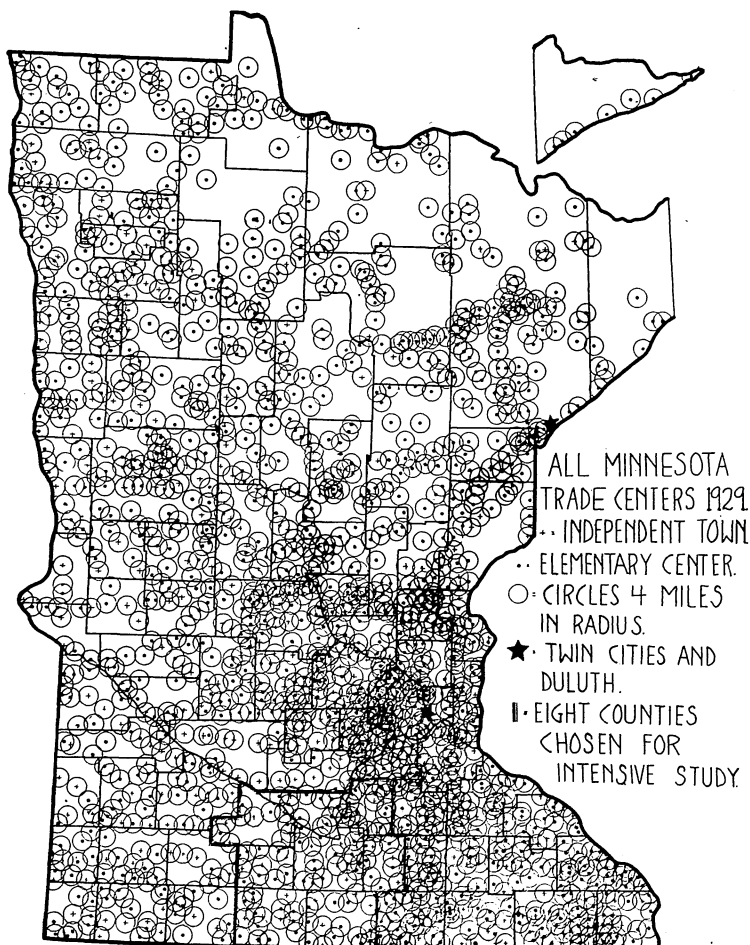


Chart 7. Location of All 1,564 Trading Centers of Minnesota in 1929

The independent centers are marked by a cross and the pure elementary centers by a dot. The circles are 4 miles in radius. The map attempts to show that the agricultural population of the state, even in 1929, are within approximately 4 miles or less of one or more trading centers. Further, the more highly developed areas, which are somewhat typical of the closely populated areas of the older settled sections of the United States, show that a 2-mile radius circle would encompass most of the territory. The inclosed area in the southern part of the state is the 8-county section chosen for intensive study.

the situation in the whole state, except that the changes came somewhat earlier and are exempt from the colonizing influences.

Charts 7, 8, and 9 are introduced in the following pages. Chart 7 shows all 1,564 trading centers in Minnesota, 1929, and shows the area of the state which is within circles with a radius of 4 miles around



these centers. It demonstrates clearly that areas not within 4 miles of one or more trading centers of one kind or another are limited and insignificant. They are either unsettled, parks, swamps, quarries, unused lands, or lakes, or located midway between important parallel railways.

Chart 8 shows the 376 independent trade centers in Minnesota that are or have been in the class of "competitive centers" either in

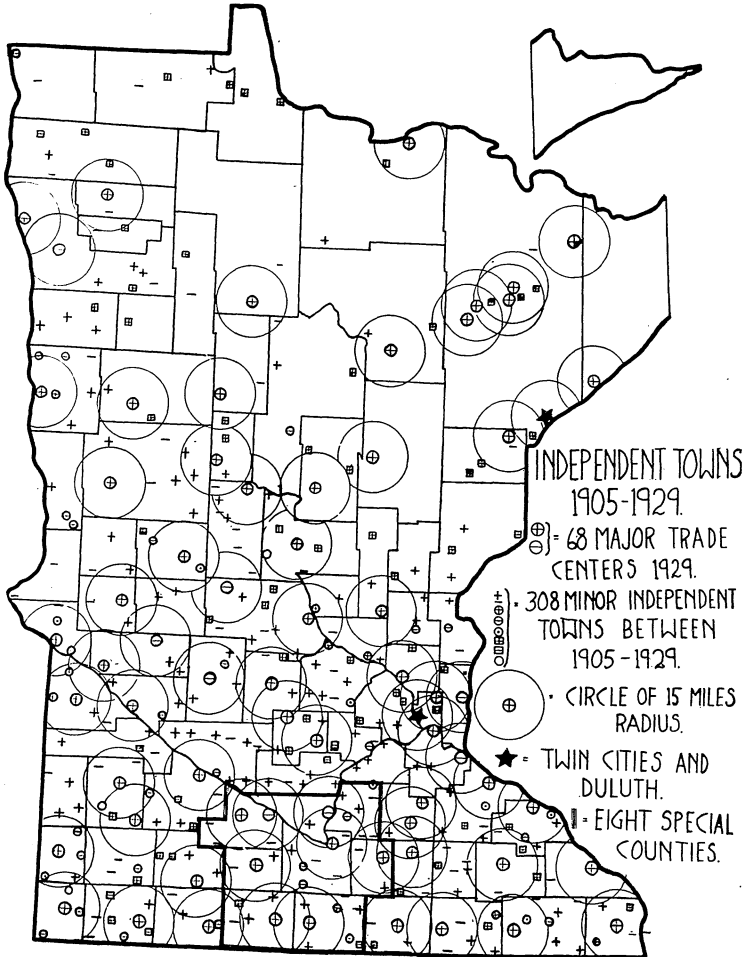


Chart 8. Location of All 376 Independent Centers in Minnesota Between 1905 and 1929

The circles of 15-mile radii are drawn around the 68 major trade centers with more than 75 business units in 1929. The different markings within the circles and squares apply to growth or decline in number of business units since 1905. A plus means growth, a minus means decline and a dot or a blank means no change. Of the 68 major trade centers, 61 have grown and 7 have declined. Of the 308 smaller independent towns, 186 have grown since 1905, 110 have declined, and 12 have stayed constant. A number increased in the earlier period and have declined in later years but are still above 1905. The map shows that most of the farms of Minnesota are within an hour's distance of one or more of these large centers. The inclosed area in the lower section of the state represents the 8 counties chosen for intensive study.

1929 or between 1905 and 1929. Around the 68 major centers, which in 1929 had more than 75 commercial credit ratings, circles with radii of 15 miles are drawn. These circles around these towns demonstrate clearly that the major portion of the settled areas of the state are within an easy hour's trading distance of one or more of these important centers. Those not so located are primarily in the undeveloped sections of the state or in the Red River Valley, where the average size of farms runs into the hundreds of acres.

Charts 7 and 8 also show the eight counties that were chosen for a more careful study. These are inclosed in special lines in the center of the bottom of the charts. Chart 9 shows an enlarged picture of these eight counties. The situation as it appears in Chart 9 is the same as one would see if a magnifying glass were applied to the eight counties set apart in Chart 7.

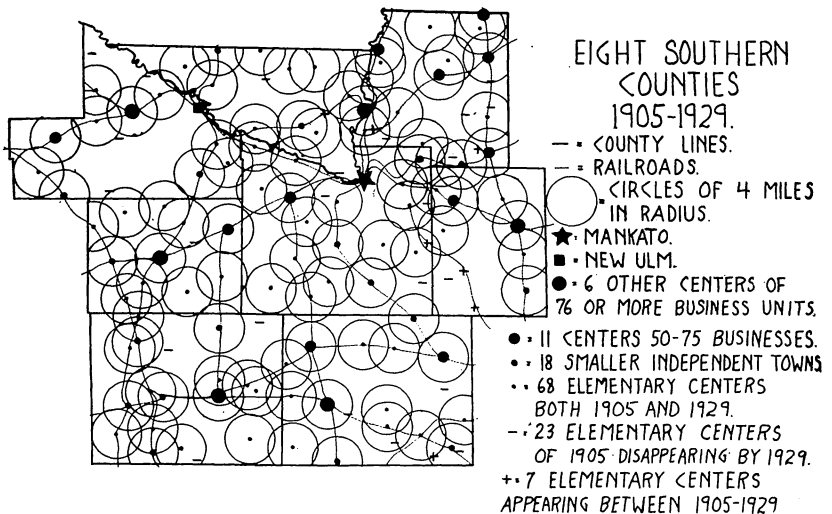


Chart 9. An Enlarged View of the Eight Counties Centering Around Mankato, Minnesota

The circles with radii of 4 miles are drawn about all trading centers which were located there in 1905 as well as 1929. The minuses show elementary centers which have disappeared since 1905 and the pluses those which have appeared. From the standpoint of elementary trade centers, the Mankato area seems not to have changed its basic organization materially since 1905. Neither has the development of Mankato caused the surrounding elementary centers to disappear.

These 8 counties in southern Minnesota are around the important trade center of Mankato. The situation pictured here shows the most outstanding development of the larger trading center in a pure agricultural area of Minnesota. Changes in trading structure within this area are typical for the older settled areas of the northwest, and, to a considerable extent, they enable the prediction of future changes in the later developed areas of the northwest generally. The last statement applies particularly to the important agricultural areas.

What important conclusions may one reach from a study of these tables and charts? First, the towns and trade centers have shown different rates of growth. Many have started that have now disappeared; others have grown and relapsed; still others have reached a certain size and remained constant; and a few have become major centers of trade. In Galpin's sense of the word, a few have become "rurban towns."<sup>13</sup>

Now the question arises as to whether this "rurban" growth has been at the expense of the disappearance of smaller communities or as a result of other changes. This study suggests that the growth of the major trade center has not been at the expense of the disappearance of the smaller center, primarily, but rather as a result of changes in the standards of living of the farm family and at the cost of the simplicity of its community.

Although it is true that the smaller independent centers have declined somewhat with the rapid growth of the important trade centers, nevertheless this decline has been largely because they had expanded to a greater extent than was demanded by the elementary services which they are capable of supplying. These smaller independent centers aimed to become *the* important centers of their localities; they were not able to compete successfully. The growth of the major trading centers has not caused the disappearance of the smaller centers so much as it has forced those with unfavorable locations and those unable to take advantage of earlier opportunities to assume a simpler rôle—that of the purely elementary center. Where the growth of the "favored" towns has been most prominent, there is to be found an elementary center every two to four miles. That is as near as the trade centers which American agriculture afforded in the days of the oxen haul. It is as near as the villages of any except the most densely populated countries in the times when road transportation was unused.<sup>14</sup>

<sup>13</sup> See C. J. Galpin's researches as summarized in his two works, "Rural Life," and "Rural Social Problems," Century Publishing Co., 1918.

<sup>14</sup> See the numerous early references to works upon the forms of village social organization. At times artificial systems of social organization have been created in densely populated countries and these were nearer to each other than the elementary centers in the more densely populated sections of Minnesota. Such happened in the Japan of the Tokugawa Emperors after 1600 A.D. and in China many times in its long history. Of particular interest were the Chinese "character" villages of early times where each eight families were grouped about a common pasture and the Japanese "House-Father" organizations where nine house-fathers were subjected to the government of the tenth house-father. Brunner finds that the Korean village equals in total extent the incorporated area of an American village of 1,000 persons. However, the Korean farm ranges from 1 to 4 acres. It is evident that 100 American farms would make a much larger area. The market town of Korea also furnishes an area somewhat smaller than those of our market or "rurban" towns. See "Rural Korea" in vol. 6 of the International Missionary Council, 1928. Where size of farm is eliminated as a factor, the elementary villages (including independent towns which serve elementary needs also) of Minnesota agriculture seem just as numerous under the present system of social organization as under any previous system.

The above discussion makes it clear that the growth of the present system of rural organization of the trading centers in Minnesota has been because of changes in the farm standard of living and changes in the simplicity of the earlier community or trade center organization. Back of these reasons are certain underlying changes in transportation and in the agricultural economy. The good roads, the automobile, and commercialized or trading system in agriculture, the size of the farm income, and the spending habits of the people made the complex system of trade centers and the luxurious centers possible.

The growth in complexity of the farm trading organization has meant that the typical family is trading at numerous shops in numerous centers, as discussed previously in this study. The farmer has entered the realm of choosing and discarding, and of mass buying suggestions the same as the urban population. Salesmen and agents waylay him at every turn as they do the city person.

The economic, social, religious, educational, political, and other phases of the life of the farmer are no longer about a common center as is often pictured in the heyday of the simple village organization of the past.

Nor does the farm community, like the city community, show any tendencies to become more centralized in the future than it is at present. If anything, the immediate trend in the next generation or so appears in the direction of greater confusion and greater complexity of the total rural social organization. But the farmer is retaining an elementary geographic center near his home. To a much greater extent than among the non-farm populations, these elementary centers seem to be able to centralize the organization of his moral and religious life. Insofar as it is desirable to preserve some centralization of the moral, social, and religious personalities of the farm families, it will probably have to be done either within the home or in organizations centered about the purely elementary trading centers.

Farm families who wish to preserve this centralization of the non-economic local forms of life may use the elementary centers for such a purpose. Those who wish to see farm life approach the pure materialism of the cities may drive on. The same suggestions apply to agricultural leaders. Some are insistent that the social forms of organization should follow the trading organization into the larger communities. But what does this statement mean when we analyze it carefully?

As explained above, the trading relationships have not all gone into any certain larger town. Only a part, the purchase of luxurious goods, has changed materially. The part that has changed, has dispersed itself into several larger communities and into the hands of various types of merchants. Some of it has even come into the large metropolitan

centers like Minneapolis and St. Paul. Further, the purchasing of luxurious or "shopping" goods has entered very largely into the realm of personal choice. Allegiances to merchants and even to towns are fluctuating according to choice and according to the prices of goods.

Can a non-economic form of social organization change and fluctuate to the same extent as the purchasing arrangements for luxurious or shopping goods? Altho there is much popular belief to the contrary, this study suggests a negative answer.

Contrary to the theories of historical materialism as pronounced by the Marxist school, man seems to need a certain centralization and stability to his social life which is not to be found in any attempts to co-ordinate the moral, religious, and non-economic functions of life upon the centers of purchase of shopping goods.<sup>15</sup> In spite of many popular contrary theories of social organization given as dogmas of the "cultural school," even studies of our city civilizations show that the moral and religious life can not be organized most efficiently upon the same geographic basis as the trading relations for shopping goods. Careful studies by the Institute for Social and Religious Research show that the down-town church is dying. At the same time the down-town department stores and shopping districts are growing apace.<sup>16</sup>

The millions who pour into the "loops" on working days to fill the positions and to purchase at the stores are replaced by a few dozens of watchmen and necessary employees on Sunday. The neighborhood church is growing in the city, if one may speak of any growth of religious life in the city.

This but adds weight to the conclusion that for the preservation of many forms of rural social life they will have to be centralized about the elementary centers in the country. Such a form of organization is necessary if the strength of these forms of life is to be preserved.

Additional proofs of this idea are to be found in the study of villages which have disappeared and new ones which have appeared in Minnesota since 1905.

<sup>15</sup> The Marxian theory of "cultural change" is that changes in industrial methods force changes in economic organization and these in turn force similar changes in our social life and in our ideas. The modern versions of "cultural change" break this down into the simple statement that changes in our "material culture" force similar changes in our "non-material" or "adaptive culture." The ideas presented here are that certain constant factors in human nature, such as the need for a family or a wholesome philosophy of life makes it unnecessary for the "non-material culture" to change with the material. Men can still farm with tractors even if they do believe in the divinity of the family or in a personal God. They can still be happy even if they attend a small rural church in the elementary centers rather than a larger and more ornate church in a highly developed center. As a matter of fact, other than commercialized recreation, the social life seems to break up when it tends to follow the trading into the larger center. If rural people wish to preserve their contemporary rural social life, it will have to be done largely in the elementary centers.

<sup>16</sup> See H. Paul Douglass, "The Springfield church survey," 1925; "The St. Louis church survey," 1924. See also the other works by Douglass, Brunner, Fry, Morse, and the Institute for Social and Religious Research.

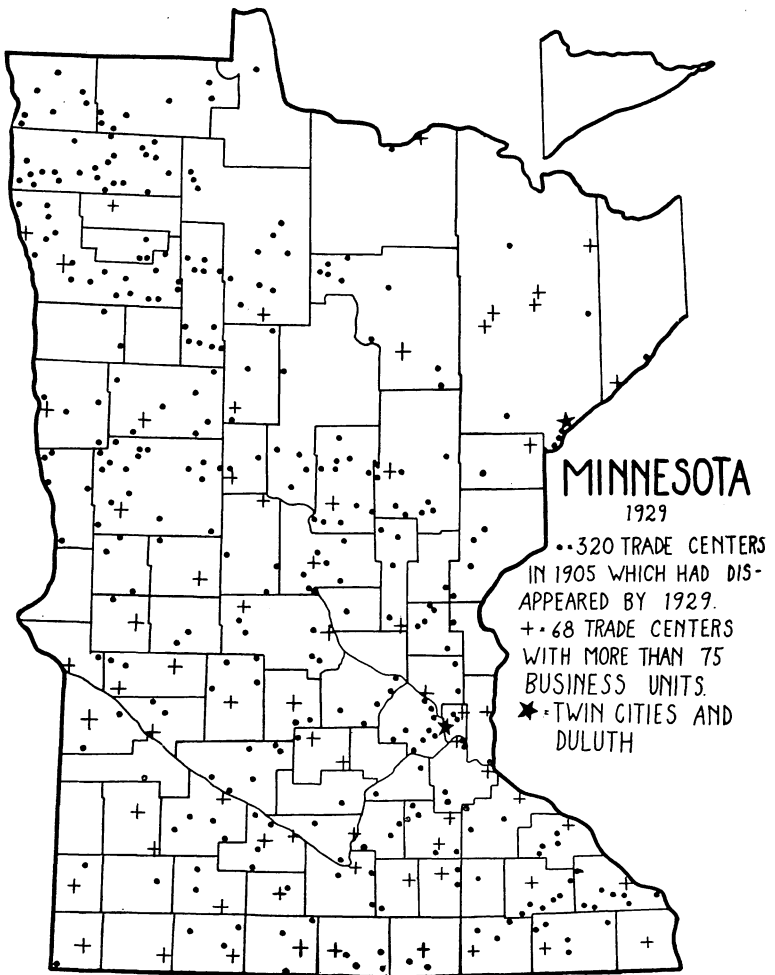


Chart 10. Location of the 320 Minnesota Trade Centers That Were Listed in 1905 and Which Had Disappeared by 1929; Also the 68 Major Trade Centers of More Than 75 Businesses in 1929

The disappearing centers seem to bear no relation to the 68 major trade centers. In the northwest corner of the state the disappearing centers are very numerous yet there is no great development of the major trade centers there as in southern Minnesota. The next important area of disappearance is around the Twin Cities. By comparison with the following map, one may see that this Twin Cities area is also one of the places where the most villages have appeared. This map suggests that disappearing centers are largely functions of local life and not primarily a reaction to the development of the major trade center.

### Trade Center Appearances and Disappearances, 1905-29

Between the years of 1905 and 1929, 320 trade centers have completely disappeared and 356 new ones have appeared. These may be spoken of as births and deaths among trade centers. A careful study of these appearances and disappearances reinforces some of the previ-

ous conclusions concerning the stability of certain forms of local life, even in a dynamic and urbanizing rural area. These appearing and disappearing trade centers are shown in Charts 10 and 11.

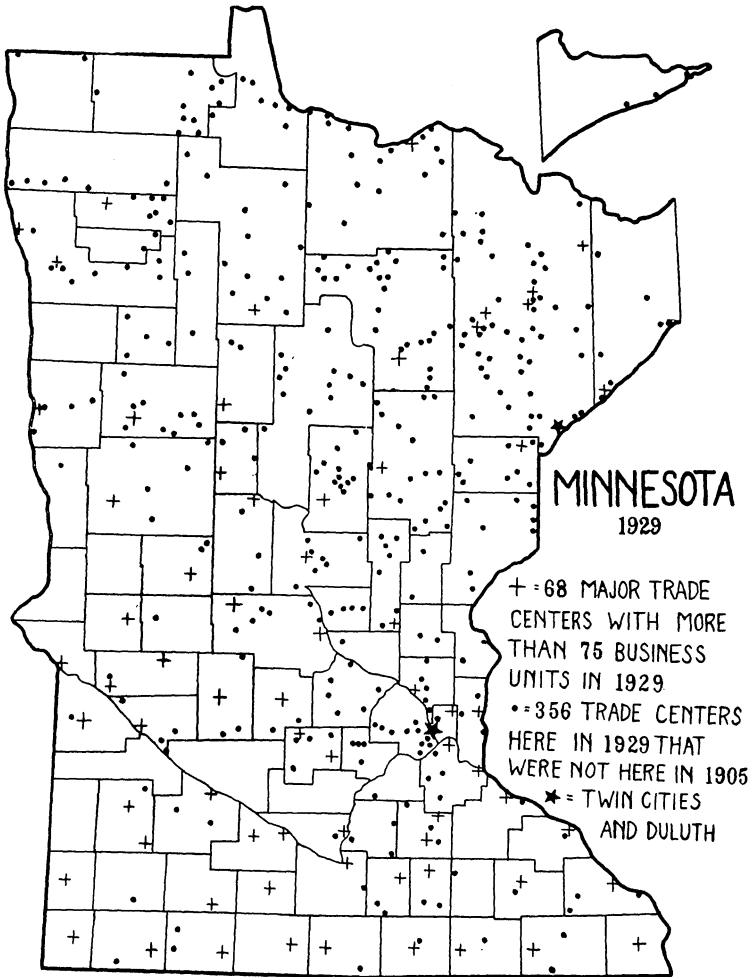


Chart 11. Location of 356 Trade Centers Which Were Here in 1929 But Were Not Here in 1905; Also the Location of the 68 Major Trade Centers of More Than 75 Businesses in 1929

The chief area of appearance is the northwest where there has been considerable settlement since 1905. The next area is around the Twin Cities where local life is most fluctuating. However, centers have appeared all over the state, some of them clustered about the major trading centers. The major trading centers are shown by the crosses on the map.

Disappearing trade centers are of two types—those that amalgamated with cities, such as West Duluth with Duluth, and those that completely lost all trading functions. This study is interested particularly in those that completely lost all trading functions.

Appearing trade centers are those that have developed to meet the needs of agriculture and of local community life and those that have developed as the population bases of certain new industries and needs. Illustrations of those that developed to meet the needs of certain industries are the iron range towns of the north, many of which have appeared from nothing and have grown to be large centers since 1905. This study is interested particularly in those centers that have appeared to meet the needs of agriculture.

Chart 10 shows the 320 Minnesota trade centers that were to be found in 1905 and that had disappeared by 1929. The chart also shows the 68 major trade centers with more than 75 business units in 1929. This chart is to be studied with Chart 11, which gives the 356 trade centers located in Minnesota in 1929 that were not here in 1905.

Charts 10 and 11 show that appearing and disappearing centers have certain close relationships to the population movements and settlements of the state rather than to the development of these important trade centers. The older settled agricultural sections of the state have received few new trade centers. Newly settled sections of the state—the lands to which the population has been infiltrating, the areas of population growth around the Twin Cities, the iron range in the north-east—these are the places where most of the new trade centers have appeared. At the same time these areas have been those of the greatest loss in villages—particularly those areas just back of the edge of primary settlement.

It is evident that claims of substantial correlation between the appearance and growth of the larger trading center and the disappearance of the primary center are more or less unfounded. Altho there are minor relationships, the main change has been a division of labor between the two types of centers rather than the complete obliteration of the smaller in favor of the larger.

To go further into the data for appearing and disappearing trade centers, the following table is necessary. It gives the number that have appeared and disappeared for each 4- or 5-year period since 1905.

Table III shows that appearances were greater than disappearances in the earlier years, but the situation was reversed after 1920. The earlier years were those of closer settlement in the northern part of Minnesota and of stability in the southern part. The state seems now to be approaching a stability in all parts except the metropolitan area around the Twin Cities, where changes in population and settlement are rapid. It may be predicted that the chief changes in the near future will be competitive changes among the independent towns and mobility in the metropolitan area.

Again it seems rather clear that the chief influences in the appearance and disappearance of trade centers is the mobility of the open country population rather than the growth of the major trading towns.



TABLE III  
 APPEARING AND DISAPPEARING VILLAGES BY PERIODS SINCE 1905

	1905-10	1910-15	1915-20	1920-25	1925-29	1905-29
Number that appeared .....	195	166	86	78	51	576*
Number that disappeared .....	151	110	114	86	86	547*
Total left at end of period.....	1,579	1,635	1,607	1,599	1,564	1,564

\* These numbers are greater than the 320 disappearing villages and 356 appearing as given in Charts 10 and 11. The reason many villages reach the brink between total disappearance and existence is that they seem to fluctuate. New merchants constantly purchase the places of business and attempt unsuccessfully for a year or so to secure business. Then the place is closed a while until a new man with sufficient capital to start in appears on the horizon.

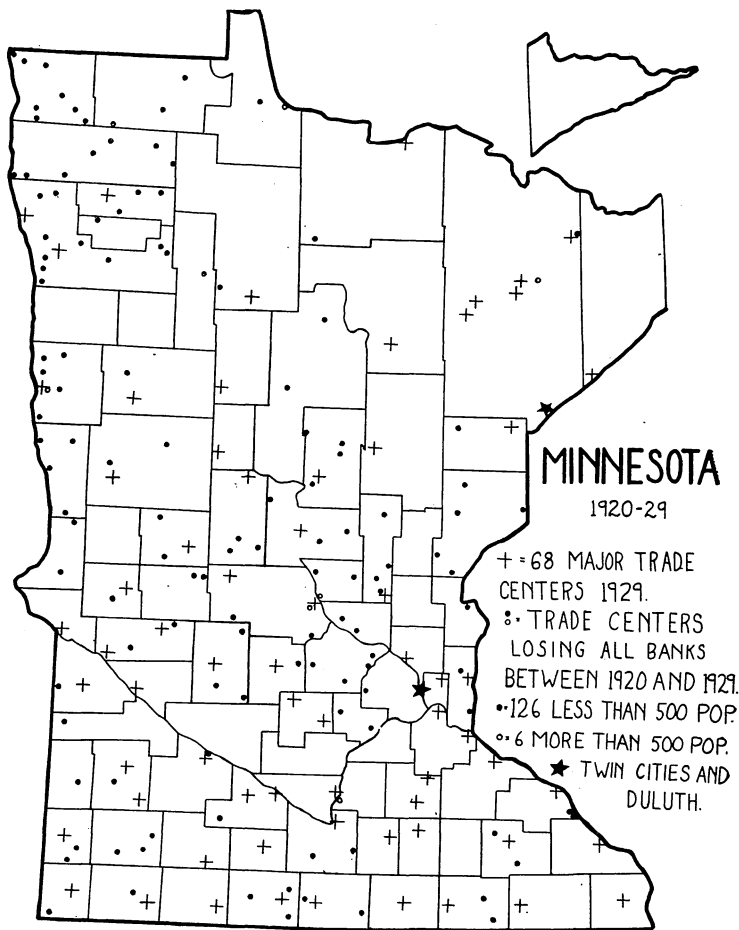


Chart 12. Location of 132 Minnesota Communities That Lost All Banking Facilities Between 1920 and 1929; Also the 68 Major Trading Centers

The need for a reorganization of banking laws which will permit the banks of the major centers to establish branches in these smaller centers is evident from a study of the map. Whole counties have no major trading centers and are rapidly losing their banks from the minor trading centers. Local banking accommodations of some sort seem necessary to any organized village life.

### The Migration of Banking Facilities Since 1920

The division of labor between the major agricultural towns and the elementary centers still leaves a need for the elementary center but takes from it an important part of its commercial support.

This may be illustrated by a study of the towns and trade centers which have lost all banking facilities since 1920. The banks have moved into the larger centers. This has not been a gradual social change, but came about in the rapid failures and consolidations of the small banks following the depression of 1920. A few of these banks which have disappeared were located in the suburbs of the larger trading centers, as may be seen from a study of Chart 12. However, the great majority were located in the smaller independent centers which had attempted to grow into major trading towns.

The majority of these centers that have lost all banking facilities will never again have banks unless some system may be developed to make them receiving and paying offices subsidiary to the banking organizations in the major trading towns. In that case they will not be materially different in organization from the subsidiary cream-receiving stations for the creameries located in the major trading centers. Such a movement has much in its favor. State and national banking commissioners and examiners are advocating certain legal changes which will enable this to be brought about.<sup>17</sup>

### AN EXAMINATION OF THE CAUSES OF THESE CHANGES IN SOCIAL ORGANIZATION

A study is not complete with a recital of facts. Why did these changes come about? Only after a causal explanation can one predict the future or understand the social processes of the present.

Three major causes are generally cited as being responsible for the present conditions of social organization of the trade center. They are: (1) the development of transportation and communication; (2) the agricultural crisis since 1920; and (3) newer developments of distribution as illustrated particularly by the chain store. The following analysis takes these up in reverse order, beginning with the chain store.

#### The Chain Store as a Causal Factor

What is meant by the term "chain store"? A clear idea is necessary since many chain stores think of themselves as independent or unit stores and many others which have very few chain factors advertise themselves as chains. A chain organization obviously is a series of

<sup>17</sup> See particularly the statements of A. J. Veigel, Minnesota state commissioner of banking, in "The small city and town," University of Minnesota Press, 1930.

two or more units upon the same level and in the same business and which are related to each other as follows:

1. There is a tendency for inter-ownership and inter-control.
2. The inter-control tends to lead to standardization of business methods from unit to unit.
3. Inter-control and standardization of business methods enables the individual units to concentrate more closely about the average efficiency of the whole system than is the case of the unit stores.
4. These gains in higher average efficiency, if there be such, along with others supposed to accrue to greater bargaining power, may be used as a competitive weapon to secure more business.

Only such an involved definition of a chain organization enables a clear differentiation between chain and non-chain organizations.<sup>18</sup> This shows clearly that the chain organization consists of a system of business practices that have been spread rather widely through the inter-ownership and inter-management of unit stores. These business practices have been known for some time; further, they can and have spread through other agencies than the inter-ownership and inter-management of unit stores or organizations.

The above definition permits the use of the most constant factor in chain organizations (inter-ownership of units on the same approximate level) and use it to gather information as to the existence of chain organizations in Minnesota since 1905. This measure gives the following numbers of chain organizations in rural Minnesota and in the eight special counties since 1905.

TABLE IV  
CHAIN ORGANIZATIONS IN RURAL MINNESOTA AND IN THE EIGHT SPECIAL COUNTIES  
1905-29\*

Year	Total chain units in state		Total chain units in eight counties of southern Minnesota	
	Gross number	Per cent of all business units	Gross number	Per cent of all business units
1905	931	3.9	121	4.2
1910	1038	4.1	140	5.0
1915	1084	4.0	133	4.6
1920	1273	4.4	142	4.7
1925	1388	4.5	146	4.6
1929	1545	5.2	168	5.3

\* Excluding the "mother stores" which were not classified as chains. It also excludes "group" banks.

Table IV indicates that chain organizations have been present in the state since before the beginning of the period under consideration. Since 1905 they have shown a consistent growth, with a special spurt between 1925 and 1929. The two enormous holding company banks

<sup>18</sup> See "The consumer and changes in distribution of consumer goods" (with special reference to the chain store), Parts I and II, University of Minnesota School of Business Administration, 1930.

were not classified as chains, altho factually there are few economic differences between them and chain organizations.

The list underestimates the number of chain organizations in both 1905 and 1929. One of the chief reasons for this is that it is very difficult to tell whether an organization is a chain or not. But the assertion that the chain organizations have increased in number and in proportion of the total volume of business organizations since 1905 appears well founded.

It is also possible to indicate that in 1905 the primary forms of the chain organization were line elevators, line lumber yards, or general stores with two or three branches about the state. By 1929, the more specialized retail stores were growing rapidly. The chain has entered the banking and gasoline or oil distributing industries. Further, the chain co-operative farm processing factories, such as creameries, that are linked together into state and regional organizations, have appeared.

The above figures establish a "correlation" between the changes in social organization and the chain organizations. But does this correlation have a causal significance; did the chain cause the changes in social organization or was the chain a result of these changes? The answer suggested here is that the chain may have been at times the cause and at other times the effect. The primary factor in merchandising has been certain improvements in business methods in which the chain was only one form.

Rural communities had numerous chain organizations in 1905. The chain trading companies, the line elevators, and lumber yards played an important part in the settlement and in the creation of the Northwest. As a result, any great revolution on account of the increasing influx of chain stores need not be expected. As shown by careful studies, the business methods they use soon become the property of the unit stores and competition equalizes itself again. A similar equalizing of competition has occurred in the urban centers and in Europe where the chain has established itself to a greater extent than in the rural Northwest.<sup>19</sup> The chain may be eliminated as an important causal factor in the social reorganization of the Minnesota trade center since 1905.

#### **Newer Methods of Distribution As Causal Factors**

In addition to the chain store as a development in merchandising methods, numerous other changes have come about during this period. Advertising, price cutting to secure greater volume, use of "leaders" sold at near cost, sales days, distribution through the rural mail carriers, quicker turnover with lower markups—all these and numerous other "business getters" have developed in volume and intensity of

<sup>19</sup> See "The consumer and changes in distribution of consumer goods," referred to above for proofs of these statements.

use during this period. What rôle may be assigned to these as factors in the reorganization of the trade area?

This study shows that the changes in communication increased the possible volume and mass of contact between the farms and the trade centers. Families that once lived in the area of one or two centers were thrown into the area of several dozens of centers. An increase in the possibilities of travel to the trade center from 4 to 15 miles increased the area of the trade community from 50 square miles to 706 square miles. At an average of 4 farms per square mile, which is about that of the eight counties included in our special study of southern Minnesota, this means an increase from 200 farms per trade center to 2,824 farms per trade center. If the average family only goes 15 miles to a major trade center, instead of being in the radius of only one trade center, it now has 14 trade centers that it can join. As 15 miles is not the limit of travel for purchasing shopping goods, several dozens of other trade centers are within its reach.<sup>20</sup>

In this welter of competition which was brought about by transportation, the development of modern retailing performed two selective functions. It was a partial factor in convincing the farm families that some of their trading should be done at certain centers and it helped to select the favorable centers from the large number of possible major trading centers.

Transportation made the present system of social organization possible. Merchandising and its satellites, such as advertising, services offered, prices offered, performed a good share of the active functions in the selection and development of the major trading centers.

This points out the potential advantage of many favorably situated towns of the present that have not yet developed into major trading centers. A study of Chart 8 shows the areas where proper merchandising competition has not yet settled the major trading center of the present. Further, it shows a number of towns that have reached the position of major trading centers, but that are now retrogressing.

Business comes voluntarily to an elementary center. The competitive center must merchandise for its business. The problem of merchandising itself is much more involved than "trade in your home town" campaigns.

### The Depression of 1920

It is frequently thought that the depression following 1920 has been a major factor in the present hard times in the smaller competitive agricultural trade centers. In the light of this study what may be said about this?

<sup>20</sup> According to Canon's study in New York State, the average family went 17 miles to purchase women's coats. This means that about half of the families went more than 17 miles. See Cornell Bulletin 472, 1928.

The tables in the Appendix suggest that the underlying changes in the rural social structure that have taken place since 1920 were already under way before 1920. Even before 1915, in southern Minnesota, the underlying changes had proceeded to some length. In northern Minnesota, the changes were well under way by 1920.

The good agricultural years of the war held back the changes. When times are good, people do not pay particular attention to small economies. Then came the post-war depression. In the short space of a few years, the agricultural districts caught up with the gradual trend toward complex social organization and went beyond normal progress. Transportation was primarily responsible for the reorganization of rural life. The war delayed the changes. The post-war depression hastened them unduly.

Businesses that eventually would have found their way into the major trading centers by obsolescence and consolidation were destroyed by the tremendousness of the crash. Transportation was the background of the change. The post-war crisis was responsible for the heartlessness and much of the destruction caused by the change.

### THE IMPLICATIONS OF THIS STUDY

This study seems to indicate that the transformation in trading relationships and the development of the agricultural retail trading area since the beginning of the century has been more of a complex change than is ordinarily pictured. The outstanding characteristics that may be observed in this change may be given as follows:

1. The development of the extensive trade centers or major farm retail trading towns was an addition or an extension of a shopping goods trading area upon a larger number of elementary farm trade centers. It was not a substitution of one trade area for another.

2. The total process gave a division of labor between retail trading communities and greatly increased the complexity of rural social organization. The elementary trade center still tends to keep much of its centralization of interests and its simplicity; but the competitive shopping areas are confused and fluctuating. Further, the total retail trading organization of the individual farm is much more complex and decentralized than it was before this development of "market basket" agriculture.

3. The farm family has yielded to this confusion of social contacts brought to bear upon it and is losing some of its hold upon the individual members. The elementary agricultural trading centers added to the strength of the farm family as a social organism; the extensive trading centers tend to break down the cohesion between members of the family and between families in the same area. The same differences seem to appear between the trading relations of the elementary center

and the major extensive centers as appears generally between the retailing organization of the country and the city.

4. This development of contemporary retail trading relations in the country districts came about primarily because of two factors—changes in transportation and changes in the material standards of living of the farm families. These two processes went on together. Which was *cause* and which was *effect* is not known. “Merchandising” was the foil that guided the change. The fact that families could move farther and had the money and the desire to purchase numerous types of shopping goods were the basic causes.

5. The changes in the trading relations of agriculture were associated with two major changes in the farm standards of living. The first of these was an increase in the luxuriousness of the material standards of living. Despite the popular impressions regarding farm standards of material living in America, it is unquestionably true that never in the history of agriculture has there been a group of people upon the soil who had as many “things” to consume as the American farmer of the present. Never has the American farmer spent so large a part of his family budget for other than the basic satisfactions of food, shelter, and necessary clothing as now. The large trading center could not live without this type of a standard of living. Furthermore, the larger retail center contributes to the development of such a standard of living.<sup>21</sup>

However, the second change has arisen simultaneously with the first. The non-material phases of the farm standards of living are now tending to stay constant or decline with the rapid improvements in material standards. In other words, the standard of living measured in terms of material things tends in time to reach a saturation point beyond which it can not expand without pushing backward the non-material or cultural factors. This can be measured objectively by changes in the birth rate, the death rate, rates for certain types of diseases, particularly the mental diseases, by the strength of the cohesion of the family, by the rigidity of allegiance to established forms of religion, by changes in the rigidity of the moral beliefs, and by the supplanting of commercialized recreation for voluntary and local forms.

As the farm family comes more closely into contact with the larger trading centers, and as its attention becomes more fixed upon the satisfaction of certain desires which the large centers primarily cater to, there are notable tendencies for the farm family reproduction rate to decline, for an increase in worry and mental diseases, for decreases

<sup>21</sup> For proof of this, study the distribution and types of trade centers in non-American agricultural countries or in the states with lower material standards of living than Minnesota. Preliminary data from a study by N. L. Whetten for the Canadian Pioneer Belt Committee, shows that Saskatchewan, with more than 1,000 trade centers in 1930, had only 10 centers with more than 75 business units, including even the cities of Regina, Moose Jaw, and Saskatoon. Minnesota, omitting Minneapolis, St. Paul, Duluth, and Fargo across the line in North Dakota, had 68 with more than 75 business units.

in cohesion of the family unit, and a decline in the popularity of the once strongly established forms of religion and moral beliefs. Commercialized recreation rapidly supplants former community affairs. "Rural organizers" of dramatics and of leisure-time activities are needed more and more even with the commercialized amusements. And there is even some evidence to show that the death rate, particularly for persons of middle age, tends to increase and the expectancy of life from the adult age on tends to decline. The suicide rate increases. The vital and psychological factors that hold a man to life tend to weaken.<sup>22</sup>

All these changes go on unnoticed largely because few forms of agriculture have proved as debilitating to the cultural aspects of standards of living as the contemporary urban life. And the attention of people seems directed to the city. But when the city begins to feel itself wearing out, its attention is turned back to the country.

When America was sure that she would have more than 200 millions of population by the latter part of the twentieth century, then no one thought of the cultural advantages of agriculture in our larger national life. Students of population talked about the "menace of the farm family" and about the need for spread of birth control measures in agriculture.

But now the American urban populations are not replacing themselves. Now that our population shows a likelihood of stopping its increase in the next few decades, the farm cultural standards of living have become a national problem for those who favor a growing population. The increasing development of transient philosophies and irreligion in place of the historical American religions has turned the eyes of the religious leaders back to the country. Those who favor the other development look to the city.<sup>23</sup>

<sup>22</sup> See especially a forthcoming study by L. I. Dublin and A. J. Lotka in *Metron*, 1930. Prepublication knowledge of this study was furnished through the courtesy of Professor Corrado Gini, the editor. See the data also in "Population" by C. Gini, S. Nasu, O. E. Baker, and R. R. Kuczynski, University of Chicago Press, 1930.

<sup>23</sup> See P. Sorokin and C. C. Zimmerman, "Principles of Rural-Urban Sociology," H. Holt and Co., New York, 1929. See also the important works of Émile Durkheim which deal with this subject, particularly "De la division du travail social" (2nd ed.), Paris, 1902, and "Le Suicide," Paris, 1912. For changes in the birth rate and death rate, see especially R. Kuczynski, "The balance of births and deaths," Macmillan, 1929; L. I. Dublin and A. J. Lotka, "On the true rate of natural increase," *Journal of the American Statistical Association*, September, 1925; Gladden W. Baker, "The trend in adult mortality, *ibid.*, September, 1923. For good historical studies see Jules Feriet, "L'abaissement de la natalité a Rome et la depopulation des campagnes," Paris, 1902; Gustave Glotz, "Ancient Greece at work," New York, 1926; C. A. Savage, "The Athenian family," Baltimore, 1907; and C. F. Thwing, "The family," Boston, 1887. For the crime rate or the decreasing proportion of the young adult population found as unfit for military service. See especially the studies for the recruits of the Civil War and of the World War in the United States; of the World War in Great Britain; and the series of other European studies summarized in M. Alsberg, "Militäruntauglichkeit und Groszstadeinflusz," *Archiv für Rassen-und Gesellschafts-Biologie*, vol. 5, 1908, pp. 729-42. See also the papers by L. I. Dublin and A. J. Lotka and by F. H. Hankins, Neil A. Dayton, and O. E. Baker in vol. 24 of the *American Sociological Society*, May, 1930.



These and other factors explain why the cultural standards of living of country people have come into national prominence at a time when the proportion of our population upon farms is decreasing rapidly. They are the major changes which first strike the attention. They raise the questions as to what should and what can be done about it.

The answer to *what should be done* is to be found in the public policies of the country as regards the future it desires for the nation. At present, public opinion regarding social organization in agriculture can be classified into two types. The most popular is the one that may be classified as *laissez faire* or "let alone" policy. The adherents of this policy either believe that all social problems work themselves out, given sufficient time, or they are not aware of the seriousness of the problem.

America is young. The vitality of the pioneer still surges in the veins of her people. Health seems good; death rates are low; birth rates are high; progress and change are the favorite words. The mass of the people are not aware of the changes that seem to be taking place rapidly beneath this seeming staunchness of purpose and character. The old-time family and the religious institutions are still favorites for attack.

On the other hand, calculations based upon a population divided into standard age and sex groups show that our rate of population increase is now almost at a standstill. There are slight evidences of a tendency for increasing death rates among the middle-aged and adult groups. It is even claimed that in many respects the population is beginning to live more and more upon the accumulated nervous and vital energy of the rural past.

If this study proceeds upon the assumption that within the next few years a larger and larger proportion of the public leadership in America will become conscious of certain underlying changes which seem to be occurring in the social organization, then some measures may be proposed to stabilize the social organization and to help prevent the probable effects of certain rapid changes which are taking place. Symptoms that this awareness is coming about are to be observed in the rising nationalist movement in the United States and the movements for "fundamentalism" in every line of behavior.<sup>24</sup> This is further strengthened by a study of the "Green Rising" or agrarian fundamentalist and nationalist movements in Europe of the present time.

*What can be done* is a more difficult question to answer. In all lines of human behavior purposeful control of social processes is very difficult. However, in spite of its difficulty, each generation attempts

<sup>24</sup> Any measures to preserve the older forms of social organization and its valuable social processes will have to be undertaken in a definite manner before the crisis is reached in order to be successful. See J. Wolf, "Der Geburtrüchgang, die Rationalisierung der sexual libens in unsurer Zeit," Jena, 1912.

to control the destinies of the next. Following are some practical suggestions for the elementary farm centers, the weakening competitive centers and the major rural retail trading towns. Science, as many prominent thinkers have pointed out, is largely the application of good judgment and common sense to our everyday problems.<sup>25</sup>

### Elementary Farm Trading Centers

The basic facts as to the structure of these centers are given in the Appendix, Tables XVI to XXI. Altho the trend has been toward a decline in number in more recent years, these places have shown remarkable ability to continue. Certain changes that have gone on within the group are of importance.

The crossroads store is disappearing and is being replaced by a small village aggregate. These small village aggregates show remarkable vitality. This alone is proof that they are performing certain necessary social services to the farm families.

Their principal rôle seems to lie in performing certain services to agriculture in which nearness and convenience are of major importance. As indicated earlier, those functions evolve primarily around the centralization of the social activities of the farm family and the furnishing of basic economic services. These basic economic services consist of furnishing rail transportation for heavier items and in the retailing of articles known as standard necessities.

The problem of maintaining some coherency in rural social organization suggests that a large number of measures probably should be taken to preserve these villages and to improve their conditions. The measures that might be taken may be presented as those public agencies might perform, those the major trading centers might do, and those the villagers alone must do if they are to be accomplished.

The practical possibilities of programs that might be undertaken by public effort of agencies located outside of the major trade centers, at the present time, are more or less limited to study, advice, and guidance. The problem of the centralization and simplification of the number of units catering to the political organization of the population is a somewhat separate, yet important, aspect of the preservation of the necessary village or trade center forms.<sup>26</sup>

The general trend in recent years has been toward the development of larger governing local units, in co-ordination with the shift toward

<sup>25</sup> See the valuable statements by Henri Poincaré in "The Foundations of Science," New York, 1913.

<sup>26</sup> For the following suggestions see principally: William Anderson, "City charter making in Minnesota," Minnesota Bureau for Research in Government, Publication No. 1; Harvey Walker, "Village laws and government in Minnesota," *ibid.*, No. 6. Much of the following discussion is based upon the experience of The League of Minnesota Municipalities, and particularly upon the suggestions of Professor Morris Lambie, who has charge of the work of the League.

larger economic units and the improvement in transportation. But even in the states where this shift has gone to some length, the preservation of local forms of social life and the keeping of local social institutions and local responsibility has been an important factor.

Public agencies outside of the local communities may study, advise, and guide in this movement for preservation of local social life, but the major changes must come from a preservation and reorganization of the spirit and ideals of the local people. However, a preservation of and development of the proper ideals among the agricultural leaders probably will have to come first. It is a social problem rather than a political or an economic problem. Political and economic forms may help, but the primary forces will have to come from the residents of these districts under the guidance of national leaders who are interested in these aims.

The proper centralization of the present 512 high school districts in Minnesota can do much to give a community consciousness to many of these communities. Much of this has been done. But Minnesota has 7,800 common school districts, many of which could be improved if they were consolidated about some of the 1,131 Minnesota trade centers that, in 1929, had populations of more than 25 persons. Such a consolidation and reorganization might improve many of the schools as well as benefit the smaller communities.

The major trade centers, those with above 75 business units, can contribute to this reorganization and preservation of local life to the advantage of the smaller communities and to their own advantage.

Altho Chart 8 shows circles of 15 miles radius around these major centers, there is no guarantee that this 15-mile zone is constant. As a matter of fact, the changes taking place in many of these larger centers show that their own inability to merchandise their communities is causing some of them to lose out at the expense of the others.

By the furnishing of proper merchandising and certain advantages to the people residing within their extensive trade areas, many of these communities can preserve their present business status and grow. All these communities have passed the minimum sizes in business organization necessary for supporting most of the services essential to a commercialized agriculture as it is organized at the present.

"Psychologically" they can incorporate the families in the smaller communities more permanently into the extensive trade communities. Such a movement is much more fundamental and valuable than "trade at home" campaigns.

By the proper dissemination of neighborhood news in the country newspapers of these major trading towns, the neighborhoods or smaller communities can be made to feel a unit with the larger area and at the

same time preserve the consciousness of their own communities. The country press outside of the major trading towns is losing out rapidly. The chief reason seems to be that the press is largely supported by advertising. Shopping goods are the items of retail merchandising which permit the margins and the business gains from salesmanship that pay for and justify extensive advertising. National advertising is going primarily to the major trade center newspapers. The successful country paper has always carried neighborhood news and gossip. Definite pages, columns or editions of the major trade center publications can contribute to the psychological organization of the elementary trade centers and to the extensive organization of the major trading centers. It is a matter of psychological rather than formal organization.<sup>27</sup> Such newspapers not only benefit the families in the smaller communities but add business to the larger communities and make the extensive trade basins more permanent.

Other business units can co-ordinate with this work. When the business man in the major retail trade centers organizes his business upon a thoroly efficient basis, out-of-town competition will decline and the stability of these trade basins will be more permanent. The bank of the major trade center eventually can organize itself with branches or receiving and paying stations in the elementary trade centers. There is already an active movement under way to change our branch banking laws to permit this. This includes only a few things which may be done. It is an opportunity and a duty of the major trade center to help preserve the community consciousness and solidarity of organization of the social life of the elementary center.

Within the smaller center, the major improvements will have to come from a rebirth of the social ideals of the people themselves. If America is ever to have a strong native culture it must be created in the elementary farm centers. Up to now the attention of the American pioneers has been centered on *business* and *work*; the business and working ability will not be harmed materialy if more attention is paid to *living* from now on. The development and preservation of this strong rural culture is a challenge to the American people if they wish to preserve the things it emphasizes; it is not a "rural problem."

### Dying Competitive Centers

Preliminary returns from the census of 1930 show that the competitive centers which have not been able to push themselves into the ranks of the major trading are losing population rapidly. The data

<sup>27</sup> This discussion follows largely the suggestions of Bruce R. McCoy of the Department of Journalism of the University of Minnesota, and of Sam Haislett, of the Minnesota Editorial Association. See "Competition and consolidation in the community newspaper field," *Journalism Quarterly*, March, 1930, by Professor McCoy. See also his discussion in "The small city and town," University of Minnesota Press, 1930.

show that this movement has been going on in many of these centers for some time.

The loss of population in itself can come about because of more efficient organization of the business units within these towns and because of the actual loss of business units or the decrease in the volume of business they handle. It can also come about because of declining birth rates in these villages. This study suggests that all three factors are responsible for the present trend toward declining populations in these smaller competitive villages.

If the present trend toward centralization of types of retailing continues, these villages must continue to lose population because of decrease in total volume of business. Good merchandising can offset much of this loss.

The size of the birth rate in these villages is something that the people themselves can control. The cost of living is cheap; these are ideal places in which to rear children; sufficient medical facilities are near by. Studies of the birthplaces of eminent persons show both for America and Europe that the small town and village furnish the most ideal environment for the rearing of children.

In addition to the above measures, the people themselves can do much to preserve their communities by making each town an ideal place for living, for residences of retired farmers and for the location of churches, schools, farm organizations, high schools, and other social institutions.

Other measures which might be undertaken include a closer amalgamation and division of labor with neighboring major trade centers. These can and may become the residential suburbs for many who reside and work in the major trading towns. By proper organization of many of these villages, many active farmers can be induced to make their residence in these centers and farm their adjacent lands. The spread of electric power may see many of them develop into small factory towns.<sup>28</sup> Other worth-while measures may be found by a further study of the life of the villages.

### Major Trading Towns

Major trading towns are very interesting. Their wide distribution is largely a function of the social changes of the past twenty years. Their future is worthy of careful consideration. They have risen not only because of their somewhat favorable location but also because of their economic competitive ability. Many trade centers equally as favorably located have not been able to compete with them. Primarily they are economic products, and as such they will have to maintain

<sup>28</sup> See "America's new frontier," Middle West Utilities Company, Chicago, 1929.

themselves. But in addition they furnish certain social facilities to the residents in their trade basins. In this respect considerable improvement may be needed.

Few of these centers have their positions because they are "entitled" to them; neither do they keep their position by non-aggressive policies. This aggression is of two qualities, that which is destructive and that which is constructive. The destructive type promotes the center at all hazards; eventually it may have its repercussions which tend to destroy the integrity of the trade basin itself. The wise town will follow only the constructive measures for growth and development. In the long run such measures will give it the greatest permanency. Constructive measures consist in binding the farm families and the surrounding residents of smaller centers to the trade basin by ties of friendship as well as economic allegiance. They should be "incorporated" into the trade centers by feelings of friendliness and community. The trade center should try to make itself a part of the agriculture and life of the trade basin.

The smaller centers and the surrounding farmers should be represented in its social organization and its advisory councils. Their business makes the trading town. The trading town should help the surrounding residents to see that it is but a development of the personalities of the surrounding residents.

The constructive aggressive policy would see that the social institutions of the surrounding countryside are preserved. Some of the measures which may be used for this purpose are indicated above.

From another standpoint the trading town should see that its own living conditions are not antithetical to the spirit of the rural residents in the surrounding areas. Such measures can be promoted most easily by the inclusion of representatives of the larger trade basin in the advisory councils of the major trading towns.

Other measures depend largely upon a study of the specific situation in each area. Stability of the trading basin of each area may be considered a desirable social factor.

## SUMMARY

The viewpoints presented in this study are based upon an attempt to understand the modern development of trading in the rural districts, the newer forms of trading organization, and the problems of social organization of the countryside. The study attempts to harmonize these forms of social organization and these changes with national ideals regarding the preservation of the integrity of the cultural elements of the farm and the national standards of living. From the

nature of a beginning analysis, many of the suggestions are more general and tentative than they may be after further study.

This study simply shows that the series of changes in trading organization represents certain fundamental changes within the personalities of the people themselves. Certain losses have occurred with the gains. Already there are some signs which indicate that public policy of the future will wish to offset some of these more fundamental losses within our social life.<sup>29</sup> The specific recommendations give some of the measures that might be used to conciliate the newer forms of trading organization with a strong development of the spiritual life of the people.

In the introduction it was suggested that a study such as this might lead to some understanding of the relative advantages or disadvantages of the pure isolated type of farm elementary trade center organization in contrast to the farm village type (in which the farm families reside in the trade center and go out to farm their lands).

The study suggests that the isolated type of farm elementary trade center form of social economy is closely related to the isolated or pure village type. As there are no farm villages in Minnesota, the comparisons of the isolated farm organizations as it is found here must be with studies of these farm villages located in other places.<sup>29</sup>

The chief differences are given in Table V, which summarizes the psycho-social, mental, and economic organization of three types of economy—the farm village, the isolated farm based upon a pure elementary trade center organization, and the rurban or large trade center organization founded upon either the farm village or elementary trade center unit. In the following comparison these three are called the farm-village type (Chart 1, illustration 1), the elementary trade center type (Chart 7), and the rurban trade center organization (Chart 8).

Before giving the comparison it must be made clear that this is the "typological" system of analysis. The pure types of farm social economy do not exist at present in America. One may picture the pure types by characterizing the trends in human behavior which each has contributed to the total.

The farm village is characterized as a pure type where there are very few trading relationships with other and larger communities. These have existed in some of the earlier settlements of the United States and Canada. Today they exist in old Mexico and in many of the eastern countries including China and India.<sup>30</sup>

The pure elementary trade center type predominated in America before the twentieth century. In some districts it still exists. The rurban trade center forms of organization show some tendency to sup-

<sup>29</sup> See footnote 7 for bibliography.

<sup>30</sup> E. deS. Brunner's study of rural Korea shows that the pure type is disappearing there owing to the development of the 1,300 market towns.

plant the other forms in all of western and northern Europe and in the United States and Canada.

Table V compares the three forms of social organization according to the characteristics that they emphasize. The elementary trade center form of organization emphasizes the family as a social unit, the individual farm as an economic unit, a high birth rate, a low death rate, a high reproduction rate, a fair respect for custom and progress, fairly high material and cultural standards of living, and the preservation of a well-balanced mental life of the people. The pure farm-village type or the pure rurban type tends to create extremes of one kind or another.

Conclusions concerning the preservation or development of any particular village or trade center type of organization may be based upon the beliefs as to what America needs and in light of the cultural types preserved and developed in these various centers.

The facts presented seem to be valid. The utilization of these facts depends upon the varying ambitions of men to guide the national destiny. Only popular opinion and leadership can bring about the utilization of the facts for any particular purpose. At present the chief attempts are in favor of the rurban center. Later, or at other times, popular sentiment may cause the seeking of the other forms of social organization.



TABLE V

COMPARISON OF THE SOCIAL LIFE IN THE FARM VILLAGE, ELEMENTARY TRADE CENTER, AND RURBAN TRADE CENTER FORMS OF ORGANIZATION

Item of comparison	Farm villages	Elementary trade centers	Rurban trade centers
Primary mental unit of personal organization	The village	The family	The individual
Primary economic unit of organization	Village area	Individual farm	The farm family and the individual productivity
Group life	Families belong to a small number of groups. The interests of these groups are very similar	Families and individuals belong to a larger number of groups. There is a tendency for the groups to have conflicting interests. Some conflicting interests among members of families develop	Individuals belong to a large number of groups the interests of which often conflict sharply. Signs of personal disorganization appear
Collective enterprises	Exceedingly strong and numerous. Systems of organization are informal	Fairly strong and numerous. Systems of organization are partly formal and partly informal	Collective enterprises are of those types forced by the division of labor and economic gain. Systems of organization tend to become purely formal
Observance of custom	Extremely high	Fair	Extremely low
Mental stability of the population	Exceedingly high	Medium stable	Very unstable
Religious life and philosophical outlook	Extremely close followers of historical religions with strong development of stoicism	Close followers of historical religions with mean between stoicism and epicureanism	Epicureanism of individual choice develops rapidly
Attitudes regarding nationalism	Village and nationalist types of spirit predominate	Family and nationalist predominate	Family and nationalist spirits are less predominant
Mobility and heterogeneity of population	Mobility is low and homogeneity of population is high	Mobility increases. Homogeneity declines	Mobility becomes great and homogeneity of the population declines rapidly
Standardized birth rate	High	High	Low
Standardized death rate	High	Low	Medium
Reproduction rate	Medium or low	High	Medium or low
Material standards of living	Low	High	Higher
Psychological or spiritual standards of living	High	Medium	Low

## APPENDIX

TABLE I

TRADE CENTERS IN MINNESOTA 1905 THROUGH 1929

Total Population Located in the Trade Center													
Year	0	1-25	26-50	51-100	101-250	251-500	501-1000	1001-2500	2501-5000	5001-7500	7501-10,000	or more	Total
Number of All Trade Centers													
1905	547	104	140	139	200	177	108	84	22	7	4	3	1535
1910	355	226	150	141	233	218	125	90	22	12	3	4	1579
1915	144	393	189	158	258	229	132	89	21	9	8	5	1635
1920	100	363	190	185	260	241	134	87	23	11	7	6	1607
1925	88	351	175	196	266	231	138	99	31	10	5	9	1599
1929	85	348	150	193	262	234	135	103	30	9	5	10	1564
Number of Independent Trade Centers*													
1905	0	0	1	1	29	76	85	78	22	7	4	3	304
1910	0	0	1	0	17	93	97	84	21	12	3	4	332
1915	1	0	1	0	21	114	103	83	20	9	8	5	365
1920	0	0	0	2	21	103	101	83	23	11	7	6	357
1925	0	0	1	1	14	90	105	90	29	10	5	9	354
1929	0	0	0	1	8	86	109	95	29	9	5	10	352
Average Number of Business Units per Trade Center—Based on All Trade Centers													
1905	2.1	2.9	4.0	5.7	12.8	22.3	37.2	64.6	104.6	174.0	206.5	334.0	15.7
1910	1.8	2.1	3.4	4.7	10.4	20.3	35.5	60.7	99.5	170.7	201.7	330.0	15.9
1915	2.1	1.6	2.8	5.0	11.1	21.0	36.6	62.7	99.4	158.0	213.6	339.2	16.7
1920	3.0	1.7	3.0	5.8	11.6	21.3	38.1	63.1	101.5	165.6	218.3	333.5	18.0
1925	3.5	1.6	3.1	6.2	10.8	20.9	37.4	60.6	103.0	183.8	231.0	347.3	19.3
1929	3.6	1.7	2.9	5.8	10.2	20.3	35.7	59.1	103.8	166.2	233.8	317.7	19.0

\* An independent trade center or town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

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**TABLE II**  
**DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA IN 1905 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY**

Population groups	0-500		501-1000		1001-2500		2501-5000		5001-7500		7501-10,000		10,000 or more		Total	
No. of trade centers....	1307		108		84		22		7		4		3		1535	
No. with post office .....	630		103		84		22		7		4		3		853	
No. with telegraph office.	469		101		84		22		7		4		3		690	
No. with express office...	559		101		84		22		7		4		3		780	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	398	4.3	155	3.9	208	3.8	61	2.7	37	3.0	24	2.9	24	2.4	907	3.8
Banks .....	337	3.6	163	4.1	172	3.2	51	2.2	23	1.9	10	1.2	10	1.0	766	3.2
Publishers .....	135	1.5	104	2.6	134	2.5	57	2.5	34	2.8	20	2.4	18	1.8	502	2.1
General stores .....	2131	23.0	473	11.8	400	7.4	120	5.2	40	3.3	15	1.8	13	1.3	3192	13.3
Specialized retail stores..	2652	28.6	1544	38.4	2259	41.6	1082	47.0	562	46.2	425	51.5	533	53.2	9057	37.6
Chain units* .....	477	5.1	163	4.1	165	3.1	69	3.0	26	2.1	11	1.3	20	2.0	931	3.9
Livery and auto .....	158	1.8	95	2.4	116	2.1	48	2.1	21	1.7	14	1.7	12	1.2	464	1.9
Wholesale and jobber ...	5	0.1	1	0.0	7	0.1	4	0.2	10	0.8	9	1.1	30	3.0	66	0.3
Farm processing .....	1643	17.8	536	13.3	622	11.5	167	7.2	122	10.0	65	7.9	82	8.2	3237	13.4
Other manufacturing ...	76	0.8	64	1.6	164	3.0	88	3.8	74	6.1	60	7.3	81	8.1	607	2.5
All other .....	1265	13.6	717	17.8	1180	21.7	554	24.1	269	22.1	173	20.9	179	17.8	4337	18.0
Total units .....	9277	100.0	4015	100.0	5427	100.0	2301	100.0	1218	100.0	826	100.0	1002	100.0	24,066	100.0
	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all
Towns with hotel .....	316	24.2	89	82.4	80	95.2	22	100.0	7	100.0	4	100.0	3	100.0	521	33.9
Towns with bank .....	286	21.9	97	89.8	80	95.2	22	100.0	7	100.0	4	100.0	3	100.0	499	32.5
Independent trade centers†	107	8.2	85	78.7	78	92.8	22	100.0	7	100.0	4	100.0	3	100.0	304	19.8

\* A chain unit is one giving its credit rating at another address. This does not include the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE III  
DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA IN 1910 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0-500		501-1000		1001-2500		2501-5000		5001-7500		7501-10,000		10,000 or more		Total	
No. of trade centers....	1323		125		90		22		12		3		4		1579	
No. with post office . . . .	693		121		90		22		12		3		4		945	
No. with telegraph office.	529		120		90		22		12		3		4		780	
No. with express office...	594		120		90		22		12		3		4		845	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	389	4.3	182	4.1	195	3.6	76	3.5	63	3.1	17	2.8	33	2.5	955	3.8
Banks .....	399	4.4	194	4.4	189	3.5	50	2.3	36	1.8	9	1.5	16	1.2	893	3.5
Publishers .....	131	1.4	112	2.5	128	2.3	44	2.0	44	2.1	11	1.8	22	1.7	492	1.9
General stores .....	2107	23.1	508	11.4	408	7.5	104	4.8	62	3.0	7	1.2	15	1.1	3211	12.8
Specialized retail stores..	2409	26.5	1586	35.7	2288	41.9	948	43.3	865	42.2	305	50.4	650	49.3	9051	36.0
Chain units* .....	527	5.8	183	4.1	177	3.2	53	2.4	66	3.2	7	1.2	25	1.9	1038	4.1
Livery and auto .....	200	2.2	125	2.8	162	3.0	51	2.3	43	2.1	14	2.3	26	2.0	621	2.5
Wholesale and jobber ...	2	0.0	7	0.2	16	0.3	18	0.8	28	1.4	8	1.3	36	2.7	115	0.5
Farm processing .....	1583	17.4	614	13.8	645	11.8	178	8.1	165	8.1	46	7.6	123	9.3	3354	13.3
Other manufacturing ...	82	0.9	71	1.6	172	3.1	87	4.0	105	5.1	43	7.1	106	8.0	666	2.6
All other .....	1274	14.0	860	19.4	1080	19.8	580	26.5	572	27.9	138	22.8	268	20.3	4772	19.0
Total units .....	9103	100.0	4442	100.0	5460	100.0	2189	100.0	2049	100.0	605	100.0	1320	100.0	25,168	100.0
	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all
Towns with hotel .....	324	24.5	105	84.0	84	93.3	22	100.0	12	100.0	3	100.0	4	100.0	554	35.1
Towns with bank .....	383	26.7	116	92.8	86	95.6	22	100.0	12	100.0	3	100.0	4	100.0	596	37.7
Independent trade centers†	111	8.4	97	77.6	84	93.3	21	95.4	12	100.0	3	100.0	4	100.0	332	21.0

\* A chain unit is one giving its credit rating at another address. This does not include the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE IV  
DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA IN 1915 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0-500		501-1000		1001-2500		2501-5000		5001-7500		7501-10,000		10,001 or more		Total	
No. of trade centers....	1371		132		89		21		9		8		5		1635	
No. with post office .....	795		126		89		21		9		8		5		1053	
No. with telegraph office.	568		126		88		21		9		8		5		825	
No. with express office...	621		126		88		21		9		8		5		878	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	377	3.8	165	3.4	194	3.5	64	3.1	47	3.3	50	2.9	45	2.6	942	3.4
Banks .....	566	5.7	229	4.7	198	3.5	56	2.7	27	1.9	28	1.7	20	1.2	1124	4.1
Publishers .....	149	1.5	122	2.5	123	2.2	42	2.0	29	2.0	33	1.9	30	1.8	528	1.9
General stores .....	2200	22.1	462	9.6	389	7.0	81	3.9	67	4.7	41	2.4	31	1.8	3271	12.0
Specialized retail stores..	2578	26.0	1773	36.7	2302	41.2	922	44.2	602	42.4	753	44.1	770	45.4	9700	35.6
Chain units* .....	490	4.9	201	4.2	204	3.7	58	2.8	29	2.0	50	2.9	52	3.1	1084	4.0
Livery and auto .....	466	4.7	301	6.2	344	6.2	97	4.6	69	4.9	67	3.9	56	3.3	1400	5.1
Wholesale and jobber ...	18	0.2	9	0.2	14	0.3	21	1.0	23	1.6	32	1.9	44	2.6	161	0.6
Farm processing .....	1676	16.9	633	13.1	640	11.4	188	9.0	134	9.4	147	8.6	117	6.9	3535	13.0
Other manufacturing ...	91	0.9	94	1.9	159	2.8	80	3.8	70	4.9	113	6.6	126	7.4	733	2.7
All other .....	1325	13.3	847	17.5	1018	18.2	478	22.9	325	22.9	395	23.1	405	23.9	4793	17.6
Total units .....	9936	100.0	4836	100.0	5585	100.0	2087	100.0	1422	100.0	1709	100.0	1696	100.0	27,271	100.0
	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all
Towns with hotel .....	320	23.3	113	85.6	87	97.7	20	95.2	9	100.0	8	100.0	5	100.0	562	34.4
Towns with bank .....	471	34.3	122	92.4	87	97.7	21	100.0	9	100.0	8	100.0	5	100.0	723	44.2
Independent trade centers†	137	10.0	103	78.0	83	93.2	20	95.2	9	100.0	8	100.0	5	100.0	365	22.3

\* A chain unit is one giving its credit rating at another address. This does not include the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE V  
DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA IN 1920 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0-500		501-1000		1001-2500		2501-5000		5001-7500		7501-10,000		10,001 or more		Total	
No. of trade centers....	1339		134		87		23		11		7		6		1607	
No. with post office.....	785		130		87		23		11		7		6		1049	
No. with telegraph office..	590		128		86		23		11		7		6		851	
No. with express office...	625		129		86		23		11		7		6		887	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	349	3.3	163	3.2	152	2.8	58	2.5	54	3.0	52	3.4	49	2.5	877	3.0
Banks .....	727	6.8	255	5.0	217	3.9	70	3.0	40	2.2	28	1.8	29	1.5	1366	4.7
Publishers .....	132	1.2	113	2.2	130	2.4	46	2.0	34	1.9	27	1.8	32	1.6	514	1.8
General stores .....	2233	20.8	514	10.1	371	6.8	114	4.9	73	4.0	48	3.1	53	2.6	3406	11.8
Specialized retail stores..	2543	23.7	1739	34.1	2167	39.5	994	42.6	774	42.5	674	44.1	918	45.9	9809	33.8
Chain units* .....	596	5.6	235	4.6	194	3.5	65	2.8	51	2.8	46	3.0	86	4.3	1273	4.4
Livery and auto .....	983	9.2	490	9.6	562	10.2	225	9.6	137	7.5	108	7.1	148	7.4	2653	9.2
Wholesale and jobber ...	17	0.2	15	0.3	20	0.4	18	0.8	36	2.0	29	1.9	49	2.4	184	0.6
Farm processing .....	1764	16.5	653	12.8	627	11.4	227	9.7	148	8.1	134	8.8	128	6.4	3681	12.7
Other manufacturing ...	76	0.7	77	1.5	149	2.7	70	3.0	88	4.8	79	5.2	135	6.7	674	2.3
All other .....	1291	12.0	848	16.6	901	16.4	447	19.1	387	21.2	303	19.8	374	18.7	4551	15.7
Total units .....	19 711	100.0	5102	100.0	5490	100.0	2334	100.0	1822	100.0	1528	100.0	2001	100.0	28,988	100.0
	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all
Towns with hotel .....	291	21.7	112	83.6	78	89.7	23	100.0	11	100.0	7	100.0	6	100.0	528	32.9
Towns with bank .....	562	42.0	129	96.3	85	97.7	23	100.0	11	100.0	7	100.0	6	100.0	823	51.2
Independent trade centers†	126	9.4	101	75.4	83	95.4	23	100.0	11	100.0	7	100.0	6	100.0	357	22.2

\* A chain unit is one giving its credit rating at another address. This does not include the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE VI  
DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA IN 1925 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0-500		501-1000		1001-2500		2501-5000		5001-7500		7501-10,000		10,001 or more		Total	
No. of trade centers....	1307		138		99		31		10		5		9		1599	
No. with post office .....	784		137		98		31		10		5		9		1074	
No. with telegraph office.	591		137		95		31		10		5		9		878	
No. with express office...	623		137		96		31		10		5		9		911	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	273	2.6	124	2.4	157	2.6	77	2.4	53	2.9	22	1.9	76	2.4	782	2.5
Banks .....	634	6.1	241	4.7	221	3.7	84	2.6	38	2.1	20	1.7	40	1.3	1278	4.2
Publishers .....	118	1.2	114	2.2	134	2.2	588	1.8	32	1.7	24	2.1	50	1.6	530	1.7
General stores .....	2122	20.5	494	9.6	386	6.4	138	4.3	81	4.4	30	2.6	88	2.8	3339	10.8
Specialized retail stores..	2384	23.0	1786	34.6	2361	39.4	1452	45.5	797	43.4	533	46.1	1498	47.9	10,811	35.1
Chain units* .....	532	5.2	235	4.6	247	4.1	117	3.7	73	4.0	44	3.8	140	4.5	1388	4.5
Livery and auto .....	1140	11.0	574	11.1	703	11.7	380	11.9	183	10.0	121	10.5	305	9.8	3406	11.1
Wholesale and jobber ...	23	0.2	11	0.2	27	0.5	17	0.5	32	1.7	24	2.1	82	2.6	216	0.7
Farm processing .....	1717	16.6	702	13.6	701	11.7	262	8.2	166	9.0	75	6.5	181	5.8	3804	12.3
Other manufacturing ...	49	0.5	58	1.1	101	1.7	81	2.5	67	3.6	65	5.6	166	5.3	587	1.9
All other .....	1357	13.1	821	15.9	961	16.0	528	16.6	316	17.2	197	17.1	500	16.0	4680	15.2
Total units .....	10,349	100.0	5160	100.0	5999	100.0	3194	100.0	1838	100.0	1155	100.0	3126	100.0	30,821	100.0
	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all
Towns with hotel .....	240	18.4	96	69.6	83	83.8	30	96.8	10	100.0	5	100.0	9	100.0	472	29.5
Towns with bank .....	531	40.6	134	97.1	97	98.0	31	100.0	10	100.0	5	100.0	9	100.0	807	50.5
Independent trade centers†	106	8.1	105	76.1	90	90.9	29	93.5	10	100.0	5	100.0	9	100.0	354	22.1

\* A chain unit is one giving its credit rating at another address. This does not include the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE VII  
DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA IN 1929 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0-500		501-1000		1001-2500		2501-5000		5001-7500		7501-10,000		10,001 or more		Total	
No. of trade centers....	1272		135		103		30		9		5		10		1564	
No. with post office . . . .	765		134		101		30		9		5		10		1054	
No. with telegraph office.	586		134		99		30		9		5		10		873	
No. with express office...	612		133		100		30		9		5		10		899	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	216	2.2	92	1.9	140	2.3	62	2.0	35	2.3	19	1.6	66	2.1	630	2.1
Banks .....	476	4.8	190	3.9	196	3.2	67	2.2	25	1.7	16	1.4	35	1.1	1005	3.4
Publishers .....	124	1.3	114	2.4	131	2.2	58	1.9	31	2.1	26	2.2	52	1.6	536	1.8
General stores .....	2056	20.7	454	9.4	327	5.4	103	3.3	60	4.0	34	2.9	84	2.6	3118	10.5
Specialized retail stores..	2275	23.0	1651	34.2	2506	41.1	1398	44.9	674	45.1	523	44.7	1502	47.3	10,529	35.3
Chain units* .....	545	5.5	265	5.5	276	4.5	152	4.9	68	4.5	57	4.9	182	5.7	1545	5.2
Livery and auto .....	1273	12.8	623	12.9	836	13.7	412	13.2	176	11.8	137	11.7	333	10.5	3790	12.7
Wholesale and jobber ...	35	0.4	23	0.5	45	0.8	23	0.7	34	2.3	24	2.1	78	2.5	262	0.9
Farm processing .....	1600	16.1	682	14.1	641	10.5	240	7.7	116	7.7	84	7.2	201	6.3	3564	12.0
Other manufacturing ...	40	0.4	52	1.1	103	1.7	80	2.6	56	3.7	55	4.7	145	4.6	531	1.8
All other .....	1272	12.8	680	14.1	892	14.6	518	16.6	221	14.8	194	16.6	499	15.7	4276	14.3
Total units .....	9912	100.0	4826	100.0	6093	100.0	3113	100.0	1496	100.0	1169	100.0	3177	100.0	29,786	100.0
	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all	No.	Per cent of all
Towns with hotel .....	200	15.7	78	57.8	82	79.6	29	96.7	9	100.0	5	100.0	9	90.0	412	26.3
Towns with bank .....	426	33.5	125	92.6	99	96.1	29	96.7	9	100.0	5	100.0	10	100.0	277	17.7
Independent trade centers†	95	7.5	109	80.7	95	92.2	29	96.7	9	100.0	5	100.0	10	100.0	352	22.5

\* A chain unit is one giving its credit rating at another address. This does not include the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.



TABLE VIII  
DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA TRADE CENTERS BY SIZE IN 1905

Population groups	0-500		501-1000		1001-2500		2501-5000		5001-7500		7501-10,000		10,001 or more		Total	
No. of trade centers....	1307		108		84		22		7		4		3		1535	
No. with post office .....	630		103		84		22		7		4		3		853	
No. with telegraph office.	469		101		84		22		7		4		3		690	
No. with express office...	559		101		84		22		7		4		3		780	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	398	4.3	155	3.9	209	3.8	62	2.7	37	3.0	24	2.9	24	2.4	909	3.8
Banks .....	337	3.6	163	4.1	172	3.2	51	2.2	23	1.9	10	1.2	10	1.0	766	3.2
Publishers .....	138	1.5	106	2.6	134	2.5	57	2.5	34	2.8	20	2.4	18	1.8	507	2.1
General stores .....	2182	23.5	477	11.9	405	7.5	123	5.3	40	3.3	17	2.1	13	1.3	3257	13.5
Specialized retail stores.	2988	32.2	1666	41.5	2359	43.5	1122	48.8	581	47.7	429	51.9	542	54.1	9687	40.3
Livery and auto .....	158	1.7	96	2.4	117	2.1	49	2.1	22	1.8	14	1.7	14	1.4	470	2.0
Wholesale and jobber ...	12	0.1	3	0.1	9	0.2	8	0.3	11	0.9	9	1.1	31	3.1	83	0.3
Farm processing .....	1694	18.3	556	13.8	644	11.9	169	7.4	123	10.1	67	8.1	86	8.6	3339	13.9
Other manufacturing ...	81	0.9	66	1.6	177	3.2	29	3.9	75	6.2	60	7.3	83	8.3	631	2.6
All other .....	1289	13.9	727	18.1	1201	22.1	571	24.8	272	22.3	176	21.3	181	18.0	4417	18.3
Total units .....	9277	100.0	4015	100.0	5427	100.0	2301	100.0	1218	100.0	826	100.0	1002	100.0	24,066	100.0
By Number of Major Functions Listed for Each Business																
Three or more functions.	166	1.8	64	1.6	73	1.4	29	1.3	10	0.8	12	1.4	16	1.6	370	1.5
Two functions .....	1180	12.7	517	12.9	657	12.1	309	13.4	158	13.0	117	14.2	107	10.7	3045	12.7
One function .....	7931	85.5	3434	85.5	4697	86.5	1963	85.3	1050	86.2	697	84.4	879	87.7	20,651	85.8
Total .....	9277	100.0	4015	100.0	5427	100.0	2301	100.0	1218	100.0	826	100.0	1002	100.0	24,066	100.0

TABLE IX  
DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA TRADE CENTERS BY SIZE IN 1929

Population groups	0-500		501-1000		1001-2500		2501-5000		5001-7500		7501-10,000		10,001 or more		Total	
No. of trade centers....	1272		135		103		30		9		5		10		1564	
No. with post office .....	765		134		101		30		9		5		10		1054	
No. with telegraph office.	586		134		99		30		9		5		10		873	
No. with express office...	612		133		100		30		9		5		10		899	

Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	216	2.2	92	1.9	140	2.3	63	2.0	37	2.5	21	1.8	66	2.1	635	2.1
Banks .....	476	4.8	190	3.9	196	3.2	67	2.2	25	1.7	16	1.4	35	1.1	1005	3.4
Publishers .....	127	1.3	115	2.4	132	2.2	58	1.9	31	2.1	26	2.2	52	1.6	541	1.8
General stores .....	2091	21.1	464	9.6	352	5.8	114	3.7	61	4.1	36	3.1	94	2.9	3212	10.8
Specialized retail stores...	2643	26.6	1807	37.5	2650	43.5	1471	47.2	706	47.2	550	47.0	1581	49.8	11,408	38.3
Livery and auto .....	1301	13.1	657	13.6	859	14.1	429	13.8	184	12.3	142	12.2	362	11.4	3934	13.2
Wholesale and jobber ...	46	0.5	32	0.7	53	0.9	34	1.1	41	2.7	29	2.5	88	2.8	323	1.1
Farm processing .....	1673	16.9	720	14.9	689	11.3	262	8.4	122	8.1	89	7.6	218	6.9	3773	12.7
Other manufacturing ...	44	0.4	55	1.1	112	1.8	88	2.8	62	4.1	61	5.2	156	4.9	578	1.9
All other .....	1295	13.1	694	14.4	910	14.9	527	16.9	227	15.2	199	17.0	525	16.5	4377	14.7
Total units .....	9912	100.0	4826	100.0	6093	100.0	3113	100.0	1496	100.0	1169	100.0	3177	100.0	29,786	100.0

By Number of Major Functions Listed for Each Business																
Three or more functions.	246	2.5	151	3.1	122	2.0	61	2.0	31	2.1	20	1.7	42	1.3	673	2.2
Two functions .....	1707	17.2	825	17.1	999	16.4	467	15.0	267	17.8	208	17.8	522	16.4	4990	16.8
One function .....	7964	80.3	3850	79.8	4972	81.6	2585	83.0	1198	80.1	941	80.5	2613	82.3	24,123	81.0
Total .....	9912	100.0	4826	100.0	6093	100.0	3113	100.0	1496	100.0	1169	100.0	3177	100.0	29,786	100.0

TABLE X  
DISTRIBUTION OF BUSINESS UNITS IN EIGHT COUNTIES\* OF SOUTHERN MINNESOTA, 1905

Population groups .....	0-500		501-1000		1001-2500		2501-5000		New Ulm		Mankato		Total	
No. of trade centers.....	101		8		11		5		1		1		127	
No. with post office .....	53		8		11		5		1		1		79	
No. with telegraph office. ....	44		8		11		5		1		1		70	
No. with express office.....	49		8		11		5		1		1		75	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	29	3.3	10	3.3	26	3.8	10	2.0	4	2.3	7	2.0	86	3.0
Banks .....	37	4.1	12	3.9	22	3.2	14	2.9	3	1.8	4	1.2	92	3.2
Publishers .....	15	1.7	8	2.6	15	2.2	14	2.9	5	2.9	6	1.8	63	2.2
General stores .....	165	18.5	39	12.8	57	8.4	33	6.7	7	4.1	5	1.5	306	10.6
Specialized retail stores... ..	315	35.2	127	41.7	311	45.5	261	53.4	76	44.5	180	53.4	1270	44.1
Livery and auto .....	19	2.1	5	1.6	16	2.3	9	1.8	3	1.8	5	1.5	57	2.0
Wholesale and jobber ... ..	4	0.5	0	...	1	0.1	1	0.2	0	...	9	2.7	15	0.5
Farm processing .....	186	20.8	41	13.5	99	14.5	47	9.6	20	11.7	28	8.3	421	14.6
Other manufacturing ... ..	3	0.3	5	1.6	25	3.7	14	2.9	10	5.8	25	7.4	82	2.9
All other .....	121	13.5	58	19.0	111	16.3	86	17.6	43	25.1	68	20.2	487	16.9
Total units .....	894	100.0	305	100.0	683	100.0	489	100.0	171	100.0	337	100.0	2879	100.0
B: Number of Major Functions Listed for Each Business														
Three or more functions.....	13	1.4	5	1.6	8	1.2	3	0.6	1	0.6	8	2.4	38	1.3
Two functions .....	98	11.0	45	14.8	89	13.0	62	12.7	24	14.0	45	13.3	363	12.6
One function .....	783	87.6	255	83.6	586	85.8	424	86.7	146	85.4	284	84.3	2478	86.1
Total .....	894	100.0	305	100.0	683	100.0	489	100.0	171	100.0	337	100.0	2879	100.0

\* These are Blue Earth, Waseca, Le Sueur, Nicollet, Brown, Faribault, Martin, and Watonwan.

TABLE XI  
DISTRIBUTION OF BUSINESS UNITS IN EIGHT COUNTIES\* OF SOUTHERN MINNESOTA, 1910

Population groups .....	0-500		501-1000		1001-2500		2501-5000		New Ulm		Mankato		Total	
No. of trade centers.....	102		7		13		3		1		1		127	
No. with post office.....	53		7		13		3		1		1		78	
No. with telegraph office.....	54		7		13		3		1		1		79	
No. with express office.....	60		7		13		3		1		1		85	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	31	3.6	10	4.2	30	3.5	14	4.3	4	2.5	6	1.8	95	3.4
Banks.....	45	5.1	11	4.6	29	3.4	7	2.1	3	1.9	6	1.8	101	3.6
Publishers .....	13	1.5	7	2.9	16	1.9	7	2.1	3	1.9	6	1.8	52	1.9
General stores .....	166	19.0	24	10.1	61	7.2	20	6.1	7	4.4	6	1.8	284	10.2
Livery and auto .....	294	33.6	107	45.0	393	46.2	155	47.3	65	40.6	168	50.6	1182	42.5
Specialized retail stores.....	19	2.2	7	2.9	20	2.3	8	2.4	4	2.5	7	2.1	65	2.3
Wholesale and jobber .....	1	0.1	1	0.4	0	...	1	0.3	2	1.2	8	2.4	13	0.5
Farm processing .....	184	21.0	36	15.1	130	15.3	33	10.1	23	14.4	34	10.3	440	15.8
Other manufacturing .....	3	0.3	2	0.9	30	3.5	19	5.8	9	5.6	19	5.7	82	2.9
All other .....	119	13.6	33	13.9	142	16.7	64	19.5	40	25.0	72	21.7	470	16.9
Total units .....	875	100.0	238	100.0	851	100.0	328	100.0	160	100.0	332	100.0	2784	100.0
By Number of Major Functions Listed for Each Business														
Three or more functions.....	16	1.8	8	3.4	13	1.5	3	0.9	1	0.6	7	2.1	48	1.7
Two functions .....	102	11.7	35	14.7	128	15.1	44	13.4	19	11.8	45	13.6	373	13.4
One function .....	757	86.5	195	81.9	710	83.4	281	85.7	140	87.6	280	84.3	2363	84.9
Total .....	875	100.0	238	100.0	851	100.0	328	100.0	160	100.0	332	100.0	2784	100.0

\* These are Blue Earth, Waseca, Le Sueur, Nicollet, Brown, Faribault, Martin, and Watonwan.

TABLE XII  
DISTRIBUTION OF BUSINESS UNITS IN EIGHT COUNTIES\* OF SOUTHERN MINNESOTA, 1915

Population groups .....	0-500		501-1000		1001-2500		2501-5000		New Ulm		Mankato		Total	
No. of trade centers.....	94		7		14		3		1		1		120	
No. with post office .....	56		7		14		3		1		1		82	
No. with telegraph office.....	54		7		14		3		1		1		80	
No. with express office.....	58		7		14		3		1		1		84	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	27	3.1	10	4.2	26	2.8	10	3.1	3	1.8	5	1.3	81	2.8
Banks .....	53	6.1	12	5.1	31	3.4	8	2.5	4	2.4	6	1.5	114	3.9
Publishers .....	16	1.8	5	2.1	21	2.3	7	2.2	4	2.4	7	1.8	60	2.1
General stores .....	161	18.5	22	9.4	64	7.0	15	4.7	6	3.6	8	2.0	276	9.5
Specialized retail stores.....	288	33.0	91	38.7	391	42.7	150	46.7	66	39.5	195	49.6	1181	40.7
Livery and auto .....	45	5.2	10	4.2	66	7.2	13	4.0	7	4.2	18	4.6	159	5.5
Wholesale and jobber .....	3	0.3	0	...	0	...	3	0.9	5	3.0	7	1.8	18	0.6
Farm processing .....	168	19.2	36	15.3	128	14.0	30	9.3	20	12.0	34	8.7	416	14.3
Other manufacturing .....	8	0.9	3	1.3	24	2.6	16	5.0	11	6.6	26	6.6	88	3.0
All other .....	104	11.9	46	19.6	165	18.0	69	21.5	41	24.5	87	22.1	512	17.6
<b>Total units .....</b>	<b>873</b>	<b>100.0</b>	<b>235</b>	<b>100.0</b>	<b>916</b>	<b>100.0</b>	<b>321</b>	<b>100.0</b>	<b>167</b>	<b>100.0</b>	<b>393</b>	<b>100.0</b>	<b>2905</b>	<b>100.0</b>
By Number of Major Functions Listed for Each Business														
Three or more functions.....	26	3.0	2	0.8	14	1.5	2	0.6	2	1.2	5	1.3	51	1.7
Two functions .....	122	14.0	42	17.9	146	15.9	47	14.7	21	12.6	60	15.3	438	15.1
One function .....	725	83.0	191	81.3	756	82.6	272	84.7	144	86.2	328	83.4	2416	83.2
<b>Total .....</b>	<b>873</b>	<b>100.0</b>	<b>235</b>	<b>100.0</b>	<b>916</b>	<b>100.0</b>	<b>321</b>	<b>100.0</b>	<b>167</b>	<b>100.0</b>	<b>393</b>	<b>100.0</b>	<b>2905</b>	<b>100.0</b>

\* These are Blue Earth, Waseca, Le Sueur, Nicollet, Brown, Faribault, Martin, and Watonwan.

**TABLE XIII**  
**DISTRIBUTION OF BUSINESS UNITS IN EIGHT COUNTIES\* OF SOUTHERN MINNESOTA, 1920**

Population groups .....	0-500		501-1000		1001-2500		2501-5000		New Ulm		Mankato		Total	
No. of trade centers.....	88		8		14		3		1		1		115	
No. with post office .....	55		8		14		3		1		1		82	
No. with telegraph office.....	52		8		14		3		1		1		79	
No. with express office.....	56		8		14		3		1		1		83	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	23	2.6	10	3.6	22	2.3	10	2.8	3	1.8	5	1.2	73	2.4
Banks .....	66	7.5	13	4.7	38	3.9	10	2.8	4	2.4	7	1.8	138	4.6
Publishers .....	13	1.5	7	2.5	23	2.4	8	2.3	5	3.0	5	1.2	61	2.0
General stores .....	144	16.4	28	10.1	60	6.1	15	4.3	8	4.8	11	2.8	266	8.7
Specialized retail stores.....	279	31.8	99	35.7	421	43.1	167	47.6	72	43.4	198	50.0	1236	40.6
Livery and auto .....	92	10.5	22	7.9	92	9.4	33	9.4	10	6.0	42	10.6	291	9.6
Wholesale and jobber .....	2	0.2	1	0.4	1	0.1	1	0.3	5	3.0	11	2.8	21	0.7
Farm processing .....	163	18.6	42	15.2	126	12.9	29	8.3	10	6.0	20	5.1	390	12.8
Other manufacturing .....	4	0.5	8	2.9	27	2.8	14	4.0	12	7.3	28	7.1	93	3.0
All other .....	91	10.4	47	17.0	166	17.0	64	18.2	37	22.3	69	17.4	474	15.6
<b>Total units .....</b>	<b>877</b>	<b>100.0</b>	<b>277</b>	<b>100.0</b>	<b>976</b>	<b>100.0</b>	<b>351</b>	<b>100.0</b>	<b>166</b>	<b>100.0</b>	<b>396</b>	<b>100.0</b>	<b>3043</b>	<b>100.0</b>
By Number of Major Functions Listed for Each Business														
Three or more functions. ....	33	3.8	8	2.9	24	2.4	3	0.8	4	2.4	9	2.3	81	2.6
Two functions .....	143	16.3	48	17.4	160	16.4	62	17.7	21	12.7	58	14.6	492	16.2
One function .....	701	79.9	220	79.7	793	81.2	286	81.5	141	84.9	329	83.1	2470	81.2
<b>Total .....</b>	<b>877</b>	<b>100.0</b>	<b>276</b>	<b>100.0</b>	<b>977</b>	<b>100.0</b>	<b>351</b>	<b>100.0</b>	<b>166</b>	<b>100.0</b>	<b>396</b>	<b>100.0</b>	<b>3043</b>	<b>100.0</b>

\* These are Blue Earth, Waseca, Le Sueur, Nicollet, Brown, Faribault, Martin, and Watonwan.

TABLE XIV  
DISTRIBUTION OF BUSINESS UNITS IN EIGHT COUNTIES\* OF SOUTHERN MINNESOTA, 1925

Population groups .....	0-500		501-1000		1001-2500		2501-5000		New Ulm		Mankato		Total	
No. of trade centers.....	87		12		11		5		1		1		117	
No. with post office .....	51		12		11		5		1		1		81	
No. with telegraph office.....	49		12		11		5		1		1		79	
No. with express office.....	54		12		11		5		1		1		84	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	16	2.0	9	2.1	16	2.1	13	2.3	4	2.4	4	0.9	62	2.0
Banks .....	51	6.3	23	5.4	25	3.3	16	2.8	4	2.4	8	1.8	127	4.0
Publishers.....	10	1.2	9	2.1	13	1.7	12	2.1	7	4.1	7	1.5	58	1.8
General stores .....	137	16.8	42	9.9	44	5.9	20	3.5	5	2.9	20	4.4	268	8.4
Specialized retail stores.....	230	28.2	161	37.8	325	43.2	276	48.1	80	47.3	219	48.8	1291	40.6
Livery and auto .....	105	12.9	48	11.3	84	11.2	66	11.5	14	8.3	44	9.8	361	11.3
Wholesale and jobber .....	0	...	0	...	6	0.8	4	0.7	4	2.4	21	4.7	35	1.1
Farm processing .....	159	19.5	70	16.4	108	14.3	58	10.1	13	7.7	26	5.8	434	13.6
Other manufacturing .....	2	0.3	2	0.5	15	2.0	17	3.0	12	7.1	26	5.8	74	2.3
All other .....	104	12.8	62	14.5	117	15.5	91	15.9	26	15.4	74	16.5	474	14.9
Total units .....	814	100.0	426	100.0	753	100.0	573	100.0	169	100.0	449	100.0	3184	100.0
By Number of Major Functions Listed for Each Business														
Three or more functions.....	19	2.3	9	2.1	16	2.1	6	1.0	2	1.2	8	1.8	60	1.9
Two functions .....	127	15.6	60	14.1	123	16.3	88	15.4	25	14.8	65	14.5	488	15.3
One function .....	668	82.1	357	83.8	614	81.6	479	83.6	142	84.0	376	83.7	2636	82.8
Total .....	814	100.0	426	100.0	753	100.0	573	100.0	169	100.0	449	100.0	3184	100.0

\* These are Blue Earth, Waseca, Le Sueur, Nicollet, Brown, Faribault, Martin, and Watonwan.

TABLE XV  
DISTRIBUTION OF BUSINESS UNITS IN VILLAGES UNDER 500 POPULATION IN 1905 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups .....	0-500		501-1000		1001-2500		2501-5000		New Ulm		Mankato		Total	
No. of trade centers.....	83		12		11		5		1		1		113	
No. with post office .....	49		12		11		5		1		1		79	
No. with telegraph office.....	46		12		11		5		1		1		76	
No. with express office.....	51		12		11		5		1		1		81	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	11	1.4	5	1.2	13	1.8	11	1.9	3	1.7	4	0.9	47	1.5
Banks .....	40	5.1	19	4.4	24	3.2	14	2.4	4	2.3	6	1.3	107	3.4
Publishers .....	11	1.4	9	2.1	13	1.8	12	2.1	6	3.5	7	1.6	58	1.9
General stores .....	128	16.5	37	8.7	34	4.6	22	3.8	2	1.2	15	3.4	238	7.6
Specialized retail stores.....	214	27.6	168	39.3	335	45.4	273	47.6	88	51.8	228	51.6	1306	41.8
Livery and auto .....	118	15.2	60	14.1	101	13.7	75	13.1	19	11.2	50	11.3	423	13.5
Wholesale and jobber .....	1	0.1	3	0.7	5	0.7	6	1.1	3	1.8	14	3.2	32	1.0
Farm processing .....	153	19.7	68	15.9	101	13.7	63	11.0	12	7.0	22	5.0	419	13.4
Other manufacturing .....	2	0.3	5	1.2	11	1.4	18	3.1	8	4.7	22	5.0	66	2.1
All other .....	99	12.7	53	12.4	101	13.7	80	13.9	25	14.7	74	16.7	432	13.8
<b>Total units .....</b>	<b>777</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>738</b>	<b>100.0</b>	<b>574</b>	<b>100.0</b>	<b>170</b>	<b>100.0</b>	<b>442</b>	<b>100.0</b>	<b>3128</b>	<b>100.0</b>
By Number of Major Functions Listed for Each Business														
Three or more functions.....	13	1.7	14	3.3	20	2.7	3	0.5	3	1.8	9	2.0	62	2.0
Two functions .....	120	15.4	68	15.9	130	17.6	92	16.0	26	15.3	61	13.8	498	15.9
One function .....	644	82.9	345	80.8	588	79.7	479	83.5	141	82.9	372	84.2	2568	82.1
<b>Total .....</b>	<b>777</b>	<b>100.0</b>	<b>427</b>	<b>100.0</b>	<b>738</b>	<b>100.0</b>	<b>574</b>	<b>100.0</b>	<b>170</b>	<b>100.0</b>	<b>442</b>	<b>100.0</b>	<b>3128</b>	<b>100.0</b>

\* These are Blue Earth, Waseca, Le Sueur, Nicollet, Brown, Faribault, Martin, and Watonwan.



TABLE XVI

DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA VILLAGES UNDER 500 POPULATION IN 1905 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0		1-25		26-50		51-100		101-250		251-500		Total	
No. of trade centers.....	547		104		140		139		200		177		1307	
No. with post office .....	104		31		68		86		173		168		630	
No. with telegraph office.....	40		18		42		65		147		157		469	
No. with express office.....	83		39		55		75		153		154		559	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	37	3.3	12	4.0	21	3.7	25	3.2	132	5.2	171	4.3	398	4.3
Banks .....	11	1.0	3	1.0	11	2.0	21	2.7	115	4.5	176	4.5	337	3.6
Publishers .....	4	0.4	1	0.4	3	0.5	1	0.1	39	1.5	87	2.2	135	1.5
General stores .....	582	51.4	120	40.3	172	30.6	218	27.7	480	18.8	559	14.2	2131	23.0
Specialized retail stores.....	119	10.5	43	14.4	111	19.8	176	22.3	787	30.8	1416	35.9	2652	28.6
Chain units* .....	66	5.8	24	8.0	31	5.5	41	5.2	132	5.2	183	4.6	477	5.1
Livery and auto .....	5	0.4	1	0.4	5	0.9	11	1.4	48	1.9	88	2.2	158	1.7
Wholesale and jobber .....	0	...	0	...	0	...	0	...	1	0.0	4	0.1	5	0.1
Farm processing .....	231	20.4	71	23.8	157	27.9	199	25.3	408	16.0	577	14.6	1643	17.7
Other manufacturing .....	12	1.1	3	1.0	4	0.7	7	0.9	12	0.5	38	1.0	76	0.8
All other .....	65	5.7	20	6.7	47	8.4	88	11.2	398	15.6	647	16.4	1265	13.6
Total units .....	1132	100.0	298	100.0	562	100.0	787	100.0	2552	100.0	3946	100.0	9277	100.0
Towns with hotel .....	32	5.9	8	7.7	18	12.9	25	18.0	110	55.0	123	69.5	316	50.2
Towns with bank .....	11	2.0	3	2.9	11	7.2	20	14.4	103	51.0	138	78.0	286	45.4
Independent trade centers†.....	0	...	0	...	1	0.7	1	0.7	29	14.5	76	42.9	107	17.0

\* A chain unit is one giving its credit rating at another address. This does not include "divided responsibility" and the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE XVII

DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA VILLAGES UNDER 500 POPULATION IN 1910 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0		1-25		26-50		51-100		101-250		251-500		Total	
No. of trade centers.....	355		226		150		141		233		218		1323	
No. with post office .....	61		68		61		86		203		214		693	
No. with telegraph office.....	15		35		44		64		177		194		529	
No. with express office.....	32		59		52		74		181		196		594	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	16	2.5	6	1.3	14	2.8	25	3.8	123	5.1	205	4.6	389	4.3
Banks .....	1	0.2	6	1.3	9	1.8	24	3.6	137	5.7	222	5.0	399	4.4
Publishers .....	3	0.5	1	0.2	3	0.6	3	0.5	19	0.8	102	2.3	131	1.4
General stores .....	354	56.5	244	52.3	190	37.7	208	31.4	486	20.1	625	14.1	2107	23.1
Specialized retail stores.....	63	10.1	51	10.9	70	13.9	115	17.4	653	27.0	1457	33.0	2409	26.5
Chain units* .....	22	3.5	38	8.2	30	5.9	41	6.2	158	6.5	238	5.4	527	5.8
Livery and auto .....	1	0.2	1	0.2	2	0.4	4	0.6	57	2.3	135	3.1	200	2.2
Wholesale and jobber .....	0	...	0	...	0	...	1	0.1	0	...	1	0.0	2	0.0
Farm processing .....	125	20.0	95	20.3	137	27.2	162	24.5	408	16.8	656	14.8	1583	17.4
Other manufacturing .....	2	0.3	1	0.2	4	0.8	10	1.5	13	0.5	52	1.2	82	0.9
All other .....	39	6.2	24	5.1	45	8.9	60	10.4	367	15.2	730	16.5	1274	14.0
Total units .....	626	100.0	467	100.0	504	100.0	662	100.0	2421	100.0	4423	100.0	9103	100.0
Towns with hotel .....	15	4.2	6	2.6	14	9.3	24	17.0	106	45.5	159	72.9	324	24.5
Towns with bank .....	1	0.3	6	2.6	9	6.0	23	16.3	133	57.1	181	83.0	353	26.7
Independent trade centers†.....	0	...	0	...	1	0.7	0	...	17	7.3	93	42.7	111	8.4

\* A chain unit is one giving its credit rating at another address. This does not include "divided responsibility" and the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE XVIII

DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA VILLAGES UNDER 500 POPULATION IN 1915 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0	1-25	26-50	51-100	101-250	251-500	Total
No. of trade centers.....	144	393	189	158	258	229	1371
No. with post office .....	43	125	84	109	211	223	795
No. with telegraph office.....	14	23	53	78	195	205	568
No. with express office.....	16	43	64	86	204	208	621

Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	9	3.0	8	1.3	16	3.0	27	3.4	130	4.5	187	3.9	377	3.8
Banks .....	5	1.7	5	0.8	13	2.5	60	7.6	194	6.8	289	6.0	566	5.7
Publishers .....	2	0.7	0	...	3	0.6	2	0.2	23	0.8	119	2.5	149	1.5
General stores .....	158	53.4	389	61.7	213	40.2	242	30.5	547	19.1	651	13.5	2200	22.1
Specialized retail stores.....	35	11.8	48	7.6	52	9.8	134	16.9	773	27.0	1536	31.9	2578	26.0
Chain units* .....	15	5.1	32	5.1	29	5.5	57	7.2	143	5.0	214	4.4	490	4.9
Livery and auto .....	5	1.7	2	0.3	4	0.7	20	2.5	142	4.9	293	6.1	466	4.7
Wholesale and jobber .....	1	0.3	0	...	2	0.4	1	0.1	5	0.2	9	0.2	18	0.2
Farm processing .....	37	12.5	122	19.4	147	27.7	181	22.8	479	16.7	710	14.7	1676	16.9
Other manufacturing .....	1	0.3	1	0.2	4	0.7	3	0.4	19	0.7	63	1.3	91	0.9
All other .....	28	9.5	23	3.6	47	8.9	67	8.4	411	14.3	749	15.5	1325	13.3
Total units .....	296	100.0	630	100.0	530	100.0	794	100.0	2866	100.0	4820	100.0	9936	100.0
Towns with hotel .....	8	5.5	8	2.0	15	7.9	26	16.5	112	43.4	151	66.0	320	23.3
Towns with bank .....	5	3.5	5	1.3	13	6.9	60	38.0	180	75.0	208	90.8	471	34.4
Independent trade centers†.....	1	0.7	0	...	1	5.3	0	...	21	8.1	114	49.8	137	10.0

\* A chain unit is one giving its credit rating at another address. This does not include "divided responsibility" and the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE XIX

DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA VILLAGES UNDER 500 POPULATION IN 1920 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0		1-25		26-50		51-100		101-250		251-500		Total	
No. of trade centers.....	100		363		190		185		260		241		1339	
No. with post office .....	26		99		72		126		225		237		785	
No. with express office.....	17		17		46		92		197		224		590	
No. with telegraph office.....	15		30		54		98		205		223		625	
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	10	3.3	5	0.8	10	1.7	33	3.1	113	3.8	178	3.5	349	3.3
Banks .....	5	1.7	10	1.6	40	7.0	92	8.6	228	7.6	352	6.8	727	6.8
Publishers .....	1	0.3	0	...	0	...	3	0.3	22	0.7	106	2.1	132	1.2
General stores .....	137	45.7	356	58.3	212	36.8	224	27.4	560	18.6	674	13.1	2233	20.8
Specialized retail stores.....	55	18.4	58	9.5	63	10.9	156	14.6	702	23.3	1509	29.3	2543	23.7
Chain units* .....	8	2.7	22	3.6	40	7.0	82	7.6	176	5.9	268	5.2	596	5.6
Livery and auto .....	7	2.3	18	2.9	40	7.0	96	9.0	313	10.4	509	9.9	983	9.2
Wholesale and jobber .....	1	0.3	0	...	0	...	0	...	2	0.1	14	0.3	17	0.2
Farm processing .....	42	14.0	119	19.5	131	22.7	208	19.4	508	16.9	756	14.7	1764	16.5
Other manufacturing .....	1	0.3	1	0.2	1	0.2	12	1.1	15	0.5	46	0.9	76	0.7
All other .....	33	11.0	22	3.6	39	6.7	96	8.9	368	12.2	733	14.2	1291	12.0
Total units .....	300	100.0	611	100.0	576	100.0	1072	100.0	3007	100.0	5145	100.0	10,711	100.0
Towns with hotel .....	7	7.0	5	1.4	8	4.2	30	16.2	96	36.9	145	60.2	291	21.7
Towns with bank .....	5	5.0	10	2.7	40	21.0	89	48.1	197	75.8	221	91.7	562	42.0
Independent trade centers†.....	0	...	0	...	0	...	2	1.1	21	8.1	103	42.7	126	9.4

\* A chain unit is one giving its credit rating at another address. This does not include "divided responsibility" and the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE XX

DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA VILLAGES UNDER 500 POPULATION IN 1925 WITH ALL CHAIN ORGANIZATIONS (CLASSIFIED SEPARATELY)

Population groups	0	1-25	26-50	51-100	101-250	251-500	Total							
No. of trade centers.....	88	351	175	196	266	231	1307							
No. with post office .....	34	99	62	134	229	226	784							
No. with telegraph office.....	28	20	41	101	188	213	591							
No. with express office.....	26	26	47	108	199	217	623							
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	10	3.2	6	1.0	13	2.4	32	2.6	82	2.8	130	2.7	273	2.6
Banks .....	9	3.0	3	0.5	30	5.6	94	7.7	198	6.9	300	6.2	634	6.1
Publishers .....	0	...	0	...	1	0.2	2	0.2	16	0.6	99	2.0	118	1.2
General stores .....	130	42.2	324	56.7	214	39.6	297	24.3	537	18.7	620	12.8	2122	20.5
Specialized retail stores.....	55	17.9	48	8.4	54	10.0	206	16.9	622	21.7	1399	28.9	2384	23.0
Chain units* .....	6	2.0	19	3.3	25	4.6	86	7.0	169	5.9	227	4.7	532	5.2
Livery and auto .....	30	9.7	42	7.3	42	7.8	142	11.6	333	11.6	551	11.4	1140	11.0
Wholesale and jobber .....	1	0.3	0	...	1	0.2	1	0.1	3	0.1	17	0.4	23	0.2
Farm processing .....	29	9.4	112	19.6	122	22.6	232	19.0	490	17.1	732	15.1	1717	16.6
Other manufacturing .....	1	0.3	1	0.2	3	0.5	2	0.2	10	0.3	32	0.7	49	0.5
All other .....	37	12.0	17	3.0	35	6.5	127	10.4	412	14.3	729	15.1	1357	13.1
Total units .....	308	100.0	572	100.0	540	100.0	1221	100.0	2872	100.0	4836	100.0	10,349	100.0
Towns with hotel .....	7	8.0	6	1.7	8	4.6	30	13.3	74	27.8	115	49.8	240	18.4
Towns with bank .....	8	9.1	3	0.9	30	17.1	92	46.9	118	44.4	210	90.9	531	40.6
Independent trade centers†.....	0	...	0	...	1	0.6	1	0.5	14	5.3	90	39.0	106	8.1

\* A chain unit is one giving its credit rating at another address. This does not include "divided responsibility" and the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.

TABLE XXI

DISTRIBUTION OF BUSINESS UNITS IN MINNESOTA VILLAGES UNDER 500 POPULATION IN 1929 WITH ALL CHAIN ORGANIZATIONS CLASSIFIED SEPARATELY

Population groups	0	1-25	26-50	51-100	101-250	251-500	Total							
No. of trade centers.....	85	348	150	193	262	234	1272							
No. with post office .....	34	83	57	133	228	230	765							
No. with telegraph office.....	28	21	39	93	191	214	586							
No. with express office.....	25	28	39	101	199	220	612							
Units	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Hotels .....	8	2.6	5	0.8	8	1.8	20	1.8	63	2.3	112	2.4	216	2.2
Banks .....	8	2.6	2	0.3	14	3.2	69	6.2	156	5.8	227	4.8	476	4.8
Publishers .....	0	...	0	...	0	...	2	0.2	15	0.6	107	2.3	124	1.3
General stores .....	117	38.4	344	56.6	182	41.2	284	25.4	514	19.1	615	12.9	2056	20.7
Specialized retail stores.....	60	19.7	40	6.6	46	10.4	191	17.1	575	21.4	1363	28.7	2275	23.0
Chain units* .....	10	3.3	24	3.9	25	5.7	73	6.5	169	6.3	244	5.1	545	5.5
Livery and auto .....	33	10.8	56	9.2	45	10.2	150	13.4	345	12.9	644	13.5	1273	12.8
Wholesale and jobber .....	1	0.3	1	0.2	1	0.2	1	0.1	10	0.4	21	0.4	35	0.4
Farm processing .....	29	9.5	108	17.8	88	19.9	205	18.3	459	17.1	711	15.0	1600	16.1
Other manufacturing .....	3	1.0	3	0.5	1	0.2	5	0.4	5	0.2	23	0.5	40	0.4
All other .....	36	11.8	25	4.1	32	7.2	119	10.6	374	13.9	686	14.4	1272	12.8
Total units .....	305	100.0	608	100.0	442	100.0	1119	100.0	2685	100.0	4753	100.0	9912	100.0
Towns with hotel .....	7	8.2	5	1.4	5	3.3	20	10.4	61	23.3	102	43.6	200	15.7
Towns with bank .....	7	8.2	2	0.6	14	9.3	68	35.2	151	57.6	184	78.6	426	33.5
Independent trade centers†.....	0	...	0	...	0	...	1	0.5	8	3.0	86	36.7	95	7.5

\* A chain unit is one giving its credit rating at another address. This does not include "divided responsibility" and the "mother" unit as a member of the chain.

† An independent town is one with at least a post office, a telegraph office, an express office, a publisher, and a bank.