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# Some aspects of the bread baking industry in Omaha

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Accepted for the faculty of The Graduate College of  
the University of Nebraska at Omaha, in partial fulfill-  
ment of the requirements for the degree master of arts.

Graduate Committee

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5276/102



SOME ASPECTS OF THE BREAD BAKING INDUSTRY IN OMAHA

A Thesis

Presented to the

Department of Geography-Geology

and the

Faculty of the Graduate College

University of Nebraska at Omaha

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Shirley A. Jahnke

August, 1972

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## INTRODUCTION

Since the beginnings of civilization, bread has been a staff of life. The unleavened flat breads of ancient times, grandmother's old-fashioned home-made loaf, and today's precision-controlled product have all vitally contributed to the world's food supplies and have made baking a basic economic activity in most societies. Despite the increased variety of foods now available, bread is still a staple in many diets. Although bread baking was one of the last types of manufacturing to advance to the commercial stage, the development of the industry has progressed rapidly so that today commercial bakers account for approximately 90 per cent of the total bread production in the United States.<sup>1</sup>

Bakery products, while no longer of the importance they once were, still account for almost a tenth of the American consumer's food dollar.<sup>2</sup> Nor is the industry's importance confined to its ultimate consumer, since the nation's flour millers, and, indirectly, its wheat farmers look to it as a primary sales outlet. Of all the wheat flour consumed in

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<sup>1</sup>Richard G. Walsh and Bert M. Evans, "The Baking Industry," in Market Structure of the Agricultural Industries, ed. by John R. Moore and Richard G. Walsh (Ames, Iowa: Iowa State University Press, 1966), p. 195.

<sup>2</sup>National Commission on Food Marketing, Organization and Competition in the Milling and Baking Industries, Technical Study No. 5 (Washington, D.C.: Government Printing Office, 1966), p. 6.

the United States, 43.3 per cent is used by the baking industry.<sup>1</sup> In several respects, baking holds a prominent position within the food industries on a national level (see Table 1). Bread baking is one of the largest industries in the United States with annual sales of more than \$8 billion.<sup>2</sup> It is exceeded only by canning and freezing in value added by manufacture and is thirteenth among all manufacturing industries in value of products shipped. Therefore, baking is a significant industry.

TABLE 1  
COMPARATIVE SIZES OF THE PRINCIPAL FOOD INDUSTRIES,  
1967

Type	No. of Plants	Value of Shipments*	Value Added by Mfg.*	No. of Workers
Baking . . . . .	4,390	6,466.5	3,494.6	264,200
Flour Milling . . . . .	541	2,457.4	491.3	20,500
Meat Packing . . . . .	2,697	15,576.3	2,220.5	170,500
Sugar Refining . . . . .	182	2,305.0	652.0	30,900
Canning & Freezing . . . . .	582	9,231.5	3,588.2	259,900
Dairying . . . . .	6,188	12,815.1	3,466.4	231,700

\* (Million dollars)

Source: Census of Manufactures: 1967.

A review of the literature reveals that the baking industry has received most attention from economists and

<sup>1</sup>National Commission on Food Marketing, pp. 1, 3.

<sup>2</sup>"A Story of Interstate Brands Corporation," Reprinted by special permission from the Missouri Harbinger Magazine, (November, 1970), p. 31.

from private and public agencies, including the United States Department of Agriculture, the Federal Trade Commission, and various universities. This is probably due to the fact that bread is a food staple.

Throughout the geographical literature, commercial bakeries are cited as a classic example of an ubiquitous industry which is everywhere proportional to the distribution of population.<sup>1</sup> With no penetrating analysis of the bread baking industry to be found within the literature, the geographer seems to have relegated this industry as only an example of an ubiquitous industry tied to the local market.

While the basic local market orientation of baking and its positive correlation with population density are not to be disputed, changes have and are coming about in the baking industry which may alter the above interpretation. Advancements in communication, transportation, technology, and changing economies of scale have been reflected in a concentration of the commercial baking industry and an expansion of their marketing areas. Thus, baking today may not be as ubiquitous as once thought, for not every urban community has

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<sup>1</sup>John W. Alexander, Economic Geography (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963), pp. 296-297; E. Willard Miller, A Geography of Manufacturing (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1962), p. 6; Chauncey D. Harris, "The Market as a Factor in the Localization of Industry in the United States," Annals of the Association of American Geographers, LIV (December, 1964), p. 320. Hereafter referred to as "Market Factor."

a commercial baking operation. While essentially local in character, the baking industry appears to serve a wider regional market. Geographical concentration seems to have advanced to the point that large commercial bakeries are operated only in larger cities, distributing bread to smaller cities and towns in the contiguous service areas. In this light, baking, with characteristics of both the manufacturing and the service industries, is of indubitable geographical interest as an indicator of an external relationship which effectively binds Omaha to the countryside.

Wholesale bakery deliveries represent a daily interaction between a city and its surrounding area which Chauncy D. Harris, in a study of Salt Lake City and its region, found to be a meaningful indicator of the city's sphere of influence.<sup>1</sup>

Cities commonly serve areas around them and normally act as the focal point of a surrounding area which it dominates. Cities function as centers of employment, as collecting and marketing points for the products of the surrounding areas and as distributing centers for goods from outside. Their more specifically social functions are as centers for the provision of educational, health, entertainment, and cultural services; and they also provide crystallizing points of regional feeling and thought. With

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<sup>1</sup>Chauncy D. Harris, Salt Lake City: A Regional Capital, doctoral dissertation (Chicago: University of Chicago Libraries, 1941). Hereafter cited as Salt Lake City.

increasing distance away from the city, the influence of the city weakens until a point is reached where another competing city exerts more dominance.<sup>1</sup>

The study of the influence of an urban center deals with both the tributary area, which is that area to which the city sends its goods and services, and the supporting area which is that area that sends goods, people, and revenue to the city. Further consideration of a city's area of dominance or sphere of influence, finds it to consist of a number of single-feature regions. Many studies have dealt with services and types of commodities emanating from the city, particularly newspaper areas<sup>2</sup> and retail and wholesale market areas,<sup>3</sup> and with the general regions that cities may be considered to influence.<sup>4</sup>

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<sup>1</sup>For a penetrating analysis of city-region relationships, both internal and external, see Robert E. Dickinson, City and Region (London: Routledge and Kegan Paul, Ltd., 1964).

<sup>2</sup>Robert E. Park and Charles Newcomb, "Newspaper Circulation and Metropolitan Regions," in The Metropolitan Community, ed. by R.D. McKenzie (New York: McGraw-Hill Book Co., Inc., 1933).

<sup>3</sup>Brian J.L. Berry, Geography of Market Centers and Retail Distribution, Foundations of Economic Geography Series, ed. by Norton Ginsburg (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967).

<sup>4</sup>Harris, Salt Lake City; Edward L. Ullman, Mobile: Industrial Seaport and Trade Center, doctoral dissertation (Chicago: Department of Geography, University of Chicago, 1943); Howard L. Green, "Hinterland Boundaries of New York City and Boston in Southern New England," Economic Geography, XXXI (October, 1955), p. 283-300; John R. Borchert and Russell B. Adams, Trade Centers and Trade Areas of the Upper Midwest, Upper Midwest Economic Study, Urban Report No. 3 (Minneapolis: University of Minnesota Press, 1963).

Previous studies have been made dealing with the area which Omaha dominates in a general way and with more specialized spheres of influence, such as newspaper circulation, telephone calls and retail trade, as well as milk, grain, and animal shipments.<sup>1</sup>

While these studies have made valuable contributions to the problem of determining Omaha's area of dominance, none have included an in depth study of the service or commodity whose service area and/or market area was used as an indicator of Omaha's influence. Nor have any of the above studies dealt with the important aspect of wholesale commodity distribution. Arthur E. Smailes states the importance of this factor in The Geography of Towns.

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<sup>1</sup>Harold J. Retallick and Charles R. Gildersleeve, License Plate Survey of Two Major Shopping Points, Omaha Trade Study No. 1, Omaha Urban Area Research Project (Omaha, Nebraska: Center for Urban Affairs, University of Omaha, 1967); Harold J. Retallick and Charles R. Gildersleeve, An Analysis of Telephone Calls, Newspaper Circulation, and Correspondent Banks, Omaha Trade Study No. 2, Omaha Urban Area Research Project (Omaha, Nebraska: Center for Urban Affairs, University of Omaha, 1967); Donald W. Lea and John T. Wilhelm, License Plate Survey of Eight Major Shopping Points, Omaha Trade Study No. 3, Omaha Urban Area Research Project (Omaha, Nebraska: Center for Urban Affairs, University of Omaha, 1967); Charles R. Gildersleeve and John T. Wilhelm, Milk, Grain and Livestock Source Areas, Omaha Trade Study No. 4, Omaha Urban Area Research Project (Omaha, Nebraska: Center for Urban Affairs, University of Omaha, 1968); Harold J. Retallick and Charles R. Gildersleeve, Omaha Spheres of Influence, Omaha Trade Study No. 5, (Omaha, Nebraska: Center for Urban Affairs, University of Nebraska at Omaha, 1968); John T. Wilhelm, "Delimitation of the Omaha Wheat Source Supply Region," (Unpublished Master's thesis, University of Nebraska at Omaha, 1968).



The outstanding and indeed the most general economic function discharged by towns is distribution. The higher ranks of urban centres are important for wholesale distribution, a centralized function in respect of which their service-areas are significant as measures of the wider field of their economic influence.<sup>1</sup>

The purpose of this study therefore, is: (1) to investigate the bread baking industry in a specific location, Omaha, Nebraska, with emphasis on the spatial aspects of raw material acquisition, distribution of finished products and markets; (2) to examine the production process as an intermediate stage in the focus of assembly and distribution areas; and (3) to analyze the commodity service area of bakery deliveries as an expression of Omaha's function as a regional population and distribution center.

No attempt is made to investigate all aspects of the Omaha baking industry. The basic approach is that of a general input-output consideration in which the main foci are the relationships linking the industrial bakeries to areas which supply its raw materials, and to areas which consume its product. Only those commercial bakeries within the study area of the Omaha Standard Metropolitan Statistical Area (Douglas and Sarpy counties in Nebraska and Pottawattamie County in Iowa, see Figure 1) which produce bread and employ at least twenty employees are considered. Only six plants are found to fit the above criteria; however, these six plants account for 1,067 of the approximately

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<sup>1</sup>Arthur E. Smailes, The Geography of Towns (London: Hutchinson University Library, 1953), p. 140.

# STUDY AREA

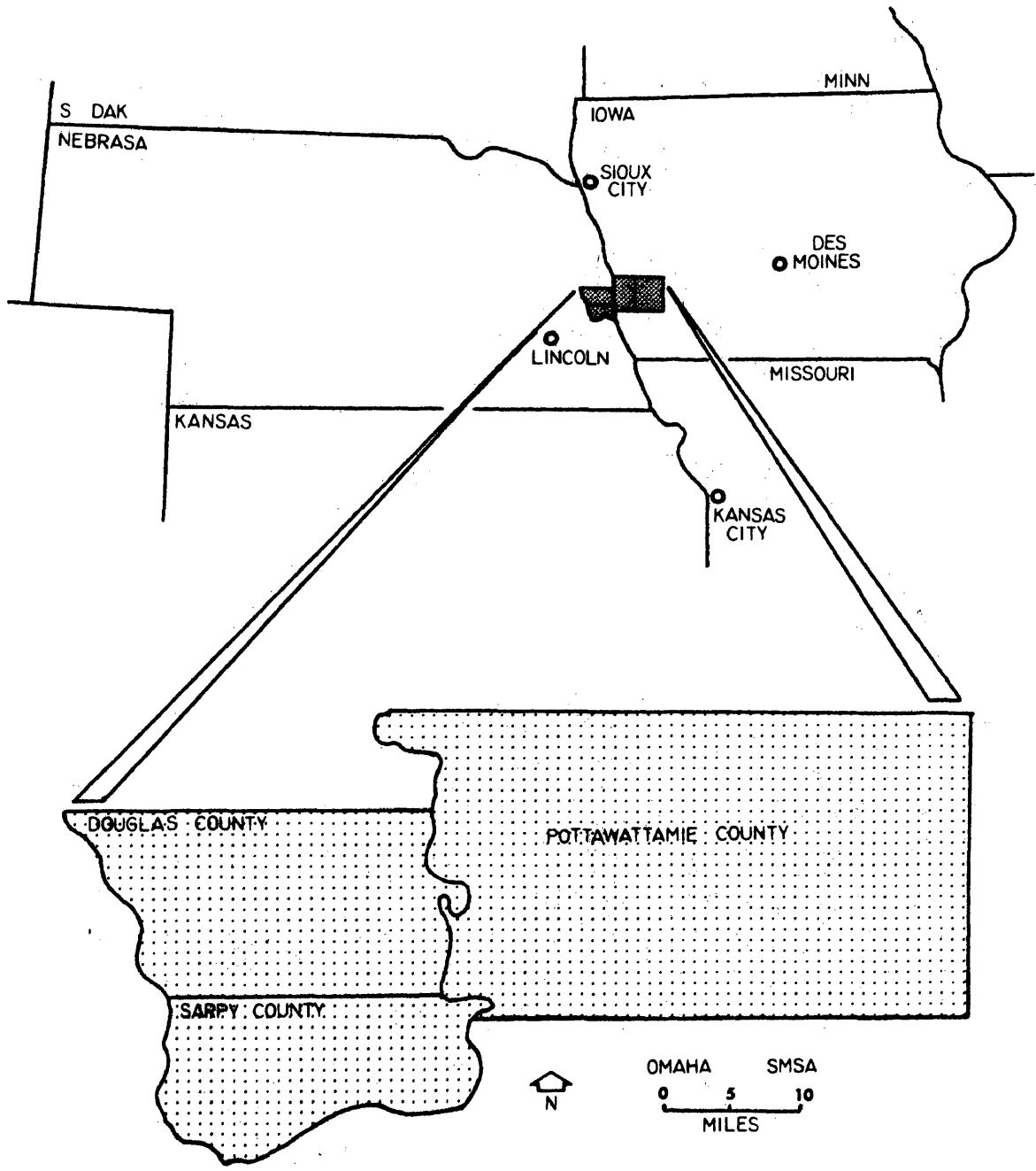


FIGURE ONE

1,250 employees employed by the wholesale baking industry within the Omaha SMSA.<sup>1</sup> The above criteria also eliminate the single-unit retail bakeshops, which for all practical purposes, are purely local, community operations.<sup>2</sup>

Sources of information on the baking industry as a whole are found in published materials including statistical data from the Bureau of Census, Department of Labor, and annual reports of firms and trade organizations. Studies published by Federal agencies and bakery associations, as well as industry studies by economists are helpful in gaining a general background of the baking industry.<sup>3</sup>

Since little or no data have been published concerning the baking industry in Omaha, extensive field work is the

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<sup>1</sup>U.S. Department of Labor, Bureau of Labor Statistics, Nebraska Department of Labor, telephone conversation, June, 1972.

<sup>2</sup>Industry data for bread and other bakery products (SIC 2051) as presented in this study and as reported by the Census of Manufactures exclude single-outlet retail bakeries and bakery products made in nonmanufacturing establishments such as restaurants, hotels, hospitals, and other institutions, this omission is assumed to be a relatively small part of total production.

<sup>3</sup>National Commission of Food Marketing; William G. Panschar, Baking in America, Vol. I: Economic Development (Evanston, Illinois: Northwestern University Press, 1956); Charles C. Slater, Baking in America, Vol. II: Market Organization and Competition (Evanston, Illinois: Northwestern University Press, 1956); Richard G. Walsh and Bert M. Evans, Economics of Change in Market Structure, Conduct, and Performance: The Baking Industry 1947-1958, University of Nebraska Studies New Series No. 28 (Lincoln, Nebraska: University of Nebraska Press, 1963), hereafter cited as Economics of Change; David A. Storey, Market Performance in the Perishable Bakery Products Industry, Research Bulletin No. 734, Agricultural Experiment Station (Lafayette, Indiana: Purdue University, 1962).

chief source of information obtained from direct field observations involving the bakeries themselves, their raw material suppliers, and their customers. Field work entailed an examination of the whole population of single cases, the six bakery plants. Interviews with key bakery personnel formed the basis for gathering necessary industry data concerning the Omaha commercial bakeries.

A schedule type questionnaire was prepared and used during the field interviews with selected plant personnel.<sup>1</sup> The focus of inquiry deals with procurement of raw materials, production, distribution, and areal market extent. Questions were also included concerning general plant operations, the number of employees, kinds of production, and cost structure. In many instances, due to the extremely competitive nature of the industry, quantitative responses were reduced to generalized statements rather than specific figures. In some cases, information was unavailable or refused. Therefore, questionnaire results may not always reflect the degree of precision desired; however, they are adequate in forming a basis for analysis of Omaha bread plant operations.

By the request of a majority of the bakeries involved in this study, none will be referred to by company name.

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<sup>1</sup>A copy of the questionnaire used during field interviews is in Appendix I, p. 95.

## CHAPTER I

### GENERAL CHARACTERISTICS OF THE BAKING INDUSTRY

#### Major Divisions of the Baking Industry.

What is thought of broadly as the baking industry is really two quite separate industries--the biscuit and cracker industry and the perishable bakery products industry. Both use essentially the same raw materials and both bake their products. There the similarity ends, for the biscuit industry manufactures dry or semi-perishable products, while the perishable bakery produces such products as bread, rolls, pies, and cakes. Since perishability necessitates almost immediate delivery, the territory served by a baker of the perishable bakery products tends to be more restricted. This limitation results in a preponderance of small plants located relatively close to their respective markets, while the biscuit industry is characterized by fewer but larger plants.<sup>1</sup> The degree of perishability of their products may be the explanation for the differences in the characteristics of the two divisions and makes them virtually noncompeting.

The perishable bakery industry is further divided into four subindustries by the Census of Manufactures: 1) wholesale bakeries; 2) grocery chain bakeries; 3) home service

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<sup>1</sup>Stanley Vance, American Industries (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1955), p. 544.

bakeries; and 4) retail multi-outlet bakeries.<sup>1</sup> The titles given to the subindustries lead one to believe that the differences among them are merely in types of customers. This is not so, for kinds of products, methods of manufacture, and mode and/or areal extent of distribution are significantly different among the various segments of the industry.

Wholesale bakeries deliver most of their output to independent grocery stores and to individual outlets of chain grocery stores for retail sell there, although a small share of their output may be sold to restaurants, hotels, institutions, and other establishments buying the products for resale. Wholesale bakeries commonly use retail route distribution systems, with truck drivers acting as salesmen making sales on consignment. Of all the subindustries, bakeries selling primarily to grocery stores have by far the largest plants and the highest total value of products shipped. Bread products are the most important single group of items manufactured by wholesale bakeries. This may possibly be due to the fact that consumers desire to purchase their bread as part of their other grocery purchases; and grocery stores, wholesale bakeries' primary sales outlet, are not ideal places for the careful handling of fragile bakery products such as cakes and pies.<sup>2</sup>

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<sup>1</sup>Defined as in the U.S. Department of Commerce, Bureau of the Census, Census of Manufactures 1967, Vol. II, Industry Statistics.

<sup>2</sup>Storey, p. 4.

Grocery chain bakeries are owned and operated by grocery chain store companies which distribute their product through retail grocery stores owned by the same company. Bulk delivery methods are used instead of distribution by routes and bread is handled by store clerks rather than driver-salesmen. Bread is the major product of grocery chain bakeries for much the same reason it is the principle product of wholesale bakeries. Although there are fewer bakeries owned by grocery chains than wholesale bakers, the grocery chain subindustry is the fastest growing and has great importance in the competitive processes of the industry.<sup>1</sup>

Home service bakeries sell primarily through retail home service routes, delivering directly to the home on a house to house basis. Home service bakeries have been declining rapidly in the past several years. Many small bakeries that formerly distributed their products via high cost house-to-house routes have shifted to restaurant and grocery store outlets and are now classified as wholesale bakeries. Many more home service bakeries have been bought out by multi-market corporations which have either closed the home service bakery or took over the plant for production of their own products. A few home service plants do sell part of their output through grocery stores, particularly on the East Coast. While bread is still the main product, rolls, cakes, pies, and other specialty items make up a

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<sup>1</sup>Slater, Market Organization and Competition, p. 30.

much larger portion of bakery items produced by home service bakeries than any of the other subindustries.<sup>1</sup>

Retail multi-outlet bakeries sell primarily through nonbaking outlets operated by the same company. In addition to outlets away from the plants, most multi-outlet bakeries have outlets at the plant. Because they control the product until it is wrapped in the consumer's presence, their product can be more fragile and delicate than that of other industrial producers and more like the products of single-outlet retail bakeries. Multi-outlet bakeries are restricted in size by the character of the handwork that is involved in their main products.<sup>2</sup>

This study centers on the perishable products industry which accounts for 80 per cent of all bakery products,<sup>3</sup> and, within this group, primarily with the activities of wholesale industrial bakeries producing bread. The emphasis of further discussions will then focus on bread producing wholesale bakeries.

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<sup>1</sup>Ibid., p. 32.

<sup>2</sup>Ibid., pp. 32-33.

<sup>3</sup>E.B. Alderfer and H.E. Michl, Economics of American Industry (2nd ed.; New York: McGraw-Hill Book Co., Inc., 1950), p. 526.



### History and Development<sup>1</sup>

Baking, dating back thousands of years to the Stone Age, was until recently a household activity. The transition into large-scale commercial baking began around the turn of the century. This transition depended upon three major forces: first, the change in the pattern of consumer demand; second, the triumph of mass production; and third, the coming of the automobile age and mass distribution.<sup>2</sup> All three forces came about slowly by degrees, each reinforcing the others.

In the United States, commercial baking began in the last half of the nineteenth century. It was during this period that large portions of the nation moved from a near subsistence level of living to a more affluent way of life. Under the stimulus of a growing population with expanding real incomes, the consumption of virtually all commercially prepared foods increased rapidly. The increasing urbanization of population was especially favorable to the growth of the baking industry since, outside the cities, home-baked bread was virtually universal. But, however minor, the baking industry had made some inroads, progressing from production of 10 per cent of all bread consumed in 1850 to about 25 per cent in 1900. Most bakeries were still small

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<sup>1</sup>For a more detailed history of the industry, see Panscher on which much of this portion of this paper is based. An interesting account which traces the story of bread through its practical and aesthetic roles in almost every culture and recorded age is found in H.E. Jacob, Six Thousand Years of Bread (Garden City, N.Y.: Doubleday, Doran and Co., Inc., 1945).

<sup>2</sup>Panscher, p. 93.

retail shops. Panschar estimates that only about a tenth of them could be called industrial, that is, operating large plants and selling their output to stores. But these few bakeries had sales six times that of the smaller retail operations and were the forerunners of the modern baking industry.<sup>1</sup>

During the next thirty years the industry flourished as it adopted mass production and, with the coming of the automobile, mass distribution. Although expanding greatly, the very factor contributing to the baking industry's earlier growth, increasing real income, now came to have the opposite effect. The American consumer began to shift away from starches and to enjoy a much greater variety of foods, especially the more expensive fruits and vegetables. The redeeming feature of this change in demand was that home baking of bread continued to decline rapidly. By 1930, for the first time in the history of baking, commercial bakeries surpassed the home as the source of the nation's bread, supplying over 60 per cent of all bread consumed.<sup>2</sup>

Two other developments occurred during the thirty year period from 1900 to 1930 that were to have lasting effects on the industry. First, chain grocers began to integrate into baking, producing some of their own bread for sale in their stores. This movement started after

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<sup>1</sup>Ibid., p. 47.

<sup>2</sup>Ibid., p. 95.

World War I and, within ten or fifteen years, was important enough to account for about 5 per cent of the industry's total output.<sup>1</sup> Secondly, the baking industry shared in the general merger frenzy that was sweeping industries across the country. This came in two waves: (1) the local consolidation, largely during the first half of the period, and (2) the multi-market combinations, following slightly later and reaching a peak in the 1920's.

One of the earliest of the local type of merger was the formation of the American Baking Company in 1907. This was a merger of seven baking companies in St. Louis. The stated purpose of the merger was to eliminate unfair trade practices and destructive competition, familiar terms in the industry even today. Two of the seven plants were shut down immediately and, by 1924, three others were closed so that only two plants of the original seven remained in operation.<sup>2</sup> This would seem to indicate that excess capacity, a current problem in the industry, was severe even then.

Since mergers of the local type were not completely successful in combating competition, bakers began to look to other markets for protection. Mergers involving bakeries operating in different markets were sought for diversification

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<sup>1</sup>Richard G. Walsh, Bert M. Evans, and Eleanor M. Birch, "Some Consequences of Bilateral Oligopoly and Vertical Integration in Bread Markets," Journal of Farm Economics, XXVIII (January, 1963), p. 164.

<sup>2</sup>Panschar, pp. 146-147.

purposes and also to give more financial strength than could be found in any one single market. An early example of this type of merger was the formation of the General Baking Company, incorporated in 1911 as a consolidation of twenty baking companies in seventeen cities.<sup>1</sup> The decade of the twenties featured many more sweeping mergers, many of them inspired by William B. Ward who created a baking empire that was to have a lasting influence on the industry. The nation's largest two bakery firms today, Continental and General, were his creations.

Due to increased competition from chain stores during the twenties and the emergence of giant multi-market firms, the baking industry took on many of its present features by the 1930's. Frequent price wars also shaped the industry. But, bakers soon learned the hard way that theirs was an oligopolistic industry characterized by fewness of sellers so that the behavior of any one firm affected others and quickly brought on retaliatory actions. Consequently, a new emphasis on nonprice tactics, such as advertising and shelf display developed, persisting to the present.

The depression of the 1930's hit the baking industry hard even though bread is generally considered depression-proof. When incomes are decreasing, consumers tend to shift away from more elaborate diet patterns and return to the lower-cost staples such as bread. To some extent, this did occur during the thirties but the economic slump was

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<sup>1</sup>Ibid., p. 149.

so severe that consumption of all foods, including bread, was reduced. Also, unemployed women had more time to bake their own bread and the very low incomes of the period made the small savings gained by home baking significant. For the first time in more than eighty years the trend toward more commercial baking was reversed. Only integrated chain stores, with lower priced bread, made some small gains during the depression.<sup>1</sup>

With the coming of World War II, millions of housewives were put into the labor force and had little time for baking. Higher wartime income, together with rationing which restricted spending, helped to create a situation which allowed the baking industry to rapidly regain ground it had lost in the thirties. The war indirectly aided the industry in another way by temporarily halting destructive competition practices. A War Food Order prohibited consignment selling to minimize waste through stale returns and a Defense Transportation Order restricted the expansion of routes as a means of conserving tires and gasoline.<sup>2</sup>

The major effect of the war was an enormous expansion in demand for bakery products. This expansion rose until commercial bakeries were supplying about 90 per cent of all bread consumed by the 1950's.<sup>3</sup> Up until recently, development

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<sup>1</sup>Walsh and Evans, "The Baking Industry," p. 195.

<sup>2</sup>Panschar, pp. 222-224.

<sup>3</sup>Walsh and Evans, "The Baking Industry," p. 195.

in the baking industry has been one of almost uninterrupted growth. But, as one looks forward, the picture looks much dimmer. Changes in the demand for bread may force the industry to face the prospect of vast changes in production and distribution practices.

### Consumption Patterns

Total industrial output of perishable bakery products increased from an estimated 3,555.9 million dollars in 1958 to 3,829.8 million dollars in 1963 and 4,320.6 million dollars in 1967.<sup>1</sup> However, several studies concerning the baking industry have shown that per capita consumption of industrially produced bakery products have decreased, especially in the years just after World War II until the mid 1960's. Census figures would seem to indicate that this decline in per capita consumption appears to be leveling off. Per capita consumption of most types of bread and cake decreased the most, while per capita consumption of rolls and specialty breads increased.<sup>2</sup> The latter two groups include products such as "brown 'n serve" rolls and "diet" breads.

Competing products are among the major factors affecting bakery product demand. Industrial bakers must compete with

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<sup>1</sup>Estimates based on data from U.S. Department of Commerce, Bureau of the Census, Census of Manufactures: 1967.

<sup>2</sup>Charles C. Slater, Economic Changes in the Baking Industry (Chicago: American Bakers Association, 1958), pp. 1-4; and Storey, p. 7.

retail bakers producing similar products and with producers of close-substitute products. Frozen bakery products, such as frozen pies, have greatly increased in importance. Most frozen bakery products are produced by non-baking firms, although at least one large baking firm owns a frozen food subsidiary.

Prepared mixes used for home baking and refrigerated doughs are perhaps even more influential in affecting bakery goods sales than frozen bakery products. These products are generally produced by firms in the flour milling industry. Although statistics were not available, these products appear to be increasing greatly in popularity and are considered to have become serious competing products for industrial bakers.

Although the basic inelasticity of demand for bread has been hidden and offset by the substitution of commercial baking for home baking, this process appears to have reached its upper limit. Even though home baking may still be declining slightly, most cakes, pies, and biscuits served in the home are home baked rather than purchased, apparently due to the popularity of the prepared mixes discussed above.<sup>1</sup>

Rural families do more baking than urban families. There are also considerable differences among geographic

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<sup>1</sup>Storey, p. 7.

regions. Home baking is more important in the South and least important in the Northeast. There does not seem to be any noticeable difference between the amount of home baking done by low or high income families.<sup>1</sup>

The steady growth of population in the United States has a positive influence on the demand for bakery products. In the years between 1960 and 1970, the U.S. population increased about 13 per cent; thus, an average annual rate of about 1.3 per cent.<sup>2</sup>

Most available information indicates that increases in income do not appreciably increase the consumption of bakery products, except in the case of very low income families. Generally, consumption of bread products rises with income until a plateau is reached at incomes from \$3,500 to \$4,500.<sup>3</sup> Above this point people eat less bread products. The inference can be drawn that the decline in per capita consumption of bread reported in the Census is related to the rise in family incomes and the fact that the higher income families actually consume less bread and spend less for bread than moderate income families.

The price elasticity of demand is highly inelastic for bread and somewhat less inelastic for other bakery

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<sup>1</sup>Slater, Market Organization and Competition, p. 7.

<sup>2</sup>U.S. Department of Commerce, Census Bureau, United States Census of Population: 1970.

<sup>3</sup>Slater, Market Organization and Competition, p. 78.



products.<sup>1</sup> The assumption that changes in bread prices have little effect on consumption has a logical basis because bread is generally a staple item in the diet. Bread is bought frequently and each purchase involves a relatively small expenditure. Price changes might be more likely to affect the consumption of bakery products other than breads because closer substitutes are available and unit prices are much higher.

A study of bread buying habits indicated that many consumers have a preferred brand of white bread, but loyalties shift about every three to five years, and consumers do not always buy the preferred brand because "bread is bread."<sup>2</sup> Because of the apparent likeness of different brands of bread, bakers feel that sales must be induced by advertising, mass display, and favorable shelf position. Implicit in their selling tactics is the belief that the loaf of bread easiest for the consumer to pick up is often the one that will be purchased.

Demand fluctuations are especially significant to the bakery industry since most bakery products must be produced only one or two days before they are sold. The demand for bakery products varies seasonally with higher sales in the summer and fall and lower in the winter and

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<sup>1</sup>Ibid., p. 74.

<sup>2</sup>N.H. Engle, "Bread Buying Habits," Journal of Marketing, XXI (October, 1956), p. 196.

spring. Peaks in demand are associated with warm weather, outdoor recreation, and holidays. Demand fluctuates also within the week, with nearly half of all bakery products bought on Friday and Saturday.

### Production Process

Although a fairly complex process is involved in producing bread, baking technology is basically the same today as it was centuries ago. Flour must be stored for several weeks to achieve proper baking qualities. After storing, it is blended, sifted, and weighed. Then it is mixed with water, yeast, malt, salt, sugar, shortening, and non-fat dry milk solids. The resulting dough is fermented, divided into loaf-sized pieces, rounded, and proofed. Then it is molded into shape, panned, and proofed again. The pans are loaded into ovens where the bread is baked. After baking, the bread is depanned, cooled, sliced, and wrapped<sup>1</sup> (see Fig. 2).

Bakery products other than bread require different ingredients and storage facilities. Separate production facilities are necessary for different groups of products. Often, the production process requires handwork, as for example with yeast-raised sweet goods.

Because of the complexity of the production process and the specialized types of equipment used, baking plants

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<sup>1</sup>Slater, Market Organization and Competition, pp. 14-22.

# FLOW CHART OF BREAD PRODUCTION

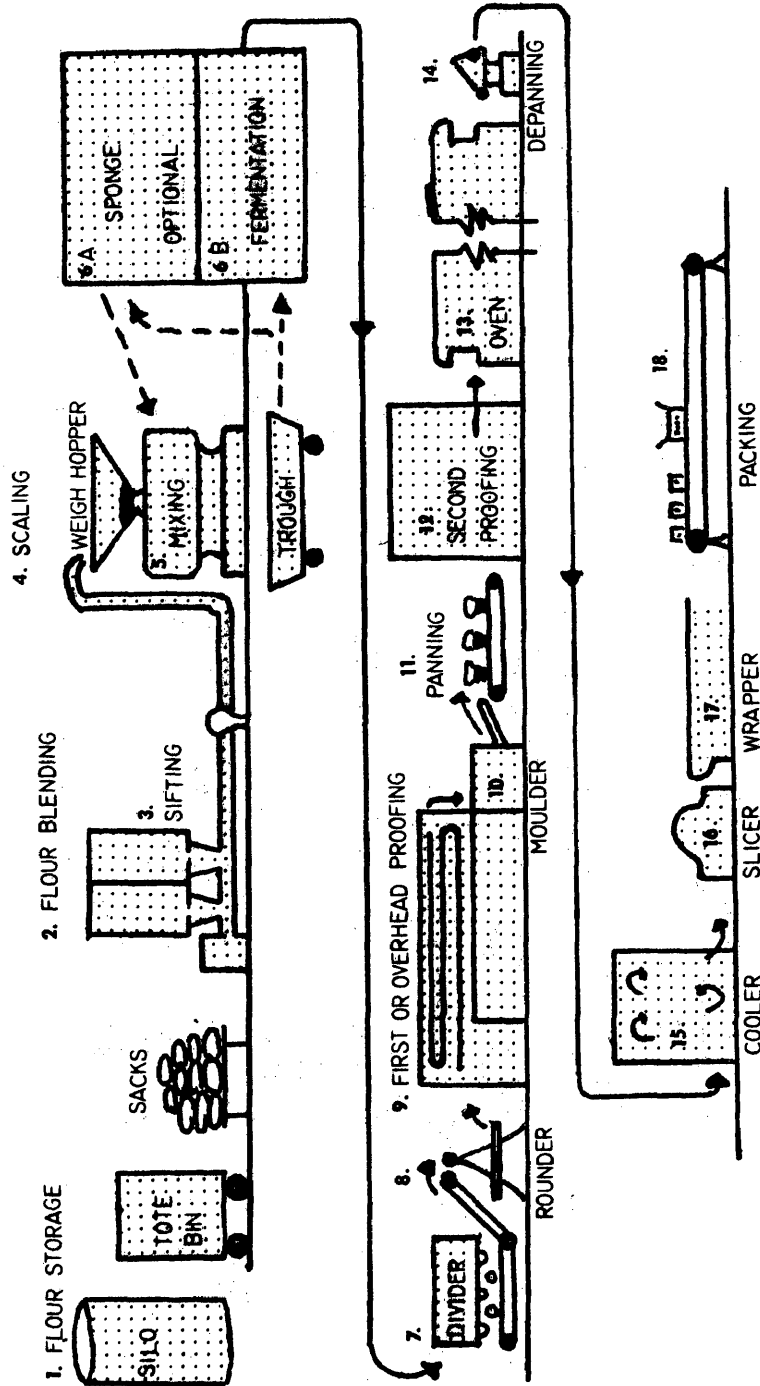


FIGURE TWO

tend to specialize in one type of product. Plants specializing in bread type products are most prevalent.

Since bakers do not produce a complete line of products, a baker producing a special type of product often will sell it to other bakers to supplement their lines. This is called "reciprocal baking." About 10 per cent of baking industries sales are products bought from other bakers and resold.<sup>1</sup>

While the basic operations of blending and sifting the flour, mixing and kneading the ingredients, proofing, baking, and packaging are fundamentally the same as those used in household baking, mechanization has brought about many modifications and technological advancements have introduced improved methods in baking today. Depending on the size and age of the plant, the above operations may be performed by hand or machine. For example, a tunnel oven (a long narrow oven through which bread passes continuously on a moving belt) provides the most uniform baking temperatures. However, a typical 100-foot-long tunnel oven has an hourly capacity of about 4,600 pounds.<sup>2</sup> A small plant could not justify this equipment.

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<sup>1</sup>Storey, p. 15.

<sup>2</sup>Ibid., p. 5.

### Technological Advance and Increasing Scale

Several significant technological advances have been made in bakery production. Today, nearly all bread plants have changed their bread formula increasing the ratios of sugar, shortening, and skim milk to flour. This modification, along with oven changes stepping up heat and otherwise improving efficiency of ovens, is estimated to have cut average baking time for a pound of bread from about thirty-five to eighteen minutes.<sup>1</sup> These improvements, along with the scientific control of fermentation, has resulted in approximately doubling bread baking capacity.

Foremost among recent technological developments are those that have made possible a shift from batch operations to continuous mixing. The conventional batch method of bread production necessitated periods of dough fermentation, intermediate proofing, and considerable hand labor in moving the product in process into or out of machines or rooms at each of the numerous production stages. Now many plants have at least partially automated their production lines. Pneumatic flour handling has been adopted by most medium-sized and large-sized plants. Continuous dough mix, tunnel ovens, and automatic equipment (slicers, wrappers, final proofers, depanners, and conveyors) are other items adopted by many of the larger plants.<sup>2</sup>

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<sup>1</sup>Walsh and Evans, "The Baking Industry," p. 197.

<sup>2</sup>David A. Storey and Paul L. Farris, "Market Performance in the Baking Industry," Journal of Marketing, XXVIII (January, 1964), p. 23.

One of the most notable advances in the improvement of storage abilities is the freezing of bakery products. Some of the larger wholesale bakers are experimenting with freezing bread in order to achieve the economies of large production runs for each bread variety.<sup>1</sup> In such cases, it is hoped that the present cost of holding frozen inventories will not completely offset reduced production costs. The frozen bread is delivered and sold as fresh bread.

The initiation of many of the frozen specialty products have come from specialty wholesalers and restaurants rather than wholesale bakers. The bakery allied trades have been much more active in the development of products and supplies useful in freezing than have operating bakeries. In some cases, they have in fact emerged as competitors of the bakeries by distributing frozen bakery products themselves.<sup>2</sup>

Although frozen bakery products are a relatively recent innovation, the volume of bakery products frozen, including frozen pies and refrigerated doughs as well as bread, is estimated at around 5 per cent of total volume.<sup>3</sup> Baking technologists do not agree on the shelf-life

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<sup>1</sup>National Commission on Food Marketing, pp. 47-48.

<sup>2</sup>Slater, Economic Changes, pp. 26-27.

<sup>3</sup>National Commission on Food Marketing, p. 48.

reduction brought about by freezing, but the stopping of the clock for these perishable products would seem to compensate for the slight reduction in shelf-life experience. Freezing, in the future, may provide further advantages to large plants, even permitting the shipment of frozen products to distant depots for defrost and sale at the distant market. The feasible radius for plants large enough to use freezers could be greatly expanded by this technological innovation.

Another improvement of primary importance in the techniques used by the baking industry is the increased use of transport trailers for bulk deliveries of products. While transport trucks represent no major technological change in the methods of operation, the extension of their use relates to other technological distribution factors which make this increase in use of transport trucks of major significance in the technological changes of the industry. The number and distance from plant of depots for distribution have increased sharply. While general statistics are not available, observations by the author indicate that this technique of extending the distribution radius of plants has taken on widespread importance in the areal expansion of individual plant markets, this topic will be discussed at greater length in a subsequent chapter.

Widespread adoption of distribution improvements especially bulk deliveries in the wholesale bakery industry requires the separation of the sales and delivery functions, which is a step that many wholesale bakers are reluctant to take because they lose control over product display. The Teamsters' Union, representing an estimated 70 per cent of wholesale bakers' driver salesmen, also resists change because it means elimination of its members' jobs.<sup>1</sup>

The rapidly advancing technology, along with the inelasticity of total demand, has created a severe problem of excess capacity, or under utilization of plant, in the baking industry. These important technological changes seem to favor plants with high production and encourage concentration into the hands of fewer, larger plants with much more extensive market areas. As a result, there have been several moves to consolidate vast segments of the industry.

#### Market Structure, Conduct, and Performance

Production and distribution of bread occurs within the market structure of the baking industry and is greatly affected by the market's conduct and performance. Therefore, a general discussion of selected dimensions of market structure, conduct, and performance should prove beneficial.

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<sup>1</sup>Storey and Farris, p. 23.



to an understanding of the factors affecting bakery production and distribution in Omaha. Only those aspects of market which apply directly to this study will be discussed.

The baking industry tends to be moderately concentrated on a national basis and somewhat more concentrated on a local market basis. Although the largest companies are relatively insignificant in terms of their shares of the entire nation's bakery business, they can be very important in the markets in which they operate. For example, Continental Baking Company, one of the nation's largest baking firms, contributes less than a tenth of the industry's total output, but it does more than a third of the bakery business in many of the markets in which it sells. Typically, the largest bakery in a local bread market does more than 30 per cent of the business, the two largest bakeries about 50 per cent, and the four largest more than 65 per cent (estimates range from 46 to 92 per cent).<sup>1</sup> The larger baking firms have been increasing their relative importance chiefly by acquiring or merging with established firms and taking over their markets, rather than by constructing new facilities and competing for market position. Storey feels that this method of growth used by large baking firms is probably due to the desire

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<sup>1</sup>Walsh, Evans, and Birch, p. 1963.

to expand market share to more fully utilize excess capacity. Any substantial increase in the market share of one firm must come at the expense of another firm. Acquisition many times may be cheaper and more certain than price warfare with competitors. In many cases, the acquiring firm purchases the acquired firm's plants and supplies the routes from its own plant.<sup>1</sup>

It is primarily the perishability and bulk of bakery products which give rise to markets featuring a small group of rival sellers supplying an essentially homogeneous product to common buyers. Consequently, even though the baking industry is composed of almost 5,000 firms, it does not conform to the purely competitive model. Virtually all markets feature a core of a few dominant companies, generally large multi-plant firms with nationwide or regional coverage, surrounded by a fringe of lesser local firms. Therefore, the structure of the baking industry in most markets may be termed oligopolistic with a few large sellers controlling a large share of each market.<sup>2</sup> In each market there are generally a number of smaller firms that compete with the large firms in varying degrees, depending on the type of product. The large firms have sufficient size to significantly affect market price and output by their actions.

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<sup>1</sup>Storey, p. 16.

<sup>2</sup>Walsh and Evans, Economics of Change, p. 4.

Bakers purchase resources from and sell products to industries or groups which are often as highly concentrated as or even more highly concentrated than the baking industry itself. Before World War II wholesale bakeries dealt primarily with independent grocers; today the bulk of their output is handled through corporate and voluntary chains. Just as with the baking industry, concentration in the retail grocery industry is rather low on a national basis, but is considerably higher in the relevant local market. Typically, stores of the largest grocery chain account for 30 per cent of a market's total retail food sales, and stores of the four largest for 63 per cent.<sup>1</sup> Because grocery chains control the terms under which outlets for most bread products are made available and possess the added power of actual and potential vertical integration into baking, wholesale baking companies have been placed under very severe economic pressures. Therefore, private label production for grocers by wholesale bakers appears to be growing rapidly in importance.<sup>2</sup>

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<sup>1</sup>Walsh, Evans, and Birch, p. 163.

<sup>2</sup>Private label bread is a lower-priced bread obtained by chains and wholesale sponsors of groups of independent grocers through contracts with wholesale bakers. This bread is not the regular wholesaler brand, but it is purchased in quantities large and constant enough to effect economies of scale which are reflected in a lower price.

Some of the industries supplying raw materials to the baking industry are highly concentrated on a national basis, especially flour and meal, concentrated milk, and the cane sugar industries. These facts would seem to indicate that increasing concentration in the baking industry may not be expected to give bakers much of a bargaining advantage over their suppliers.<sup>1</sup>

Another dimension of market structure is product differentiation or the degree of consumer substitution among the output of competing sellers. White bread, the chief product of bakers, is difficult to differentiate on a quality basis. Bakers use similar ingredients and processes and bread produced by different bakers is often similar in taste, texture, and nutritional value. Only a few national firms, such as Pepperidge Farms and The Kitchens of Sara Lee, appear to have highly differentiated their products on a quality and brand basis. Since quality differences among different brands of bread are small, bakers attempt to differentiate their bread by extensive brand advertising.

Brand preferences resulting from extensive advertising are not difficult to overcome and do not appear to be effective barriers to the entry of new firms into the industry. Chief barriers to entry are the large optimum plant scale and the extensive sales promotion activity

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<sup>1</sup>Storey, p. 17.

associated with distribution of products on wholesale routes.<sup>1</sup> These barriers appear to be fairly effective to wholesale bakers.

Other barriers to entry are not important. Baking technology is not protected by patents, and workers' skills do not require long training periods.

The main barriers to entry of wholesale bakers are not prohibitive to the entry of grocery chains. Chains have their outlets guaranteed and can justify the building of large, more efficient production plants which can generally be operated at high capacity. Since chain delivery to the store does not involve selling, costly promotional activities can be eliminated. Chain bakery products do not have to be advertised separately from other chain products and stale products can be sold in the stores. Large distribution costs can be cut through bulk deliveries to stores which can be scheduled much more efficiently than driver-salesmen routes. These savings provide a lucrative incentive for grocery chains to enter the baking field.

A prime factor affecting market conduct in the baking industry is the fact that wholesale bakers who sell through the same outlets are well informed about each other's prices and therefore appear to follow "implicit rules of behavior" in settling price disputes. Price changes initiated

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<sup>1</sup>Storey and Farris, p. 22.

by one firm are either followed by other firms or the first firm cancels its change. The growth of grocery chain and private label baking has caused the development of two price levels for bakery products. Chain bread, private label, and wholesalers "secondary" products are generally priced below "regular" wholesale brands. Consequently, retail grocers are assuming much of the price-setting power formerly held by wholesale bakers.<sup>1</sup>

Sales promotion activities are the primary method of competition among wholesale bakers. Not only direct advertising, but also part of stale losses, route expenses such as free racks for grocers and part of the wages of driver-salesmen are, in fact, promotional expenses and can total as much as 15 per cent of wholesale bakers' sales.<sup>2</sup>

The main feature of the baking industry's market performance of interest to this study is the almost uniform operation of plants at less than full capacity production. It appears that most bakery plants operate far below optimum scale (the scale where long-run average costs are lowest) largely because of virtually static total demand, rapidly advancing technology, and the inability of bakers to stockpile their perishable products for efficient handling of uneven demand.<sup>3</sup>

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<sup>1</sup>Storey, p. 18.

<sup>2</sup>Storey and Farris, p. 22.

<sup>3</sup>Walsh, Evans, and Birch, p. 165.

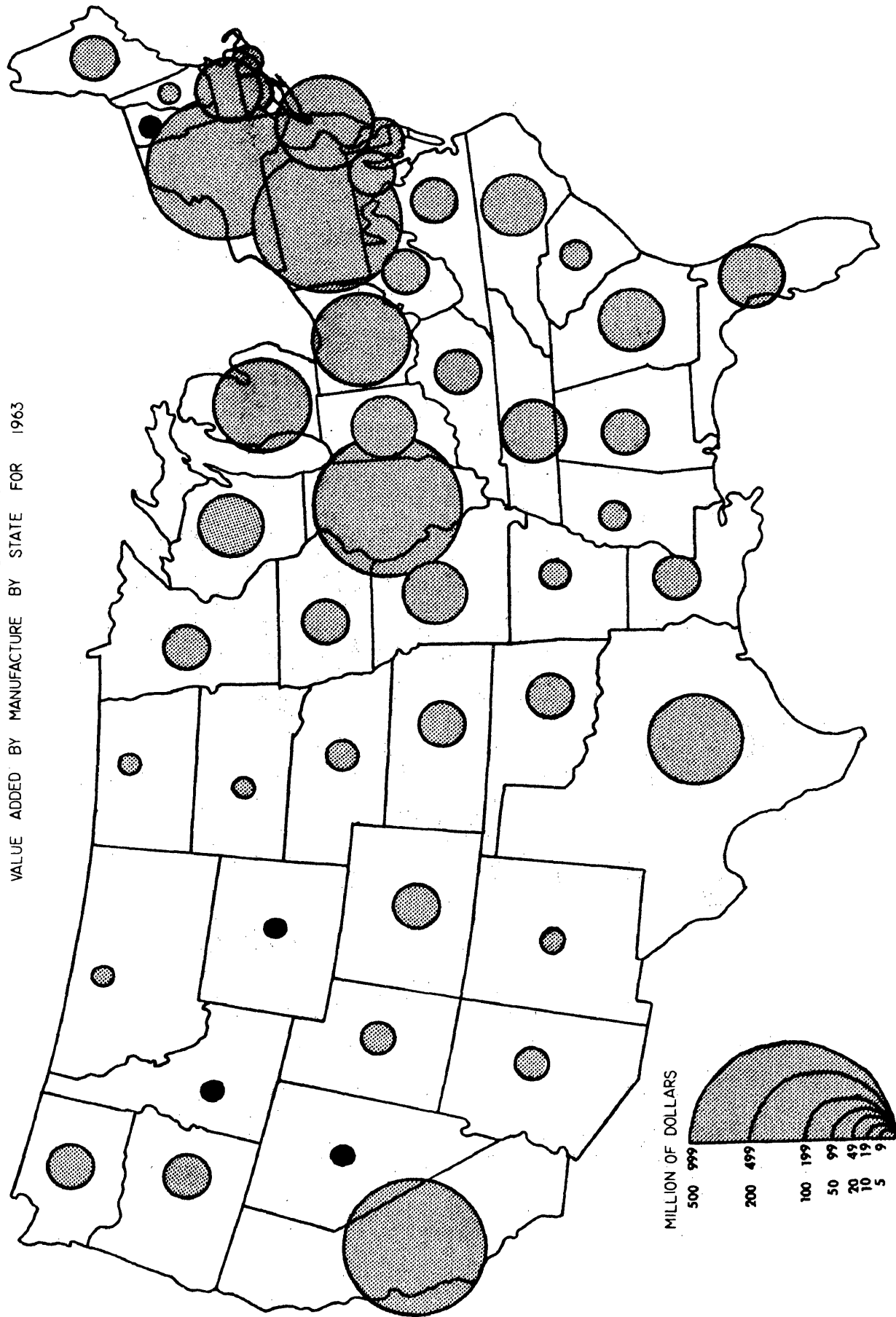
In distribution, much duplication of effort occurs because the driver-salesmen make many small-volume stops and call-backs. One of the chief advantages of vertical integration by retail grocers is that sales promotion is eliminated from distribution.

Under utilization of bakery plants and outmoded distribution systems are major factors affecting each plant's areal market extent. The need for change has been recognized by top union leaders and bakery management. However, change has been slow and painful.

#### Locational Factors in the Commercial Baking Industry

A comparison of the distribution of the production of bakery goods (see Fig. 3) and the areas of densest population in the United States (the eastern half, especially the northeastern quadrant, from the Mississippi River to the Atlantic Coast and the West Coast), would seem to indicate that commercial bakeries are ubiquitous, tending to follow population density. Table 2 shows that the more populous the settlement, the larger the employment in commercial baking. Thus, it can be observed that the commercial baking industry tends to correlate positively with population.

**BAKERY PRODUCTS: SIC 205**  
 VALUE ADDED BY MANUFACTURE BY STATE FOR 1963



MILLION OF DOLLARS

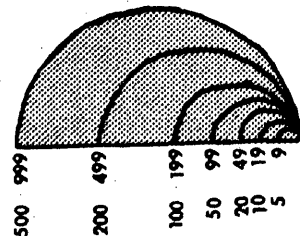




TABLE 2  
POPULATION AND EMPLOYMENT IN COMMERCIAL  
BAKING BY LEADING METROPOLITAN AREAS

Metropolitan Area	Population 1970	Employment in Bakeries 1967
1. New York - NE New Jersey	16,206,841	27,500
2. Los Angeles	8,351,266	11,500
3. Chicago - NW Indiana	6,714,578	18,200
4. Philadelphia - Camden	4,021,066	12,500
5. Detroit	3,970,584	6,000
6. San Francisco - Oakland	2,987,850	5,700
7. Boston	2,652,575	4,500
8. Washington, D.C.	2,481,489	2,300
9. Pittsburgh	1,846,042	3,100
10. Cleveland	1,959,880	3,100

Source: Alexander, p. 279; U.S. Census of Manufactures, 1967; and U.S. Census of Population, 1970.

Commercial bakers tend to settle near their markets because of several considerations. Perhaps the single most important locational consideration is the bulk and perishability of their finished product. Freshness is of prime importance to consumers.

The nature of the basic raw materials of the baking industry also helps explain why bakeries tend to be located near their markets. The raw materials of bakeries tend to be located near their markets. The raw materials of bakeries are not as perishable as their products, making a market location more desirable. Transport costs for moving the finished products of bakeries are greater than those for moving raw materials. Flour, salt, sugar, and yeast can be handled in bulk form for which freight charges

are much lower than are the charges on bakery goods, which must be handled more carefully and fill more shipping space. Also, the baking industry has a low weight-loss ratio--the weight of the raw materials used are approximately the same as the weight of the finished products.<sup>1</sup>

Labor considerations have little or no influence on location. Apart from a few craftsmen and managerial staff, the labor force is largely unskilled. Power and capital are also insignificant as far as location is concerned.

The location of bakeries is, therefore, obviously determined more by the pull of the market than by any other factor. Partly because of the widespread market, bakeries generally are on the small side when compared to many other industries, and are relatively dispersed geographically. Therefore, baking is a relatively local business. This means that bakeries compete primarily in local markets with a considerable amount of overlap among their individual markets, making the bakery industry extremely competitive.<sup>2</sup>

#### Spatial Patterns of Baking Company Organization

Restrictions on movement of bakery products due to perishability give rise to a national pattern of almost

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<sup>1</sup>Alexander, p. 297.

<sup>2</sup>Slater, Market Organization and Competition, p. 44.

100 separate and semi-independent bakery markets ranging in radius from 150 to 300 miles.<sup>1</sup> The national, and even more importantly, the regional setting of the baking industry influences the spatial expression of commercial baking in each of these separate bakery markets, especially in the areal extent of each local plant's market area. The proximity of other large commercial plants, the location of their sales branches and depots, and the type of products they produce are factors greatly affecting the baking industry in a specific location.

The baking industry follows an organizational pattern typical of many food processing industries in that it consists of a small number of large firms which operate on a nationwide, or at least regional, basis plus many smaller local firms. Three bakery corporations,<sup>2</sup> two national and one regional, represent the largest bakery plants in the Omaha market and are responsible for providing much of the regional setting for the baking industry in Omaha.

National Corporation A operates thirty bread bakeries and nine cake bakeries<sup>3</sup> with more than 320 distribution

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<sup>1</sup>Walsh and Evans, Economics of Change, p. 17.

<sup>2</sup>Due to the extremely competitive nature of the baking industry, the corporations cannot be identified by company name, but will be referred to as National Corporations A and B, and Regional Corporation C. This designation will correspond to the later codification of the six individual bakeries studied. That is, Bakery A will correspond with its National Corporation A, Bakery B with its National Corporation B, and Bakery C with its Regional Corporation C.

<sup>3</sup>For a list of specific locations of production and sales facilities for each corporate bakery, see Appendix III, p. 102.

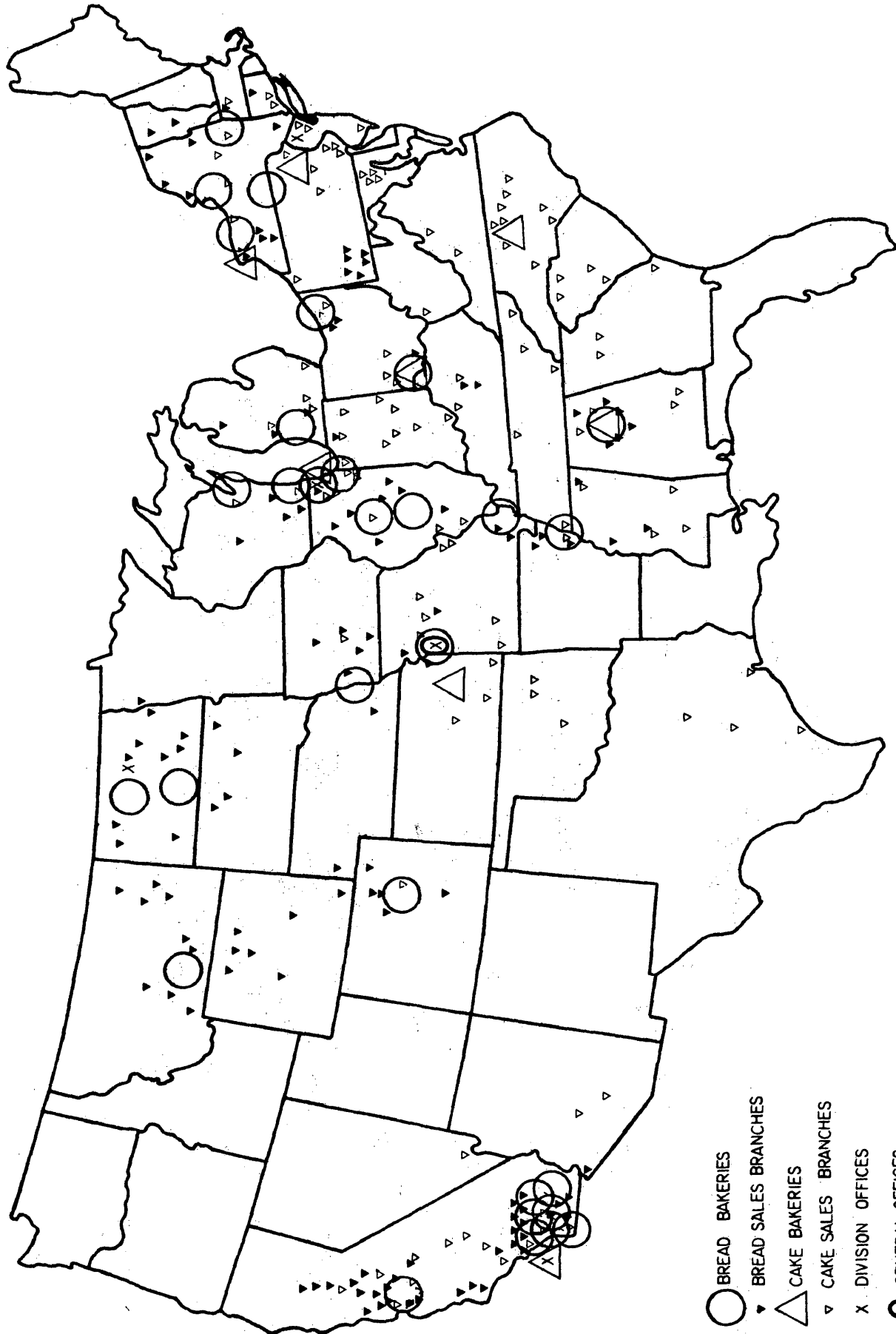
depots located in thirty-eight states (see Fig. 4).<sup>1</sup> The national pattern of Corporation A's production and sales facilities appears to partially mirror the areas of heavier population density in the United States. Large areas not served by this corporation are to be found in the western mountain and desert regions, areas of slight population. Exceptions to this generalization are found in the extreme north central portion of the country where although population is relatively sparse, several Corporation A plants are located in the area. A second exception is to be found in parts of the far South where few national corporation plants of any company are to be found. Regionally, Corporation A has no other major bread plants within Omaha's immediate area. Omaha's bread market would therefore appear to receive little competition from other plants belonging to Corporation A, except for the Kansas City plant to the south.

The national pattern of production and sales facilities for National Corporation B are shown in Figure 5. This company has forty-three bread bakeries, twenty-two combination bakeries producing bread and cake, seven cake bakeries, and eight plants manufacturing frozen foods, snack items, and other food products. Bakery products are distributed from a total of 360 sales branches. Again, much the same general pattern of distribution appears in Corporation B's

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<sup>1</sup>Statistics used to describe the three baking corporations represented in Omaha were provided by published materials of the three corporations.

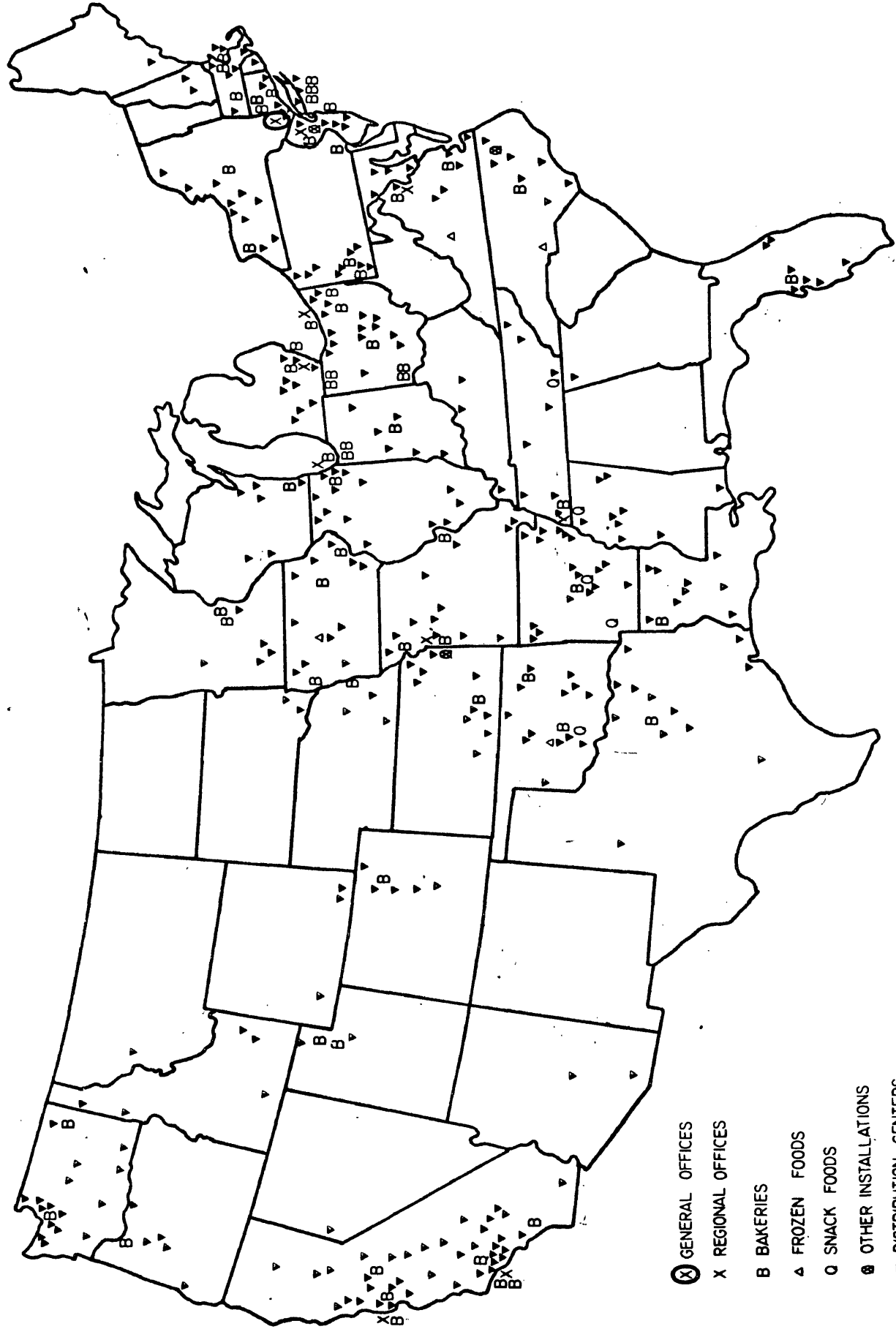
# PRODUCTION AND SALES FACILITIES: NATIONAL CORPORATION "A"



- BREAD BAKERIES
- ▼ BREAD SALES BRANCHES
- △ CAKE BAKERIES
- ▽ CAKE SALES BRANCHES
- X DIVISION OFFICES
- ⊗ GENERAL OFFICES

FIGURE FOUR

# PRODUCTION AND SALES FACILITIES: NATIONAL CORPORATION "B"



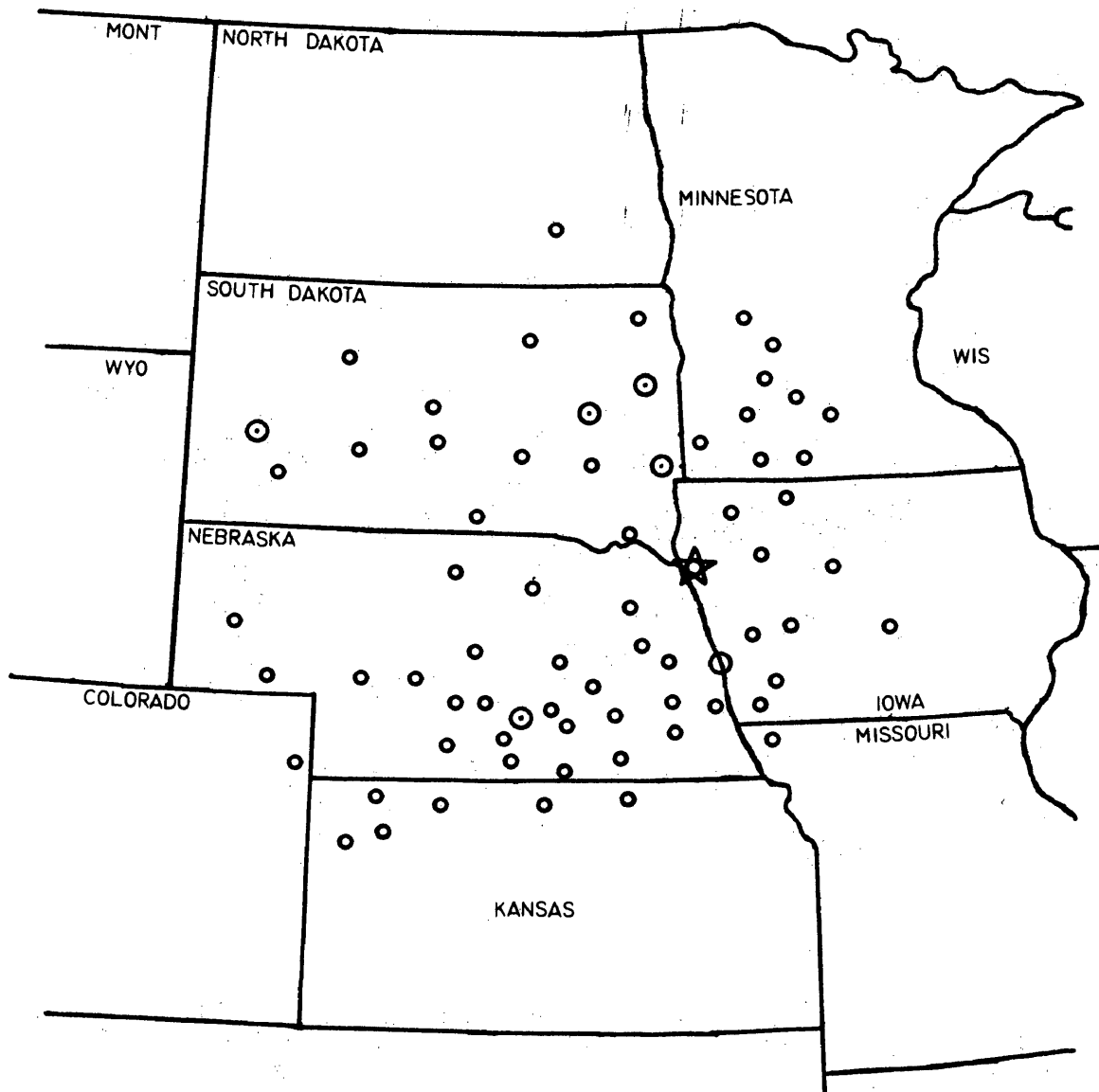
- (X) GENERAL OFFICES
- X REGIONAL OFFICES
- B BAKERIES
- ▲ FROZEN FOODS
- SNACK FOODS
- ⊙ OTHER INSTALLATIONS
- ▼ DISTRIBUTION CENTERS

FIGURE FIVE

facilities as in Corporation A. While Corporation B does not serve the Dakotas and Montana, it does cover the Pacific Northwest which Corporation A does not. Omaha is affected by the location of Corporation B plants to the north in Sioux City, Iowa, and to the south in Kansas City, Missouri.

Regional Corporation C is a family-held corporation covering a ten-state area of the Midwest. Seven major bread baking plants, with supporting variety baked goods plants, form the core of the company. Service out of these plants is provided by seventy-one sales branches and depots (see Fig. 6). Although the scope of operation of Corporation C appears small when compared to the national distribution of Corporations A and B, it has at least an equal affect upon the baking industry in Omaha. Corporation C's plants to the north and west help to shape the pattern of Omaha's market orientation. Much of the important competition for Corporations A and B is from this regional company.

# PRODUCTION AND SALES FACILITIES: REGIONAL CORPORATION "C"



★ GENERAL OFFICES

⊙ MAJOR BREAD AND BUN BAKING PLANTS

● SALES BRANCHES AND DEPOTS

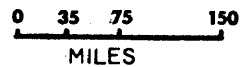


FIGURE SIX



## CHAPTER II

### COMMERCIAL BREAD BAKING IN THE OMAHA SMSA

Thus far the analysis has dealt primarily with the activities of bakery plants in general. The characteristics and roles of individual Omaha firms, as well as the position of industrial baking in Omaha will now be investigated.

#### The Position of the Baking Industry in Omaha

According to the Census of Manufactures, the Omaha Standard Metropolitan Statistical Area has a total of fourteen industrial bakery plants (see Table 3). Only six of these fourteen plants fit the criteria set up for this study by (1) producing bread and (2) employing at least twenty employees. Five of the eight excluded plants have less than twenty employees; two do not bake bread; and one bakery, specializing in home service, has ceased to exist. Table 3 also indicates that all six of the study plants are located within Douglas County, Nebraska. Further investigation shows that all of the plants are also located within the Omaha city limits (see Fig. 7).<sup>1</sup>

The Census of Manufactures also indicates that within the entire state of Nebraska there are only thirteen bakeries employing twenty or more people. Omaha claims

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<sup>1</sup>Due to the competitive nature of the baking industry, the bakeries will not be identified by name. The following code is used to designate individual bakeries: Multi-market bakeries--A, B, and C; grocery chain bakeries--D and E; and local firm bakery--F.

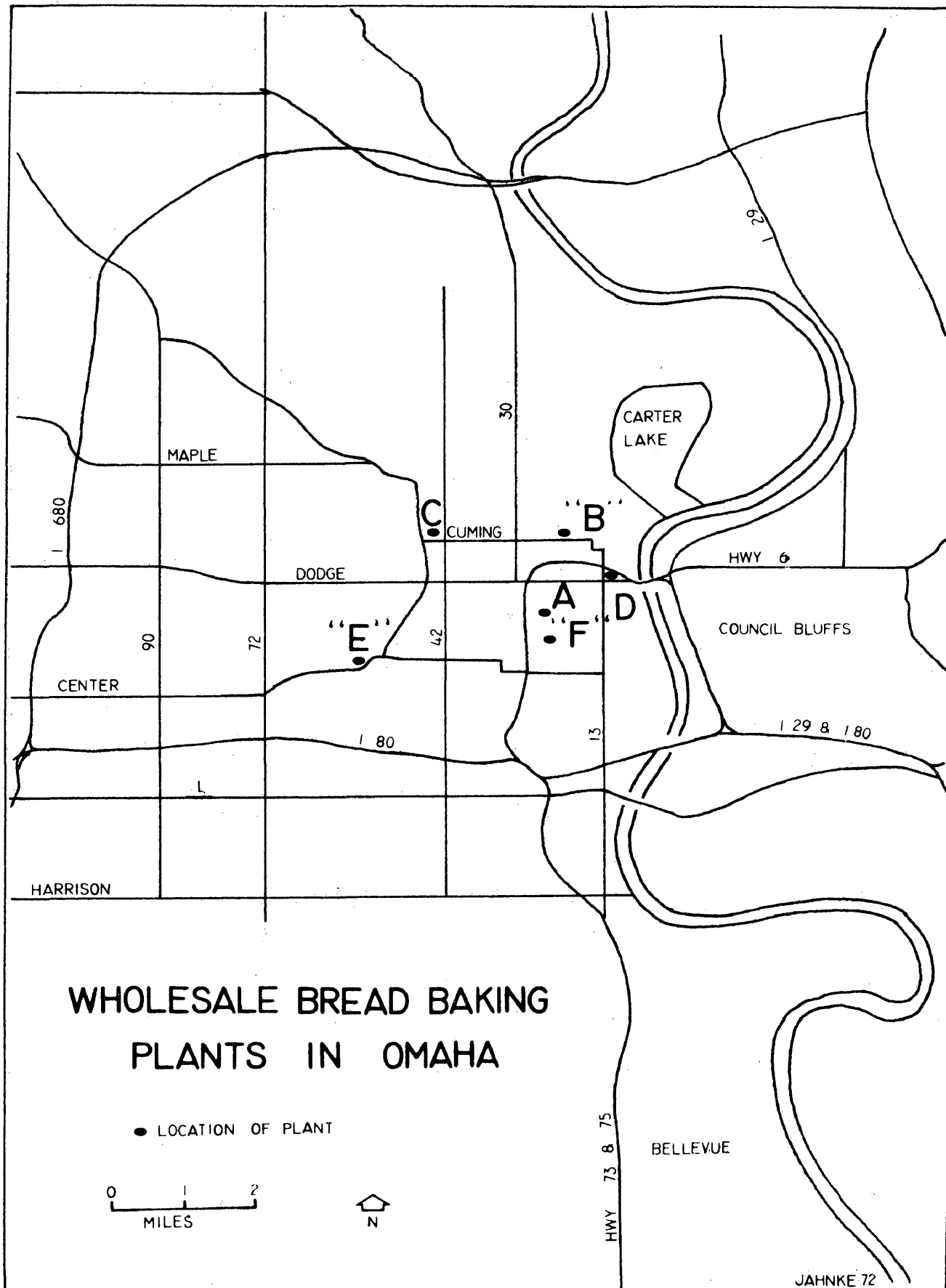


FIGURE SEVEN

TABLE 3  
COMMERCIAL BAKING IN THE OMAHA SMSA

Area & industry	All plants (number)	No. of plants with employment of--					
		1- 19	20- 49	50- 99	100- 249	250- 499	500
Douglas Co., NE							
Bread & related products*	10	2	3	1		4	
Biscuit, crackers & cookies	1		1				
Sarpy Co., NE							
Bread & related products	0						
Biscuit, crackers & cookies	0						
Pottawattamie Co., IA							
Bread & related products	3	3					

\*Two companies do not produce bread.

Source: Census of Manufactures, 1963, Plants by  
County, Industry, and Employment Size,  
Pt. 4 West North Central Division.

nine of these thirteen bakeries. Of the 1,400 commercial bakery employees in Nebraska, Omaha employs approximately 1,067 in the six plants studied.<sup>1</sup> These figures do not take into consideration the employees of the very small firms and of the many retail bake shops of which there are thirty-eight listed in the 1972 Omaha Telephone Directory.

<sup>1</sup>Census of Manufactures, 1967, and information supplied by Omaha bakeries included in the study.

The Omaha SMSA employs 36,600 total industrial workers according to the 1967 Census of Manufactures. While the 1,067 bakery employees of the six study plants do not indicate a great standing in the total industrial structure of Omaha, the importance of the bread baking industry in Omaha cannot be denied both in respect to supplying a necessary food item, and its dominance of the baking industry in Nebraska.

The location quotient measure more emphatically shows the strength of the commercial baking industry in Omaha's industrial structure. The location quotient, calculated from 1967 Census of Manufactures statistics, is 2.43 for bakery products.<sup>1</sup> This would indicate that the Omaha SMSA has about two and a half times its proportionate share of baking industry employees.

#### Baking in Omaha's Competing Centers

Any urban focal point with its wholesale trade area does not exist in a vacuum. Omaha bakeries face competition from surrounding cities, especially in fringe market areas.

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<sup>1</sup>The location quotient measures the degree to which a region has more or less than its share of a particular industry. A location quotient of 1.00 means that a region has neither more nor less than its share of that particular industry. A quotient of less than 1.00 indicates the industry is less well developed than the national average, whereas a quotient greater than 1.00 indicates a high concentration of that industry. Location quotient shows relative concentration only. For further information on location quotient, see John W. Alexander, Economic Geography, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963), pp. 406-407, 594-595.

The extent to which bakers in any large city can expand their market by drop shipment to outlying area depots is limited by the relationship between the slope of the products' production cost curve and the rising cost of distribution. Roughly estimated, these balance at 150-200 miles. Grocery chains which distribute their private label bread via common carrier to store docks can venture much farther before distribution costs become prohibitive, an estimated 400 to 500 miles.<sup>1</sup> Thus, the degree to which competition in bakery markets is among local plants themselves or with plants in surrounding large cities, appears to depend a great deal on the distance between the larger cities.

Table 4 gives some indication of the position of commercial baking in selected SMSAs which surround Omaha and are considered to be competing centers. It would appear that those SMSAs with a smaller total manufacturing employment tend to have a greater proportion of their workers involved in baking than the larger SMSAs. While location quotients cannot be compared among cities, it is interesting to note the position of baking relative to each city's total manufacturing employment. Perhaps a discussion of plant locations of the same national or regional corporation would

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<sup>1</sup>Walsh and Evans, "The Baking Industry," p. 206.

be more significant than the figures given in Table 4 in discussing bakery market competition from cities in close proximity to Omaha. This will be investigated further in Chapter IV.

TABLE 4  
THE COMMERCIAL BAKING INDUSTRY IN SELECTED SMSAs

SMSA	Baking establishments >20 empl.	Total mfg. empl.	Bakery empl.	Location quotient
Des Moines	4*	25,400	D	na
Denver	19	74,100	2,700	2.57
Sioux City	3	9,200	700	5.42
Kansas City	13	129,400	2,400	1.36
Minneapolis-St. Paul	18	203,700	2,400	0.86
Omaha	7*	36,600	1,250**	2.43

\* Data calculated from Polk City Directories.

\*\* Nebraska Department of Labor figure.

D Data withheld to avoid disclosing figures for individual companies.

na not available

Source: Census of Manufactures: 1967

Types of Bread Bakeries in Omaha  
and Their Major Products

Of the four major segments of the bread baking industry, only home service bakeries are completely absent in Omaha. The retail multi-outlet plants in Omaha specialize in doughnut production and do not produce bread and, therefore, are not represented in the six study plants. Three of the six studyplants are multi-market wholesale firms, two are grocery chain bakeries, and one is a local wholesale firm.

For the purposes of this study, the wholesale firms are classified into two groups. Three of the wholesale bakeries are parts of large corporations having many plants with a combined national or regional coverage, and will be referred to as multi-market bakeries. One of the wholesale plants is a family business whose products are sold, for all practical purposes, completely within the Omaha metropolitan area. The latter will be referred to as a local wholesale firm.

Table 5 indicates that the multi-market plants (Bakeries A, B, and C on Table 6 following) have both the most establishments and the greatest number of workers. Bakeries A and B are both part of large national corporations, while Bakery C is presently part of a family-held corporation with regional coverage (see Appendix III, p 102 for list of plants operated by each corporation). Bakery A is basically a

TABLE 5  
TYPES OF WHOLESALE BAKERIES IN OMAHA, 1972

	Number of Establishments	Number of Employees
Multi-market bakeries . . . . .	3	901
Grocery chain bakeries . . . . .	2	111
Home service bakeries . . . . .	0	0
Local wholesale bakeries . . . . .	<u>1</u>	<u>55</u>
Total . . . . .	6	1,067

Source: Omaha bakeries included in the study.

bread and roll producing bakery, while Bakery B is classified as a combination bakery producing cakes, pies, doughnuts, and snack items as well as bread type products (see Table 6). Bakery C is also classified as a combination bakery even though bread is the major product as it produces all of the pies and much of the sweet goods for other company plants. Production in other company plants greatly affects the product line of individual plants.

TABLE 6  
TYPES OF BAKERY PRODUCTS PRODUCED

Plant	Type of Plant	% of Total Production			
		White bread	Variety breads	Bread-type rolls	Sweet goods
A	Multi-market	45	20	30	5
B	Multi-market	34	15	16	35
C	Multi-market	70	0	10	20
D	Grocery chain	70	30	0	0
E	Grocery chain	0	80	5	15
F	Local firm	0	83	2	15

Source: Omaha bakeries included in the study.

Bakeries D and E have been classified as chain bakeries as they are examples of vertical integration into baking by chain grocery stores. Bakery D produces only bread-type products, 70 per cent of which is white bread. Sweet goods sold under this chain label is either produced at small in-store bakeries, or are supplied by contract from one of the other large multi-market wholesale bakers.



Bakery E represents a rather unusual situation in grocery chain bakeries. Up until 1970, this bakery would have been classified as a local wholesale firm specializing in variety breads and catering to hotels and restaurants. When this local family business merged with a rapidly expanding local grocery chain, the character of Bakery E changed somewhat. Unlike most chain bakeries, very little white bread is produced. White pan bread is still produced for the chain through a private label contract with one of the multi-market wholesale bakeries discussed above. Bakery E is basically responsible for producing specialty breads and sweet goods for the chain stores, as well as supplying 90 per cent of the frozen dough used in the small in-store bake-off bakeries belonging to the chain. It would appear that Bakery E has kept much of the same product line as before the merger, with the exception of the production of frozen doughs. The major change would be in type of customers with hotels and restaurants being minor rather than the major customers they once were.

Bakery F is the one local wholesale firm employing over twenty employees in the Omaha SMSA. Table 6 shows this bakery to be much more specialized in its line of products, largely due to the production of Italian bakery varieties and specialty items, such as hand decorated cakes and sweet goods. The sweet goods and cakes make up

approximately 5 per cent of all sales and are primarily disposed of by retail sale at the plant store. Much of the production in this bakery still required much hand work, even in the production of bread-type items. A great deal of pride in the product is displayed and no machine is purchased if the basic dough recipe has to be changed. Personnel at Bakery F do not feel that there is any product competition from larger wholesale multi-market bakeries as their products are so different, both in type and quality. Actually, Bakery F supplies two of the multi-market bakeries with Italian specialties under the large wholesaler's label. The large wholesalers also deliver Bakery F's products beyond Omaha where there is a demand. Although their products are virtually non-competing, the local firm does feel the competition squeeze from corporate bakers in acquiring labor. The smaller firm cannot pay as high wages as the multi-plant firms, but does offer advantages such as unlimited overtime, no layoffs during slack times, and especially pride in the finished product.<sup>1</sup>

In summary, Table 6 indicates that the larger multi-market plants tend to produce a much larger proportion of white bread, while the smaller local firm specializes in variety breads and in sweet goods involving a great deal of

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<sup>1</sup>Rotella's Italian Bakery, Omaha, Nebraska, interviews with selected personnel, June, 1972.

handwork. One chain store bakery produces only breads, while the second chain store bakery rather uniquely prepares specialty items almost exclusively. The larger multi-market plants tend to be more mechanized, and since the production of white pan bread generally lends itself more to mechanization than sweet goods, it would follow that these plants produce a higher percentage of white bread. But, the multi-market bakeries, especially Bakery B, appear to be producing less white bread and seem to be diversifying into mechanized production of buns, sweet goods, and snack type items. This would appear to be due to changing consumption patterns, that is, per capita consumption of bread and bread type items is down while per capita consumption of sweet goods and snack type bakery products is rising.

#### Cost Structure of the Omaha Plants

Baker's costs have shifted significantly during the past two decades. Studies have shown that selling and distribution costs have increased more rapidly than other costs, increasing by one-third. Manufacturing costs increased approximately 20 per cent, while ingredient costs remained practically the same.<sup>1</sup>

The cost structure of the six plants studied is shown in Table 7. Proportionally, the smaller plants have the highest manufacturing costs, and the larger plants have the lowest manufacturing costs. Similarly, the smaller plants

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<sup>1</sup>National Commission on Food Marketing, p. 97.

TABLE 7  
DISTRIBUTION OF OMAHA BREAD BAKERS' COSTS

Plant	Type of Plant	Approximate % of Total Cost			
		Raw materials	Processing	Distribution	Other
A	Multi-market	23	32	40	5
B	Multi-market	25	25	40	10
C	Multi-market	25	30	40	5
D	Grocery Chain	30	50	15	5
E	Grocery Chain	35	43	18	4
F	Local Firm	32	40	26	2

Source: Calculated from estimates provided by six Omaha bakeries.

have the proportionally higher ingredient costs and the larger plants have the lower ingredient costs. However, the reverse is true for selling and distribution costs, with the three larger plants having their greatest cost in the area of distribution.

Labor costs are significant, especially for production costs of the smaller firms. The local labor force in the Omaha area easily supplies the necessary semi-skilled and unskilled labor as well as most management personnel. Although, especially in the case of large multi-market plants, management personnel are sometimes brought in.

### Intraurban Site Location

Earlier baking technology (precluding factory production and mass distribution) and the highly perishable nature of bread necessitated very short-distance product movement. In these earlier years the intraurban location of baked goods produced in Omaha was largely a function of the journey to shop, often a pedestrian journey. Therefore, there was little locational choice for the typical one-man, one-oven bakery, and a rather dispersed distribution resulted.

The earlier tendency toward dispersion was probably also reinforced by the bakers' need to market his products at extreme convenience to overcome the stiff competition offered by household baking. Home delivery and peddlers on the streets were early efforts to combat this competition.<sup>1</sup>

The rather uniform intraurban distribution of baked goods manufactured changed only when increases of consumer range were facilitated by changes in urban transportation (the automobile), factory production, and higher wage levels along with an improved standard of living.<sup>2</sup> Today, commercial baking would appear to be more clustered wholesale, rather than diffused retailing.

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<sup>1</sup>Charles G. Ortman, retired Omaha baker, personal interview, December, 1969.

<sup>2</sup>Allan R. Pred, "Manufacturing in the American Mercantile City: 1800-1840," Annals of the Association of American Geographers, LVI (June, 1966), p. 309.

According to Pred, those industries tending to be ubiquitous are usually highly concentrated near the edge of the central business district, or at least within the inner city, especially if the basic raw materials and finished products are shipped by rail or truck.<sup>1</sup> The location of commercial bakery plants serving Omaha are clearly not confined to the periphery of Omaha's central business district, although preference is marked by three plants having such a location (see Fig. 7 above, p. 48). The three remaining are located in or near the inner city. Only one bakery, recently built in 1970, is relatively near the outer edge of the city.

Many of Omaha's bakeries, having characteristics of both light manufacturing and wholesaling, are nucleated in or near the traditional wholesaling district due largely to the fact that this type of light industry has linking wholesaling functions. Only Bakery F, reflecting a recent location decision, is found any distance from the downtown core. Bakery F's location may have been influenced by easier accessibility to the chain store's distribution center and the fact that many of the stores receiving direct delivery from the bakery tend to be located in areas more easily reached from this location.

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<sup>1</sup>Allan R. Pred, "The Intrametropolitan Location of American Manufacturing," Annals of the Association of American Geographers, LIV (June, 1964), pp. 174-175.

The six plants are near main transportation routes such as Cuming, Leavenworth, Center, and Douglas Streets. The local sites appear to have no serious disadvantages. Although located in the older sections of the city, there seems to be ample loading and unloading space to satisfy each baker's needs. Congestion may be somewhat of a problem at some locations, but with much of the loading and unloading taking place at night or early in the morning, much of the serious traffic congestion is avoided. Before Bakery E merged with the local chain, it was located on the city's Near North Side and some problems involving racial uprisings disrupted operations at times. The bakery's new location has no such problems.

The characteristic of raw material acquisition and final product distribution of the Omaha bread baking industry are so relevant to a general input-output consideration that separate chapters will deal with each. Many of the characteristics just discussed will be referred to again in discussions of raw materials and distribution relationships.

CHAPTER III

BASIC RAW MATERIALS OF THE SIX OMAHA BAKERY PLANTS

Baking is one of the few food industries in which the major processing efforts convert a semiperishable product (wheat) into perishable ones (bread and sweet goods). This is the reverse of most other food processing activities.

Major Ingredients

The basic raw materials in bread making and their relative costs are shown in Table 8. Flour is the largest single ingredient and also constitutes the largest share, 48 per cent, of the total raw-material costs in bread baking. The three multi-market plants and grocery

TABLE 8  
BREAD BAKING INGREDIENTS

Ingredients	% of flour wt.	% of total wt.	% of total ingredient costs
Flour	100	53.7	48
Water	65	34.7	} each less than 5
Yeast	2	1.1	
Yeast food	0.25-0.5	0.2	
Malt	0.50-1.0	0.4	
Salt	2	1.1	
Sugar	6	3.3	13
Dry milk solids	6	3.3	4-6
Shortening	4	2.2	7

Sources: Slater, Market Organization and Competition, p. 17 and Alderfer and Michl, p. 524.



chain Bakery D have extensive bulk facilities for handling the major bread baking ingredients. The smaller bakeries tend to deal with materials by unit packaging since they do not buy in large enough quantities to warrant the expense of bulk storage and handling.

Bakery products other than bread require different ingredients and storage facilities. Those bakeries producing sweet goods, especially doughnuts, generally use a premix.

Ingredient costs for the smaller bakers are much higher than they are for the larger bakeries (see Table 7 above, p. 58). Large bakery firms enjoy the advantage of being able to get quantity discounts wherever they are possible. Furthermore, a staff of full-time market specialists, employed by the multi-market bakeries and some grocery chain bakeries, can have greater knowledge of market conditions than bakers whose duties include purchasing among many other chores.

#### Source Areas

The source areas of the basic raw materials of the six Omaha bakeries studied are indicated in Table 9. Investigation of this table shows that the two major ingredients by weight, flour and water (see Table 8 above, p. 62), are supplied by local sources in every case but one. Water, of course being ubiquitous is not an important consideration among the various raw material costs. Flour,

which accounts for 50 to 60 per cent of total ingredient cost, is a major consideration. Only two plants use local sources of yeast and dry milk solids. The source areas of these two materials are no more than 600 miles distant from Omaha. A majority of the raw materials that are not secured locally, are purchased from areas within a 200 mile radius of Omaha. The materials which are most often bought locally tend to be those items that make up the largest cost. More of the more minor ingredients tend to be shipped in from relatively nearby areas. All of the premixes used are secured locally.

TABLE 9

## RAW MATERIAL SOURCES OF SIX OMAHA BAKERIES

Raw Material	Number of Plants having Source Area	
	Local	Other
Flour . . . . .	5	Kansas - 1
Yeast . . . . .	2	St. Louis - 3; Milwaukee - 1
Sugar . . . . .	3	Denver - 1; Clinton, IA - 1; Gering, NE - 1
Dry milk solids . . .	2	Keokuk, IA - 1; Superior NE - 1; S.W. Wisconsin - 1
Shortening . . . . .	4	St. Joseph - 1; Drew, MN - 1
Water . . . . .	6	none
Eggs . . . . .	3	Kansas City, MO - 1; Marshall, MN - 1; Wakefield, NE - 1

Source: Personnel of six Omaha bread bakeries.

Many of the source areas, especially for such items as dry milk solids and eggs, represent contract buying of the larger multi-market plants. In most situations, the source of raw materials, other than flour, is constantly changing, depending upon individual contracts.<sup>1</sup>

All of the six study bakeries receive their raw materials by truck as most of the hauls are local or of a relatively short length. Many times raw materials are shipped to multi-market plants, generally by truck, from their general offices. Some of the raw materials used by the chain store bakeries do arrive in Omaha by rail, but this is a very small amount and is transferred from the chain store distribution center to the bakery by truck.

Raw Materials as a Factor in the Locational  
Analysis of the Omaha Baking Industry

Although most of the basic raw materials are local, it does not necessarily follow that the Omaha bread bakeries owe their location to the accessibility of raw materials. It must be kept in mind that this general area, the Midwest, is a great area of food production and most raw materials in a food processing industry could be supplied locally.

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<sup>1</sup>Metz Baking Company, Omaha, Nebraska, interview with selected personnel, June, 1972.

One factor which would discredit the assumption that the Omaha bread baking industry is material oriented is the fact that Omaha does not produce a large portion of the nation's bread and is a relatively small industry within Omaha.

## CHAPTER IV

### DISTRIBUTION AND MARKETS OF SIX OMAHA BAKERY PLANTS

The finished product of the bread baking industry is relatively difficult and costly to distribute due to its perishability, fragility, and bulkiness. These factors, along with the fact that Omaha is a regional population and distribution node, are largely responsible for the markets and distribution systems of the Omaha bakeries.

#### Major Customers

The major customers of the six plants studied are presented in Table 10. The multi-market and grocery chain bakeries have the largest portion of their business with grocery stores, while the local plant has its most business with hotels, restaurants, and other eating places. The local plant sells part of its specialty bread to the multi-market plants to be distributed under the larger plants' label. This allows the larger bakers to offer a wider variety of products without the added expense of producing limited amounts of high quality specialty items. Table 10 would also seem to give evidence to the supposition that small, local bakeries have made a place for themselves within the city market because of their high quality specialty products.

TABLE 10  
MAJOR CUSTOMERS OF SIX OMAHA BAKERIES, 1972

Bakery		Customers		
Plant	Type of Plant	Grocery (Ind. & Chain)	Eating Places	Others
A.	Multi-market	70%	20%	10%
B.	"	66%	24%	10%
C.	"	70%	23%	7%
D.	Grocery Chain	100%	0	0
E.	Grocery Chain	85%	10%	5%
F.	Local Firm	40%	50%	10%

Source: Estimated provided by six Omaha study bakeries.

#### Channels of Distribution

At this point it is necessary to distinguish among the methods the Omaha bakery plants use to distribute their products. The wholesale multi-market bakeries all use the commissioned driver-salesman and his truck route to distribute their products. The drivers serve as salesmen and order takers, load and unload their trucks, and place the products on the grocer's shelves. The driver-salesmen are also responsible for keeping displays fully-stocked and attractive. They often return several times daily to the larger retail outlets within the city. Bakery routes are then built, within the limits of the market,

one upon another, much like a brick wall. A method of consignment selling is used with the grocers returning unsold goods for full credit. Driver-salesmen pick up all unsold "stale" items and return them to the plant where they are transferred to "thrift" stores where they are offered for sale at reduced prices.

The multi-market plants in Omaha operate depots, or loading stations, in areas distant from their plant. Bakery products produced in the Omaha plant are shipped in semitrailer trucks to a depot up to 200 miles from the plant. Trucks and driver-salesmen are assigned to the depots to deliver to outlets in the distant areas. In the majority of cases the multi-market companies own the depots and employ the driver-salesmen. Only two small outlying routes are maintained by independent distributors, known as "bobtailers," since they are usually at the "bobtail" or end of the transport trailer's run.

The system of depot operations followed by the three multi-market plants allows larger-scale production which offsets the higher cost of the transportation to the depots. Depot operations allow the plant to determine if an area can be profitably added to its market without disrupting plant production too much.

Wholesale bakers in Omaha produce some private label products for affiliated independent grocers and chains that do not have their own manufacturing plants or that

need to supplement their bakery product line. In most markets, wholesale bakers deliver private label products to the store dock or to grocery wholesaler warehouses, from which they are distributed to individual stores by warehouse trucks. This is generally not the case in Omaha, as the majority of private label produced is delivered on routes in conjunction with the wholesalers' own brand.

Grocery chain bakeries transport products from the plant to a central distribution center in large tractor-trailers. In most cases, bakery products are loaded with other products, and a tractor-trailer carries a full load delivering to individual stores. The tractor-trailers may be owned by the grocery chains, or independent truckers may haul the products on contract. Both methods are represented in Omaha.

In the grocery chain system of delivery, there are certain obvious cost advantages due to the fact that the bakery is not directly responsible for delivery. Products are usually unloaded at the store dock by store clerks. The store clerks are then responsible for stocking the store shelves and stale items are sold in the store at reduced prices.

Chain Bakery E uses the above described distribution system, except for deliveries within the Omaha metropolitan area. The bakery still delivers to individual stores in the city using its own delivery trucks on a route system.



The local firm has several methods of distribution. It also has route trucks call on grocery stores daily as well as on eating places. The eating places retain ownership of products and do not have the privilege of returning stale products. Much of the local plant's business is conducted by individual contracts for daily deliveries at negotiated prices. The small amount of private label production is picked up at the plant and distributed by the multi-market trucks. A very small amount of Bakery F's own label is distributed by the multi-market bakeries in this same way. Approximately 5 per cent of this firm's output represents retail purchases made at a retail store located at the plant.

#### General Market Characteristics of Omaha Bakeries

An analysis of Table 11 will give an indication as to the location of the markets of the six bakeries. The three multi-market plants tend to have more of their business outside of Omaha, while the local plant conducts almost all of its business within the metropolitan area. Bakery C does a great deal of private label production for a local chain store which explains the high percentage of its business within the Omaha area as compared to the other two multi-market plants.

The grocery chain bakeries also do the majority of their business outside of the Omaha metropolitan area.

TABLE 11

## PER CENT OF BAKERY CUSTOMERS WITHIN OMAHA SMSA

Plant	Type of Plant	% of business in Omaha SMSA	% of business outside Omaha
A	Multi-market	29	71
B	"	30	70
C	"	57	43
D	Grocery chain	35	65
E	Grocery chain	50	50
F	Local firm	95*	5*

\* Author's estimate

Source: Estimates of six Omaha bakeries

The difference between the two chain bakeries in their percentage of business within the Omaha SMSA, appears to be a reflection of the fact that Bakery D serves a more regional distribution of stores than Bakery E which currently serves more localized stores (see Appendix IV, p.105).

Truck routes are the most important part of the distribution system of most of the bakeries in this paper. An investigation of the truck route information presented in Table 12 further supports ideas already presented.

A comparison of Tables 11 and 12 shows that Bakeries A and B, with a greater proportion of their business outside also logically have the greater number of distribution points and delivery routes outside of the city. Again

TABLE 12  
TRUCK ROUTES OF SIX OMAHA BAKERIES

Plant	Type of Plant	Depots (no.)	Number of Truck Routes		
			Total	In Omaha	Outside Omaha
A	Multi-market	9	73	36	37
B	"	7	105	33	72
C	"	7	80	51	39
D	Grocery chain	1	na	na	na
E	Grocery chain	1	2	2	na
F	Local firm	0	6	6	na

na--not applicable

Source: Six Omaha bakeries.

Bakery C's high proportion of delivery routes within the SMSA results from its large amount of private label production for a local chain and the regional, rather than national, orientation of the corporation to which Bakery C belongs.

The grocery chain bakeries supply only their central distribution depots. In both cases baked goods to be distributed from the distribution centers are transported from the bakeries to the centers by large tractor-trailers to be distributed to chain stores in conjunction with other grocery items. Only Chain Bakery E delivers direct from the bakery to its stores in the Omaha area, with deliveries outside the city delivered by tractor-trailer as described above. Two routes are maintained with each route making several recalls at many of the store locations.

The large multi-market plants have increased the number of depots they serve in recent years. The most recent additions are by Bakeries A and B, both of which have opened new depots in the rapidly expanding section of Southwest Omaha. The multi-market plants are also currently consolidating their route systems to make them more efficient. The market area served is not decreased, but fewer routes and driver-salesmen will result. Although the reduction will not be substantial, it will be a step to make an outmoded and expensive distribution system more economical.

Now that some general observations have been made concerning distribution and marketing of Omaha bread bakeries, each type of bakery will be discussed separately.

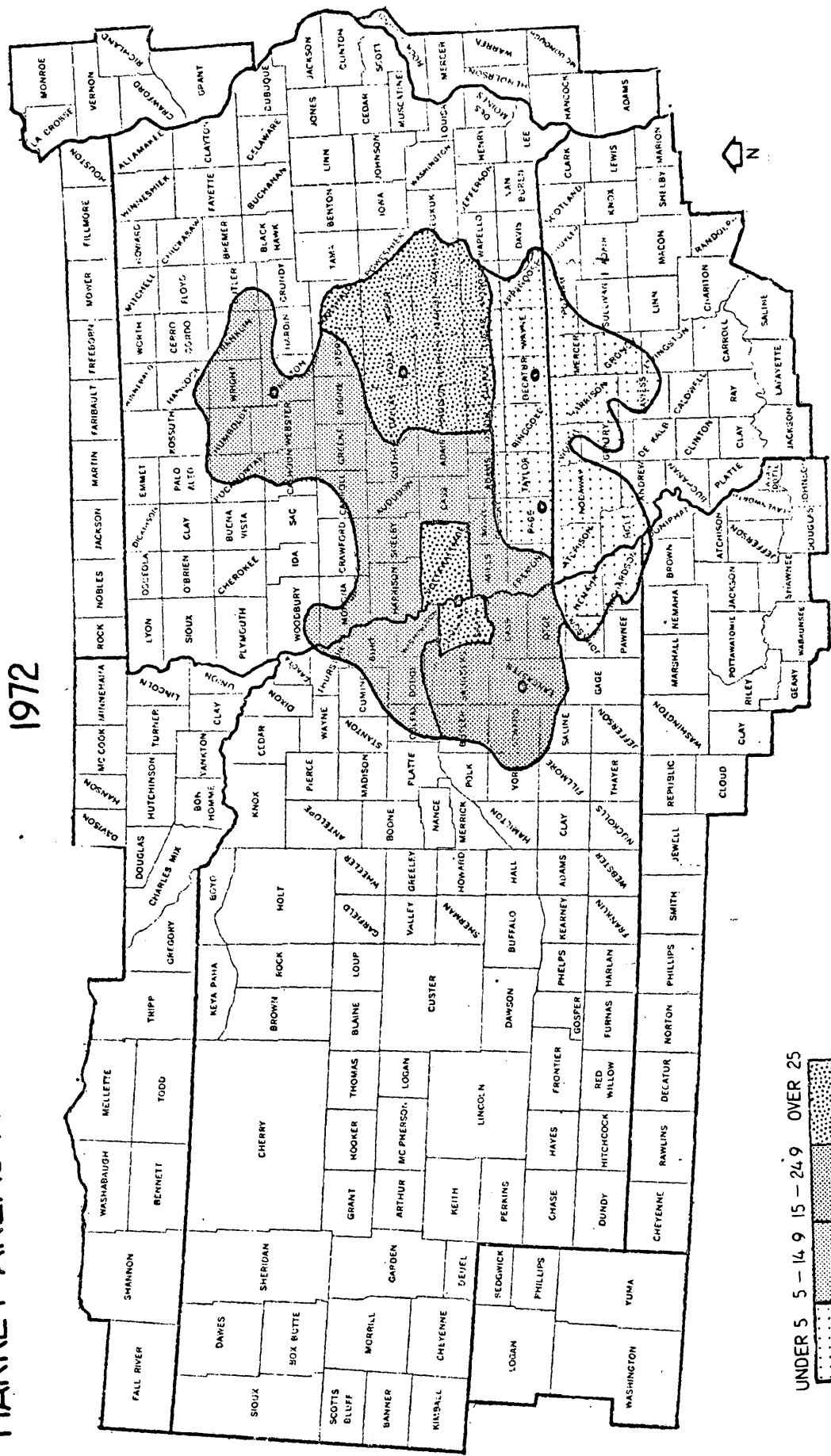
#### Areal Extent and Intensity of Individual Plant Markets

Bakeries A, B, and C are multi-market and are by far the largest producers in the Omaha area. Figures 8, 9, and 10 show the areal extent of each plant's market. The importance of each portion of the markets is also indicated.

Since the larger bakery corporations have other plants in other cities surrounding Omaha, the Omaha markets are to a certain extent shaped by market areas of other plants of the same company (see Figures 4, 5, and 6 above on pp.43-46). For example, plants B and C are restricted

# MARKET AREAS AND DISTRIBUTION POINTS OF BAKERY "A" MULTI - MARKET

1972



UNDER 5 5 - 14 9 15 - 24 9 OVER 25

PERCENT OF TOTAL SALES

● DISTRIBUTION POINTS

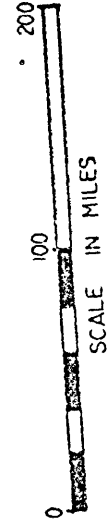
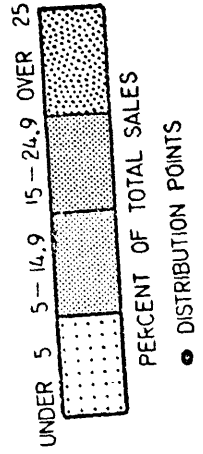
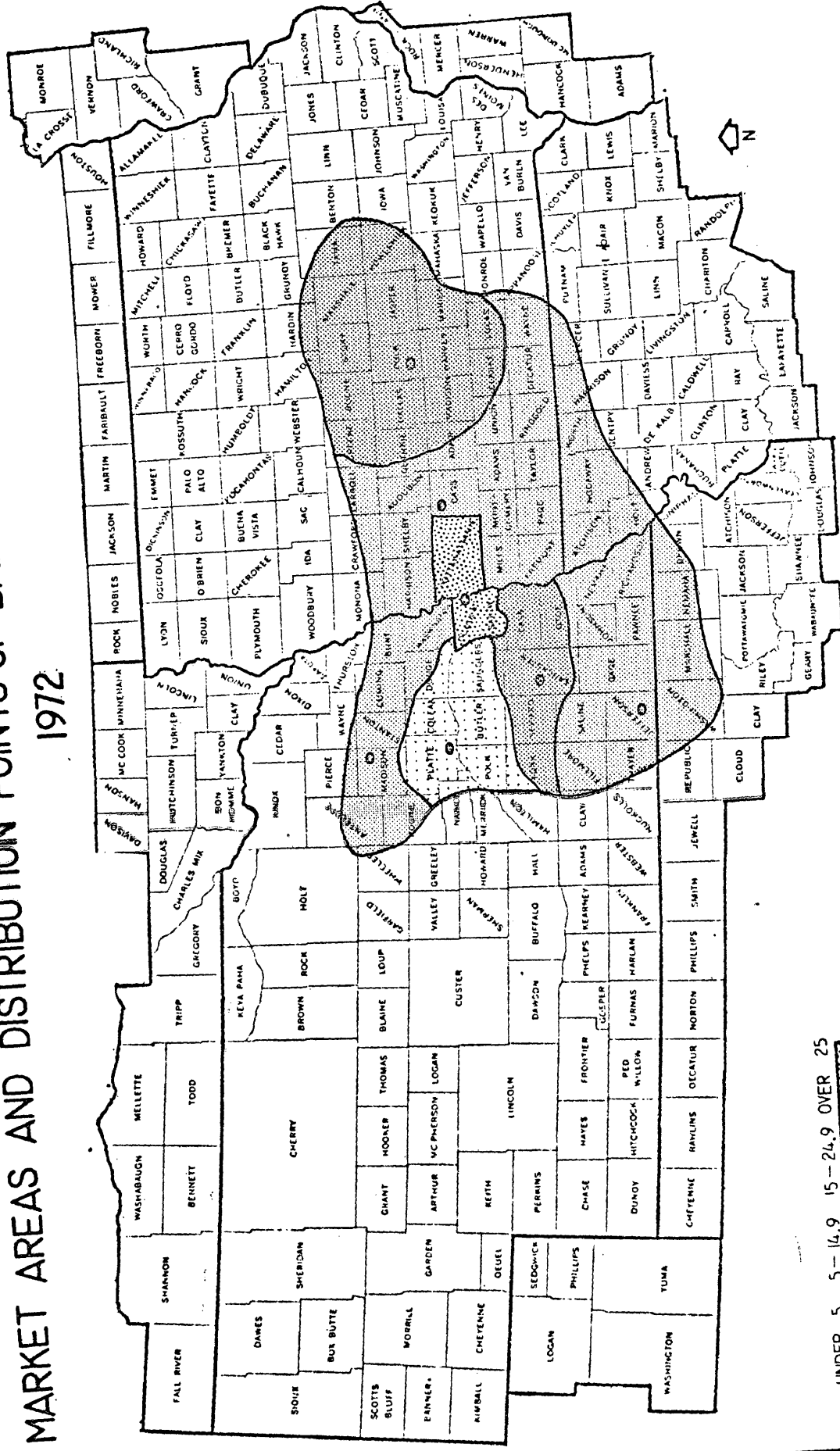
0 100 200

SCALE IN MILES

SOURCE PERSONNEL OF BAKERY A 1972

FIGURE EIGHT

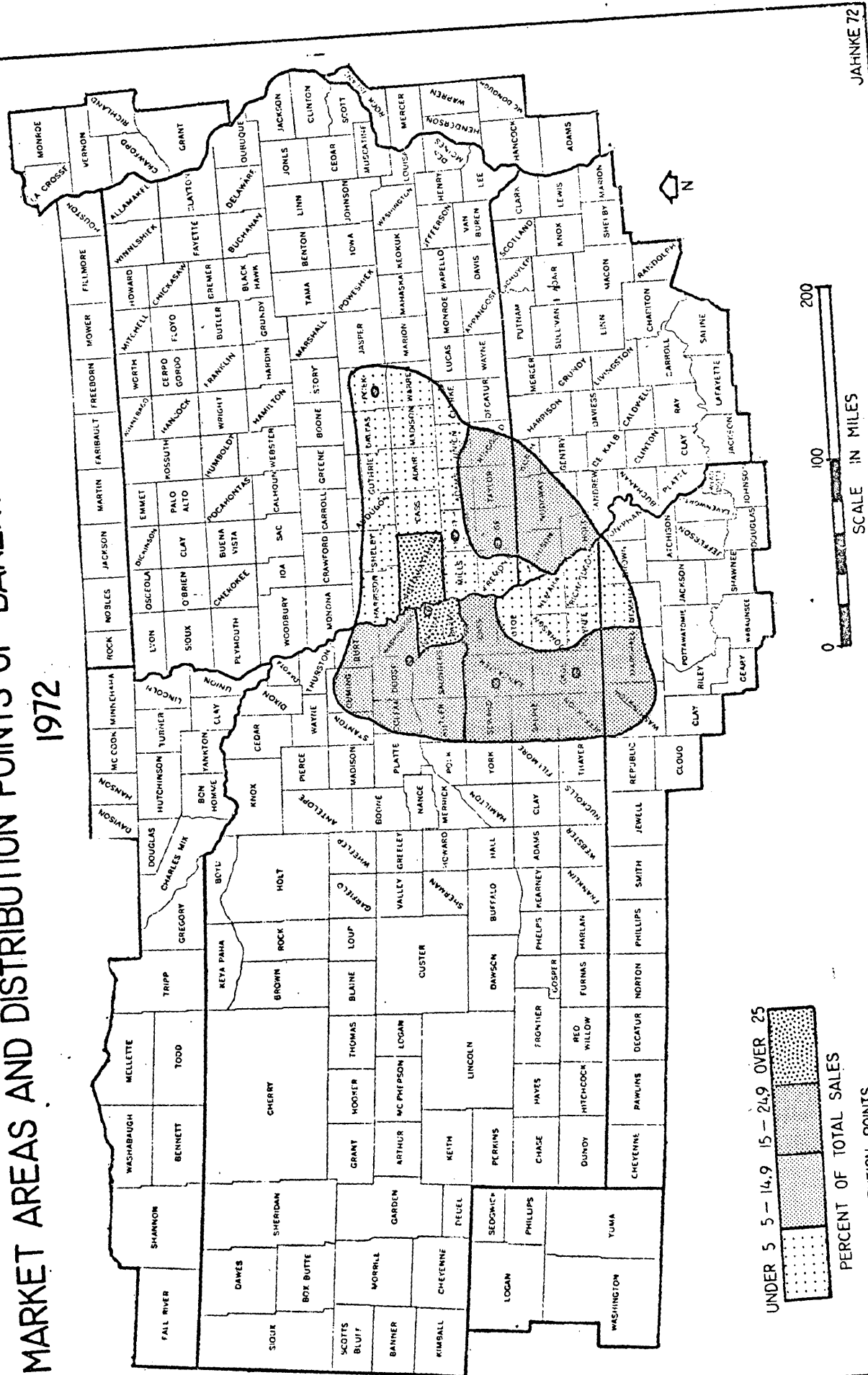
# MARKET AREAS AND DISTRIBUTION POINTS OF BAKERY 'B' MULTI-MARKET 1972



SOURCE PERSONNEL OF BAKERY B 1972

FIGURE NINE

# MARKET AREAS AND DISTRIBUTION POINTS OF BAKERY "C" MULTI-MARKET 1972



UNDER 5 - 5 - 14.9 15 - 24.9 OVER 25  
 PERCENT OF TOTAL SALES  
 ● DISTRIBUTION POINTS

SOURCE PERSONNEL OF BAKERY C 1972

FIGURE TEN

to the north because their companies have bread plants located in Sioux City, Iowa. Bakeries A and B are both limited in their markets to the south by bakeries of the same corporations in Kansas City. None of the multi-market plants have bread plants of the same company directly east of Omaha, which helps to explain the eastward pull of their markets. Further analysis of the two sets of maps appears to indicate that it is Bakery C's market that is most shaped by the location of fellow company bread plants. The location of other company plants to the north and west have given Bakery C's market its south-eastward orientation.

The three multi-market plants have a total of twenty-three different distribution centers outside of Omaha. The location of these depots, or sales branches, within the market areas of the individual plants are in line with the baking corporations' attempt to maximize sales. Although the greatest number of depots are located in Omaha and Des Moines, the two most populous centers within the market areas of the multi-plant bakeries, population is not the only factor determining depot location. Many times the policies of the baking corporations to invade a particular market or to gain volume of sales have influenced depot locations.<sup>1</sup>

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<sup>1</sup>Interstate Bakeries Corporation, interviews with selected personnel, December, 1969.



Omaha and Des Moines have the largest portion of business for all three of the multi-market plants (see Figures 8, 9, and 10), with the Lincoln area being a secondary area of concentration. The other areas included in the markets vary as to the amount of business carried on. A comparison of the areas having over 25 per cent of their company's business would seem to add support to the earlier observation that bread baking tends to follow population, that is, the more population, the more bread sold.

Another observation that can be made in analyzing the market areas of the multi-market plants is that the largest plants also tend to have the largest market areas. Ranked both in order of numbers employed and production, plant B is first, plant A second, and plant C third. Identical ranking can be observed in their market size.

The market area of both grocery chain bakeries is reflected in the distribution of the chain stores served. Figures 11 and 12 would seem to indicate that Bakeries D and E have the largest market areas of the six bakeries, reflecting to a certain extent, the economies of bulk delivery. But, it must be remembered that the chain bakery does not serve all of the area involved, only individual chain stores in selected towns and cities.<sup>1</sup> Therefore,

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<sup>1</sup>For a list of cities served by Chain Bakeries D and E, see Appendix IV, p. 105.

# MARKET AREAS OF BAKERY "D" GROCERY CHAIN PLANT. 1972

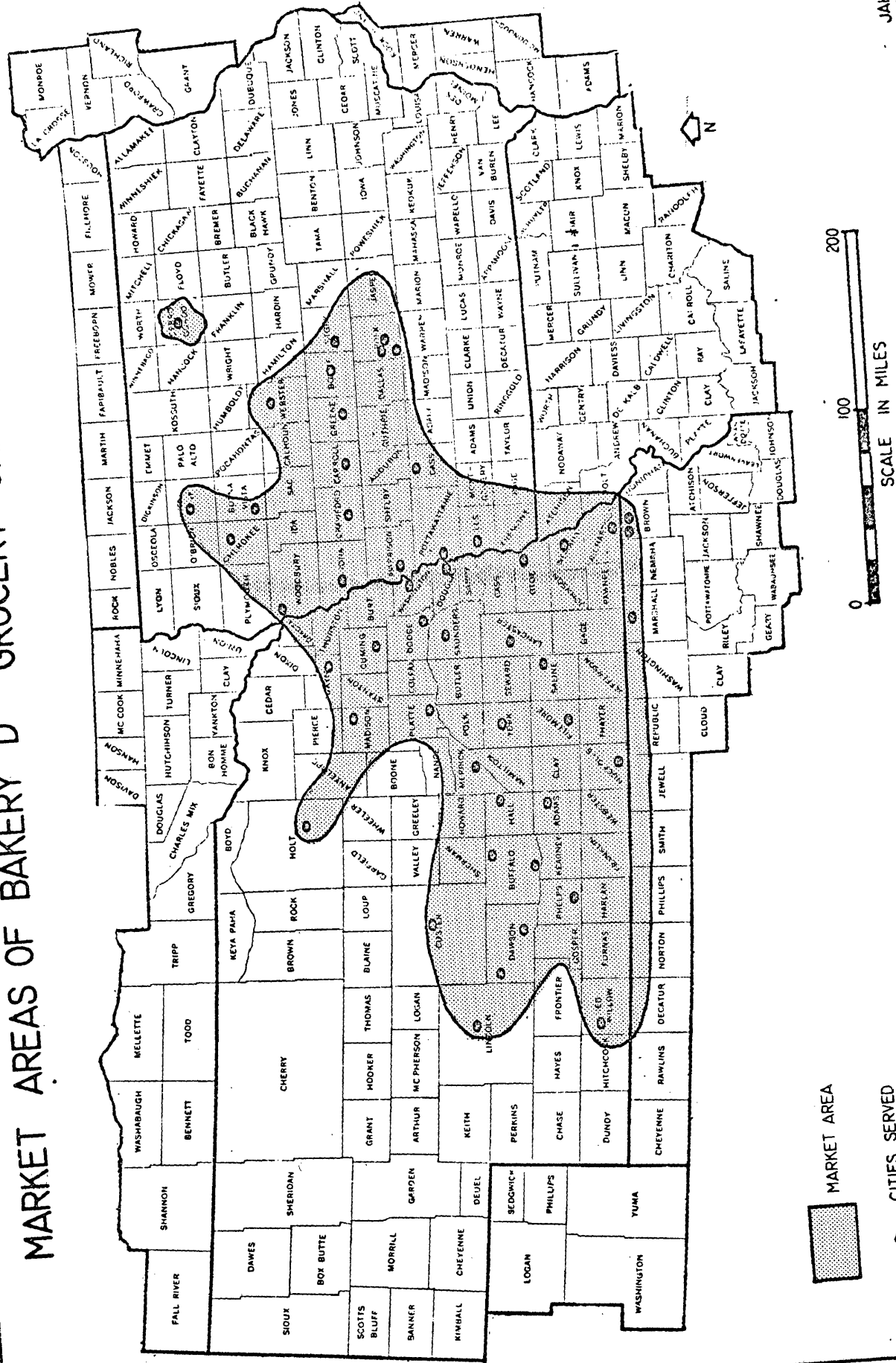
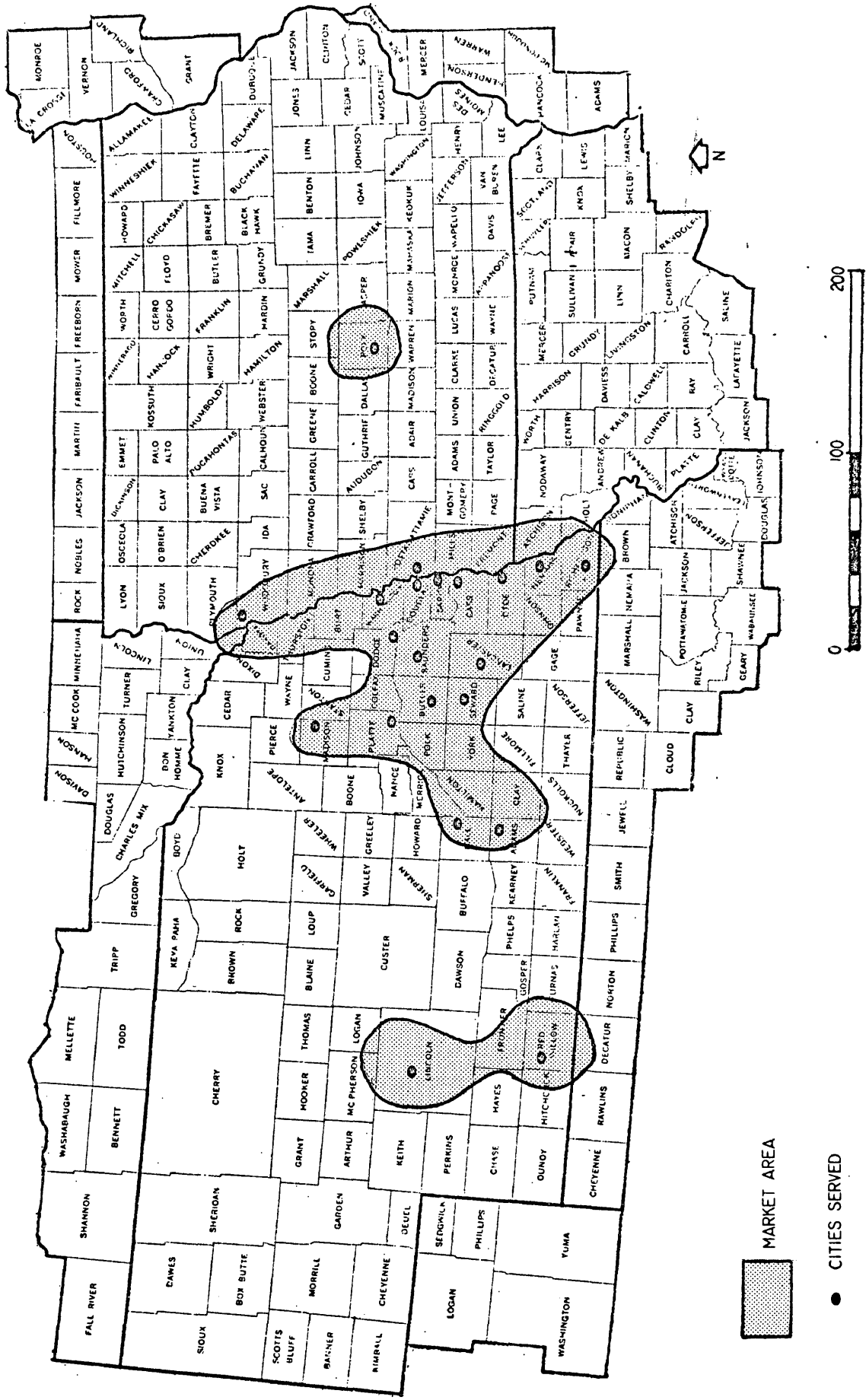


FIGURE 11

SOURCE PERSONNEL OF BAKERY D 1972

# MARKET AREAS OF BAKERY "E" GROCERY CHAIN PLANT FOR 1972



SOURCE PERSONNEL OF BAKERY E 1972

FIGURE 12

the larger areas served by the chain bakeries are not blanket market areas, but rather are punctiform in nature. Omaha is the only depot from which distribution is made, data could not be obtained to determine where the most sales were made, but it would seem safe to assume that more sales would be made where the greatest number of company grocery stores would be located. Again, this area appears to be the more populous areas around Omaha, Des Moines, and Lincoln.

Plant F, a local firm, has virtually all of its market within the Omaha SMSA. The area of its market, along with its specialty products which have already been discussed, would seem to indicate that local firms are able to compete with the larger bakeries on the local level, but due to high distribution costs do not normally expand beyond the metropolitan market area. A larger production which would allow an expanded market, may also lower the high quality of this bakery's products. For this reason, Bakery F is not concerned with market expansion beyond the local area.

#### A Composite of Omaha Bakery Markets

Now that the markets of the six bakeries have been discussed, some general observations concerning the composite market area of the Omaha bread bakeries can be made. It is quite difficult to construct a composite map of the six bakery markets. Several major problems create

this difficulty: (1) the varying areas covered by the bakeries, (2) the wide range in the volume of bakery products shipped from each plant, (3) an extremely uneven market intensity among the different type bakeries, that is, the grocery chain bakeries deliver to widely scattered stores without servicing areas between them, and (4) lack of exact sales data. However, the problem is lessened somewhat by the great amount of overlap among the six market areas, for in essence, the three lesser individual markets, Bakeries F, C, and A are encompassed by the three larger, Bakeries D, E, and B. Therefore, areas included in the composite area of dominance represent a 50 per cent overlap of individual bakery markets (see Figure 13). Also, weight was given to the higher volume bakeries (A, B, and C) in determining the composite line. Hence, essentially, where ever at least three of the six bread markets overlapped, the composite line was constructed.

Figure 13 indicates that the composite area of Omaha wholesale bakery markets is a contiguous region surrounding the city in eastern Nebraska and southwestern Iowa. The three larger cities of Omaha, Des Moines, and Lincoln are included in the composite market area. It will be remembered that these three cities were also the areas of greatest market intensity in the multi-market bakeries' markets. The combined markets of the six bakeries also tend to have a greater portion of their markets within Iowa rather than



Nebraska. This may partially be explained by the fact that Iowa has a more dense population in the countryside than does Nebraska. Perhaps even more significant in explaining the eastward orientation of Omaha's composite bakery market is the lack of large corporate bakery plants in southwestern and central Iowa.

It can be concluded that the areal extent depends somewhat upon the absolute size of the plants, the size of the home market, the cost of production and distribution, and the proximity of other large markets and producers.

#### Wholesale Bakery Deliveries as an Indicator of Omaha's Sphere of Influence

By constructing a composite map of the six market areas, the general over-all regional influence of Omaha baking is shown. This composite market area, based on the actual movement of commodities over specific routes to definite parts of the region, is a reflection of Omaha's regional supporting area. Wholesale bakery deliveries would appear to be a meaningful indicator of Omaha's more immediate hinterland, especially from the point of view of the wholesale area that the city serves, due to the very nature of the relatively constant and daily interaction between the Omaha bakeries and the areas they supply.

Normally, as one progresses away from a focal point such as Omaha, the influence of this point gradually declines until another focal point becomes more important.

Although the Omaha bakery market is contiguous, areas of dominance exist some distance from Omaha with intervening areas of much lesser importance. The Des Moines and Lincoln areas are notable exceptions to the gradual decline in influence with distance from Omaha.

Although bakery deliveries do not and could not presume to present the only delimitation of the tributary area of Omaha, they can be used to begin to show the embryo of a core of dominance which could serve as a beginning of the development of a composite analysis of Omaha's wholesale trade area. Bakery deliveries appear to be an excellent reflection of Omaha's position as a regional population and wholesale distribution node.



CHAPTER V  
CONCLUDING STATEMENTS

This study has investigated, in varying degrees, three phases of the Omaha bread baking industry, (1) its role as an indicator of Omaha's sphere of influence, (2) its position within the national-regional baking industry pattern, and (3) its local expression in individual bakeries, with special emphasis on the spatial elements of raw material acquisition and finished product delivery.

The analysis of the Omaha bread baking industry represents an in depth study of an activity which combines the functions of ubiquitous manufacturing and regional wholesaling; two aspects of economic behavior often neglected by the geographer. The relative importance of this particular study is that it represents the first known attempt to investigate Omaha's sphere of influence by means of what is commonly considered to be an ubiquitous industry. The study also entails a much more detailed analysis of the commodity, whose market area is proposed as an indicator of a city's sphere of influence, than is generally the case. This is significant since greater knowledge and understanding of the forces responsible for the spatial expressions of an activity should promote the application of those areal expressions as an indication of a city's area of dominance.

While many studies have been made of the tributary areas of cities, the method invariably has been to use the leading industries and services (those considered to be basic to a city)<sup>1</sup> as a basis. The local and regional services (non-basic), ubiquitous functions that most cities provide for their surrounding areas, have received very little attention. To remedy this situation, R.E. Dickinson calls for

. . . a much more careful analysis of the urban community, not only as the location of specialized industry and service serving a wide market, but also as the location of industry and service for the "regional" market over and above "local" needs of the urban community itself.<sup>2</sup>

Dickinson further contends that studies focusing on local non-basic activities would prove useful in revealing defects in the structure of the urban community and the nature and degree of its dependence on better-equipped neighboring cities. Insight would also develop as to the character of adjustments needed to give the city a more balanced structure.<sup>3</sup>

The most ubiquitous economic activities carried out by a city for external areas are referred to as central

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<sup>1</sup>Basic activities are those producing goods or services for export out of the urban area which brings money into the city. Non-basic are those activities whose resultant goods and services are consumed within the city or urban agglomeration.

<sup>2</sup>Dickinson, City Region and Regionalism, p. 24.

<sup>3</sup>Ibid.

place functions because they must be performed regularly for a large number of people in the surrounding area. All settlements are supported to some degree by income obtained from the supply of such goods and services.<sup>1</sup> Bread baking is an example of such an ubiquitous manufacturing function.<sup>2</sup> Each rank of the settlement hierarchy (hamlet, village, town, and city) maintains a certain number of these central place functions, with goods and services provided tending to be both more plentiful and diversified at each higher level of the hierarchy. Centers, both of the same class and on different levels, compete for hinterland support. Thus, the urban hierarchy is largely established by the provision of different levels of ubiquitous goods and services on a regular basis.<sup>3</sup> Many goods and services tend to become less ubiquitous at higher levels.

Commercial bread baking, therefore, is ubiquitous to the extent that it is a central place function. It is an industry not found in every central place; but is today increasingly finding expression at a higher level in the urban hierarchy.

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<sup>1</sup>Dean S. Rugg, Spatial Foundations of Urbanism, (Dubuque, Iowa: Wm. Brown Company, 1972), p. 106-107.

<sup>2</sup>Other examples of such ubiquitous functions cited by Rugg, p. 106, include the following types and examples: retail-grocery; service-garage; wholesale-soft drinks; education-grade school; government-county offices; and recreation-bowling.

<sup>3</sup>Ibid.

Wholesaling activities have also been largely neglected by the geographer. A survey of the literature reveals an absence of work both on the location of wholesaling and on the effect wholesaling has had on the broader geographical patterns of settlement. James E. Vance, Jr. explains that there is no solid system of analysis to account for the general structure and location of wholesale trade. This, along with the fact that wholesale trade dealings tend to be carried out in an extremely confidential manner and often represent transactions of abstract quality may help explain the paucity of geographical work on wholesale trade.<sup>1</sup>

Few substantive data and inadequate theory have limited the use of wholesaling activities as measures of a city's relationship with the countryside. Another problem in dealing with wholesale trade in determining spheres of influence lies in the fact that many wholesale marketing areas are large and not necessarily continuous since a manufacturing firm, for example, may draw on widely scattered resources and sell its products to diverse markets. Wholesale bakery deliveries representing a relatively contiguous market area, does not have the extreme problem of market area delineation, but the confidential trade relations are a problem in gathering data on which to construct the market area.

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<sup>1</sup>James E. Vance, Jr., The Merchant's World: The Geography of Wholesaling, (Englewood Cliffs, N.J.; Prentice-Hall, Inc., 1970), pp. 6-7.

<sup>2</sup>Ibid., pp. 11-12.

In view of the above discussion, wholesale bakery deliveries would appear to be a meaningful indicator of Omaha's area of influence. Since commercial baking is generally common to cities of a certain rank in the urban hierarchy and represents a regular and relatively essential relationship with the countryside, bakery deliveries may well be one measure of city influence which could be used to compare cities on similar levels of the urban hierarchy. Further study of bakery market areas in other cities would be required in order to test the validity of this suggestion.

This study also shows that the Omaha wholesale bread baking industry generally fits the organizational pattern of the baking industry found throughout the nation, in that Omaha's market consists of a few large national or regional corporations, vertical integration into baking by grocery store chains, several smaller local independent wholesale firms, and many small retail specialty bake shops. Concentration of production in larger and fewer plants, underutilization of plant facilities, outmoded distribution systems in large segments of the industry, and changes in consumer demand are all characteristic of Omaha's market as well as being general statements of the character of the baking industry on a national level. Thus, it is suggested there is little which is significantly unique in the Omaha market.

Certain spatial aspects of the national and regional organization of the baking industry greatly affect commercial baking in Omaha. Omaha's position is especially influenced by the distribution of production and sales facilities of multi-market corporations with national or regional coverage. Large corporate bakeries to the north in Sioux City, Iowa and to the south in Kansas City, Missouri, along with the absence of such bakeries immediately west of Omaha and in southwestern and central Iowa, are major factors in the explanation of the east-west orientation of Omaha's bread market.

In addition to influencing market extent and configuration, type of products produced by the Omaha plants also depends somewhat upon corporate structure. The product line produced by corporate bakeries in surrounding cities influences to a degree the type of bakery product produced by Omaha plants of the same corporation. For example, Bakery C in this study bakes a large amount of sweet rolls and pies in order to provide these products for most of the entire area served by this regional corporation.

Several general conclusions can be made as a result of the analysis of the six individual study plants concerning specifically results of changing consumer demand for bakery products, raw material acquisition, and economies of alternate modes of product distribution.

The larger plants generally tend to bake the largest proportion of white pan bread, while the smaller plants specialize in variety breads and sweet goods requiring more hand work. In this way the smaller wholesale bakeries have managed to compete with the large multi-market plants in the local Omaha market by offering specialty products of high quality. White bread continues to be the major product of large bakeries. However, the multi-market plants in Omaha have begun to diversify their product line to include mechanized production of sweet goods and other snack type items as a result of changing consumer demand. This takes the form of lower per capita consumption of bread type products and an increasing per capita consumption of sweet goods and especially snack type bakery items. Expansion into this type of production is also a reflection of attempts to utilize excess plant capacity. In the long run, the slight shift from bread products to less perishable snack type products may lead to some areal expansion of Omaha's bakery market.

The sources of raw materials for the Omaha bread baking industry reflect Omaha's location within a large food producing region. Therefore, the sources of the ingredients used in the Omaha bakeries are in many cases within the immediate Omaha, none being more than 600 miles distant. This is especially true for flour, the most important ingredient in volume and cost. Although many

of the raw materials used may be obtained locally, the Omaha bread baking industry does not depend entirely upon local sources.

In light of the investigation concerning the various distribution systems employed by the six study plants, it is suggested that the driver-salesmen system of the multi-market plants is hopelessly inefficient and outmoded. Originally geared to serving the needs of small independent grocery stores, this system has become less and less appropriate as the market condition has shifted to a concentration of grocery retailing in the form of large chain grocery stores. Although the three multi-market plants in Omaha are currently attempting to reorganize and consolidate delivery routes, the driver-salesmen system remains. The economies to be gained by adopting bulk delivery to store docks, separating delivery and sales transactions, may well allow sufficient reduction in distribution costs to bring about some expansion of Omaha's bakery market. Further quantitative study is needed to ascertain the validity of this contention.

It is hoped that this study has presented substantive data on the baking industry and in some degree has demonstrated the need for geographical investigation of ubiquitous manufacturing activities and the wholesale distribution of particular commodities. One can only hope that geographers will recognize the need to incorporate these areas of study more fully into regional construction methods.



APPENDIX I

QUESTIONNAIRE ON PLANT OPERATION FOR OMAHA BAKERY STUDY

Section A: General Information

Name of company \_\_\_\_\_

Address of company \_\_\_\_\_

Date \_\_\_\_\_

1. Number of fulltime employees.

Production-employees \_\_\_\_\_

Delivery and sales employees \_\_\_\_\_

Other employees \_\_\_\_\_

Total employees \_\_\_\_\_

2. Cost structure: Give per cent of total costs, including wage costs in all areas.

Raw materials \_\_\_\_\_

Production costs \_\_\_\_\_

Distribution costs \_\_\_\_\_

Other \_\_\_\_\_

3. Weekly (or daily if more appropriate) capacity of your plant in terms of one-pound white bread loaves.

Rated weekly capacity \_\_\_\_\_

Average amount of bread produced weekly \_\_\_\_\_

or

Rated daily capacity \_\_\_\_\_

Average amount of bread produced daily \_\_\_\_\_

4. Please indicate your general operation schedule below (number & length of shifts).

Section B: Production

1. Classification and volume of products manufactured by this plant in 1971.

Product	Check	Quantity by Baked Wt. 1,000 lbs	% of Total Output
White bread . . . . .			
Variety bread and rolls .			
Sweet rolls . . . . .			
Pies . . . . .			
Cookies . . . . .			
Donuts . . . . .			
Soft cakes . . . . .			
Frozen baked goods . . .			
Other (specify) _____ . .			
_____ . . . . .			
_____ . . . . .			

2. Type of label for bread and bread-type rolls: give per cent of total output.

Type of Label	Per cent of total
Brand (your own) . . . . .	_____
Private label (for retailers) . . . . .	_____
Private label (for other wholesalers) . . . . .	_____

3. Ingredients used in your plant. Please indicate approximate quantity used for each item, the per cent each item made up of total raw material costs, and sources of raw material by location.

Item	Quantity	% of total ingredient costs	Source (Location)
Flour . . . . .			
Vegetable shtng. & oils . .			
Lard & other animal fats .			
Milk solids (nonfat) . . .			
Sugar . . . . .			
Yeast . . . . .			
Salt . . . . .			
Malt extract . . . . .			
Other (specify) _____ . .			
_____ . . . . .			
_____ . . . . .			

Section B: Production--continued

4. Technological improvements adopted

Improvement	Check		If yes, give approx. year installed
	Yes	No	
Continuous mix . . . . .			
Bulk flour . . . . .			
Bulk sugar . . . . .			
Bulk shortening . . . . .			
Brew system . . . . .			
Automatic cooler . . . . .			
Faster wrapper . . . . .			
Automatic feed to slicer . . . . .			
Panners . . . . .			
Depanners . . . . .			
Automatic proofers . . . . .			
Oven with loaders and unloaders . . . . .			
Conveyors . . . . .			
Automatic bun equipment . . . . .			
Bigger mixer . . . . .			
Pan stackers--bread . . . . .			
Delidders . . . . .			
Twisters and molders . . . . .			
Bagging machines . . . . .			
Automatic ingredient scaling . . . . .			
Pan return conveyors . . . . .			
Automatic bun grouping and packaging . . . . .			
Palletizing of baked goods . . . . .			
Other (specify) _____ . . . . .			
_____ . . . . .			
_____ . . . . .			
_____ . . . . .			

5. Check method of dough mixing used in producing your volume selling loaf.

- a. Conventional . . . . . \_\_\_\_\_
- b. Continuous . . . . . \_\_\_\_\_

C: Distribution and Market

1. Sales of bread and bread-type rolls by outlet.

<u>Sales outlet</u>	<u>% of total output</u>
a. Bakery dock pickup . . . . .	_____
b. Driver-salesmen delivery out of plant (wholesale). . . . .	_____
c. Driver-salesmen delivery out of plant (home service at retail) . . . . .	_____
d. Depot or loading station away from bakery:	
(1) Depot pickup . . . . .	_____
(2) Driver-salesmen delivery (wholesale) . . . . .	_____
(3) Driver-salesmen delivery (home retail) . . . . .	_____
(4) Delivered by other methods (specify) _____ . . . . .	_____
e. Warehouse delivery (chain & voluntary groups) . . . . .	_____
f. Delivered to buyer by other means (drop stop, etc.) . . . . .	_____
g. Thrift stores . . . . .	_____
h. Retail stores owned by you (sales at retail price) . . . . .	_____
i. Leased store premises (sales at retail price) . . . . .	_____
j. Inter-plant (applies to multiple-plant operations) . . . . .	_____
k. Other (specify) _____ . . . . .	_____

2. Types of customers. What per cent of output is sold to each?

<u>Types</u>	<u>% of total output</u>
a. Independent grocery stores . . . . .	_____
b. Grocery chains . . . . .	_____
c. Grocery (voluntary group) . . . . .	_____
d. House to house retail route . . . . .	_____
e. Hotels, restaurants & institutions . . . . .	_____
f. Other (specify) _____ . . . . .	_____

3. What percentage of your total sales are within the metropolitan Omaha area? . . . \_\_\_\_\_

C. Distribution and Market--continued

4. Delivery operations of your plant.

Item	Number
1. Delivery routes . . . . .	_____
a. Wholesale (driver-salesmen):	
(1) Company operated . . . . .	_____
(2) Independent jobbers . . . . .	_____
b. Wholesale (drop delivery to stores):	
(1) Company operated . . . . .	_____
(2) Independent jobbers . . . . .	_____
c. Retail (home service):	
(1) Company operated . . . . .	_____
(2) Independent jobbers . . . . .	_____
2. Depots supplied . . . . .	_____
3. Retail stores operated . . . . .	_____
4. Employees in selling and delivery:	
a. Wholesale driver-salesmen . . . . .	_____
b. Wholesale drop delivery . . . . .	_____
c. Retail (home service) . . . . .	_____
d. Transport drivers . . . . .	_____

5. Route summary:

Total number of routes . . . . .	_____
Number of routes within Omaha . . . . .	_____

6. Depots supplied. Please list the depots supplied by your plant, the number of routes for each depot, and the approximate per cent of total sales for each.

Depots	# of routes	% of total sales
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

(Please list any additional on the back)

## APPENDIX II

### ORGANIZATION OF A MULTI-MARKET BAKING COMPANY: ITT CONTINENTAL BAKING COMPANY, AN EXAMPLE\*

Continental Baking Company, incorporated in 1924, was formed by a merger which originally included nearly 100 plants turning out bread under dozens of labels. At the time, it was a sprawling, loosely-knit concern with each of its baking units acting, for the most part, as an independent operator.

In 1927, its headquarters, originally in Chicago, was moved to New York. A nationally known brand name --"Wonder"--was established for its bread along with an easily recognized symbol, the now famous balloon wrapper. About the same time, a second brand name, "Hostess Cake," came into being. Subsequent national advertising programs spread the name and fame of these products.

Products, packaging, baking techniques and distribution methods were improved. In 1930 sliced bread was introduced. In 1941, in cooperation with the government, the baking industry began the enrichment of white bread with vitamins and minerals to improve nutrition.

Since World War II, Continental's growth has been rapid. The company expanded in terms of sales, geography, and diversification. In 1956, it acquired the Morton Packing Company, then in Louisville, which had become an important frozen food producer. The same year it bought Stewart's, Inc., of Memphis, a leading processor of potato chips, cookies, and snack items.

Many inefficient plants were closed or consolidated. Although Continental has fewer bakeries today than it had in the late '20's, its production has expanded greatly.

In September, 1968, Continental Baking Company was merged into the International Telephone and Telegraph World System.

ITT Continental Baking now has 43 bread bakeries, 22 bakeries producing both bread and cake, 7 cake bakeries, and 8 plants manufacturing Morton Frozen Foods, snack items, and other food products. It employs 30,000 people. In 1957, its headquarters and food laboratories were moved from New York to new buildings in suburban Rye, New York.

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\*Taken from the pamphlet, ITT Continental Baking Company, Inc.

Four basic divisions make up ITT Continental Baking Company: Wonder Bread, Hostess Cake, Morton Frozen Foods, and Wonder Snack Foods. In addition, the company owns the Paniplus Company of Kansas City, Missouri, which produces dough conditioners and other bakery needs.

The Wonder Bread and Hostess Cake Divisions, in turn, are divided into nine regions. Two have their headquarters in Chicago: others are located in or near Boston, New York, Washington, Detroit, Kansas City, Los Angeles, and San Francisco. Each regional office is responsible for the operations of a group of bakeries.

ITT Continental's general office, in Rye, New York, provides overall direction and also acts as a service organization. It is divided into some 30 departments --advertising, bread sales, engineering, legal, personnel, purchasing, etc., which assist in meeting the problems faced by regions and plants. The company has its own chairman, board of directors, president, and officers.

### APPENDIX III

#### LOCATION OF PRODUCTION AND SALES FACILITIES OF THE THREE NATIONAL AND REGIONAL BAKING CORPORATIONS REPRESENTED IN OMAHA

##### Corporation A Plants

###### Bread Bakeries

Chicago, Illinois (South)  
Chicago, Illinois (North)  
Kansas City, Missouri  
Cincinnati, Ohio  
Omaha, Nebraska  
Grand Rapids, Michigan  
Peoria, Illinois  
Springfield, Illinois  
Green Bay, Wisconsin  
Milwaukee, Wisconsin  
Denver, Colorado  
Memphis, Tennessee  
Bismarck, North Dakota  
Minot, North Dakota  
Billings, Montana  
Sikeston, Missouri  
Los Angeles, California  
Los Angeles, California  
Los Angeles, California  
Oakland, California  
San Diego, California  
Long Beach, California  
Glendale, California  
Santa Ana, California  
Albany, New York  
Elmira, New York  
Cleveland, Ohio  
Birmingham, Alabama  
Rochester, New York  
Syracuse, New York

###### Cake Bakeries

Chicago, Illinois  
Emporia, Kansas  
Cincinnati, Ohio  
Los Angeles, California  
Kingston, Pennsylvania  
Birmingham, Alabama  
Greensboro, North Carolina  
Albany, New York  
Buffalo, New York

###### Division Offices

Chicago, Illinois  
Los Angeles, California  
Minot, North Dakota  
Union, New Jersey

###### Corporate Headquarters

Kansas City, Missouri



Corporation B PlantsBread Bakeries

Akron, Ohio  
 Berkeley, California  
 Beverly Hills, California  
 Bridgeport, Connecticut  
 Chicago, Illinois  
 Chicago, Illinois  
 Clarksdale, Mississippi  
 Columbus, Ohio  
 Dayton, Ohio  
 Detroit, Michigan  
 East Hartford, Connecticut  
 Gary, Indiana  
 Hammond, Indiana  
 Holyoke, Massachusetts  
 Honolulu, Hawaii  
 Indianapolis, Indiana  
 Little Rock, Arkansas  
 New Haven, Connecticut  
 New York City, New York  
     Bronx  
     Brooklyn  
     Jamaica  
 Norristown, Pennsylvania  
 Paterson, New Jersey  
 Pittsburgh, Pennsylvania  
 Portland, Oregon  
 Raleigh, North Carolina  
 Rochester, Minnesota  
 Sacramento, California  
 St. Joseph, Missouri  
 Salt Lake City, Utah  
 San Diego, California  
 San Pedro, California  
 Shreveport, Louisiana  
 Sioux City, Iowa  
 Tampa, Florida  
 Toledo, Ohio  
 Tulsa, Oklahoma  
 Utica, New York  
 Waterloo, Iowa  
 Wichita, Kansas  
 Youngstown, Ohio

Cake Bakeries

Cincinnati, Ohio  
 Detroit, Michigan  
 Hoboken, New Jersey  
 Los Angeles, California  
 New Haven, Connecticut  
 Schiller Park, Illinois  
 Toledo, Ohio

Combination Bakeries

Anchorage, Alaska  
 Buffalo, New York  
 Cleveland, Ohio  
 Dallas, Texas  
 Davenport, Iowa  
 Denver, Colorado  
 Kansas City, Missouri  
 Memphis, Tennessee  
 Milwaukee, Wisconsin  
 Minneapolis, Minnesota  
 Natick, Massachusetts  
 Ogden, Utah  
 Oklahoma City, Oklahoma  
 Omaha, Nebraska  
 Richmond, Virginia  
 St. Louis, Missouri  
 San Francisco, California  
 Seattle, Washington  
 Seattle, Washington  
 Spokane, Washington  
 Washington, D.C.  
 Wheeling, West Virginia  
 East Brunswick, New Jersey

Foreign

Kingston, Jamaica  
 Mexico City  
 Nassau, Bahamas

Snack Plants

Columbus, Ohio  
 Little Rock, Arkansas  
 Memphis, Tennessee  
 Oklahoma City, Oklahoma

Frozen Foods Plants

Concord, North Carolina  
 Crozet, Virginia  
 Russellville, Arkansas

Regional Offices

Baileys Crossroads, Virginia  
 Chestnut Hill, Massachusetts  
 Detroit, Michigan  
 Kansas City, Missouri  
 Los Angeles, California  
 Memphis, Tennessee  
 Redwood City, California  
 River Grove, Illinois  
 River Grove, Illinois  
 Rye, New York

Corporation C PlantsPlants

Rapid City, South Dakota  
 Hastings, Nebraska  
 Omaha, Nebraska  
 Watertown, South Dakota  
 Huron, South Dakota  
 Sioux Falls, South Dakota  
 Sioux City, Iowa

APPENDIX IVCITIES SERVED BY BAKERIES E & DCities Served by Chain Bakery ENebraska

Omaha (14 stores)\*  
 Plattsmouth  
 Auburn  
 Nebraska City  
 Wahoo  
 Seward  
 Falls City  
 David City  
 Lincoln (4 stores)  
 Fremont  
 Grand Island  
 Bellevue\*  
 Norfolk  
 North Platte  
 McCook  
 Hastings  
 Blair

Iowa

Des Moines  
 Council Bluffs\*  
 Sioux City

(12 new stores are  
 currently under  
 construction)

\*Those cities served  
 by delivery routes  
 direct from the bakery.

TOTAL: 42 stores

Cities Served by Chain Bakery DNebraska

Omaha (12 stores)  
 Lincoln (1 stores)  
 Nebraska City  
 Auburn  
 Falls City  
 Blair  
 West Point  
 Wahoo  
 Wayne  
 Fremont

Beatrice  
 Columbus  
 Norfolk  
 O'Neill  
 Central City  
 York  
 Crete  
 Geneva  
 Fairbury  
 Hastings

Superior  
 Kearney  
 North Platte  
 Grand Island  
 Broken Bow  
 Lexington  
 Holdredge  
 McCook  
 Ravenna  
 Gothenberg

Iowa

Red Oak  
 Windsor Heights  
 Jefferson  
 Ames  
 Mason City  
 Cherokee  
 Onawa  
 Des Moines (7 stores)

Shenandoah  
 Perry  
 Carrol  
 W. Des Moines  
 Storm Lake  
 Fort Dodge  
 Mo. Valley  
 Council Bluffs

Glenwood  
 Newton  
 Boone  
 Spencer  
 Atlantic  
 Denison  
 Sioux City (2 stores)  
 Council Bluffs (2 stores)

Kansas

Hiawatha  
 Norton

Sabetha

Marysville

TOTAL: 84 stores

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