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FEASIBILITY STUDY FOR A NEW MEDIUM-TO-LARGE SIZED  
SUPERMARKET IN GREAT FALLS, MONTANA

By

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B.A., University of Washington, 1972

Presented in partial fulfillment of the requirements  
for the degree of

Master of Business Administration

UNIVERSITY OF MONTANA

1975

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## CHAPTER I

### INTRODUCTION

The retail food industry in Great Falls, Montana closely resembles that of other U.S. metropolitan areas the same size. Individual businesses must constantly be aware of market changes. One of the ways these businesses can measure future demand is through the use of a feasibility study. These studies help retailers maintain maximum efficiency in the market place. Since building a new supermarket requires many different resources, the potential new owner must be certain that demand will be sufficient before beginning. Along with forecasting demand, a feasibility study also projects the proper revenues and costs involved in opening a new store.

The purpose of this study was to determine whether or not it would be feasible for a new supermarket to open in Great Falls. In making this determination, major considerations included: (1) the economic and demographic trends in Great Falls, (2) the existing retail food store situation, and (3) the selection of a possible site location. The analyses utilized a pro-forma balance sheet, income statement, break-even analysis, and an analysis of debt service capability.



## INDUSTRY OVERVIEW

The majority of today's retail food distribution in the United States is accomplished through large corporate chains. These companies own several stores located throughout a geographical region or regions. This food chain concept dates back as far as 1849 when the Great American Tea Company was founded in New York City. Starting out as tea wholesalers, this company later sold directly to consumers, and eventually added a line of groceries. Succeeding years brought many changes. A name change to the Great Atlantic & Pacific Tea Company occurred, and today the company is known by its many A&P supermarkets throughout the country.

The first chain was quite primitive in nature. Most stores were small one man operations which sold dry groceries only. Many other companies followed the A&P example such as Kroger, Grand Union, Jones Brothers and Safeway. The number of stores has grown steadily over the years with the exception of the depression period. The original A&P was the largest chain for several years with as many as 4200 stores.

Another innovation which has been successful in the food industry is the food discount store. Originating in the early 60's, these stores sell a more restricted line at lower than average prices. The major chains were quite reluctant to recognize this new form of marketing, but after noted measures of success, the industry leaders realized future

potential and converted many of their existing supermarkets.

Apart from large discount stores lies still another innovation: the convenience store which is seen almost everywhere these days. These stores operate on high margins for a very limited line of products. Overhead is kept to a minimum, and the stores typically stay open long hours, 7 days a week. Examples are Circle K and Seven--Eleven stores which are located throughout the country.

Even more recently, another method of food distribution has developed. Within the last couple of years, large cities have shown the growth of food co-ops. These usually operate out of someone's garage or basement and include anywhere from 1 to 25 families. Pooling their efforts, these families purchase large quantities of food from wholesalers and are able to save sizeable amounts of money and obtain fresher perishable food.

In surveying the retail food industry's market structure, issues to consider are buyer and market concentrations, vertical integration, economies of scale, and product differentiation. Interacting with one another, these factors prescribe how firms will compete, how they will view the customer, and how a potential firm will view the industry's opportunities.

Market concentration has grown steadily over the past 2 or 3 decades. Statistics show the number of independent grocers in the U.S. dropping since the mid 30's.<sup>1</sup> Chain stores,

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<sup>1</sup>Adams Walter, The Structure of American Industry. (New York; The MacMillan Company, 1971.) p. 34.

while not growing greatly in number, have integrated both vertically and horizontally, merged and diversified. This has led to the typical large shopping complex of today. Supermarkets are packed with everything from flowers to food to furniture polish. Large supermarkets are primarily owned by chains, while small grocery stores are still run by independents, and the market share enjoyed by grocers is controlled primarily within geographical regions. Although most supermarket shoppers arrive by automobile, they generally limit themselves to one certain area.

A look at the concentration of local food suppliers shows them to be smaller in size than regional suppliers. Most retailers deal solely with one wholesaler for their grocery line as it is inefficient and costly to do otherwise. Smaller independent grocers typically form buying co-operatives to allow them greater price reductions and a better service by wholesalers.

The retail food industry has also been successful with vertical integration. It is not uncommon to find larger chains manufacturing their own bakery, dairy, and canned goods. Since these products have high delivery costs, most large chains also own delivery systems. An excellent example of this is Safeway which owns its own dairy and distributes its own products. Meat is another item typically processed by larger chains, although on a more selective basis. Location is very important due to spoilage. If a chain is highly concentrated in a beef producing area, it is advantageous to

have its own meat plant. An excellent example of this is Buttrey Foods Incorporated in Great Falls, Montana which manages its own processing plant to supply beef to several stores within a five state region.

Overall, about three-fourths of all chain manufacturing goes directly to its own stores. The remainder is sold to other food retail and wholesale outlets. Various firms which do their own manufacturing are keenly aware as to which products to produce. Economies of scale are different for various products, and volume must be high for some such as jams, jellies, and mayonnaise. Baked goods and dairy products can be profitable at lower levels of turnover.

Other scale economies once enjoyed by the larger chains are becoming less significant today. As larger chains have had more money to pay buying experts, they have enjoyed higher profits from better purchases and better knowledge. Independent supermarkets have formed buying co-operatives to get around this, however, allowing them greater savings.

Another scale economy enjoyed by larger firms is advertising. Since supermarket advertising is primarily accomplished in newspapers, one can easily see the cost savings of having all stores of a particular chain in a local area covered by a single set of ads. Television advertising is also cheaper for the chain store as the name can be conveyed over a larger geographical region including many stores.

Another important phase of market structure which directly affects the industry's concentration is mergers.

Food retailing first saw a major merger movement in the early 1920's. The most pronounced effects of this movement were: (1) greatly expanded size and scope of operations for several leading chains, (2) increased market concentration on a national scale, (3) widespread market extension of merger activity, and (4) the establishment of industry leaders who have remained dominant up to the present time. More recently (late 50's and early 60's) merging has consisted primarily of larger chains buying out smaller ones.

The grocery store of today typically carries a much wider variety of items than it did prior to the chain store movement. Large chains have diversified into high-margin general merchandise lines such as in-store bakeries, delicatessans, liquor sales, pharmacies, flower shops, and photo processing. Some chains have gone into convenience stores, family centers, drug stores, and restaurants. Standard & Poor's lists the three most diversified food retailers as Jewel Co., Inc., Lucky Stores, and Supermarkets General.<sup>1</sup> Jewel Stores are opening restaurants, bakeries, delicatessans, drug stores, and convenience stores. Lucky Stores have recently opened family centers, department stores, drug stores and sporting good stores. Buttrey Foods, a division of Jewel Company, Inc., has an in-store bakery, delicatessan, and small restaurant in its Holiday Village store in Great Falls. Buttrey's also own and operate a chain of Osco Drug Stores. Obvious advan-

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<sup>1</sup>Standard & Poor's Industry Surveys, "Retail Food Industry," (December 13, 1973), p. R167.

tages of these acquisitions are: (1) they complement existing facilities, and (2) it is easier to acquire already established facilities than build new ones.

Most chains offer their own brand of items. Companies such as Grand Union, Safeway, and Supermarkets General do twenty percent or more of their annual business in private labels.<sup>1</sup> Since this industry is primarily a service industry, differentiation of any great amount is difficult to achieve. Most exclusive promotions and drawing features may be imitated by someone else. Where an in-store delicatessen may not be extremely profitable, it is another feature designed to bring in customers. Games and trading stamps represent still another attempt by retailers to differentiate their service.

A final facet of the food industry's market structure is barriers to entry. With the expansion of large supermarkets, (both vertically and horizontally), it is expensive to enter the industry today and effectively compete. An independent would have to be more than adequately capitalized and have an excellent market before he could seriously consider opening a large supermarket. The establishment of co-operatives has helped independents build small stores and later expand with growing markets.

Other barriers to entry besides costs are prevalent also. A chain store carries an established name and image among its customers. Customers tend to be loyal for reasons of

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<sup>1</sup>Adams, Walter The Structure of American Industry. (New York; The MacMillan Co., 1971.) p. 54.

geographical location, prices, brands, and other intangible factors. As mentioned, advertising is much more costly for the independent. These are important factors to consider in the establishment of a new supermarket.

A second area to consider in establishing a new store is market conduct. "Market Conduct consists of a firm's policies toward its product market and toward the moves made by its rivals in that market."<sup>1</sup> Three major areas of significance are prices, product quality, and policies toward competition in the market. Prices are very important in that they directly affect the consumer's demand for the product. This in turn regulates the retailer's demand from wholesalers and wholesaler's demand from manufacturers. Manufacturers are then responsible for the efficient allocation of the industry's raw materials. If a retailer is not always aware of pricing against his competition, he can quickly lose many customers and possibly his whole business. One author says, "It is the margin between his payment to wholesaler or manufacturer and the price to the customer that is the price of the retailer's service."<sup>2</sup>

Food retailers are very aware of the items which shoppers regularly price. They competitively price these items to bring shoppers into their store. Once in a certain store, it is very unlikely that a shopper will go elsewhere. To the

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<sup>1</sup>Caves, Richard American Industry: Structure, Conduct, Performance. (New Jersey: Prentice--Hall, 1972.) p. 36.

<sup>2</sup>Adams, Walter The Structure of American Industry. (New York; The MacMillan Co., 1971.) p. 49.

extent that shoppers will do a weeks shopping once in a certain store, retailers are seen as monopolists (over this set of shoppers).

Many analyses of pricing patterns in the food industry have shown irregular methods to be used by various dealers. Margins have varied from slightly below cost (at a loss) to very high markups. In overall economic terms, retailers try to price at the theoretical point of profit maximization (where marginal revenue equals marginal cost). They use a "price loss" to lure shoppers into the market and then make up the loss with higher mark-ups on other items. Among items most frequently featured as specials in supermarkets throughout the country are coffee, ground beef, sirloin steak, mayonnaise, sugar, and soap.<sup>1</sup> These products are marked at a price loss. Alongside these products many other fillers on weekly newspaper ads are priced at no discount.

The food retailer can price in many different combinations which will result in the same overall profit percentages. Among the many things which leave the grocer free to manipulate prices in the market place is the general lack of knowledge by the buying public. The average retailer is also a victim of incomplete knowledge. He must make determinations on how much shelf facing to allow, which items not to carry, what products to put on end displays, etc.

Another likeness of the food industry to other industries

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<sup>1</sup>Adams, Walter, The Structure of American Industry, (New York: The MacMillan Co., 1971.) p. 50.



is that of price leadership. Many of the larger chains will price after one another with the independents either leading or following depending on geographical area. The recent trend of these operators to experiment with prices has lead primarily to a generally accepted low price-high volume selling technique.

Pricing competition has shown other tactics to be relatively successful. Included is the use of multiple unit pricing. This is the case of the 19¢ can of beans which is changed to a price of 3 for 59¢. If the customer elects to purchase only one can, he is charged the penalty price of 20¢. Either way he has lost while the retailer's price margin rises.

Even in face of the special promotion techniques used by large chains, a proven fact remains in the industry that independents have higher profits than chain stores. This is true even though the industry is oligopolistic in nature because food retailers have not been known to outright collude on prices. Possible reasons for the fairly competitive nature of the food industry include: (1) relatively free entry and exit, (2) competitiveness in price cutting and a long time lag between price changes and sales and (3) differences in product lines and geographical location. Since most areas have more than one large supermarket to patronize, managers must be competitive in all areas of pricing or they may be surpassed sufficiently to jeopardize their market position.

Today's grocers as well as those of the past compete in areas other than price. One competitive tactic is to improve the store in which consumers make purchases. Comfort

items such as air conditioning, parking lots, automatic doors, music, check cashing and stamp service are common examples. Although actual results are hard to measure, it is thought that a brand new or newly renovated store will have an inherent advantage over its competitors. It is also a well known fact that most grocery stores are laid out in similar format designed to get the customer completely through the store. Meat, dairy and produce sections usually get the outer sections with frozen foods and dry items lining the aisles. Certain high demand items are located within easy reach to get customers in a good buying mood. The remainder of high demand--low margin items are then strategically located so as to give maximum exposure to all high margin items.

Other techniques commonly employed make use of gifts and bargain sets. Customers are lured back to the same store by offering sets of dishes, encyclopedias, cookbooks, silverware offers etc. Safeway is a firm which readily comes to mind when mentioning this technique. Still another technique which has been employed for many years is that of redeemable trading stamps. Stores hope to enhance loyalty through the distribution of these stamps. Stamps have been declining in recent years as consumer incomes have risen. Stores have employed other techniques and found them to work just as well.

Product brands are also used in the competitive methods of grocers. The battle is fought between national and private brands. Chain stores are partial to private labels for two reasons. First, they can maintain lower prices because of

less cost in distribution and promotion and second, they can build customer loyalty if the product is satisfactory to its buyers.

A third and final area of industry overview is market performance. The retail food industry is measured in terms of its efficiency, progressiveness, and overall industry practices.

With respect to the industry's utilization of resources, one must consider profits, costs, and industry capacity. History indicates that profits are not excessive and therefore the industry may be operating quite well (Table 1-1). Other considerations should be brought out though. Over the past few years, stores and their related services have been changing. As the size of stores grows, many of the previous individualized services go by the wayside. During the period 1964 through 1968, personalized services were almost non-existent. Only during the last couple of years have large stores paid the extra cost of persuading customers to patronize by again offering more personalized services.

Grocery stores can also be more efficient with respect to operating costs. Stores stay open during periods when relatively few people patronize them. They often are located very close to one another, detracting from each others efficiency. The industry could in the future locate stores a certain distance apart. They could also only stay open fewer hours per day and in this way be more efficient cost wise. It is likely that at the same time they will sell the

TABLE 1-1

PERCENT RETURN ON NET WORTH,  
BY INDUSTRY

Industry	1964	1965	1966	1967	1968
Food chains	12.5	12.5	12.3	11.0	11.5
Manufacturing	12.6	13.8	14.2	12.5	13.1
Electric Power	11.0	11.4	11.5	11.5	11.2
Finance	5.6	5.4	5.4	6.0	5.6
Wholesale	11.4	13.4	15.2	15.1	16.5

SOURCE: Adams Walter, The Structure of American Industry. (New York; The MacMillan Company, 1971.) p. 55.

same amount of food as before. All things considered though, employees would have less income and the very nature of competitiveness would be gone.

Looking to progressiveness, the food industry has made giant strides over the past few years. Stores have changed drastically in size, composition, and services offered. Strictly in terms of the time taken by the housewife to do her one-stop shopping, one can see remarkable changes. Continual changes are also taking place internally within today's supermarket. A recent method of ordering is all computerized. The grocer walks along the isles punching his orders by code number into a recorder. He then dials a telephone number and puts the playback over the line. The main terminal reads the tape which automatically provides the warehouse with the weekly order. All of this is done in a fraction of the time taken just 2 or 3 years ago. A company can earn substantial profits if it is very efficient in applying the new technologies of the industry (Table 1-2). Return to net worth averaged 12% (food) industry wide for 1973.<sup>1</sup> When compared to previous years, little change can be seen but one must realize that the industry has grown in size over the years. Even though the industry has grown and is performing much more efficiently, Adams feels it is far from utopia.<sup>2</sup> He contends the average housewife still wanders

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<sup>1</sup>"How Chain Management Performed in 1973", Chain Store Age, Headquarters Edition, (New York, March 1974) p. E66.

<sup>2</sup>Adams, Walter, The Structure of American Industry. (New York; The MacMillan Company, 1971.) p. 63.

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TABLE 1-2

HOW CHAIN MANAGEMENT  
PERFORMED IN 1973

Chain	% Return on Total Capital	% Return on Equity	% Sales Growth	% Earnings per share Growth
1. Longs Drugs	23.1	23.7	33.5	28.7
2. Winn-Dixie	20.2	22.3	35.7	39.0
3. Melville Shoe	19.8	24.7	39.2	28.3
4. Jack Eckerd	19.8	21.6	59.4	60.0
5. Weis Markets	17.3	17.4	20.5	9.7
6. Dillon Cos.	17.2	22.3	99.9	65.1
7. Kings Dept. S.	16.9	17.4	14.0	9.3
8. S. S. Kresge	16.4	17.1	40.3	38.5
9. Revco	14.7	17.0	109.0	37.6
10. Albertson's	13.8	19.7	43.2	41.5
11. Lucky Stores	13.8	21.4	25.4	11.0
12. J. C. Penney	13.5	15.6	24.9	24.7
13. Lane, Bryant	13.3	15.6	19.0	19.7
14. Sears, Roebuck	12.7	14.9	19.2	15.9
15. Edison Bros.	12.6	16.1	25.5	34.4
16. Federated Dept. S.	12.6	13.9	22.4	19.1
17. Mercantile Strs.	12.6	15.2	24.8	18.6
18. Levitz Furn.	12.5	16.3	52.0	26.1
19. Rite Aid	12.3	16.7	55.5	45.5
20. Safeway	12.1	14.4	20.5	9.6

SOURCE: "How Chain Management Performed in 1973",  
Chain Store Age, Headquarters Edition, (New York, March 1974)  
p. E66.

blindly down the isles just as she did years ago. Adams' opinion could be disputed, however. The use of unit pricing, consumer awareness, and stricter labeling have all contributed to enhancing the market in the sense of shopper awareness.

All of these components are important considerations for the prospective supermarket owner. The retail food industry is fairly uniform throughout the United States. Great Falls and Montana markets do not differ much from other midwestern or western cities, with respect to the issues discussed above.

## CHAPTER II

### POPULATION

The population of Great Falls has grown significantly in the last 30 years. During the fifties and early sixties (1950 - 1963) total population grew by more than seventeen thousand persons (Table 2-1). More recently, growth has slowed. Population has failed to meet projected levels since 1961. The 1970 census of population showed significantly lower levels than had been anticipated and current estimates show the city of Great Falls grew less than 1% between year ends 1972 and 1973.

Coupled with this small percentage in growth is the fact that Cascade County showed a drop in population over the same period (1972 - 1973). While the city gained an estimated 1,081 people, overall county figures showed an estimated decline of some 500 people (Table 2-2). The county losses were primarily in the age groups of 20 - 40 years.<sup>1</sup> This phenomenon is partly explained by the fact that Great Falls natives migrate to larger urban areas when they reach working age. These losses may be directly correlated with the individuals seeking education, training, employment, and fulfilling military

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<sup>1</sup>Cascade County USDA Committee for Rural Development, Cascade County Situation Statement--1972 with Special Emphasis on Agriculture, (Cascade County, Great Falls, Montana, 1972), p. 8.



TABLE 2-1

## GREAT FALLS POPULATION ESTIMATES

Year	Population
1940 .....	29,928 <sup>a</sup>
1950 .....	39,214 <sup>a1</sup>
1960 .....	55,357 <sup>a1</sup>
1963 .....	56,777 <sup>b</sup>
1967 .....	58,670 <sup>b</sup>
1970 .....	60,091 <sup>a2</sup>
1972 .....	61,173 <sup>c</sup>
1973 .....	62,254 <sup>c1</sup>
1975 .....	63,185 <sup>d</sup>
1980 .....	66,671 <sup>d</sup>

<sup>a</sup>U.S. Department of Commerce, Bureau of the Census, 1940 Population, Number of Inhabitants, Vol. 1, State of Montana, (Washington D.C.: Government Printing Office,) p. 619.

<sup>a1</sup>1960 Population, Number of Inhabitants, p. 28-15.

<sup>a2</sup>1970 Population, Number of Inhabitants, p. 28-13.

<sup>b</sup>Assuming a Straight Line Trend 1960 - 1970, 473.4 Per Year.

<sup>c</sup>Editor & Publisher Company, 1972 Editor & Publisher Market Guide, (New York: Editor & Publisher Company, Inc., 1971), p. 250.

<sup>c1</sup>1973 Editor & Publisher Market Guide, p. 277.

<sup>d</sup>Figures obtained from The Department of Intergovernmental Relations, Research and Information Systems Division, State of Montana.

TABLE 2-2

## CASCADE COUNTY POPULATION ESTIMATES

Year	Population
1940	41,999 <sup>a</sup>
1950	53,027 <sup>a1</sup>
1960	73,418 <sup>a1</sup>
1963	75,934 <sup>b</sup>
1967	79,286 <sup>b</sup>
1970	81,804 <sup>a2</sup>
1972	84,200 <sup>c</sup>
1973	83,700 <sup>c</sup>
1975	87,171 <sup>d</sup>
1980	93,213 <sup>d</sup>

<sup>a</sup>U.S. Department of Commerce, Bureau of the Census, 1940 Population, Number of Inhabitants, Vol. 1, State of Montana, (Washington D.C.: Government Printing Office, 1942), p. 619

<sup>a1</sup>1960 Population, Number of Inhabitants, p. 28-15.

<sup>a2</sup>1970 Population, Number of Inhabitants, p. 28-13.

<sup>b</sup>Assuming a Straight Line Trend 1960 - 1970, 836.6 per year.

<sup>c</sup>U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Population Estimates, P-26, No. 53, (Washington D.C.: Government Printing Office, February 1974), p. 3.

<sup>d</sup>Figures obtained from The Department of Intergovernmental Relations, Research and Information Systems Division, State of Montana.

obligations. At the same time, young people from Montana's rural areas migrate to Cascade County for employment in or near Great Falls.<sup>1</sup> This migration serves to further limit the job market for young adults in Great Falls.

The overall declining population growth has been caused by various other factors in the local economy. A 1970 merger between Great Northern and Burlington Northern Railroads was the cause of many job losses.<sup>2</sup> Burlington Northern closed their car repair shop and the main line for rail traffic was moved. Moving this main line, which connected the south, midwest, and west coast to Great Falls, increased shipping time enough to discourage a few businesses. Two wholesale parts businesses curtailed their Great Falls operations as a result.

In 1972, expectations for a defense-related economic boom were raised and obliterated. Northern Montana was chosen for the site of a safeguard anti-ballistic missile system. There were expectations for at least 3500 employees who would initially live and shop in Cascade County. However, the 1972 Strategic Arms Limitation Treaty with Russia was signed and the project was closed. At about the same time, the Anaconda Company closed its zinc and aluminum wire plants causing a layoff of almost 900 employees.

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<sup>1</sup>THK Associates, Inc., Economic Base Study, 1974 City of Great Falls and County of Cascade Montana, (Great Falls, MT, Great Falls City/County Planning Board, October 1974.) p. 36.

<sup>2</sup>Ibid., p. 7.

The State of Montana and various independent agencies have made population projections through 1980 for Cascade County and the City of Great Falls (Appendix Tables 1, 2, 3, 4, 5). When looked at collectively, obvious discrepancies can be seen in the magnitude of these different projections. Most of the estimates were high for the early seventies and it is likely they are high for the years 1975 through 1980.

For purposes of this study, the conservative figures obtained from the Research and Information Systems Division, Department of Intergovernmental Relations, State of Montana are thought to be a more realistic reflection of what will happen in Great Falls in the near future (Table 2-1). A continuing sales pattern in agriculture and a stable population for Malmstrom Air Force Base should produce this projected growth.

The 1980 Great Falls population is forecasted to reach 66,671 persons. Assuming no major changes in current food consumption patterns, this small amount of population growth may or may not warrant a new supermarket. Retail food sales forecasts for the Great Falls area are developed in chapter three as part of this feasibility analysis. However, alternatives to a new supermarket must be carefully examined. Perhaps the existing market can easily be penetrated and a new store can be profitable. Another possibility is serving the existing market with a better geographical location. These and other pertinent factors are examined throughout this paper.

## CHAPTER III

### GROCERY STORE SALES

Wholesale distribution of groceries in Great Falls is done primarily by the chain stores supplying themselves (Appendix 6). All of the larger stores are vertically integrated to the point of self-sufficiency. They package and distribute their own meats, canned goods, baked goods, produce, and even some dairy goods. Also, greater savings are made through purchasing large amounts of other brands.

The remainder of distribution for all of the smaller stores is handled by three firms. Circle K and Rosauers are the only chain stores served by another firm. Along with two other cooperative type stores, Circle K is supplied by Associated Foods from Helena, Montana. Super Save IGA and all of the independents are served by Ryan Merchantile Company of Great Falls.

The wholesale and retail industry growth pattern, as indicated by the number of outlets, is unique (Table 3-1). While wholesale units dropped substantially in 1967, they increased to their previous level in 1969 and dropped again in 1972. Throughout this period, though, the size of the units, as indicated by number of employees, continued to grow. This growth in size, especially for 1972, indicates a larger more concentrated industry structure.

While retail units increased by only one in 1969, they

TABLE 3-1

## INDUSTRY CONCENTRATION

## WHOLESALE

Year	Total Reporting Units	Number of Reporting Units by Employment-Size						
		1-3	4-7	8-19	20-49	50-99	100-249	250-499
1964	22	8	6	7	1	-	-	-
1967	17	5	6	4	2	-	-	-
1969	22	8	5	5	3	1	-	-
1971	21	6	5	7	3	-	-	-
1972	17	4	4	6	1	1	1	-

## RETAIL

1964	46	29	6	6	2	1	2	-
1967	42	24	7	6	2	2	-	1
1969	43	18	12	7	3	2	1	-
1971	42	14	14	9	2	2	1	-
1972	36	10	11	10	2	1	2	-

SOURCE: U.S. Department of Commerce, Social And Economic Statistics Administration, County Business Patterns 1972-Montana, comp. Bureau of the Census, CBP-72-28, (Washington D.C.: Government Printing Office, June 1973), p. 23.

dropped substantially by 1972. They also showed a continued growth pattern when looking at the increasing numbers of employees.

Retail grocery sales have grown steadily over the years. Total 1973 sales for Great Falls were estimated to be in excess of \$41 million.<sup>1</sup> This represents almost \$15 million dollars of growth in a ten year period (Table 3-2). One obvious reason for this increase is the growing population. Another is the higher standard of living which people enjoy today.

In measuring growth characteristics for Great Falls and Cascade County, the population figures are correlated with weekly sales volume (Table 3-2 and 3-3). Dividing sales volume by population yields food sales per person per week. These figures will be used in chapter five in evaluating sales potential for a new supermarket.

In addition, current sales are evaluated on the basis of store square footage (Table 3-4). Both sales area and total store area are used as criteria. Dividing annual sales volume by the square footage reveals the revenue per square foot of each store on an annual basis.

Great Falls grocery sales are distributed through a fairly diversified network of stores. These stores can be categorized under four headings (Appendix 6). The first and largest group includes five different chain stores which account for 66%

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<sup>1</sup>Bill Communications Inc., Sales Management--1974 Survey of Buying Power, Monday, July 8, 1974, (New York, Bill Publishing Agency, 1974), p. D-66.

TABLE 3-2

GREAT FALLS POPULATION & RETAIL FOOD SALES  
CHARACTERISTICS

Year End	Sales Total (000)	Sales Weekly	Population <sup>c</sup>	Weekly Sales/Person
1975	46,886	901,650	63,185	14.27 <sup>e</sup>
1973	41,205 <sup>b</sup>	792,404	62,254	12.73
1972	33,811 <sup>a</sup>	650,212	61,173	10.54
1970	31,242 <sup>b1</sup>	600,807	60,091	10.00
1967	25,776 <sup>a1</sup>	495,622	58,670 <sup>d</sup>	8.45
1963	26,310 <sup>a2</sup>	505,962	56,777 <sup>d</sup>	8.91

<sup>a</sup>U.S. Department of Commerce, 1972 Census of Business, Retail Trade-Montana, comp. Bureau of the Census, Vol. 2, Trade Area Statistics, (Washington D.C.: Government Printing Office, 1973), p. 27-8.

<sup>a1</sup>1967 Census of Business, Retail Trade-Montana, p. 28-16.

<sup>a2</sup>1963 Census of Business, Retail Trade-Montana, p. 28-18.

<sup>b</sup>Bill Communications Inc., Sales Management-1974 Survey of Buying Power, (New York: Bill Publishing Agency, 1974), p. D-84.

<sup>b1</sup>Bill Communications, Inc., Sales Management-1971 Survey of Buying Power, p. D-66.

<sup>c</sup>See Table 2-1.

<sup>d</sup>Assuming a straight line trend 1960 - 1970, 1960 = 55,357, 473.4 per year.

<sup>e</sup>1973 figure of \$12.73 adjusted for 12.1% growth in consumer price index--food component, 1973 - 1975.



TABLE 3-3

CASCADE COUNTY POPULATION & RETAIL  
FOOD SALES CHARACTERISTICS

Year End	Sales Total (000)	Sales Weekly	Population <sup>c</sup>	Weekly Sales/Person
1975	51,494	990,263	87,171	11.36 <sup>e</sup>
1973	44,100 <sup>b</sup>	848,076	83,700	10.13
1972	37,278 <sup>a</sup>	716,884	84,200	8.51
1970	33,708 <sup>b1</sup>	648,230	81,804	7.92
1967	28,131 <sup>a1</sup>	540,980	79,286 <sup>d</sup>	6.82
1963	27,625 <sup>a2</sup>	531,250	75,934 <sup>d</sup>	7.00

<sup>a</sup>U.S. Department of Commerce, 1972 Census of Business, Retail Trade-Montana, comp. Bureau of the Census, Vol. 2, Trade Area Statistics, (Washington D.C.: Government Printing Office, 1973), p. 27-8.

<sup>a1</sup>1967 Census of Business, Retail Trade-Montana, p. 28-13.

<sup>a2</sup>1963 Census of Business, Retail Trade-Montana, p. 28-14.

<sup>b</sup>Bill Communications, Inc., Sales Management-1974 Survey of Buying Power, (New York: Bill Publishing Agency, 1974), p. D-84.

<sup>b1</sup>Bill Communications, Inc., Sales Management-1971 Survey of Buying Power, p. D-66.

<sup>c</sup>See Table 2-2.

<sup>d</sup>Assuming a straight line trend 1960 - 1970, 1960 = 73,418, 836.6 per year.

<sup>e</sup>1973 figure of \$10.13 adjusted for 12.1% growth in consumer price index--food component, 1973 - 1975.

### GREAT FALLS RETAIL GROCERY SALES

Store Name	Approximate Square Footage		Estimated Sales		Annual Sales/Square Foot	
	Sales Area	Total Area	Weekly (1,000)	Annual (1,000)	Sales Area	Total Area
Albertson's	23,000	37,500	\$103	\$5,356	\$233.	\$143.
Buttrey's #1	17,100	27,000	65	3,380	147.	125.
Buttrey's #2	25,000	36,000	82	4,264	170.	118.
Buttrey's #3	6,500	9,750	19	988	152.	101.
Buttrey's #4	20,000	33,000	64	3,328	166.	101.
*Rosauer's	15,400	20,700	39	2,059	134.	100.
Safeway #1	12,500	15,500	56	2,943	235.	190.
Safeway #2	12,750	15,600	78	4,056	318.	260.
Super Save #1	10,000	16,650	45	2,382	238.	143.
Super Save #2	9,600	15,000	41	2,174	226.	145.
Super Save #3	16,000	22,600	47	2,444	153.	108.
Western Whsle	18,600	20,000	29	1,508	81.	75.
Noble's	8,000	10,200	28	1,456	182.	143.
Thriftway	5,800	7,100	12	624	108.	88.

27

NOTE: Square footage figures are approximations which were obtained while talking with store managers and by measuring the individual store areas.

Sales estimates were made from 1973 Sales Management figures (Table 3-2) and the figures shown in Appendix 6.

Individual store addresses are given in Table 3-5.

\*During the assemblance of this paper, Rosauer's sold out and store became Shop n' Jot. All figures are assumed the same.

of the city's grocery sales. Individual stores range in size from small convenience types to large diversified complexes.

Being headquartered in Great Falls, Buttrey's Incorporated is the leading competitor. Buttrey's operates four stores which have a combined annual sales in excess of \$11 million (Table 3-4).

The next largest category includes voluntary and cooperative groups. This group of stores does 20% of the city's sales. Super Save IGA Stores are the main component of this category. They own and operate three stores which do \$7 million in sales annually. These stores would be classified as medium-sized supermarkets.

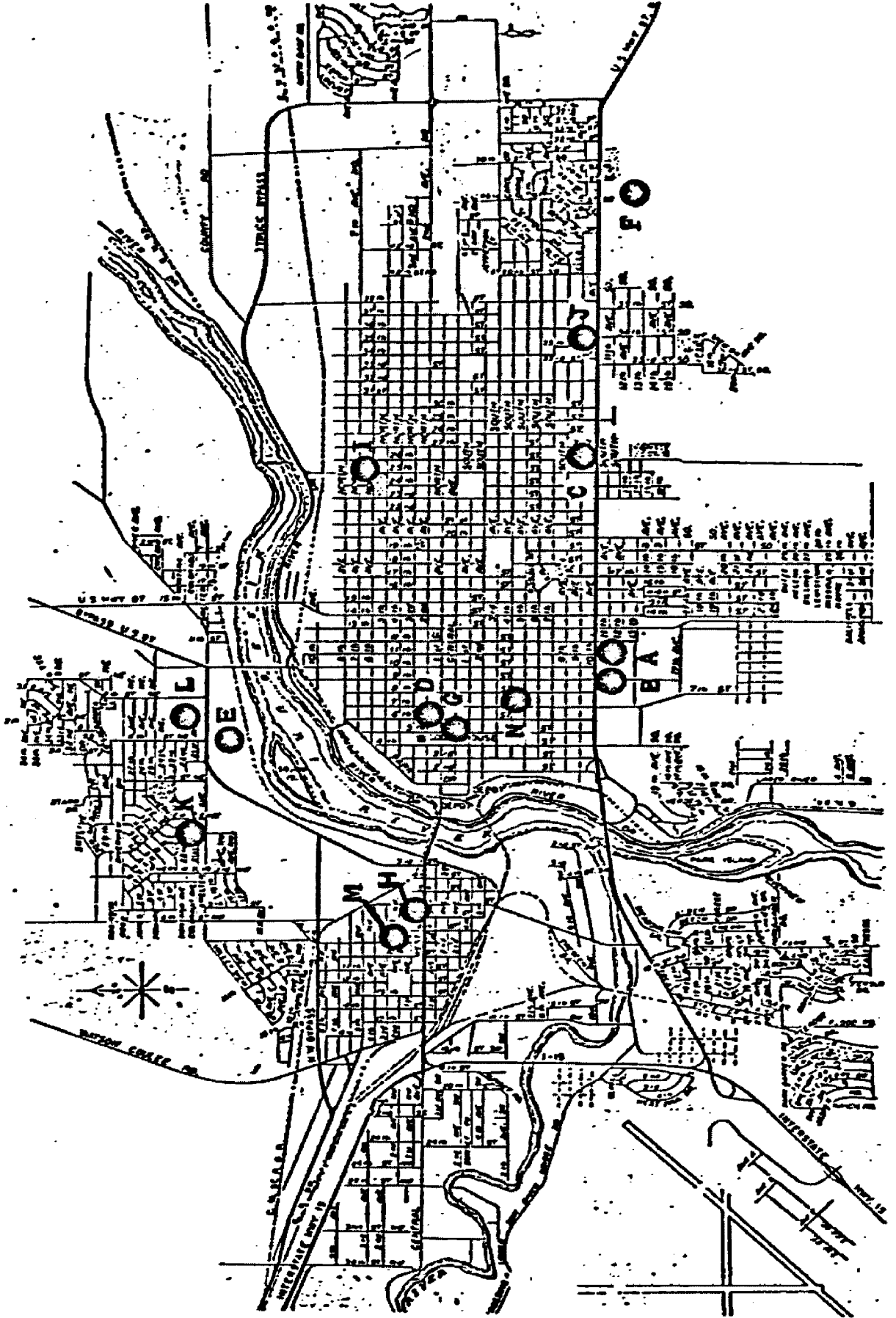
The remaining two categories include independents and all others. These groups do the remainder of the Great Falls sales volume.

All of these grocery stores are located inside the city limits. The largest concentration is along 10th Avenue South where there are two Buttrey's, one Albertson's, one Rosauer's, and one Super Save IGA (Map 1). Also, there are numerous independents and convenience stores along this road. Other fairly concentrated areas would include the downtown area with one Safeway and one Buttrey's store. The west side of town has one Safeway, one Buttrey's, one Super Save IGA and Noble's Foodland.

Many other factors which are generally considered when looking at existing competition include the number of check stands, parking spaces, and the number of employees (Table 3-5).

MAP 1

GREAT FALLS MEDIUM-TO-LARGE SIZED SUPERMARKETS



NOTE: See Table 3-5 for Map Coordinates

TABLE 3-5

## GREAT FALLS GROCERY STORES

Map Index	Store Name Address	Check Stands	Parking Spaces	Number of Employees
A	Albertson's Holiday Vllg	9	286*	60
B	Buttrey's #1 Holiday Vllg	7	150*	63
C	Buttrey's #2 2615 10 Av S.	9	165	82
D	Buttrey's #3 1st Av N.	4	30	18
E	Buttrey's #4 Westgate Ctr	8	400*	63
F	**Rosauer's 4800 10 Av S.	5	75*	11
G	Safeway #1 1st Av N.	5	68	19
H	Safeway #2 6th St. NW	6	40	26
I	Super Save #1 25th St. N.	6	35*	28
J	Super Save #2 10th Av S.	4	130	25
K	Super Save #3 Smelter & Div.	6	120	29
L	Western Whsle 833 Smelter	4	60	5
M	Noble's 617 1st Av NW	3	35	25
N	Thriftway 825 5th Av S.	2	10	8

NOTE: This table's figures were obtained by talking with each store manager and by counting personally.

\*Denotes current parking directly adjacent to other shopping area parking.

\*\*See Table 3-4.

## CHAPTER IV

### POSSIBLE LOCATIONS FOR A NEW SITE

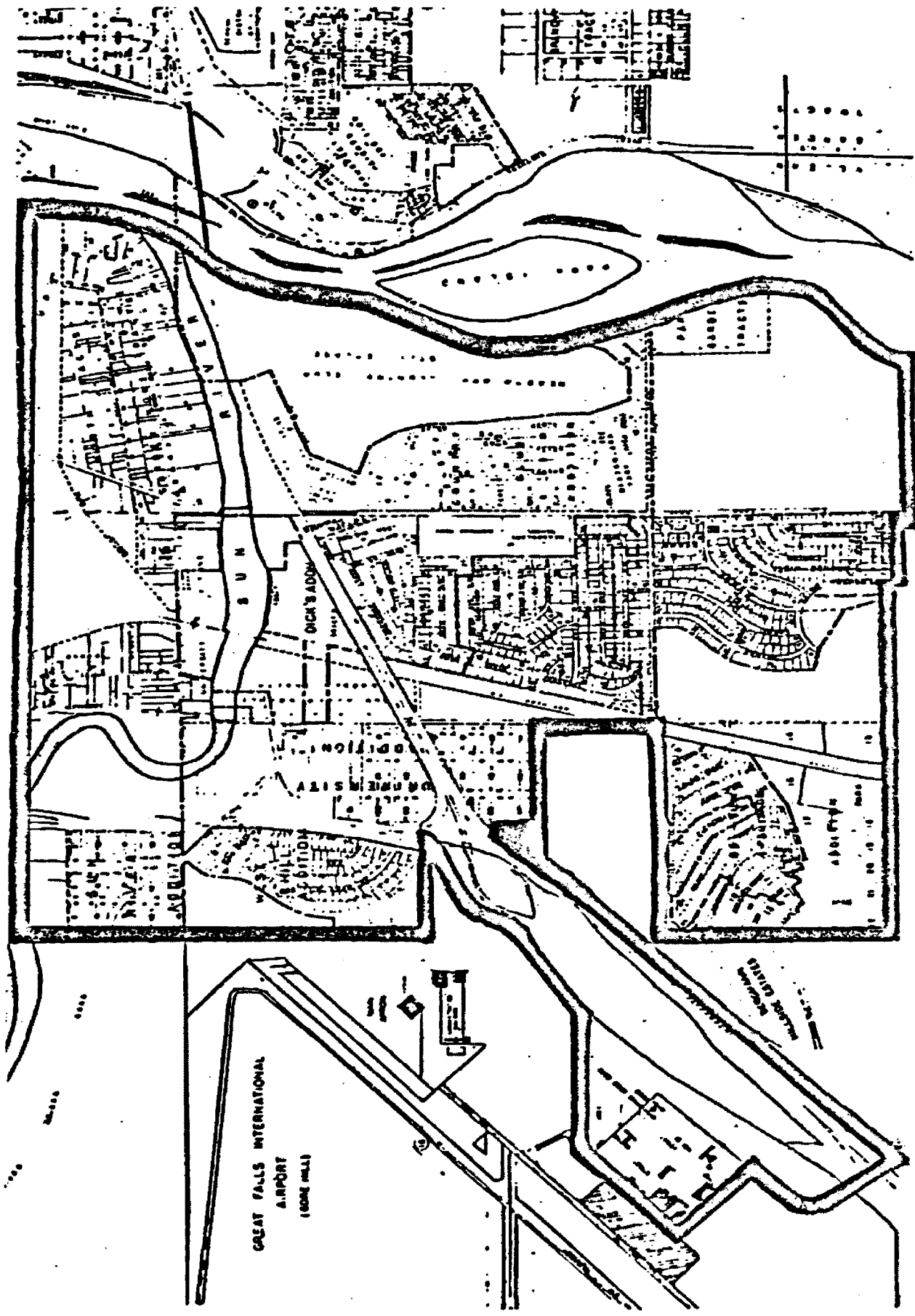
At the onset, three different locations were chosen as possible sites (Map 2). All of these areas were looked at on a general basis. Among the considered criteria were existing competition, traffic volume, number of households, existing schools, personal incomes and housing valuations surrounding the site areas. Other items considered were the recent trends of building permits, zoning restrictions, existing rental properties and the potential for new private and rental properties.

After generally considering all three locations, site number 3 was eliminated. The primary reason for this was existing competition. Five medium-to-large sized supermarkets serve this area. They offer a complete assortment of grocery coverage. Buttrey's Westgate and Safeway are the main components with Super Save IGA, Noble's Foodland, and Western Wholesale being the remainder. Numerous Circle K and other convenience stores fill any open gaps to provide a most comprehensive service to the area.

In evaluating site number 1, several interesting characteristics are worth considering (Map 3). First, the average number of persons per household is slightly higher than the overall mean for Great Falls (Table 4-1). This most likely results from a multitude of factors. Even though no study of ages was made, the presence of more children probably makes the difference.



MAP 3  
AREA SURROUNDING SITE NUMBER 1



NOTE: Site number 1's enumeration districts include: 67, 68, 70, 71, 72, 73, 74, 115, 116, 117, 120, 121, 122, 123, 124, 125, 4B.



TABLE 4-1

STATISTICS FOR IMMEDIATE TRADE AREA OF SITE NUMBER 1  
AND GREAT FALLS METROPOLITAN AREA

	Population	Family Characteristics		Household Characteristics		Housing Units (Total)
		Number	Persons Per Family	Number	Persons Per Household	
Site #1	4,979	1,313	3.79	1,472	3.38	1,573
City	72,916	17,859	4.08	22,589	3.23	23,885

SOURCE: 1970 Census, Research & Information Systems Division, Montana Department of Intergovernmental Relations, State of Montana, Helena, Montana.

NOTE: See Map 3 for approximate size of area around Site Number 1.

This type of data is useful when budgeting for a new store.

Second, the value of owner-occupied housing units around site number 1 is high compared to city-wide statistics (Table 4-2). Although this site has less housing than site number 2, it definitely has more houses valued over \$25,000 (Table 4-6 for comparison). In addition, the annual incomes of home owners around site number 1 is concentrated in the \$15,000 plus category (Table 4-3).

Site number 1 also has shown significant growth over the past four years. By comparing the number of residential building permits issued during these years, growth was noted for both sites 1 and 2 (Table 4-4). This recent growth coupled with current building indicates a majority of Great Falls housing growth is taking place around site number 1. Much of the land is still undeveloped and could easily provide growth through 1980.

The City of Great Falls has no zoning restrictions for unplatted area. This leaves much of the land near site number 1 open for almost anything. Both the Montana and Country Club Additions have provisions for one block of multi-unit rental zoning.<sup>1</sup> Grand Vista and Bel-View Palisades have no provisions for these but Bel-View has a one block provision for commercial use (ie. a small shopping center).

There is one elementary school (Meadow Lark) located within the area of site number 1. This school has an enrollment of 535

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<sup>1</sup>Office of the Building Inspector, Record of Building Permits, City of Great Falls, Montana.

TABLE 4-2

COUNT & PERCENT OF SELECTED OWNER-OCCUPIED UNITS BY \$ VALUE FOR SITE NO. 1  
AND CITY OF GREAT FALLS

Site No. 1

Under \$5,000	\$5,000- \$9,999	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000 +
37	138	175	126	92	214	156	52
4%	14%	18%	13%	9%	22%	16%	5%

Great Falls

281	1452	2429	3445	1485	1027	398	109
2.6%	13.6%	23%	32.4%	14%	9.7%	3.7%	1.0%

SOURCE: 1970 Census, Research & Information Systems Division, Montana Department of Intergovernmental Relations, State of Montana, Helena, Montana.

NOTE: See Map 3 for approximate size of area around site number 1.

TABLE 4-3

COUNT & PERCENT OF SELECTED OWNER-OCCUPIED UNITS BY VALUE OF UNIT  
& INCOME OF OWNER FOR SITE NO. 1

Value less than \$9,999				Value \$10,000--\$19,999			
Under \$5,000	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 +	Under \$5,000	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 +
56.5	61	27	1	43	87	60	26
39%	42%	18%	1%	20%	40%	28%	12%

Value \$20,000--\$34,999				Value \$35,000 + + +			
Under \$5,000	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 +	Under \$5,000	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 +
27	21	67	180	13	30	26	132
9%	7%	23%	61%	6%	15%	13%	66%

SOURCE: 1970 Census, Research & Information Systems Division, Montana Department of Intergovernmental Relations.

NOTE: See Map 3 for approximate size of area around site number 1.

TABLE 4-4  
RESIDENTIAL BUILDING PERMITS  
January 1971--January 1975

Location	No. of Permits Issued
Site No. 1 .....	255
Site No. 2 .....	45

SOURCE: Office of the Building Inspector, Record of Building Permits, City of Great Falls, Montana.

and ranks fourth out of twenty-one Great Falls elementary schools (Appendix 7). The current capacity of the school is 600.<sup>1</sup> Great Falls overall school enrollments are down and school officials do not anticipate any need to enlarge Meadow Lark in the short run. If this need arises, they will bus excess children to the nearest under-capacity school. For the long-run, building another school is entirely possible.

Existing competition around site number 1 consists of one small convenience store. The majority of persons from this area must travel across the Missouri River to Holiday Village or across the Sun River to Central Avenue West when doing their weekly grocery shopping. This reason helps to make site number 1 a very good possible location either now or in the future.

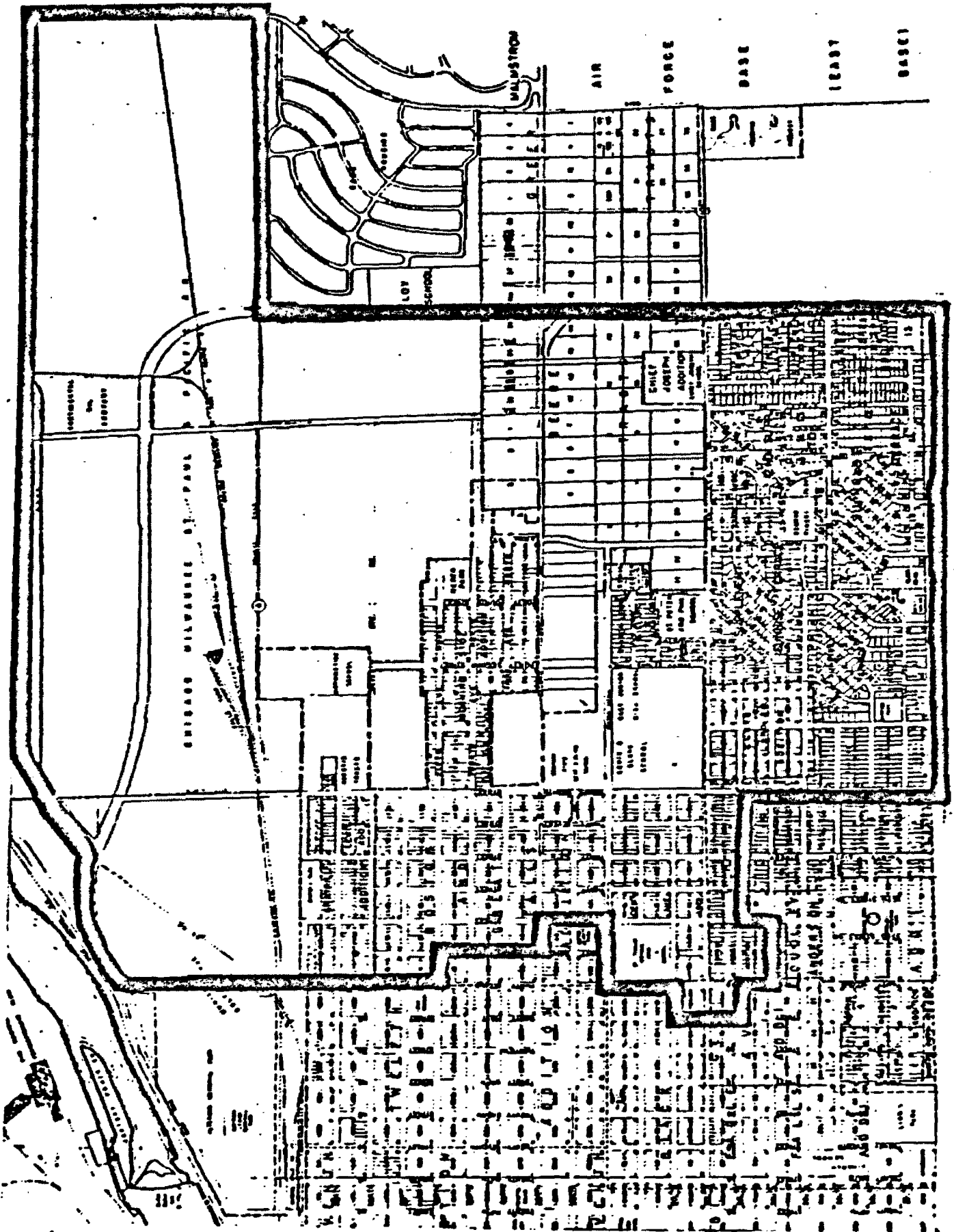
Site number 2 differs in many ways from site number 1 (Map 4). The population is much larger than site number 1 and likewise there is much more existing housing. The average number of persons per household is also larger (Table 4-5).

However, housing values are not as high and the incomes of these people are more heavily skewed towards the middle-class ranges (Tables 4-6, 7). Due to Malmstrom AFB being directly adjacent to this area, many of these people could be military and consequently do their grocery shopping at the commissary. This could either help or hinder this area in the near future. The President has legislation before Congress

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<sup>1</sup>Interview with Dr. H. Wenaas, Superintendent of Public Schools, Great Falls, Montana, November 6, 1974.

AREA SURROUNDING SITE NUMBER 2



NOTE: Site number 2's enumeration districts include 27, 31, 32 33, 34, 35, 36, 37, 84, 85, 86, 87, 88, 104.

TABLE 4-5

STATISTICS FOR IMMEDIATE TRADE AREA OF SITE NUMBER 2  
AND GREAT FALLS METROPOLITAN AREA

	Population	Family Characteristics		Household Characteristics		Housing Units (Total)
		Number	Persons Per Family	Number	Persons Per Household	
Site #2	10,414	2,563	4.06	2,796	3.72	2,879
City	72,916	17,859	4.08	22,589	3.23	23,885

41

SOURCE: 1970 Census, Research & Information Systems Division, Montana Department of Intergovernmental Relations, State of Montana, Helena, Montana.

NOTE: See Map 4 for approximate size of area around Site Number 2.



TABLE 4-6

COUNT & PERCENT OF SELECTED OWNER-OCCUPIED UNITS BY \$ VALUE FOR SITE NO. 2  
AND CITY OF GREAT FALLS

Site No. 2

Under \$5,000	\$5,000- \$9,999	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000 +
7	107	252	826	391	192	41	4
.4%	6%	14%	45%	21%	11%	2%	.2%

Great Falls

281	1452	2429	3445	1485	1027	398	109
2.6%	13.6%	23%	32.4%	14%	9.7%	3.7%	1.0%

SOURCE: 1970 Census, Research & Information Systems Division, Montana Department of Intergovernmental Relations, State of Montana, Helena, Montana.

NOTE: See Map 4 for approximate size of area around site number 2.

TABLE 4-7

COUNT & PERCENT OF SELECTED OWNER-OCCUPIED UNITS BY VALUE OF UNIT  
& INCOME OF OWNER FOR SITE NO. 2

Value less than \$9,999				Value \$10,000--\$19,999			
Under \$5,000	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 +	Under \$5,000	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 +
79	60	24	4	195	573	614	303
47%	36%	14%	2%	12%	34%	36%	18%

Value \$20,000--\$34,999				Value \$35,000 + + +			
Under \$5,000	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 +	Under \$5,000	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 +
59	128	284	288	3	14	9	89
8%	17%	37%	38%	3%	12%	8%	77%

43

SOURCE: 1970 Census, Research & Information Systems Division, Montana Department of Intergovernmental Relations.

NOTE: See Map 4 for approximate size of area around site number 2.

which will force the closure of most U.S. commissaries.<sup>1</sup>

The results of this act will greatly enhance the food market in this area and in Great Falls.

Building trends in this area have been very slow (Table 4-4). Practically all platted tracts have been developed. Unplatted areas to the northeast side of site number 2 could be developed in the future but are not too feasible for the next few years. There are many multi-unit dwellings in this area and a good potential for many more. As mentioned earlier, unplatted land in Great Falls has no zoning restrictions concerning type of dwellings. The blocks are arranged so that site number 2 could be patroned more easily by walkers.

The area surrounding site number 2 contains three elementary schools, one junior high, and a deaf-blind school. All three elementary schools are quite large with Lewis and Clark being second largest in the city (Appendix 7). Projections do not include any new schools needed in this area in the near future.<sup>2</sup>

Existing competition is non-existent right at the site area, but two convenience stores are located within the site's outlined territory. Other competition would come from a Super Save IGA on 25th Street North and both a Super Save IGA

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<sup>1</sup>Stores: Go It Alone; Ford Orders Operations Be Self-Supporting. Air Force Times, Vol. 35, No. 22, January 1, 1975. Front Page.

<sup>2</sup>Interview with Dr. H. Wenaas, Superintendent of Public Schools, Great Falls, Montana, November 6, 1974

and Shop n' Jot on 10th Avenue South. Some people may even venture down as far as Buttrey's Super-Store or Holiday Village or downtown to shop at Safeway.

## CHAPTER V

### FINANCIAL ANALYSES AND CONCLUSIONS

The feasibility of a new business rests on an analysis of sales, operating costs, investment requirements, financing arrangements, and finally, profitability. When considering a new medium-to-large sized supermarket, sales potential is very likely the most important determinant of economic feasibility. Economies of size are well recognized in the full service retail food business. The food potential and size of store must closely correlate or else the low profit margins will be erased by expenses.

The data in previous chapters points to a medium-to-large sized supermarket as one with approximately 20,000 square feet of space generating approximately \$50,000 in sales weekly. These parameters have been selected for use in developing a pro-forma income statement and in determining investment and financing requirements for a new store. A conservative approach has been taken with respect to initial investment, limiting it primarily to fixtures and inventory. Land and building are assumed leased.

The pro-forma income statement on the following page indicates a gross profit margin of 19.42 percent. This figure was obtained in an interview with Mr. Chuck Mereness, a Super Save IGA store manager. This is the current figure

NEW MEDIUM TO LARGE SIZED SUPERMARKET  
PROJECTED INCOME STATEMENT  
FIRST 12 MONTHS

	<u>WEEKLY AMOUNT</u>	<u>PER CENT</u>	<u>YEARLY AMOUNT</u>
<b><u>INCOME</u></b>			
Sales (all departments)	\$50,000	100.00	\$2,600,000
Cost of Sales	40,290	80.58	2,095,080
Gross Margin	<u>\$ 9,710</u>	<u>19.42</u>	<u>\$ 504,920</u>
<b><u>CONTROLLABLE EXPENSES:</u></b>			
Wages & Fringes	\$ 4,080	8.16*	\$ 212,160
- Operating Supplies	345	.69	17,940
Outside Labor & Repairs	150	.30	7,800
- Advertising	435	.87	22,620
- Wholesale Buying Service	750	1.50	39,000
Administrative & Legal	250	.50	13,000
- Bad Debts	50	.10	3,600
Total Controllable Expenses	<u>\$ 6,060</u>	<u>12.12</u>	<u>\$ 315,120</u>
<b><u>FIXED EXPENSES:</u></b>			
Rent	\$ 1,000	2.00*	\$ 52,000
Utilities	400	.80	20,800
Insurance	175	.35	9,100
Taxes & Licenses	380	.76	19,760
Interest	516	1.03*	26,822
Depreciation	550	1.10*	28,600
Total Fixed Expenses	<u>\$ 3,021</u>	<u>6.04</u>	<u>\$ 157,082</u>
Total F & C Expenses	<u>\$ 9,081</u>	<u>18.16</u>	<u>\$ 472,202</u>
Income Before Taxes	\$ 629	1.26	\$ 32,718
Federal Tax	\$ 154	.31*	8,035
State Tax	\$ 475	.95	\$ 24,683
	<u>10</u>	<u>.02*</u>	<u>539</u>
NET PROFITS	\$ 465	.93	\$ 24,144

SOURCES: Interview with Mr. F. J. Raucci, Buttrey Foods Inc., Great Falls, Montana, January 22, 1975.

Interview with Mr. C. Mereness, Super Save IGA Store Manager, 10th Avenue South, Great Falls, Montana, March 5, 1975.

National Association of Retail Grocers of the United States, Inc., Financial Planning Report--Issue #12, February 1975.

Small Business Administration, 1973 Food Yearbook.

NOTE: \*Asterisk figures are calculated individually in Appendix 8 or later in this chapter. All wage and fringe figures are current rates obtained in an interview with Mr. F. J. Raucci of Buttrey Foods Inc., Great Falls, Montana.

his company would use for a store of this size and sales in Great Falls. After all operating expenses, profit before tax equals 1.26 percent of sales or \$630 weekly on \$50,000. Federal and state corporate income taxes are calculated in Appendix 8 and are approximately equal to .33 percent of sales. This leaves an after-tax net profit margin of .93 percent or approximately \$465 per week.

Most of the expense percentages were obtained in a similar manner to the profit margins. Interviews with representatives of both Buttrey's and Super Save IGA stores revealed the actual figures used in Great Falls. National and regional statistics were obtained from the National Association of Retail Grocers and the local Small Business Administration. Taken collectively, final expense percentages were arrived at with the exception of the asterisk items on the pro-forma income statement. These figures are derived individually in Appendix 8.

The sales forecast for each department was arrived at in a similar manner. Firms in Great Falls use the same department percentages as indicated by national statistics. The following calculations show the projected amount of sales for each department.

<u>Department</u>	<u>Amount.</u>	<u>% of Total</u>
Grocery	\$36,500	73%
Meat	10,000	20
Produce	<u>3,500</u>	<u>7</u>
Projected Weekly Sales	\$50,000	100%

SOURCE: Interview with Mr. C. Mereness, Manager, Super Save IGA, 10th Avenue South, Great Falls, Montana, March 1975.

Wage and fringe pay scales used represent exact amounts for the Great Falls area as outlined in Appendix 8. These items are regulated through unions for each position in the store. Although different pay grades exist for each position, the most likely combinations for a new store were used. Payroll and Social Security taxes were calculated for each individual department. Sales per man hour figures were used in the calculation of the new store's employment needs (Appendix 8). Total wages and fringes as a percent of department sales are summarized below:

<u>Total Wages &amp; Fringes as a Percent of Sales</u>			
<u>Department</u>	<u>Wage &amp; Fringe</u>	<u>Ratios</u>	<u>Yield</u>
Grocery	7.86%	73	5.7378%
Meat	8.02%	20	1.6040%
Produce	11.72%	7	.8204%
		TOTAL:	8.1622%

Since leasing of the store is an assumption, rent was obtained from a standard industry formula (the greater of \$2.00 per square feet or 2 percent of sales).<sup>1</sup> With a 20,000 square foot store and \$50,000 weekly sales, rent was determined to be \$1,000 per week.

Depreciation of fixtures was figured using the straight line method. Chosen for simplicity, this method assumes a fixture life of ten years. Fixture costs were figured on a square footage basis using \$14.30 per square foot. This figure is also based on the opinions of local retailers and national statistics.

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<sup>1</sup>National Association of Retail Grocers of the U.S. Inc., Financial Planning Report--Projection for a New Supermarket, Issue #12, (February 1974), p. 7.



Investment Requirements

Investment requirements include inventory projected at \$5.60 per square foot plus cost of fixtures and working capital requirements. These amount to \$420,400 as indicated below.

Fixture Cost	\$286,000
Inventory (20,000 x \$5.60)	112,000
Working Capital (20% of Inventory)	22,400
TOTAL INVESTMENT	<u>\$420,400</u>
Less: Investment by Retailer	\$(100,000)
TOTAL LOAN	<u>\$ 320,400</u>

Working capital needs and debt financing assumptions were obtained in a telephone interview with a commercial loan officer in the Great Falls First National Bank. The balance sheet on the following page shows a beginning assets, liabilities, and owner's equity projection for the new store. This statement assumes that inventories are purchased without the use of trade credit. Any purchase so arranged can be reflected in an adjustment to "Accounts Payable" (increase) and to "Contracts Payable" (reduction of long term financing requirements).

Debt Service Capability and Return on Investment

If approximately \$2,600,000 of sales are achieved in the first year, expected after-tax profits should equal \$24,144. Total funds available for debt service are found by adding first year depreciation to net profit. The loan principal payments are listed in the following first year loan amortization schedule. When subtracting principal payments from available funds, net funds generated for the first twelve months of business equal \$30,900.

**NEW MEDIUM-TO-LARGE SIZED SUPERMARKET  
BEGINNING BALANCE SHEET**

**ASSETS**

**Current Assets:**

Cash on Hand & In Bank	\$ 22,400
Notes & Accounts Receivable	0

**Inventories:**

Grocery Department	\$ 81,760
Meat Department	22,400
Produce Department	7,840
<b>Total Merchandise Inventories</b>	<b><u>\$112,000</u></b>

<b>Total Current Assets</b>	<b>\$212,000</b>
-----------------------------	------------------

**Fixed Assets:**

Fixtures & Equipment	\$286,000
Reserve for Depreciation	0
<b>Total Fixed Assets</b>	<b><u>\$286,000</u></b>

<b>Total Assets</b>	<b><u><u>\$420,400</u></u></b>
---------------------	--------------------------------

**LIABILITIES**

**Current & Accrued Liabilities:**

Accounts Payable	0
Notes Payable	0
Accrued Taxes	0
<b>Total Current &amp; Accrued Liabilities</b>	<b>0</b>

**Fixed Liabilities:**

Contracts Payable	<u>\$320,400</u>
-------------------	------------------

<b>Total Liabilities</b>	<b>\$320,400</b>
--------------------------	------------------

Capital	\$100,000
---------	-----------

<b>Total Capital</b>	<b><u>\$100,000</u></b>
----------------------	-------------------------

<b>Total Capital &amp; Liabilities</b>	<b><u><u>\$420,400</u></u></b>
--	--------------------------------

LOAN AMORTIZATION SCHEDULE

Loan of \$320,400--10 Year Payoff--9% Simple Interest

<u>PAYMENT</u>	<u>INTEREST</u>	<u>PRINCIPAL</u>	<u>LOAN BALANCE</u>
			\$320,400
1	\$ 2,403	\$ 1,656	318,744
2	2,372	1,687	317,057
3	2,342	1,717	315,340
4	2,311	1,748	313,592
5	2,281	1,778	311,814
6	2,250	1,809	310,005
7	2,220	1,839	308,166
8	2,189	1,870	306,296
9	2,159	1,900	304,396
10	2,129	1,930	302,466
11	2,098	1,961	300,505
12	2,068	1,991	298,514
	<u>\$26,822</u>	<u>\$21,886</u>	

Interest of \$26,822 divided by 52 weeks = \$516/wk.  
 Principal of \$21,886 divided by 52 weeks = \$421/wk.

PROJECTED CASH FLOW

New Income Projection	\$24,144
Add Back: Depreciation	<u>28,600</u>
Total Funds Available	<u>\$52,744</u>
Less: Principal Payments	<u>\$21,886</u>
NET FUNDS GENERATED	\$30,858

The profitability of the new store must be analyzed partially in relation to the level of investment. Two common profitability ratios are Return on Total Assets and the Return on Capital. The first ratio gives a yearly return on the total investment while the second yields a return on the retailer's investment.

$$\text{Return on Assets} = \frac{\text{Net Profit after Taxes plus Interest}}{\text{Total Assets}} = \frac{\$50,966}{\$420,400} = 12.12\%$$

$$\text{Return on Capital} = \frac{\text{Net Profit after Tax}}{\text{Capital}} = \frac{\$24,144}{\$100,000} = 24.14\%$$

Since first year financing charges are significant, a Net Operating Profit Rate of Return is also calculated.

Net Operating Profit =  $\frac{\text{Profits before Interest \& Taxes}}{\text{Total Investment}}$  =  
Rate of Return

$$\frac{\$ 59,540}{\$420,400} = 14.16\%$$

It should be noted that total investment requirements of \$420,400 assumed inventories purchased without the use of trade credit. To the extent that some trade credit can be arranged, less initial investment and long term financing will be required. This will result in a higher return on investment than that calculated above.

#### Break-Even Analysis

A beginning break-even point can be found in relation to the income statement. If business dropped off severely, it is assumed that forced cuts in part time and bag boy help would save approximately \$1,333 in wages and fringes. This amount equals 22 percent of controllable expenses, which can be classified as variable cost. A breakdown of all fixed and variable costs is outlined below:

##### Fixed Costs:

Fixed Expenses (Per Income Statement)	\$ 3,021
Controllable Expenses (78%)	<u>4,727</u>
Total Fixed Costs	<u>\$ 7,748</u>

##### Variable Costs:

Controllable Expenses (22%)	\$ 1,333
Cost of Sales	<u>40,290</u>
	<u>\$41,623</u>

The break-even point is calculated from these figures as \$46,240.

$$\text{Break-Even Point} = \frac{\text{Fixed Costs}}{1 - \frac{\text{Variable Costs}}{\text{Sales}}} = \frac{\$7,748}{1 - \frac{\$41,623}{\$50,000}} = \$46,240.$$

The break-even analysis is not complete, however, without showing the cash flow break-even point. Fixed costs must be adjusted to eliminate depreciation, a non-cash expense.

$$\text{Cash Flow Fixed Costs } \$7,748 - \$550 = \$7,198$$

$$\text{Variable Costs} = \$41,623$$

$$\text{Cash Flow BEP} = \frac{\$7,198}{1 - \frac{\$41,623}{\$50,000}} = \$42,957$$

#### Food Potential - Site Area Number 1

Food potential for site area number 1 is figured using food sales per person in Great Falls times number of households times number of persons per household. Year-end food sales per person equal \$14.27 for 1974 (Table 3-2). Average persons per household in site area number 1 equal 3.38 (Table 4-1). Assuming growth in housing units correlates directly to households, the number of 1975 households can be estimated using building permit data. The 1970 figure of 1,573 housing units grew to 1,828 or 13.9% by the beginning of 1975 (Tables 4-1, 4-4). The 1970 figure of 1,472 households increased by 13.9% equals 1,676 households estimated for 1975 in site area number 1.

$$\begin{array}{l} \text{Food Potential for} \\ \text{Site Area Number 1} \end{array} = \$14.27 \times 3.38 \times 1676 = \$80,837$$

If approximately 72% of all households in site area number 1 spend 80% of their food budgets in the store, the break-even point of \$46,240 will be accomplished. It would take approximately 77% of all households spending 80% of their food budgets to equal \$50,000 weekly sales.

Food Potential - Site Area Number 2

Food potential for site area number 2 is figured the same way as that calculated for site area number 1. Housing units grew only 1.5% (Table 4-4). The number of households beginning the 1975 year is estimated to be 2838 with 3.72 persons per household (Table 4-5); the food potential for site area number 2 is estimated at \$150,653 as indicated below.

$$\begin{array}{l} \text{Food Potential for} \\ \text{Site Area Number 2} \end{array} = \$14.27 \times 3.72 \times 2838 = \$150,653$$

If approximately 61% of all households in site area number 2 spend 50% of their food budgets in the store, the break-even point of \$46,240 will be accomplished. It would take approximately 66% of all households spending 50% of their food budgets to equal \$50,000 weekly in sales.

Final Conclusions

The building of another medium-to-large sized super-market in Great Falls would be feasible if certain conditions can be achieved. First, weekly sales must approximate \$46,240 to break even and \$50,000 to make a reasonable profit. Second, a general industry consensus is that the gross profit margin should equal 18 percent or more. Without this amount, expenses will force the store owner to operate at or near a loss. Expenses must also remain fairly constant. If rent or wages were to suddenly double for some unknown reason, profits would be seriously jeopardized.

In addition to these requirements, certain intangible factors must be mentioned. Things like community feeling, brand loyalty, and convenience are all very important. If the surrounding homeowners were strongly against another business in a site area, housewives wouldn't patronize the store and it could fail as a result. Similarly, if local consumers have a strong loyalty to a certain chain, the independent store may suffer. A door-to-door survey could answer many of these questions.

Although both site locations presently have the food potential to generate needed sales, it is very unlikely site number 1 would do so at this time. The percentage of shoppers needed to consistently generate sales is most likely too high. Military people living in this area who shop at the Base Commissary can't be utilized. Site number 1 is a real prospect for the near future, however, as the rate of housing construction in Great Falls is highest in this area. There is also the possibility of purchasing and expanding the existing convenience store located in this area.

Site area number 2 is also a good prospect for now and in the future. Its location makes it easily accessible and the traffic flow on Second Avenue North is fairly constant. The population in site area number 2 is greater than in site area number 1 and there are more schools (relating to the fact that there are more persons per family than average). Several multiple unit dwellings can also be found in this area.

A large portion of this population, however, is most likely military and therefore competition from the Base Commissary would be stronger. A flexible operating schedule could bring in many of these customers, though. As mentioned in Chapter IV, congressional legislation may close many U. S. commissaries in the near future. This would be a major factor concerning the food potential of site area number 2. Other competition consists mainly of two Circle Ks and Shop n' Jot on 10th Avenue South. If similar hours to Circle K and the reasonable prices of Shop n' Jot were employed, a full service medium-to-large sized supermarket in this site area is very feasible.



APPENDIX 1

CITY POPULATIONS BY AGE AND SEX  
USING MIGRATION-SURVIVAL METHOD  
FOR GREAT FALLS

Sex	Age Years	Census 1960	Census 1970	Net 1970 Migration	Projections	
					1975	1980
Male	0 - 4	3919	2609	-488	2603	3026
	5 - 9	3096	3380	464	3619	3920
	10 - 14	2515	3461	-478	3147	2304
	15 - 19	1546	2543	-570	2756	2776
	20 - 24	1780	2232	-236	2604	3072
	25 - 29	2042	2088	591	2600	3435
	30 - 34	1906	1695	-60	1831	2126
	35 - 39	1892	1677	-321	1665	1715
	40 - 44	1766	1650	-197	1568	1467
	45 - 49	1558	1674	-110	1629	1484
	50 - 54	1254	1556	-83	1556	1454
	55 - 59	1034	1276	-95	1343	1371
	60 - 64	844	1005	-52	1117	1247
	65 - 69	802	759	-17	821	937
	70 - 74	711	558	-12	580	664
75 & Over	754	972	76	1063	1138	
Totals		27419	29135	-1588	30492	32136
Female	0 - 4	3804	2540	-440	2533	2941
	5 - 9	3061	3210	-941	3420	3717
	10 - 14	2398	3355	-450	3057	2240
	15 - 19	1993	2969	-117	3146	3113
	20 - 24	2213	2715	322	3185	3799
	25 - 29	2000	2120	140	2525	3158
	30 - 34	1847	1794	-427	1941	2200
	35 - 39	1794	1694	-297	1722	1796
	40 - 44	1771	1709	-114	1685	1660
	45 - 49	1526	1679	-48	1663	1585
	50 - 54	1181	1627	-73	1662	1570
	55 - 59	1009	1338	-86	1431	1472
	60 - 64	907	1095	-6	1275	1509
	65 - 69	865	892	-8	1006	1183
	70 - 74	742	780	25	846	942
75 & Over	827	1439	195	1596	1650	
Totals		27938	30956	-2325	32693	34535
CITY TOTALS		55357	60091	-3913	63185	66671

SOURCE: Information Systems Bureau, Department of Inter-governmental Relations, State of Montana, Helena, Mont.

NOTE: Assumes continued 1960 - 1970 migration trends. It illustrates what the city population would be in 1975 and 1980 if 1960 - 1970 birth, death and migration rates remain constant through 1980.

APPENDIX 2

COUNTY POPULATIONS BY AGE AND SEX  
USING MIGRATION-SURVIVAL METHOD  
FOR CASCADE COUNTY

Sex	Age Years	Census	Census	Net 1970 Migration	Projections	
		1960	1970		1975	1980
Male	0 - 4	5146	3707	-320	3795	4410
	5 - 9	4199	4719	993	5125	5626
	10 - 14	3422	4788	-384	4457	3449
	15 - 19	2459	3584	-638	3892	4027
	20 - 24	2951	3968	610	4690	5553
	25 - 29	3804	2954	572	3480	4305
	30 - 34	2559	2532	-378	2857	3405
	35 - 39	2531	2520	-224	2571	2655
	40 - 44	2381	2207	-273	2177	2183
	45 - 49	2071	2129	-258	2134	2119
	50 - 54	1697	1996	-214	1983	1850
	55 - 59	1319	1649	-173	1709	1696
	60 - 64	1096	1334	-77	1462	1591
	65 - 69	1007	974	-16	1063	1218
	70 - 74	897	705	-35	740	858
75 - 79	551	577	45	574	558	
80 & Over	377	622	56	708	765	
Totals		37444	40965	-714	43417	46277
Female	0 - 4	5075	3588	-287	3680	4326
	5 - 9	4094	4530	-774	4935	5462
	10 - 14	3323	4689	-387	4346	3315
	15 - 19	2521	3725	-402	4026	4122
	20 - 24	2722	3470	154	4100	4897
	25 - 29	2592	2968	464	3548	4386
	30 - 34	2391	2570	-161	2859	3277
	35 - 39	2372	2344	-237	2469	2684
	40 - 44	2246	2216	-144	2275	2382
	45 - 49	1969	2104	-180	2113	2079
	50 - 54	1468	2010	-145	2069	1983
	55 - 59	1264	1696	-142	1795	1812
	60 - 64	1089	1334	-35	1551	1827
	65 - 69	1044	1071	-57	1212	1437
	70 - 74	868	916	9	1000	1122
75 - 79	562	759	52	792	778	
80 & Over	374	849	101	984	1047	
Totals		35974	40839	-2171	43754	46936
CITY TOTALS		73418	81804	-2885	87171	93213

SOURCE: Information Systems Bureau, Department of Inter-governmental Relations, State of Montana, Helena, Mont.

NOTE: Assumes continued 1960 - 1970 migration trends. It illustrates what the county population would be in 1975 and 1980 if 1960 - 1970 birth, death and migration rates remain constant through 1980.

APPENDIX 3

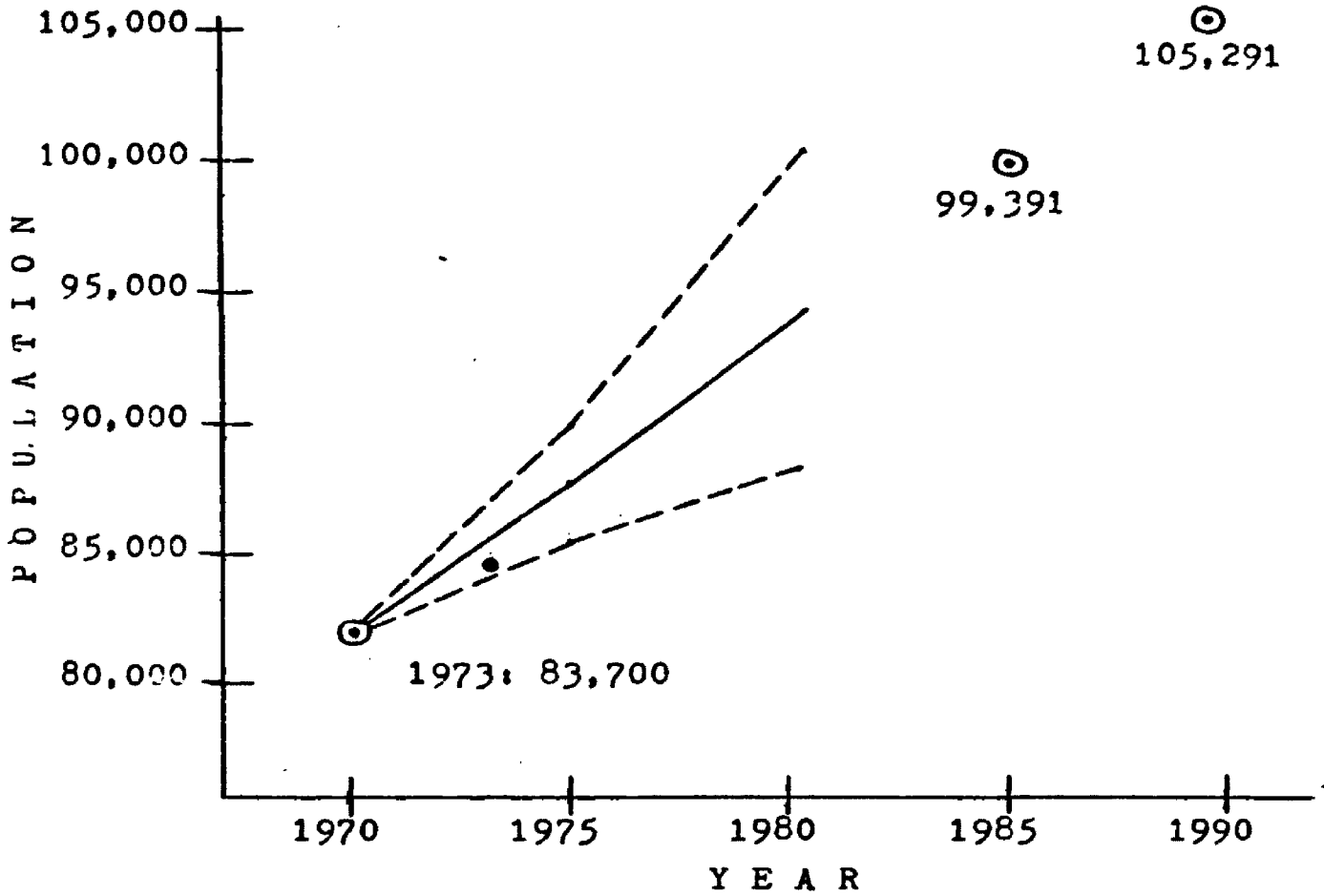
POPULATION PROJECTIONS

Year	CASCADE COUNTY			GREAT FALLS		
	Most Likely Projection	High Projection	Low Projection	Most Likely Projection	High Projection	Low Projection
1970	82,100			60,351		
1972	84,200			61,900		
1977	96,100	97,500	90,500	75,000	76,000	72,000
1980	99,000	103,000	85,500	78,700	82,000	70,500
1985	102,000	109,000	81,200	81,600	87,700	70,000
1990	106,000	116,400	81,700	87,000	96,000	70,000
2000	116,000	126,900	81,750	96,000	104,000	70,000

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economics Information System and THK Associates, Inc., Economic Base Study, 1974, City of Great Falls and County of Cascade Montana, October 1974, Figure 14.

APPENDIX 4

SUMMARY OF CASCADE COUNTY POPULATION PROJECTIONS, 1975 - 1990



SOURCE: Research and Information Systems Division, Department of Intergovernmental Relations, State of Montana, Helena, Montana.

## APPENDIX 5

CASCADE COUNTY POPULATIONS BY AGE CATEGORY AND SEX  
1970 PROJECTED TO 1980

Sex	Age Years	Census		Projections			
		1970	%	1975	%	1980	%
Male	0 - 19	16,798	40.0	17,269	39.8	17,521	37.9
	20 - 44	14,181	34.7	15,775	36.3	18,101	39.0
	45 - 64	7,108	17.4	7,288	16.8	7,256	15.7
	65 and over	<u>2,878</u>	<u>7.0</u>	<u>3,085</u>	<u>7.0</u>	<u>3,399</u>	<u>7.3</u>
	Totals	40,965	100.0	43,417	100.0	46,277	100.0
Female	0 - 19	16,532	40.5	16,987	28.8	17,225	36.7
	20 - 44	13,568	33.2	15,251	34.9	17,626	37.5
	45 - 64	7,144	17.6	7,528	17.1	7,701	16.4
	65 and over	<u>3,595</u>	<u>8.7</u>	<u>3,988</u>	<u>9.2</u>	<u>4,384</u>	<u>9.4</u>
	Totals	40,839	100.0	43,754	100.0	46,936	100.0
County Totals		81,804		87,171		93,213	

SOURCE: Information Systems Bureau, Department of Intergovernmental Relations, State of Montana, Helena, Montana.

APPENDIX 6

GREAT FALLS GROCERY SALES

	No. of Stores	% of Market's Grocery Store Sales	Principal Supplier
<b>LEADING CHAINS</b>		<u>66.0%</u>	
Buttrey's	4	29.0	{Own} Great Falls, Mont.
Safeway	2	17.0	{Own} Butte, Mont.
Albertson's	1	13.0	{Own} Boise, Idaho
Rosauer's	1	5.0	U.R.N., Spokane, Wash.
Circle K (c)	8	2.0	Assoc. Foods, Helena, Mont.
<b>VOLUNTARY &amp;/OR COOPERATIVE GROUPS</b>		<u>20.0%</u>	
63 Super Save IGA	3	17.0	Ryan Mercantile Co., Great Falls, Montana
Bob's Thriftway	1	1.5	Assoc. Foods, Helena, Mont.
The Market Place	1	1.5	Assoc. Foods, Helena, Mont.
<b>LEADING INDEPENDENTS</b>		<u>6.0%</u>	
Noble's Foodland	1	3.5	Ryan Merc. Co., Great Falls, Mt.
Northside Market	1	1.5	Ryan Merc. Co., Great Falls, Mt.
Whitehouse Grocery	1	1.0	Ryan Merc. Co., Great Falls, Mt.
<b>OTHER GROCERY STORES</b>		8.0%	
<b>TOTAL</b>		52	100.0%

SOURCE: Fairchild Publishers, Supermarket News Distribution Study of Grocery Store Sales in 287 U. S. Cities. (New York: Fairchild Publishing Co., 1974), p. 132.

(c) Convenience Stores

## APPENDIX 7

### Great Falls Public Schools Great Falls, Montana

#### ENROLLMENT - September 19, 1974

School	Kdn	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Spec	Total
** Chief Jos.	58	66	63	65	70	69	86								477
Collins	0	17	20	20	15	19	26								117
Emerson	41	43	26	40	43	27	46							10	276
Franklin	62	59	52	48	64	68	80							11	444
** L. & Clark	77	99	77	75	106	104	120								658
Lincoln	55	50	51	52	64	67	66							10	415
Longfellow	92	81	94	81	85	87	76							14	610
Lowell	44	45	52	28	41	46	25								281
Loy	102	101	97	89	98	116	102								705
McKinley	35	37	46	46	42	57	53								316
* Meadow Lk.	61	73	81	63	87	81	89								535
** Morningside	49	48	71	75	73	97	109								522
Mt. View	32	66	64	65	74	82	82							8	473
Riverview	49	47	50	41	43	59	49							13	351
Roosevelt	43	47	50	50	49	106	105							6	456
Russell	44	46	54	40	44	54	66								348
Sacajawea	41	47	49	47	71	64	95							14	428
Skyline	45	51	56	52	48	76	57							6	391
Sunnyside	54	52	47	45	41	65	62							25	391
Valley Vw.	56	50	65	62	63	63	68								427
Whittier	52	42	46	22	42										204
Rehab. Ctr.														16	16
Spec Ed Ctr														61	61
** E. Jr. High							439	465	541					21	1466
N. Jr. High							457	423	428					21	1329
P. Gibson							311	322	344						977
W. Jr. High							315	314	291						920
G.F.H.S.										700	679	680	26		2085
C.M.R.H.S.										862	724	650	26		2262
Vo-Tech														354	354
<b>Total</b>	<b>1092</b>	<b>1167</b>	<b>1211</b>	<b>1106</b>	<b>1263</b>	<b>1407</b>	<b>1462</b>	<b>1522</b>	<b>1524</b>	<b>1604</b>	<b>1562</b>	<b>1403</b>	<b>1330</b>	<b>642</b>	<b>18295</b>

Elementary	Junior High		Senior High	Spec. Ed.	Post H.S.
Kindergarten	1092	Grades 7 & 8	3046	Total	642
Grades 1-6	7616	Grade 9	1604	Vo-Tech	354
<b>Total</b>	<b>8760</b>	<b>Total</b>	<b>4650</b>		

Third Week of School

SOURCE: Office of the Superintendent of Public Schools, Great Falls, Montana.

NOTE: \*Indicates school within Site Area Number 1.  
 \*\*Indicates school within Site Area Number 2.

APPENDIX 8

WAGES AND FRINGES: Grocery Department

<u>POSITION</u>	<u>WEEKLY WAGES</u>	<u>RATE PER HOUR</u>
Head Grocery Clerk	\$197.80*	\$4.30
Grocery Clerks	152.00	3.80
Box Boys	Average	2.20
Part-Time	Average	3.40

\*Based on 44 hours/week, Industry rewards extra hours @ time + one-half for being Department Head.

Store volume of approximately \$50,000 per week. \$50,000 x 73% sales mix = \$36,500 grocery sales. \$36,500 divided by \$56 sales per man hour = 652 hours.

<u>POSITION</u>	<u>HOURS</u>	<u>WEEKLY SALARY</u>
Store Manager	40	\$ 307.69
Head Grocery Clerk	44	197.80
7 Clerks	280	1,064.00
Box Boys	124	272.80
Part-Time	<u>164</u>	<u>557.60</u>
<b>TOTAL</b>	<b>652</b>	<b>\$2,399.89</b>

$$\frac{\$2,399.89}{652 \text{ hrs}} = \$3.6808 \text{ cost per hour}$$

FRINGES:

Health, Welfare, Dental, Optical & Prescription Drugs  
 ----25.7¢/hour  
 Pension----12.5¢/hour  
 Vacation Accrual----1/52nd of \$3.6808 = \$.0708/hour  
 State Industrial Accident----\$.0034/hour

PAYROLL TAXES:

TAX RATE (% OF TOTAL WAGES)

Social Security	5.76% *
State Unemployment	<u>1.46% **</u>
<b>TOTAL</b>	<b>7.22%</b>

\* Social Security Tax rate is 5.85% up to \$14,100/Yr/Man.<sup>1</sup>

\*\*Unemployment Tax rate is 3.10% up to \$4,200/Yr/Man.<sup>2</sup>

<sup>1</sup>Department of Health, Education & Welfare, Social Security Administration, Great Falls, Montana.

<sup>2</sup>Division of Employment Security, Great Falls,



Average hourly rate of \$3.6808 x 7.22% = \$.2657/hour in payroll taxes.

TOTAL GROCERY WAGES & FRINGES PER HOUR:

Wages	\$3.6808
Health, Welfare, Etc	.2570
Pension	.1250
Vacation Accrual	.0708
State Industrial	.0034
Payroll Taxes	.2657
<b>TOTAL</b>	<b>\$4.4027</b>

Grocery Wages & Fringes as a percent of Sales:

$$\frac{\$4.4027}{\$56} = 7.86\%$$

WAGES AND FRINGES: Meat Department

<u>POSITION</u>	<u>WEEKLY WAGES</u>	<u>RATE PER HOUR</u>
Head Meat Cutter	\$214.82*	\$4.67
Journeyman	186.80	4.67
Wrapper	151.20	3.78
Part-Time	Average	3.78

\*Based on being paid for 44 hours, Industry rewards extra hours @ time + one-half for being Department Head.

Store Volume of approximately \$50,000 per week. \$20,000 x 20% sales mix = \$10,000 meat sales. \$10,000 divided by \$67 sales per man hour = 149 hours.

<u>POSITION</u>	<u>HOURS</u>	<u>WEEKLY SALARY</u>
1 Head Cutter	40	\$214.82
1 Journeyman	40	186.80
1 Wrapper	40	151.20
1 Part-Time	<u>29</u>	<u>109.62</u>
<b>TOTAL</b>	<b>149</b>	<b>\$662.44</b>

$$\frac{\$662.44}{149 \text{ hrs}} = \$4.4459 \text{ cost per hour}$$

NOTE: Wage & Fringe Scales were obtained from Mr. F. J. Raucci, Buttrey Foods Inc., Great Falls, Montana.

FRINGES:

Health, Welfare, Dental, Optical & Prescription Drugs  
 ----31.7¢/hour  
 Pension-----20¢/hour  
 Vacation Accrual-----152nd of \$4.4459 per hour = \$.0854  
 State Industrial Accident-----\$.0034

PAYROLL TAXES:TAX RATE (% OF TOTAL WAGES)

Social Security	5.85%
State Unemployment	1.51%
TOTAL	7.36%

Average hourly rate of \$4.4459 x 7.36% = \$.3272/hr in payroll taxes.

TOTAL MEAT WAGES & FRINGES PER HOUR

Wages	\$4.4459
Health, Welfare, etc.	.3170
Pension	.2000
Vacation Accrual	.0854
State Industrial Accident	.0034
Payroll Taxes	<u>.3272</u>
TOTAL	\$5.3789

Meat Wages & Fringes as a percent of Sales:

$$\frac{\$5.3789}{\$67} = 8.02\%$$

WAGES & FRINGES: Produce Department

<u>POSITION</u>	<u>WEEKLY WAGES</u>	<u>RATE PER HOUR</u>
Produce Clerk	\$172.00	\$4.30
Part-Time	Average	3.40

Store volume of approximately \$50,000 per week. \$50,000 x 7% sales mix = \$3,500 produce sales. \$3,500 divided by \$39 sales per man hour = 89 hours.

<u>POSITION</u>	<u>HOURS</u>	<u>WEEKLY SALARY</u>
1 Produce Clerk	40	\$172.00
Part-Time	<u>49</u>	<u>166.00</u>
TOTAL	89	\$338.60

$$\frac{\$338.60}{89 \text{ hrs}} = \$3.8045$$

FRINGES:

Health, Welfare, Dental, Optical & Prescription Drugs  
 ----25.7¢/hour  
 Pension----12.5¢/hour  
 Vacation Accrual----1/52nd of \$3.8045 = \$.0731/hour  
 State Industrial Accident----\$.0034/hour

<u>PAYROLL TAXES:</u>	<u>TAX RATE (% OF TOTAL WAGES)</u>
Social Security	5.85%
State Unemployment	2.22%
TOTAL	8.07%

Average hourly rate of \$3.8045 x 8.07% = \$.3070 per hour in payroll taxes.

TOTAL PRODUCE WAGES & FRINGES PER HOUR:

Wages	\$3.8045
Health, Welfare, Inc.	.2570
Pension	.1250
Vacation Accrual	.0731
State Industrial Accident	.0034
Payroll Taxes	.3070
TOTAL	\$4.5700

Produce Wages & Fringes as a percent of Sales:

$$\frac{\$4.5700}{\$39} = 11.72\% \text{ of Produce Sales}$$

TOTAL WAGES & FRINGES AS A PER CENT OF SALES:

<u>DEPARTMENT</u>	<u>WAGE &amp; FRINGE PER CENT</u>	<u>RATIOS</u>	<u>YIELD</u>
Grocery	7.86	73	5.7378
Meat	8.02	20	1.6040
Produce	11.72	7	.8204
TOTAL			<u>8.1622%</u>

OTHER EXPENSES:

Rent: The greater of \$2.00/square foot on 20,000 square feet or 2% of sales.<sup>1</sup>

<sup>1</sup>National Association of Retail Grocers of the U.S., Inc., Financial Planning Report--Issue #12, February 1974.

\$50,000 sales/week x .02 = \$1,000/week or \$52,000/year.

Depreciation:

Fixture cost of \$14.30 per square foot. \$14.30 x 20,000 square feet----\$286,000.

\$286,000 using 10 year life, straight line depreciation equals first year depreciation of \$28,600.

Interest:

The interest cost is obtained from the "Amortization Schedule" to show the repayment of the loan to purchase fixtures and equipment. The interest was annualized at \$26,822 for the first year or \$516 per week.

Federal Income Taxes:<sup>1</sup>

Corporate Federal Income Taxes are 25% on the first \$25,000 and 23% thereafter.

\$25,000 x 25%	=	\$6,250
\$ 7,760 x 23%	=	<u>1,785</u>
TOTAL FEDERAL TAXES:		\$8,035

State Income Taxes:<sup>2</sup>

Corporate State Income Taxes are figured at 2.18% on all profits after Federal Taxes.

\$24,683 x 2.18% = \$539

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<sup>1</sup>Interview with Mr. Lyle Gorman, Buttrey Inc., Great Falls, Montana (January 1975).

<sup>2</sup>Ibid.

## SOURCES CONSULTED

### BOOKS

- Adams, Walter. The Structure of American Industry. 4th ed. New York, N.Y.: The MacMillan Company, 1971.
- Caves, Richard. American Industry: Structure, Conduct, Performance. 3rd ed. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.
- Editor & Publisher Company. Editor & Publisher's Market Guide. New York, N.Y.: E & P Company Inc., 1968, 69, 70, 71, 72, 73, 74.
- Fairchild Publishers. Supermarket News Distribution Study of Grocery Store Sales in 287 U.S. Cities. New York, N.Y.: Fairchild Publishing Company, 1974.
- Gustafson, Neil C. Recent Trends/Future Prospects: A Look At Upper Midwest Population Changes. Minneapolis, Minnesota: Upper Midwest Council, 1973.
- Mountain Bell Telephone Co. Mountain Bell Telephone Directory For Great Falls and North Central Montana. January 1974.

### PERIODICALS

- Bill Communications Inc. "1974 Survey of Buying Power." Sales Management. (July 1974).
- Degener, Jo. "A Food Co-Op Can Get It For You Wholesale." Money. (June 1974) 34-36.
- "How Chain Management Performed in 1973." Chain Store Age. Headquarters Edition. (March 1974) E66.
- Mead, William B. "What's In A Name Brand." Money. (February 1974) 40-44.
- Osborne, Phillip B. "A&P Counts The Cost of It's Pyrrhic Victory." Business Week. (April 28, 1973) 117-119.
- "Retail Food Industry." Standard & Poor's Industry Surveys. (December 13, 1973).
- "Stores: Go It Alone; Ford Orders Operations Be Self-Supporting." Air Force Times. Vol. 35, No. 22. (January 1, 1975).

PUBLIC DOCUMENTS

- U.S. Department of Commerce. 1972 Census of Business, Retail Trade--Montana. Washington, D.C.: Government Printing Office, 1973.
- U.S. Department of Commerce. 1972 Census of Business, Wholesale Trade--Montana. Washington, D.C.: Government Printing Office, 1973.
- U.S. Department of Commerce. County and City Data Book. Washington, D.C.: Government Printing Office, 1967,72.
- U.S. Department of Commerce. Census of Population, Montana. Washington, D.C.: Government Printing Office, 1940, 60, 70.
- U.S. Department of Commerce. County Business Patterns 1972--Montana. Washington, D.C.: Government Printing Office, June 1973.
- U.S. Federal Trade Commission. Economic Report on the Structure and Competitive Behavior of Food Retailing. Washington, D.C.: Government Printing Office, January 1966.

UNPUBLISHED SOURCES

- Cascade County USDA Committee For Rural Development. Cascade County Situation Statement--1972 With Special Emphasis on Agriculture. Cascade County Reproduction, 1972.
- Commercial Loan Department. Telephone Interview, First National Bank, Great Falls, Montana, March 1975.
- Gorman, Lyle. Interview At Buttrey Foods Inc., Great Falls, Montana, January 1975.
- Great Falls City/County Planning Board. Economic Base Study, 1974, City of Great Falls and County of Cascade Montana. THK Associates, Inc., October 1974.
- The Great Atlantic & Pacific Tea Company Inc. 1973 Annual Report.
- Jewel Companies Inc. 1972 Annual Report.
- Mereness, Chuck. Interview at Super Save IGA, Store 10th Avenue South, Great Falls, Montana, March 1975.
- Modil, Tony. Telephone Interview, Commission of Employment Security, Great Falls, Montana, February 1975.
- National Association of Retail Grocers in the U.S., Inc. Financial Planning Report--Projection For a New Super-market. Issue #12, February 1974.

Office of The Building Inspector. Record of Building Permits.  
Great Falls, Montana.

Raucci, F. J. Interview at Buttrey Foods Inc., Great Falls,  
Montana, January 1975.

Research & Information Systems Division, Montana Department  
of Intergovernmental Relations, State of Montana.

Social Security Administration. Telephone Interview, Department  
of Health, Education, & Welfare, Great Falls, Montana,  
March 1975.

Store Managers. Interviews with all Medium-to-Large Sized  
Grocery Outlets in Great Falls, Montana, December, 1974.

Wenaas, H., Dr. Interview at the Office of the Superintendent  
of Public Schools, Great Falls, Montana, December 1974.