A CASE STUDY OF CONTROLLING LAND USE IN AN UNINCORPORATED AREA IN POTTOWATOMIE COUNTY, KANSAS

by

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INTRODUCTION

The study area of this report was selected because of its proximity to Manhattan and that the area seemed to be in the path of a logical growth corridor for development.

When observed, the area typified many physical manifestations of American growth patterns, leap frogging and discontinuous land use, strip development, mixed land uses, speculative erection, substandard housing, poor street layout and generally inadequate land use controls. Thus, the study area could devulge a wealth of knowledge about the development process and its effects both socially and physically in one small easily accessible area. (Note: A behavior setting survey of a housing project called "Timber Creek" which is located in the study provided some impetus to the study area selection.)

The study area is an unincorporated 25 square mile area located in Blue Township Pottawatomie County, Kansas and is approximately 4 miles East of Manhattan, Kansas on U.S. Highway 24 (see Figure 1).

The boundaries of the study area were set to include a sampling of the various land uses residential, commercial and agricultural that were typical in the area. Grouped together the land uses form the aforementioned growth patterns, and thus warranted the author's interest.

The results of this report are not to be considered statistically significant for any other area similar in size or shape. Only that
UNINCORPORATED STUDY AREA
POTAWATOMIE COUNTY, KANSAS

the discussion of the dynamics of the development process as it manifested itself in the study area, and its exponential effects upon the area could be helpful in explaining similar development processes in other urban fringe areas. The type of areas that provide the living environment for 3.6 out of 10 people residing in the contiguous United States. (Source: U. S. Department of Commerce.)
PHYSICAL CHARACTERISTICS OF THE STUDY AREA

This section is not intended to be a detailed analysis of the physical features of the study areas, but is intended to provide an overview of the area for generalized analysis and an introduction to the area. All of the physical characteristics will be overlayed on the base map area in a "composite" McHarg suitability approach.¹

The study area is predominately a low flat alluvial flood plain that has been formed by the flooding, receding and the meandering of the Kansas River, Big Blue River, and Elbo Creek—Figure 2 Flooding and Drainage Map. The flooding potential of the two major rivers has been significantly altered by the construction of the Tuttle Creek flood control Reservoir on Big Blue River. But the threat of serious flood damage is still present in the area as the results of the Department of Housing and Urban Development flood plan map clearly demonstrates (panel no. 2006210010A) (see Figure 2—Flood Plain and Drainage Map).

Potential flooding is also depicted along Elbo Creek and the run-off from Pottowatomie State lake number 2 (not shown). The overall drainage of the study area is relatively poor and pools of standing water were observed in the area after moderate rainfall.

This drainage problem and the potential flooding of some areas is a physical drawback to speculative development in some parts of the study area.
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POTTAWATOMIE COUNTY, KANSAS

Floodplain & Drainage

SOURCE: Dept. Housing and Urban Development

One Mile

Soils

The basic soil composition of the area is a class I Kypson-Martin Sogn type. This has been determined by the United States Department of Agriculture Soil Conservation Service. The analysis of these soils follows:

a) Not suitable for road fill due to poor stability and high shrink well potential (expansion and contraction).

b) Good topsoil for agricultural uses.

c) Low shear strength for foundation of low buildings.

d) Have moderate to slight permeability for septic tank absorption fields.

e) Moderate permeability for sewage lagoons where slopes are more than 2 percent.²

(See Figure 3--Soils Map.)

There are areas in the study area that have a mixture of the above soil types. Extreme caution should be exercised in the approval of development in the area. Development should be approved on a case by case basis and predicted upon a soils test and a percolation test to determine the long term effects of the development on ground water contamination and sewage disposal hazards.³,⁴

Water

Ground water is generally abundant in the study area. But the aquifers that serve the area development are not always of consistent yields.⁵

Pottawatomie County. Rural Water District No. 3 serves the area on a limited basis⁶ and "hook ups can be expensive," when they are available.⁷ Through an interview with Professor H. V. Beck of the
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POTTAWATOMIE COUNTY, KANSAS

Soil Characteristics:

LEGEND
- Silty to Clayey Soils
  (No Special Practices)
- Silty to Clayey Soils
  (Limited Use and
  Intensive Practices)
- Silty to Clayey Soils
  (Intensive Practices)
- Dark Tight Clay and
  Clay Pan Soils
  (Simple Practices)
- Sandy Soils
  (Simple Practices)

SOURCE: Pottawatomie County Southwest
Area Plan, McCullough, Keller and
Weisenburger Planning Consultants.
Kansas State University Geology staff, it was revealed that a significant underground water deposit was available for a large centralized water extraction system. It appears to be a large buried glacial deposit. The absolute impact of this discovery is not known but it could be significant. The valley is approximately 3 miles northeast of the study area and forms a 4 to 5 mile wide arc that is 14 to 15 miles long. The deposit is at a depth of ninety feet and the water depth is approximately ninety feet. The recharge rate is not known. If the preliminary reports are verified, these findings could have significant impact upon the potential development of the land North of U.S. Highway 24 East of Manhattan to Wamego.

During interviews with the developer of Timber Creek East, it was determined that the ground water availability is not as abundant as determined by water studies in the area. Future development will be predicated upon the availability of ground water and rural water district "hook up" capacity, and the acquisition of water rights for wells.

**Transportation Linkages**

The quality of the internal roads and highway linkages are a continuum of wide poles. On the positive side excellent linkages are provided by the paved four lane portion of U.S. Highway 24 that bisects the study area East and West. Also, excellent road bed is present on the Union Pacific Railroad line that also provides a quasi-flood control level south of U.S. 24. The railroad does not have a spur in the area, (as of the completion of this report, but one is planned for the area).

The north and south linkages through the area consists of gravel hard pack roads. This principal north south linkage, Elbo Creek Road, is in poor condition due to the poor load bearing conditions of the
road bed and the increased use of the road by new residents in the area, i.e. Timber Creek East. The local residential streets are a similar continuum. The new development in the area Timber Creek and Quail Creek have excellent paved streets, but on the other end of the spectrum, the R. C. Stephenson's subdivision has streets of truly primitive quality. This disparity will be discussed at length in a later section of this report.

Current Land Uses

The inventory of land uses in the study area was basically a "space use" survey as described by Chapin in Urban Land Use Planning. The survey was conducted by automobile and by foot when the lack of adequate roadbed was encountered. The field listing of land uses was assisted by aerial photographs of the area (provided by the County Zoning Administrator), Title Abstracts Maps, and U.S. Geological Survey Maps.

The land use patterns of the study area reflect economic individualization and the "silhouetted finger" type of development prevalent in many suburbs. Mobile homes are placed indiscriminately alongside commercial and residential uses and in some instances, limited access is provided to the occupants. (See Existing Land Uses—Figure 4.)

These land use patterns are basically the lack of, as the author views it, community order. Christopher Alexander describes the need for community order in the Timeless Way of Building.

"In order to build this kind of process into the building of a town it is necessary that there be a simple and radical change of view about the nature of a single act
UNINCORPORATED STUDY AREA
POTTAWATOMIE COUNTY, KANSAS

Existing Land Uses:

- Single Family Residential
- Duplex
- Mobile Home
- Agriculture
- Commercial
- Agri. Commercial
- Light
- Heavy
- Cemetery
- Public Buildings
- Primitive Roads
- County or Township Road
- Divided Highway
- Sewage Treatment Facility

One Mile
Source: United States Dept. of the Interior Geological Survey Maps and Fig. Pottawatomie County Southest Area Plan.
of building. It is easy to see a single act of creation which makes something new. But this view isolates the acts from one another and makes the town a collection of fragments."12

A recent example of this fragmented process was the land subdivision and subsequent development of the R. C. Stephenson's Tracts South of U.S. 24 Highway. Substandard streets and inadequate drainage precautions cause severe problems for the residents in the area even during seasonable rainfall. A classic case of "caveat emptor."

The strip development along U.S. 24, in the study area, is a reflection of decisions based upon location and market access. The motels and farm sales service buildings are the physical expressions of access to market population.13

Strip commercial with some single family residential and mobile home parks have been the dominate land uses in the study area. But recent trends toward tract single family residential home construction are changing the basic land use profile in the area. The reasons for this shift will be discussed later in this report. But as one enters and passes through the study area on U.S. 24 the agriculture service buildings and the motels establish the "image" of the area.

This concludes the physical characteristics introduction to the study area. There will be, however, reference made to the soils drainages and land uses of the area in later sections of this report.
DEVELOPER ATTITUDES AND THE STUDY AREA

Land use plans have primarily emphasized the "where of development indicating on multicolored maps where residential commercial and industrial uses should be located. However, many of the traditional master plans do not adequately take into consideration the economic realities of the marketplace, which is the primary provider of such land uses.\textsuperscript{1}

The above passage by Mr. Allan A. Hodges succinctly states the objective behind this section of the report, i.e. to determine the ripeness\textsuperscript{2} of the study area for future development, and also to determine why the profile of the area is changing as had been stated earlier in the report.

It is usual to indicate what "should" be developed in an area, but is another thing to see a plan materialize on the face of the earth. Consequently, interviews of developers in the Manhattan area were conducted to determine if there was any interest in developing the available land in the study area. Nine developers were contacted and interviewed over a two-week period. The interviews were open-ended discussions with the direct objective of determining the comparative advantages of the study area to other developable areas in the Manhattan area housing market. As stated earlier it would be the intent to determine the ripeness of the area for development.

Professor Ely in his work Land Economics discusses ripening costs of land development and their effects on land moving from lower uses to higher uses. In the interviews with developers these costs were discussed as significant factors of land development.
"In a growing community land uses are not static. Near cities agricultural land moves into suburban areas. Within the city stores and apartments supplant residences. In such cases land may be said to 'ripen' into the higher use. Ripening costs arise because the land is suspended between the old and new uses, yet the owner can derive an income only from the present but 'lower' use. Near cities, for instance, farm land remains in agricultural use until it is subdivided, but in the interim the land is assessed on a suburban valuation. It may also be subject to special assessments for sewerage and other utilities yet not derive any benefits from these facilities. All the costs are being paid out of the current income from the land as a farm. However, the owner will retrieve all costs whenever the land is sold for suburban purposes at a price high enough to cover these outlays."[3]

Only two developers interviewed were actually accruing any ripening costs of development in the area.

Land acquisition was not a principal concern of four of the developers, interviewed, whereas it was a concern of the other five. So a split was determined, some developers buy developable lots as part of the production function of housing while others speculate in the land market and carry the land development sequence through from land acquisition and subdivision to sale of the finished dwelling.

All of the developers did agree however that the cost of land and the availability of it was a good barometer of the final cost of housing in the Manhattan market area. The aforementioned availability of "land for sale" was a repeated characteristic of land acquisition in the study area, as one developer put it, "The farmers don't want to sell."[4]
It was a majority of opinion that "land" constituted ten percent of the total cost of new homes in and around Manhattan. When asked to rank the most desirable areas of developable potential around Manhattan, the study area did not rank very high for one specific reason. It (the study area) was not the "strong market" area. The majority of opinion was that the "$45,000 to $50,000 house (3 to 4 bedroom, 2 bath, full basement, double garage, built in kitchen and central air) was the real market for the region and "it" was not moving East but West and Northwest. When asked "why?", it was generally agreed by the developers that two basic reasons were prevalent:

1. location preference - This is where the people want to live.\(^6\)

2. land ownership/acquisition - This is where the developers own property.

Seven out of nine developers considered the West/Northwest area to be the best growth area in Manhattan for the next four to five years.

A repeated concern of the developers was the availability of developable lots in the market area. The annexation of a large subdivision (undeveloped) and the subsequent sale of lots would eliminate some of the shortages but some of the developers stated that the lots were overpriced for the market (average stated to be between $6,500 and $9,000).

This fact was pursued with (1) an attorney, and (2) the principle abstract and title conveyor in the area. His assessment of the developable lot availability in Manhattan was that a shortage of buildable lots existed, however the price of the available lots was not excessive. His reasoning was that,
"The purchaser of these homes is buying a lifestyle that was set prior to the purchaser ever moving to Manhattan, and that they do not intend to downgrade that level of lifestyle even if it costs 'more'."

Also he stated that development will follow the existing service connections of sewer and waters.

What became of interest as a result of the developer interviews to this point was the question: where do the moderate to low income wage earners live or purchase homes in Manhattan? The community Development Director of Manhattan was interviewed to ascertain his appraisal of the housing market of Manhattan and how it would affect the study area. The Director stated that there was a need for "1000 units of low to moderate income housing in the Manhattan area today." In his opinion "the developers in and around Manhattan do not intend to provide moderately priced housing because of land costs and profit margins." This, he stated, coupled with a two to three percent vacancy rate in the community, almost eliminated any real market pressure to provide cheaper housing.

He did feel that, as a result of this market, the study area or any other area on the fringe of Manhattan could come under some pressure to provide some low cost development that would be profitable. However this would be dependent upon the availability of low cost land.

The demand for housing in the Manhattan area is projected to continue to grow with the formation of approximately 3,000 household by 1985. Also a more vigorous economic growth attitude by the Manhattan business community will certainly exert pressure for housing starts in the community.
The effects of the preceding information upon the study area (pressure for development) could be summarized to be:

1. If shortages in developable lots persist in the desired areas of Manhattan, pressure for development will be redirected into other areas.

2. If the cost of buildable lots continue to rise in the western sectors of Manhattan, the market could become over priced for a larger sector of the housing market, thus making cheaper lots in other directions (east and north) more attractive to speculators. (This could include the study area.)

3. The costs of development in the west of Manhattan (special assessments will be discussed later) could become excessive thus making other portions of the city closer and closer to the water and sewer facilities more attractive for development, i.e. the study area.

The major constraints to development in the study area, as expressed by the developers, were as follows:

1. Location - the area is not a highly preferred area by home buyers.

2. The absence of centralized sewage treatments and water facilities acted as a detriment to the home buyer.

3. The land owners in the area were not anxious to sell their land.

The positive (salable) features of the study area according to the developers interviewed were:

1. Low taxes for the home buyers.

2. Good access to Manhattan on Highway 24.

3. No special assessments to the home buyers.

4. Manhattan schools were available to the home buyers in the area.
Overall, it seemed that intensive development would follow into the study area if two basic factors occurred:

1. Centralized sewage and water services were extended into the area.

2. The availability of developable lots within the city of Manhattan became acute thus placing the land in the study area under more pressure for development.

There will continue to be competition for cheaper lands for development in and around Manhattan, and this will manifest itself in "leap frog" development\(^\text{13}\) if adequate controls are not enforced. A detailed analysis of the administrative controls of development and their effects on land usage will be considered in the next section.
ADMINISTRATIVE CONTROLS AND POLITICAL PROCESSES
THAT EFFECT THE STUDY AREA

Besides private developers, there are other interest groups that can influence the schedule of development in the planning area, including the administrative and political entities in and around the study area. Previously the extension of services into an area has been shown to influence the development sequence. However, there are many more administrative and governmental variables that can have an effect upon the "where" and "when" of land development.

The following passage taken from Principles and Practices of Urban Planning by Coleman Woodbury describes to what degree the administrative and political environment can influence the form and shape of a planning area. The passage refers to urban government but applies equally well to a county government.

"Urban government: ...takes in all governments operating within such areas as municipal government, essentially rural government (e.g. counties and townships), state and national governments in so far as they deal directly, or in close collaboration with local governments, with the affairs of urban or urbanizing localities. It includes of course, not only general-purpose governments, but also special districts and authorities--both single and multi-purpose. It comprehends not only governmental forms, structures, functions and processes, but also the roles and relationships of individual citizens, officials and various groups in formulating opposing and administering public policies and programs."

The research of the interjurisdictional influences that effect the study area, necessarily took on a regional scope since there is a conspicuous absence of local control over development in
the unincorporated study area. Excluding the Neighborhood Association in Timber Creek East, no local organized governmental entity was appraising the development that was occurring in the study area. Thus, the type and timing of development in the study area was influenced directly and indirectly by a fragmented consortium of districts and governments exogeneous to the study area. The effects of this fragmentation are described as very far from ideal by Allan K. Campbell and Seymour Sacks.

The fact of fragmentation as a general feature of local government in the United States has led to the development of a variety of generalizations about its impact on policy-making at this level of government. These generalizations usually point to a lack of coordination, inequity in tax burdens, distortions in land use patterns and unhealthy competition among local jurisdictions as the inevitable results of the fragmentation.

The existing land use patterns in the study area substantiate the assertions made by Campbell and Sacks. Poor street construction, unhealthy living environments and flood plain development are some examples of the effects of fragmentation and the absence of effective control of development in the study area.

The authority, however, to effect control in the study has been in existence for some time, as verified by the minutes of the county planning board, which are on file since May of 1958. What appears to have been absent has been a trained staff, and officials with any desire to intervene into the development sequence in the study area. This lack of action by administrators and politicians is not unique to this study area as it is described by Morton B. Lang.

"But even in a city (county) where the municipal (county) corporation provides an apparent over-all government, the
appearance is deceptive. The politicians who hold the offices do not regard themselves as governors of the municipal (county) territory but largely as mediators or players in a particular game that makes use of the other inhabitants. Their roles, as they conceive them, do not approach those of the directors of a TVA developing a territory. The ideology of local government is a highly limited affair in which the office holders respond to demands and mediate conflicts. They play politics and politics is vastly different from government if the latter is conceived as the rational, responsible ordering of the community. In part, this is due to the general belief that little government is necessary or that government is a conglomeration of services only different from others because it is paid for by taxes are provided for by civil servants.  

The past "non interventionist" attitude was changing, however, through interviews and research a different perspective of development and its consequences seemed to be emerging. The hiring of consultants and the purchasing of technical studies has educated the political officials about growth patterns in the county. Also, the zoning and administrative officer has been replaced by a more conscientious individual. Finally, the mistakes and "oversights" of the past have influenced the desire to increase the use of planning and growth control in the county. This was especially true when discussion was raised at the county planning commission meeting held on 16 March 1978 in reference to development by Mr. R. C. Stephenson in the study area. It was vocally agreed that any development similar to Stephenson's would not be condoned in the future. Mr. Stephenson had not provided adequate grading, drainage or sufficient road bed in his development. Subsequently, school district bus access and township roadway acceptance had developed into a dilemma of significant proportions. Residents in the area are now complaining about the inadequate street conditions and want their rights protected.  

The instruments for land use control are in effect to guide development in the study area. The Board of Commissioners of the County of Pottawatomie did on February 9, 1976 adopt a land subdivision regulation to specify street and grading standards, sections 5 and 6 respectively, however Mr. Stephenson's work had been initiated prior to this adoption of the above ordinance. A court injunction was filed to have Mr. Stephenson "cease and desist in his development." 6

The strengthening of the controls on development was an ad hoc reaction of the county officials to increasing and more complex development pressures in the county planning area. The need for and the intent of development regulations as administrative controls are aptly expressed by Robert H. Freilich:

"A new subdivision of land is not an isolated experience involving only buyer and seller. The pattern of a subdivision becomes the pattern of a community, which in turn may influence the character of an entire city. If growth is to be orderly and rational, some control over land development must be exercised." 7

The county reaction to growth and its "frustrative consequences." 8 is not unique to the study area. Similar circumstances, although of greater magnitude, were the stimulus for controls in Ramapo, New York, Petaluma, California, Prince Georges County, Maryland, Dade County, Florida and many other areas of the United States incurring spill-over urban growth. 9

The study area certainly is not a likely candidate for any Lakewood, California scale development ("17,500 single family detached homes in 18 months.") 10 But the growth and development in the study
area, Quale Creek, Timber Creek and the R. C. Stephenson subdivisions do signify a change in the "pattern" of the community as Professor Feldich has stated.

This changing pattern, has raised some interesting doubts about the goals and motivation of the county planning authorities concerning growth in the study area. The general policy statement that was repeated during interviews was that Pottowatomie County is a rural county and,

...has set its primary goal the preservation and judicious use of prime agricultural land.\textsuperscript{11}

This goal will become increasingly difficult to realize as development pressures increase in the study area. The commissioners have recognized this issue and have stated in their goals a need for "joint cooperation between developers and government."\textsuperscript{12} This attitude, if followed, will provide a sound base for land use control in the study area, basically because the study area is not at its highest and best agricultural use.\textsuperscript{13} This will become increasingly evident in the future if the factors addressed earlier in the developers section materialize. A recommended solution to control the changing patterns of land use in the study area will be dealt with in a later section of this report.

Zoning Control by Pottowatomie County

The existing county zoning ordinances were adopted as the "official zoning resolutions of Pottowatomie County, Kansas on the 29th day of
April 1974 and replaced all pre-existing zoning resolutions in the county. Thus, the study area falls under the direct jurisdiction of the county planning board, zoning administrator and the county commissioners for zoning control.

The county zoning ordinance is the comprehensive growth management instrument of the county and is the official implementation tool to attain the goals and objectives for land use control in unincorporated areas of Pottowatomie County. A detailed analysis of the county zoning ordinance was not deemed necessary for the scope of this report. However, the "goals and intents" of the County Zoning Ordinance and the use of the County's Official Map were examined to determine their impact upon the study area of this report. The "Intent and Purposes" Article II of the Zoning Ordinance for Pottowatomie County, Kansas are as follows:

1.11 To divide the county of Pottowatomie into zones and districts.

1.12 To promote and protect the public health safety and the general welfare.

1.13 Promote adequate light and air.

1.14 Secure safety from fire, explosion, noxious fumes and other hazards.

1.15 To avoid undue crowding of land, persons, and buildings.

1.16 To encourage the most appropriate use of land throughout the county and to foster a rational relationship between people, land, buildings and uses.

1.17 To protect uses from encroachment by incompatible uses.

1.18 Lessen congestion in public streets.

1.19 To regulate and restrict the height, number of stories and size of buildings; the percentage of
lots that may be occupied by buildings and other structures, size of yards and other open spaces.

1.110 Preserve the Natural Environment of the county.

1.111 To define the powers and duties of the administrative officers and bodies as provided hereinafter.¹⁴

This author considered the ordinance to be clearly defined and in conformance with the "Pottowatomie County Area Development Plan" for the southwest portion of the county dated May 28, 1977 and previously mentioned in the report. The only limitations of the ordinance and official map that could be determined during the research of the ordinance and through interviews were:

1. There was little desire to direct growth to certain desired areas through advanced planning of zoning districts for anything other than agricultural districts. Of course some difficulty had resulted in advanced zoning due to an unexplainable and "unofficial" 1969 zoning of an "R3 district" in the flood plain of the study area. But advanced zoning, if implemented properly and in conformance to effective market demands¹⁵ can provide a basis for logical and safe land use patterns. This type of "policy" was advocated in the Land Use and Open Space Plan for Pottowatomie and Riley Counties by Obling and Smith Planning Consultants in 1972.

"The U.S. 24 Highway corridor has experienced some undesirable strip development which threatens the integrity of the highway and the environment of the area. The report recommends that a set of land use development policies be adopted for residential commercial and industrial land uses to insure an orderly and efficient development."¹⁶

2. It is in the author's opinion that relying upon the preservation of agricultural land for its own sake and not recognizing the existing and future competition for land uses in a jurisdiction is too broad and not substantiated in fact.

A more equitable and rational approach to agricultural land preservation would be to establish "agricultural production
zoning districts." This would entail the identification of the lands and soils in the planning jurisdiction that are the best and worst producers in their respective uses. This technique would be dependent upon complex research and data collection but in the long run would provide a more quantitative rationale for agricultural land preservation as well as identifying those lands more suitable for alternative and more intensive land uses. This system is being developed in the State of Michigan through the Division of Land Resources Programs of the Michigan Department of Natural Resources.

Such a system is stated to be sound in the "court balance of the interests of the individual property owner with the needs of the community, the testing of the validity of the ordinance" and "serving the public welfare without being exclusionary." If the county continues to pursue prime agricultural land preservation as its primary planning goal, more research to develop specific criteria for prime agricultural land identification to assure its role in promoting the general welfare.

The Planning Commission and the County Commission are administrative and legislative bodies that effect land use control in the study area directly. Consideration must be given, however, to the administrative and legislative bodies that effect the study area indirectly through their deliberations and decision-making. The remainder of this section will deal with interviews and the written positions of the administrative and legislative bodies that influence land use patterns in the study area as external forces. The basis for this concern is embodied in the following passage.

"He (planner) must learn that local self-determination—that is planning on a map that stops at the city limits—is as outmoded as the trolley car, that governmental interdependence is a fact of life."

The research began with the Manhattan Planning Commission's growth study prepared by the city planning staff. In the "Where We Grow From Here an Alternative Growth Study" of Manhattan Kansas published in August of 1977 the study area was appraised and compared
to other growth corridors around Manhattan, Kansas. The study area was appraised as follows:

- An area subject to flooding with drainage problems.
- Poor soils.
- Flat.
- An interjurisdictional problem area.

But in a further note the study stated that:

"The negative physical aspects of this district are due to the flooding and drainage problems. If they could be corrected development is possible." 20

Overall the planning staff did not give the area very high marks as an alternative growth direction for the City of Manhattan. And through interviews with the city planning staff the area was not appraised as being a viable growth area to have services extending into the area. 21

During an interview with a city commissioner of Manhattan, 22 with seven years tenure, the above mentioned growth study was discussed and the study area was evaluated for future growth potential as the "commissioner saw it." The commissioner was very concerned with "balancing the city to save the downtown business district." He thought that a continued westward expansion of the city would not be in best "overall" interest of the city and that the 177 corridor southeast across the Kansas River should be opened up for city services and a new bridge built over the river to enhance the linkages with downtown Manhattan. He called this a "billion dollar" decision for the future of Manhattan.

When asked about the desirability of promoting growth into Pottowatomie County and the study area, he stated that the area was
a viable alternative and the "sleeper" of the various alternatives. He also stated that to move in this direction would require a vigorous annexation policy by the city and he thought that this attitude was not that popular. He did feel though that the area would develop at a "quick pace" due to the new interest the city was expressing in expanding the economic base of the Manhattan community. (He was referring to the "speculative building" that was to be built in the Manhattan Industrial park to lure industry to Manhattan.) The commissioner stated that the jobs that the new industry would generate would not be high paying jobs so the housing needs of the employees would not be met by the Manhattan housing market. He went on to state that the study area could be a potential release point for a housing need that would include trailer parks and small duplexes. (This sort of development was opposed by the Pottowatomie Commissioners because they considered it the "rifraf" overflow of Manhattan.)

The commissioner felt that the city commission could not "resist" the developers in the Manhattan area and that growth will occur where developers want to build. But he did state that there was a growing consensus among the city commissioners of Manhattan, that a balancing of Manhattan must be pursued through overt action by government to influence the growth pattern of the city and he felt this was "the current opinion of the majority of the commissioners."

The preceding dialogue infers that the study area will continue to be influenced by spillovers from the economic activity within the Manhattan economic community. The study area should be effected by the expansion of the Manhattan economic base, but no overt action such
as annexation will be seriously pursued by the Manhattan governing bodies, unless, as Dr. Linder stated, "the election processes change the profile and attitudes of the Manhattan City Commission, by throwing the rascals out."  

**Taxes and the Study Area**

Another administrative function that can effect the local development sequence is the property tax. Principally, the property tax and how it effects locational preferences of home buyers. The following passage from *Modern Public Finance: The Study of Public Sector Economics* by Bernard P. Herber explains the influence of the property tax upon locational preference.

"The property tax can influence residential and industrial location. Individuals in metropolitan areas may select one area of residence as opposed to another because of property tax differentials. This is sometimes decided on an irrational basis. For example, an individual may select a residential location on the basis of tax rate disparities rather than upon differences in the quantity and quality of governmental services within the various political jurisdictions."

Herber goes on to state how the property tax and its assessment rate system can manifest itself in leap frog type development and urban sprawl.

The property tax, moreover, is increasingly becoming a tax upon improvements to real estate. As such it tends to discourage investment in heavily taxed real estate improvements and to encourage the speculative purchase of lower taxed, unimproved land. Such distorted behavior may exert significant effects in rapidly growing communities where it can result in the existence of large tracts of unimproved land within the metropolitan community. This phenomenon, which is more commonly known as "urban sprawl" makes necessary the existence of additional miles of streets,
gas, electric, and telephone lines, extensive areas of police and fire protection, and increased commuting costs and travel time. This is an outstanding case of a negative allocative nonneutrality resulting from the structure of the property tax.  

The allocative effects of the property tax can also be used to the developers advantage in his marketing schemes. One developer, in the study area has constructed a large sign along his development that states in bold red and white letters "LOW TAXES MANHATTAN SCHOOLS ½ ACRE LOTS." Rural amenities with low taxes and the availability of good schools is a genuine paradox (on the resident survey section of this report the "irrational basis" for resident selection and the allocative effects of property taxes will be examined in depth).

The quantitative results of differential tax rates and their possible effects on the study area are contained in the following research. A simple question was constructed and asked of the Potowatomie and Riley county appraisers. "What would the basic property tax be on a newly constructed home appraised at $40,000.00, in your county--Potowatomie County in Blue Township--Riley County in Manhattan city limits. The responses given were:

Riley County (Manhattan) 104.64 Mils $40,000 Residence=$831.89
Potowatomie County (Blue Township) 73.64 mils $40,000 Residence=$380.00

The total tax differential is $451.89 or $37.65 a month. In addition to the above base tax, Manhattan development usually incurs a special assessment for streets and curbs. Special assessments are:

"levied on owners of property to defray the costs of specific improvements such as paving drainage or irrigation facilities, and apportioned according to the assumed benefits of the property affected."
Normally the costs of improvements are scheduled over a 10 to 20 year payout period, and the range of specials in Manhattan is from $400 to $700 a year, or to put into monthly payment terms $33.33 to $58.33 a month added to the cost of a new residence. 27

Due to the lower land costs per unit of construction and the absence of improvement districts in the study area, developers in the study area sink the development costs of streets and curbs into the unit cost of their houses. The principal developers in the area felt that this did not increase their costs significantly to out price the market for new housing in the area. 28

With just tax considerations, a new $40,000 appraised home in the study area could cost $38 to $96 less per month than a similar home in Manhattan based upon location and special tax assessments.

**Kansas State Statutes**

Another obvious area of influence in administrative controls are the Kansas State planning and incorporation laws. This area of concern will be dealt with in detail in the alternative plans section of this report. The implications of these laws are discussed in relation to the citizen input that was generated through the area resident survey.

This section has demonstrated that the study area is affected by direct and indirect administrative and political influences. By no means did this section exhaust the list of influences. For example, school districts, water districts, environmental protection agencies and the Department of Transportation were not included and each would have a bearing on land use decisions in the study area. The variables
of administrative and political influence are complex and exponential. Any land use decisions that will be made in the study area will never occur in a vacuum, and as Anthony Cantanese so aptly puts it in his "contention"

"The local political process usually will overrule long range and comprehensive plans based solely upon rationality principles of planning."
LANDOWNER ATTITUDES AND VALUES
IN THE STUDY AREA

The following section was by far the most interesting and experimental research of this report. It dealt with the determination of farm-owner values and attitudes about development and land use patterns in the study area.

The basic research tools were:

1. A Pottowatomie County abstract map from the Pottowatomie County Abstract Company, that identified the owners of property within the study area.

2. An interview questionnaire that facilitated the determination of the landowners values and attitudes about his property.

The written work of William H. Whyte in his book, The Last Landscape, gave the impetus for the above research, especially, the sections of the work that discuss the role of "stewardship" in open space planning and land preservation. The basic thrust of the theory is that landowners are very proud of their property and can become very expansive in the discussion of their property, and if a sentimental cord can be struck at the right time, gifts of park space and scenic easements can be negotiated with the landowners.

The landowners that were interviewed will not be identified by name but the location of their land holdings are plotted on a study area base map (Figure number 5). Out of nine landowners contacted five were willing to be interviewed, and as a group they controlled
UNINCORPORATED STUDY AREA
POTTAWATOMIE COUNTY, KANSAS

Landownership Interviews

Approximate Location of "Dripping Springs"

Kansas River


Property of Landowners interviewed
approximately 900 acres of prime developable land within the study area.

The questions that were asked of each of the owners were as follows:

1. How long have you owned this property?
2. How long has this property been in your family?
3. What are your aspirations for your property in the future?
4. What is your opinion about the development that is occurring in the area (principally Timber Creek and Quail Creek Developments)?
5. Have you considered what your farmland will look like in ten years?
6. Have you ever considered donating part of your land as a park?
7. Would you consider selling easements or the development rights on your property to preserve some of the natural features on your land?
8. Have developer's approached you to purchase your land?
   a. What have they offered you for your land per acre?
9. What was your response to the offer?
10. Would you sell your land to the public? e.g. the County.
11. What are your general feelings about your land?

The questions were successful in stimulating conversation and all of the owners had deep feelings about their property. None of the landowners were in opposition to development in the study area. One interviewee summed up the feelings of the group rather well.

"It's okay, Hell you can't keep a town from growing, it's just natural expansion."\(^2\)

There was a split in attitudes about the quality of development that was occurring in the area. Three of the landowners expressed real
concern over the preservation of the landscape and "slip shod" development. (The R. C. Stephenson development was volunteered in two separate interviews as being a poor type of development.) The use of more stringent controls was mentioned by two of the landowners.

All of the landowners believed their land would be developed "some day" but only one landowner interviewed, a developer in the area, had any immediate plans for development of his land. 3 Generally, the respondents were happy with the status quo of their property and would continue to farm or rent their land to farmers. 4

Every landowner interviewed had been contacted by an agent to purchase some or all of their property for speculative purposes, and all but one had refused. The general feeling is captured in the following quote by one of the interviewees.

"no since in selling unless you're hungry, but when it goes in, doesn't make any difference to me." 5

The offers made to the landowners were difficult to extract in the interviews, because the interviewees were evasive. One offer was $2,300.00 per acre for an 18 acre tract 6 and it was refused. Another offer was a $1,500.00 per acre offer for an undetermined amount of acreage to build a trailer park 7 and it was refused. All of the owners were reluctant to identify the sources of the above offers. (These interviews verified the feelings of developers that land was difficult to acquire in the study area.)

When the discussion of parkland donations, scenic easements and development rights was raised, the tone of the conversation usually became tense in the opinion of the author. The only real common attitude of the landowners was that they did not want to enter into
such negotiations if it would jeopardize any present or future development value of their property. None of the interviewees were opposed to selling their land to the public, but what was really interesting was that all of the interviewees refused to set a price on the property they would sell to the public. The landowners seemed, although not expressed, to reserve that right for an outside opinion, most likely an attorney or a real estate broker.

All of the interviewees expressed a personal attachment to their land, some stronger than others. One landowner expressed his attachment as follows:

"If it took my granddad and my dad so long to put this land together and then if I can't keep it together then there must be something wrong." 

The questions in the interview 1, 2, 7 and 10 were designed to develop conversation that would "evaluate the level of attachment the landowners held towards their property." In one interview an elderly lady, who died approximately two weeks after the interview, became noticeably involved in the conversation. She went to great effort to produce magic lantern slides and photographs of "her" farm and her family that chronicled the farm's history. One slide of "Dripping Springs" was incorporated into this report, see Figure 6. She expressed a fondness for the area and said it would make a "nice park." She described how the area had been used as a picnic area and camp site for many people in the late 1800's. "People use to come from all over the county to wade and picnic." But she did not know how anyone could get to it now because it was landlocked and it had no road access. The ladies son continually discounted the area as being "worthless."
Figure 6

"Dripping Springs" Popular Recreational Area in the Late 1800's that is Located in the Study Area
The preceding account solidified the purpose of interviewing landowners in growth areas. Through the interview, information was secured that could open a negotiation process for a significant park acquisition project. Without the initiation of the "stewardship" process the information probably would not have been determined prior to the development of the farm site. What must be emphasized however, is that the subsequent negotiations must be conducted with the assistance of qualified tax and estate planners to provide the "dollars and sense" information that could implement the initial findings. This is necessary because, as has previously been mentioned, the landowners in the study area do not want to jeopardize the attractiveness of their property for future land negotiations. It would be possible to demonstrate that a gift of land could provide a tax break and also enhance the value of the remaining property to the point that no absolute dollar value had been sacrificed due to the increased value of the land contiguous to parkland that could be marketed a higher price to compensate for the donation.\textsuperscript{10, 11}

This section has attempted to shed light on the personal values that landowners within the study area attach to their property. The owners interviewed did demonstrate personal attachment to their land. But it was quite clear, also, that development in the area was accepted and not considered a threat to the landowners interests. On the contrary, most of the landowners expressed either a latent or outright interest in the value added impact of development upon their property values.

As a result of this research and the developer attitude research in the study area, one point becomes clear. If any type of advanced
land use planning and property acquisition were to be initiated in this study area, it would have to have been initiated from six to seven years ago. This is when farm land was still available for $300.00 per acre$^{12}$ and before the study area came under land speculation pressure.$^{13}$
RESIDENT VALUES TOWARD LAND USE
CONTROLS IN THE STUDY AREA

On 23 April a survey was conducted to ascertain the attitudes and values of the residents of the study area concerning land use controls and development patterns in the study.

The survey did not limit its scope completely to land use controls, information was generated about potential citizen participation levels, location preference decisions, and environmental satisfaction held by the residents.

There are numerous variables that have been developed to explain the suburban migration of Americans: anti urbanism, to be in the "wide open spaces," status, to raise children, to reduce a tax burden, to avoid the perceived negative pathological nature of the central city, a desire to return to the land, racism, transportation linkages of the central city, and many more. Some of these variables are applicable to the residents of the study area. Through a sampling of the study area population with the enclosed survey, (Appendix 1), it was hoped that the wants, needs and concerns of the residents could be determined about land use and governmental control in the study area.

If the residents of the study area moved to their present location to achieve a rural habitat then it was assumed by the author that the residents would be motivated to voice their desires for rational land
development in the area, to retain the amenities of their rural environment.

To try and develop interest in land use in the area and to also allow the residents an opportunity to express their temporal perceptions of the area. A base map of the area was included in the survey, it was hoped with the instructions provided, the residents would identify: their neighborhood, their community boundary for land use control, and the best and worst things in their area. This form of research is not new, i.e., Lynch, Ladd, Somer, Saarinen and Milgram are researchists who have used this technique in their work. The applications of this technique are explained by Saarinen.

"Once the mental maps have been obtained and their significance understood for the individual, what application, if any, do they have for the betterment of human society? Saarinen handles this question implicitly by suggesting that future campus plans take into consideration the composite campus image of the student population. On a larger scale, he points out that an analysis of sketch maps of the world might help in averting dangers based on conflicting world images of different cultural groups. It is also possible that city planners, with a knowledge of mental maps, will be able to better arrange cities so that they communicate a sense of place to the individual, help him to orient himself in a new city, and contribute to his esthetic delight."

By overlaying the individual maps into a composite it was hoped the information provided by the residents could identify the effects of certain physical features in the study area environment, both positive and negative.

A complete copy of the survey instrument is enclosed in Appendix I.
A stratified sampling\textsuperscript{12} of the study area population was utilized to insure the representativeness of a sample to include the four housing groups observed in the area. The four groups that were surveyed and responded are listed as follows:

<table>
<thead>
<tr>
<th>Housing Type</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber Creek P.V.D.</td>
<td>5/56</td>
<td>9%</td>
</tr>
<tr>
<td>Single Family Detached</td>
<td>26/76</td>
<td>34%</td>
</tr>
<tr>
<td>Duplex</td>
<td>3/9</td>
<td>33%</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>8/69</td>
<td>12%</td>
</tr>
</tbody>
</table>

Sixty-three residents were contacted to fill out fifty-two surveys and forty-two residents completed and returned the survey for a response rate of 80 percent. (Only one resident approached, reacted in an intolerant and abusive manner to the author. Overall, the residents of the study area were favorably disposed to participate in the survey. Out of the forth-two respondents thirty-eight filled out the map portion of the survey for a 90 percent response rate. Naturally some of the maps were more expressive than others but it is accepted that certain individuals are better in "understanding a task and have greater abilities in conceptualizing and representing spatial relations," as demonstrated by the research of Florence C. Ladd in Boston, Massachusetts.\textsuperscript{13}

Survey Results

Q.1) AGE

The median age of the respondent was 30 years with the arithmetic average age of 32.4 years.

Q.2) SEX

33 males and 9 females responded

Q.3) MARITAL STATUS

78 percent were married heads of households and 22 percent were single heads of households.
Q.4-5) OCCUPATION

White Collar 52%
Blue Collar 15%
Military 17%
Student 12%
Other (Retired) 4%

a) Place of employment
   In the Area 5%
   Manhattan 57%
   Junction City 24%
   Other 14%

b) Distance to Work
   Average Trip Distance 9.9 Miles

Q.6-7-8-10) HOME OWNERSHIP

a) Own 85%
   Rent 15%

b) Occupancy Average 3.1 Occupants per household

Average Residency Time 3.2 Years
Expected Resident Duration:
   3 respondents stated "permanent"
   16 responded for an average of 2.8 years
   23 were undecided

Q.9) LOCATION PREFERENCE DECISION--135 Responses Listed

a) Price 24 Responses 17.000%
b) Location 28 Responses 21.000%
c) Taxes 25 Responses 18.000%
d) Similar People 1 Response .7%
e) Live in the Country 22 Responses 16.000%
f) Only Place Available 1 Response .7%
g) Good Place to Raise Children 15 Responses 11.000%
h) Wide Open Spaces 14.000%

Q.11) RESIDENCE SATISFACTION

Would you select a similar residence if you had to move?

   Yes 32 Responses 76%
   No 9 Responses 22%
   Not Sure 1 Response 2%
Q.12) DESCRIPTION OF THE STUDY AREA—48 Responses Listed
  a) Suburban 7 Responses 15%
  b) Small Town 1 Response 2%
  c) Rural Area 21 Responses 44%
  d) Farm Area 5 Responses 10%
  e) A Tract Housing Area 10 Responses 21%
  f) A Planned Community 2 Responses 4%
  g) No Identity 2 Responses 4%

Q.13-14) ENVIRONMENTAL IMPORTANCE
  a) Is environment important in residence selection process?
      Yes 36 Responses 86%
      No 6 Responses 14%
  b) Future environmental preference in study area:
      Change 9 Responses 21%
      Stay the Same 27 Responses 64%
      Start to Build Up 2 Responses 5%
      Do Not Care 4 Responses 10%

Q.15) DO YOU KNOW WHAT GOVERNMENTAL AGENCY CONTROLS LAND USE IN YOUR AREA?
  Yes 21 Responses 50%
  No 21 Responses 50%

Q.16) SUBSCRIPTION RATE TO THE OFFICIAL COUNTY NEWSPAPER:
  The St. Marys Star
  Yes 1 Response 2%
  No 41 Responses 98%

Q.17-20) LOCAL CONTROL OF LAND USE
  a) Would you join a neighborhood association to effect land use control?
     Yes 12 Responses 29%
     No 12 Responses 29%
     Undecided 18 Responses 42%
  b) Area incorporation:
     Yes 9 Responses 21%
     No 28 Responses 66%
     Undecided 5 Responses 13%
  c) Sign a petition for incorporation:
     Yes 10 Responses 24%
     No 28 Responses 66%
     Undecided 4 Responses 10%
d) Area annexed by Manhattan:
   Yes 7 Responses 17%
   No 29 Responses 69%
   Undecided 6 Responses 14%

Q.21) DESCRIPTION OF DEVELOPMENT IN YOUR AREA—-55 Responses Listed:
   a) "This is a good place to live"
      20 Responses 29%
   b) "Developers are building out here just to make a buck and do not care about the other residents."
      8 Responses 15%
   c) "The market should set the rules for the development in the area."
      2 Responses 4%
   d) "This area is a mess and something should be done about it."
      2 Responses 4%
   e) "This area is being developed according to a good plan."
      5 Responses 9%
   f) "This area is being developed in a haphazard way."
      16 Responses 26%

Q.22) SERVICE ADEQUACY IN THE AREA—Total number of responses that a service(s) was considered inadequate was 108.
   a) Police Protection 15 Responses 14%
   b) Ambulance Service 17 Responses 16%
   c) Fire Protection 17 Responses 16%
   d) Schools 3 Responses 3%
   e) Trash Collection 3 Responses 3%
   f) Waste Disposal 9 Responses 8%
   g) Street Maintenance 25 Responses 23%
   h) Parks and Playgrounds 18 Responses 16%

Q.23) HOUSING TYPE AND STRUCTURAL INTEGRITY
   a) Dwelling type
      1. Single Family Detached 31 Responses 73%
      2. Duplexes 3 Responses 7%
      3. Mobile Homes 8 Responses 20%
   b) Sewage Disposal Systems in Use
      1. Septic Tank 26 Responses 62%
      2. Central Sewer 16 Responses 38%
c) Water System in Use
   1. Well  33 Responses  79%
   2. Rural Water Dist.  5 Responses  12%
   3. Other  4 Responses  9%

d) Cracks in Foundation of Residence
   Yes  9 Responses  21%
   No  33 Responses  79%
e) Sewage System Problems
   Yes  3 Responses  7%
   No  39 Responses  93%

Q.24) EXISTING LAND USES IN THE AREA AND THEIR OVERALL ACCEPTABILITY:
   Acceptable  26 Responses  62%
   Not Acceptable  13 Responses  31%
   Do Not Care  3 Responses  7%

Q.25) LAND USE PREFERENCES FOR DEVELOPMENT IN THE AREA—80 Responses Listed:
   a) Residential  26 Responses  36%
   b) Commercial  9 Responses  11%
   c) Public (Schools, Town Hall, etc.)  17 Responses  21%
   d) Industrial  4 Responses  5%
   e) Parks  20 Responses  25%
   f) No Development  2 Responses  2%
   g) No Preferences  2 Responses  2%

Q.26) COMMERCIAL LAND USE ACCEPTABILITY IN THE STUDY AREA—74 Responses Listed:
   a) Shopping Center  11 Responses  15%
   b) Grocery Store  7 Responses  9%
   c) Convenience Store  8 Responses  11%
   d) Tavern  6 Responses  8%
   e) Drive Up Food  5 Responses  7%
   f) Service Station  10 Responses  14%
   g) Restaurant  7 Responses  9%
   h) None  18 Responses  24%

Q.27) ACCEPTABLE DISTANCE FROM RESIDENCE OF VARIOUS LAND USES IN THE STUDY AREA—Please state what distance from your residence the following land uses would be acceptable to you:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Resp.</th>
<th>Next Door</th>
<th>One Block</th>
<th>½ Mile</th>
<th>¾ Mile</th>
<th>1 Mile</th>
<th>Not At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>39</td>
<td>2%</td>
<td>0</td>
<td>15%</td>
<td>13%</td>
<td>26%</td>
<td>44%</td>
</tr>
<tr>
<td>Industrial</td>
<td>39</td>
<td>2%</td>
<td>0</td>
<td>2%</td>
<td>5%</td>
<td>20%</td>
<td>69%</td>
</tr>
<tr>
<td>Service Station</td>
<td>41</td>
<td>0</td>
<td>12%</td>
<td>22%</td>
<td>17%</td>
<td>38%</td>
<td>17%</td>
</tr>
<tr>
<td>Public Bldg.</td>
<td>38</td>
<td>0</td>
<td>5%</td>
<td>16%</td>
<td>27%</td>
<td>27%</td>
<td>32%</td>
</tr>
</tbody>
</table>
Q. 27 cont.  

<table>
<thead>
<tr>
<th></th>
<th>Resp. No.</th>
<th>Next Door</th>
<th>One Block</th>
<th>¼ Mile</th>
<th>½ Mile</th>
<th>1 Mile</th>
<th>Not At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>39</td>
<td>36%</td>
<td>18%</td>
<td>26%</td>
<td>10%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Mobile Homes</td>
<td>37</td>
<td>11%</td>
<td>5%</td>
<td>8%</td>
<td>5%</td>
<td>14%</td>
<td>57%</td>
</tr>
<tr>
<td>Farms</td>
<td>38</td>
<td>23%</td>
<td>10%</td>
<td>26%</td>
<td>16%</td>
<td>29%</td>
<td>5%</td>
</tr>
<tr>
<td>Parks</td>
<td>37</td>
<td>11%</td>
<td>19%</td>
<td>35%</td>
<td>8%</td>
<td>24%</td>
<td>3%</td>
</tr>
<tr>
<td>Shopping Center</td>
<td>39</td>
<td>3%</td>
<td>3%</td>
<td>8%</td>
<td>13%</td>
<td>36%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Q. 28) RESIDENT MAPS OF THE STUDY AREA

This section of the survey attempted to promote citizen participation in the land use decision making process through cognitive mapping of the area. The maps that were constructed for the section are a composite map of the responses of 38 residents who participated in this exercise.

The four maps that resulted from the survey are:

Figure 7 -- Neighborhoods Identified by Residents

This map tried to determine if there were patterns of association within recognizable physical sub groupings within the study area.

"Other approaches include 'cognitive maps' where people are literally asked to draw their neighborhoods, streets and cities or are interviewed as they move through environments. The goal is to determine subjective perceptions of an environment independent of its objective characteristics."

Figure 8 -- Community Boundaries Identified by Area Residents

This map was intended to allow the resident to express his greater than neighborhood association with the study area environment. This map should identify, through the composite, the perceived land use control area, or set the boundary of the study area as a community.

Figure 9 -- Positive Elements of the Environment

The information developed by this map, "the best things in your area" was intended to identify the existing elements in the study area that were satisfying to the residents. Hopefully, the information generated by the composite would help in goals formulation processes for land use control and development in the area.
Figure 10 -- Negative Elements of the Environment

The negative elements composite map would, hopefully, generate information that would assist in the land use goals formulation process. The residents would be allowed the opportunity to plot their gripes about the land use development in the area.

Resident Survey Analysis

The results of the survey were not intended to provide any statistically significant data to substantiate any quantitative analysis. The survey was intended to provide insight to the overall attitudes and values of the area residents toward land use controls in their environment. Statements and conclusions about the survey data will not be assessed for probability, independence, interdependence, joint probability or correlation.\textsuperscript{14} However, the results will be measured by the frequency of response to issues of land use control in the study area.

There were a total of 228 occupied residences in the study area and the 42 residents surveyed constituted an 18 percent sampling of the area residence population. (Group data was reported earlier.)

Resident Profile

The residents of the area find their livelihood outside the study area principally in Manhattan and Junction City/Fort Riley.

The model respondent was male (79%), 32 years old, a white collar worker (52%), home owner (85%), and drives 9.9 miles to his place of employment. The average household has 3.1 occupants and has been in its present residence for 3.1 years.
UNINCORPORATED STUDY AREA
POTTAWATOMIE COUNTY, KANSAS

Neighborhoods Identified By Residents:

- Residence of individual that identified a neighborhood
- Neighborhood Boundary

UNINCORPORATED STUDY AREA
POTTAWATOMIE COUNTY, KANSAS

Community Boundaries
Identified By Area Residents:

--- Community Boundary

One Mile
Source: United States Dept. of the
Interior, Geological Survey Topo and
County Line Plan.

Fig. 3
UNINCORPORATED STUDY AREA
POTTAWATOMIE COUNTY, KANSAS

Positive Elements Of The Environment:

* Positive Element Symbol

UNINCORPORATED STUDY AREA
POTTAWATOMIE COUNTY, KANSAS

Negative Elements Of The Environment:

- Negative Element Symbol
- Residence with Cracked Foundation

As was expected the residents in the study area chose their residence principally for economic related reasons, price and taxes. But the urge to move and live in the country was a strong variable in the location preference of the residents. As a combined selection variable, "Location, to live in the country and to live in the wide open spaces" constituted 61 percent of the total responses for the residence selection question (9). This was substantiated in the positive element map Figure 8 when out of a total of 45 plots 18 were on non built up elements in the environment, or 40 percent of the responses.

As far as residential satisfaction was concerned in the area, 76 percent of the residents surveyed would look for a similar type of residence in a future move (Q.11). In a later question, that provided phrases to evaluate development in the study area, the phrase "This is a good place to live" was the model response by the resident with 20 selections of this phrase out of 53 selected for a 37 percent average (Q.21).

The residency expectation time data was inconclusive due to the fact that the model response was that they did not know when they would move.

The environment of the study area was important to the residents when they moved there (85%) and 64% of the residents surveyed would prefer the environment to stay in its present configuration. But when given the opportunity later in the survey to choose no "future" development from a list of types of development "what would you prefer to see developed in the area" only two residents selected no development. It seems that the environmental
reasons for moving to the study area were not held as irreversible values. This was graphically depicted in Figure 9 with the concentration of stars on the E & R sales facility No. 1 at the corner of Elbo Creek Road and U.S. 24 Highway. This type of commercial development would most likely be readily accepted by area residents as well as more residential development. The overwhelming rejection of mobile home development by surveyed residents (57%) does clearly express a negative attitude toward this type of land use in the area as well as industrial development (69%) and commercial development (44%). This information was generated in question 27 distance from residence development. This information was likewise plotted on the composite negative elements map—Figure 10. It can be observed that the hatchery, the sale barn (1) and the future grain storage facility (2) were held to be negative elements of the environment.

Land Use Control

The residents surveyed were split in their knowledge of what governmental body controlled land use development in the study area, 49 percent Yes, 49 percent no, 1 percent Not Sure (Q.15). But as far as being aware of how and when the County Planning of Pottowatomie County was conducting land use decisions it can safely be assumed that the residents of the study area will not be notified through the official county news release media, The Saint Mary's Star. This was substantiated with the fact that 99 percent of the residents in the study area do not subscribe to this newspaper (Q.16).

There were three alternatives presented to the survey residents to develop more control of land use development in the area. The first
alternative, the formation of a local neighborhood association was received with the most favorable reaction, 12 Yes, 12 No, and 18 Undecided. The next two alternatives, Area Incorporation and Annexation by Manhattan were soundly rejected, each by a 34 percent for and 66 percent against. When asked if they would sign a petition for incorporation of the area, (a state requirement, K.S.A. 15-121) the residents rejected this issue, 66 percent to 34 percent also.

As a result of this information it was evident that local land use controls are not acceptable to the residents except by a self-governing neighborhood group.

This is interesting in the light of information developed in question 22 when the residents evaluated the adequacy of services within the study area. In the survey 25 out of 42 (59%) residents considered the street maintenance in the area to be inadequate. Also in the preceding question (21), evaluating the development of the area, a positive combination of responses in 1, 3, 5 as opposed to a negative combination of 2, 4, 6 was the minority response at 47 percent. There were observed irregularities and inadequacies in the study area as expressed by the above information but not severe enough it seems to warrant a concerted effort to take control, as was demonstrated in the responses to questions 17 through 20.

As a follow-up to the services section of the survey information was gathered to determine if there were structural problems and sewage treatment problems with residences in the study area. Only three residents reported any problems with their sewage removal systems but nine residents did report cracks in the foundations of their homes.
These homes are plotted on the Negative Elements Map Figure 10 with an X over the residence. Only eight of the nine residents could be identified with the information given in the survey. But it is clear that the area between the Union Pacific Railroad and U.S. Highway 24 must have unstable soils and obviously incur consistently high levels of vibration. This should be kept in consideration for future development in this area.

The absence of septic tank problems in the area is surprising due to the basic slow percolation rates of soils and the poor drainage of the area as a whole. The three residents who reported the problems were located in the same area as the high foundation crack incidence area. Two of the respondents resided in the R. C. Stephenson subdivision north of the railroad and south of U.S. 24 Highway. A continued monitoring of this subdivision will be necessary for the health and welfare of the residents. It might be assumed that the septic tanks in this subdivision are of similar quality and workmanship as the road network provided to the residents.

Study Area Resident Maps

The composite maps of the area assisted in identifying the positive and negative elements as perceived by the residents in the area. Some of these elements have been described earlier and will not be dealt with further.

The railroad that bisects the study area East and West was identified as an unsafe element of the environment by the residents in close proximity to it. (See Figure 9.)
The basic problem with the railroad was aptly expressed by one area resident:

"Should be flashing red light at railroad crossing. Stop signs are easily ignored!"

The railroad was identified as a negative element by ten residents.

The composite neighborhood map of the residents (Figure 7) gives some insight into the neighborhood perceptions of the area residents. The Timber Creek and the R. C. Stephenson subdivision south of the railroad are clearly defined neighborhoods, but the other residential areas do not share this quality. It appears that the residents of the other area have very "close in" small area perceptions of their neighborhoods.

U.S. Highway 24 had a strong influence upon neighborhood boundary perceptions. None of the residents included any residence across the highway from their residence as a part of their neighborhood. Kevin Lynch describes an element of this type an "edge".

"Edges are the linear elements not considered as paths: (of course Highway 24 is a path) they are usually, but not quite always, the boundaries between two kinds of areas. They act as lateral references...Those edges seem strongest which are not only visually prominent, but also continuous in form and impenetrable to cross movement. The Charles River in Boston is the best example and has all of these qualities."15

This strong influence of the Highway can also be evident in the Community Boundary Identification composite map (See Figure 8). Only eight residents plotted community boundaries that crossed the Highway.

Also the Timber Creek Area was rarely included in the community maps of the residents along 24 Highway and only one resident of Timber Creek included the residential areas south of Timber Creek in his community boundary map.
It is obvious that if a sense of community is to become a reality in the study area it will have to be developed. Only two respondents in the survey identified the total study area as a community for land use controls.

This section has demonstrated that city limit signs are not necessarily wanted or needed by the residents of an unincorporated area. But it was clear, however, that controls are wanted and needed for these same residents to retain a desired type of environment.

The next section of this report will develop alternatives for land use control in the study area that will be predicated upon the information generated in the previous sections of this report.
ALTERNATIVES FOR FUTURE LAND USE CONTROL
IN THE STUDY AREA AND CONCLUDING REMARKS

"The decisions made by county officials are often
necessitated by pressure for growth and each decision
may have a significant impact on the future growth
of the county. Growth management to county officials,
then, is not only a topic of discussion and study. It
is a recurring problem, always requiring decisions
and action."1

This is the concluding section of this report, its purpose is to
develop alternative land use planning processes for the residents
of the study area. These alternatives are hoped to be alternatives
that can assist in problem solutions for the County Commissioners
and the County Planning Board of Pottowatomie County as well.

This section will be brief and the alternatives are presented
as short policy statements. These statements are based upon the
previous research and documentation of this report.

Alternative 1:

a) Continue present processes with centralized planning
and land use control authority at the county level of
government.

b) Continue to consider the study area an agricultural area
and review applicants for rezonings and sub division plots
as before, but strengthen the performance bond language
within the subdivision regulations.
Alternative 2:

a) **Modify the planning goals and land use evaluation criteria of the County Comprehensive Plan to recognize the pressure and effective demand for development in unincorporated areas in the county that are adjacent to municipalities.** Also, a production evaluation of agricultural lands within the county should be conducted to determine which, more intensive, agricultural lands are more suited to alternative uses than agricultural production.

Alternative 3:

a) **Develop a Township Planning and Zoning Strategy for the county to allow the land use control procedures to be enforced at a more local level of input.** KSA 19-2903 through KSA 19-2513 are the state statutes that specify the requirements for this type of planning and zoning implementation.²

b) **Form special benefit districts in areas where service levels are inadequate and residents have petitioned for their formation.** KSA 80-1507 defines the authority for implementing special benefit districts.³

Alternative 4:

a) **Assist the formation of neighborhood associations in rural unincorporated areas, to allow the residents a forum to articulate their planning goals and objectives.** These local associations could also become service
delivery organizations for these areas. This alternative was recognized as the only real citizen participation process that was acceptable to the residents of the study area. The alternatives of Incorporation and Annexation were rejected in such significant proportions that these two alternatives are not currently viable options.

The study area will incur growth in the future, this is a foregone conclusion, however, the type of growth will be predicted by external and internal administrative and economic influences. The availability of building lots at affordable prices will have a marked impact on the desirability of the study area as a development area. The household formation rate of the region will affect the study area. The subsequent income levels of these households will influence the type and cost of housing that will be marketable in the study area, i.e. mobile home parks and small duplexes.

The allocation effects of a non-neutral property tax rate will continue to influence home buyer location preferences in the region. The favorable tax structure of the study area and its rural amenities will continue to be a "net" attractor to the area.

During the resident value research of this report, a resident of the study area asked the author to return to his residences to discuss the alternative future of the area. He expressed a real desire to become involved in the land use control of the area. During our discussions it became evident that the resident would like to initiate some type of local control of development in the area. He thought that an attempt
to establish a neighborhood association would be a worthwhile endeavor. Subsequently, an interview was arranged with the president of the Older Manhattan Neighborhood Association to discuss neighborhood association organization and operation techniques.  

These developments were not planned to be a part of the research of this report. If a neighborhood association does emerge in the area it could be a positive influence in the area. As the research has shown, it probably is, the only real viable alternative for active citizen participation in planning and land use control for the study area. Christopher Alexander in the Oregon Experiment expresses the seemingly intrinsic worth of citizen participation in community development.

"Let us begin with the idea of participation as an intrinsic good. When we say that people are more able to become involved in the world they live in when they take part in its design, there are actually two aspects to this thought. On the one hand, people need the chance to make active decisions about the environment. This is a fundamental need. It is need to create, and a need for control. Whenever people have the opportunity to change the environment around them, they do it, they enjoy it, and they gain enormous satisfaction from what they have done. On the other hand people need a chance to identify with the part of the environment in which they live and work; they want some sense of ownership, some sense of territory. The most vital question about the various places in any community is always this: Do they feel that they can do with them as they wish; do they feel that the place is theirs; are they free to make the place their own."  

When the proposal for this report was formulated the concluding remarks of the proposal did project a passing interest to try and generate citizen interest in the land use control process within the study area. Those remarks are provided as follows:

"Hopefully, the methodology and spirit of this research work will generate some interest in land use control and patterns in the study area."
The following comments taken from one survey summarize succinctly the interest in planning and land use controls that seem to latently exist in the area:

"I am not sure about how this area is zoned but, we have agriculture (farms), trailers, houses, chicken hatchery, small business, sale barns and a bunch of other stuff just clumped together. Enough people live out here that there could be a nice community out here. But, I'm not so sure that I would want to gave up the cheap Pott (Pottawatomie County) taxes (even though we get few, if any, services for the little tax that we pay) in exchange for having the Manhattan city annexing us just so that we can have their much more expensive lousy services. THANK YOU!"

Hopefully, this interest and the interest expressed by other residents in the survey will be a motivating force for the organization of an association in the study area to promote a sense of community and an effective voice of area resident needs.
INTRODUCTION


PHYSICAL CHARACTERISTICS OF THE STUDY AREA


3 Ibid., Physical Characteristics, p. 1.


5 Interview with Professor H. V. Beck, Department of Geology, Kansas State University, Manhattan, Kansas, 8 February 1978.


7 Interview with Mr. Ray Carubel D & R Builders, Inc., Manhattan, Kansas, February 18, 1978.
8 Interview with Professor Beck, 8 February 1978.

DEVELOPER ATTITUDES AND THE STUDY AREA

3 Ibid., p. 148-150.
5 Interview with Mr. Doyle Yocker, Manhattan Builders Association, 9 March 1978.
7 Interview with Mr. Robert Wilson, Charlson and Wilson Riley County Abstract Company, 11 March 1978.
8 Interview with Marvin Butler, Director of Community Development, Manhattan, Kansas, 24 March 1978.

11. Interview with Mr. James Rothschild, Manhattan Chamber of Commerce, Manhattan, Kansas, 29 March 1978.


ADMINISTRATIVE CONTROLS AND POLITICAL PROCESSES THAT EFFECT THE STUDY AREA


3. Interview with Mr. Donald Tessler, Pottawatomie County Zoning Administrator, Westmoreland, Kansas, March 7, 1978.


6. Pottawatomie County Planning Board Meeting.


Pottowatomie County Subdivision Regulation, Introductory Comments, p. 3.

Ibid., p. 4.


Interview with Mr. Tessendorf.


Ibid., p. 22.


Manhattan City Planning Department, Where Do We Grow From Here An Alternative Growth Study, (Manhattan: League of Women Voters, 1977), p. 16.

Interview with Gary Stith, City Planner, Manhattan, Kansas, 15 February 1977.


Interview with Dr. Robert Linder, City Commissioner, Manhattan, Kansas, March 24, 1978.


Ibid., p. 235.


Interview with Doyle Yocker, Manhattan Builders Association, Manhattan, Kansas, 9 February 1978.
Interview with Mr. Ray Crubel, D & R Builders, Manhattan, Kansas, 2 February 1978, and Interview with Mr. Dennis J. Day, Habitats Incorporated, Manhattan, Kansas, 5 April 1978.


LANDOWNER ATTITUDES AND VALUES IN THE STUDY AREA


2 Interview with Mr. Ken Ball, Landowner in the study area, Pottawatomie County, Kansas, 15 March 1978.

3 Interview with Mr. Dennis J. Day Habitats Inc., Manhattan, Kansas, 15 February 1978.

4 Interview with Mr. Glenn Marcoux and the now late Mrs. Stella Marcaux, landowners in the study area, Pottawatomie County, Kansas, February 22, 1978.

5 Ibid.

6 Ibid.

7 Interview with Mr. Clifford Barry, Landowner in the study area, Pottawatomie County, Kansas, March 18, 1978.

8 Ibid.


10 Whyte, Landscape, p. 23.

11 Interview with Mr. Donald V. H. Walker, Director, Real Estate Services/Open Space Program, City of Boulder, Colorado, Manhattan, Kansas, 31 March 1978.


RESIDENT VALUES TOWARD LAND USE CONTROLS
IN THIS STUDY AREA

1. Frank J. Coppa and Philip C. Doke, Cities in Transition: From
   the Ancient World to Urban America (Chicago: Nelson Hall

2. Ralph Thomlinson, Urban Structure The Social and Spatial Character

3. William Michelson, Man and His Urban Environment: A Sociological
   Approach, (Reading, Massachusetts: Addison-Wesley Publishing

4. Ibid., p. 99.

5. Interview with Dennis Day, "Habitats," Manhattan, Kansas,
   9 December 1977.


7. Ibid., p. 103.

8. Anthony Downs, Urban Problems and Prospects, (Chicago: Markham

   p. 632.


    Analysis: Methods and Models, (New York: John Wiley & Sons

12. Harold M. Prohansky, William H. Ittelson and Leanne S. Rivlin,
    Environmental Psychology: People and Their Physical Settings,

13. Ibid., p. 34.


ALTERNATIVES FOR FUTURE LAND USE CONTROL IN THE STUDY AREA


2 Kansas State Act Planning and Zoning Law, Kansas State Statutes, Sec. 19-2503 through 19-2913.

3 Ibid., Sec. 80-1507.

4 Wayne White, Resident of study area, Pottawatomie County, Kansas. Interview, 24 April 1978.

5 William Griffith, Older Manhattan Neighborhood Association, Manhattan, Kansas. Interview, 19 April 1978.

BIBLIOGRAPHY


Kansas. Statutes Annotated (Sanders, 1974).


Pottowatomie County Zoning Ordinance. Pottowatomie County, Kansas.


APPENDIX I

UNINCORPORATED AREA LAND USE SURVEY

1) AGE IN YEARS _______

2) SEX: Male _____ Female _____

3) MARITAL STATUS: Married _____ Single _____ Other _____

4) YOUR OCCUPATION: (Fill in) ___________________________________________

5) YOUR PLACE OF EMPLOYMENT: Manhattan _______

                             Wamego _____    Ft. Riley _____    Junction City _____

                             In This Area _____    Other _____

                             Miles Your Drive To Work? ___________________________

6) DO YOU OWN OR RENT YOUR RESIDENCE?

       Own _____ Rent _____

7) HOW MANY PERSONS RESIDE IN YOUR HOME _______

8) HOW LONG HAVE YOU LIVED IN THIS RESIDENCE?

       Years _____ Months _____

9) WHY DID YOU MOVE TO THIS RESIDENCE? (You may check more than one.)

       Price _____ Location _____ Taxes _____

       To Live Next to Similar People _______

       To Live in the Country _______

       The Only Place Available at the Time _______

       A Good Place to Raise Children _______

       The Wide Open Spaces of the Area _______

       Other: __________________________________________

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10) **HOW LONG DO YOU PLAN TO STAY IN YOUR PRESENT RESIDENCE?**

Years _____  Months _____  Do Not Know _____

11) **IF YOU MOVE WILL YOU LOOK FOR A RESIDENCE SIMILAR TO WHAT YOU PRESENTLY RESIDE IN?**

Yes _____  No _____

If Yes, Please Explain ____________________________________________

If No, Please Explain ____________________________________________

12) **WHAT TYPE OF ENVIRONMENT BEST DESCRIBES YOUR RESIDENCE LOCATION:**

Suburban _____  Small Town _____  Rural Area _____

Farm Area _____  A Tract Housing Area _____

A Planned Community _____  It Has No Identity At All _____

Other (Please fill in) ____________________________________________

13) **WAS THE TYPE OF ENVIRONMENT AROUND YOUR RESIDENCE IMPORTANT IN YOUR RESIDENCE SELECTION?**

Yes _____  No _____

14) **WOULD YOU PREFER THAT THE ENVIRONMENT AROUND YOUR RESIDENCE:**

Change _____  Stay the Same _____

Start to Build Up _____  Do Not Care _____

15) **DO YOU KNOW WHAT GOVERNMENTAL BODY CONTROLS LAND USE DEVELOPMENT IN YOUR AREA?**

Yes _____  No _____  Explain ________________________________

16) **DO YOU SUBSCRIBE TO THE ST. MARY'S STAR:**

Yes _____  No _____

17) **WOULD YOU JOIN A NEIGHBORHOOD ASSOCIATION TO EFFECT LAND USE DEVELOPMENT IN YOUR AREA?**

Yes _____  No _____  Not Sure _____
18) DO YOU THINK YOUR AREA SHOULD BE INCORPORATED INTO A TOWN TO PROVIDE LOCAL CONTROL OF DEVELOPMENT IN THE AREA?

Yes ______ No ______ Do Not Care ______

19) WOULD YOU SIGN A PETITION TO HAVE THE AREA INCORPORATED?

Yes ______ No ______

20) ARE YOU IN FAVOR OF YOUR AREA BEING ANNEXED BY THE CITY OF MANHATTAN?

Yes ______ No ______ Not Sure ______

21) WHICH PHRASE(S) BEST DESCRIBES DEVELOPMENT IN YOUR AREA?

A) "This is a good place to live" ________________
B) "Developers are building out here just to make a buck and do not care about the other residents." ________________
C) "The market should set the rules for the development in the area." ________________
D) "This area is a mess and something should be done about it." ________________
E) "This area is being developed according to a good plan." ________________
F) "This area is being developed in a haphazard way." ________________

22) DO YOU FEEL THE FOLLOWING SERVICES ARE ADEQUATE IN YOUR AREA?

Police Protection Yes ______ No ______
Ambulance Service ______ ______
Fire Protection ______ ______
Schools ______ ______
Trash Collection ______ ______
Waste Disposal ______ ______
Street Maintenance ______ ______
Park & Playground ______ ______
23) PLEASE CHECK THE CORRECT PHYSICAL FEATURES ABOUT YOUR RESIDENCE?
   A) Single Family _____ Duplex _____ Mobile Home _____
   B) Septic Tank _____ Sewer _____ Other _________
   C) Water: Well _____ Water Dist.3 _____ Other _________
   D) Are there cracks in the foundation of your residence?
      Yes ______ No ______
   E) Has or does your sewage disposal system cause you any major problems?
      Yes ______ No ______

24) ARE THE LAND USES AROUND YOUR RESIDENCE ACCEPTABLE TO YOU?
   Yes ______ No ______ Do Not Care ______
   If No, Please Explain __________________________________________
                                                                                       
25) WHAT TYPES OF DEVELOPMENT WOULD YOU PREFER TO SEE DEVELOPED IN YOUR AREA?
   More Residential ______ Yes ____ No ___ Some ____
   Commercial ________ ________ ________
   Public (Fire Station, Schools, Town Hall, etc.)
      Industrial ________ ________ ________
      Parks ________ ________ ________
   No Development ________ ________ ________
   No Preference ________ ________ ________

26) WHAT TYPES OF COMMERCIAL DEVELOPMENT WOULD BE ACCEPTABLE TO YOU IN THE AREA?
   None ______ Shopping Center _____ Grocery Store _____
   Convenience Store _____ Taverns _____ Drive-Up Food _____
   Service Station _____ Restaurant ______________________
   Other: _________________________________
27) PLEASE STATE WHAT DISTANCE FROM YOUR RESIDENCE THE FOLLOWING LAND USES WOULD BE ACCEPTABLE TO YOU:

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28) **ON THE ENCLOSED MAPS PLOT THE FOLLOWING INFORMATION: (Use Dark Ink). You May Use Both Maps.

A) Put an X on your residence.
B) Circle your neighborhood.
C) Put a dashed line around your community—the area you would prefer to control if you had power to do so.
D) Put a star on the best things in your area—schools, open spaces, business, neighbors, etc.
E) Put an asterisk on the worst things in your area—streets, highway 24, neighbors, farms, trash areas, etc.

29) PLEASE WRITE IN ANY COMMENTS YOU HAVE ABOUT ANY OF THE PRECEDING QUESTIONS OR ANYTHING YOU CONSIDER IMPORTANT ABOUT YOUR LIVING AREA. TAXES, PROTECTIVE COVENANTS (TIMBER CREEK), ZONING, SCHOOLS, TRAFFIC, ETC.

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________.
ACKNOWLEDGMENTS

I want to acknowledge with the deepest thanks the assistance of Professor John W. Keller, Professor Claude A. Keithley and Professor Dennis J. Day have given me in preparation of this report. It could not have been written without their wise and discriminating help. I also wish to express my deepfelt thanks to my lovely wife, Cynthia, for her patience and constant support of my efforts throughout the preparation of this report.

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The list of individuals who contributed to the experience of this report is too long to be presented. But I must acknowledge that this planning report could not have reached fruition without the cooperation of numerous citizens and public servants in Pottowatomie and Riley Counties, Kansas.
A CASE STUDY OF CONTROLLING LAND USE IN AN UNINCORPORATED AREA IN POTTOWATOMIE COUNTY, KANSAS

by

JOHN RAYMOND CAIN

B. S., Kansas State University, 1970

________________________________________

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

KANSAS STATE UNIVERSITY

Manhattan, Kansas

1978
This report consolidates the author's research conducted from November 1977 to April 1978 in Manhattan, Kansas. The overall purpose of this report is to develop a better understanding of the land development processes in and around Manhattan, Kansas. The report examines the physical economic and political influences that effect the land development sequence in the area. The scope of the report was narrowed to specifically deal with the development process underway in and around a study area 2 2/3 miles East of Manhattan on U.S. Highway 24.

The specific objectives of the report are (1) determine the attractiveness of the study area to developers, present residents and possible future residents, (2) to examine the strengths and weaknesses of the area to include the physical limitations and administrative controls at work within and outside the study area, (3) develop a mini-plan for the area based upon citizen values, developer attitudes and land owners aspirations within the study area.

The methodology of research for this report was based primarily upon surveys and interviews of residents in the area and officials that influenced the land development in the study area. The research results substantiated a real interest for more effective land use planning in the study area. The potential for citizen participation in the land use planning process was evident in the resident survey responses.