

THE EFFECTS OF PERCEIVED SPATIAL RELATIONSHIPS
ON LOCATIONAL CHOICE: A CASE STUDY
OF THE HASTINGS, NEBRASKA
CITY-COUNTY CIVIC CENTER

by

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CHAPTER ONE

INTRODUCTION

The study of urban phenomena is a well established subfield within geography. While various approaches have been effected to provide a geographical perspective on urban systems, Mayer suggests "The significant contributions that geography is making to urban studies are defined by its emphasis on the spatial organization of cities on the one hand, and on city-external relations on the other."¹ One thrust within the first of Mayer's categories seeks to describe and explain the internal organization of cityscapes as a manifestation of human spatial behavior. Thus, observable variation in form and function are conceived to be a result of a complex process of perception, cognition, appraisal, and decision making by individuals and social groups. A brief overview of related literature will serve to place this paper in the context of the conceptual orientation sketched above.

Background to this Study

Examination of the urban geography literature reveals that the economic aspects of cities or urbanized areas have received a great deal of attention from researchers. As one example, optimum locations of stores and shopping centers are defined as those which attract shoppers by enabling them to minimize cost in terms of both time and money.² Within the city a locational hierarchy of clusters and service establishments is viewed as a function of rational economic behavior where

consumers and entrepreneurs optimize or satisfy mutual accessibility. Thus, functions which set one service center above those of a lower order in the urban hierarchy tend to occur in more accessible core areas. Conversely, lower order functions are found in less accessible intermediate and fringe areas.³

Social Area Analysis

More general concepts to describe and explain urban morphology draw heavily upon sociological and economic processes.⁴ A more recent and basically descriptive approach to urban spatial structure of this genre is social area analysis, or factorial ecology. This is an attempt to characterize social variation more accurately within the city. Particular interest has often been given to residential areas. Berry identified factors, or underlying dimensions, that seem to encourage socio-economic homogenization of areas within the city. These are stage in the family cycle, socio-economic status, mobility, ethnicity, and attitude toward journey to work.⁵ In a study in Britain, Herbert identified occupation, education, fertility, and women in the labor force as indices differentiating social areas.⁶ In yet another study Schmid and Tagashira illuminated eleven major categories.⁷ In every case these studies support a behavioralist view of spatial organization. Interdependent processes of economic activity, site selection, and residential choice produce a richly differentiated cityscape.

The Social-behavioral Approach

Another more contemporary approach emphasizes the perception of the city, indeed of the environment in general. As early as 1903 and 1912 Gulliver and Trowbridge, respectively, were examining the city as

viewed by its residents.⁸ For some time following these early efforts little was done within the discipline of geography concerning spatial mental images.

In 1956 Kenneth Boulding published The Image. This cross disciplinary work challenged those individuals involved in research dealing with human behavior to begin to consider the role of the mental image. As an underlying premise the author states that "the first proposition of this work, therefore, is that behavior depends on the image."⁹ Boulding goes on to state that an image is partially the result of some pre-programmed data. In the case of higher life forms, however, this image is dependent on information gathered by the organism itself, rather than passed along biologically from a previous generation. The author also points out that the most intelligent animals, including humans, behave with some reference to an image of the results of their acts.¹⁰ Not only do humans have a mental "picture" or image of the world about them, but they realize that their action can have some effect on their surroundings. Based on his reflections, Boulding called for the establishment of a new science of "Eiconics," the study of human imagery.¹¹ This was conceived as an interdisciplinary study by those involved in the behavioral sciences.

Geographers, perhaps heeding Boulding's call, began exploring ideas about the mental image as it relates to man's spatial activities. Among those influential in promoting interest in the sub-field of spatial imagery within the discipline of geography was Kevin Lynch (an architect). He attempted to get at the "mental maps," the spatial diagrams in the minds of residents in three large United States cities.¹² Lynch found that most individuals saw their city as a collection of

paths, nodes, landmarks, districts, and edges.¹³ In each instance common points of orientation were found in subjects' maps.

Cognitive Maps

Marked differences were found in the mental maps of various groups in the Los Angeles metropolitan area. Fielding cites a study conducted by the Department of City Planning, City of Los Angeles. Each person surveyed was asked to draw a map of the Los Angeles metropolitan area. A composite map was then constructed for each status group. Results indicated that higher status groups have a more comprehensive view of their city than lower status groups, who have an image generally restricted to their own neighborhood. Fielding believed that "In part this may be related to their (the higher status groups') economic ability to experience distant areas of the city."¹⁴

Maurer and Baxter in a study of elementary and secondary school children in Harrisburg, Texas, a part of the Houston metropolitan area, found considerable difference in the ways Mexican, Black, and Anglo-American children mapped their neighborhood. Although the entire area of the study is one of lower-middle incomes, each group seemed to view the concept of "neighborhood" differently. "There were significant differences among ethnic groups in the number of square blocks they considered as 'neighborhood'."¹⁵ The Anglo children consistently saw their neighborhood as being almost two square blocks, whereas the Mexican-Americans saw their neighborhood as being only one block, and the Black-American children viewed their neighborhood as being only three-fourths of a block. The methodology employed by Maurer and Baxter was similar to that used by Lynch in that subjects were asked to draw maps and to answer some pre-determined questions.

Blaunt, McCleary, and Blaunt in a 1970 study of Puerto Rican and North American preliterate six year olds in Worcester County, Massachusetts, altered Lynch's approach.¹⁶ In deference to the age of the participants, air photos were used to determine the children's ability to recognize and retain spatial images. The findings of the study seem to indicate that even at this early stage of development, a point where what are most often thought of as "map skills" have yet to be learned, most of the children appeared able to construct some sort of mental image. In attempting to account for this ability the authors cite the work of Tolman where he notes that rats seem to gain the ability to run a maze that goes beyond simple stimulus-response levels of learning.

He sought to explain this phenomenon, along with the ability of humans to navigate in infinitely more complex "mazes" of physical and social space by postulating the existence in both species of a form of cognitive representation in which the data of environmental perception have been stored in a way that somehow leads to complex strategies of environmental behavior. The cognitive representation has the functions of a map, but not necessarily the properties of a pictorial image - something difficult to associate with social space, not to mention rats.¹⁷

All of this would seem to support Lynch's theory of the acquired spatial image common to organisms of higher intelligence.

An article by John Gulick lends support to the idea that some sort of spatial image is not only common among various sub-cultural groups within the western culture of the United States, but is also to be found in some form in the Arabic culture of the Eastern Mediterranean. Using a technique similar to Lynch's in an Arab city in southern Lebanon, Gulick arrived at parallel results.¹⁸ He found that residents of the city were able to identify paths, landmarks, districts, and edges in a fashion similar to Lynch's respondents in the United

States.

The image one constructs of the world about himself is more than a mere recording process. It is one of constant filtering and sorting, and is the result not only of immediate input, but of previous experience.¹⁹ This would indicate that an image is more than a photograph in someone's mind, but that instead it is to some degree affected by the individual's past and the context in which the image was experienced.

The world of imagination and myth no doubt plays some role in the structure of our mental maps.²⁰ "A myth of the world's form, in the case of the mythical kingdom of Prester John and El Dorado, were as real in the minds of many as anything in life they had experienced first hand. Imagination, myth, and ignorance, still affect our mental images of reality."²¹ Although few would go off today in search of the Kingdom of Prester John, many individuals know and believe popular myths with regard to areas or places with which they have had little or no personal experience. These personal prejudices are important to geographers in that "many of the human patterns we see on the landscape today are the result of men making locational decisions based on information that has come through a perceptual filter."²² That is to say, information about the outside world does not find its way into our "mental storehouse" unaltered. An attempt is made by mental processes to modify any new information so that it will agree with our past experience and present beliefs. If the new information contradicts the preconceived image, it is likely to be rejected. Often, however, it is not forgotten. If enough contradictory information is discovered, a change in the initial image will take place.

Another aspect of the perceptual filtering process which must

be mentioned is that it is in all probability impossible for humans to absorb and retain the almost infinite amount of information that our senses come into contact with daily.²³ Our mental processes tend to take note of those sensual impressions which seem relevant at the time, and filter out the rest. An individual's belief structure may, to some extent, determine which bits of information are deemed relevant, and therefore worthy of retaining. In his research with rats, Tolman speculates that the rat's nervous system is selective of the stimuli it will let in.²⁴ One assumes the human mind is as selective as that of the rat.

The author's personal interest in the perception of the environment, and more precisely of the urban environment, is concerned with the American, small urban place. This type of community is that which is large enough to be "officially" urban (2500 residents) but not large enough to be considered part of a standard metropolitan statistical area. The work done by researchers in perception studies has generally not included the realm of the small urban place. Thus, one aspect of this study will be an effort to apply to the American, small urban place certain general concepts established by previous research.

Statement of the Problem

The city can be viewed as a phenomenon whose origin, form, and functions result from human decision making. The perceptions of the city and its structure held by individuals influence societal decisions affecting the cityscape. This study examines some aspects of the inter-relationships of cityscape perception, or imagery held by residents, and decision-making with respect to a very specific change, a location for

a new public facility. It will be the purpose of this paper to attempt to measure some of the effects of respondents' images of the city on site selection for a community center.

It would be most opportune to assess the role of perception of the cityscape in the community's decision-making process when the city is faced with a change in its structure. Until a community is faced with a major change in its structure, residents in all probability tend to view the city form as something that seldom, if ever, changes. For some, perhaps, the overall pattern of the city goes unnoticed until such an alteration affects them.

Ideally, therefore, any change studied should be one that involves all or most of the members of the community. While the public does to an extent affect the location of some private structures, the individual citizen really has very little direct influence regarding the construction site that private enterprise chooses. A public, tax supported project would be something that would affect all residents as taxpayers and in which they, in turn, could conceivably have some direct input.

"Evidence is far from secure but it seems reasonable to adopt as a working hypothesis that individuals possess some proportion (as yet undetermined) of 'common image' derived from some group norms (and possibly certain norms in action with respect to this image) and a proportion of 'unique image,' which is highly idiosyncratic and undependable."²⁵

It is with the separation of the unique and common parts of the spatial image that this paper is concerned. In particular emphasis is placed on perceptions concerning the possible locations of a proposed city-county community center.

Because this is a geographic problem it should in some fashion relate man to his spatial environment. The spatial activity of indi-

viduals as it relates to a community center is a valid geographical concern. A community center is likely to attract large numbers of people for certain special events. These attractions might draw not only local residents, but also people from some distance. This means that the location of a community center in relation to the in-place population of the city and to the access routes in and out of the city are of some importance. In addition, one must consider the possibility of a greatly increased traffic flow on certain streets periodically and the effects of the heavier traffic on the city.

A community center would in all probability be a structure with a "lifespan" something in excess of fifty years. Therefore, any parcel of land on which it is built would not be available for any other purpose for some period of time. This means that the determination of the location would require consideration of the long term growth and expansion of the city.

A large facility such as a community center will have some effect on the use and value of adjacent parcels of land. For example, because of the traffic activity, and auto parking problems inherent in such a center, the value of the immediately surrounding property as in a residential area could conceivably decline. Traffic and auto parking, however, could increase the value of adjacent parcels of land as sites for hotel and motel operations, restaurants, and other special functions. These effects should be of interest to those selecting a site for a new center. It would perhaps be best to select a location within the city ensuring compatible land uses, as opposed to a site which might result in the disruption and displacement of current land uses, unless the latter was desired as a catalyst for altering city morphology.

The decision-making process of a community may involve two groups. For the purposes of this study these two groups will be identified as leaders and non-leaders. "Leaders" will be defined as those individuals who, because of service to the community, professional status, or financial position, are held in esteem by their fellow community members. These individuals will be identified by means of a "power check." "Non-leaders" will be those members of the community not identified by the power-check. It is the opinion of the writer that those individuals identified as community leaders have a much greater influence on the community decision-making process than do non-leaders. In addition it is also speculated that leaders, perhaps because of greater education or different vested interests, perceive and respond to a restructuring of their city in a fashion dissimilar to that of non-leaders. Based on this reasoning, a comparison and contrast of these two groups is an attractive research avenue.

It is also hypothesized that neither leaders nor non-leaders, in reaching a decision to locate a community center, do so systematically. It is believed that what often occurs is that an individual or group selects a site and then defends it against those who favor location elsewhere. In these instances a construction site for a community center may be chosen with little thought given as to its effect on the community structure. While an "acceptable" site may be arrived at by this process, it would perhaps be better if a systematic methodology could be developed to aid communities in site selection for tax supported facilities.

Methodology

Various methods have been employed by researchers in an attempt to gain some insight into the image of the environment held by individuals and related behavior. A brief survey of a few common approaches should indicate something of the strengths of each.

Previous Studies

One method of determining an individual's understanding of a particular concept is to ask him to define that concept. To paraphrase Burton and Kates, the definability of a term is a sophisticated form of perceiving that term.²⁶ Although this method can be most enlightening, it was felt that perhaps it would not be the most helpful in obtaining all of the desired information for this study. In addition, there could be some problems in analyzing such data. Lowenthal and Riel in their study of a Denver suburb, used word correlation to determine what individuals opine concerning their environment. There was concern that this particular technique might cause confusion on the part of respondents, even though for the purposes of Lowenthal and Riel it proved most useful.

Lundeen made use of the semantic differential technique to determine subjects' images of their environment in a study dealing with neighborhood recreational facilities. The semantic differential measures people's reactions to a stimulus word or phrase in terms of a rating on a bipolar scale defined with adjectives at each end. Given here is an example of a bipolar scale.

Urban Sprawl

Good	3	2	1	0	1	2	3	Bad
------	---	---	---	---	---	---	---	-----

This type of scale would measure directionality of a reaction (good versus bad) as well as intensity (slight through extreme).²⁷ This procedure has the advantages of allowing a fairly accurate assessment regarding an individual's opinion, and facilitates comparisons of responses and respondents.

V. J. Silzer, on the other hand, attempted to understand subjects' constructs of their neighborhood by asking them to identify like and unlike elements in their environment.

People interpret elements of the environment by categorizing them as being either similar to or different from one another in some important respect. By eliciting a person's constructs, investigators aim to examine the categories he uses to present significant aspects of his environment. The essential feature of the theory is that it seeks explanation of behavior in terms of the person's own descriptions he is responding to.²⁸

Both Lundeen and Silzer reported some confusion on the part of respondents with regard to questionnaire form and desired responses. The Lundeen semantic differential method probably produces less confusion than the Silzer approach.

Approach of this Study

For the purposes of this study it will be necessary to develop an awareness of the opinions of residents of Hastings concerning issues involving site selection for a new community center. The population of the city is over 23,000. For this reason attempting to question all residents would be a time consuming, if not impossible, task. Thus, a decision was made to sample the population of Hastings. Previous (similar) studies have made use of this technique when confronted with a large subject population.

Obtaining the Sample

Given the experience of Lundeen and Silzer, clarity of the questionnaire was of the utmost importance, as no personal interviews were solicited from the "non-leader" population of the study area. The questionnaire was circulated by mail to 200 residents of the city. The subjects were chosen by means of an accepted random sampling technique. College or university students, unless long term residents of the city, were excluded from the study, unlike several studies which sampled students either in part or wholly.

For the research in question to have any implications beyond the immediate study itself there must be an assumption of representativeness of the sample of residents of the study area. As the author is unaware of any evidence to the contrary, it is assumed that the respondents to the survey employed are not unlike those questioned in previous (similar) studies.

It is assumed that the sample group will represent the degree of resident interest in community projects, taxes, and facilities found in the population study area. In relation to the second preliminary assumption, it should be noted that community interest on the part of the study area population is not any lesser or greater than one would encounter elsewhere.

In order to determine the "leader" population of the city a power index was used. An original list of those felt to be community leaders was obtained from several residents within the city who were felt to be in a position to be aware of community leadership. From this list, mailings were sent to each individual mentioned with a request for his own list (power index) for the city-county area. Those

individuals most often mentioned in such listings, or power indices, were tabulated separately from the general population; the rationale being that those individuals who are community leaders are perhaps better educated, more aware, and at the very least more influential in local decision making.

The Questionnaire - A Brief Outline

The questionnaire is divided into three sections. The first elicits personal information, such as sex, employment, stage in the family cycle, education, and length of residency in the Hastings area. The second section deals with the subject's image of the city and of some of the community facilities that a center will either augment or replace. Since an individual's construct of the city and his impression of its cultural and recreational needs will have a bearing on whatever conclusion he may reach concerning the location of a community center, this section of the questionnaire is essential.

The third and final section of the questionnaire deals with the placement of a community center, and those activities that the subject would like to have included in a new facility. This section includes questions on such matters as cost of land, access to a community center for various age and economic groups, access to the central business district from a community center, a central versus a peripheral location, and an open-ended question for any "other" important locational factors that the respondent may care to mention. Finally, there is a question that involves locating a site for a proposed community center on a map.

A Technique for Comparison of Possible Sites for a Community Center

To provide a control, and therefore a kind of "yardstick" against which one may compare the locational perception within the community, the various locations will be viewed in terms of efficiency, equity, resource allocation, and environmental quality.

Efficiency is defined as the least time/travel cost for residents, while equity entails a modification by weighting factors governing their mobility, such as age and income. That is to say, the most efficient location may not be the most equitable. Location "A" might be the best site selection if all residents had equal mobility. Unfortunately, the very young, the very old, and the extremely poor often are not as mobile as the rest of the population. When one takes these factors into consideration it may be seen that perhaps an alternative to location "A" should be sought.

Resource allocation is defined as the opportunity cost of different sites, and the long term effect on the land adjacent to the site. No doubt within the city of Hastings there are several possible locations for a community center. Each would have an effect on the structure of the city in general, and on adjacent properties in particular. Also to be considered is the fact that some locations might require more in the way of utility expansion, parking lot construction, street improvement and maintenance, or building removal, than others. In short, the societal and economic resource base of the community will be taxed by a new community center. Given the size of the community investment, the merits of each locational alternative should be weighed carefully.

Environmental quality refers to the environmental consequences

of alternative locational choices. There are several environmental implications for a project of this size. Not the least of these is the expansion of urban land uses into the surrounding farm land. The crop land in the Hastings area is generally quite fertile, and should be viewed as a limited resource. In addition, a large, paved parking area, which usually accompanies a facility of this type, will increase water run-off, and contribute to local problems of flooding and soil erosion. Also, a large paved area would retain more of the sun's energy than an equal area of greenery, causing an increase in the amount of energy required to cool nearby buildings during summer months.

Finally, it would perhaps be aesthetically pleasing if a community center were placed in an area of the city where it did not seem incongruous with the surrounding buildings. This of course, is a matter of personal taste. The author, however, is of the opinion that a large structure surrounded almost entirely by smaller buildings looks somehow out of place, and might detract from an otherwise pleasant cityscape.

Expected Results

The expectation that most individuals, both leaders and non-leaders, imperfectly consider socio-economic effects of public facility location appears somewhat appropriate. Most considerations that have been viewed as of interest to the community at large involved parking, land acquisition, and traffic congestion. This is not to say that concern for access to the center by the community's less fortunate was not present in subjects' responses, but evidence seemed to indicate that for many it was merely a less pressing issue.

This may well be because those involved in the decision making process, though most often with the community's best interests central to their thinking, are in many instances not professionally trained to perceive accurately the community's socio-economic needs. Therefore, their decisions regarding the placement of public facilities are based on those factors of which they do have some knowledge (parking, etc.) and on incomplete images of community socio-economic needs.

Justification

To begin, one must view the city as Lynch does "-made by art-shaped for human purposes."²⁹ The city is a distinctly human creation on the landscape, it has no "life" or "meaning" other than that which people give it. Societal decisions, and perhaps lack of societal concern, have created the city as it exists today.

It should logically follow that location of public facilities is but one function of community decision making. It is argued by this writer that location of certain public facilities is one method by which society can attempt to redistribute its wealth and redress social imbalance. However, surprisingly little research has been done in the area of community public facility location.

Few criteria have been developed for determination of location of public buildings. Public finance concepts have been largely spaceless and location theorists have largely neglected the problem of public facility location. Given that no criteria have been developed it is hardly surprising that locational decisions on public activities are almost entirely the result of unbalanced political pressure. Since public facilities are one manner of redistributing the wealth of a community, should we not begin to be concerned with location?³⁰

Traditionally, resource distribution has been of interest to geographers. In the instance of urban geography, the concern involves

the distribution of resources among members of society.³¹ With regard to social issues, Harvey has observed that

It seemed a reasonable starting assumption, for example, that principles of social justice had some relevance for application of spatial and geographic principles to urban and regional planning.³²

It is argued that an individual's perception of the urban landscape will weigh heavily on what action he feels should be taken. "The first proposition of this work, therefore, is that behavior depends on the image."³³ In relation to this, the importance of the image of the "common" people should not be discounted. Gould and White cite a study done by planners in Birmingham, England. Using Lynch's technique, the "Birmingham Post" asked people to draw maps of the city as they saw it. Response was good, and the findings were helpful, as what were often felt to be important landmarks by the planners were not viewed as such by the "common" people.³⁴

It would appear to follow that those interested in the spatial-locational problems of community cultural-recreational public facilities, and by extension, the process of altering or improving of urban structure, could benefit from an understanding of perception. Hopefully, such knowledge will place those concerned in a stronger position to better satisfy their client population.

In closing it should be noted that this study will be unlike some previous (similar) works. It is not concerned with nodes, paths, boundaries, and landmarks to any great extent. Instead it is assumed that these exist in individuals' images and have some bearing on locational decisions they must make. And, the study area is not part of a major metropolitan region, but is rather a small Great Plains city of just over 23,000.

FOOTNOTES

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- ²⁷Richard Lundeen, "The Semantic Differential Technique and Personal Construct Theory in Image Measurement," (Discussion Paper #5, Department of Geography, York University, Toronto, Canada, 1972), p. 9.
- ²⁸V. J. Silzer, "Personal Construct Elicitation in Space Preference Research," (Discussion Paper #1, Department of Geography, York University, Toronto, Canada, 1972), p. 5.
- ²⁹Kevin Lynch, The Image of the City (Cambridge: Massachusetts Institute of Technology Press, 1960), p. 95.

³⁰Harvey, op. cit., p. 89.

³¹Berry, op. cit., p. 334.

³²Harvey, op. cit., p. 9.

³³Boulding, op. cit., p. 6.

³⁴Gould, op. cit., p. 30.

CHAPTER TWO

THE STUDY SETTING

The selection of Hastings, Nebraska, as the study site, and of public facility location as the study theme, are to some degree inter-related. An interest in the city of Hastings first developed while I was a student at Hastings College. Later, as a graduate student, I developed an interest in urban studies, and often reviewed concepts in the context of Hastings. Coupled with this general curiosity about urban studies was an interest in public facility location, which was to some extent prompted by my knowledge of the proposed new community-cultural-recreational complex in Hastings. The process, then, of the selection of Hastings as the site of the study was affected by the writer's first-hand acquaintance with the city.

From a conceptual standpoint, a case-study area should fulfill certain criteria. An examination of perception, appraisal, and decision-making is facilitated if a dramatic physical change is planned or in progress. This would, ideally, be a project of sufficient import that most community members are aware of it and are to some degree affected by it. The fact that the city of Hastings is currently contemplating the construction of a new city-county community-cultural-recreational center provides an environment that is conducive to the study being undertaken. As of this writing, the exact nature of the center has yet to be determined, but it will be a structure of great size and expense. During the summer of 1974 estimates on cost for the community center project ranged from four to five million dollars.¹

Impact on Community Morphology

The community center project will have an impact on the city of Hastings in relation to land use, patterns of traffic movement, and resource allocation. Land devoted to the center will be removed from any consideration for any other use for some period of time, as the life of such structures is often in excess of fifty years. In the immediate vicinity of the center land as a resource will inevitably be reappraised. Nearby parcels of land, aside from those used for parking, may be attractive to business interests associated with convention and recreational-cultural centers.

Street patterns may have to be altered, and present streets widened, to accommodate the heavy and irregular traffic going to or from the center. Thus, what was once a quiet residential street may from time to time become a busy thoroughfare. In this instance residents' less tangible resources, i.e. their freedom of movement and peace of mind, may be exploited.

These factors together could substantially alter property values. Aside from the land itself, a very tangible resource that will be affected by the community is tax dollars. In addition to the cost of construction itself, the expense of building maintenance and improvement over the years must be considered.

In order to obtain a more accurate picture of the setting for the study a brief profile of the city of Hastings will be undertaken. This profile will perhaps help to place in proper context the later description of the community center project.

Hastings: A Brief Profile

With a population of just over twenty-three thousand, the city of Hastings is within the category of an urban non-metropolitan place. The city is located in the northeastern portion of Adams County, Nebraska. An elevation of some nineteen-hundred feet, and very low local relief in all directions, place the community on the eastern edge of the North American physiographic region known as the Great Plains. Adams County itself is located south of the Platte River, which bisects the state of Nebraska from east to west (see figure 1). The region surrounding the city of Hastings is a fairly prosperous agricultural area specializing in feed grains and livestock.

Using figures from the 1950 census, Nelson attempted to classify various cities in the United States as to their economic character. These classifications were based on the number of the city's work force found in any given form of employment. Nelson's rating system classified Hastings as being above the norm for retailing and wholesaling.² Personal experience within the city from the autumn of 1965 until the present supports the conclusion that these two activities are still dominant functions within the economy of Hastings.

In addition to retailing and wholesaling, the city has a number of medium-sized industrial concerns, several of which are headquartered in Hastings. Service occupations also play an important role in the economy. In the late 1960's Central Technical Community College was founded on the grounds of the defunct Nebraska Naval Ammunition Depot. This institution is primarily a vocationally oriented school for post-high school students. Total current enrollment for both full and part time students is about thirty-two hundred.

The city is also the home of Mary Laning Memorial Hospital and School of Nursing. A large, new addition to the hospital has been completed in the past few years. The Hastings State Hospital, which has been incorporated as the separate village of Ingleside, is a state operated mental health care facility and alcoholic rehabilitation center some two miles west of the city. As this is one of the larger state hospitals in Nebraska, its work force is of some consequence within the city of Hastings. Hastings College, a small, Presbyterian-related liberal arts school of about seven hundred students, is also located within the city.

This sketch, admittedly a very brief and superficial description of the city of Hastings, will perhaps provide a setting for the history of the community center project. The following section is an accounting of that project.

History of the Community Center Project

The feeling among some of the residents of the city of Hastings that the present facilities for the performing arts, conventions, and some recreational activities are inadequate is not a development of the recent past. An interest in better facilities can be documented at least as far back as the autumn of 1959. In October of that year the City Housing Authority purchased for about \$180,000 the site on which the present courthouse stands, a city block bounded by Fourth and Fifth Streets and Denver and St. Joseph Avenues (see figure 4).³ The land was given to the city by the Housing Authority for the construction of a downtown civic center. Furthermore, such a facility had been recommended by the City Planning Commission. The entire plan called

for the relocation of the police station, city hall, courthouse, and for the closing and landscaping of a section of Fourth Street (see figures 3 and 4).

At this point it should be clarified as to what is meant by the terms "civic center" and "community center." An interview with a member of the "community leaders" group, an individual who had been involved with the project for some time, led the writer to understand that a "civic center" not only includes some general purpose rooms for community recreation and performances, but also city offices, police headquarters, and other city services. A "community center," on the other hand, is a structure devoted specifically to cultural-recreational uses. The structure that was proposed in 1959, then, was not a community center in the strictest sense of the term, as the new building, if it is built, will be.

About one year after the land had been given to the city, the first of the homes on the block was torn down, with the others soon to follow.⁴ The area was to be temporarily used as an unpaved parking lot, and later as a site for the new courthouse, or possibly the civic center.

No further record of the project was found until a notice in early 1964, when the City Planning and Zoning Commission approved a plan which required the closing of Fourth Street, and landscaping along Third and Fourth Street from Hastings Avenue to St. Joseph Avenue.⁵ It was estimated that this would have added about one acre of green space to the downtown area. By this time the new, and current, courthouse was nearing completion on the site purchased by the Housing Authority, but there was still an intention to construct a civic center nearby.⁶

By the summer of 1964 a plan which had been officially approved by the Planning and Zoning Commission earlier that year was beginning to take form. The new courthouse would soon be ready for occupancy, and the old structure could then be razed. A new library, which fronted on the new courthouse and had been part of an earlier plan, was already in use. Four projects remained to be completed in order for the plan to be considered finished.

1. A "comfort station" at the corner of Third Street and Hastings Avenue
2. Close Fourth Street
3. A 160 auto parking facility on the city block bounded by Third and Fourth Streets and Hastings and Denver Avenues
4. Landscape the entire area ⁷
(see figures 3 and 4)

The plan was never completed, for reasons that are not part of the public record. The comfort station and the parking facility were finished, but the closing of Fourth Street and the extensive landscaping did not occur. It should be noted that at this time there was no mention of the pending construction of a civic, or community, center. It appears that for the time being it was dropped from the over-all city plan, or that it simply was not reported in the newspaper.

In any case, no action was taken until early in 1973. Late in January of that year the mayor, reacting to what appeared to be general interest on the part of city residents, appointed a twelve person committee to study possible plans for a new community center.⁸ At this point backers of the project envisioned the construction of a new YMCA-type indoor recreational complex and a remodeling of the present city auditorium. The following month, February of 1973, the Hastings Civic Center Study Commission went on record as being opposed to the construction of a new auditorium, and very much in favor of remodeling the

present building. The study commission also went on record as believing that a community center should be a facility that could be used by all age groups.⁹

The commission asked five architectural firms to make presentations concerning the proposed center. In the autumn of 1973 the architectural firm of Clark and Emerson, one of five original firms asked to make presentations, was commissioned to make detailed plans for a community center. In the process 180 persons representing fifty-three businesses and organizations in the city were interviewed. These inquiries represented an attempt to determine what community members felt should be included in a new community center. The study by Clark and Emerson concluded that construction of a new center would be least expensive, in terms of immediate dollar cost, on a new peripheral site, and most costly on a downtown site.¹⁰

Funding of the Project

An important concern of any public project is funding. For a project with a possible cost of four to five million dollars in a community of twenty-three thousand, funding becomes a major issue. To put this figure in perspective it might be helpful to point out that the assessed valuation for the city of Hastings, excluding franchise public utilities and railroad property, is approximately \$54,470,000. For purposes of comparison, a public high school, most of which was built in the middle 1950's, cost the taxpayers about 1.2 million dollars. Therefore, a community center project is a considerable undertaking for the city.

One funding proposal called for the county to build and operate the structure, or structures, and for the city to lease them.¹¹ Some

county officials, however, were concerned about the idea of the county paying for the entire project, and seemed to feel that the city could better fund it.¹² Another scheme was proposed whereby the county and city would simply share the outright cost of the facility, with the county's share being twenty-five percent, and the city covering the remainder. This plan, however, was found by the city and county attorneys to be legally unfeasible.¹³ Another possibility that has been discussed with regard to funding of the project would be the imposition of a one-half percent sales tax.¹⁴

An important aspect of the issue of who pays for what revolves around the exact nature of the facility agreed upon. Various groups in the community would like to have the center fulfill different roles. Among the types of facilities that people would like to see are a center for the performing arts, a little theater, a convention hall, an exhibition hall suitable for livestock, and a recreation center. Obviously, certain groups would be more willing to share the cost of the center if their particular interests were served. For example, those in rural areas throughout the county might be more willing to share in the cost of the facility if a livestock exhibition hall were included, while hotel and motel operators would perhaps be more interested in a convention facility.

Locational Alternatives

The location of the new center will in part be determined by the type of facility that is finally selected. Moreover, some interest in more than one structure has been expressed, hence more than one site could be involved. In the spring of 1974 several areas in the city were under consideration as possible sites for a city-county community

center.

Lake Hastings is a small, man-made body of water on the north edge of the city (see figure 5). It is currently surrounded by private homes and a park area. A tract of farm land between the eastern end of the lake and federal Highway 281 is the proposed site of a Hilton Motor Inn and a small shopping complex. Northwest of the lake is another area of open farmland which is currently being considered as a possible site. If this land were chosen, North Shore Avenue and Baltimore Avenue would have to be extended to provide access (#1, figure 5).

Two other possible sites are nearby. Pastime Bowl bowling alley is located at the corner of Eighteenth Street and Baltimore Avenue. Just to the east of Pastime Bowl, along Eighteenth Street, is a large area of vacant land that has been a proposed site (#2, figure 5). Across the street, on the south side of Eighteenth Street and adjacent to the land occupied by Hastings High School, is an empty city block which is a third possible site (#3, figure 5).

Also on the extreme northern edge of the city is a fourth possible site. This is the so-called "Johnson land" (#5, figure 5). This parcel is located east of Highway 281 and south of the city by-pass route. The site is privately owned and is currently in crop land. The owner of this particular piece of ground is willing to donate the land to the community for the project.

Each of the aforementioned alternative locations would be in proximity to the proposed Grand Island-Hastings freeway. Grand Island is a city of approximately thirty-three thousand people twenty miles north of Hastings on Highway 281 (figure 1). Both cities make use of the same exit on Interstate Highway 80, the major east-west highway in

the region. Thus, Highway 281, which is a two-lane road, is often very congested, prompting the state to propose construction of a four-lane access route for both Hastings and Grand Island. Such an eventuality would affect the evaluation of the proposed sites.

Still another possible site is on the Adams County Fairgrounds, which are located in the southwestern part of the city (#4, figure 5). This land is owned by the County Fair Board, and is located close to the junction of Highways 6 and 281. One advantage of the site is that it might give better access than other possible sites to some population in the county outside of the city. This site has also been mentioned as a possible location of a livestock arena portion of the project if more than one structure is built.

In June of 1975 the commission studying plans for the proposed center voted to support a compromise site just north of the public high school¹⁵ (see "?", figure 5). The commission is composed of twelve members, six being from the city and six from the county outside of the city. Prior to the compromise location the commission had been evenly divided in support of two different sites. Six of the members favored locating a center at the County Fairgrounds (#4, figure 5), and six supported location of a center on the "Johnson land"¹⁶ (#5, figure 5). No doubt a factor in the commission members' decision in favor of the compromise site was the proposed location nearby of the southern terminus of the Grand Island-Hastings freeway. Current plans for the freeway call for the construction of a new dual-lane overpass across the Union Pacific tracks on the north side of the city, and a partial cloverleaf exit onto Eighteenth Street. In addition, Eighteenth Street, because of its access to the interchange, will in all probability be

extended to Marion Road, a major north-south artery in the westernmost portion of Hastings. This extension would also give users of the center a fairly easy access to the Hastings airport. One possible drawback of this site is its proximity to the Union Pacific tracks and freight yard.

The building sites discussed above do not exhaust locational alternatives. These are merely the possibilities that have been publicly discussed. A perspective on the needs of the city for a new facility would perhaps be clarified by a brief statement concerning the extent and condition of the present structures available within the community for cultural events, conventions, display shows, and recreation.

Existing Facilities

The city auditorium is a large brick and steel frame structure built in 1922 at a cost of \$180,000. By making use of the balcony and temporary seating on the main floor, the structure has a maximum seating capacity of three thousand. The original plans called for a seating space for five thousand, a small theater, museum quarters, and an elaborate exterior. Cost estimates, however, restricted the structure to its present form.¹⁷ The building is located at the intersection of Fourth Street and Hastings Avenue, just across from the downtown parking mall (figures 3 and 4). Although the construction of the building may still be sound, heavy use over the past fifty years has taken its toll. In addition, the structure was built as a general purpose facility, which means that it does not fulfill all uses well. Acoustics, given technological advancements since 1922, could be dramatically improved to make the facility really suitable for the

performing arts. Also, the seating arrangement may have to be changed to enhance its use for the performing arts.

Directly west of the City Auditorium is the Masonic temple building (M, figure 3). This structure houses a theater that is currently used by the Hastings amateur theater group for some of their performances. It is the only true theater in the city that is not connected with a school.

On the campus of Hastings College are several facilities suitable for performances of various kinds (H, figure 3). The Calvin H. French Chapel is used by the drama department for major productions, and also for convocations, religious services, movies, and special events. This makes the facility almost unavailable for general public use. A new general purpose theater has been built on the campus. However, this facility is used for student productions, rehearsals, and drama department activities. Perkins Auditorium, located in the Fuhr Hall of Music, is designed specifically for music recitals and other performances associated with the school of music, and is generally unsuitable for other purposes. For the most part it would be difficult for the general public to obtain use of the college's performing arts facilities for an extended period of time, particularly during the school term. Although college productions are attended by some community members not associated with the college, as are some special concerts, these are generally separate from the city at large.

Hastings High School has a large auditorium theater (A, figure 3). This facility is occasionally used for community-wide productions of various types. Users, however, must pay rental and janitor fees. Activities of the school, however, limit use of the auditorium by the

general public.

There does seem to be an interest in artistic-cultural events by residents of Hastings and the surrounding area. The city boasts both a community theater group and a community orchestra. Each of these organizations draws participants from some distance throughout central Nebraska. The Hastings concert series is an annual repertoire of performances by touring artists. These attract sizeable audiences and are currently held in the City Auditorium.

Various schools and the YMCA operate indoor recreational facilities within Hastings. For the most part these are limited to gymnasiums, exercise rooms, indoor swimming pools, and some "temporary" handball courts in an old garage next to the YMCA.

Hastings College has a gymnasium and swimming pool complex, construction of which was completed in 1970 (H, figure 3). The college's old gymnasium, which was converted into the pool building, was generally open to the neighborhood children on weekends. The new facilities can be used with permission of the college.

Hastings High School also has a gymnasium and pool complex (A, figure 3). Both the high school and the junior high facilities (J, figure 3), which do not include a pool, are open to the public, but require a faculty sponsor. These buildings, and at times the college gymnasium, are used by adults and high school students when not in use for school activities. The public school district also operates a system of neighborhood elementary schools (X's, figure 3). Each of these buildings has a gymnasium which could be used by those in nearby areas.

The Hastings Catholic School system includes two grade schools

and a high school. The high school and one grade school are part of the same complex, and do have a gymnasium (C, figure 3). These are open for use by church members, which comprise a substantial portion of the city's population.

A new, combined, Lutheran grade school and church has been built on the western edge of the city. Use of this facility is generally limited to families of church members.

The campus of Central Community Technical College includes a swimming pool and a gymnasium. Both the pool and the gymnasium can be used by public groups, but heavy use of these facilities by students limits their availability for the larger community.

The YMCA is an older structure located on the southeast corner of the intersection of Lincoln Avenue and Fourth Street in the downtown area (Y, figure 3). The structure includes a gymnasium and a swimming pool, both of which are small, and perhaps by themselves inadequate for a city of over twenty thousand. The gymnasium's court is not of regulation size for basketball, and the ceiling of the swimming pool room, which is beneath the gymnasium, is low enough that caution is required when using the diving board.

Hastings seems to have the potential to provide some of the activities that a new community center would accommodate with existing structures. However, this would require use of educational plants throughout the city, with availability unassured on a regular or long term basis. In addition, there are no really adequate facilities for indoor tennis, handball, or ice skating. Also, the city has barely adequate facilities for a convention of any size, and limited, if indeed any, facilities useable as a livestock arena.

In conclusion, evidence can be presented that there is a need for an improvement in structures presently used for cultural events, recreation, conventions, and arena purposes. Just what kind of additions are finally elected will have a bearing on where they are placed. As an example, a livestock arena, because of problems of animal care, might require a different location than a center for the performing arts.

As was stated earlier, the writer's special interest area in urban studies is that of the non-metropolitan urban place. For this reason some mention should be made of the effect of this interest on the nature of this study.

The Smaller Urban Place

A survey of related literature has led the author to the conclusion that there has been but a modest amount of research by geographers, and social scientists in general, within the realm of the small to medium sized North American city. Work by social scientists in the past has most often been concerned with very large metropolitan areas, or very small villages and rural areas.

It might also be noted that the problems of the huge metropolis and the small village are perhaps more obvious than those of the non-metropolitan urban place. In most major cities of the United States one finds countless examples of congestion, urban blight, poverty, sprawl development, and other problems of interest to the social scientist. At the opposite end of the spectrum is the small village. In this case outmigration of the population is an obvious and serious problem that has received much attention from social scientists.

Finally, it is generally true that material necessary for research is usually more readily available for larger urban places than for smaller communities. In the instance of small villages, such information is often not overly difficult to obtain from field research. While the rationale for past research is sound, problems of the urban non-metropolitan community also deserve attention. Indeed, such communities have problems worthy of research, and could benefit from social science expertise.

The census report of 1970 indicated that 73.2 million persons in the United States were living in metropolitan areas, communities of fifty thousand residents or more. However, 76.2 million persons, or about 37.5 per cent of the United States population, were residing in urban non-metropolitan communities. This largest segment of the population of the United States should be of importance to social science research. Indeed, it is perhaps not over-zealous to state that knowledge of the nation's social patterns is in fact incomplete until further investigation is undertaken concerning the urban non-metropolitan place.

Prelude to the Balance of the Study

Chapter one was intended to place this study in a proper context with other (related) research endeavors within the discipline of Geography. Chapter two has been an attempt to describe the setting in which the research for this study was undertaken, and to provide a background for the community center project.

The balance of this paper is devoted to an accounting and analysis of survey results. Chapter three is an overview of responses

to the questionnaire. The fourth chapter is a description of the statistical testing used for the study and the results obtained from such manipulation. A summary and conclusion follow in chapter five.

FOOTNOTES

- ¹Hastings (Nebraska) Daily Tribune, September 26, 1974.
- ²Howard J. Nelson, "A Service Classification of Cities," in Readings in Urban Geography, eds. Harold M. Mayer and Clyde F. Kohn (Chicago: University of Chicago Press, 1965), p. 157.
- ³Hastings (Nebraska) Daily Tribune, October 16 & 19, 1959.
- ⁴Hastings (Nebraska) Daily Tribune, August 3, 1960.
- ⁵Hastings (Nebraska) Daily Tribune, February 11, 1964.
- ⁶Hastings (Nebraska) Daily Tribune, March 14, 1964.
- ⁷Hastings (Nebraska) Daily Tribune, June 25, 1964.
- ⁸Hastings (Nebraska) Daily Tribune, January 23, 1973.
- ⁹Hastings (Nebraska) Daily Tribune, February 6, 1973.
- ¹⁰Hastings (Nebraska) Daily Tribune, November 6, 1973.
- ¹¹Hastings (Nebraska) Daily Tribune, March 27, 1974.
- ¹²Ibid.
- ¹³Hastings (Nebraska) Daily Tribune, June 13, 1974.
- ¹⁴Hastings (Nebraska) Daily Tribune, July 17, 1974.
- ¹⁵Hastings (Nebraska) Daily Tribune, July 2, 1975.
- ¹⁶Hastings (Nebraska) Daily Tribune, June 21, 1975.
- ¹⁷Dorothy J. Creigh, Adams County: The Story, 1872-1972 (Hastings, Nebraska: Adams County - Hastings Centennial Commission, 1972), p. 119.

CHAPTER THREE

LEADER AND NON-LEADER RESPONSES TO SURVEYS

For the purposes of this study it was necessary to conduct two surveys. This involved a sample of community leaders and a second sample of the non-leader population. Two samples were drawn on the basis of the proposition that community leaders and non-leaders view their city's problems and possible solutions differently, and also to attempt to ascertain how well community leaders respond to the wishes of non-leaders. Later testing was done to determine the validity of this supposition, and to control for other population characteristics that might affect a subject's responses. After a brief description of the process of obtaining the two samples, the following chapter will recount the survey responses. First the population characteristics of the samples will be compared to those of the community in general. Then the responses of each sample will be reviewed. Finally, a very cursory summary and comparison of the samples will be undertaken.

Obtaining the Samples

The process of securing the two sample groups has been discussed in the methodology section of Chapter One. It is therefore sufficient here to note that a list of community leaders was arrived at by means of a "power check." The non-leader sample was obtained by use of a random numbers list and a Hastings telephone directory.

A decision was made to interview each of those identified as

community leaders. Non-leaders were contacted by mail. Both leaders and non-leaders were subjected to the same questionnaire to facilitate comparison of responses.

The list of community leaders included twenty-two individuals, nineteen of whom were interviewed. Two hundred questionnaires were mailed to the non-leader population, of these sixty-eight were returned in a usable form. The interviews were conducted in Hastings during the spring of 1975, and the mail survey was posted shortly thereafter. All respondents did not answer all questions. For example, several did not respond to an invitation to render information on the enclosed map.

To facilitate processing of survey data, tabulation of the questionnaire results involved several steps. First the leader and non-leader groups were treated separately. This was done to determine how the two groups perceive the cityscape. If they perceive the cityscape differently, this would no doubt affect what they view as viable solutions to the issues facing the city. Because of the small size of the community leaders sample, no attempt was made to identify sub-groups within it.

After the initial review of data, leader and non-leader groups were combined, and various sub-groups were identified and examined. Respondents were categorized according to age, sex, occupation, length of residency in the city of Hastings, and stage in the family cycle. Some individuals did not record their exact age, but instead listed "60's" or "senior citizen," in which case the respondent was placed in a proper category.

It is fair to state that individuals in each sample group were most helpful. In many instances, including those contacted only by

mail, respondents explained their answers. These have been an important aid in interpreting the results of the survey.

Population Characteristics of the Survey Groups

Of the sixty-eight usable responses received from the non-leader mailing, forty-three were from men and twenty-five were from women. This does not reflect the true male-female proportions within the population of Hastings adults, and was no doubt caused in part by the use of the telephone directory in obtaining the mailing list. The nineteen individuals in the community leader group included seventeen men and two women. This very one-sided ratio no doubt shows the male dominated nature of American society, rather than a lack of ability or ambition, in the positive sense, on the part of Hastings' women. The two women recognized as community leaders, although married to men of some standing in the community, have achieved their position among their peers through their own accomplishments.

Ages of non-leader respondents ranged from twenty-three to ninety, with the median age being 56 and the mean 55.5. For the city as a whole the median age of the population is 42, and the mean age is 49 years. The sample ages are somewhat older than that of the general population of Hastings. This is perhaps caused by several factors. All non-resident students in the community were eliminated from the sample, in addition responses of individuals who had not lived in the city for at least two years were not used. Finally, fully twenty-five per cent of the non-leader sample was sixty-five years of age or older, which leads to speculation that perhaps older persons simply took time to respond to the survey while the younger individuals did not.

The age structure of the leader group was also older than the city as a whole. The range of ages was from twenty-seven to seventy-one, with the median age being 49 and the mean 50. This was no doubt caused in part by the fact that it generally takes time to become regarded as a "community leader," and leaders are therefore often older than the general population.

In relation to the age structure of the city of Hastings, it should be noted that the community's resident age structure is older than that of the nation. This is in all probability influenced by the fact that the city is something of a retirement community for south-central Nebraska. As a result, Hastings, which in 1970 had a population of just over 23,000 also had 3,810 residents who were sixty-five years of age or older.

The educational attainment levels of those who responded to the survey were in general somewhat higher than those of the city. In 1970 the average level of educational attainment for males in the city was 12.4 years. For females the average was 12.5 years. For the non-leader sample group the mean grade of completion was the fifteenth. Only three individuals did not respond to the question concerning educational attainment. Since in each instance the individual in question was quite elderly, it is conceivable that their level of school completion might have lowered the group mean, as older generations often did not continue their schooling as long as is more common today. In addition, there is also the possibility that individuals with more education, for whatever reason, might feel more inclined to respond to the survey.

The community leaders had a slightly higher level of educational attainment than the non-leader sample. When one considers that

community leaders are often individuals employed in professional and management positions that require considerable schooling, this finding is expected. For the leader group, the mean educational attainment was 16.47 years, or just beyond the level of a bachelor's degree.

A question was included regarding the presence of dependent children in a respondent's immediate family. The rationale for this question's inclusion was that an individual with children might view community facilities for adolescents and younger children far differently than an individual who had no children, or whose children have left home. Of the sixty-eight members of the non-leader group, twenty-six responded that they did have dependent children. Twelve of the nineteen community leaders surveyed also have dependent children.

Leader and Non-Leader Survey Responses

The first few questionnaire entries attempt to elicit some indication of a respondent's opinion of the community. The reasoning behind these questions, especially those dealing with the placement of and access to the central business district is based on the assumption that an individual's view of his community will affect his entire outlook on the placement of a new community center. If he believes, for example, that the placement of the central business district is good in relation to the rest of the cityscape, then he may be more willing to see a community center located in that part of the city.

Responses of Community Leaders

Question one, which was somewhat lengthy, asked the respondent to rate various characteristics of Hastings. The variables in question could be rated as "excellent, adequate, inadequate, or very inadequate."

Variable one was parks and recreation. It should be noted at the outset that several individuals expressed the opinion that "parks" and "recreation" should have been separate categories. This was because they felt the parks system to be quite good while the recreation facilities were not, and they believed that this question did not allow them to adequately express this opinion. In any case, fifteen of nineteen community leaders indicated that they believed the parks and recreation facilities in the city to be adequate, though only two persons judged them to be excellent. On the other hand, only one individual rated the parks and recreation facilities as very inadequate.

On variable two, entertainment, reaction was much more evenly divided. While only one person felt that entertainment opportunities within the community were excellent, eight respondents saw entertainment offerings as adequate. The remaining nine respondents rated these as inadequate.

As was noted in Chapter Two, Hastings has, on occasion, been characterized as a retailing and wholesaling center. Evidently the community leaders would agree, for while only four individuals felt the store selection within the community to be excellent, the remainder believed it to be at least adequate. It is fair to note that several of the community-leader group were also merchants. Of these, three individuals felt store selection within the city to be excellent, while the remaining two felt it to be adequate.

Variable four involved judgment of public transportation. This was the first factor where reaction of respondents was clearly negative. Eleven persons believed public transportation within the city to be inadequate, while five more rated it as very inadequate. Only one

individual claimed it to be excellent. These results present an interesting contrast to variable five, which is perhaps in some way related. Variable five refers to "downtown parking." It is interesting to note that while public transportation received a very negative rating, downtown parking facilities were viewed by six people as excellent, and another nine thought they were adequate. Only one person viewed the downtown parking situation as inadequate. It is possible that because so many individuals operate their own cars public transportation has never developed. Such circumstances, however, would require the construction of suitable parking facilities.

Receiving an even more positive reaction than the downtown parking situation was variable six, cultural events. This was seen as a positive aspect to the community life of Hastings by sixteen respondents, with seven of the sixteen viewing the cultural life of Hastings as excellent. Only two individuals found Hastings deficient in this area, and no one classified the community as very inadequate. During the course of several interviews comments by subjects were to the effect that for a community of its size Hastings offered exceptional cultural opportunities. The presence of Hastings College within the city was seen by some as a contributing factor.

It is interesting to compare the opinion of the leaders regarding the high quality of cultural activity within the city to their opinion of the facilities available for such events. No one regarded the facilities available for cultural events as excellent, and only four individuals viewed them as adequate. As a matter of fact, eight people saw the facilities as inadequate, and seven as very inadequate. The answers to variables six and eight would seem to indicate a feeling

among the community leaders that the cultural activities of the city fulfill most of the needs of the community, but that some of the facilities are not adequate for the events.

Facilities within the city for conventions were seen in an even more negative light than those for cultural events. Of the seventeen people responding to variable nine, eleven felt the facilities in question to be very inadequate, while the remainder felt them to be merely inadequate. One must conclude that the community leaders interviewed see a need to improve convention facilities within the city.

Variables ten, eleven, and twelve are related to what are perceived to be inadequate convention facilities within the city. These entries solicit ratings of train, airplane, and bus passenger service, respectively, to and from Hastings. It could be argued that the city has not developed better convention facilities because public transportation, while certainly present, is in some cases inconvenient. For example, the east bound Amtrack train arrives at 11:30 p.m., and the west bound at around 4:00 a.m.

Respondents were fairly evenly divided on variable ten, passenger train service to the city. One individual thought it was excellent, while two people believe it to be very inadequate. Seven persons felt the service to be inadequate, and eight considered it to be adequate. Lack of a clear consensus among the leaders concerning the railroad service to Hastings infers that it is not positively rated.

With regard to air passenger service, a negative response by subjects was more explicit. Eleven individuals felt the air service to be very inadequate, while six saw it as inadequate and two as

adequate. A tri-city airport to be used jointly by Hastings and the nearby cities of Grand Island and Kearney, has been proposed by officials of the three cities. Some see this as a possible solution to the air travel problem.

Bus service to and from Hastings is viewed more positively. Twelve individuals regarded bus service as adequate, six saw it as inadequate, and one as very inadequate. Several individuals noted that while access to and from Hastings by bus was quite good, the depot services could be improved.

Variable seven, health care, received the most positive response of all. Of the nineteen subjects surveyed, none of whom were doctors, eighteen responded that health care in the city was excellent. The remaining individual indicated that it was adequate. The recent construction of a large new wing of the city hospital may in part account for this very positive view of health care in the community.

All of the leaders seemed to feel that the central business district was well located. Nine indicated that the downtown's placement was excellent, or right in the center of the city, and ten felt it to be good, or very near the center of the city. It is perhaps not surprising, therefore, that thirteen of nineteen respondents also said that access from their home to the central business district was excellent. Five more individuals indicated that access to the downtown was good, while only one person indicated that his access to the central business district was poor. Even the individual who felt his access to the downtown was poor, believed it to be located near the center of the city.

The community leaders surveyed view Hastings as a pleasant

place in which to live. They are somewhat more divided, however, as to how well some facilities meet the needs of residents. Fourteen of nineteen individuals indicated that Hastings was more pleasant than other cities its size, and four felt that it was about the same as other similar cities. Only one person felt that Hastings was not as pleasant as other cities its size. By a ratio of thirteen to six, respondents felt that recreational facilities of the city served the needs of children. It was generally felt, however, that no other age group in the city was as well served. Respondents indicated by ratios of eleven to eight, fourteen to five, twelve to six, and ten to eight that adolescents, young adults, older adults, and senior citizens, respectively, were not served by the recreational facilities of the city.

The opinions concerning the ability of the cultural facilities of Hastings to serve the needs of residents were more divided. Ten of eighteen respondents believed that the cultural facilities served the needs of children of the community. However, by an almost identical margin of ten of seventeen, cultural facilities of the city were rated as not meeting the needs of adolescents. With regard to the young adults, older adults, and senior citizens age groups, opinion among the leaders questioned was divided as to whether or not the facilities in question served the needs of these groups.

Community Leaders and Their Response to the Community Center Project

In discussing the proposed community center, all nineteen subjects indicated that they were aware of the desire on the part of some of their fellow residents to build a new community center. The

location of the proposed center was seen as an important issue by most of those surveyed. (At least) one individual, however, informed me that the location of the center was not important, as public transportation is almost non-existent, in this person's opinion, and therefore any location would inconvenience some group.

Most respondents seemed to feel that the cost of land, although of some importance, should not be an over-riding consideration. Several individuals noted that almost any parcel of land selected would cost the city something.

By a considerable margin, the leaders seemed to feel that ease of access from all parts of the city was important. Support was also found for access to a center for the community's low income groups, the elderly, and the youth of the city too young to drive. About the only issue that the leaders did not feel an important question was that of access to the central business district from a community cultural/recreational center. On this particular question responses were evenly divided.

Respondents were then asked to indicate other factors that they felt should be considered in determining the location of a community center. By far the most often mentioned item was that of parking. This is probably in keeping with the opinion of many that public transportation within the city is inadequate. Also mentioned by several individuals was a concern for the presumed growth of a community center and the city it would serve. Other considerations were also mentioned. These were access to motels and hotels (presumably to help support a convention facility), access for primary users, access for those from outside the city, and a site near the downtown

to replace old, dilapidated structures. Only one respondent was concerned enough about the aesthetic impact of the project to mention it on the questionnaire. This particular person felt that a center should be the kind of structure that visitors to the city would admire. In a call for some sort of action, another individual responded that some site should be decided upon and the project gotten underway as soon as possible.

On the issue of a central versus a peripheral location for a community center, there seemed to be a lack of a definite agreement on the part of the community leaders. A small majority appeared to feel that either a central or a peripheral location would make a center "accessible" for most of the residents of Hastings. On the basis of the results of these questions dealing with location, one could conclude that there was no strong sentiment among community leaders that the project must be located either in the center of the city or at a particular site on the edge of town.

A third question dealing with the subject of a community center's location dealt with the possible demolition of older buildings in the central part of the city to create a site. The leader group generally seemed to oppose this idea, although there were those who supported this proposal. The margin of disapproval was not overwhelming.

The last section of the questionnaire concerned possible uses of a center and those age groups that would most often make use of the facility. The possible uses included indoor swimming, indoor ice skating, basketball, handball, the performing arts, and a convention center. In addition, space on the questionnaire form was provided for

any "other" uses a respondent might care to list. Each of the uses appearing on the questionnaire could be rated as very important, important, and not important. By a comfortable margin, performing arts and convention facilities tied as the most popular possible uses. Perhaps even more noteworthy is the fact that none of the respondents listed either performing arts or convention facilities as "not important." Those activities in which the leaders seemed to indicate the least interest were indoor ice skating and basketball. Two other possible uses were mentioned by respondents. These were indoor tennis, and some provision within a new center for coffees following performances, or merely a place where one could meet other people.

Children, adolescents, young adults, older adults, and senior citizens were the age grouping into which the users of a center were placed. The frequenting of the center by each age group could be indicated as often use, use somewhat, seldom use, and never use. By a clear margin the community leaders felt that young adults and adolescents would use the center most often. Older adults were judged as the next most frequent users, followed by children, with senior citizens seen as those who would use a community center least often.

Community Center Locations Preferred by Leaders

Each participant in the leader survey was provided a map of the city on which he could indicate his selection for a location of a community center. Sixteen of the nineteen interviewees chose to do so. Three individuals defined more than one locale as ideal, in that they believed that a complex should include more than one site (see figure 6).

By a ratio of eleven to five the leaders appear to favor a peripheral site over one near the center of the city. There is, however, no concensus as to a particular peripheral location. One person would like the center located just south of Lake Hastings and just west of Highway 281. Four persons indicated that at least part of the complex should be located just east of Highway 281 and south of the city by-pass route. Seven respondents favored location of some of the center's facilities just north and west of the public high school, while three others saw the locale of the county fairgrounds as a possibility.

All of the individuals indicating the county fairgrounds as a possible site seemed to believe that the center should include at least two sites. Only the arena portion of the complex would be located on the fairgrounds. Two of these individuals felt that the remainder of the complex should be located north and west of the public high school; while the third person indicated that a convention facility should be built east of Highway 281 and the recreational-cultural structure north and west of the public high school.

Summary of the Leader Survey

Among those individuals responding to the "leader survey" it appears that some feeling of dissatisfaction exists concerning certain public facilities in the city. While the leaders believed the needs of the city's children were generally well served, they express reservation with respect to how well the needs of other age groups were satisfied. It is probably true that no set of circumstances could satisfy what various members of a community would perceive as their "needs." However, in the absence of approval of current circumstances

one must conclude there is support among respondents for an improved cultural/recreational/convention facilities.

If the project of a new community center is undertaken, the leaders generally see access as important. By comparison, the cost of land was viewed as less important than any question of access, except that of access to the central business district from a center.

Although the question of access is important to the leader group, the sample as a whole registered no strong sentiments on the issue of location of the center. This is indicated by the fact that respondents felt that either a central or a peripheral location would be accessible for most of the residents of Hastings. A lack of a definite consensus for a central or a particular peripheral site is further displayed by the somewhat confusing pattern that results from a composite map of leader site selections (see figure 6).

While leaders were evenly divided on the ability of the city's present cultural facilities to serve the needs of various age groups within the city, they also indicated that inclusion in a community center of facilities for the performing arts was very important. This incongruence may be understood if one considers that the earlier questions referred to the needs of the general population, while the later inquiry was made with respect to a respondent's personal interests.

In a closing note with respect to the leaders it was observed earlier that they indicated recreational, and perhaps cultural, facilities within the city were inadequate for adolescents, young adults, and older adults. It is interesting to note that it is just these age groups that the leaders feel would most often patronize a

new center, should it be built.

An Overview of the Non-Leader Survey

This description of the non-leader survey results will confine itself to an account of the raw total of questionnaire responses. Although various sub-groups within the sample were identified and tabulated, comparisons and contrasts of these will be covered later. Before reviewing the survey results it should also be noted that not all subjects answered all questions, which would account for responses not totaling sixty-eight.

Results of the tabulation of non-leader responses to question one indicates that survey subjects have a generally positive view of their city. The patterns which emerged were similar to those established by the leader responses to question one.

As was the case with the community leaders group, non-leaders saw health care within the city as its most positive characteristic. However, whereas no member of the leader group indicated that health care in the city was inadequate, eight non-leaders felt this to be the case, while one person indicated that it was very inadequate.

Non-leaders also agreed with leaders on the issue of facilities for cultural events and for conventions. While the cultural events themselves were viewed as being quite good, the facilities for such performances were judged to be inadequate. Convention facilities were seen as even more inadequate than facilities for the performing arts.

Variable four in question one raised the issue of public transportation within the city. Non-leaders, although more evenly divided, tended to agree with the leader group concerning public transportation.

Both felt that public transportation in the city was less than adequate. Perhaps a reflection of the poor quality of public transportation was the fact that both leaders and non-leaders felt that downtown parking was adequate.

As was the case with the leader group, non-leaders viewed parks and recreation within the city, variable one, as adequate. Non-leaders were somewhat less decisive on the issue of entertainment opportunities in the city, although it was also rated positively. Most non-leaders also agreed with leaders that store selection in the city was at least adequate. Only four persons felt store selection in the city of Hastings to be less than adequate.

Non-leader respondents were fairly evenly divided on variable ten, passenger train service for Hastings. Seven individuals felt that service was excellent, while thirty-one believed it to be adequate. Seven individuals felt that passenger train service to Hastings was very inadequate and twenty others judged it to be inadequate.

The last characteristic to be judged inadequate by non-leader respondents was variable seven, air passenger service to the city. Only four individuals indicated that air service was excellent, while ten felt that it was very inadequate. Seventeen respondents indicated that air passenger service was adequate, while thirty felt it was inadequate. It should be remembered that leaders were also of the opinion that air passenger service to Hastings was less than adequate.

Bus service to Hastings, variable twelve, while judged adequate, was not viewed enthusiastically by non-leaders. Six persons felt bus service to the city to be excellent, while forty-two viewed it as adequate. Only one person felt bus service to Hastings was very

inadequate, and seventeen judged the service to be inadequate. These opinions seemed to generally agree with those elicited from the leader sub-group on the issue of bus service to Hastings.

Questions two and three dealt with the respondents' conception of the placement of the central business district and their access to it. Even though no respondent indicated that the placement of the central business district was poor, seven did state that it was only fair, or not too far from the center of the city. Twenty-two individuals felt that the location of the downtown was excellent, while thirty-six subjects marked "good," very near the center of the city. By contrast, thirty-four individuals also indicated that their access to the downtown area was excellent. Three persons, however, said that access to the central business district was poor. One of these indicated that trains blocking crossings made access difficult, another cited traffic control problems, while a third individual stated that he was closer to the new shopping mall than to the downtown.

The non-leader sample was about evenly divided as to whether or not Hastings was an exceptionally pleasant community in which to live. Thirty-three persons indicated that the city was more pleasant than other communities its size, while thirty felt that Hastings was about the the same as other places. Only three individuals felt that Hastings was not as pleasant as other communities of similar size.

With one exception, non-leaders were fairly positive regarding the ability of present recreational and cultural facilities to meet the needs of residents. The one exception was that a majority, though by no means an overwhelming one, felt that the recreational needs of young adults are not met at present. Sizeable majorities

indicated that they believed the recreational and the cultural needs of children, older adults, and senior citizens were adequately served. On the issues of recreation and cultural needs of adolescents and the cultural needs of younger adults, the group seemed fairly evenly divided, though leaning slightly toward the positive.

Perhaps because of the long period of time that the issue of the proposed center has been debated within the community, or perhaps because the sample consisted of well informed individuals, most respondents knew of the proposed center. Only seven of sixty-eight respondents were unfamiliar with the project. One other individual, however, indicated only a minimal awareness of it. The factors of access discussed in questions one through six were all seen as important issues in final site selection for the center. Not all matters, however, were viewed as of equal importance. The question of least importance to respondents was that of access to the central business district. Question five, access for children too young to drive, and question three, access for the elderly, were viewed as very important by sizeable numbers of respondents. Access from all parts of the city, and access for low income groups were also seen by respondents as important. Cost of land, while of some relevance to those of the non-leader sample, appeared as less important than all but one question of access. It would appear, then, that certain questions of access are of particular importance to a sample of the non-leader population of Hastings. If the raw figures here are any indication of reality, it would appear that access is more important than land cost.

The subjects of the mail survey were given an opportunity to state any considerations that they felt were pertinent to the location

of a center. Nineteen individuals chose to do so. Of these, ten persons responded that the availability of parking space should be a prime concern. No other issue was mentioned nearly as many times. Several others were mentioned more than once. Among these were some form of public transportation for those unable to drive, a location downtown, a location on a main street to limit traffic congestion, and a general opposition to a center being built at all. Although only two persons indicated open opposition to a new community center, answers to other questions by survey subjects provokes speculation that more than a few respondents were "lukewarm" towards the idea of a new center. Also mentioned by respondents were access for the physically handicapped, location away from trains, whether it is more in a business or residential area, and no "politics." It is assumed that the last statement was meant to indicate that the interests of special groups, or persons, should not have undue influence on the location of a community center.

The issue of a central versus a peripheral location was taken up in questions eight through ten. In this instance there was no strong consensus. There was some support for the idea that a central location would be accessible for city residents, but responses were divided on the question of access to a peripheral location. For the most part, few subjects express strong preference on these questions. Responses were more often listed as "agree," "disagree," and even "no opinion," than "strongly agree" or "strongly disagree."

As with the leaders of the community, the non-leaders were asked to establish their priorities with regard to activities at a center. Paralleling community leaders, the non-leaders felt strongly that a new center should include facilities for both the performing

arts and conventions. In this instance, however, there was a slight but definite tendency to see the performing arts as more important than the convention facility. Both handball and indoor ice skating were seen as unimportant, while basketball and indoor swimming were of somewhat more interest to respondents.

Only six individuals exercised the option to suggest other possible activities to be included in a center. Several mentioned small rooms that could be used for activities, crafts, games and smaller meetings. Also mentioned were such things as agricultural shows, indoor tennis, activities for senior citizens, bowling, dances, and a community theater.

In what seemed to be an agreement with the community leaders, the non-leader sample seemed to feel that young adults would be the individuals most likely to frequent a community center. The margin in support of suggested young adult patronage was very substantial. Adolescents and older adults were also seen as possible frequent users of a community center, with adolescents using the center slightly more often than young adults. Respondents felt that children would use a community center less often than older adults, while senior citizens would make use of a community center least of all.

Non-Leader Site Preferences

Each of the non-leader subjects was asked to indicate on a map of the city his/her preference for a location for a community center. Of the sixty-eight usable returns, fifty-four included maps that had been marked in some fashion. Some persons indicated specific sites, while other merely circled sections of the city. For the purposes of

tabulation the author located a point near the center of any "circle" drawn by a respondent, and used this point as a "site." In instances where subjects listed more than one possible site his first choice was used.

Twenty-six of those who elected to make use of the maps chose a community center site within six blocks of the present city auditorium (see figure 6). In other words, nearly one half of the sample members who answered the map question selected a central location for a community center. Of these, all but two sites selected were within one block of the present city auditorium.

No other location appeared with similar frequency. The next most popular area was one bounded by the public high school on the east, Libs Park on the west, and the Union Pacific tracks on the north (see figure 6). This area received eight responses. The only other area that received more than three preferences was the Adams County Fairgrounds with four responses.

Summary of the Non-Leader Profile

At first glance it might appear as though present facilities are thought by non-leaders to serve the needs of most groups within the city. Indeed, responses indicated that the only obvious exception might be the recreation facilities available for young adults. When questioned as to those activities they would most like to have included in a new community center, however, the most popular item was the performing arts, followed closely by convention facilities. Perhaps the participants were trying to indicate that while present facilities meet the needs of the community, things could be somewhat better.

Access was viewed by non-leaders as important. Only access to the central business district was seen as less important than the cost of land. Along with this was some support for locating a new community center in the central area of the city, as opposed to a site on the edge of the city. Results of the map question also indicate some support for location of a new center, if it is built, somewhere downtown.

Non-leaders responded that the age groups whose needs were least well met by current community facilities for recreational activities were young adults and adolescents. They also indicated that these were the very groups most likely to patronize a new community center.

Comparison of Leader and Non-Leader Groups

The leader and the non-leader samples come very close to complete agreement on several issues raised by the questionnaire. On some other points, however, there is some divergence of opinion.

Both groups felt that the recreational needs of children are served by the city at present, although non-leaders were more affirmative than the leaders on this issue. Whereas the non-leaders were equally emphatic that the recreational needs of the elderly are met, the leaders indicated that they believed the recreational needs of no group, aside from children, are adequately served. The non-leaders saw only the needs of young adults as inadequately served, while the leaders noted young adults as simply the most poorly served age group in the city.

The cultural needs of all members of the community are served, according to the responses of the non-leaders. The leaders were

evenly divided on this issue with regard to the needs of older adults and the elderly. The leaders also felt that the cultural needs of children in Hastings are satisfied, whereas the needs of young adults and adolescents were not. It should perhaps be noted that the non-leader responses were less heavily affirmative regarding the satisfaction of young adult and adolescent cultural needs than for any other group. For this reason, responses of the leaders and the non-leaders concerning the perceived lack of cultural fulfillment of community members may not be all that divergent.

Questions of access were seen in a similar, though not identical, fashion by leaders and non-leaders. Cost of land, though not nearly as important to non-leaders as most questions of access, was seen by them as more important than access to the central business district from a community center site. The leader sample rated the cost of land as the least important consideration in the location of a community center. This apparent lack of concern for the cost of land on the part of the leaders may well be explained by the opinion voiced by several members of this groups that any site would cost something. Tabulation of results seems to indicate that the non-leaders view all other aspects of access as being of similar importance, while the leaders viewed access from all parts of the city and access for youth too young to drive as more important questions.

There was a fairly strong feeling among non-leader respondents that a location near the downtown would be more accessible than one near the edge of the city. This interpretation seems supported by the pattern resulting from the non-leader map locations (see figure 6). The leaders were much more indecisive as to their selection of a site

for a center. This is also borne out by the choices on the leader map of site selections (see figure 6). Generally, one would have to say that non-leaders favor a downtown location more than do leaders. In addition, non-leaders, by a small margin and with some reservations, appeared more in favor of the demolition of old, dilapidated structures to create a downtown site for a community center. The leader group was actually opposed to this idea. This could be because some among the leader group believed the cost of such demolition and construction would be prohibitive.

Both leaders and non-leaders indicated that facilities for the performing arts and conventions were the most important things to be included in a new center. No other possibility was nearly so popular with either group. Basketball and indoor swimming received some support from non-leaders, while indoor swimming and handball found support among leaders.

Leaders and non-leaders seemed to feel that the young adults age group would most often make use of a new community center. In the case of the non-leader sample no respondent indicated that he believed that young adults would "seldom" or "never" use such a facility (see appendix 1). The leaders, however, felt that adolescents would frequent a community center almost as often as young adults. The non-leaders rated adolescents as the second most frequent users of a center, with their rate of usage viewed as much greater than that of older adults and children. Both leaders and non-leaders indicated senior citizens as the age group least likely to make frequent use of a center.

CHAPTER FOUR

AN ANALYSIS OF SURVEY DATA

The previous chapter was a recounting of survey data. This is a useful process in that it does give a general impression as to the opinions of respondents on issues raised in the questionnaire. In order to better examine and understand raw data it is necessary to undertake a more systematic procedure. For this reason a statistical testing procedure was adopted. The purpose of the statistical testing is to determine if differing opinions by defined sub-groups vary enough to be significant. If statistical significance is indicated, then it is possible to conclude that it is extremely unlikely opinions of populations represented by the two sub-groups are the same on the particular issue in question. For this reason, statistical testing was undertaken with those questions which raise issues directly related to the placement of a community center.

Statistical Modelling Considerations

The nominal level of measure is involved in this testing process. This is the lowest level of measurement, and therefore forces limitations on the selection of test to be used, and the conclusions drawn from the test results. Chi-square analysis was selected since the data are more manageable in a series of two by two contingency tables (or matrices). Chi-square is especially appropriate for contingency table assessment of nominal level data.

Identifying Subsamples

The data were first broken into two groups. These sub-samples were identified as community leaders and non-leaders. The sub-samples were then tested against each other to determine if any significant differences existed between their pattern of responses. The purpose of the testing was two fold. It was done to discover first if there were any significant differences in the way in which leaders and non-leaders view the spatial structure of a community, and second, to find if leaders truly represent the views of most community members.

For further testing these two groups were combined. From the sample various other sub-groups were examined. These sub-groups were defined by characteristics common to both leaders and non-leaders. Each of the sub-groups was then tested against all other respondents. The rationale for this testing was to determine if any factor other than leadership could account for an individual's opinions concerning the placement of a new community center. If all variables except those distinguishing leaders from non-leaders could be eliminated as insignificant, the research hypothesis that community leaders and non-leaders perceive the city-scape differently can be directly judged. Those determinants used for identifying sub-samples were age, sex, stage in the family cycle, occupation, education, and length of residency in the Hastings area. It is hypothesized that these characteristics could be determining factors in an individual's decision concerning site selection for a community center. The rationale for this reasoning is that the inventory of personal interests for members of differing sub-groups (i.e., sexes, age groups, etc.) will vary. This process also involved questions two and three on pages one and two of

the questionnaire, and questions twelve and thirteen on page four (see appendix 1).

A Preview of Questionnaire Responses

Questions two and three dealt with the issues of access and location of the central business district. Here, respondents' general imagery of the community was elicited by focusing on a dominant feature. Respondents were asked if the downtown was in or near the center of the city, and if they had easy access to it. It was hypothesized that if an individual had easy access to the downtown area of the city he might be more likely to favor a community center near the central business district.

Questions twelve and thirteen on page four of the questionnaire dealt, respectively, with the uses which a center might include, and those age groups who might use it most often. It was hypothesized that an individual's interest in a particular use for a community center might affect his selection of a site for a center. Not all age groups in society enjoy equal degrees of mobility. Question thirteen was an attempt to raise this issue for survey subjects. An examination of responses to question thirteen was undertaken to determine if a subject's consideration of the mobility of possible users of a community center affected his process of site selection for a community center.

Statistical analysis was concentrated on questions one through ten, excluding seven, on pages two and three of the questionnaire. Question one of this section dealt with the issue of cost of land, and if subjects felt this to be important. Question two asked about general access to a community center from all parts of the city. Various issues

of access dealing with certain economic and age groups were solicited from questions three through five. The importance of access to the central business district from a community center was covered in question six. Questions eight through ten discussed the advantages of central and peripheral sites.

The chief concern of this study is perception among individuals in the city of Hastings as it relates to the placement of a proposed community center. Because items one through ten, pages two and three of the questionnaire, deal specifically with problems of location and access, responses to these questions have been emphasized. Other questions were used to help determine sub-groups among respondents for testing and comparing.

Questions one through six and eight through ten allowed the subject not only to register his feeling for or against something, but also the intensity of his feelings. For example:

1. Cost of Land

Important						Not Important
	2	1	0	1	2	
2. A central location, perhaps near the downtown, would make the civic center accessible for most of the residents of Hastings.

Strongly	Agree	No	Disagree	Strongly
		Opinion		Disagree

In each instance all negative and all positive responses were reduced to one category each. This was done to facilitate statistical testing. As a result "Strongly Agree" and "Agree" were combined as favored, and "Disagree" and "Strongly Disagree" were combined as against. A similar process was carried out for questions one through six. The combining

of responses for the purposes of testing does present the disadvantage of "masking" or grouping information. A decision was made to do so to simplify the statistical testing process. It was believed that the advantage of preciseness was outweighed by the advantage to be gained by simplifying the statistical manipulations. A similar process was carried out for questions one through six. All "Important" responses were combined and all "Not Important" responses were combined.

The purpose of the testing was to discover if any meaningful differences existed in the way respondents viewed the city with respect to the location of a community center. For this reason it was believed that a greater danger lay in finding significant difference where in fact none existed, than overlooking significance elsewhere. Thus a somewhat conservative significance level of .01 was elected. In order to obtain statistical significance at the .01 level a chi-square value of 6.635 or larger must be found in each application involving two-cell by two-cell tables.

Leader - Non-leader Contrasts

For the most part leaders and non-leaders agreed on the issues raised in the survey on access and site location for a community center. On many issues about which the leaders felt strongly, non-leaders concurred, often in a similar ratio. There were exceptions, however, to this general trend. For example, non-leaders seemed to feel more strongly than did leaders that a central location would be more accessible to all residents of the city. Also, non-leaders seemed to look less favorably on a peripheral site than did leaders. Difference of opinion found on the question of access to the downtown from a community

center site was not statistically significant. By a small margin leaders felt that access to the downtown from a community center was unimportant, while non-leaders, by an equally small margin, felt it was.

These differing points of view regarding access to the central business district and a central versus a peripheral location is perhaps made more clear in the group responses to question ten. Question ten raised the issue of demolishing old, dilapidated structures near the middle of the city to create a site for a community center. The difference was not significant at the .01 level, with a chi-square value of 4.4583. This would, however, have been significant at the .05 level.

TABLE 1
Attitude Toward Demolition of
Buildings to Create a Center Site

	<u>Favor Demolition</u>	<u>Against Demolition</u>
Leaders	6	11
Non-Leaders	34	19
N=70	$\chi^2=4.4583$	

Source: Obtained from sample data, survey question 10

Question one elicited the greatest difference of opinion between leaders and non-leaders. This entry dealt with the importance of the cost of the land for a community center project. Leaders felt that the cost of land was not important, while non-leaders indicated that they believed otherwise. The difference of opinion was statistically significant at the .01 level, with a chi-square value of 13.2658.

TABLE 2
Attitude Toward Cost
of Land for Center

	<u>Cost as</u> <u>Important</u>	<u>Cost as</u> <u>Not Important</u>
Leaders	8	11
Non-Leaders	45	8
N=72		$\chi^2=13.2658$

Source: Obtained from sample data, survey question 1

It is interesting to note that, while non-leaders were concerned about the cost of land, they also demonstrated an interest in the demolition of existing buildings to create a site. Such an undertaking would in all probability result in a site with the greatest cost for the obtaining of the land itself; although the reduced cost of parking facilities, access roads, and other expenses inherent with a new peripheral site might help offset the cost difference. Also, the leaders, who did not feel the cost of the land for the project to be an overly important issue, favored a new, peripheral site over one near the central business district.

This finding on question one, "Cost of Land," tends to lend support to the hypothesis that leaders and non-leaders do not always perceive things in the same way. One may also question how well attitudes of community leaders reflect non-leaders on the issue raised by question ten, the demolition of older buildings downtown to create a community center site. A chi-square value of 4.4583, though not significant at a conservative level, cannot be dismissed casually. In order to maintain a proper perspective of these two groups, however, it should be pointed out that for the remainder of the questions the opinion

of the leaders closely paralleled those of the non-leaders.

A map of the city was included with each questionnaire. On this map each subject was asked to indicate his choice of a site for a community center. Both leaders and non-leaders were provided with maps. Three circles were then drawn, using the intersection of Hastings Avenue and Third Street as the axis point of the compass. The radius of each succeeding circle was twice that of the preceding one. The final circle enclosed almost all of the incorporated area of the city (see figure 6).

TABLE 3
Map Locations of Site Selections
for a Community Center

	Frequency of Selection in Zones		
	1	2	3
Leaders	5	0	11
Non-Leaders	26	2	25
N=69		$\chi^2=2.117$	

Source: Obtained from sample data

A chi-square test, using a two by three matrix, was used to determine if there was any difference between leaders and non-leaders in the site selected for a center. On the matrix above number one indicates the inner-most circle. With two degrees of freedom at the .01 level this value was not significant. Thus, on the basis of the results of this test, it is possible to conclude that there was no statistically significant difference in the pattern of site selected for a community center by the leader sub-group and the pattern of sites selected by the non-leader sub-group.

The crudity of this assessment is acknowledged. No attempt was made, for example, to examine specific site selection choices between leader and non-leader sub-groups. It is not believed, however, that this renders the results of the test of any less value. The purpose of the test was merely to determine if either sub-group varied markedly from the other in their preference toward a central or a peripheral location for a community center. It is felt that the test accomplished this.

In order to clarify differences which might exist between leaders and non-leaders it was necessary to control for other population characteristics.

Sex

Perhaps one of the most important factors in an individual's personality is his/her sex role. Because of society's tradition of stereotyping sexual roles for men and women it is possible that this could affect in some fashion the way one views the morphology of the city. A test was made to control for this possibility.

Since the problem was to control for a respondent's "femaleness" or "maleness" all respondents, both leaders and non-leaders were first combined, and then divided according to sex. Comparisons were then made to determine if a respondent's sex was a significant factor in site preference for a community center.

The test undertaken was to compare all men's responses to all women's responses. In only one instance were the opinions of the two groups not the same. Female respondents felt that access of a center site to the downtown area was an important issue. Males, on the other

hand were divided on the issue. A chi-square test on a two cell by two cell matrix revealed the two samples did not vary enough to be significant.

No significant differences of opinion concerning the placement of a community center were found on the basis of a respondent's sex. Therefore, sex can be eliminated as an important determinant in a resident's attitude toward the location of a community center.

Age Groups

An individual's age could have a bearing on the way in which he chooses to deal with a particular issue. In some instances the very young or the very old may feel left out of the decision-making process. The very young were not included in this study, but a number of elderly persons were. On several occasions elderly persons indicated that because of their age they did not feel that they should state an opinion about a given issue. None of these individuals indicated that they were physically handicapped in a way that would prohibit their taking advantage of at least some activities of a center, should one be built. Several elderly respondents who indicated little or no interest in a community center were residents of Good Samaritan Village, a retirement center in the city. These individuals stated that most of their needs were served by the retirement center. Most elderly residents, however, did feel that community projects concerned them. The majority of respondents sixty-five years of age or more, including a gentleman of 90, did choose to share their opinions.

For purposes of statistical analysis respondents were placed in one of three categories, according to their age. These categories were

20 to 45 years (young adults), 46 to 65 years (older adults), and 66 years or more (senior citizens). These classifications are somewhat arbitrary, but the results of age group responses would not be substantially altered by minor changes in group delineation. Each group was then compared in turn to all other age groups.

The two groups likely to differ most on the issue of placement of a community center could be the young adults and the senior citizens. Interestingly enough, in this sample this was not the case. For questions one through ten agreement was found between elderly respondents and young adult respondents. There were differences as to degree of positive response to a given question, but in no instance were the two groups in strong opposition.

When the responses of the young adult group were compared to those of the older adults complete agreement did not obtain. The two groups concurred on all issues except those raised by questions six and eight concerning access of the center. Older adults felt access from a community center to the central business district to be of some importance, while the younger age group did not. The computed chi-square was not significant at the .01 level.

Question eight asked if the respondent agreed that a location near the downtown would be accessible to most of the people of the community. Young adults indicated by some margin that they believed this to be so while older adults disagreed.

TABLE 4
Ease of Access for Community Members
to a Center Near the Downtown
Younger Adults vs. Older Adults

	<u>Access Good</u>	<u>Access Bad</u>
Older Adults	16	18
Younger Adults	22	4
N=60	$\chi^2=8.9384$	

Source: Obtained from sample data, survey question 8

In this case a significant chi-square value was found. It would appear, that if age is indeed a factor in an individual's site selection process, that it is the older adults who differ from young adults.

When the older adults were compared to the senior citizen group similar configurations of responses were uncovered. On question six the two groups disagreed, but not to an extent that significance could be found. On question eight, however, significance was obtained with a chi-square value of 7.4142. These results prompt a conclusion that young adults and senior citizens view a central location as accessible to most city residents, while older adults do not.

TABLE 5
Ease of Access for Community Members
to a Center Near the Downtown
Senior Citizens vs. Older Adults

	<u>Access Good</u>	<u>Access Bad</u>
Senior Citizens	14	2
Older Adults	16	18
N=50	$\chi^2=7.4142$	

Source: Obtained from sample data, survey question 8

The older adult and senior citizen groups were combined and compared to the young adults. It was found that the young adults agreed with the rest of the sample on all but one of the issues raised. The only exception to the general trend was a question of access to a peripheral site. The older adults and senior citizens, when combined, indicated that such a site would be accessible to community members. The young adults, by a slim margin, did not agree. The comparison of the senior citizen group to the combined young adults and older adults indicated that elderly respondents generally reflected similar views, the only difference being the degree of support for various issues.

The comparison of the older adult group to the combined young adult and senior citizen groups presented several contrasts in opinion. When compared, the older adults had differences of opinion with the two other groups on questions six, eight, and ten. On question six the older adults indicated that access to the downtown from the center site was not important, while the remainder of respondents felt it was. Question ten dealt with the possibility of razing older structures downtown to create a site for a community center. The young adults and senior citizens felt this to be a viable option, while the older adults did not. For questions six and ten, however, testing revealed no significant difference between the groups.

TABLE 6
(A)
Access to the Downtown from
a Community Center
Older Adults vs. Senior Citizens and Younger Adults

	<u>Access Important</u>	<u>Access Not Important</u>
Older Adults	17	19
Senior Citizens and Younger Adults	23	14
N=73	$\chi^2=1.6128$	

Source: Obtained from sample data, survey question 6

(B)
Ease of Access for Community Members
to a Center Near the Downtown
Older Adults vs. Senior Citizens and Younger Adults

	<u>Access Good</u>	<u>Access Bad</u>
Older Adults	16	18
Senior Citizens and Younger Adults	35	7
N=76	$\chi^2=11.1469$	

Source: Obtained from sample data, survey question 8

(C)
Razing of Older Structures to Create a
Community Center Site Near the Downtown
Older Adults vs. Senior Citizens and Younger Adults

	<u>Favor Demolition</u>	<u>Against Demolition</u>
Older Adults	16	16
Senior Citizens and Younger Adults	28	13
N=73	$\chi^2=2.5304$	

Source: Obtained from sample data, survey question 10

The result of question eight, the question on which the older adults were found in significant disagreement with senior citizens and younger adults, was not altered when the combined younger adults and senior citizens group was tested against the older adults. The calculated chi-square value was 11.1469.

Stage in the Family Cycle

The presence of children in a household could conceivably affect preferences for placement of a community center. On the one hand, it could be seen as positive to have a community center nearby for children to use. Alternatively, the center could be viewed as a disruptive element in an otherwise quiet neighborhood. Some might see a nearby community center as a hazard to children because of the increased traffic flow on neighborhood streets. In contrast, members of a household with no children may be opposed to placing near their home a facility which might be frequented by youngsters.

The combined sample was divided into three groups, those with dependent children, those whose children have grown and left home, and those with no children. The smallest of these groups was that of respondents who had no children. This group was so few in number that chi-square testing could not be undertaken. In any event, this group agreed in all but one instance with all other respondents. The exception was question nine, which concerned the issue of access to a peripheral site. Those individuals with no children did not feel that a peripheral site would be accessible to all of the population of the city, while the majority of other respondents indicated that such a location would be accessible.

The sample included about equal numbers of subjects whose children were still in the home and whose children were grown. In comparing these two groups no significant difference of opinion was discovered. A minor difference involved the issue of access to the downtown from a community center (question number six). Those with no children and those with dependent children favored such a location, while those whose children were grown were evenly divided on the issue. The calculated chi-square value was not significant.

These findings indicate that the presence or absence of children in a respondent's household has little, if any, bearing on site selection for a community center.

Length of Residency in Hastings

Length of residence in a community is another factor that could affect a person's perception of the cityscape. A short term resident may be unfamiliar with parts of the city. Also, a resident who had been in the city only a few years might feel less affected by a major change in the landscape, whereas a lifelong resident may view the cityscape as something that should be altered carefully.

For the purposes of this study individuals residing in Hastings for less than two years were eliminated from the sample. The rationale for this was to control for a transient student population and a judgment that this length of time would be required for an individual to develop awareness of the community and an interest in its affairs. There were two exceptions to this rule. Both were members of the leader sample, and both had lived in Hastings between one and two years. As a result of their occupations, and because in the course of their

tenure within the community they were already recognized as community leaders, they were included in the sample.*

Respondents were placed in sub-groups according to their length of residence in the Hastings area. The Hastings "area" included Adams County as well as the city. Residential categories were ten years or less, eleven to twenty-five years, and twenty-six years or more. These divisions should adequately describe residency and related degrees of familiarity with the city.

Analysis revealed no statistically significant differences of opinion among the groups defined. This is not to say that complete agreement was obtained. The "newcomers" (in the city for less than eleven years) differed from those who had been in the city longer as they were opposed to the razing of older structures in the central part of town (question ten) to create a site for a community center. Residents who had been in the city for eleven to twenty-five years were evenly divided on the issue. Those who had been in the city for twenty-six years or longer were decidedly in favor of razing older structures to create a site for a community center, and somewhat opposed to the construction of a community center on the edge of the city. Tests indicated, however, that none of these differences was statistically significant.

In summation, there was little relationship between length of residence within the city of Hastings and responses to the issues related to a community center's location.

*The two individuals in question were involved in responsible jobs in banking and public relations. Such positions would allow these individuals to become acquainted with the city of Hastings in a short time.

Education

Another variable which the author felt should be controlled was formal educational experience. An individual's length of formal education should affect his awareness of community needs, and therefore his perception of possible solutions. Ideally, formal education should accomplish several things. It should create in an individual a quest for an awareness of what is happening around him. In so doing the individual develops a sensitivity which causes him to observe things he might otherwise ignore, and which, hopefully, encourages him to investigate what he discovers. It is this "awareness," due in part to exposure to ideas other than his own, that brings an individual to a point where resolutions to problems are something to be thought through carefully, rather than reached in haste.

Because of this reasoning, the educational attainment of respondents was examined. The sample group was divided into several sub-groups. For lack of a better device, last grade of schooling completed was used as an index. The divisions that resulted were less than high school graduation, graduation from high school, post high school education, and college education.

Very few individuals with less than a high school education responded to the survey. This made statistical manipulation of this particular sub-group impossible. Little can be said of this group except that with one exception there was agreement with the opinions of the remainder of the sample. The exception was that those individuals with less than a high school education were opposed to the demolition of present structures near the downtown area of the city to create a site for a community center.

High school graduates for the most part also reflected the feelings of the remainder of the survey sample. The single exception to this was on the question of locating a center on the edge of the city. This group opposed such a suggestion. A chi-square test revealed a value of 1.612, insignificant at the .01 level.

Those whose formal education went beyond the high school level also more or less reflected the feeling of the other respondents. The only exception to this was that college graduates were as a group less evenly divided on any given issue than those who had not finished four years of post high school work.

Occupations of Respondents

The occupation of respondents was the last population characteristic to be assessed. Some occupational types may serve to better acquaint the individual in the employ with the cityscape and/or the needs of the community. For example, a fire-fighter or a police officer might be more familiar with the cityscape than others, while ministers and teachers may be more aware of the community's social needs.

Occupational types were divided into several categories. Since some of these categories contained very few individuals, combinations of similar groups were necessary for statistical testing. Unfortunately, some sub-groups were still not large enough to allow for statistical manipulation. The categories elected were homemakers, tradesman and factory workers, retail and wholesale, service occupations and the professions.

There were so few individuals in the groups labeled "homemakers"

and "tradesmen and industrial workers" that use of the chi-square test was not possible. The homemaker group, in any event, appeared to conform to the feelings of the rest of the sample. The tradesmen and factory worker group, however, did not. Interestingly, those individuals took exception to both questions nine and ten. That is, they were opposed to both location of a center on the edge of the city and to the removal of older structures near the central business district for a site.

Those involved in retail and wholesale occupations varied from the remainder of the sample in several ways. None of the differences, however, were statistically significant. Perhaps surprisingly, individuals felt that access to the downtown from a community center was not important. The remainder of the sample indicated that access to a community center from the central business district was of some importance. Also, members of the sub-group generally opposed construction of a community center downtown, and felt that a peripheral location would be most easily accessible for most residents.

With one exception, individuals in service occupations followed very closely the pattern established by other residents. The one exception was the question dealing with access to the downtown. Those in service occupations were evenly divided on the issue, while the rest of those sampled indicated mild support for the idea.

The occupational group labeled "professionals" shared an opinion unlike the remainder of the sample. This involved the cost of land for a community center site. While most others sampled felt this to be an important issue, the professional people included in the survey did not agree. The computed chi-square value was significant at the .01

TABLE 7
Attitude Toward Cost of Land
Professional Occupations vs. All Others

	<u>Cost as Important</u>	<u>Cost as Not Important</u>
Professionals	11	13
All Others	43	7

N=64

$\chi^2=13.2013$

Source: Obtained from sample data, survey question 1

level. A partial explanation for this phenomenon might be that those individuals earlier identified as the community leaders made up a sizeable portion of the sub-group known as "professionals." This sub-group also differed from the remainder of the sample in that they opposed, by a small margin, the removal of older buildings to create a site for a community center.

Comparisons

Beyond population characteristics, other factors may influence an individual's selection of a site for a community center. An individual who envisions a facility which would be primarily a recreational complex might select a site much different than a second individual who sees a new facility as a center for the performing arts. If a respondent believes that a new center will serve the needs of a particular group more than others this may affect his selection of a location for a community center. For example, if a center is intended to serve the needs of those segments of the population that are less mobile (the very young, the elderly, and the very poor) location and access of the center may be viewed as more important than if more

mobile segments of the population are to be served (young and middle-aged adults).

Subjects were asked to rate the location of the central business district of Hastings and their access to it. Respondents were grouped according to their answers, and the responses were examined to determine if these opinions were reflected in their choice of sites for a community center. Responses to questions eight, nine, ten, and any other questions felt to be relevant were then examined.

Selected Uses of a Community Center

Certain uses of a community center, while not mutually exclusive, may serve the needs of different segments of the population. It is therefore conceivable that facilities with different uses should be located at different places in the city. Since the community center in question is envisioned by most as a multipurpose facility, no one location would perhaps be best for all possible uses. For this reason persons interested in but one function for a center may feel it should be located in one place, while someone interested in other functions would prefer a different location. Based on this rationale an attempt was made to determine which activities appealed most to respondents. Chi-square tests were then conducted to determine if the differences affected an individual's selection of a site for a community center.

For the purposes of the test three classes of respondents were singled out, those who indicated swimming, performing arts, or conventions as very important uses for a community center. These three activities were felt to be examples of uses that might require different locations within the city to be "ideally" located.

Those who stated that swimming was a very important use did not

vary in a statistically significant way from the rest of the sample on question eight (location of a community center downtown), question nine (location of a community center on the edge of the city), and question ten (the demolition of old buildings to create a community center site). There was, however, an indication of opposition to a location on the edge of the city. Individuals who showed an interest in the performing arts also were in agreement with other respondents on question eight (location downtown) and nine (location on the edge of the city). On question ten (the razing of old buildings) these persons differed from the rest of the sample, and rather than support this proposal, were evenly divided on the issue. The differences were not statistically significant.

The pattern of responses by subjects interested in a convention center was very similar to that of those who cited a center for the performing arts as very important. The only difference of opinion with the remainder of the sample was with question ten (the razing of old buildings). This, however, was not statistically significant.

From the results of these tests on a limited sample, a subject's preference for use of a center has a statistically insignificant effect on site selection for a community center.

Patronage Frequency as a Factor in Location

It has been stated that it is possible that a subject's selection of a site for a community center could be affected by his opinion of what groups would be likely to frequent a center. This was assumed because various segments of the population may be more mobile than others.

Three groups of respondents were drawn from the sample, those

who felt children would "often use," those who felt young adults would "often use," and those who felt senior citizens would "often use" a community center. These age groups were considered representative of three different degrees of mobility.

Tests of each of these sub-groups against the remainder of the sample revealed no statistically significant differences of opinion. Some minor differences, however, were disclosed. Those who saw senior citizens as frequent users of a center were slightly against location of a center on the edge of a city. This point of view was in opposition to the remainder of the sample. Also, those who viewed children as frequent users of a center were somewhat opposed to a location on the edge of the city. When tested these differences of opinion were not significant at the .01 level.

Location and Access of the Central Business District and its Effect on Site Selection for a Community Center

Respondents were asked to rate the location of Hastings' central business district and their access to it. (It might be noted in passing that the central business district is actually located very near the physical center of the city (see figure 2).) Respondents could rate location (question two, page one of the questionnaire) and access (question three, page two) as "excellent," "good," "fair," or "poor." If a respondent rated either aspect of the business district as "excellent" he was placed in a group separate from those who had rated the respective quality as less than excellent. The responses were divided in this fashion because few individuals rated either access or location of the downtown as "fair" or "poor." The responses of each group to questions eight (attitude toward a central location), nine (attitude

toward a peripheral location), and ten (attitude toward razing old structures to create a center site) on page three of the questionnaire were then examined.

When the response frequencies were assessed statistical significance was not indicated. No matter how a respondent answered the questions concerning the central business district he did not differ significantly from the remaining sample concerning site selection for a community center. It should be noted that agreement was not uniform. Those who rated their access to the downtown as only "good," "fair," or "poor" conflicted with other respondents concerning the possible location of a community center near the downtown. While the rest of the sample was in favor of such a site, this group was opposed to the idea. The difference of opinion was not great enough to produce statistical significance.

Effect of a Subject's Place of Residence on Community Center Site Selection

An individual might view a community center near his home as an asset to his neighborhood. Any activities included in a center would be made easily accessible by such a location. Other persons might view the activity that could accompany such a center as a nuisance.

The residences of those who favored a peripheral location for a center and of those who favored a central site were plotted on a map of the city (see figure 7). Three concentric circles were then drawn on the map, using the intersection of Hastings Avenue and Third Street as the axis point of the compass. The radius of each succeeding circle was twice that of the preceding one. A chi-square test

was then used to determine if a significant relationship existed between the distance of a subject's home from the center of the city and his choice of a central or a peripheral location for a community center.

Using a three-cell by two cell matrix, no significance was found at the .01 level. No evidence was discovered that a respondent's place of residence may be considered as an important variable in site selection for a community center.

Summary

Before an attempt is made to summarize the findings of this chapter, some note should be taken of the sample size and the analytical tool used in manipulation of the data. Of two hundred questionnaires mailed, only sixty-eight were returned in usable form. Together with the leader sample of nineteen, this resulted in a total number of eighty-seven responses. The return of the mail-out was hardly encouraging. This would necessitate caution in extending strong conclusions.

Additionally, one must consider the weakness of the chi-square test. The data is the nominal level of measure, and this somewhat limits the ways in which it may be treated. The chi-square test was elected due to the nature of the data. The major weakness of the chi-square test, however, is that while it can indicate the presence of a relationship it cannot adequately indicate the strength of that relationship.

Leaders and Non-Leaders

A basic premise of this study has been the proposition that

community leaders, because of a generally higher level of education, a greater degree of awareness, and perhaps a different personal interest inventory view the cityscape differently than do non-leaders. The results of this study tend to indicate that, with the exception of "attitude toward cost of land," there is no statistically significant relationship between a respondent's leadership role in the community and the way in which he views the morphology of the city. This might tend to indicate that the leadership population of Hastings is fairly responsive to the desires of the non-leader population.

The only other issue worthy of note was that concerning demolition of buildings in the central business district to create a site for a community center. A chi-square test revealed insignificant difference because of the use of an extremely conservative significance level of .01. While no statement in support of the research hypothesis can be made, one hesitates to dismiss completely speculation concerning the question of community leader awareness of non-leader demands.

While keeping in mind the crude nature of the test employed, one is forced to admit that there appears little, if indeed any, difference in the way in which leaders and non-leaders of the subject community (Hastings) view their city.

Age Groups

As much difference of opinion came to light in the comparisons of age groups as with any other sample sub-groups. It was found that young adults and senior citizens agreed that most residents of the city would have better access to a community center built near the downtown than one built near the edge of the city. These two groups

were at odds with the older adults on this particular issue. The older adults felt that a community center located on the periphery of the city would be more accessible for most residents than a community center located near the central business district.

It was speculated that an individual's place of residence might in fact be the real cause of this pattern. This was based on the opinion that older adults might reside in the newer, larger single family dwellings nearer the edge of the city, while the senior citizens and young adults would live nearer the middle of the city in older, lower cost housing. Non-leader residences were then plotted on a map of the city, while noting if they (on the maps of the city that served as part of their questionnaires) preferred a downtown or a peripheral location. Three concentric circles were then drawn on the map, with the radius of each succeeding circle being twice that of the one preceding it. The intersection of Hastings Avenue and Third Street was used as the axis point of the compass. Using a three by two matrix and a chi-square test with a significance level of .01, no significant relationship was found.

It must therefore be concluded, on the basis of these tests, that age does influence site selection for a community center, and by extension, the way in which one views his community.

Types of Employment

One last area of disagreement between sub-groups involved the employment category. One sub-group, that labeled as the "professional" sub-group, disagreed with the remainder of the sample concerning the importance of the cost of land. The professional sub-group felt the cost of land for the community center project was not an important

issue. The remainder of the sample felt that it was. As was noted earlier, this can in part be attributed to the fact that the "leaders" sub-group, many of whom were also members of the "professional" occupational sub-group, felt that the cost of land was a less important consideration. One should also note, however, that the professional class would probably constitute a higher income bracket than would the remainder of the sample. For this reason the cost of a more expensive site, and the resultant increase in local taxes, would seem less important to the professional employment class.

Issues of Importance to Most Residents

Early in this work a "conceptual yardstick" was introduced. This "yardstick" was to serve as an evaluation mechanism in the appraisal of survey responses. Equity was a part of this measuring device. Equity, as it relates to the issue of a community center's location, requires a consideration of the needs of society's less fortunate when selecting a site. It would appear that the equity portion of the "yardstick" is being observed, perhaps unknowingly, by subjects of the study survey. The majority of survey respondents indicated that access to a community center by the poor and by children too young to drive were important issues. Access for the elderly was somewhat less important an issue than access for other disadvantaged groups, while access from all areas of the city was rated as less important than any question of access for the less fortunate residents of the city. Whether or not most respondents were aware of the concept of equity as it applies to this particular problem of location, responses to the survey seem to indicate some realization that certain members of the community are in fact less able to get about than others. Respondents seem to

indicate that some provision should be made for the city's less fortunate in the locating of a community center.

Resource allocation, another part of the "yardstick," is certainly considered by most respondents, at least in the form of tax dollars spent on a community center site. This is evidenced by the statistically significant difference of opinion between leaders and non-leaders concerning the importance of the cost of a community center site. Non-leaders felt that this was an important consideration, while leaders, as a group, did not. It can also be speculated that the preference among some sub-groups for a downtown location is an expression of a lack of interest in the continued expansion of the city into the surrounding farmland. Little overt evidence was found to indicate that subjects were interested in using the community center as a way to redistribute society's resources to the poor. The only inference of such intentions was prompted by a revealed concern that a center be accessible to low income groups.

Concern for the urban-sprawl problem around the city could also be viewed as related to the aesthetics portion of a conceptual evaluation mechanism. A community center of the type currently envisioned would involve a structure of considerable size. Such a facility would perhaps look somewhat out of place, and be therefore that much more difficult to make look attractive, if not surrounded by structures of a similar size. Still, one must also consider the view of that respondent who opposed location of a new community center near the middle of town because a new "modernistic" building would look out of place surrounded by older structures. In any event, the consideration of aesthetics, while perhaps not a primary consideration, did play some

role in subjects' responses to the survey.

Chapter Four has been an attempt to clarify results of the survey through analysis of the resultant data. Quite often research project surveys are not as successful as anticipated. This project was no exception. It is felt that the major shortcoming was the poor response to the "mail" survey. The following chapter is devoted to a more extended treatment of conclusions drawn from this study.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

The premise on which this work has been based is that the form and function of the man-made environment are largely the result of man's conscious decision-making. This intellectual process is one involving several steps. These can be identified as perception, appraisal, and decision making. Each succeeding step is to some degree affected by those preceding it. Logically, then, the most basic element in human decision making is the individual's perception of his surroundings. An individual's perception of the environment is affected by individual differences and experience as well as filters imposed by membership in a social-cultural group.

This study has attempted to deal with perception as a factor in the decision-making process, specifically, how perception of a cityscape affects the decision-making process with regard to site selection for a new community center. Also of interest to this study was a comparison of various possible sites for a community center. The qualities of a site were assessed by means of a model, or conceptual "yardstick," which included consideration of such factors as efficiency, equity, resource allocation, and environmental quality.

The following chapter, as its title suggests, is to serve as the summary and conclusion of this paper. The first section of the chapter will be a summary of the significant statistical relationships revealed in this study. A following section will outline several approaches that may have been used by various individuals in selecting

site for a community center. Section three of the chapter will be an attempt by the author to identify, by making use of those factors included in the previously mentioned model, a general area of the city of Hastings in which a community center site might be located. The thesis will close with some general conclusions and observations.

Summary of Significant Relationships

A secondary theorem of this work was that there would be a significant difference between the ways in which leaders and non-leaders viewed their community (see Chapter One). A survey and chi-square testing of survey data was used to determine if significant differences existed between the two groups. The leader and non-leader groups were then combined into one large sample group. This sample was then divided into several sub-groups according to pre-established population characteristics. This was done to determine if any characteristics, besides leadership in the community, could account for significance with regard to various issues concerning the placement of a community center (see Chapter Four).

Leaders and Non-Leaders

In only one instance was significance between leaders and non-leaders indicated. This was over the issue of land cost for a community center. Using a significance level of .01, with one degree of freedom, a computed chi-square of 6.635 or larger was necessary in order to obtain statistical significance. For the issue of cost of land for a center site a chi-square value of 13.2658 was computed. This indicated that leaders and non-leaders differed concerning the

importance of the cost of land for the project. Leaders did not feel as strongly about the cost of land as did non-leaders. In part this no doubt reflects the different financial positions of most leaders and non-leaders. An increase in taxes to fund a more costly site for a community center project would have less impact on higher income groups than lower income groups. It is only fair to point out, however, that this difference of opinion may reflect an awareness on the part of the leader population that a center project should perhaps be thought of as a long-term investment in the social, cultural, and recreational well-being of the city. Therefore, any cost incurred in the construction of a community center must be weighed against the resulting benefits as seen over a lengthy span of time. When viewed in this manner the opinion of the leader sub-group is placed in perspective. In addition, when interviewed, many leaders noted that any site will cost something, and any additional cost for a site that better suits the needs of the city would probably be a worthwhile investment. On this particular issue, therefore, it would appear that most leaders questioned had a better grasp of the long range nature of the project in question, and its resultant cost/benefits to the community, than did the non-leaders questioned.

With a computed chi-square value of 4.4583, the difference of opinion between leaders and non-leaders over the issue of razing old buildings near the central business district to create a site for a community center was not significant at the .01 level. This score, however, would have been statistically significant had the .05 level been used. One must still ponder, therefore, how closely the opinions of the leaders reflect those of non-leaders on this issue. Non-leaders

generally favored the demolition of older structures, while most leaders did not. Though cost may be a factor in this issue, results from the question on the importance of cost of land would seem to contradict the conclusion that cost is the major reason that most leaders were less than enthusiastic towards a downtown location for a new community center. Before dismissing cost as a factor in the consideration in the razing of downtown structures, however, it might be noted that some respondents among both leaders and non-leaders may have been of the opinion that the refurbishing and incorporating of the present city auditorium in any new complex might result in some savings in tax dollars.

Both leaders and non-leaders seemed to feel a community center located on either the periphery of the city or near the downtown area would be accessible from throughout the city. Most leaders and non-leaders agreed that the downtown of Hastings was well located, and that access to it was good. It would therefore appear logical that questions of access did not enter into the issue of razing old structures.

It is conceivable that some respondents in the leader sample do not believe that adequate space for a community center, and what they believe to be the required parking space, could be obtained near the downtown. Another possibility is that because some new commercial development has taken place on the fringes of Hastings, and seems likely to continue in the near future, it may appear logical to some of the leaders that a new community center be placed on the periphery of the city. Just as logically, however, new construction in the downtown area may have convinced most non-leaders that the demolition of older structures near the central business district is a viable alternative.

Age Groups

Aside from the leader and non-leader sub-groups, only two population characteristics revealed a statistically significant difference of opinion between two sub-groups. Of these, only one set of responses differed from the pattern established by the comparison of responses of leaders to those of non-leaders. The sub-groups that established their own patterns were the various age groups within the sample.

The sample was divided into several sub-groups according to various age categories. These categories were 20-45 years (young adults), 46-65 years (older adults), and 66 years or more (senior citizens). Testing revealed that the young adults and the senior citizens disagreed with the older adults on a question of access. Older adults did not feel that there would be access from all parts of the city to a downtown community center site. Both young adults and senior citizens indicated that they believed such a location would be accessible from all parts of the city. The young adults sub-group and the senior citizens sub-group were individually compared to the older adults sub-group. Then the senior citizens and the young adults sub-groups were combined and tested against the older adults sub-group. In each instance statistical significance was indicated.

It was surmised that his opinion might be affected by a respondent's place of residence. The rationale for this point of view was that older adults might live near the edge of the city in homes large enough for families with children, while younger adults and senior citizens would live in housing near the center of the city. Statistical testing, however, revealed that this was not the case. For this reason

it was difficult to draw any conclusion with regard to this factor. It does appear that younger adults and senior citizens were more interested than older adults in a downtown site for a community center. It is perhaps tenable that younger adults have children too young to drive, and senior citizens are restricted in their movement by their age, while older adults, because their children are older, are the most mobile segment of the population. Again, no statistical basis was found for this conclusion.

Another possibility is that these responses are the result of income groupings. Most leaders, though not all, fell into the category of older adults. It should be remembered that the leaders, who are usually of a higher income bracket than non-leaders, were generally opposed to locating a community center on a cleared site near the downtown. When one considered that young adults and senior citizens are not usually in the high income category, the possibility that income is a factor become apparent. Once again, it is possible that those who favor a downtown location do so because they wish to have the present structure, or structures, refurbished and incorporated into any new facility.

Occupation

The importance of the influence of a subject's income bracket on his responses was perhaps further demonstrated by the results of tests involving occupational sub-groups. The sample was sub-divided into several occupational categories. The categories were homemakers, tradesmen and factory workers, retail and wholesale, service occupations, the professions, and retired (see Chapter Four).

Because of the relatively small size of the overall sample, some occupational sub-groups were too small to facilitate statistical testing. Of those sub-groups which were tested, only one was found to vary from the remainder of the sample in a statistically significant way.

The occupational category labeled as "professional" varied in a statistically significant way from the remainder of the sample on the question of the importance of the cost of land. The professional sub-group generally felt this a less important issue than did the remainder of the sample.

Two factors were perhaps influential in the opinions indicated by the professional sub-group. The first is that this sub-group absorbed a large number of individuals from the community leaders category. This no doubt had some influence on the similarity of responses by the professional sub-group and the community leader sub-group to the question on the importance of the cost of land. The second factor may have been that of income. Individuals who are part of the professional class generally enjoy a higher income level than the remainder of the population. It is possible that for this reason the professionals, as a group, are less concerned with the cost of the community center site. It is also possible that the professional occupation sub-group is able to more accurately assess importance of site cost to the cost of the entire community center project.

Conclusions From the Sample Sub-Group Testing

Because of the information presented in the three preceding sub-sections, it appears that the level of an individual's income has a bearing on the way in which he views locational alternatives for a

community center, and by extension, the city in general. The evidence is admittedly circumstantial, and the conclusion, therefore, somewhat tenuous.

In retrospect, it is unfortunate that a question requesting the income level of respondents was not included. It is possible that such a question might have served either to substantiate or dismiss speculation concerning the importance of an individual's income in influencing his view of the city-scape. The exclusion of a question concerning the income of respondents was not an oversight on the part of the writer. The question was purposely omitted from the questionnaire. It was felt that a question involving income, even if only an approximation, might have discouraged individuals from completing the questionnaire.

In any event, enough circumstantial evidence is present to suggest that there is at least some support for the premise that an individual's income level does affect the image he holds of his community. In part this would appear to support the findings of Fielding in his study of the mental maps of various groups in the Los Angeles metropolitan area.¹ By inference, then, one could conclude that because a community's leaders are often individuals with an income higher than most of the non-leaders, there are at least some differences in the way leaders and non-leaders view the city-scape.

Map Analysis

In addition to the questionnaire itself each subject was provided with a map of the city and asked to locate a possible site for a community center. Various tests were then operationalized in an attempt

to assess this facet. Although no statistical significance was indicated in any test, some interesting patterns did appear when the locations selected by subjects were plotted on a map (see figure 6).

The patterns resulting from the maps seem to reflect some of the general trends in opinion indicated by the examination of the questionnaire returns. That is, a larger proportion of the non-leaders favored the location of a community center downtown than did leaders. Of the non-leaders, twenty-six of fifty-four favored location of a community center within six blocks of the present city auditorium. The remainder selected sites at various locations throughout the city area. Only five of the sixteen leaders responding to the map selected a community center location in or near the downtown area of Hastings.

The most popular peripheral site among non-leaders was an area near the Pastime Bowl and west of Hastings High School. Eight of the fifty-four non-leaders favored this site. Four of the sixteen leaders chose this particular site, while the most popular peripheral site among leaders was the area north of the city along Highway 281 (see figure 6). When compared to any other single site, it is obvious that no other location was as popular with the combined leader and non-leader samples as the downtown site. It was not felt, however, that the purpose of this work should be to attempt to isolate a specific site for a community center. Instead, an attempt was made to identify certain more general opinions on the part of leader and non-leader respondents. In this instance the popularity of the downtown location was compared to the combined preference of all peripheral locations.

It is noteworthy, however, that very few leaders or non-leaders selected as possible sites for a community center locations south of

the Burlington-Northern tracks, which bisect the city from east to west (see figure 2). Much of the recent growth of the city has taken place in the areas not far removed from the more popular peripheral locations. It could therefore be that individuals see most likely sites as those areas of the city where the most building activity is now taking place, i.e., the downtown area and a region of recent growth on the north edge of the city. It should be noted, however, that few individuals thought that the community center should be located in the extreme western portion of Hastings, an area of recent and extensive commercial and residential growth.

Thus it can be stated that although a preference among many for a downtown location is acknowledged, an almost equal number favor location of a community center elsewhere. Therefore, aside from a plurality in support of a location near the central business district, no highly specific alternative surfaced from the map analysis.

An Outline of Various Approaches to Site Selection for a Public Facility

There are several methodologies which may be exploited to arrive at a locational selection for a community center. Each of these will be briefly explored in the following paragraphs.

A common approach to the problem of site selection for a public facility is the "unsystematic," or perhaps more accurately put, "unskilled" method. This process is generally engaged by individuals who lack any formal training involving the structuring of the city. Quite often this process may involve bits and pieces of other approaches, but lacks the depth of understanding and/or skills to exploit fully any

formal methodology. All too frequently individuals in a position to influence site selection for a community center, or other public facility, are not among those professionally qualified to do so.

What may be described as the "engineering methodology," for want of a better term, is a somewhat more systematic approach than that described in the previous paragraph. This involves an attempt, sometimes single-minded and myopic, to locate a public facility on a site that best suits the needs of the facility itself. Chief concerns of such an approach would include such questions as ease of construction, drainage of the site, travel time/cost to the site from all parts of the city, and access to a community center for those from outside the city. The effect of site selection on the community morphology and on residents themselves is generally a secondary consideration.

A modification of the engineering approach more concerned with the socioeconomic well-being of community members is the methodology exploited by those concerned with equity. This approach is based on two considerations; the first is that all members of a community should be able to use a public facility if they so desire, and the second is that not all persons have the same degree of mobility. Therefore, this process involves a concern with the ability of various groups within the community to travel to and from a community center. Those concerned with the equity aspect of a community center's location contend that because of factors of age and income, some individuals are less able than others to move about the city. Therefore, a community center should be located so that it is most accessible to those portions of the population least able to travel.

In contemplating various locational alternatives, other

methodologies should be noted. Among these are the concern of resource allocation and the ecological impact of the project on the surrounding environment and the city itself. The expenditure of a part of the community resource base, land, will have some effect on the future of the cityscape. It will affect not only the parcel of land on which the structure of a community center is built, but may also serve to influence, if not indeed dictate, uses to which adjacent parcels of land might be devoted. Further, the financial resources of a city involved in such a project will be devoted to the construction of a community center. This will impair the city's ability to devote funds to other needs. This may result in opportunity cost for the community as other programs will, as a result of the financial strain, be less likely to be fully exploited.

A concern for the environmental impact of a public project is perhaps in some respects related to the issue of resource allocation. The environmental impact of a public project is also concerned with the resource of land. From this perspective, however, it is the effect on a limited resource, rather than its effect on land values, that is of concern. Beyond the use of the resource of land the environmental impact of the construction of a large public facility involves a concern with run-off water and possible problems with erosion and pollution. There is also a concern with heating and cooling problems of adjacent buildings caused by the presence of a large nearby structure and its parking facilities. In addition, the congestion and noise pollution attendant with a community center would be of interest to those concerned with environmental impact of the project.

Finally, one would hope that an underlying concern of any

individual in determining a location for a community center is a sense of the aesthetic, that is, a conscious attempt to avoid the ugly or unpleasant, if not the attainment of the beautiful. This striving after a tasteful execution of a community center project should go beyond the structure and the grounds that surround it, to include the placement of a center within the framework of the city.

Bearing these processes in mind, the writer has attempted to identify those qualities of a site in determining the location of a community center. Following that, the writer attempted to draw some conclusions concerning the information gleaned from the survey used for this study.

Qualities of a Community Center Site

Ideally, the selection of the site for a public facility should be done with the needs of the entire community considered. A set of "site prerequisites" should be drawn up by those charged with site selection. A search should then be undertaken to determine which location(s) about the city fulfill(s) the pre-determined requirements. A judgment should then be made as to which site best meets the purposes of the project in question.

All too often communities have located public facilities on the parcel of land supported by whatever interest group that was able to overcome its opposition. Unfortunately, the initial purpose of a public facility, service to all members of the community, is often lost in the fray.

In part, the selection of a site for a tax supported public facility is influenced by the nature of the facility. Obviously, few

communities would consider locating a sanitary land fill or sewage treatment plant in the same place they would consider as a site for a center for the performing arts. A community center, however, should be a facility available for use by all members of the community. Its site should therefore be chosen so as to make its location most convenient for the greatest number of people. In this respect, special consideration should be given to those age and income groups whose circumstances in life restrict their mobility. Stated briefly, the site selection process for a community center should involve, as a primary consideration, the question of equity.

There are two ways in which a city may provide access for its less fortunate residents to a community center. One alternative is that the city may attempt to locate the community center so that it is easily accessible to less affluent and/or young and aged members of the community. A second possibility is that special free public transportation be provided for these groups. In any event, in order for a project to be a truly "community" center, consideration of the needs of those individuals less able to get about the city must be part of the planning process. This is true whether the facility in question is to be used only for special events or in constant use for recreational purposes.

The alternative selected by a community to deal with problems of movement to and from a community center by the less fortunate among the city's population may affect not only the location of a community center, but also the size of the site required. If all, or most, center users were required to drive to a community center a large parking area would be needed. This could be especially true if some form of bus/shuttle were to be provided for the less mobile. If it

were possible, however, for many users to walk to a center, perhaps less parking space would be necessary. Therefore, aside from requirements of a structure itself, and any surrounding landscaping, the size of the site required for a community center could well be affected by where it is placed.

An additional consideration involves the location of a community center on or near a major thoroughfare. Unless this is done, the street that it is located on will from time to time become a major traffic artery. This could involve an expansion of the present street system, and therefore result in increased capital and environmental costs.

In turn the location and size of a community center site will have several direct effects on the project's environmental impact. If a community center is built on the fringe area of the city, as a sort of "expansion development," several results occur. The most obvious is that the urban area of the city involved will be increased, and that any preceding land use will be displaced. Often the displaced land use is agricultural in nature. Since land appropriated for urban uses is seldom, if ever, returned to agricultural production, and since good agricultural land must be viewed as a finite resource, the appropriation of irreplaceable agricultural land for urban uses is a process that must be carefully considered. The "cost" of such a peripheral site must be evaluated in terms that go beyond the very superficial dollar cost of the land involved.

Another, perhaps less obvious, factor affected by the size of the parcel of land allotted to a community center project and its accompanying streets and parking areas is that buildings and paved areas themselves present environmental questions. One of these is the problem

of rain water run-off. To provide for control of rain water and spring snow melt run-off, cities must usually build a system of storm sewers. Unless properly executed, the construction of a large community center near the edge of a city could create serious problems of increased water run-off and related soil erosion.

It is well known that large cities create "mini-climates." This phenomenon is caused in part by the extensive building and paving characteristic of such population nodes. Although Hastings, Nebraska, the community which is the study setting for this work, is hardly a major urban area, the effects of a sizeable increase in the city's pavement and building space, and the resultant changes in vegetation cover and surface temperatures could be meaningful. Any air-conditioned structure located near a large paved parking area will require more energy to cool it in the summer months than a like structure not located near a large paved parking area. Given the national interest in the conservation of energy, an alternative to construction projects of this type should perhaps be seriously considered.

Hopefully, as one survey respondent observed, a new community center will be a "showplace of the community, something the city can be proud of." This would of course include a concern for building design and for landscaping. Ideally, however, an interest in the aesthetic impact of a community center on its city should go beyond the appearance of the project itself. There should be an awareness on the part of the individuals involved in the planning of a community center that a project of this size can have a considerable impact on the morphology of the immediately surrounding area of the city. A large project such as a community center may either enhance the surrounding structures or

act as a catalyst to encourage replacement of antecedent land uses.

Previous statements within this subsection have been less than enthusiastic toward the selection of a peripheral site for a community center. Before dismissing completely this possibility, its positive qualities should be considered. A large, peripheral site could easily provide for adequate parking and landscaping for a community center. For many, perhaps, the most convincing factor in favor of a peripheral site involves the dollar cost of the project. In terms of cost for the parcel of land required, it is less expensive to locate a community center on a site near the edge of the city than in or near the downtown. In addition, adequate parking space would be much easier to acquire on the periphery of the city.

It is the opinion of the writer, however, that the factors in favor of a central location for a community center far outweigh those which favor a peripheral site. First, one must consider that several of the negative aspects of a site on the edge of the city would either be reduced or eliminated by the selection of a downtown site. For example, problems dealing with handling of increased water run-off, a reduction in green space, and a like increase in building and paved areas are likely to be reduced. Present storm sewers could no doubt be easily adapted to handle run-off water, and the replacement of any present buildings and pavement area by a new facility would only minimally affect the total building and pavement area of the city. In addition, while a peripheral site would be likely to encroach on the rich farmland that generally surrounds Hastings, this would not be the case with a central locale.

The central business district of Hastings, despite some business

growth in the fringe areas of the city, is the most important retail and commercial area in the city. The extensive building and refurbishing of the area by commercial interests of some consequence tends to give one the impression that this reality in the city's structure is not subject to immediate change. It has been noted (see Chapter Two) that retail and wholesale activities are very important to the economic well-being of Hastings. It would seem of some importance, therefore, that the enhancing effect on the downtown business district that a new community center could have should definitely be taken into consideration.

A peripheral site would have the disadvantage of being readily accessible only to those individuals whose homes are on the same side of the city. Such a site selection would require a large parking area, as almost all users of the center would be forced to drive. Since the downtown area of Hastings is near the center of the city (see figure 2) a location nearby would be more accessible from all parts of the city. Even location of a community center near the middle of the city might not alleviate the need for special transport for the poor and aged to the center. This is because a large segment of the elderly population of Hastings is resident in the Good Samaritan Village in the southeastern portion of the city.

The major disadvantages of a community center site near the downtown area of Hastings are the reverse of the major advantages for a peripheral site. That is, a downtown site lacks room for extensive parking, and procurement of a suitable site could be costly. The parking problem, however, could perhaps be eased somewhat by the fact that fewer people would be required to drive a car to the center, and

perhaps would refrain from so doing. In addition, the cost of obtaining a suitable site might be offset in part by the improvement of the downtown area resulting from the removal of old, dilapidated buildings.

In any event, a community center, especially in an urban, non-metropolitan place, will have an impact on the cityscape. Therefore, any prospective site should be judged not only for its quality as a construction site, or its environmental effects, but also for its effect on the pattern of the city's structure.

Conclusions

In viewing the results of this work, several conclusions may be drawn. The first is that an image of the city does exist in the minds of the subjects of the survey. This belief is supported by the fact that most residents placed the central business district of the city of Hastings near the center of the city, and indicated that it is easily accessible to them. In fact, the central business district of Hastings is in the center of the city, and is fairly accessible from all parts of the city. This would seem to support the conclusions of previous (similar) research regarding the existence of a common spatial image among residents of a given community.

Unfortunately, this work must be judged inconclusive in its attempt to measure the effect of an individual's perception of the environment on site selection for a public facility. The perception, and the resultant image, that individuals have of their community is affected by other considerations. If this were not true, then the great majority of respondents to the survey would have favored a site near the central business district, which they realize is in the center

of the city and easily accessible to most of them. All that can be said is though an image exists, it seems to rank second in importance to other considerations.

There did seem to be an interest on the part of most respondents in the equity of any location chosen for a community center, and an interest on the part of others over the cost of the site. The concern of respondents with equity was evidenced by the fact that all groups felt that access for low income groups, children too young to drive, and the aged was important. Many among the non-leader segment of the survey indicated that cost was an important consideration in site selection.

It is the conclusion of the author that factors other than the individual's mental image of the community weigh heavily in the decision-making process concerning public facility location. Among these are equity, dollar cost of the project, opportunity cost, and aesthetics. Little evidence was found to indicate that respondents were overly concerned with the environmental impact of a community center project.

The relationship between those factors indicated by respondents as important to the decision-making process concerning public facility location and the perceived image should be examined. Therefore, it would appear that further research will be necessary to clarify this relationship between the perceived image and the other factors involved in the decision-making process by use of a better questioning and testing methodology.

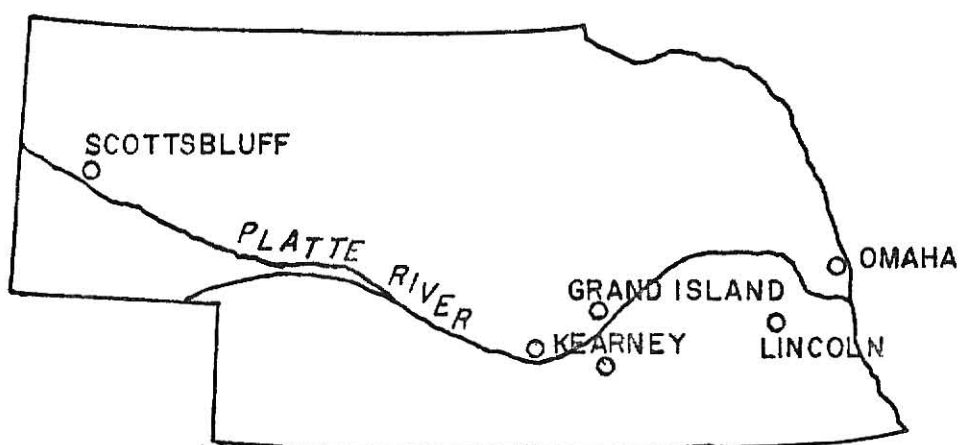
FOOTNOTES

- ¹Fielding, *op. cit.*, p. 303.

FIGURES

**THIS BOOK
CONTAINS
NUMEROUS PAGES
WITH DIAGRAMS
THAT ARE CROOKED
COMPARED TO THE
REST OF THE
INFORMATION ON
THE PAGE.**

**THIS IS AS
RECEIVED FROM
CUSTOMER.**



LOCATION OF HASTINGS, NEBRASKA

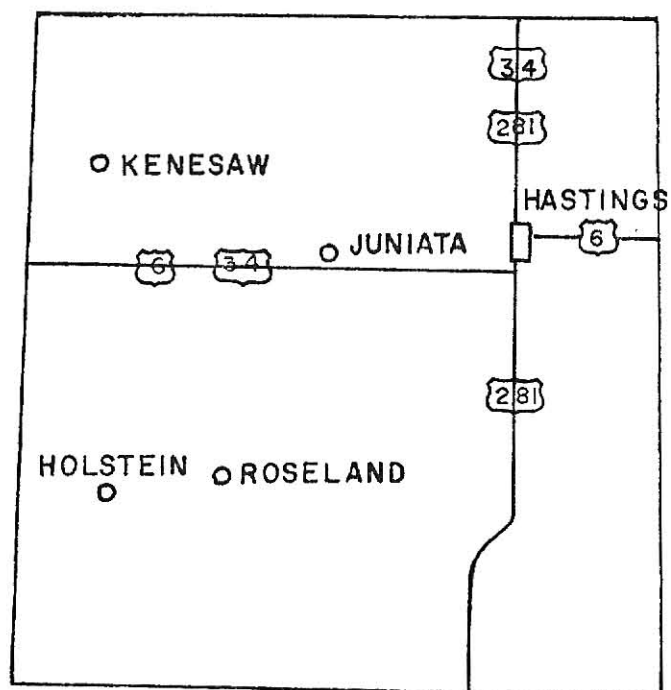


Figure 1

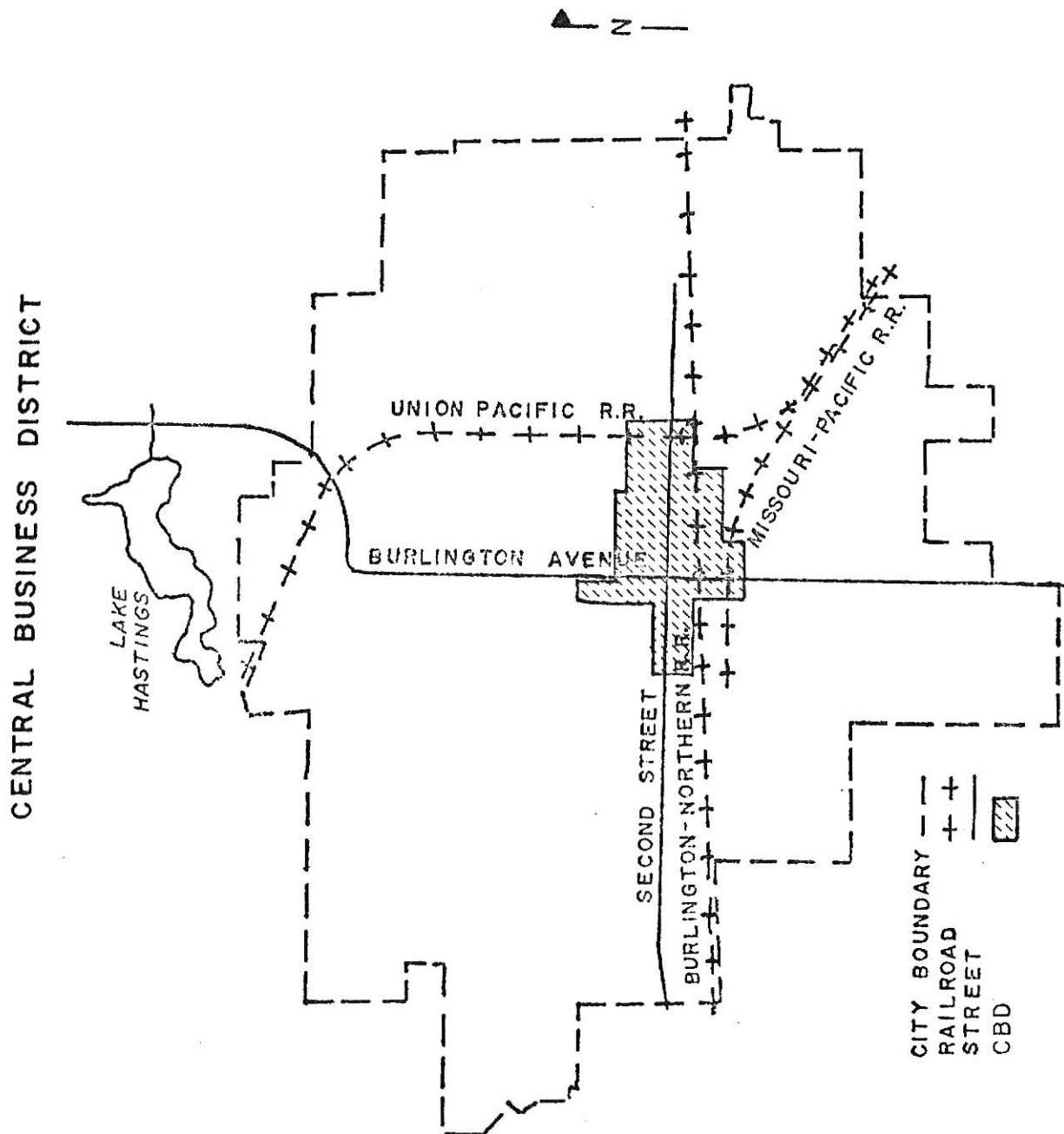


Figure 2

AREA ENLARGED IN FIGURE 4

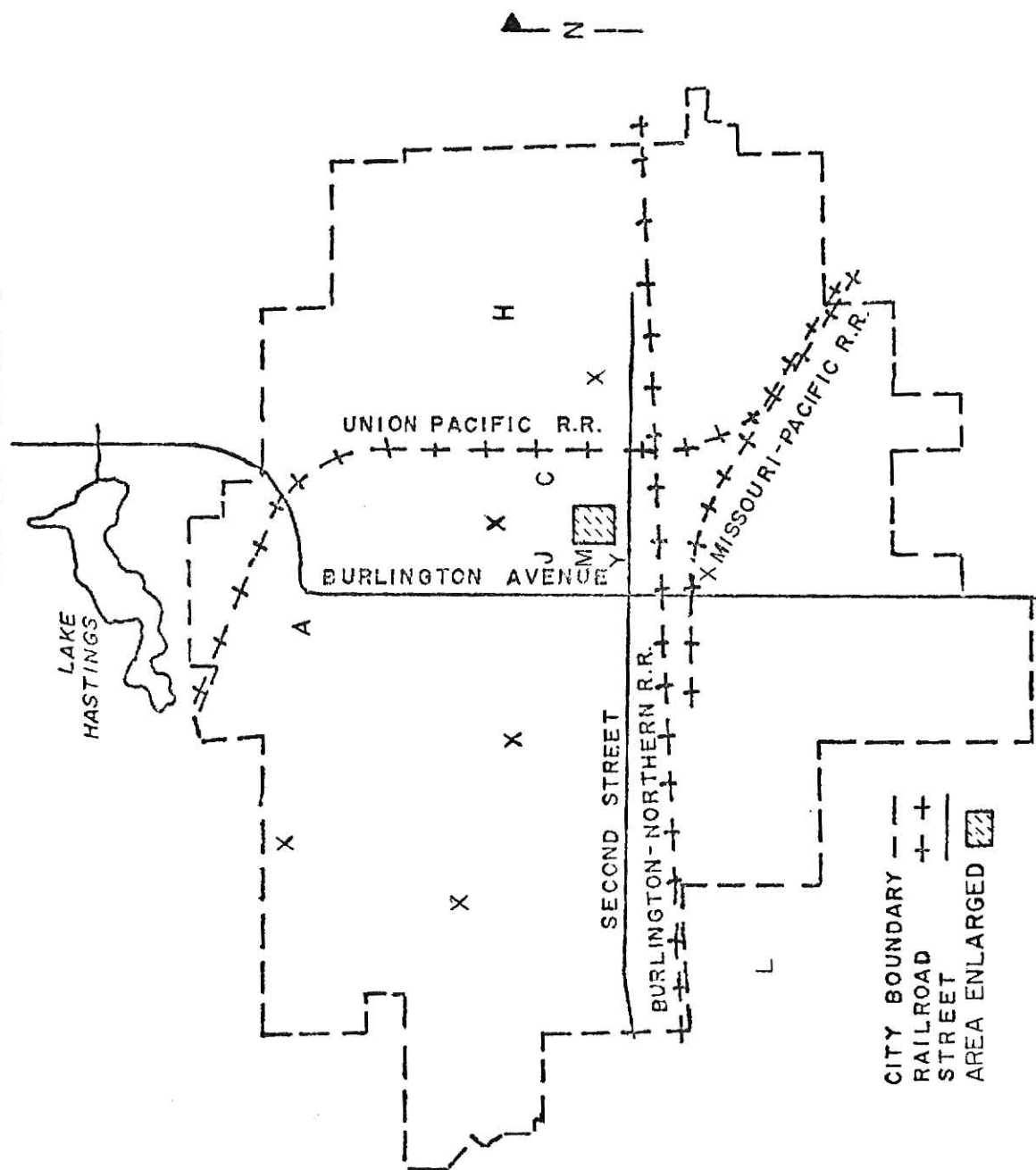


Figure 3

SECTION OF FOURTH STREET
TO BE CLOSED

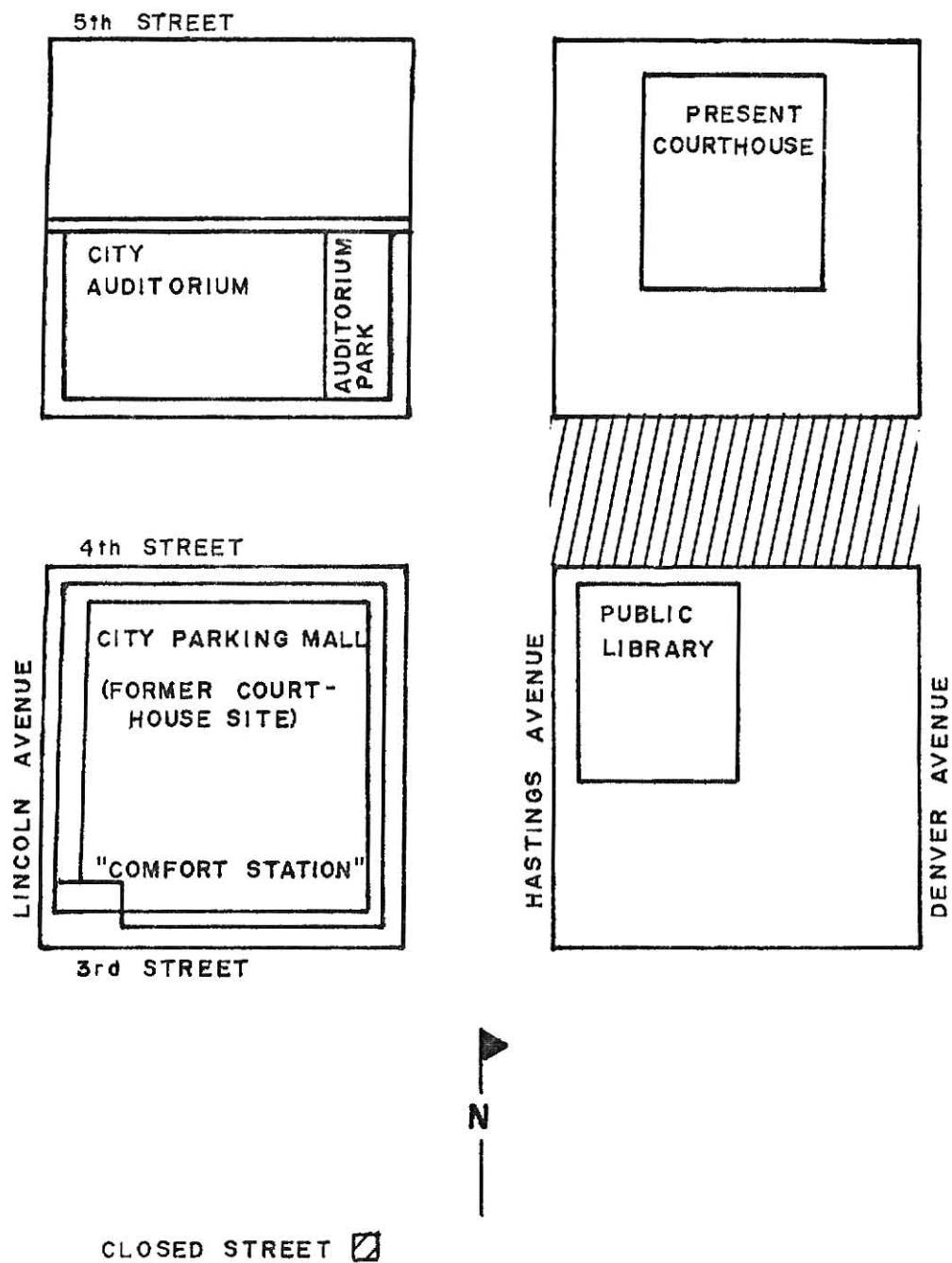


Figure 4

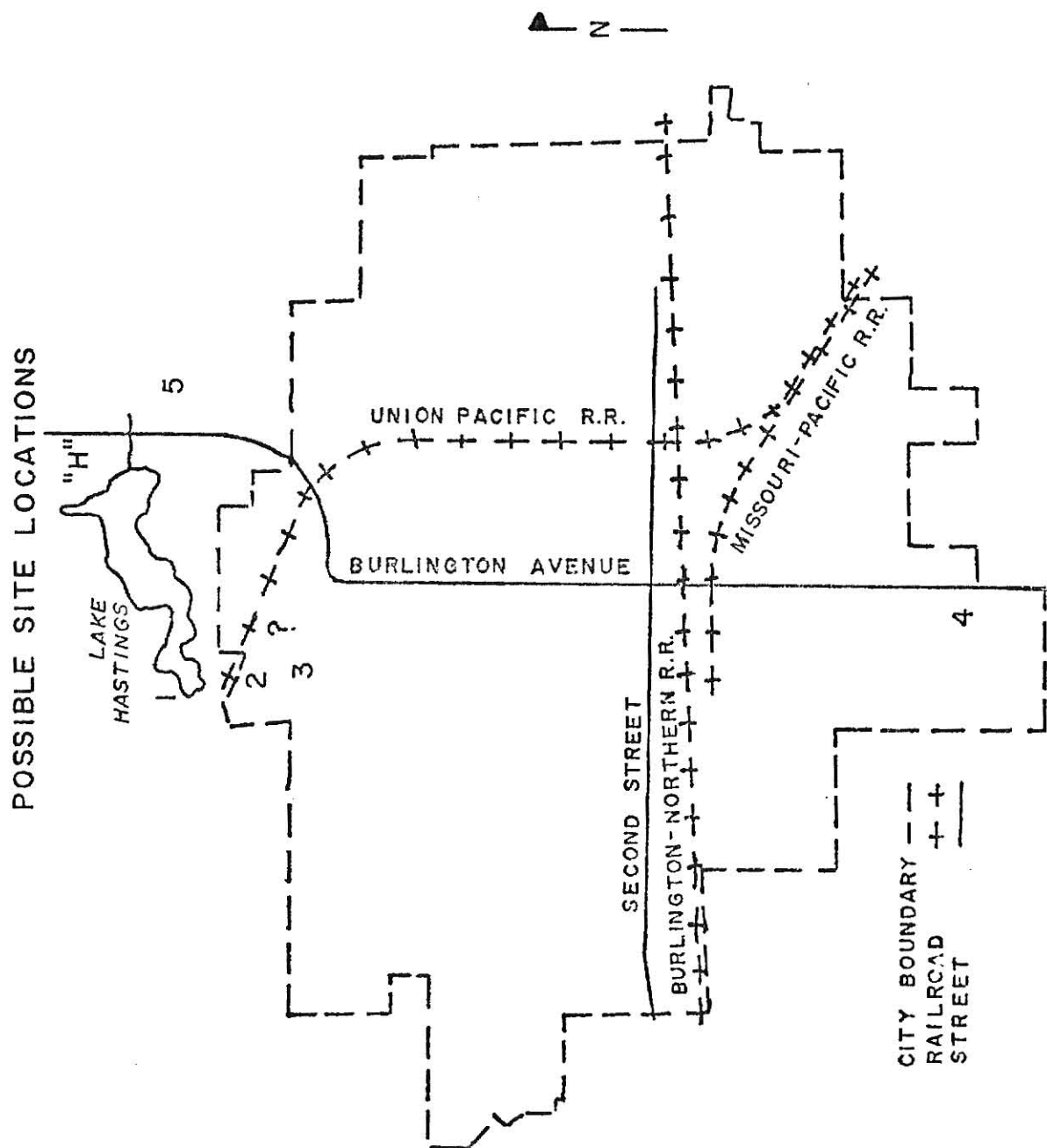


Figure 5

NUMBERS OF NON-LEADERS AND LEADERS SELECTING VARIOUS SITES FOR A LAKE HASTINGS COMMUNITY CENTER

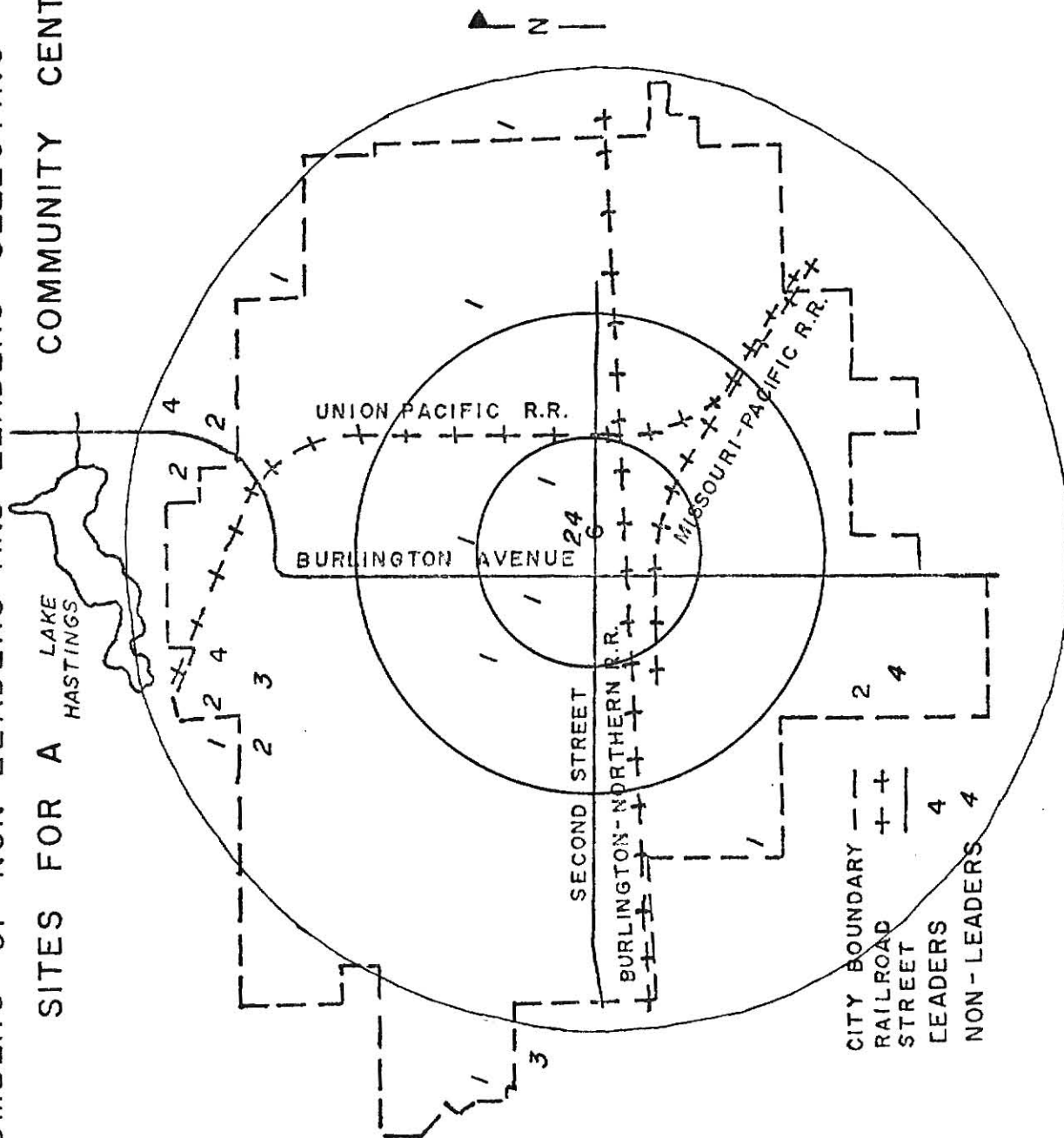


Figure 6

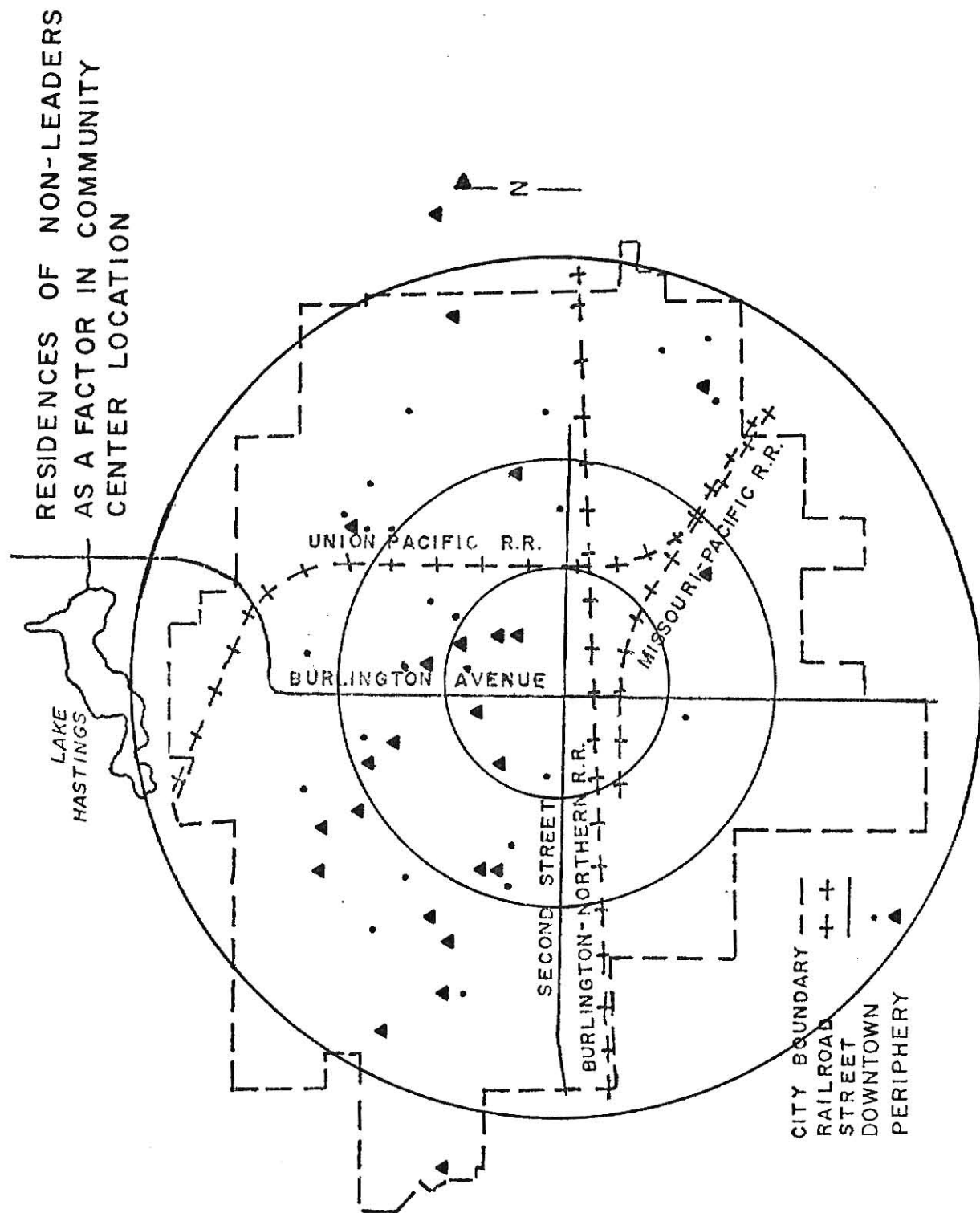


Figure 7

APPENDIX ONE

QUESTIONNAIRE

Sex: Female_____ Male_____

Age:_____

Marital Status:_____

What are the approximate ages of your dependent children?

Employment:

In what type of work are you involved?_____

Education:

Please indicate the last grade of schooling you completed.

How long have you lived in the Hastings area?

1. Please evaluate each of the following characteristics of the city of Hastings by circling the letter that corresponds to your impression.

	Excellent	Adequate	Inadequate	Very Inadequate
Parks & Recreation	A	B	C	D
Entertainment	A	B	C	D
Store Selection	A	B	C	D
Public Transportation (within city)	A	B	C	D
Downtown Parking	A	B	C	D
Cultural Events	A	B	C	D
Health Care	A	B	C	D
Facilities for:				
Cultural Events	A	B	C	D
Conventions	A	B	C	D
Connections by:				
Train	A	B	C	D
Airplane	A	B	C	D
Bus	A	B	C	D

2. How would you rate the location of the downtown business district of Hastings in relation to the rest of the city?

_____ Excellent, right in the center of the city
 _____ Good, very near the center of the city
 _____ Fair, not too far from the center of the city
 _____ Poor, some distance from the center of the city

3. Please rate the ease with which you can travel from your home to the downtown area of Hastings.

_____ Excellent, access to the downtown is very good
 _____ Good, access to the downtown is somewhat better than that to other commercial areas of the city
 _____ Fair, access to the downtown is about the same as that to other commercial areas of the city
 _____ Poor, access to the downtown is not as good as that to other commercial areas of the city

4. If it is difficult for you to get to the downtown area of Hastings, indicate why this is so.

5. How would you rate Hastings as a place to live:

_____ More pleasant than other cities its size
 _____ About the same as other cities its size
 _____ Not as pleasant as other cities its size

6. Do you feel that the recreational facilities in Hastings serve the needs of:

children _____ yes _____ no
 adolescents _____ yes _____ no
 young adults _____ yes _____ no
 older adults _____ yes _____ no
 senior citizens _____ yes _____ no

7. Do you feel that the cultural facilities in Hastings serve the need of:

children _____ yes _____ no
 adolescents _____ yes _____ no
 young adults _____ yes _____ no
 older adults _____ yes _____ no
 senior citizens _____ yes _____ no

8. Are you aware of the proposed civic center? _____ yes _____ no

Please rate the importance of the following in locating a community civic center.

1. Cost of land

Important _____ _____ No _____ _____ Not Important
 2 1 1 2
 Opinion

2. Access from all parts of the city

Important _____ _____ No _____ _____ Not Important
 2 1 1 2
 Opinion

3. Access for the elderly

Important	<u>2</u>	<u>1</u>	<u>No</u>	<u>1</u>	<u>2</u>	Not Important
			Opinion			

4. Access for low income groups

Important	<u>2</u>	<u>1</u>	<u>No</u>	<u>1</u>	<u>2</u>	Not Important
			Opinion			

5. Access for youth of the city (people too young to drive a car)

Important	<u>2</u>	<u>1</u>	<u>No</u>	<u>1</u>	<u>2</u>	Not Important
			Opinion			

6. Access to the downtown area

Important	<u>2</u>	<u>1</u>	<u>No</u>	<u>1</u>	<u>2</u>	Not Important
			Opinion			

7. Please list any other factors that you feel are important in determining the location of a civic center.

8. A central location, perhaps near the downtown, would make a civic center accessible for most of the residents of Hastings.

<u>Strongly</u>	<u>Agree</u>	<u>No</u>	<u>Disagree</u>	<u>Strongly</u>
Agree		Opinion		Disagree

9. A location near the edge of the city would make the civic center accessible for most of the residents of Hastings.

<u>Strongly</u>	<u>Agree</u>	<u>No</u>	<u>Disagree</u>	<u>Strongly</u>
Agree		Opinion		Disagree

10. The condemnation and razing of older buildings in the central portion of Hastings should be considered in order to create a site for a new civic center.

<u>Strongly</u>	<u>Agree</u>	<u>No</u>	<u>Disagree</u>	<u>Strongly</u>
Agree		Opinion		Disagree

11. On the enclosed map of the city of Hastings please indicate a possible location that you feel would be good for a civic center.

12. Which of the following possible uses of a civic center are most important to you?

	<u>Very Important</u>	<u>Important</u>	<u>Not Important</u>
Indoor Swimming	A	B	C
Indoor Ice Skating	A	B	C
Basketball	A	B	C
Handball	A	B	C
Performing Arts	A	B	C
Convention Center	A	B	C
(Please list any other use important to yourself.)			

13. Whom do you think would use a civic center most often:

	<u>Often Use</u>	<u>Use Somewhat</u>	<u>Seldom Use</u>	<u>Never Use</u>
Children	A	B	C	D
Adolescents	A	B	C	D
Young Adults	A	B	C	D
Older Adults	A	B	C	D
Senior Citizens	A	B	C	D

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THE EFFECTS OF PERCEIVED SPATIAL RELATIONSHIPS
ON LOCATIONAL CHOICE: A CASE STUDY
OF THE HASTINGS, NEBRASKA
CITY-COUNTY CIVIC CENTER

by

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AN ABSTRACT OF A MASTER'S THESIS

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requirements for the degree

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An understanding of human organization of the earth's surface requires that the decision-making process occupy a place within geographic research. This study is concerned with one aspect of locational decision making: the image of a city held by residents and the effects of that image on decisions to alter a city's morphology.

Research from this perspective can more concretely yield insight into the nature of human spatial organization when it focuses on specific instances of morphological change. Accordingly a city was selected for a case study that has been considering construction of a new community-cultural center. The project has been a matter of public interest for some time. It involves a very substantial commitment of the city's resources, and it will have a wide-ranging impact on the city's form. Such a setting provides an opportunity to assess relationships between locational preferences and images held by community residents. It is the purpose of this study to attempt to measure some effects of residents' images on site selection for a community center while controlling confounding influences.

Images of the community held by residents and locational preferences associated with these images should be affected by variable characteristics of residents. It is hypothesized that an important attribute differentiating imagery and locational preference is that of leadership. Community leaders are expected to perceive, evaluate, and select among alternative locations in a fashion significantly different from the larger non-leader population. By virtue of power, influence, and responsibility in both the private and public sector, community leaders should possess, and act upon, a more comprehensive awareness of the community.

A standard sampling procedure was employed to elicit responses by questionnaire from residents of the study area. A second population was identified through a power analysis as community leaders. Questionnaires administered to both groups were designed to yield information about respondents, their imagery of the city, and locational preferences for the community-cultural center. Chi-square procedures were used to assess the significant differences between leaders and non-leaders, and to weigh the effects of confounding factors. To further analyze differences, responses were compared to "yardstick" criteria that included considerations of efficiency, equity, resource allocation, and environmental quality. Thus respondents' judgments could be appraised in terms of issues that would be applicable in any objective approach to the choice of a location for the community-cultural center.

Results of the survey and data analysis indicate the hypothesis that community leaders will perceive, evaluate and reach decisions differing from non-leaders is not supportable. Age and income of respondents were far more important, and significant factors affecting locational preference. Other factors such as sex, education, and place within the family cycle have no significant effect. Site selections for the center were about evenly divided between those favoring a central or peripheral location. A site in the central city, was, however, more favored than any single peripheral location. There was no significant difference in respondent preferences when assessed against a more objective set of criteria. Community leaders do reflect the larger population, and their locational preferences for restructuring the city's morphology result in decision making that is no more systematic, or optimum-seeking than that of the larger population.