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**TWIN CITY NATURAL FOOD CO-OPS:
THE ROLE OF CUSTOMER PREFERENCES AND
CHARACTERISTICS WHEN CHOOSING AMONG
STRUCTURAL OPTIONS**

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Abstract

The demand for natural foods has been growing steadily over the past decade. As more mainstream grocers and investor-owned, natural food chains respond to this increased demand, the viability of local, independent natural food cooperatives becomes uncertain. A case study on seven Twin City natural food co-ops (TCNFCs) was used to assess organizational options. The study employed a customer survey to determine characteristics and preferences of co-op shoppers. The survey results were used in conjunction with a schema that analyzed the interaction among market forces, store differences, and customer factors to make recommendations to the TCNFCs. This analysis suggests that in the short run, these stores should employ a federated cooperative structure to accommodate a city-wide co-op membership and increase joint ventures among the co-ops. In the long run, the scale and scope of the federated co-op should be increased to enter new markets as a centralized co-op.

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Table of Contents

INTRODUCTION	1
GROWTH OF NATURAL FOOD INDUSTRY	3
EARLY RESPONSE TO INCREASED COMPETITION	4
OBJECTIVES OF STUDY	6
ORGANIZATION OF STUDY	7
ORGANIZATIONAL OPTIONS	7
DESCRIPTION	8
ADVANTAGES AND DISADVANTAGES	10
TCNFC STORE COMPARISON	14
BRIEF DESCRIPTION OF TCNFC STORES	15
COMPARISON OF SALES AND SIZE	18
MEMBERSHIP COMPARISONS	24
MEMBERSHIP COSTS AND BENEFITS	24
CUSTOMER SURVEY: DESCRIPTION	29
PROCESS	29
SURVEY INSTRUMENT	30
CONCERNS	32
CUSTOMER SURVEY: RESULTS	35
CHARACTERISTICS OF RESPONDENTS	35
PREFERENCES OF RESPONDENTS	42
POPULARITY OF CITY WIDE CO-OP MEMBERSHIP	45
ZIP CODE ANALYSIS	48
BY HOME ZIP CODE	48
BY WORK ZIP CODE	49
IMPLICATIONS OF ZIP CODE ANALYSIS	49
REGRESSION ANALYSIS	50
MODEL DESCRIPTION	50
REGRESSION RESULTS	56
	iii

REGRESSION IMPLICATIONS	60
CONCLUSION-RECOMMENDATIONS FOR THE TCNFC STORES:	61
FRAMEWORK USED TO MAKE RECOMMENDATIONS	61
APPLICATION OF FRAMEWORK TO TWIN CITY NATURAL FOOD CO-OPS (TCNFCs)	64
WAYS TO INCREASE SERVICES PROVIDED BY THE TCNFC Co-op:	69
EPILOGUE	74
BIBLIOGRAPHY	75
APPENDIX 1: CUSTOMER SURVEY	77

Introduction

Today, in the late 1990's, natural foods¹ and bulk foods are much easier to obtain than they were thirty years ago. Due to relatively low demand and small profit margins, mainstream grocery stores simply did not supply these items. However, there was a group of consumers who for political, health, and environmental reasons, sought to obtain these goods. To do so, they came together to form buying clubs and cooperatives. Over the past decade, as health and environmental concerns have continued to increase, a growing number of food stores are carrying natural and bulk foods. Today, these items are not just found in natural food cooperatives. They can be found in many mainstream grocery stores and investor owned natural food shops. As noted in Supermarket News (1997, p. 11):

“Until ten years ago, natural food items were confined to small independents or community co-ops, often staffed by the consumers themselves. While these stores satisfied a need, they generally lacked the appeal, merchandise, selection and convenience of conventional supermarkets. They also lacked buying clout, which was apparent in their higher prices...however, natural food--once the realm of hippies and health buffs-- has become more affordable and more mainstream.”

In 1844, a group of textile workers in Rochdale, England formed the first consumer cooperative (Sekerak and Danforth, 1980). In the United States, consumer co-ops can be traced back to the mid-1800s (Nadeau and Thompson, 1996). These early co-ops, like consumer co-ops today, differ from an investor owned firm (IOF) in that the cooperative is voluntarily owned by the people who use the products and services provided by the store. One becomes a member-owner by purchasing a share in the business. These members then elect a board of directors who

¹In this case, ‘Natural Foods,’ as defined by the Wallace Institute, refers to “foods that are produced with organic or sustainable farming methods, are minimally processed, and are free of artificial ingredients, preservatives, and chemicals (Richman, p. 22).”

make decisions on hiring, evaluating, and advising management. Unlike an IOF, where voting rights are based on one's level of ownership, each co-op member-owner gets just one vote. The co-op board is also involved with setting store policies and determining how the profits will be distributed to members/owners. In most cases, profits are distributed among the members based on their purchases of the goods and services provided by that co-op throughout the fiscal year. Again, this differs from an IOF where profits are typically distributed based on one's level of ownership or equity investment. In other words, it is usage rather than investment, which determine how profits will be distributed. Besides natural food groceries, other examples of common consumer co-ops are credit unions, outdoor clothing stores, and housing co-ops.

It is estimated that there are more than 300 retail food cooperatives around the nation. It should be noted that this figure includes all food cooperatives, and not just those specializing in natural foods (Gilyard, 1990). These co-ops are estimated to have a total of 500,000 members and a combined retail volume in excess of \$500 million (Nadeau and Thompson). The Twin Cities is reported to have one of the strongest natural food markets in the country. Along with Seattle, it has the highest number of natural food co-ops in the nation (Gilyard). In the early to mid 1970's, nearly 30 natural food cooperatives were established around the metro area (Cox, 1994). However, organizational problems, a declining economy in the 1980's and increased competition from mainstream grocery stores prompted all but twelve of these stores to close. Of these remaining 12 stores, at least half have chosen to expand their stores to meet customers' demand for one-stop shopping. Now most carry non-grocery items, such as household paper products, cleaning supplies, etc. Most are equipped with a deli counter. A few also provide full service meat and seafood counters as well as juice bars.

Growth of Natural Food Industry

One reason these stores have expanded is due to an overall increase in the demand for natural foods. Currently, the natural foods industry accounts for approximately 1.4 percent of the total retail food industry (Richman). Within the past seven years, this industry has reported average growth rates of 20-25 percent per year. In comparison, the conventional food market has, on average, increased three to five percent annually. Analysts predict that if these growth rates persist, the natural foods market may account for 6.6 percent of the total retail market by the year 2007. (Richman, 1999)

Although this increased demand has led to increased sales at natural food co-ops, it has also led to increased interest from mainstream grocery stores. Currently, health food stores account for 67.6 percent of total natural food sales. However, it is estimated that, as of 1996, 65 percent of conventional supermarkets were carrying some natural food products (Minnesota Grocer, 1996). Moreover, twenty five percent of consumers report buying natural or organic foods at least once a week from conventional supermarkets (Richman).

A 1996 survey conducted at two different metro area co-ops showed the largest competitor to local cooperatives was not other cooperatives, but rather larger chain groceries, such as Rainbow Foods, Cub Foods, and Lunds (Brunn, 1996). Recently, many of these large chain stores merged or consolidated, thus making it more difficult for small single store cooperatives to remain competitive.

The entry of national chain, investor owned, natural food stores, such as Whole Foods and Wild Oats also pose a competitive threat to the viability of natural food cooperatives. These stores are targeting cooperative shoppers. They are similar to natural food co-ops in their appearance, product selection and services, yet they are structured as an investor owned firm.

Currently, Whole Foods accounts for 12 percent of the national natural foods market. It plans to have a total of 100 stores by the year 2000 and 140 by the year 2003. In the Twin Cities alone, Whole Foods has opened two stores within the past four years. In May of 1995, it opened its first store in St. Paul. In November of 1999, it opened a second store, located in Minneapolis. Another method of expansion employed by large chain natural food stores is to acquire smaller existing natural food stores. In 1998 alone, Wild Oats acquired four existing natural food retailers (Food Institute, 1999 p. 546). A reason for these expansion efforts is that decision makers at Wild Oats and other national natural food stores realize that to substantially increase their market share, they must tap in to “real America” which is defined as the markets outside Boulder, Santa Fe or Austin (Richman).

Early Response to Increased Competition

In the early 1990's, this trend of increased popularity of natural foods, combined with increased competition, became apparent to Twin City metro area cooperatives. At that time, general managers of some of these cooperatives developed and offered the option of consolidating these natural food grocery stores². Ultimately, there were five stores that seriously considered this option; Lakewinds Co-op, Mississippi Market, Seward Co-op, Valley Stillwater, and the Wedge. The plan was to form one centralized co-op from these five individual stores. Thus, there would have been one board of directors to oversee the general operations of all five stores.

Even though the proposal was favored by a large majority of the members at Lakewinds and the Wedge, the majority of members at Mississippi Market and Valley Natural were opposed

² Originally, there were seven co-ops that were considering centralization: Lakewinds, Linden Hills, Mississippi Market, Seward Co-op, Valley Natural, Valley Stillwater and the Wedge.

to the plan. Seward co-op, which was the last to vote on this proposal, became the deciding co-op. While the majority of Seward members voted in favor of this option, it did not receive the required two-thirds majority, thus consolidation was voted down. It should be noted that the consolidation became a contentious issue at Seward co-op. It is thought that a relatively small and vocal group of members who feared a loss of local control played a key role in influencing the vote (Ryan, 1995).

Since that time, metro area natural food co-ops have responded to increased competition and market changes by expanding individually. More precisely, Seward, the Wedge, Linden Hills, and Lakewinds have all expanded their stores size since the time of the vote, and Mississippi Market has established a second location. While management and the board of directors of each store realize that increased cooperation may bring about greater economies of scale, they are hesitant to broach the subject of consolidation a second time. For these reasons, management and board members find themselves at an impasse; although they recognize the need to respond to changing market conditions, they do not want to spend scarce resources on an alternative that may be unpopular with members or customers. Also, as individual co-ops expand their stores and take on more debt, the logistics of financial consolidation become more complex.

Nevertheless, there are co-op board members who are interested in obtaining information on alternative structural options. Shortly after the failed consolidation vote, board presidents of seven natural food co-ops formed a loose alliance referred to as the Twin Cities Natural Food Cooperatives (TCNFC). The cooperatives that actively participate in TCNFC activities are the five stores that considered consolidation, plus Linden Hills and Valley Natural Co-op. Initially, the TCNFC activities were lead primarily by the board president of each of the seven co-ops,

rather than their general managers. The primary purpose of this alliance was to explore options that could increase efficiency via inter-cooperative collaboration. In 1997, the individual TCNFC stores incorporated as a federated co-op. This new federated co-op provides a bi-monthly publication for members and customers, informational brochures on beans, grains, and flours that are used in the stores, and contracts with certain product vendors to obtain volume discounts for the member co-ops.

Objectives of Study

Although there has been increased collaboration among these seven co-ops over the past few years, the possibility exists for more extensive collaboration. The purpose of this study is to assess the organizational options available to the TCNFCs to help them remain viable in the changing natural food market. To assess the various structures, this study evaluates a schema of market forces affecting the natural food co-ops, store differences, and customer preferences.

The first objective was to identify which of the co-ops are more suited to work together and discern any potential obstacles that could arise from increased cooperation. Data was collected on sales, size of membership base, percent of sales to members, membership benefits, and store size to determine obvious areas of similarities and differences among the co-ops.

The second objective was to determine if and how the characteristics of co-op shoppers affect their preferences for attributes of retail food markets. To accomplish this, a customer survey at each of the seven TCNFC stores was conducted to determine the characteristics of customers who shop at natural food co-ops. Shopper characteristics, which included food expenditures at the co-op, membership status, level of involvement within the co-op, socio-economic information (income, age, gender) and distance traveled to shop at the co-op, were then linked to how shoppers answered the following questions:

- Why do they shop at co-ops instead of mainstream grocery stores?
- What characteristics, or attributes, do they feel are most important for the co-op?
- How do they value co-op characteristics in comparison to characteristics that are common to all grocery stores?
- What changes would they like to see made at their co-op?
- What prompts a customer to become a co-op member?

The store comparison and the customer survey were then used to assess the alternative organizational structures available to these natural food stores.

Organization of Study

This study begins with a brief description of the different types of cooperatives, in terms of membership structure. It then discusses the findings and implications of the store comparisons. Following the store comparison are descriptions of the process and results of the customer survey. The results of the customer survey are then combined with multivariate regression analysis to link respondents' preferences and characteristics. The study concludes by using these findings and a schema of market forces to develop recommendations to the TCNFC stores on organization options.

Organizational Options

Because of the nature of this study, discussion of different types of cooperatives will focus solely on organizational and membership structure. Along these lines, there are two distinct types of cooperatives; those that are federated and those that are centralized. This section will provide a brief description of each and discuss the comparative advantages and disadvantages of each, in light of the survey results and the comparison among the seven TCNFC stores.

Description

Centralized Cooperative Structure:

At the time of the survey, all of the seven TCNFC stores were single store, independent cooperatives. A single store co-op is a centralized co-op. However, a centralized co-op may have more than one store location. When Mississippi Market opened a second store in 1999, it became a multi (two) store, centralized co-op. Under a multi store, centralized format, each individual store is a branch of the centralized cooperative. In this section, single store co-ops will be referred to as independent co-ops. Multi store centralized co-ops will be referred to as a multi-store co-ops, and centralized co-ops will refer to both independent and multi-store co-ops.

Regardless of the number of stores within the centralized co-op, the membership structure is the same; ownership and governance is handled directly by the co-op members. As stated previously, one becomes a member-owner by purchasing stock in the co-op. In exchange, owners receive member benefits and the ability to vote directly for the board of directors, who are also member-owners. Responsibilities of the board of directors include selecting a general manager, determining the amount and distribution of the patronage rebate, and deliberating on other issues affecting the co-op.

As a multi-store cooperative, an individual co-op is no longer autonomous from the other stores within the organization. Instead, authority rests with a centralized decision making entity. For example, if the seven TCNFC stores were to form a centralized cooperative, there would be one board of directors and one overall managing body that would oversee the operations of the seven cooperatives. Decisions about the amount and distribution of patronage rebates would also be made at the centralized level. Unlike an independent co-op, members do not usually shop

directly at the centralized entity. Instead, they patronize the individual branches of the organization.

Federated Co-ops:

When the TCNFC organization incorporated in 1997, it did so as a federated cooperative. A federated cooperative is essentially a co-op of co-ops. From the perspective of the individual members, a federated co-op is like a single independent co-op. To become a member, one still purchases stock in the co-op in exchange for member benefits and the ability to vote directly for the board of directors of the local co-op. This board is still responsible for decisions regarding the general manager, the patronage rebate, and other co-op issues.

Unlike a single independent co-op, however, a federated co-op is also a member of a second co-op that provides goods and or services to the individual co-ops. The seven natural food co-ops in this study are members of the TCNFC federated co-op, which will be referred to as the TCNFC Co-op. Services currently provided by this co-op include printing brochures carried in the individual co-ops, printing and distributing a newsletter to members of the seven of the co-ops, and contracting with a small number of product vendors to obtain volume discounts for the individual stores. Currently, the individual stores pay for these services on a pro-rated basis that is tied to the store's annual sales. Like a single independent co-op, the board of the TCNFC is also responsible for determining co-op management, and deciding, in accordance with the member co-ops, the scope of goods and services provided by the TCNFC Co-op. The amount and distribution of patronage rebates among the member co-ops is then based on the surplus generated by providing the services listed above.

Advantages and Disadvantages

Independent Co-ops:

Cropp and Ingalsbe (1989) argue that there are several advantages of an independent co-op over the multi-store co-op. Independent co-ops are autonomous from all other co-ops; their profits are not directly affected by the expansion or relatively poor performance of another co-op. A second advantage is that communicating with members is easier in an independent co-op. Also, members may feel a greater sense of loyalty, ownership, and control (Cropp and Ingalsbe).

A disadvantage of this structure is that the volume of business is relatively low, especially in comparison to large national chains. Because of this, small independent co-ops likely have less bargaining power and may have difficulties obtaining volume discounts and other economies of scale. Given that large national chains are more actively targeting the Twin Cities market, the TCNFC stores should consider how an organizational structure will effect their bargaining power.

Also, the argument on a greater ease of communicating with members was made nearly ten years ago and was aimed at marketing and producer cooperatives. Today, it is relatively easy to communicate with members of a consumer co-op. For one, they come in to the store to shop. Thus, information can be given to them directly. Moreover, the majority of member communication is done through mail. Given that it does not cost more money to mail a newsletter to a member in a suburb than it does to one who lives two blocks away, this alleged communication advantage may no longer be applicable to an independent consumer cooperative.

Multi Store Co-ops:

A major advantage of the multi-store structure over a single independent store is that it allows for greater bargaining power, which may lead to volume discounts, and other economies

of scales in marketing, payroll services, financial services, etc. An advantage of a multi store structure over a federated structure is that there is a single board of directors. This may lead to lower transaction costs and lower operating costs. Another advantage of multi-store co-op is that a centralized decision-maker can react quickly to changing economic conditions (Cropp and Ingalsbe). This advantage may be accentuated if larger size co-ops can attract more qualified managers.

A final potential advantage of the multi-store structure is the ability to achieve greater uniformity among the stores (Cropp and Ingalsbe). In terms of packaged grocery items, this is not an issue. In terms of services provided at the co-op and deli items, however, a case can be made that more uniformity may be a desirable. However, if a reason for shopping at a co-op is for a unique shopping experience, too much uniformity among the stores may be a disadvantage.

A disadvantage of a multi store co-op, compared to a federated or single independent co-op, is that members may not feel a strong sense of control or ownership in their co-op. Variation in the size and location of the individual stores in the organization can accentuate this problem. For example, if the seven TCNFC stores were to form one entity, the members of Valley Natural and Valley Stillwater may feel less involved if voting for the board of directors was done at large, since these co-ops are small compared to the others. To account for this, multi-store co-ops may use a delegate system, or tie the number of representatives from each co-op to the relative size of the store. However, setting limits on the number of board positions that can be held by representatives from each co-op may alter the true democratic nature of the centralized co-op.

Also, the location of the annual meeting can further alienate a portion of the membership. Since four of the seven natural food co-ops are located in the metro area, the most logical place

for an annual meeting would be somewhere in Minneapolis or St. Paul. This may make representation at these meeting heavily biased toward urban shoppers and alienate members from the outer ring suburbs.

Another potential disadvantage of a large multi-store co-op is that, as membership becomes more diverse, a central decision making body may have a more difficult time meeting the needs of individual members. For a small, independent natural food co-op, there may be less pressure to carry a wide range of products if the membership base is fairly homogeneous in their food preferences. For example, when most of the seven TCNFC stores began, the products carried by all stores were very similar; bulk items and organic produce. However, as the membership and customer base grew, consumers' demands became more varied. Some customers still wanted their co-op to carry only organic and natural foods. Other shoppers wanted an increased availability of lower priced, conventional (non-organic), and, or convenience items. Thus, it became increasingly difficult to satisfy both types of shoppers, especially with limited store space.

A final disadvantage of the multi-store structure is that individual stores are no longer autonomous. The success of one store is tied directly to that of all other stores in the organization. Thus, more profitable stores subsidize those that are less profitable.

Federated Co-ops:

Like a multi-store structure, a major advantage of a federated co-op over a single independent store is that the former has greater bargaining power and therefore, may be better positioned to obtain volume discounts and other economies of scales in marketing, payroll services, financial services, and purchasing. An advantage federated co-ops have over multi-store co-ops is that members of a federated co-op tend to feel a greater sense of ownership and

control, since on the membership side, the communication channels and voting structure is the same as they are in an independent co-op (Cropp and Ingalsbe).

Another advantage of the federated structure is that independent local co-ops can really only benefit from the membership in the federated co-op. If membership is not advantageous, they are free to defect (to remove their co-op from the federation). In contrast, under a multi store structure, the central decision making entity manages the local co-ops. And as stated previously, more profitable co-ops may end up subsidizing those that are less profitable.

One disadvantage is that a federated structure does not entirely eliminate the duplication of functions performed at each local cooperative because each federated co-op retains their own management and board of directors. Also, the federated structure is more organizationally cumbersome, especially if the individual co-ops are quite different in terms of size, customers or overall store mission. In such cases, it may be difficult to reach consensus on policies, pricing and level of services provided by the federated co-op.

One of the most difficult aspects of forming a federated cooperative is to establish policies conducive to a stable coalition of member co-ops. Trying to determine an outcome with conflicting goals among member co-ops falls under the realm of game theory, where two or more players (co-ops) may have opposing objectives (Schmiesing, 1989). The basic problem is as follows: There is an incentive for two or more co-ops to work together if the benefits from doing so are greater than the benefits gained from working alone, less the cost of forming a coalition (Staatz, 1983, Sexton, 1986). If a coalition of co-ops is not homogeneous, the allocation of benefits and costs among members may make it beneficial for one or more of the co-ops to defect and either work independently or form another coalition. However, if the benefits gained from joint action are sufficiently large, the other co-ops in the coalition may be willing to make

concessions with the members who are threatening to defect. The amount of concessions will depend on two factors; the other members' perception of the costs that the defecting member would face without the coalition, and the defecting members' perception of the costs the coalition would face if it were to leave. Thus, when there are considerable economies of scale, larger co-ops will have relatively stronger bargaining power (Staatz).

TCNFC Store Comparison

One objective of this study was to collect information on the size of each store, gross sales, sales per square foot, sales per labor hour and percent of sales to members. The reason for doing this is that one would expect to see the larger co-ops, such as the Wedge, Linden Hills, and Lakewinds, better positioned to realize economies of scope and scale³. These efficiencies would then likely show up as either increased sales, lower costs, or a combination thereof. In turn, one would expect the larger stores to be relatively more profitable.

To obtain this information, a letter was sent to each participating store requesting organizational information, such as mission statements, bylaws, organization charts, member benefits, and copies of past surveys. To facilitate and standardize participation in this study, a second letter with a "fill in the blank" attachment for requested information was sent to each co-op. Originally, five years of data was requested to verify if indeed larger co-ops were able to realize greater efficiencies. However, the individual stores were only prepared to provide three years of data. Because of this, it is difficult to draw any solid conclusions about economies of

³ As the name suggests, economies of scope refer to an increase in profits resulting from an increase in the scope of the organization, for example, the number of products and services provided by a co-op. Economies of scale refer to increase in profits resulting from an increase in the scale of the organization, for example, the overall size (in square feet) of a co-op.

scope and scale at these stores. This is further complicated by the fact that five out of the seven stores expanded during these three-years.

Thus, although the original objective of collecting data on the individual stores was to look for economies of scale, due to the nature of the data itself, it proved to be more useful for identifying any obvious barriers to specific organizational options. In order to give the reader a better idea of the stores involved, the next section provides a brief description of the seven stores. Following this description, the data provided by the stores is then used to evaluate the feasibility of increased cooperation.

Brief Description of TCNFC Stores

Lakewinds Co-op:

Lakewinds Co-op, founded in 1975, is the second largest of the seven TCNFC Co-ops in terms of sales and size of store. The store is located in Minnetonka, an outer ring suburb of Minneapolis. The original site was 500 square feet. In 1996, the co-op expanded a third time and is now operating in a 12,000 square foot store, with 6,500 square feet of retail space. The new store is equipped with a deli counter, coffee area, juice bar, meat and seafood counter, customer service counter and an ATM machine. In 1997, the co-op reported annual sales in excess of \$7.2 million and averaged \$1,123 in sales per square foot. In 1998, it reported sales of \$8.8 million and sold an average of \$1,343 per square foot. Also in 1998, Lakewinds opened a store adjacent to the existing co-op, called Lakewinds Natural Home, that sells organic clothing, environmentally friendly cleaning and household products, non-toxic paints and other natural, or “green”, non-grocery items (Youngblood, 1999).

Linden Hill's Co-op:

Linden Hill's Co-op opened in 1976. It is located in a residential neighborhood in southwest Minneapolis. The co-op has moved one time since its original 800 square foot store. The current site has 9,500 square feet of retail space. The co-op provides a deli counter, coffee area, juice bar, customer service counter and an ATM machine. In 1997, it reported sales of over \$4.6 million, with an average of \$490.20 sales per square foot.

Mississippi Market:

The original Mississippi Market co-op was established in 1980. It is located in Highland Park, a residential neighborhood in St. Paul. The original store was 1,100 retail square feet. In 1991, it moved to a new, nearby location and increased in size to 3,700 retail square feet. This store offers a deli counter, coffee area and ATM machine. In 1997, Mississippi Market reported over \$4.4 million in sales and averaged \$1205.41 per square foot.

In April of 1999, this co-op opened a second natural food store on Selby and Dale, another residential neighborhood in St. Paul, which is about three miles from the Highland Park store. The second store is 7,500 in retail square feet. It is equipped with a deli counter, coffee area, juice bar, meat and seafood counter, customer service counter and an ATM machine. The co-op's general manager projects 1999 sales to be 3.5 million at the Highland Park store, and 5 million at the new store (Gilyard, 1999). This is an average sales per square foot of \$945.95 and \$666.67 at the Highland and Selby Dale locations, respectively.

Seward Co-op:

Seward Co-op, located in an urban neighborhood in south Minneapolis, was established in 1972. In 1988, it expanded to 1,750 retail square feet. In 1998, the co-op built a new store and expanded to 5,200 square feet of retail space. This store provides a deli counter, coffee area,

juice bar, and ATM machine. In 1997, Seward co-op reported sales just over \$1.4 million with an average of \$966.64 in sales per square foot.

Valley Natural Co-op, Burnsville:

Valley Natural Co-op, established in 1977, is located in Burnsville, an outer ring suburb of the Twin Cities. This co-op is operating in its original site, with 3,500 square feet of retail space. Valley Natural does not offer many of the amenities provided at most of the other TCNFC stores. In 1997, it reported sales just under \$1.7 million and estimated sales per square foot of \$480.19.

Valley Co-op, Stillwater:

Valley Co-op Stillwater was established in 1978. By car, Stillwater is about 40 minutes east of the Twin Cities. This co-op has expanded two times, once in 1983 and again in 1990. The current store, which is twice as large as the original site, has 2700 square feet of retail space. In 1997, sales were reported to be just under \$1.2 million and sales per square foot were estimated at \$428.51.

The Wedge:

The Wedge co-op, which is currently the largest of the TCNFC stores in terms of store size and sales, was established in 1974. It is located just south of downtown Minneapolis. In 1997, the reported sales and sales per square foot were, respectively, \$9.9 million and \$1,103.29. In 1999, it is expected to generate \$17 million in revenues, making it the second largest natural food co-op in the country, in terms of sales (Youngblood). This co-op is in its third location in the neighborhood. It has experienced an almost tenfold increase in store size. The original site was 2,400 square feet, while the current store is 21,000 square feet, with nearly 11,000 of which

are for retail. The Wedge is equipped with a deli counter, full service meat and seafood counter, juice bar, coffee area, customer service counter and an ATM machine.

Comparison of Sales and Size

Sales and Increases in Sales:

Table 1 summarizes sales, the ratio of net profits to sales, patronage rebates, sales per square foot, and sales per labor hour at each of the TCNFC stores from 1995 to 1997. Figure 1 shows the ranges in sales among the seven stores with a comparison to the average supermarket (Food Institute, 1998, p50). In 1997, the average for the TCNFC co-ops was just under 4.4 million. However, only two stores, Linden Hills and Mississippi Market, actually reported sales near this average. The Wedge and Lakewinds reported sales of approximately 10 and 7.3 million, respectively, while Seward, Valley Natural and Valley Stillwater all reported 1997 sales under 2 million. It should be noted that the range in sales will decrease among five members of the TCNFC since Seward Co-op more than tripled its store size in 1998, and Mississippi Market opened a second store in 1999.

In 1997, the combined sales were over \$30 million. Total combined sales increased 14% in 1997 and 59% in 1996. Figure 2 illustrates the increase the sales for each co-op from 1996 to 1997. Figure 2 also shows the average increase among the TCNFC stores, combined, as well as the increase in sales at an average supermarket. Sales at the average supermarket increased 2.3 percent during this time period. Each TCNFC store, save Seward, experienced an increase in sales that was higher than the average supermarket. In aggregate, the average increase in sales among all seven TCNFC was 12.5 percent. Lakewinds, with a 34 percent growth in sales, experienced the highest increase during this time period. Seward Co-op, with a one half-percent increase, had the lowest rise in sales.

Sales per Square Foot:

Table 1 also shows that, among the TCNFC stores, there are two distinct groups in terms of average sales per square foot. The Wedge, Lakewinds, Seward and Mississippi Market average nearly \$1,000 or above, while Linden Hills, Valley Natural and Valley Stillwater average under \$500 per square foot. To put these figures in context, the 1998 national average for conventional supermarkets and natural food stores were, respectively, \$464 and \$829 per square foot.

Net Profits to Sales Ratio:

Reporting net profits does not have much meaning. Frequently returns are weighted by assets or equity when doing industry comparisons. However, when comparing firms within a single industry, the net profits to sales ratio is frequently used as an indication of a stores performance. In general, grocery stores are a high volume, low margin industry whose profit margins range from one to three percent. The Food Institute's Review reports for supermarkets with sales less than \$100 million, net margins in 1995, 1996, and 1997, were, respectively, .64, .53 and 1.34 percent (Food Institute, 1999, p.94). Within this same time period, the range in average net margin among the TCNFC stores was 2.6, .8 and 1.1 percent, which is generally a favorable comparison. Between 1995 and 1996, both Linden Hills and Lakewinds expanded. This may partially explain the TCNFC's decrease in net margins over this time period.

Size:

Figure 3 compares the size in square feet of the various co-op stores. The average Whole Foods store is included for comparison.

Table 1: Summary of Sales Related Information

Net Sales							
	Lakewinds	Linden hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	\$ 2,439,807.00	\$ 1,915,071.00	\$ 4,457,713.00	\$ 1,415,600.00	\$ 1,274,065.00	\$ 1,064,000.00	\$ 8,307,993.00
1996	\$ 5,430,018.00	\$ 3,712,256.00	\$ 4,308,887.00	\$ 1,394,533.00	\$ 1,501,724.00	\$ 1,118,500.00	\$ 9,321,242.00
1997	\$ 7,282,191.00	\$ 4,656,898.00	\$ 4,460,000.00	\$ 1,401,632.00	\$ 1,680,347.00	\$ 1,183,248.00	\$ 9,929,609.00

Gross Profit							
	Lakewinds	Linden hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	\$ 730,071.00	\$ 608,343.00	\$ 1,490,389.00	*	\$ 434,247.00	*	\$ 2,981,609.00
1996	\$ 1,834,777.00	\$ 1,249,525.00	\$ 1,433,079.00	*	\$ 534,999.00	\$ 352,228.00	\$ 3,404,866.00
1997	\$ 2,480,261.00	\$ 1,629,110.00	\$ 1,543,160.00	*	\$ 602,037.00	\$ 413,397.00	\$ 3,743,857.00

Profits							
	Lakewinds	Linden hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	\$ 39,137.00	\$ 127,393.00	\$ 95,878.00	\$ 16,179.00	\$ 20,701.00	\$ 11,000.00	\$ 318,923.00
1996	\$ (27,300.00)	\$ 75,265.00	\$ (29,562.00)	\$ 7,630.00	\$ 27,239.00	\$ (400.00)	\$ 259,633.00
1997	\$ 87,083.00	\$ (10,930.00)	\$ 63,000.00	\$ 5,298.00	\$ 18,876.00	\$ 20,000.00	\$ 208,321.00

Patronage Rebate							
	Lakewinds	Linden hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	\$ -	\$ -	\$ 36,314.00	\$ (16.74)	\$ 2,835.00	*	\$ 112,453.00
1996	\$ -	\$ -	\$ 11,803.00	\$ (9.92)	\$ 5,309.00	\$ -	\$ 114,375.00
1997	\$ 35,962.00	\$ -	\$ 8,000.00	\$ -	\$ 18,872.00	\$ 2,000.00	\$ 97,925.00

Sales per Square Foot							
	Lakewinds	Linden hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	\$ 955.00	\$ 201.59	\$ 1,195.92	\$ 976.00	\$ 364.02	\$ 380.00	\$ 923.11
1996	\$ 831.00	\$ 390.76	\$ 1,156.17	\$ 962.00	\$ 429.06	\$ 399.00	\$ 1,035.69
1997	\$ 1,123.00	\$ 490.20	\$ 1,205.41	\$ 966.64	\$ 480.10	\$ 428.57	\$ 1,103.29

Sales Per Labor Hour							
	Lakewinds	Linden hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995		*	\$ 53.63	*	*	\$ 62.58	\$ 60.57
1996	\$ 51.40	\$ 47.18	\$ 52.06	*	*	\$ 57.02	\$ 59.41
1997	\$ 59.00	*	\$ 53.04	*	*	*	\$ 58.13

Figure 1: 1997 Annual Sales

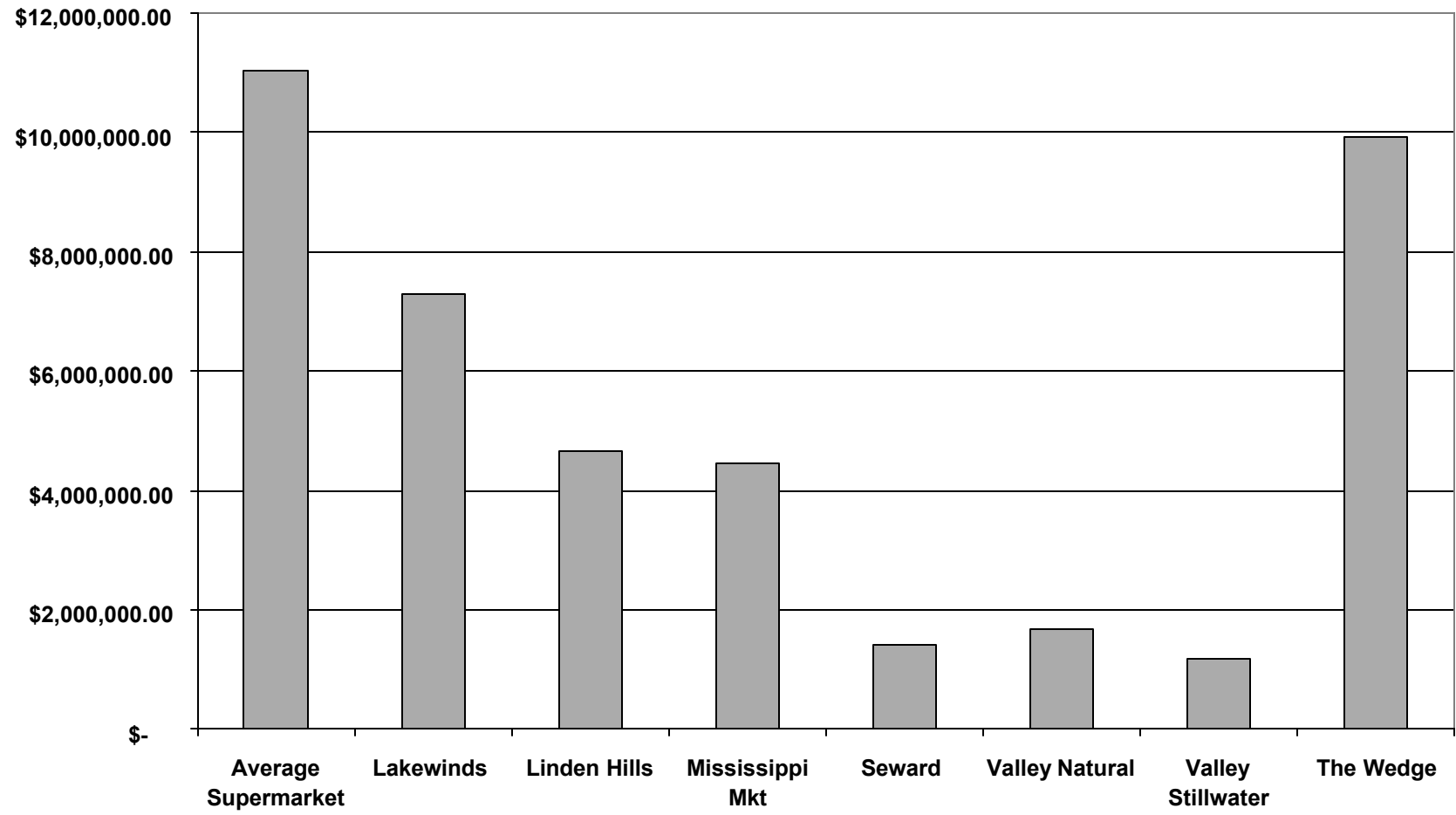


Figure 2: Percentage Increase in Net Sales, 1996-1997

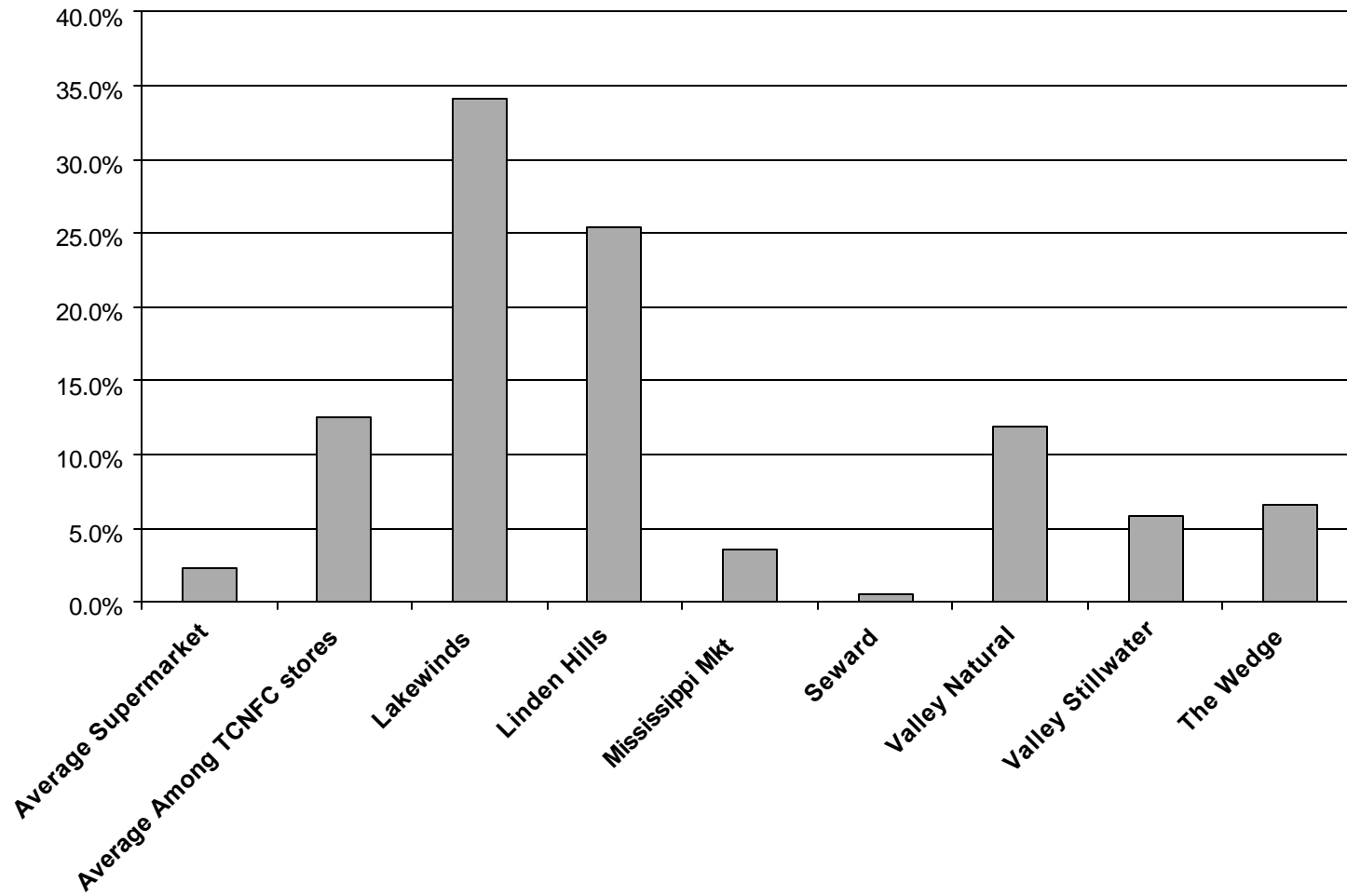
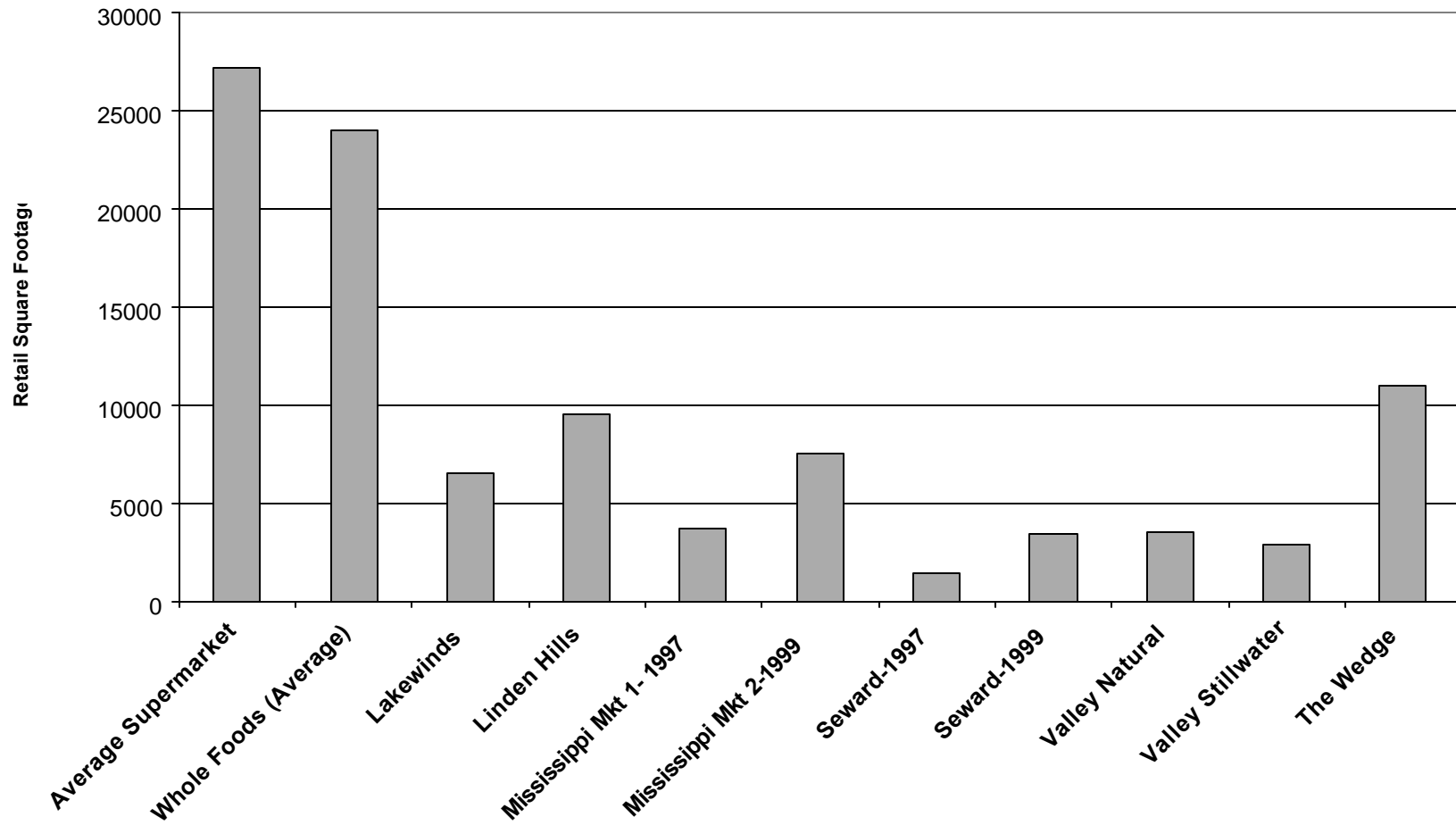


Figure 3
Size of Store in 1999
(in square feet)



Membership Comparisons

Comparison of Membership Base and Sales to Members:

Table 2 summarizes relevant information on membership from 1995 to 1997. Figure 4 shows how the number of members and percent of sales to members differed among the TCNFC stores in 1997. Some membership information, which was provided by the individual co-ops, is questionable. For example, it is unlikely that the percent of sales to members at Seward co-op remained constant at 41 percent in 1995, 1996, and 1997. It is also surprising that, at Linden Hills Co-op, the percent of sales to member rose nearly 48% from 1996 to 1997. This increase may have been the result of a concerted effort to increase membership after the store expanded, however, this would have been an exceptional expansion.

The Wedge, Lakewinds and Mississippi report the first, second and third largest number of members. For 1997, Mississippi Market reported the highest percent of sales to members at 62 percent, and Lakewinds reported the second highest percent of sales to members at 50 percent. On average, the percent of sales to members among the TCNFC has increased from 34 percent in 1995 to 47 percent in 1997.

Membership Costs and Benefits

Differences in the costs and benefits of membership at each co-op need to be considered when determining if, and how, to increase collaboration among the TCNFC stores. For example, if two or more co-ops decide to offer reciprocal benefits to other co-op members, they ought to

Table 2
Membership Related Information

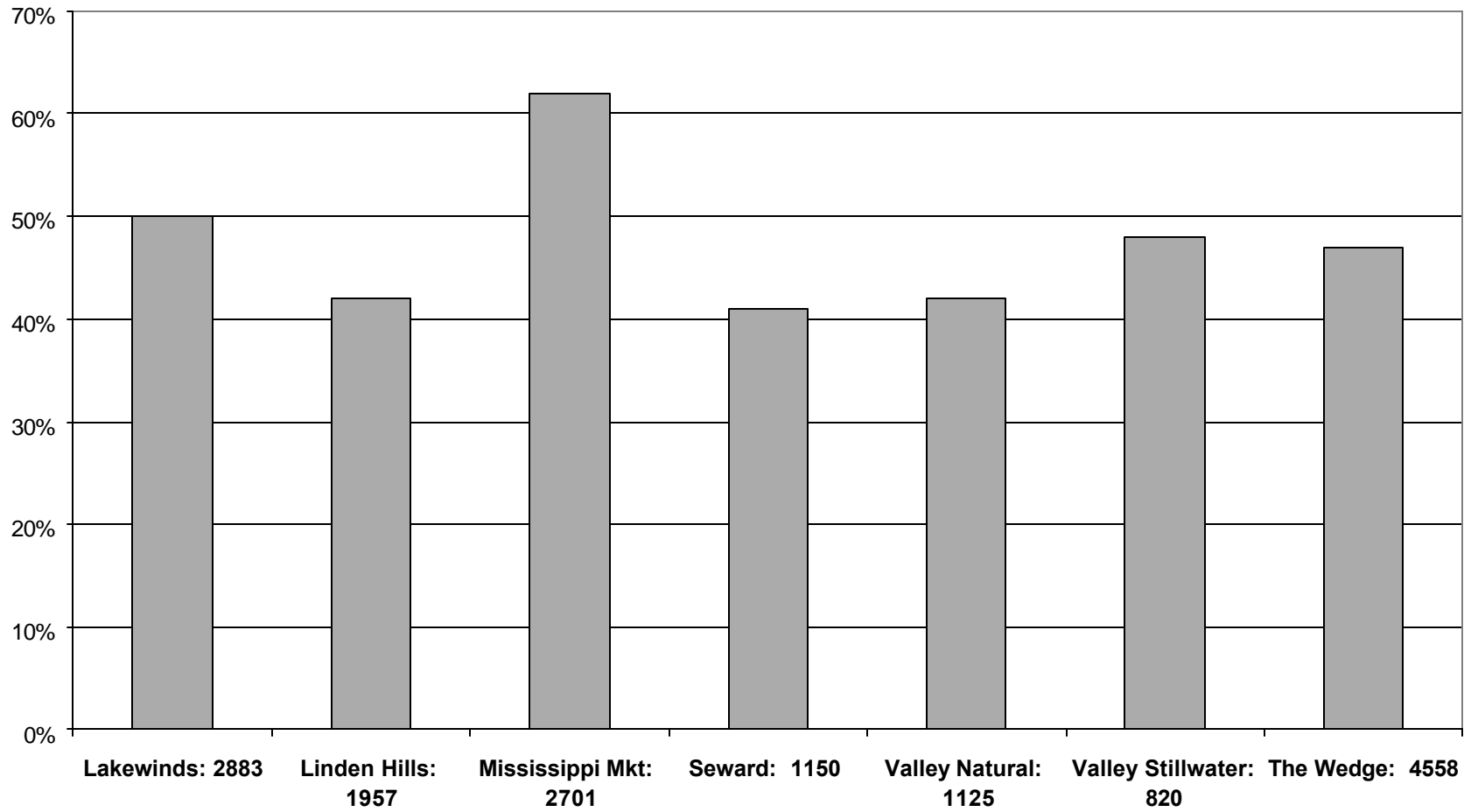
Percentage of sales to members							
	Lakewinds	Linden Hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	45%	*	48%	41%	32%	40%	35%
1996	46%	28%	50%	41%	38%	35%	44%
1997	50%	42%	32%	41%	42%	48%	47%

Number of Members							
	Lakewinds	Linden Hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	1143	1229	2390	*	661	600	2967
1996	1989	1689	2662	*	858	700	3630
1997	2883	1957	2701	*	1125	820	4558

Number of Members at meeting							
	Lakewinds	Linden Hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	*	*	175	60	50	70	42
1996	*	*	159	60	50	45	45
1997	98	100	175	60	56	20	40

Number of Members who voted							
	Lakewinds	Linden Hills	Mississippi Market	Seward	Valley Natural	Valley Stillwater	Wedge
1995	114	*	38	*	50	100	506
1996	*	*	43	*	50	90	469
1997	363	180	32	*	56	50	632

Figure 4
Percent of Sales to Members-1997



ensure that the cost and benefits at each co-op are compatible⁴. The current costs and benefits summarized in Table 3 suggest that reaching a consensus among these stores would not be too difficult. The cost of membership ranges from \$80 to \$100. All stores, except Seward, allow members to make membership payments in installments, although the cost of this payment plan differs from no fee to \$15. Other benefits are quite similar among the TCNFC co-ops. The most notable difference is that Linden Hills, Mississippi Market, and Valley Natural have an option of being a member worker, while the other four co-ops do not. Also, all the TCNFC stores except the Wedge and Valley Natural offer discounts to senior members. In terms of member benefits, this may be the most difficult difference upon which to reach a consensus.

In terms of short run profitability, smaller co-ops may be better able to retain more earnings, since they are not paying off any recent expansion efforts. These earnings may then be returned to members as patronage rebates if these co-ops opt not to expand. In contrast, the other five stores have all expanded within the past three years and carry larger debt while they pay off loans. Thus, they may not be able to offer much in terms of patronage rebates. This difference in patronage rebates could lead to strategic shopping behavior on the part of members if the co-ops decide to offer reciprocal benefits among TCNFC co-op members.

In addition to differences in the patronage rebates, the co-ops should consider discrepancies in the costs and benefits of membership at each co-op. As of 1997, the cost of membership was fairly similar at all co-ops. However, even slight differences may be enough to

⁴ Consider two co-ops 'A' and 'B.' They decide that being a member of 'A' would also mean that their members can receive member benefits at co-op B while co-op B members can receive benefits at co-op A. If it is less expensive to become a member at co-op B, then most members will sign up at Co-op B, and shop at co-op A or B. This reciprocity arrangement is not likely to benefit co-op A.

Table 3
Details of Membership

	Cost: 1 payment	Cost: with installments	Discount	Case Discount	Senior Discount	Patronage Rebate	Voting rights	Member Specials	Working Membership Option
Lakewinds	\$90	\$95 (3)	Not Set 5% 1X month	15%	5%	Yes	Yes	Yes	No
Linden Hills	\$60 individual \$80 hh	\$70 (2) \$90 (2)	\$50	No	10%	Yes	Yes	Yes	Yes
Mississippi Market	\$90	\$100 (4)	\$20	10%	9%	Yes	Yes	No	Yes
Seward	\$80	\$80	Not Set 10% 4X month	10%	5%	Yes	Yes	No	No
Valley Natural	\$100	\$110 (11)	Not set	10%	No	Yes	Yes	Yes	Yes
Valley Stillwater	\$80	\$90 (4)	\$20	15%	Yes	Yes	Yes	Yes	No
Wedge	\$80	\$80 (4)	\$45	10%	No	Yes	Yes	Yes	No

warrant strategic behavior on the part of new members if reciprocal benefits were to be offered at one or more of these co-ops. Similarly, differences in benefits, through the use of member coupons and senior discounts can also provide incentives for strategic behavior among members.

Customer Survey: Description

A survey was used to determine the characteristics and preferences of co-op shoppers. This survey was used to identify differences among members and non-members; as well as differences among customers of each of the TCNFC stores.

Process

To begin with, the survey was pre-tested using students at the University of Minnesota. It was then given to management and board members at each of the co-ops involved for review and comment. After that it was reviewed by the Director of The Food Industry Center, located at the University of Minnesota. This revised version was then given to twenty co-op shoppers. In mid September of 1997, the final revised survey was distributed on site to 400 shoppers at each of the seven Twin City co-ops (2,800 shoppers in total). A copy of this survey can be found in Appendix 1. At five of the stores, cashiers handed out the questionnaires to customers as they went through the check-out lanes. At the other two stores, customer service workers gave questionnaires to customers as they entered the store⁵. At all stores, distributors were asked to issue the survey during three specific time periods: Monday evening, Thursday afternoon and Saturday morning. This was done to determine if there were significant differences among customers who shop during the weekday, after work or on weekends. The surveys were coded to reflect the day and time of distribution.

⁵ Although it would have been relatively simple to mail the survey to members, or a random sample thereof, distributing the surveys in the store allowed for a sampling of non-members as well.

Attached to each survey was a pre-addressed, stamped envelope. Respondents were able to either mail back the completed questionnaires, or return them to the co-ops directly. In total, 978, or 35 percent, of the surveys distributed, were returned. The percent of surveys returned ranged from 15 to 51 percent among the co-ops. The break down of returned surveys by co-op is summarized in Table 4.

Table 4
Response Rate Among Participating Co-ops

Distribution Co-op	Number Returned	Response Rate
Lakewinds	191	48 %
Linden Hills	205	51 %
Mississippi Market	158	40 %
Seward Co-op	103	26 %
Valley Natural	88	22 %
Valley Stillwater	61	15 %
The Wedge	172	43 %
Total	978	35 %

Survey Instrument

The survey collected information on the following shopper characteristics:

- Membership status;
- Use of the co-ops (frequency of shopping trips, monthly expenditures and percent of food bill spent at the co-op);
- Primary co-op (the store in which the respondent does the most shopping and/or has a membership);
- The store at which the respondent received the questionnaire;
- Other Twin City cooperatives at which the respondents shop;

- Level of involvement within the co-op (stated voting history, and attendance at co-op meetings);
- Socioeconomic characteristics; age, income and zip code.

These customer characteristics were then linked to the co-op criteria that respondents identified as most important. The questionnaire asked respondents to assign a numerical value to the alternative pre-written responses, with a rank of 1 indicating lowest importance and a rank of 5 indicating highest importance. Specifically, the survey was designed to address the following questions:

1. What attributes encourage customers to shop at co-ops rather than mainstream grocery stores?

Possible responses were; product selection, location/convenience, favorable pricing, customer service, higher quality, availability of organic and natural foods, and other.

2. What attributes of the co-op are deemed to be most important to the customer?

Possible responses were; returns to membership, unique and diverse setting, direct member influence, competitiveness in terms of prices and products with other grocery stores, commitment to natural foods, and other.

3. What changes would customer like to see made at their co-ops?

Possible responses were; more member influence over co-op policy and development, ability to receive member benefits, increased selection of ready to eat foods, more convenient location, a larger store, no expansion, and other.

4. What motivates customers to become members?

Possible responses were; the benefit package, direct member influence, support of the co-op, education and nutrition, and other.

5. What would prompt non-members to join the co-op?

Possible responses were; a more convenient location, greater selection, the option of smaller payments on membership purchase, and the ability to use membership at more than one co-op, longer store hours, and more information on the benefits of membership, and other.

6. Would members like to have the option of using co-op benefits at other TCNFC stores and how often would members use this benefit?

7. Would the ability to use member benefits at other TCNFC stores prompt non-members to join the co-op?

8. Would a more convenient location of the co-op induce members to spend a higher percent of their food bill at the co-op?

9. Would a more convenient location of the co-op induce non-member to become co-op members?

For each question, the response for 'other' provided a space where the respondent could write in an alternative response.

Concerns

There are several disadvantages of an in-store mail back survey. First, only customers who currently use the co-ops are included in the sample. Another problem is that of self-selection. Respondents who choose to complete and return the survey may be more interested in their cooperative, incensed about some aspect of the store, have more time to complete the survey, or have some other motivation, which could bias the survey. To partially measure for the selectivity bias, a second survey was distributed. This survey was considerably shorter than the

extended survey. It was intended to take no more than two minutes to complete, so that customers could complete it while their groceries were rung up. This short survey consisted of five questions pertaining to membership status, age, gender, reason for shopping at co-ops and what co-op characteristics were deemed to be most important. Each store was given 100 of the short surveys to pass out to every customer who came through the cashier line until the surveys were gone.

Unfortunately, not all stores passed out all 100 surveys. In total, 398 short surveys were returned. After comparing the short and long surveys, it was found that the age of the respondents did not differ significantly between the two groups, using a five- percent level of significance. However, the percentage of members and women responding to the long survey were significantly higher than the percentage that responded to the short survey.

This suggests that there may have been some selectivity bias. It is not surprising that members were more likely to respond to the longer survey. Since they are part owners, they may feel more inclined or obligated to respond to a survey on their co-op. Since the short survey did not ask questions on household income or employment status, it is difficult to offer a good explanation as to why the percentage of women respondents was significantly higher on the longer survey.

To determine if this selectivity bias had a strong affect on the long survey results, the preference rankings and regression analysis were done with both weighted and unweighted data. The original data was weighted so that the portion of male and non-member respondents of the long survey matched what the 'true' portion of male and non-member customers, as indicated in

the short survey. The results between from the weighted and unweighted data are surprisingly similar. For that reason, the results in this paper are based solely on the unweighted data⁶.

Another disadvantage is that the respondent may interpret the question differently than had been anticipated. The intention of the pre-testing and revising stages was to identify such questions and rephrase them to make them as unambiguous as possible. However, after reviewing the completed questionnaires, it became apparent that some questions were still interpreted differently than expected. For example, some respondents took “distance traveled to the co-op” to mean how far they traveled one way to get to the store, while others reported it as a round trip distance.

A related concern is the limited range of responses included in the questionnaire. For example, one of the questions asked ‘Why do you shop at a co-op?’ In the space provided for ‘Other’, many respondents wrote in answers, such as the availability of bulk foods, the ability to use your own container, availability of pine-nuts, etc. Thus, it is possible that there were responses that were not specifically listed that would have influenced the respondents’ final rankings of the responses. To account for this, a tally was kept of responses that were written in. In every case, the selection marked ‘other’ received the lowest rankings.

A final concern relates to how the surveys were distributed. Because these surveys were to be handed out at the same times at each store, it was decided that the most feasible way to accomplish this was to have someone within the store manage the distribution of the surveys. Thus, the ultimate responsibility and oversight was directed by the member services coordinator on an essentially, voluntary basis, rather than the research project manager. This may have affected how the actual distribution times compared with intended distribution times.

⁶ See Mancino 2000 for the results with the weighted data.

Customer Survey: Results

Characteristics of Respondents

Respondents from all TCNFC Stores:

The summary statistics of shopper characteristics are reported in Table 5. For the entire data set, 55% of the respondents were members of a co-op while 45% were non-members. Thus, the percentage of respondents who were members is slightly higher than the percent of sales occurring to members. Seventy-eight and a half percent were women and 21.5% were men. The average respondent reported shopping at their co-op for 6.11 years. Among members, the average length of membership was 4.4 years. Seventy four percent of respondents said their primary co-op is closer to their home, nearly 15% said it is closer to where they work and the remaining 11% said the co-op is equally close to both work and home.

The average respondent shops weekly for 2.45 people and travels approximately 5 miles to the co-op. On average, respondents report spending about half their food bill at the co-op. Based on questionnaire data, the monthly food bill is nearly \$150 per household. Using alternative questionnaire data, monthly expenditures are estimated to be \$74 per person⁷ or an average food bill of \$148 per month per person. For the Twin Cities, the average mainstream grocery store shopper spends about \$132 per month (Food Institute, 1998, p. 17). This suggests that these respondents spend more than the average shopper does. The average respondent was just over 43 years old and had a mean household income between \$46,000 and \$60,000 per year.

Reported income levels of respondents differ widely among the co-ops. Only 1.9 percent of the respondents from Lakewinds reported a household income less than \$15, 000, while over

⁷ Per-household expenditures were estimated by the respondents themselves. The average resulted from summing over all respondents and dividing by the number of responses. The per-person estimates resulted from dividing the per household expenditures by the number of people for which the responded shops. This figure was then summed over all responses and divided by the number of responses.

Table 5
Characteristics of Respondents: All Shoppers

Characteristic	Mean	Standard Deviation
Length of Time Respondent was a Shopper (years)	6.1057	5.6132
Membership Status Member=1; 0 otherwise	0.5496	0.4978
Length of Time Respondent was a member (years)	2.3983	4.0605
Sum of TCNFC Stores Respondent Shops	1.8178	1.0090
Reported Distance Traveled to Shop (miles)	4.9180	8.5111
How Many People Respondent Shops for	2.4483	1.3427
Shopping Frequency*	3.0486	1.1748
Percent of Food Bill Spent at Primary Co-op (P.C)	0.4956	0.3174
Expenditures per month at P.C.	\$ 152.5675	\$ 140.6814
Amount per Person, per Month at P.C.	\$ 73.8633	\$ 69.8849
Expenditures per month at all TCNFCs	\$ 167.8893	\$ 152.5008
Amount per Person, per Month at all TCNFCs	\$ 81.4457	\$ 76.7579
Age	43.6552	11.8456
Gender	1.7862	0.4128
Household Income** (in thousands of dollars)	\$ 57.4793	\$ 33.0345

* Possible Responses

1-daily
2-a few times a week
3-weekly

4-semi-monthly
5-monthly
6-very infrequently

** Possible Responses

1: 0-15,000
2: 16,000-30,000
3: 31,000-45,000

4: 46,000-60,000
5: 61,000-75,000
6: 76,000-100,000
7: 100,000 and up

*** Possible Responses

1: male
2: female

36 percent reported an income more than \$100,000. In contrast, only 2.6 percent of the respondents from Seward reported such household incomes. This suggests that the distribution of income depends heavily on where the respondent is located: Lakewinds and Linden Hills are located in more affluent areas, while Seward, Mississippi Market and the Wedge are in less affluent, more urban areas.

Differences Among Respondents by Primary Co-op:

How the average characteristics differed among the seven TCNFC stores is summarized in Table 6. On average, respondents from Seward Co-op and Valley Stillwater reported having been co-op shoppers and co-op members for the longest period of time. The average respondent from the Wedge is slightly younger than the average respondent from the other six co-ops. Also, Wedge respondents reported spending the highest portion of their food bill at their primary co-op. Meanwhile, the average respondent from Lakewinds reported spending the most, in terms of dollars per month at their co-op. These shoppers also reported a higher mean household income of \$61,000-\$75,000 a year.

Another notable difference among the co-ops was that respondents, who said their primary co-op was one of the five stores located in Minneapolis or St. Paul, traveled less distance, on average, to shop. In contrast, the average shopper from Lakewinds and Valley Natural, which are located in outlying suburbs, reported traveling about eight miles to shop at these co-ops. This is not surprising, since there are more natural food co-ops in the Twin Cities and the neighborhoods are more densely populated.

Differences Among Respondents by Involvement in the Co-op:

One possible reason that the past consolidation attempt failed to pass was that the members who were more involved in the co-op were able to organize and become a vocal

Table 6
Characteristics of Respondents by Primary Co-op

	Lakewinds		Lindenhill's		Miss. Mkt		Seward		Valley Natural		Valley Stillwater		Wedge	
Characteristic	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Number of Years Respondent was a Shopper	4.60	24.70	6.50	5.84	6.44	5.04	7.20	6.51	6.41	5.77	7.53	6.19	5.73	5.5
Membership Status	0.56	0.50	0.49	0.50	0.61	0.49	0.57	0.51	0.50	0.50	0.56	0.50	0.59	0.4
Number of Years Respondent was a member	1.79	11.54	2.55	4.61	2.94	4.10	3.26	4.93	2.54	4.87	3.14	4.36	1.76	2.7
Sum of TCNFC Stores Respondent Shops	1.55	0.83	1.84	0.98	1.69	1.01	2.41	1.17	1.65	0.94	1.68	0.88	1.92	0.9
Reported Distance Traveled to Shop	7.94	156.79	2.45	3.34	4.05	9.44	1.63	1.89	8.39	8.08	5.56	6.18	4.52	7.7
How Many Respondent Shops for	2.75	1.62	2.31	1.26	2.42	1.49	2.23	1.18	2.93	1.36	2.68	1.44	2.14	1.7
Shopping Frequency*	3.08	1.17	2.90	1.09	3.21	1.27	2.74	1.06	3.69	1.19	3.29	1.39	2.79	1.0
Percent of Food Bill Spent at Primary Co-op (P.C)	50.4%	0.10	43.5%	0.31	49.6%	0.32	53.1%	0.28	33.9%	0.27	40.4%	0.33	62.9%	0.5
Expenditures per month at P.C.	\$ 195.42	30041.51	\$ 121.50	116.04	\$ 134.97	123.05	\$ 132.16	101.15	\$ 123.69	146.70	\$ 117.88	107.76	\$ 190.80	148.1
Amount per Person, per Month at P.C.	\$ 76.05	4965.21	\$ 62.72	60.60	\$ 67.54	62.93	\$ 66.67	47.01	\$ 51.18	58.41	\$ 58.34	70.55	\$ 106.82	86.0
Expenditures per month at all TCNFCs	\$ 212.11	33393.13	\$ 136.36	130.06	\$ 143.79	133.14	\$ 154.78	105.73	\$ 135.12	157.88	\$ 124.13	117.85	\$ 209.32	164.5
Amount per Person, per Month at all TCNFCs	\$ 82.52	5596.91	\$ 71.76	71.13	\$ 71.26	63.52	\$ 79.87	53.75	\$ 55.18	62.93	\$ 58.84	70.52	\$ 116.69	97.5
Age	46.81	120.58	42.92	11.57	43.95	13.38	41.29	11.94	46.15	10.94	45.86	11.08	40.03	11.5
Gender	1.82	0.15	1.76	0.43	1.82	0.39	1.73	0.45	1.87	0.34	1.84	0.37	1.73	0.4
Household Income** (in thousands of dollars)	\$ 76.58	32.89	\$ 62.09	34.19	\$ 52.72	32.14	\$ 42.20	23.25	\$ 55.84	22.66	\$ 53.89	30.38	\$ 49.59	30.6

* Possible Responses were
1-daily
2-a few times a week
3-weekly
4-semi-monthly
5-monthly
6-very infrequently

** Possible Responses were
1: 0-15,000
2: 16,000-30,000
3: 31,000-45,000
4: 46,000-60,000
5: 61,000-75,000
6: 76,000-100,000
7: 100,000 and up

*** Possible Responses were
1: male
2: female

minority. Therefore, before any one of these seven natural food co-ops considers organization changes, they need to evaluate how this portion of their membership base differs from the average member. Also, differences between members and more active members from Seward Co-op should be noted, since this co-op was the swing vote in the past.

Measures of a member's level of involvement were the response to questions regarding how often a respondent voted for the board of directors, and how often he or she attended the annual meeting. Whether or not a respondent had ever been a co-op employee also indicates an increased level of involvement in the co-op. Because some co-ops offer a working member option, while other co-ops simply have paid employees who may or may not be members, it was decided that employment would not be a valid indicator of involvement. Thus, from the questionnaire, those who reported that they either voted and, or attended the board meeting either frequently or every year were deemed to be active or involved. How member respondents answered these questions on voting behavior and meeting attendance is summarized in Table 7.

In total, the member respondents who were considered more active accounted for 60 of the 537 responding members. This implies that approximately 11% of co-op members are active. This figure is in line with numbers on voting and meeting turnout provided by each of the stores (Table 2). The distribution of these active members among the seven co-ops is summarized in Table 8. In short, Valley Stillwater and Seward Co-op had the largest portion of politically involved member. In contrast, respondents from the Wedge and Linden Hills were least involved.

How the average characteristics differed between 'active' members respondents and all member respondents is summarized in Table 9. In terms of differences significant at the five-percent level, member respondents reported shopping more frequently, yet active member

Table 7
How Members Responded to Questions on Involvement within their Co-op

	All Co-ops	Lakewinds	Lindenhills	Miss. Mkt.	Seward	Valley Natural	Valley Stillwater	Wedge
% of members who always or often attend the annual meeting	11.38%	16.04%	8.60%	5.10%	20.41%	15.91%	24.24%	4.58%
% of members who often or always vote for the Board of Directors	36.53%	33.02%	24.73%	32.65%	44.90%	20.46%	45.45%	35.78%

Table 8
Distribution of Respondents Who Were Considered Active in Their Co-op

Primary Co-op	Frequency
Lakewinds	15
Linden Hills	10
Mississippi Market	5
Seward Co-op	10
Valley Natural Co-op	7
Valley Stillwater	7
The Wedge	4
Total	60

Table 9
Characteristics of Respondents by Involvement in their Co-op

Members Active in Co-op Politics			Members who are Not Active in Co-op Politics			T-statistic
Characteristic	Mean	Standard Deviation	Characteristic	Mean	Standard Deviation	
Number of Years Respondent was a Shopper	8.96	6.74	Length of Time Respondent was a Shopper	5.97	5.29	0.7026
Number of Years Respondent was a member	7.44	6.75	Length of time Respondent was a member	3.61	4.04	1.3269
Sum of TCNFC Stores Respondent Shops+	2.15	1.09	Sum of TCNFC Stores Respondent Shops+	1.72	0.90	3.5134
Reported Distance Traveled to Shop	3.50	5.68	Reported Distance Traveled to Shop	4.39	7.79	-0.1129
How Many Respondent Shops for	2.73	1.30	How Many Respondent Shops for	2.56	1.40	0.6355
Shopping Frequency+	2.20	0.74	Shopping Frequency+	2.73	0.98	-4.1296
Percent of Food Bill Spent at Primary Co-op (P.C)+	77.1%	0.23	Percent of Food Bill Spent at Primary Co-op (P.C)+	57.1%	0.29	17.2503
Expenditures per month at P.C.	245.80	161.30	Expenditures per month at P.C.	191.59	150.90	0.0162
Amount per Person, per Month at P.C.	99.83	55.37	Amount per Person, per Month at P.C.	89.04	75.66	0.0141
Expenditures per month at all TCNFCs	274.04	171.29	Expenditures per month at all TCNFCs	206.25	159.09	0.0182
Amount per Person, per Month at all TCNFCs	111.42	68.59	Amount per Person, per Month at all TCNFCs	95.50	78.96	0.0184
Age	42.42	10.95	Age	43.52	11.21	-0.0630
Gender	1.77	0.43	Gender	1.79	0.40	-1.2048
Household Income** (in thousands of dollars)	49.70	32.05	Household Income** (in thousands of dollars)	60.13	34.90	-0.0001

+ Indicates that the difference in means is significant at the 5% level

* Possible Responses

1-daily
2-a few times a week
3-weekly

4-semi-monthly
5-monthly
6-very infrequently

** Possible Responses

1: 0-15,000
2: 16,000-30,000
3: 31,000-45,000

4: 46,000-60,000
5: 61,000-75,000
6: 76,000-100,000
7: 100,000 and up

*** Possible Responses

1: male
2: female

respondents reported spending a higher portion of their food bill at their primary co-op. More active member respondents also reported shopping at significantly more TCNFC stores. The survey indicates that individuals who are more actively involved in their co-op may also favor receiving member benefits at other Twin City area co-ops. This hypothesis is further supported by the fact that 95 percent of the more active member respondents said they would use their membership at other natural food co-ops if they could.

Preferences of Respondents

Respondents from all TCNFC Stores:

As described in the section on the customer survey, respondents were asked to answer questions that were aimed at determining shopper preferences. In answering the question; ‘how important were the following in making your decision to shop at a Natural Food co-op?’ the responses revealed that the availability of organic foods was ranked highest. Product selection and higher quality were ranked second and third respectively.

When asked what attributes of a co-op are deemed to be most important to the respondent, the top three selections were, in order, the availability of natural foods, competitiveness, and influence over co-op policies.

The ability to realize membership benefits at other co-ops received the highest ranking as a potential change that respondents would like to see at their primary co-op. A greater availability of ready to eat foods received the second highest rating and larger store size received the third highest rating.

Among the factors that prompted members to join the co-op, support of the co-op was the highest ranked response. Education and nutritional information was ranked second and giving support to community businesses was ranked third. The ability to use a membership at more

than one co-op was ranked highest among the possible responses that would induce non-members to join the co-op. The ability to make smaller payments on their membership was given the second highest rating. More information on the benefits of membership was ranked third.

Some conclusions can be drawn from these aggregate results. For one, the results suggest that, for marketing purposes, co-ops may want to focus on the fact that their stores carry a wide variety of high quality, organic and natural foods, at competitive prices, since respondents indicated that these are the reasons they shop at a co-op. Also, it is interesting to note that, unlike returns to membership and member influence, the top two ranked attributes are not specific to natural food co-ops. Many grocery stores can exhibit a commitment to natural foods. Moreover, volume discounts and other economies of scale may give large national chains, such as Whole Foods, an advantage if they can provide these items at a lower price. In terms of increasing membership, two of the highest ranked selections are easy to implement. The survey results suggest that by offering an option of making smaller per installment payments on membership and providing more information on the benefits of membership, non-members may be persuaded to join the co-op. In terms of changes that respondents would like to see at their co-op, increasing the selection of ready to eat foods also seems very tractable. Finally, given that the ability to realize member benefits at other co-ops was ranked highest as both a potential change and a change that would prompt non-members to join the co-op, such a benefit is likely to be well received by shoppers.

Preferences of Respondents by Primary Co-op:

In the section on the comparison of the TCNFC stores, it was show that there is a wide range in terms of store size, sales, services, and membership base. Therefore, it seemed plausible

that these stores may differ in their shoppers' preferences as well. To examine these differences, the responses to questions on respondent preferences were compared across co-ops. At all of the TCNFC co-ops, the top three selections always included availability of organics, product selection and product quality while convenience, competitive pricing, and customer service consistently received the three lowest rankings. At all co-ops except Valley Stillwater, respondents of each of the seven co-ops ranked organics as the primary reason they shop at a natural food co-op. At Valley Stillwater, the top ranked reason was product selection, followed by organics.

Another similarity among the TCNFC co-ops was the identical ranking of the top two selections for the important attributes of a natural food co-op. The availability of natural foods received the highest ranking and competitive prices were ranked second at each of the seven co-ops. Again, this indicates that, regardless of the size or location of the co-op, the two most important attributes to the respondent are not co-op specific. The attribute receiving the third highest ranking varied to some degree among the stores. At Linden Hills and the Wedge, a unique setting, which again is not co-op specific, received the third highest ranking. At Seward, Mississippi Market, Valley Natural and Valley Burnsville, member influence, which is an attribute specific to co-ops, was ranked third.

A notable difference among the stores is the relative ranking of the ability to receive member benefits at other co-ops as an important potential change. At Lakewinds, Linden Hills, Mississippi Market, Seward Co-op and the Wedge, this potential change was given the highest rating, while at Valley Stillwater and Valley Natural a larger store received the highest ranking. This is understandable, since these last two stores are small and located in outer ring suburbs. However, among non-members, save respondents from Lakewinds, the ability to use member

benefits at more than one co-op was ranked highest as a potential change that would induce non-members to join. Lakewinds is also located in an outer ring suburb.

A somewhat surprising finding, with regards to the most important changes to institute was the rank of an increased selection of ready to eat foods. At Lakewinds, Linden Hills, Mississippi Market and the Wedge, this option received the second highest ranking, even though at the time of the survey, these stores were already offering a wide variety of pre-made and made to order foods. In contrast, Seward, Valley Natural and Valley Stillwater gave this selection a relatively low ranking, even though these stores did not provide much in the way of ready-to-eat foods.

The degree to which respondents viewed a larger store as an important change, for the most part, varied with the size of the respondents' primary co-op at the time of the survey. Of the five stores in which this change was ranked among the top three responses, four were comparatively small at the time of the survey. Valley Natural and Valley Stillwater, which are still the two smallest co-ops in this study, have not revealed any plans to increase their store size in the near future. However, Seward Co-op has since expanded and Mississippi Market has opened a second store. It is interesting to note that, even though expansion was ranked high at Lakewinds, it was the second largest store at the time of the survey and had just expanded the previous year.

Popularity of City Wide Co-op Membership

The results of the rankings showed that, in aggregate, the ability to realize member benefits at other Twin City co-ops ranked highest as an important change. This ability was also ranked highest as a change that would induce non-members to join a co-op. Respondents from the four urban co-ops revealed similar preferences. Thus, it seems that offering this ability

would be well received. To verify this hypothesis, responses to three specific questions were looked at:

1. The percentage of respondents who ranked the ability to use a city wide membership as one of the two most important changes;
2. The percentage of members who said they would use a city wide co-op membership and;
3. The percentage of non-members who said they would join if they could realize member benefits at other co-ops.

Table 10 shows the responses to these questions in aggregate and by co-op. This table shows that, again, respondents from urban co-ops are more likely to use a city-wide co-op membership. On the whole, 45% of respondents ranked a city-wide co-op benefit as one of the top two most important changes. Nearly 60% of the respondents from Seward Co-op and the Wedge ranked this change in the top two. In comparison, less than 40% of respondents from Lakewinds, Valley Natural and Valley Stillwater viewed this as one of the top two most important changes.

Seventy-percent of respondents who were members said they would use their membership at other Twin City co-ops. On average, they estimated they would do so on a monthly basis. Forty-seven percent of non-members said they would join the co-op if they could realize member benefits at other co-ops. Again, this percent was highest at Seward Co-op and the Wedge (78% and 57% respectively). This percentage was less than 40% at Lakewinds, Valley Natural and Valley Stillwater.

Using a five percent level of significance, member respondents who indicated they would use a city-wide membership also indicated they shopped at significantly more natural food co-ops (sum of TCNFC stores), spent a significantly higher portion of their food bill at their primary

Table 10
How Respondents Answered Questions on the Possibility of a City Wide Membership

	All Co-ops	Lakewinds	Lindenhills	Miss. Mkt.	Seward	Valley Natural	Valley Stillwater	Wedge
% of respondents who said the ability to use their benefit at other TCNFC stores would be an important change	44.98%	36.32%	43.62%	42.24%	59.30%	32.95%	35.59%	60.22%
% of members who said they would use a TCNFC benefit	79.48%	77.36%	79.57%	67.35%	93.88%	81.82%	84.85%	82.57%
% of nonmembers who said the ability to use a membership at other TCNFC stores would prompt them to join	46.79%	28.40%	50.00%	39.68%	78.38%	36.36%	34.62%	57.14%

co-op, and were more likely to be women. Similarly, non-member respondents who indicated that they would join if such a benefit were offered also indicated that they shopped at significantly more natural food co-ops and spent a significantly higher portion of their food bill at their primary co-op. This implies that the co-ops could increase the percentage of sales to members by attracting these shoppers.

Zip Code Analysis

By Home Zip Code

Upon request of the co-ops, the survey asked respondents their home and work zip codes. This was done to get an idea of where customers are located. The first analysis was done to see if there is an overlap in a respondent's home zip code and his or her reported primary co-op. In other words, two different co-ops may both have members in once zip-code and is likely the case for Linden Hills, the Wedge and Seward Co-op.

A surprising finding was that that none of the respondents who reported Valley Natural as their primary co-op indicated that their home zip code was near that co-op. Instead, a large portion of these respondents indicated that their home was actually closer to Seward, Mississippi Market, or Linden Hills. This may be the result of two factors; that some of the respondents from Valley Natural did not provide a home zip code and those who did work, rather than live, near this co-op.

One conclusion that can be drawn from this analysis is that in urban areas respondents may be more interested in receiving member benefits at other near by co-ops. The section on respondents' preferences also revealed that respondents from urban co-ops were very interested in receiving such benefits.

By Work Zip Code

A question that this map raises is why such a large portion of members from Lakewinds, Valley Natural and Valley Stillwater said they would use a city-wide membership. One reason may be that these respondents work near other natural food co-ops. Analysis of work zip codes and primary co-ops was done to check this hypothesis. From this, it was found that although many respondents from Lakewinds listed a work zip code near the co-op, a large portion of members listed zip codes closer to Downtown Minneapolis. Also, many respondents from Linden Hills and the Wedge also reported a work zip code near Downtown Minneapolis.

A few respondents from Stillwater indicated that they worked near St. Paul, but no respondents from any other of the co-ops indicated that they worked near Stillwater. This suggests that reciprocal benefits between Valley Stillwater and another co-op may be one sided, in that members from other co-ops may not have occasion to shop in Stillwater. In contrast, given that practically none of the respondents from Valley Natural indicated that they lived near Burnsville, yet many gave a work zip code in this area, a case can be made for offering reciprocal member benefits between this co-op and one or more urban co-ops. Especially since respondents from the Wedge, Mississippi Market, Seward, and Lakewinds all indicated work zip codes near Valley Natural.

Implications of Zip Code Analysis

Zip code analysis provides a snapshot of where respondents live and where they travel for work. From this, the following conclusions can be made:

- In the urban area, there is a lot of overlap between where a respondent lives and his or her primary co-op. This suggests that shoppers from the Wedge, Seward, Mississippi Market, and Linden Hills would be interested in receiving reciprocal benefits at these co-ops.

- Respondents' work zip codes show some movement from the suburbs to more urban areas.

This suggests that some shoppers from suburban co-ops would also be interested in receiving benefits at some of the urban co-ops.

- Some respondents from the urban co-ops also reported a work zip code near Valley Natural and Lakewinds. Because of this, it is likely that some urban shoppers would want reciprocal benefits at a suburban co-op.

- All co-ops had some respondents who reported a Downtown Minneapolis work zip code.

Demand for a co-op in this area may warrant further investigation.

Regression Analysis

Model Description

Simply looking at how respondents ranked the various survey choices gives an idea of the relationship between characteristics and preferences, but it is a blunt approach. It quickly becomes difficult to determine precisely which characteristic is associated with a specific preference. Multivariate regression analysis, on the other hand, provides the means to assess the marginal effect of a single characteristic.

The economic theory behind the regression models employed in this study is related to the Lancaster model of economics. This model assumes that individuals gain utility from the characteristics of a good or service, rather than the good or service itself. In this study, it is assumed that individuals decide to shop at a co-op, not simply because it is a co-op, but because of the store's characteristics, such as location, selection, customer service, and prices. In turn, these characteristics provide an individual with a certain amount of utility. However, since it is not possible to measure utility directly, responses to specific survey questions were used to

indicate whether a respondent receives utility from a store characteristic. For example, a respondent who indicated that she was a member of a co-op was assumed to have a higher level of utility with, rather than without, co-op membership. In all cases, binary categorical variables were used as indicators. Because of this, ordinary least squares regressions on these dependent variables would have yielded inconsistent estimates. To correct for this problem, the probit estimation model was used. Because the survey sample only included individuals who were actually shopping in one of the co-ops, all regression results are conditional on an individual being a co-op shopper.

In all the regressions in this study, it was assumed that shoppers' preferences are a function of their use of the co-op, the location of the co-op and socio-demographic factors. Tables 11-14 summarize the results of regressions that used data from all respondents. The top panel of Table 14 summarizes regressions that used data from member respondents, while the bottom panel summarizes regressions that used data from non-member respondents. The independent variables that are significant and positive are indicated with a ++ or +, depending on whether they were significant at the 1% or 5% levels. Variables that are significant and negative are marked with a '--' or '-'.⁸

⁸ See Mancino, 2000 for a detailed account of the regression analysis, regression coefficients and standard errors.

Table 11
Factors that Encourage Shopping at a Co-op

	Question:					
	Which of the following were most important in making your decision to shop at a natural food co-op?					
Independent Variable	Dependent Variable:					
	Product Selection	Convenience Location	Favorable Pricing	Customer Service	Product Quality	Availability of Organics
Intercept						
Years respondent has been a shopper						
Membership Status-Nonmember	++			-	-	--
Co-op Closer to-work						+
Co-op Closer to-home						
Distance traveled to reach co-op	-					
amount spent per person at primary co-op	--		--			++
ever been a co-op worker-no					-	+
shopping frequency						
age						
gender-male	++		-			--
household income	++	--	-		++	

++' or '--' Indicates the coefficient is estimated to be significantly positive or negative at the 1% level

+' or '-' Indicates the coefficient is estimated to be significantly positive or negative at the 5% level

Table 12

Factors Associated with Respondents Preferring Specific Store Attributes

Question: Which of the following are the most important characteristics of a natural food co-op?

Independent Variable	Dependent Variable				
	Returns to membership	Unique setting	Direct member influence	Competitiveness	Availability of natural foods
Intercept					
# of years Respondent has been a shopper					
Membership Status-Nonmember	--			++	
Co-op Closer to-work					
Co-op Closer to-home					
Distance traveled to reach co-op	+				
amount spent per person at primary co-op				--	+
ever been a co-op worker-no			--	++	
shopping frequency					
age		--			
gender-male		--		--	

Question: Which of the following changes would you most like to see made at your co-op?

Independent Variable	Dependent Variable					
	Increased member influence	Reciprocal member benefits at other TCNFCs	More ready to eat foods	Location	Larger store	No expansion
Intercept						
# of years Respondent has been a shopper						
Membership Status-Nonmember		--				
Co-op Closer to-work		+				
Co-op Closer to-home						
Distance traveled to reach co-op						
amount spent per person at primary co-op						
ever been a co-op worker-no	--	--			+	
shopping frequency			-		--	
age						
gender-male						
household income	--	++	+			

++' or '--' Indicates the coefficient is estimated to be significantly positive or negative at the 1% level.

+' or '-' Indicates the coefficient is estimated to be significantly positive or negative at the 5% level.

Table 13
Factors Associated with a Higher Likelihood of Co-op Membership

	Dependent Variable
Independent Variable	Membership status
Intercept	
Amount Spent per person at primary co-op	++
Sum of TCNFC stores	-
Distance traveled to shop at co-op	
length of time respondent has been a shopper	+
pc: lakewinds	
pc:linden hills	
pc: mississippi market	-
pc: seward	
pc: valley burnsville	
pc: valley stillwater	
pc: wedge	
# of people for which respondent shops	++
Shopping Frequency	--
Importance of influence	++
age	
gender	
male	
hh.income	

++' or '--' Indicates the coefficient is estimated to be significantly positive or negative at the 1% level

+' or '- ' Indicates the coefficient is estimated to be significantly positive or negative at the 5% level

Table 14
Factors that are Associated with Preferring Specific Membership Attributes

Question: Which of the following were most important when deciding to become a member?

Dependent Variable					
Independent Variable	Benefits	Community Support	Direct member influence	Support the co-op	Education and nutrition
Intercept					
# of years respondent has been a shopper				+	--
Co-op Closer to-work					
Co-op Closer to-home		+			
Distance traveled to reach co-op					
amount spent/ person at primary co-op					
ever been a co-op worker-no	-				
shopping frequency		--			
Annual meeting attendance	-				
Past board voting					
Would you use a TCNFC benefit-no					
Age		--			+
Gender-Male					
Household income				+	

Question: Which of the following would be most important in getting you to become a member?

Dependent Variable						
Independent Variable	Location	Selection	Smaller payments	TCNFC benefits	Longer hours	More information
Intercept						
# of years respondent has been a shopper						
Co-op Closer to-work						
Co-op Closer to-home				+		
Distance traveled to reach co-op						
amount spent per person at primary co-op						
ever been a co-op worker-no						+
shopping frequency	++					
Would you join if TCNFC benefit-no	+			--		
Join if Closer-no	--	--				
age				+	--	
gender-male						
household income						++

++ or '--' Indicates the coefficient is estimated to be significantly positive or negative at the 1% level

+ or '-' Indicates the coefficient is estimated to be significantly positive or negative at the 5% level

Regression Results

Based on findings that were significant at a 5% level or less, the following conclusions can be drawn about the effects of a shopper's characteristic on his or her preferences;

The effects of Co-op Use:

Membership Status:

- Non-members gave greater importance to both product selection and product quality.
- Non-members were more likely to report price competitiveness as an important attribute.
- Non-members were significantly more likely to view a more convenient location as a change that would induce them to become members.
- Members were more likely to give greater importance to customer service and the availability of organics.
- As expected, members were more likely to report returns to membership as an important attribute of a natural food co-op.
- Members were more likely to view the ability to use member benefits at other co-ops as an important change at their co-op.
- For members, the length of time one reported being a co-op shopper was positively and significantly related to importance of supporting the co-op, while negatively related to the importance of education and nutrition information.

Per Person Expenditures:

- As the amount of money per person spent at one's primary co-op increased, product selection and competitive pricing became less important in influencing one to shop at a co-op, while the availability of organics became more important.

- As per person expenditures rose, competitiveness in terms of prices and products was less likely to be ranked as an important attribute of a co-op. As mentioned earlier, as household income increases, this attribute becomes less important.
- The likelihood that a respondent was a member increased with per person expenditures.

Shopping Frequency:

- As shopping frequency increased, member respondents were more likely to give ‘support of the community’ as an important reason for joining the co-op.
- Those who indicated that they were frequent shoppers were also more likely to rank an increased selection of ready to eat foods and a larger store as important changes.
- Frequent shoppers were more likely to be members.
- Infrequent shoppers were more likely to view a more convenient location as an important change that could be made at their co-op. Also, non-member respondents who shopped infrequently were more likely to indicate that a more convenient location would be an important factor in prompting them to join. These two findings suggest that making the location of the co-op more convenient to some shoppers would increase both shopping frequency and membership.

Annual Meeting Attendance:

- There was a negative relationship between annual meeting attendance and the importance of the benefit package. This may be because members who attend the meeting are more concerned with member influence, rather than returns. Or, it may be that, by attending the annual meetings, member-owners gain a better understanding of the opportunity costs of increasing benefits.

History of co-op employment (volunteer or paid):

- Respondents who had been an employee or working member were less likely to value customer service, while more likely to favor direct member influence.
- Those who had been an employee were also less likely to give product quality as an important reason for shopping at a co-op.
- As for desired changes, workers were more likely to give more influence over co-op policies and the ability to use member benefits at other co-ops high rankings.
- For non-members, respondents who had never been workers were more likely to report that more information on the benefits of membership may persuade them to become members. This is not surprising, since workers are more likely to know the policy on the costs and benefits of membership.

The effects of Co-op Location:

- Respondents who indicated their co-op was closer to their workplace were likely to rate the availability of organic foods as an important factor in getting them to shop at a co-op.
- Respondents whose primary co-op was closer to work were also more likely to want to use member benefits at other co-ops. A reason for this may be that there is another TCNFC store close to their home that they shop at as well. Being able to realize benefits at both stores would be a desirable change.
- Respondents who said their primary co-op was closer to work were less likely to indicate that community support was an important reason in becoming a member.
- As expected, as the distance traveled to shop at the co-op increased, how highly a respondent rated convenience and location decreased.

- Also, respondents who indicated their co-op was closer to work were more likely to view returns to membership as an important attribute. It may be that, either returns provide the incentive for at work shoppers to frequent the co-op, or those who frequent the co-op from work would like to be compensated for their time via returns.
- Not surprisingly, respondents who reported their co-op was closer to work, and those who indicated that they traveled farther to shop at their co-op were more likely to view a more convenient location as a change they would like to see made at their co-op.
- Respondents who reported traveling less distance to shop at their co-op were also more likely to view 'no expansion' as an important change that could be made at their co-op.

The effects of socio-demographic variables:

Household Income:

- Household income was positively and significantly related to how highly a respondent valued product selection, product quality, and availability of ready to eat foods.
- Respondents with higher incomes were more likely to give 'support of the co-op' as an important factor in prompting them to join the co-op.
- Respondents who had had higher household incomes and were non-members were more likely to report that more information on the benefits of membership may persuade them to become members.
- The importance of convenience, favorable pricing, returns to membership, and the ability to receive benefits at other co-ops were significantly and negatively related to a respondent's reported household income. As the reported household income decreases, cost and price factors become more important.

Age:

- A unique and diverse setting became a less important co-op attribute as the age of the respondent increased.
- Older respondents were less likely to view a more convenient location as an important change that could be made at their co-op.
- Older respondents were more likely to report that education and nutrition information were important in making their decision to become members.

Gender:

- Male respondents were more likely to give product selection and a unique setting high rankings, for, respectively, why they shop at a co-op and what attributes are important for a co-op
- Women were more likely to give greater importance to the availability of organics as a reason for shopping at the co-op and competitiveness as an important attribute of a co-op.

Regression Implications

The regression results show that members are more likely to shop more frequently and spend more per person than non-members. They are also more likely to place greater importance on co-op specific attributes, and are thus less likely to switch to other providers of natural foods. These findings suggest that the TCNFC stores should focus on increasing membership. This analysis also suggests that increasing information on the benefits of membership and offering reciprocal member benefits at the TCNFC stores are two possible methods to accomplish this goal.

Conclusion-Recommendations for the TCNFC Stores:

Framework Used to Make Recommendations

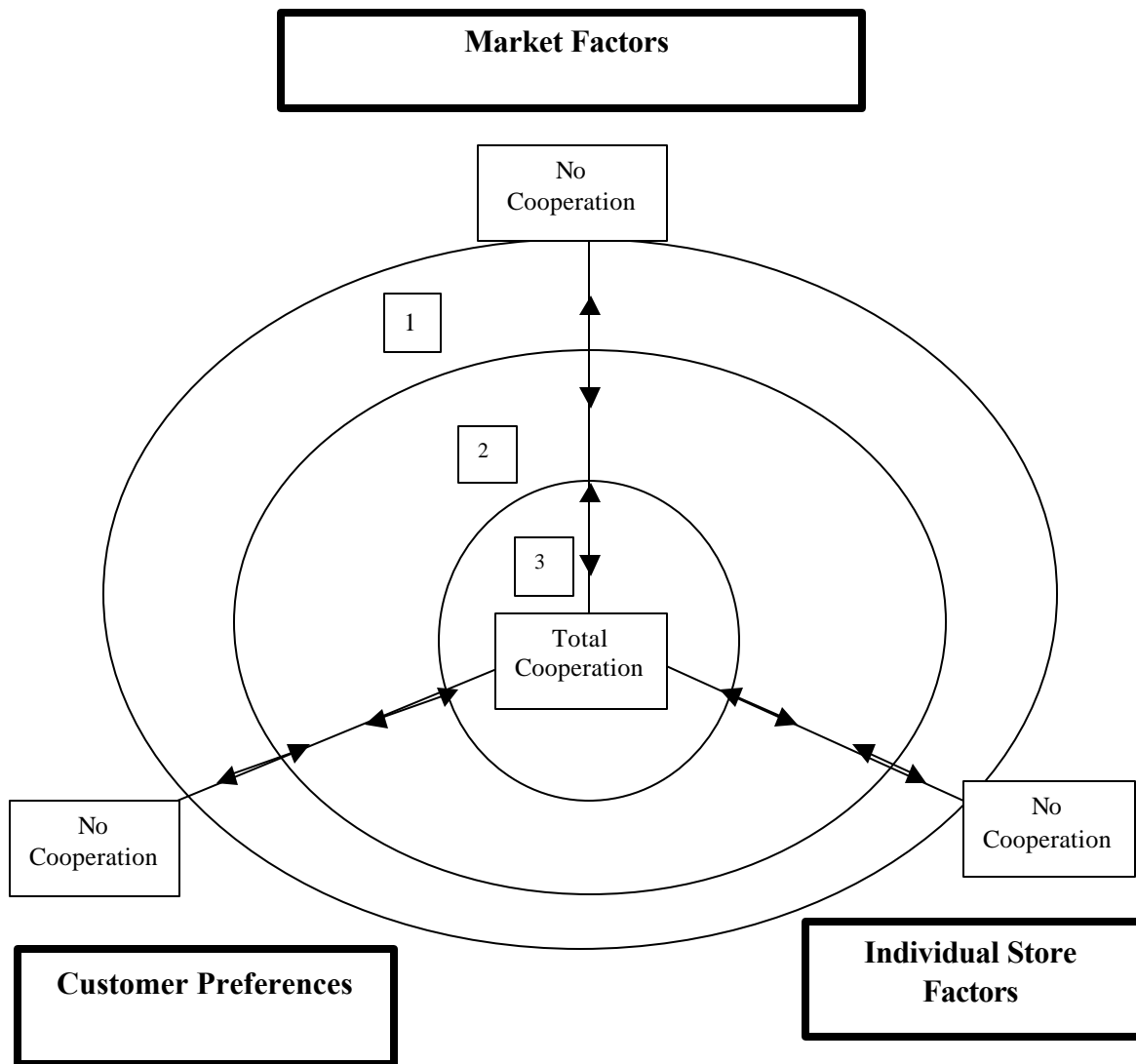
The model employed in this study looks at how market factors, preferences and characteristics of co-op shoppers, and the similarities and differences among the co-ops involved affect the optimal level of interaction among co-ops considering reorganization. This interaction can range from absolutely no co-operation (single independent co-ops), to some co-operation (joint ventures or federated co-op), to total co-operation (multi-store, centralized co-op). Using Figure 5, a combination of market forces, customer preferences, and store factors that fall within 'Region One' would indicate that it would be optimal for stores to form as independent co-ops. A combination that falls in 'Region Two' or 'Three' would indicate that it would be optimal to form a federated or centralized co-op.

Using this framework, the 'Market Forces' axis can indicate possible changes in revenue or costs from integration. In general, market trends are moving natural food co-ops to the center along the vertical axis towards total cooperation because bargaining power, economies of scope, and economies of scale are becoming more important for small natural food stores. In the U.S., the demand for natural foods (1) has been growing steadily over the past decades. Within the past seven years, this industry has reported average growth rates of 20-25 percent per year. In comparison, the conventional food market has increased three to five percent annually. Analysts predict that if these growth rates persist, the natural foods market may account for 6.6 percent of the total retail market by the year 2007 (Richman, 1999). Although this increased demand has led to increased sales at natural food co-ops, it has also led to increased interest from mainstream grocery stores. The entry of national chain, investor owned, natural food stores, such as Whole Foods and Wild Oats also pose a competitive threat to the viability of natural food cooperatives.

These stores are targeting cooperative shoppers. They are similar to natural food co-ops in their appearance, product selection and services, yet they are structured as an investor owned firm. Currently, Whole Foods accounts for 12 percent of the national natural foods market. It has a total of 100 stores in 2000 and plans to have 140 by the year 2003. Another method of expansion employed by large chain natural food stores is to tap into new markets by acquiring smaller existing natural food stores. In 1998 alone, Wild Oats acquired four existing natural food retailers (Food Institute, 1999 p. 546).

In terms of 'Customer Preferences', certain aspects of shopper characteristics and preferences are influential in choosing among organizational alternatives. This axis can be used to evaluate whether or not members and customers will support integration. For example, why customers shop at a co-op, what attributes of a co-op they value most, where they live, where they work, and the degree to which they shop at other natural food co-ops all impact the optimal level of collaboration among co-ops. Using this framework, a membership base that is greatly concerned with member influence, and largely unable to take advantage of benefits at other co-ops would be far from the center along the 'Customer Preferences' axis and would not warrant a high level of collaboration among co-ops.

Figure 5 Continuum of Factors that Influence the Level of Cooperation Among Co-ops



1 Range over which the interaction of market forces, customer preferences and individual store considerations leads to single independent co-ops being the optimal organizational structure.

2 Range over which increasing level of joint ventures and, or forming as a federated co-ops is optimal.

3 Range over which a multi-store centralized co-ops is the optimal organizational structure.

Along the 'Individual Stores' axis, differences among individual stores in terms of the volume of sales, profitability, member benefits, and the goods and services provided at the store can all influence the organizational options available to these stores as a group. This axis can be used to get an idea of the costs of and obstacles to integration. For example, smaller co-ops could be hesitant about joining a coalition comprised of large co-ops for fear of relatively weak bargaining power. A coalition of co-ops that has a wide distribution of individual store profitability could be unstable if more profitable co-ops feel they subsidize the less profitable. Also, difference in membership costs, membership benefits, and patronage rebates could lead to strategic shopping behavior on the part of members if the co-ops decide to increase the level of inter-cooperative collaboration.

Application of Framework to Twin City Natural Food Co-ops (TCNFCs)

Market Forces: Market trends in the Twin Cities mirror the national trends described above. In the past four years, Whole Foods has opened two stores; one in Minneapolis and one in St. Paul. Most of the large mainstream grocery stores carry organic products and some even have sections devoted to natural foods. A survey conducted at two different Twin City co-ops showed that their largest competitor was not other cooperatives, but rather larger chain groceries (Brunn, 1996). Recently, many of these large chain stores merged or consolidated, thus making it more difficult for small single store cooperatives to remain competitive.

In short, market factors in the Twin Cities are moving the co-ops to be more concerned with their market share and bargaining power to obtain volume discounts and other economies of scale. In turn, this suggests a greater need for co-operation among the co-ops. When just considering market forces without regard to store differences or customer preferences, the optimal organizational structure is a multi-store, centralized co-op, which entails total

cooperation among the stores. It should be noted, however, that market forces might not be affecting all the TCNFC co-ops equally. Currently, Whole Foods has only targeted the urban area of the Twin Cities.

Using Figure 5, a coalition of urban co-ops would be fairly close to the center on the 'Market Factors' axis. This suggests that a multi-store, centralized co-op would be the optimal structure (Region 3). Considering a coalition of all TCNFC co-ops together would diminish the forces moving the coop towards total co-operation but would still be within the zone that warrants a multi-store co-op.

Customer Characteristics and Preferences: The following aspects of customer characteristics and preferences influence organizational options; why customers shop at a co-op, what attributes of a co-op they value most, where the customers live, where they work, and the degree to which they shop at other natural food co-ops. The key findings of the customer survey revealed that at all seven stores, the top three reasons for shopping at a natural food co-op always included the availability of natural foods, product selection, and higher quality. Also, no large differences in the characteristics of survey respondents were found when respondents were differentiated by their primary co-op. Thus, the survey results suggest co-op shoppers are, on average, fairly homogenous in terms of their characteristics and reasons for shopping at a co-op. This implies that marketing to all co-op shoppers together, as opposed to each individual co-op marketing to their own customer base, would be both feasible and more efficient. Relating these findings to Figure 5, this aspect of customer preferences would suggest an increased level of cooperation among the co-ops.

The survey results also show that the highest ranked attributes overall were a commitment to natural foods and competitive prices. These top ranked attributes of a co-op are

not specific to natural food co-ops. This suggests that customer preferences may accentuate the market forces discussed above, since many grocery stores can exhibit a commitment to natural foods, and larger stores can do so at more competitive prices. Thus, as shoppers place higher value on attributes that are not specific to co-ops, the individual co-ops become more vulnerable to market forces, such as increased competition from mainstream grocery stores.

There is additional evidence that, along the customer preferences axis, forces are moving the co-ops toward the center. For one, the ability to realize member benefits at other co-ops was ranked highest as both a potential change and a change that would prompt non-members to join the co-op. Also, the zip code analysis shows a considerable number of respondents live near one co-op and work near another. This is especially the case among the respondents from the urban co-ops. This may explain why the ability to receive member benefits at other co-ops was viewed as the most important potential change among urban respondents.

However, respondents from the suburban co-ops, Valley Natural and Valley Stillwater, did not rank this change as highly. Non-members from Lakewinds, another suburban co-op, did not give joint membership the highest ranking as an incentive to join the co-op. This difference in preferences between urban and suburban respondents is replicated by comparing the characteristics of shoppers by primary co-op. The average number of natural food co-ops shopped at is greatest among respondent from urban co-ops: Linden Hills; Mississippi Market; Seward; and the Wedge. Again, this suggests that the forces leading to increased cooperation among the co-ops have different intensities at urban and suburban co-ops.

There are other factors identified in respondent preferences that suggest a limit to the degree of cooperation among the co-ops. Direct member influence ranked third among important co-op attributes. As a potential change, members ranked more member influence

significantly higher than non-members did. These findings suggest that, respondents do identify member influence as an important attribute. If one of the major disadvantages of a multi-store, centralized co-op is that members do not feel a strong sense of ownership and influence, these revealed preferences may imply that total cooperation among the stores may not be optimal.

To summarize, the results of the customer survey and zip code analysis suggest that, along the 'customer preferences' axis, a coalition of urban co-ops would again be closest to the center, but most likely within the region where a federated co-op would be the optimal structure (Region 2). A coalition of all seven TCNFC co-ops would be a little to the left of an urban coalition, but still within the zone that would warrant a federated co-op. A coalition of only suburban co-ops would be the farthest from the center, such that their optimal policy may be to remain as single independent co-ops.

Store Differences: The comparison of stores from Chapter III showed that there appears to be two distinct categories of co-ops; those with relatively high sales and those with relatively low sales. The five high-sales co-ops are also more similar in terms of the services offered at the stores; a deli counter, a coffee area, an ATM machine, etc. The lower sales co-ops provide relatively fewer services. A potential problem that could inhibit cooperation among all these co-ops is that relatively larger co-ops may have more bargaining power than smaller stores.

In terms of short run profitability, the smaller co-ops may be better able to retain more earnings, since they are not paying off any recent expansion efforts. These earnings may then be returned to members as patronage rebates if these co-ops opt not to expand. The larger stores have expanded within the past three years and carry larger debt. While they pay off loans, they may not be able to offer much in terms of patronage rebates. Large differences in patronage

rebates could lead to strategic shopping behavior on the part of members if the co-ops decide to offer reciprocal benefits.

Besides differences in the patronage rebate, the co-ops must consider discrepancies in the costs and benefits of membership at each co-op. As of 1997, the cost of membership was fairly similar at all co-ops. However, even slight differences may be enough to warrant strategic behavior on the part of new members if reciprocal benefits were to be offered at one or more of these co-ops. Similarly, differences in benefits, through the use of member coupons and senior discounts can also provide incentives for strategic behavior among members. With little effort, however, the costs and benefits of membership could be made more uniform. Using Figure 5, the current coalition of all TCNFC co-ops lies somewhere within the region of a federated co-op (Region 2). Since the scope of the TCNFC Co-op is still limited and the returns to membership varies among the co-ops, the current location within Region 2 is closer to Region 1 than Region 3.

In summary, the study results show that both shopper preferences and market factors are moving the co-ops to increase cooperation. In the conceptual framework used here, the individual store differences are the only endogenous, controllable variable. Thus, the individual stores should make adjustments to better accommodate these factors. An effective way to do this is to increase the services provided by the already loosely federated TCNFC co-op. The remainder of this study will discuss specific areas in which the TCNFC can move the individual co-ops along this continuum by reducing store differences, while also taking account of market factors and customer preferences.

Ways to Increase Services Provided by the TCNFC Co-op

Increase the use of the TCNFC Co-op to provide more services at lower costs:

Market factors and shopper preferences suggest that one objective of expanding the scope of the TCNFC Co-op should be to increase the bargaining power of the member co-ops. This is currently done on a limited scale by contracting with a small number of vendors who offer volume discounts. If more vendors provide volume discounts, the individual co-ops should use the TCNFC co-op for joint purchasing of products sold in all the stores. The TCNFC Co-op could also handle payroll services directly. Or, the federated co-op may obtain payroll services at a volume discount by contracting on a joint basis. Similarly, the federated co-op may consider jointly negotiating employee benefit packages, and 401k plans if volume discounts can be obtained.

Also, it would be relatively easy for the TCNFC Co-op to have a web page. Initially, it could provide general information on cooperatives, membership, store locations, with links to the individual stores. This web page could provide information on classes offered at the stores, to draw from a wider range of customers. Eventually, it could be used to handle on-line purchasing of products and services, such as membership and classes.

Finally, the three main reasons for shopping at a co-op did not differ by a respondent's primary co-op. This suggests a certain level of homogeneity among co-op shoppers. Thus, if all co-ops decide to focus on the fact that their stores carry a wide variety of high quality, organic and natural foods, joint marketing to these shoppers may be advantageous. Especially in radio, television, and newspaper mediums, that may be too expensive for one co-op to pay for individually.

Use the TCNFC Co-op to Facilitate the Logistics of a City-Wide Co-op Membership:

Individual stores can move in the direction of increasing cooperation by offering a city wide co-op membership. Survey results show that offering such a benefit would likely increase overall membership. In terms of inducing non-members to join the co-op, the highest ranked selection was to offer a membership that could be used at other Twin City natural food co-ops. Also, nearly 47 percent of non-member respondents indicated that such a benefit would encourage them to join the co-op. Moreover, the results of the survey suggest that members shop more frequently than non-members do, spend a higher percent of their food bill at their co-op, and care significantly more about co-op specific attributes. Thus, these customers are less likely to switch to a non-cooperative provider of natural foods, simply because of prices, selection, or a unique store setting.

Offering a city-wide co-op membership may do more than just increase membership. Since almost 80 percent of the member respondents said they would use member benefits at other co-ops, it may also increase the percent of sales to members at individual co-ops. Currently, if a member of the Wedge shops at Lakewinds, her purchases are recorded as purchases from a non-member. Given that sales to non-members are liable to corporate income tax, increasing sales to members may reduce taxes and may increase profits at the individual stores.

However, the logistics of instituting a city-wide membership may be a little difficult. The cross-store comparison shows that there are differences among the stores in terms of member cost, benefits, and patronage rebates. Thus, simply making a member of one co-op eligible for benefits at any other TCNFC co-op could result in strategic behavior on the part of members.

One solution would be to allow shoppers to purchase a city-wide co-op membership in addition to a membership at their primary co-op. The fee for this membership would be relatively low, but sufficient to cover the administrative costs of membership. Assume that \$10 would be sufficient to cover these costs. At any time, current members would have the option of paying an additional \$10 to receive the ability to realize benefits at other co-ops. Similarly, new members could decide to purchase this \$10 membership when they become a member, or at any time thereafter. In terms of voting rights, members would only be allowed to vote at the co-op at which he or she purchased shares. Also, board members of a co-op can be restricted to the pool of members that have stock in that co-op.

From the members' perspective, this city-wide membership would enable one to have purchases made at other TCNFC co-ops count for his or her patronage rebate. To facilitate the flow and tracking of patronage rebates, city-wide members would be assigned a member number that would indicate both his primary co-op and his city wide co-op membership. When shopping at his primary co-op, his purchases would be tracked like all other primary co-op members. When shopping at another co-op, his purchases would be accounted to the TCNFC co-op. In terms of tracking purchases, the TCNFC would thus appear to be a member of the local co-op. At the end of the fiscal year, an individual co-op would return a patronage rebate to the TCNFC Co-op. This return would include a listing of all city-wide member numbers and their corresponding purchases made by each number. In turn, the TCNFC Co-op could do one of two things; distribute patronage rebates to the individual co-ops, who would then add this on to the individual member's patronage rebate or distribute the patronage rebates directly to each city-wide co-op member. It would also be advisable to retain some portion of these profits to increase the scale and scope of the city-wide co-op.

A city-wide membership could also allow for coupon use at any one of the TCNFC co-ops. A coupon useable at all seven TCNFC stores would take the place of the coupon benefit offered to that member at his or her primary co-op. For example, in the month of October, a member who originally signed up a Lakewinds could decide to use a city-wide coupon at the Wedge. Under this policy, the individual co-ops can chose to settle on one set coupon and senior policy. Or, they may opt to keep individual policies for their actual co-op members, and offer a second type of coupon for city wide co-op members. Assuming that all the co-ops are able to track member coupon use electronically, the overall TCNFC Co-op could issue coupons and track their usage.

Use the TCNFC Co-op to enter new markets as a centralized co-op:

The TCNFC Co-op can create new co-ops as branches of this co-op, thus organizing as a multi-store centralized co-op as well. The advantages of this are that a centralized agency may have better access to capital than an independent co-op, may have more experience in management and organization than a newly formed co-op, and may be able to react more quickly to opportunities than a coalition of independent co-ops. Thus, under this structure, the TCNFC co-op may be better able to open new co-ops in markets that currently do not exist. This may be advantageous, given that regression results show non-members who either travel farther to shop at their co-op or indicate that they work near their primary co-op are all significantly more likely to rank a more convenient location as an important change that could be made at their co-op.

For example, the zip code analysis suggests that there may be sufficient demand for a co-op in downtown Minneapolis. The map of respondents work zip codes shows that respondents from all of these independent co-ops work in this area. A downtown natural food store could be opened as a branch of the TCNFC. To begin with, this store could simply be a kiosk that offers

pre-packaged deli items made at individual TCNFC stores. Members' purchases at this kiosk could be tracked, so the incentive to shop there may be increased among members. For further incentives, this kiosk could also offer special prices for members on certain items in order to encourage co-op member purchases. This may attract new members and shoppers as well. However, following the discussion on the logistics of a city-wide membership, it would not be advisable to allow a new member to have the kiosk as their primary co-op.

Another potential opportunity for the TCNFC Co-op would be to purchase goods for other natural food retailers and neighborhood restaurants that carry a similar product line. However, the restaurants and vendors that choose to participate in this program would do so as non-members. For example, Dao Natural Foods, the Mud Pie, the Good Life Café, and Seward Café may be interested in using the co-ops to deal with selected vendors. This may enable the co-ops to realize further volume discounts while allowing the other businesses to benefit as well.

Another potential growth area for the TCNFC Co-op is the internet shopping market. The TCNFC Co-op may be able to do this more efficiently than the individual stores, primarily because the former is better positioned to realize economies of scale and scope.

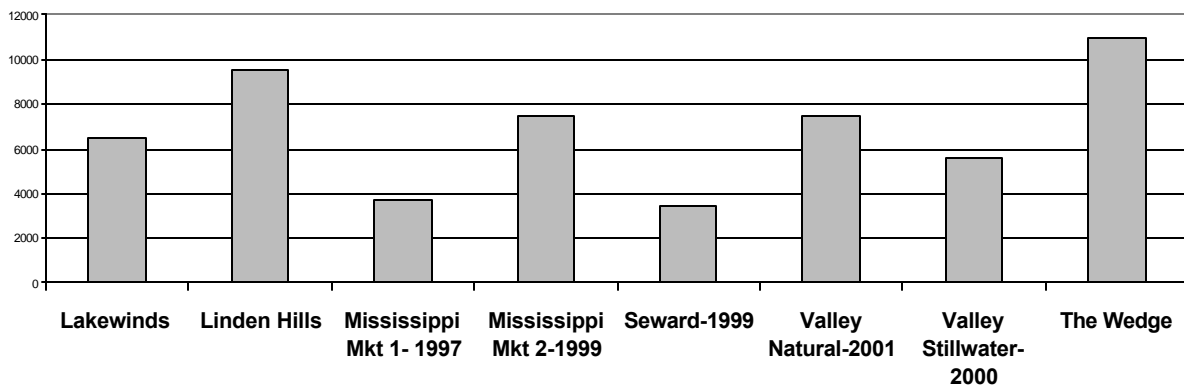
In summary, the current differences in profitability among the stores and shoppers' valuation of direct member influence suggest that a centralized structure would not be optimal. However, other shopper factors, such as their desire to realize benefits at other co-ops, coupled with increased competition are moving the co-ops towards more cooperation among the stores. Thus, the organizational structure described above allows for direct member influence and local control, while still moving toward increasing the economies of scope and scale, which in turn, should increase the market share of natural food co-ops, and lower the costs of operation at the individual stores.

Epilogue

This study started in 1997 and concluded in August 1999. Since that time, there have been some changes among the co-ops involved in this study. The first is that shortly after the original study was defended as a Master's thesis, the seven TCNFC stores began offering reciprocal member benefits. Although this program is not the same as the one that was prescribed in the study, it is similar. It is our hope that sharing our preliminary findings with these co-ops was helpful in guiding their decision.

Another change since the time of the original study is that two more of the TCNFC stores, Valley Natural and Valley Stillwater, have expanded. In 2000, Valley Stillwater expanded its retail square footage from 2900 to 5600 retail square feet. The store now has a smoothie bar, a deli, and an organic meat counter. In June of 2001 Valley Natural moved to a new location. It increased its retail space from 3500 to 7500 square feet and now offers a 'java/ and juice bar', a deli, fresh meat, a room for seminars, a small dining area and even a drive through window. How the seven TCNFC stores differ today in terms of retail square footage is shown in Figure 6.

Figure 6: Size of Stores in 2001



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Appendix 1: Customer Survey

Please answer the following questions as accurately as you can. Thank you for taking time to complete this questionnaire.

1. How long have you shopped at this co-op? _____ weeks _____ months _____ years
- 2a. Are you a member of this co-op?(please circle) Yes No
- 2b. If so, how long have you been a member? _____
- 3a. Which co-op do you consider to be your primary co-op? (select 1)
Lakewinds Lindenhills Mississippi Market Seward Valley Burnsville Valley Stillwater The Wedge Other
- 3b. At which of the following co-op(s) do you shop? (please circle all that apply)
Lakewinds Lindenhills Mississippi Market Seward Valley Burnsville Valley Stillwater The Wedge Other
4. Is your primary co-op closer to your work or home? (please circle) work home
5. How far (in miles) do you travel to shop at your primary co-op? _____
6. On most occasions, how do you get to the co-op? (please circle)
Drive Walk Public Transportation Bike Other
7. Including yourself, how many people do you shop for? (please circle)
1 2 3 4 5 6 7 8 9 10 or more
8. Have you ever been an employee or working member at your co-op? Yes No
9. On average, how often do you shop at your primary co-op? (please circle)
daily a few times a week weekly semi-monthly monthly very infrequently
10. What percent of your total grocery expenditures is spent at your primary co-op? _____
11. On average, how much do you spend **per month** at your primary co-op? _____
12. What is your total monthly grocery expenditures at all food co-ops? _____

Directions for questions 13-18: For the following questions, please rank the each of selections from 1 through 5 to indicate how important each is to you, with '1' being not important and '5' being very important.

13. How important are the following in making your decision to shop at a Natural Food co-op?
- | | not | very | | | |
|--|-----|------|---|---|---|
| a. Product selection | 1 | 2 | 3 | 4 | 5 |
| b. Location/Convenience | 1 | 2 | 3 | 4 | 5 |
| c. Favorable pricing | 1 | 2 | 3 | 4 | 5 |
| d. Customer service | 1 | 2 | 3 | 4 | 5 |
| e. Higher quality | 1 | 2 | 3 | 4 | 5 |
| f. Availability of organic and natural foods | 1 | 2 | 3 | 4 | 5 |

g. Other (please specify)_____ 1 2 3 4 5

Among these, please write the letter of the two selections that are most important to you:

14. In your opinion, how important are the following characteristics of a Natural Food co-op?

	not			very	
a. Returns to membership (patronage dividend, member discount)	1	2	3	4	5
b. Unique and diverse setting	1	2	3	4	5
c. Direct member influence	1	2	3	4	5
d. Competitiveness with other grocery stores	1	2	3	4	5
e. Commitment to natural foods	1	2	3	4	5
f. Other (please specify)_____	1	2	3	4	5

Among these, please write the letter of the two selections that are most important to you:

15. In your opinion, how important would it be for your co-op to make the following changes?

	not			very	
a. More member influence over co-op policies and development	1	2	3	4	5
b. Ability to receive member benefits at other co-ops	1	2	3	4	5
c. Increased selection of ready to eat foods	1	2	3	4	5
d. More convenient location	1	2	3	4	5
e. Larger store	1	2	3	4	5
f. No expansion	1	2	3	4	5
f. Other (please specify)_____	1	2	3	4	5

Among these, please write the letter of the two selections that are most important to you:

Members, please answer questions 16-20: Non-members, please answer questions 21-23.

Questions for members

16. How important were the following in making your decision to be a member?

	not			very	
a. Benefit package (discounts, patronage dividend, specials)	1	2	3	4	5
b. Support of community businesses	1	2	3	4	5
c. Direct member influence	1	2	3	4	5
d. Support of the co-op	1	2	3	4	5
e. Education and nutrition	1	2	3	4	5
f. Other (please specify)_____	1	2	3	4	5

Among these, please write the letter of the two selections that are most important to you:

17. How often do you attended the annual meeting? (please circle)

Never Rarely Often Every Year

18. How often do you cast a vote for the board of directors? (please circle)

Never Rarely Often Every Year

19b. If so, please circle how often? Daily Weekly Monthly Occasionally

20b. If so, please circle by how much? 1-10% 11-25% 26-50% 50-100%

21. How important would the following be in encouraging you to join the co-op?

- | | not | | | | very |
|--|-----|---|---|---|------|
| a. More convenient location | 1 | 2 | 3 | 4 | 5 |
| b. Greater selection | 1 | 2 | 3 | 4 | 5 |
| c. Option of smaller payments on membership purchase | 1 | 2 | 3 | 4 | 5 |
| d. Ability to use membership at more than one co-op | 1 | 2 | 3 | 4 | 5 |
| e. Longer store hours | 1 | 2 | 3 | 4 | 5 |
| f. More information on the benefits of membership | 1 | 2 | 3 | 4 | 5 |
| g. Other (please specify)_____ | 1 | 2 | 3 | 4 | 5 |

Among these, please write the letter of the two selections that are most important to you:

22. If a membership could be used at other Twin City Co-ops, would you be more likely to join?

Yes	No
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23. If this co-op were closer to your home or work, would you be more likely to join the co-op?

	Yes	No
23a. If you own a car, would you be more likely to join the co-op if it had a car-sharing program?		
23b. If you own a car, would you be more likely to join the co-op if it had a carpooling program?		
23c. If you own a car, would you be more likely to join the co-op if it had a carpooling program with a designated driver?		
23d. If you own a car, would you be more likely to join the co-op if it had a carpooling program with a designated driver and a car-sharing program?		
23e. If you own a car, would you be more likely to join the co-op if it had a carpooling program with a designated driver and a car-sharing program and a carpooling program with a designated driver?		
23f. If you own a car, would you be more likely to join the co-op if it had a carpooling program with a designated driver and a car-sharing program and a carpooling program with a designated driver and a car-sharing program?		

24. What is your:

a. Age:		
b. Gender:	Male	Female
c. Home Zip Code:		
d. Work Zip Code:		

25. What is your annual household income? (optional)

0- 15,000	16,000-30,000	31,000-45,000	46,000-60,000	61,000-75,000	76,000-100,000	100,000 and up
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