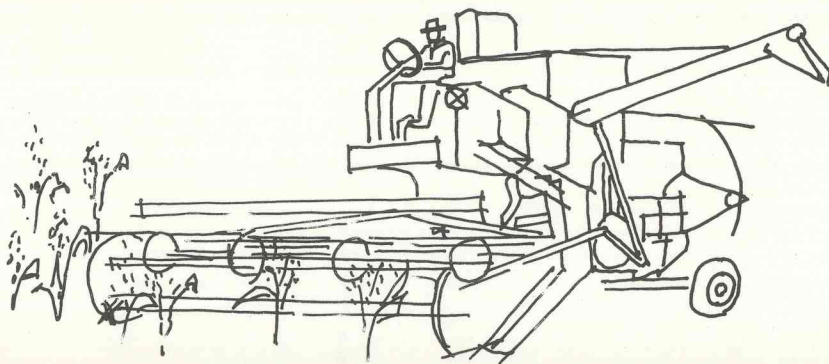
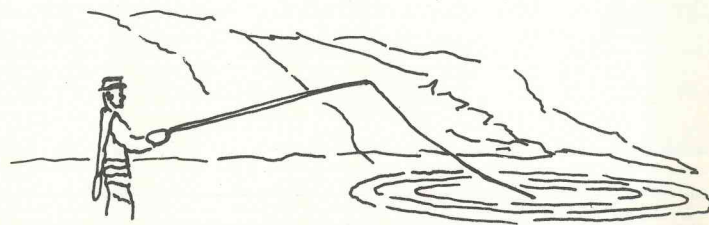
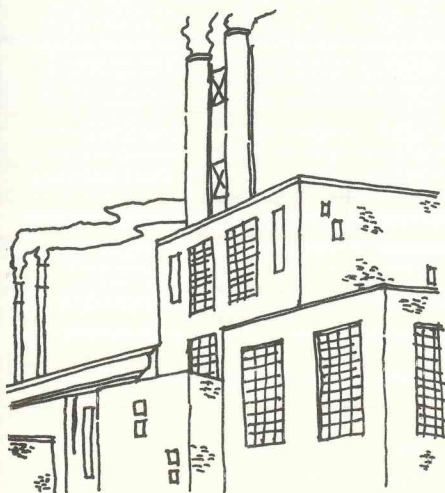




STERLING KANSAS



Comprehensive Plan



1969

JCH *and associates, inc.*
PLANNING CONSULTANTS

TITLE: Sterling, Kansas Comprehensive Plan

AUTHOR: JCH and Associates, Inc.
212 Burgundy Building
7700 West 63rd Street
Overland Park, Kansas 66202

SUBJECT: Population Study
Economic Study
Land Use and Housing Study
Community Facilities Study
Thoroughfare Study
Public Utilities Study
Development Plan
Capital Improvement Program
Implementation

LOCAL PLANNING
AGENCY: Sterling Planning Commission

SOURCE OF COPIES: Sterling Planning Commission
City Hall
Sterling, Kansas 67579

HUD PROJECT NO: Kans. P-81

NO. OF PAGES: 70

ABSTRACT: The objective of the study is to project the probable future land and facility requirements in this rural City based on past history, existing data and projected needs.

Sterling enjoyed early growth as the hub of wheat activity in Kansas in the early 1870's. Growth was bolstered by the establishment of Sterling College in 1887. Sterling College today is an important factor in the economic life of the City. Like so many rural towns, Sterling felt the out-migration of rural people, but after 1930 showed a very slight increase in population. Agricultural, educational and personal service areas form the major economic base in the City.

Sterling is primarily a community of wide tree-lined streets with low density housing. The City has established a fine community park and public service systems which will have a heavy influence on the future City. Much of the city housing is old and nearly half of the existing homes are showing signs of de-

terioration. New developments are taking place in the City; however, the need for adequate low-priced housing is mounting.

The City operates the electric service in the area. It is in need of future water reservoirs and because of the flat terrain is plagued by storm water problems. The sewage system is maintained well in the City and has been up-dated as money is available.

The City has established a sound street surfacing program and with the exception of low-lying areas has all-weather streets in most residential and all commercial areas.

Growth is expected to the northeast. The development plan projects general needs for this area. Lack of industrial land within the City required the allocation of industrial lands outside the City limits. These needs are shown in an improvement program for the City geared to up-dating as demands arise.

Implementation of an on-going planning program has been stressed in this study. The need for cooperation with other cities in the County and the area has been stressed in this study.

PARTICIPATING AGENCIES

STERLING, KANSAS

STERLING CITY PLANNING COMMISSION

C.F. Oline, Chairman
Frank Dill, Vice-Chairman
Virgil Sillin, Secretary
Ralph Johnston
Max Groves
Bill Cox
Glen Shepherd
Lewis Sergeant
Clark Yeake

PAST MEMBERS

Jerome Chandler
Ross Haney
Robert Gill

CITY COMMISSIONERS

W.C. Amend, Mayor
Logan Mahoney
Quinten Kilgore

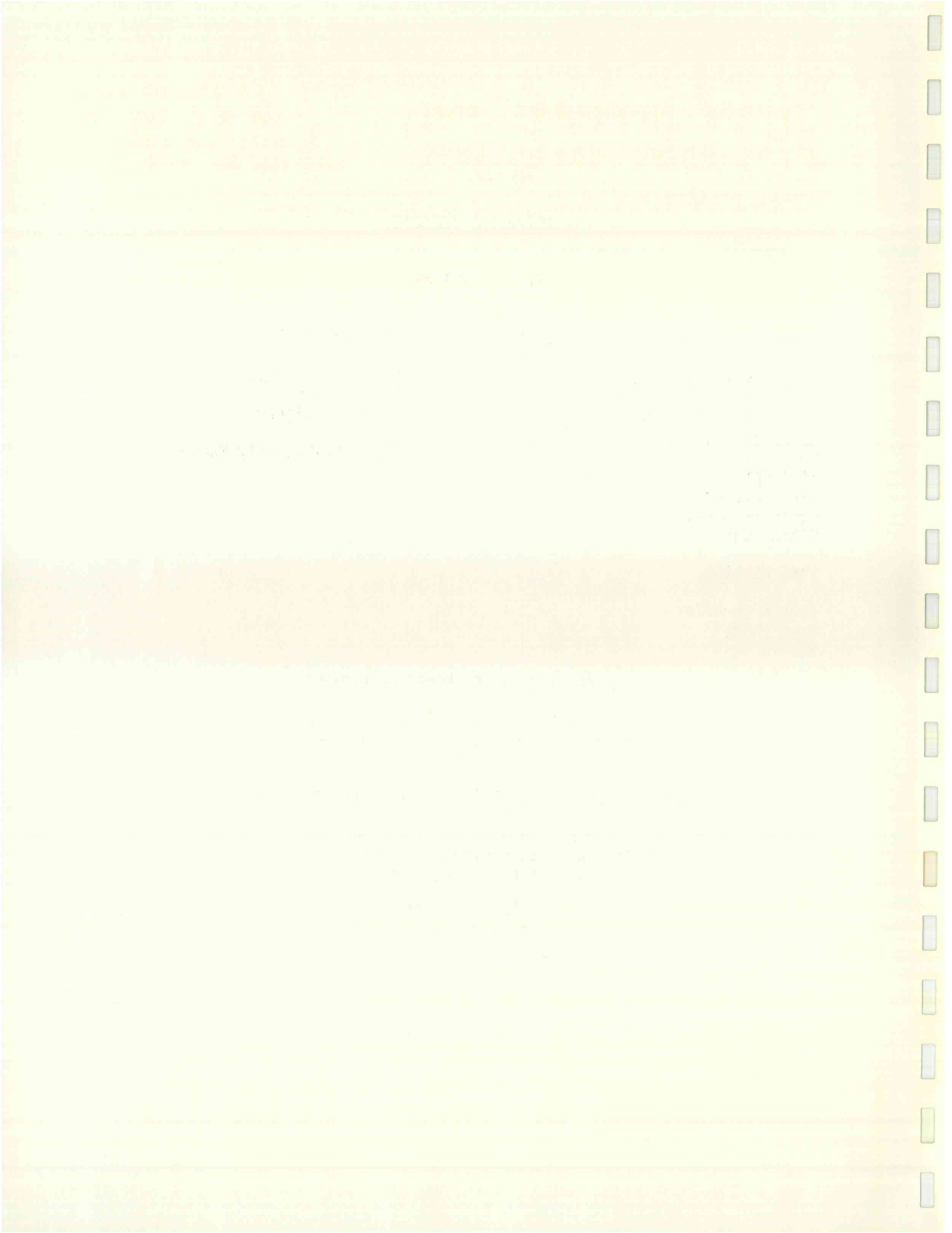
Jerry Newby, City Manager

KANSAS DEPARTMENT OF ECONOMIC DEVELOPMENT

John P. Halligan, Director of Planning
Lester H. Clark, Supervisory Planner

JCH AND ASSOCIATES, INC., PLANNING CONSULTANTS

Joseph C. Himberger, President
William K. Ritterhouse, Vice-President
Keith Zeff, Vice-President
Dan Noland
Charles McDowell
Paul Knapp
Norma Lee Rich



JCH *and associates, inc.*
PLANNING CONSULTANTS

JOSEPH C. HIMBERGER
KEITH ZEFF

212 BURGUNDY BUILDING
7700 WEST 63rd STREET
OVERLAND PARK, KANSAS 66202
AREA CODE 913 PHONE 831-3433

September 4, 1969

The City of Sterling
City Hall
Sterling, Kansas 67579

Gentlemen:

Submitted herewith is the Sterling, Kansas Comprehensive Development Plan, including studies of population, economics, land uses, community facilities, streets and capital improvements. This is in fulfillment of our contract dated March 25, 1968. The Zoning Ordinance and Subdivision Regulations have been presented under separate cover.

It has been a pleasure assisting you in the development of this report. I feel that the study will provide the City with a planning program capable of meeting the future requirements within the financial capability of the City.

Respectfully submitted,

JCH AND ASSOCIATES, INC.


Joseph C. Himberger

JCH/nlr

TABLE OF CONTENTS

<u>SECTION TITLE</u>	<u>PAGE</u>
BACKGROUND - - - - -	1
Location - - - - -	1
Early Background - - - - -	1
CHAPTER ONE - POPULATION - - - - -	5
Population Trends - - - - -	5
Population Characteristics - - - - -	6
Population Comparisons - - - - -	8
Projections - - - - -	9
CHAPTER TWO - ECONOMY - - - - -	11
Area Economic Trends - - - - -	11
Employment - - - - -	12
Retail Trade - - - - -	13
Wholesale Trade - - - - -	14
Manufacturing - - - - -	15
Trade Area - - - - -	16
Farm Facts - - - - -	16
Financial Institutions - - - - -	19
Family Income - - - - -	20
Sterling College - - - - -	21
Employment Projections - - - - -	22
Summary - - - - -	22
CHAPTER THREE - EXISTING LAND USE AND HOUSING CONDITIONS	25
Land Use Categories - - - - -	25
Housing Condition Categories - - - - -	26
Housing Conditions - - - - -	32
CHAPTER FOUR - COMMUNITY FACILITIES - - - - -	35
Public Buildings - - - - -	35
Schools - - - - -	36
Selection and Development of School Sites - - - - -	36
Existing School Facilities - - - - -	38
Recommendations - - - - -	38
Sterling College - - - - -	40
Recreation Areas - - - - -	42
Three-Mile Area - - - - -	43

CHAPTER FIVE - THOROUGHFARE PLAN - - - - -	45
Street Classification - - - - -	45
Existing Street System - - - - -	45
Thoroughfare Plan - - - - -	47
Street Improvements - - - - -	47
Business District Traffic and Parking - - - - -	47
Three-Mile Area - - - - -	49
CHAPTER SIX - PUBLIC UTILITIES - - - - -	51
Water System - - - - -	51
Sewer System - - - - -	51
Storm Drainage - - - - -	53
Refuse Disposal - - - - -	53
Electrical System - - - - -	53
CHAPTER SEVEN - DEVELOPMENT PLAN - - - - -	55
Goals and Objectives - - - - -	55
Future Land Use Plan - - - - -	56
Three-Mile Area - - - - -	58
CHAPTER EIGHT - CAPITAL IMPROVEMENT PROGRAM - - - - -	61
Fiscal Position - - - - -	62
Capital Improvement Program - - - - -	66
CHAPTER NINE - IMPLEMENTATION - - - - -	67
Public Investment - - - - -	67
Private Investment - - - - -	68
Summary - - - - -	70

LIST OF TABLES

<u>TABLE NO.</u>	<u>TITLE</u>	<u>PAGE NO.</u>
1	Incorporated in Table 2 and Plate No. 4	
2	Population Age Distribution - - - - -	9
3	Population Projections - - - - -	10
4	Employment by Industry - - - - -	12
5	Rice County Retail Business - - - - -	13
6	Rice County Wholesale Trade - - - - -	14
7	Rice County Manufactures Statistics - - - - -	15
8	Rice County Farm Size - Values - - - - -	18
9	Bank Deposits and Assets in Sterling - - - - -	19
10	Savings and Loan Assets and Savings in Sterling - - -	20
11	Family Income - - - - -	21
12	Land Use - Sterling - 1968 - - - - -	30
13	Land Use Averages for Thirteen Midwestern Cities - -	32
14	Housing Conditions for Sterling and the Three-mile Peripheral Area - - - - -	32
15	School Enrollment Projections - - - - -	40
16	Residential Area Requirements - - - - -	58
17	Assessed Valuation 1964-1968 - - - - -	62
18	Tax Rates per \$1000 Valuation 1964-1968 - - - - -	63
19	Revenues by Per Cent (Non-Utility) 1964-1968 - - - -	64
20	Expenditures by Per Cent (Non-Utility) 1964-1968 - -	64
21	Bonded Indebtedness - - - - -	65
22	Capital Improvement Program - - - - -	66

LIST OF PLATES

<u>PLATE NO.</u>	<u>TITLE</u>	<u>PAGE NO.</u>
1	Regional Location Map - - - - -	2
2	Natural Resources Map - - - - -	4
3	Population History - - - - -	6
4	Population Distribution - - - - -	7
5	Trade Area Map - - - - -	17
6	Sterling Existing Land Use - - - - -	29
7	Three-mile Area Existing Land Use - - - - -	31
8	Housing Conditions - - - - -	33
9	Sterling Community Facilities - - - - -	39
10	Three-mile Area Community Facilities - - - - -	41
11	Sterling Street Conditions - - - - -	46
12	Sterling Thoroughfare Plan - - - - -	48
13	Three-mile Thoroughfare Plan - - - - -	50
14	Existing and Proposed Water Distribution System - - -	52
15	Existing and Proposed Sewer System - - - - -	54
15A	Three-mile Area Public Utilities Plan - - - - -	54A
16	Sterling Future Land Use - - - - -	57
17	Three-mile Area Future Land Use - - - - -	59

BACKGROUND

LOCATION

Sterling is located in the south central portion of Rice County in mid-central Kansas. The County includes an area 30 miles long and 24 miles wide and has a land area of 725 square miles, or 464,000 acres. The City lies approximately 70 miles north of the Oklahoma border, 100 miles south of the Nebraska border, 185 miles west of the Missouri border and 190 miles east of the Colorado border. The corporate limits of Sterling lie within 250 miles of such cities as Kansas City, St. Joseph, and Joplin, Missouri, Oklahoma City, and Tulsa, Oklahoma, Hutchinson, Topeka and Wichita, Kansas and Omaha and Lincoln, Nebraska.

EARLY BACKGROUND

The history of Sterling dates back to the fall of 1871. At this time, a company was formed in Topeka, known as the Agricultural Colony of Kansas. This company was formed to establish a colony of farmers and a community somewhere along the Santa Fe Railroad Line before the area was developed or civilized. At the time of this expedition, the railroad terminated at Newton, a town of approximately 100 population.

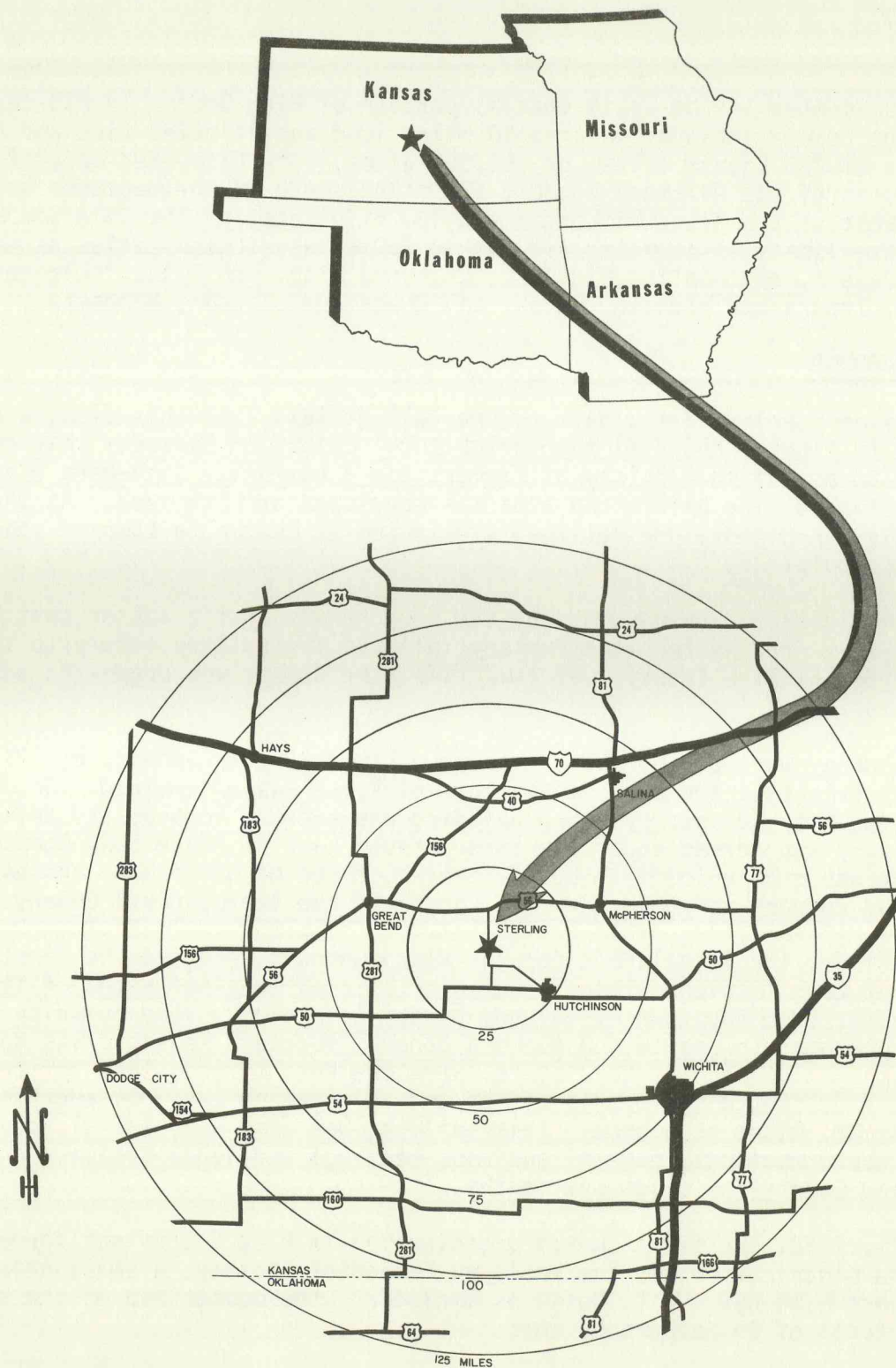
The first exploratory journey made by the company was in the latter part of December 1871. From Newton, the company followed the railway survey to the western border of Rice County. At this time, the County was organized and all ready for business.

A second journey was made by the company a month later, in January of 1872. It was on this trip that the site of the town of Peace was determined. On January 15, 1872, the City was surveyed and building was started towards its development. A town company was formed under the incorporated name of Peace Town Company. The company was made up of five board members, three of which were chosen by the railroad company and the other two chosen by the Agricultural Colony.

Mr. H. P. Ninde, the local agent for the Peace Company, erected the first building south of town. This building, characteristic of many buildings of its time, was moved over from the town of Peabody by Mr. E. Hadlock. The building contained five rooms; in one of the rooms a general merchandise store was opened. In the rooms not needed for this store, were the Post Office, land office, Peace Town Company Office, a surveyor's office and an eight by ten foot addition occupied by Mr. Ninde as a home. This building was also used for all council meetings, board meetings, general business meetings and legal transactions for the town and County for about six months.

On April 21, 1872, the first church organization in Rice County was formed at Peace. The organization was the Wesleyan Methodist Society, a small group of seven members with Rev. H. T. Besse as minister. The membership of the society reached a total of 95 members by 1876.

REGIONAL LOCATION MAP STERLING, KANSAS



JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT,
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.

PLATE 1

Messrs. Landis and Hollinger, the founders of the first general merchandise store in Hadlock's building, erected the first building in the City of Peace, on the lot now occupied by the Citizen's State Bank. On May 10, 1872, they opened the general trade store, handling merchandise varying from farm implements to groceries. At this time, there were only five buildings within a radius of five miles from the center of the town site.

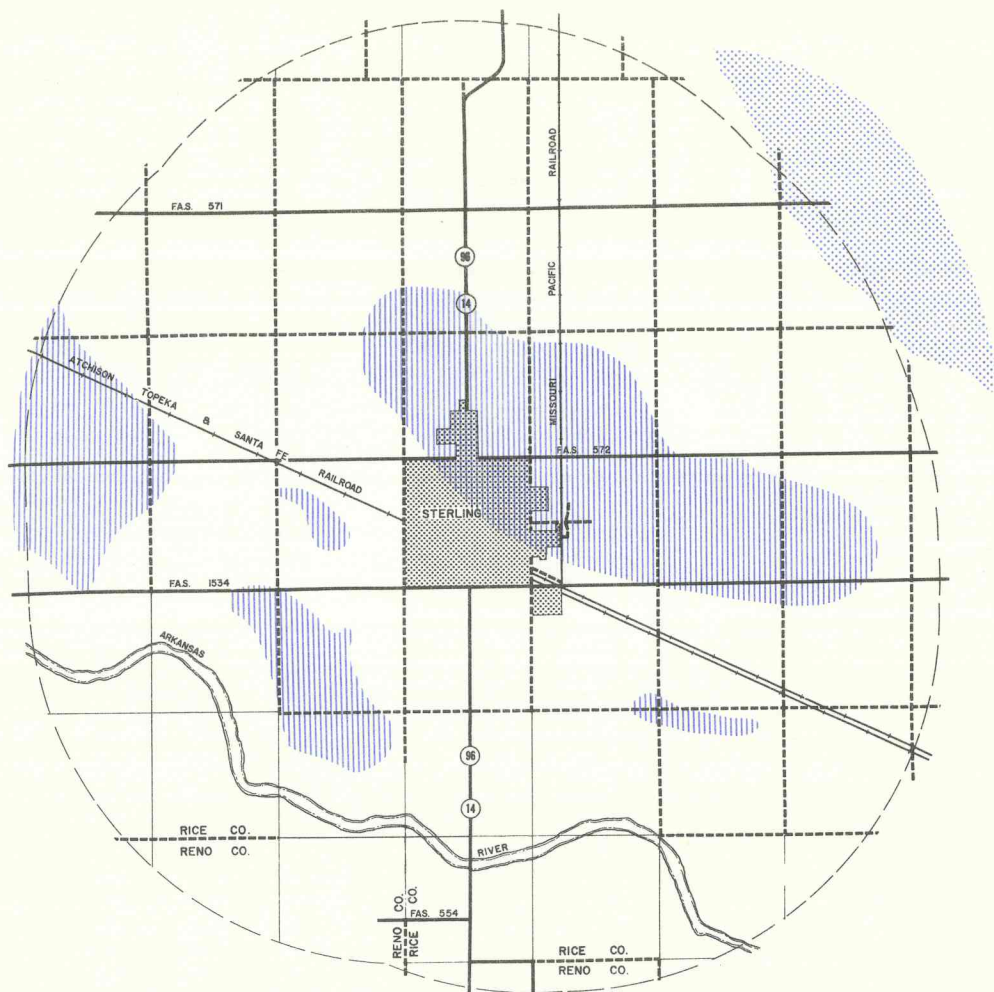
On June 26, 1872, the first train arrived at the City of Peace. It was a construction train with approximately forty cars. The City seemed to take on a new sense of pride and importance with the coming of the railroad. Out of this pride came an interest in forming a school in the County. The first meeting was held in September, 1872 at the old "Green Mountain House". This meeting resulted in the organization of School District No. 1, which proposed the construction of a new school house. Bonds were voted, and a school house, 25 feet by 40 feet, was erected near the present Junior High School. After the construction of the new school building, the school board was criticized and censured for building so large a facility.

After five successive wheat harvests, with large yields, the entire State became known as the great wheat belt of the west and enjoyed a population boom. This boom was felt quite strongly by Peace, with the City starting to realize growth.

The year 1876 was a very active one for the City of Peace. It was in this year that two newspapers, the Rice County Gazette and the Valley Echo, were founded. Also, in this year, it was recorded that over 70 percent of the imports and exports of the County were received by Peace, through the Atchison Topeka & Santa Fe Railroad. At this time, the City was one of the most thriving towns on that railroad line and was the only incorporated city in the County. Mr. W. P. Edwards recorded, on March 10, 1876, that there were 62 families living in the town site of Peace; there were 12 business houses, one merchant mill (Landis & Hollinger's Flouring Mill), two blacksmith shops, one wagon shop, two church edifices and five school houses.

It was on April 18, 1876, that the City of Peace dropped its old name and acquired the name of Sterling, named after Sterling Rosan, one of the City's early settlers. Later in the year Sterling lost an election which was to effect it for the years to come. This was the election in which the City lost the county seat to Lyons.

Eleven years later, in 1887, Sterling College, a four year liberal arts college, was founded. During this year, Cooper Hall, the school's oldest building, was constructed. It is interesting to note that this building is still in existence; however, it has recently been remodeled and redecorated. The college has had only four presidents in its 80 year history.






STERLING 3-MILE AREA

NATURAL RESOURCES

- Generalized -

Legend

-  ALLUVIUM
-  DUNE SAND
-  OIL-PRODUCING AREAS

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT.
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.



2000 0 2000 4000
SCALE IN FEET

Plate 2

CHAPTER ONE POPULATION

It is no secret that since the turn of the Century, the Nation has undergone a large scale shifting of population from rural to urban areas. This shift has been motivated largely by the employment, educational, cultural and social opportunities which are available in the larger metropolitan areas. As a result of these attractions and opportunities, a large percent of those moving to these areas have been those in the young adult age groups.

Another factor which has been instrumental in this population shift has been the new found mobility. The young adult of today thinks very little of moving from place to place when necessary, in order to take advantage of their abilities and to increase both their social and economic opportunities.

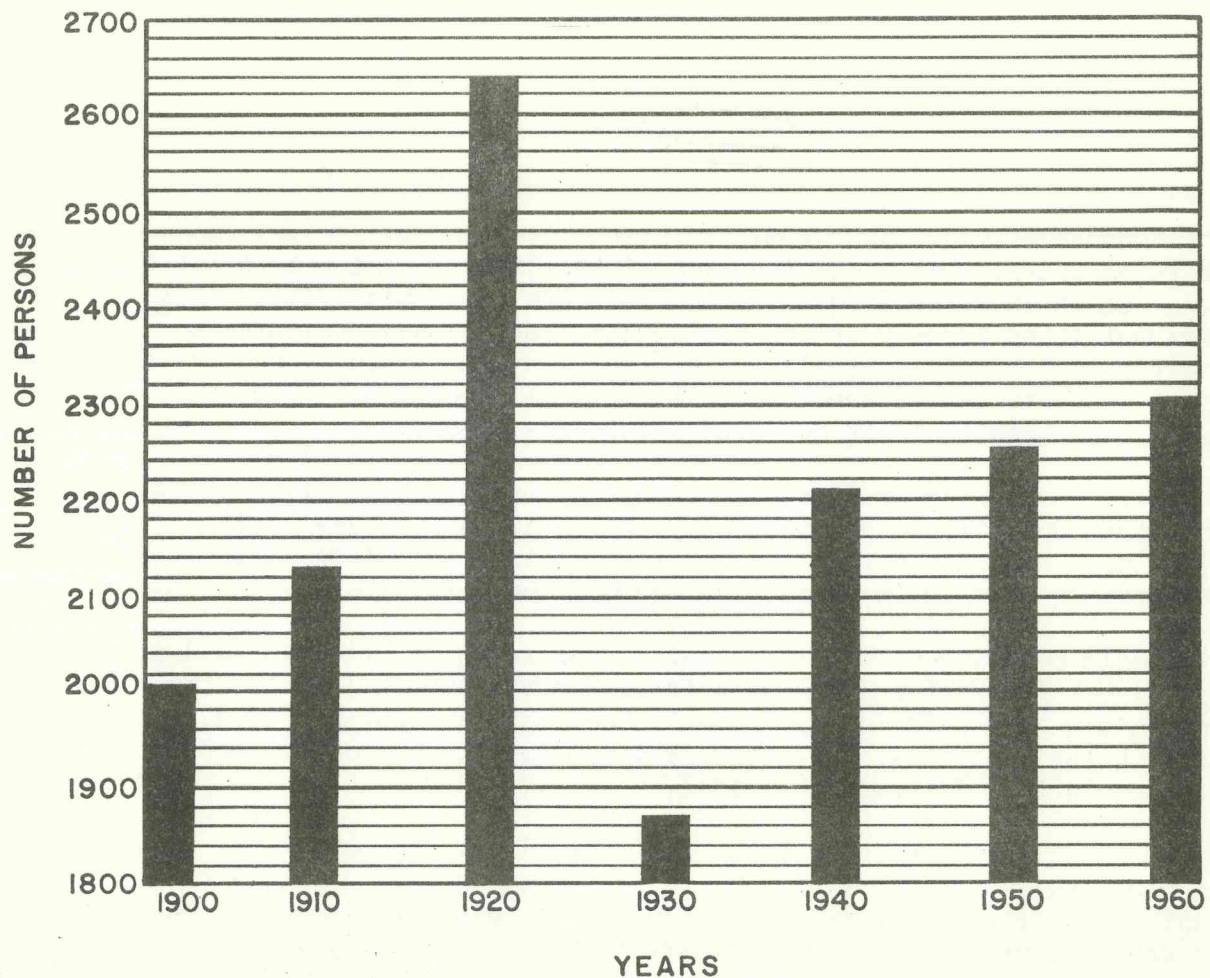
It should be obvious from this that a high ratio of children in a community will not always forecast a large work force for the future. By the time these young people are available for employment, they may have out-migrated, either alone or with their parents, when they realize that the employment and/or social conditions in the city were deficient.

As was stated in the Background, the initial development of the area incorporated as Sterling, Kansas began in 1872 with the connection of the Atchison, Topeka & Santa Fe Railroad. While the railroad still plays an important role in the City, it does not play the dominating part it did in the early years. In looking at Sterling, it is essential that both the population and economy be studied simultaneously, since both are interdependent; that is, growth in one area rarely occurs without a corresponding increase in the other. Therefore, when population projections are made for Sterling, certain assumptions concerning the City's future economy will also be made.

POPULATION TRENDS

Since the turn of the Century, Sterling has had an interesting population history. As can be seen in Plate 3, the population of the City has fluctuated greatly since 1900. It was in 1920 that the City reached its peak population of 2,640, only to have it drop by nearly 800 over the next ten years. It is felt that this great decline was partly due to the mass migration of people from the farm and small urban areas to the metropolitan areas in order to make the "fast buck". Sterling, like many small cities in Kansas, experienced a population loss from this mass migration.

It was during the 1930's, when the depression hit, that many people who had previously migrated out of Sterling again returned. This movement, and the increased oil activity in Rice County, resulted in Sterling reclaiming at least a portion of its earlier population. Between 1940 and 1960 the City did show a growing trend; however, it has been very slow, with many people obviously migrating out of the City.



**STERLING, KANSAS
POPULATION HISTORY
1900-1960**

Plate 3

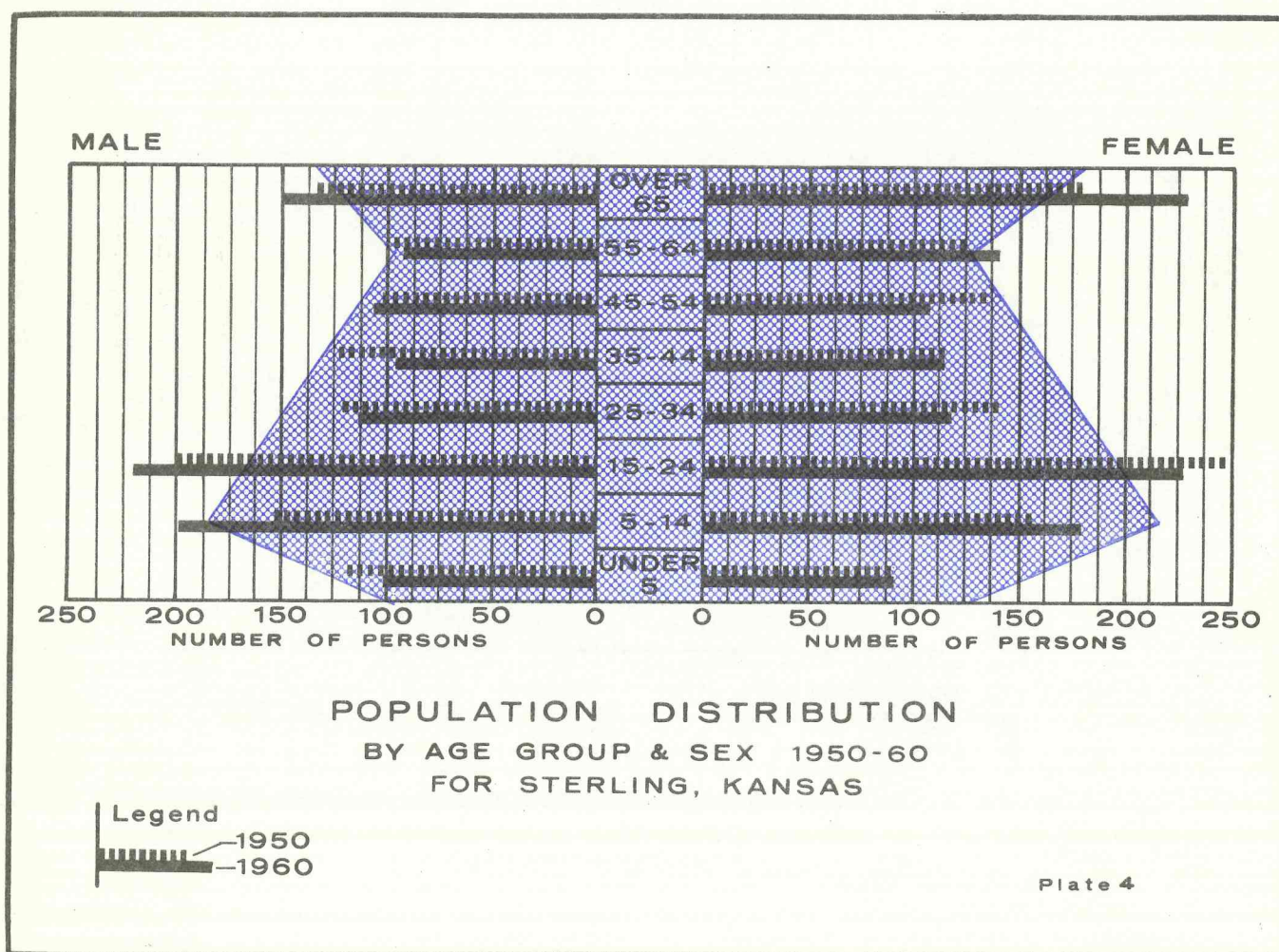
Source: U.S. Census of Population, 1900-1960.

POPULATION CHARACTERISTICS

In analyzing Sterling's present trend of a slow increasing population, it is necessary to look at the age and sex breakdowns which affect the needs and requirements of the City. From the age breakdown, it is oftentimes possible to tell whether a community will grow rapidly or have a steadily declining population. Likewise, the breakdown in an urban area will effect the social and economic activity of the community. Small deviations in the equality of either the sex or age ratios over a period of time are generally considered insignificant when looking at them in relation to the planning process. However, it should again

be emphasized that both factors must be considered when designing an atmosphere to meet the needs of the community.

Plate 4 shows Sterling's age and sex breakdown for the years 1950 and 1960. Also shown in this Plate is the ideal, or preferred, shape that a graph of this type should be. It should be noted how heavily weighted the City's population is in the 5-24 year age groups and how fast the population drops after these age groups until the retirement age groups are reached. It is not surprising that Sterling has such a high percent of those in the 15-24 age group when realizing that Sterling College, in 1960, had an enrollment of approximately 500. The high percent of the 5-14 age group is hard to explain when one notices the low percent of those in the family forming age groups (25-44). The only explanation for this large number is the post World War II "baby boom" of which many of these children have been the result.



Source: U.S. Census of Population, 1950 and 1960.

The reason for the big drop in the 25-34 and 35-44 age groups, is due to the lack of employment opportunities. Upon graduation from either Sterling High School

or Sterling College, many of those who seek employment are forced to look elsewhere to find jobs, since employment opportunities in Sterling are so limited. This is a very serious situation, and is magnified when considering that these are the young married people who produce the greatest percent of children. A loss in these age groups then reduces the City's natural growth.

As can be seen in the graph, the age group with the next largest percent of population is the 65 & Over age group. The number in this age group increased by 65 over this ten year period. An increase of the retirement age people in an agriculturally based area, such as Rice County, is understandable when realizing that a community the size of Sterling has a lower cost of living than do large metropolitan areas, and that cities have conveniences offered which are not available on the farm. A continued increase in this age group is expected, due to the new adult care home which the City has and with the expected low cost homes which will be built in the near future. Other factors which will affect this are the rapid advances being made in the medical and scientific fields, which have been instrumental in increasing the life expectancy.

POPULATION COMPARISONS

In Table 2, Sterling's 1950 and 1960 population has been compared, by various age groupings, to Rice County, the State of Kansas and urban United States. Also noted is the percent change in each age group experienced over the ten year period.

Of the four age groups noted, it can be seen that Sterling deviates noticeably in all cases from the apparent norm. The 0-14 and 35-54 age groups are apparently lower than the norm, due to the same reasons. As was stated earlier, a large portion of those in the 35-54 age group are the ones who are still active in forming families. If there is a low percent of these people, there will generally be a corresponding low percent of those in the 0-14 year age group. The reason for the low percent of these in the 35-54 age group is due to the lack of employment and social opportunities, as was stated earlier.

The high percent of the 15-34 year age group is, as was stated earlier, due primarily to Sterling College enrollment. This trend is expected to continue and possibly increase, if enrollment continues to climb. The greatest deviation is in the 55 and over age group. This situation is an indication that many people are coming to and remaining in Sterling following their retirement. This trend, too, as was stated earlier, is expected to continue.

The sex ratio (males per 100 females) in 1960 for Sterling was 90.2, which was below the State of Kansas' average of 98.6 males per 100 females. The City's 1950 ratio was 88.2, two percent less than the 1960 ratio.

The unbalance in population, by sex composition, has cultural, as well as biological significance, since women differ from men with respect to the age they reach maturity; the age which they get married; the period of time they remain in the labor force; the kind of jobs they hold; the income they earn; and their life expectancy.

The greatest unbalance in the ratio of the sexes in Sterling, as can be seen in

Plate 4, occurred in the two older age groups. The 55-64 age group consisted of 143 females and 92 males, for a ratio of 64 males per 100 females. In the 65 & Over age group there were 227 females and 150 males, for a ratio of 66.1 males per 100 females.

The only age groups where women did not outnumber men were the Under 5 and 5-14 age groups. This same ratio (unbalance with a larger percent of women than men in the 0-14 age groups) is closely correlated to the State of Kansas male to female sex ratio.

TABLE 2
POPULATION AGE DISTRIBUTION
STERLING, RICE COUNTY, KANSAS AND U. S.
1950 & 1960

Age	STERLING			RICE COUNTY		
	1950	1960	% Change	1950	1960	% Change
0-14	23.2	25.5	+ 2.3	27.9	33.9	+ 6.0
15-34	31.8	29.5	- 2.3	28.2	25.9	- 2.3
35-54	21.2	18.4	- 2.8	25.0	27.9	+ 2.9
55 & over	<u>23.8</u>	<u>26.6</u>	+ 2.8	<u>18.9</u>	<u>12.3</u>	- 6.6
Total	100.0	100.0		100.0	100.0	

Age	KANSAS			UNITED STATES URBAN		
	1950	1960	% Change	1950	1960	% Change
0-14	26.2	30.8	+ 4.6	24.3	30.1	+ 5.8
15-34	29.4	25.7	- 3.7	31.2	26.3	- 4.9
35-54	24.7	23.5	- 1.2	27.2	25.5	- 1.7
55 & Over	<u>19.7</u>	<u>20.0</u>	+ 0.3	<u>17.3</u>	<u>18.1</u>	+ 0.8
Total	100.0	100.0		100.0	100.0	

PROJECTIONS

In projecting Sterling's population, many things had to be taken into consideration. Probably the best indicator was the City's past population trends. A decreasing, or static population, in a city, is usually a good indicator that

the community is deteriorating or dying. When a city experiences a population increase, a growing or expanding economy is expected. Problems will arise when a city is growing, which require a certain amount of planning. These problems deal with utilities, community facilities (parks, schools, fire and police protection, City Hall, etc.), streets, the City's appearance and it's overall development.

Sterling should experience an increase in births during the next few years. Two reasons will be responsible for this. First, the number of women in the child bearing age groups should be increasing. This increase is the result of the post World War II "baby boom". With this increase there should be a correlating birth increase. The second reason is that during the past ten years, family planning has become much more prominent, causing a temporary decline in the birth rate. In the Consultant's opinion it is felt that although married women have delayed in bearing children, they still expect to have the same size families as their parents. Once these delayed births do occur, Sterling's population should again be on the rise.

In Table 3, below, two population forecasts have been made. In projecting Sterling's future population, both high and low population estimates have been made, which are expected to include the probable extent of the City's future growth. The purpose of forming two population projections was to provide the City with both a conservative and an optimistic figure with which to work. It is felt that Projection "B" is slightly optimistic when looking at the City's past population trends. In determining the City's minimum revenue that will be available from taxation, it would be best to use the estimate "A"; however, in doing the actual land use plan, the high projection, "B", will be used.

TABLE 3
STERLING
POPULATION PROJECTIONS

	<u>1960</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
Projection "A"	2,303	2,343	2,365	2,414	2,473	2,566
Projection "B"	2,303	2,418	2,476	2,614	2,771	2,842

The method used in making these projections is called the "comparative" or "analogy" method. This method required finding two areas which had population histories, geography, climate, economics, cultures and natural resources similar to those of Sterling. It was also necessary that these areas had already developed farther than the City. Upon having this information the projections of future growth are made based on the growth trends of these two areas. To clarify this further, the population growth curve for area "A" from 1850 to 1900 might parallel the growth curve of Sterling from 1910 to 1960. An assumption may then be made that Sterling's projected population beyond 1960 will follow the trends of area "A" beyond 1900.

CHAPTER TWO ECONOMY

When examining the economic base of Sterling, it is important to consider not only the City itself, but also the activities which are occurring within Rice County and the surrounding area. The agricultural and natural resource mining activities are examples of economic activities occurring outside the City which are and have been affecting the people within the City of Sterling.

The economic activity occurring within the area is directly related to the quality and quantity of its labor force, its job opportunities, the volume of wholesale and retail trade, and the income derived by its inhabitants. The creation or development of desirable job opportunities in the fields of manufacturing, retail and service act as lures for the young trained personnel. Investors with capital are able to secure the equipment, natural resources and inventories for the business owners to combine with a labor force to produce finished products. The sale of these finished goods and services provide income which is converted to payroll and purchase the needed raw materials. This flow of monies into and through the City is what activates its economy.

AREA ECONOMIC TRENDS

The City of Sterling, much like other Midwest towns, has been experiencing a transition from a predominantly farm economy to a farm-business economy. At first this transition was aided by the creation of additional jobs through industrial activity, with the industries employing those farmers who were, in a sense, forced off their farms due to improved farming methods. However, as years passed and farm technology continued to improve, the number of jobs in Sterling, instead of increasing, remained static. This situation, while not causing a population decline, restricted growth.

The decline since 1940 of Rice County's rural and total population and the increase of the County's two major cities indicate the extent of rural area out-migration. The rural-urban atmosphere which Sterling possesses has been instrumental in attracting those persons who have left the farm to retire and who work in the area's urban centers but prefer the small town atmosphere in which to live.

Sterling's future will be largely dependent upon its ability to provide jobs for its impending labor force, the quality of these jobs, the variety and quality of its retail stores, the size of trade area it is able to capture, the amount of capital put into the City by its citizens and the income attained by the persons living in the area. A recognition of these needs by the citizens of Sterling will play a large role in determining the future of the City.

EMPLOYMENT

Below in Table 4 are shown the employed persons by industrial groups in Rice County and the State of Kansas for the years 1950 and 1960. The largest numerical declines were in the categories of agriculture and mining. The loss in these categories amounts to over 15 percent of the total employed persons in 1950. The largest numerical gain occurred in the services category with a gain of 248 workers. The finance, insurance, and real estate category experienced the largest percentage gain in the County, as it did with the State of Kansas. Overall both the State and Rice County have experienced a similar employment shift; however, in the manufacturing, retail trade, and public administration categories the State of Kansas varies greatly from Rice County. When reviewing Table 4 it can be clearly seen that Rice County has experienced a large decline in it's basic industry during the decade studied. Before the County and likewise Sterling can experience growth, basic industry must be attracted.

TABLE 4
EMPLOYMENT BY INDUSTRY
RICE COUNTY AND KANSAS

Industry Group	Rice County			Kansas		
	No. of Persons Employed		Per Cent Change 1950-1960	No. of Persons Employed		Per Cent Change 1950-1960
	1950	1960		1950	1960	
Agriculture, Forestry, and Fisheries	1,385	987	- 28.7	162,879	104,486	- 35.9
Construction and Mining	1,383	923	- 33.3	65,101	62,928	- 3.3
Manufacturing	223	223	--	88,922	130,031	+ 46.2
Transportation, Communications, and Utilities	424	369	- 13.0	67,775	67,396	- .6
Wholesale Trade	122	146	+ 19.7	25,257	28,354	+ 12.3
Retail Trade	840	779	- 7.3	111,846	127,833	+ 14.3
Finance, Insurance and Real Estate	92	175	+ 90.2	20,330	29,767	+ 46.4
Services (Business, Repairs, Personal and Professional)	941	1,189	+ 26.4	123,006	171,378	+ 39.3
Public Administration	161	160	- .6	29,203	37,111	+ 27.1
Not Reported	97	88	- 9.3	13,302	24,593	+ 84.9
Total	5,668	5,039	- 11.1	707,621	783,877	+ 10.8

At this time, it is felt that an explanation of both basic and non-basic industry should be given. Even though two different factories may be considered in the same category, that being manufacturing, they may be categorized differently when thinking in terms of areal relationships. One manufacturer may produce his goods specifically for the local market (such as a bakery, asphalt plant, or feed mill) and the other manufacturer may produce goods that would be marketed both locally and abroad. The industry which sells its products entirely for local consumption is classified as non-basic and those which produce for other markets are considered basic.

Since a city or urban area is not nearly as self-contained economically as a nation, a higher proportion of their trade should cross its boundaries than that of a nation. This exportation by a city creates its source of basic or "urban-forming" income. This is contrasted with the income from circulation of money, credit and goods which is derived from within, which is called non-basic or "urban-serving" income.

RETAIL TRADE

During the five year period between 1958 and 1963 the retail establishments in Rice County declined by over 13 percent. With this decline came a decline in sales amounting to 3.7 percent, which, when converted to the value of the

TABLE 5
RICE COUNTY
RETAIL BUSINESS
1958-1963

Retail Business Types	1958		1963		% Change 1958 to 1963	
	000's of Dollars	No. of Estab.	000's of Dollars	No. of Estab.	Retail Sales	No. of Estab.
Lumber, Bldg. Materials	3,369	27	2,074	19	- 38.4	- 29.6
Farm Equipment						
General Merchandise Grp.	679	7	973	6	+ 43.2	- 14.2
Food Stores	3,722	20	3,981	23	+ 6.9	+ 15.0
Auto Dealers	3,289	18	3,491	11	+ 6.1	- 38.8
Gas Service Stations	1,636	32	1,159	19	- 29.1	- 40.6
Apparel, Accessory Stores	403	5	424	5	+ 5.2	0.0
Furniture, Home Furnish- ings & Equipment	740	12	697	8	- 5.8	- 33.3
Eating & Drink Places	536	26	595	25	+ 11.0	- 3.8
Drug Service, Proprie- tary Stores	665	10	785	12	+ 18.0	+ 20.0
Other Retail Stores	833	29	973	24	+ 16.8	- 17.2
Non-Store Retailers	---	--	123	9	--	--
Total	15,872	186	15,275	161	- 3.7	- 13.4

Source: U.S. Census of Business

1958 dollar, amounted to 9.3 percent. The losses in retail establishments were seen most clearly in the lumber, building materials and farm equipment, auto dealers, service station and furniture store categories, as can be seen in Table 5. These businesses, with the exception of auto dealers, are also the ones which experienced the decline in sales.

Recent figures on Rice County's sales tax collections show that the volume of retail sales has increased greatly since 1963. These figures indicate that there was an increase in sales between 1963 and 1967 of nearly 31 percent. This large increase is felt to be an indication that both Rice County and the City of Sterling have in general been strengthening their overall economies. If the City and County continue to take strides which aid in perpetuating their economic growth, an extension of the existing trend is expected.

WHOLESALE TRADE

Table 6 was prepared to show the trends that have been occurring in the County's wholesale businesses since 1954. It is interesting to note that while there was a decline by 36.7 percent in the number of establishments there was a decline of only 9.7 percent in sales and a 31.1 percent increase in payroll. To make these statistics more meaningful, the 1963 dollars were converted to 1954 dollar values. When doing this it was found that the sales decreased by 16.4 percent and the payroll increased by 14.8 percent. While the sales picture appears more realistic when looking at the decline in establishments, it is obvious that the profit margins decreased greatly since 1954.

TABLE 6
RICE COUNTY
WHOLESALE TRADE
1954-1963

<u>General Statistics of Wholesale Trade</u>	<u>1954</u>	<u>1958</u>	<u>1963</u>	<u>% Change 1954-1963</u>
Establishments	49	41	31	- 36.7
Sales (\$1,000)	19,572	13,304	17,656	- 9.7
Payroll, Entire Year (\$1,000)	553	566	725	+ 31.1
Active Proprietors of Unincorporated Businesses	30	21	10	- 66.6

Source: U. S. Census of Wholesale Trade

When the Rice County wholesale statistics were compared with those of other counties throughout the State of Kansas, it was found that the County experienced trends which were uncommon. It appears that the recession in the late 1950's was largely responsible for the decline in sales in 1958. The increase in sales in 1963 by nearly 25 percent fewer establishments was due,

it is felt, to the expansion of those surviving wholesalers, making it possible to serve more retail establishments.

MANUFACTURING

As was stated earlier Rice County has been experiencing a shift in its economy since 1940. This shift, while it most harmfully affected the agricultural and mining industries also affected other manufactures. Table 7 has been prepared to show the manufacturing growth which has occurred since 1954. It can be seen in this table that all statistics increased greatly over this period. The employment in the establishments did rise over this period; however, at not a great enough rate to employ those leaving the farms and those graduating from the County's schools. Again it should be emphasized that in order to retain this population additional manufacturing enterprises must be attracted.

TABLE 7
RICE COUNTY
MANUFACTURES STATISTICS
1954-1963

<u>General Statistics of Manufacturing</u>	<u>1954</u>	<u>1958</u>	<u>1963</u>	<u>% Change 1954-1963</u>
Total Number of Establishments	7	7	13	+ 85.7
Number of All Employees	94	269	276	+193.6
Payroll All Employees (\$1,000)	335	1,104	1,441	+330.1
Production Workers	68	191	219	+222.0
Production Worker Man Hours (1,000)	148	408	469	+216.8
Production Workers Wages (\$1,000)	228	775	1,063	+366.2
Value Added by Manufactures (\$1,000)	605	2,690	3,528	+483.1
Capital Expenditures, New (\$1,000)	44	73	202	+359.0

The City of Sterling presently has five manufacturing enterprises, four of which are involved in the production of concrete or concrete products. While these are assets to the City, they are not considered basic or "urban forming" industries. The other enterprise is a basic industry; however, it is presently too small to employ a large number of persons.

The City should continue to lend itself favorably to future industrial needs and needs of potential industrial employees. Presently, the City has bordering land which, if provided with water, sewer, and railroad siding would make favorable industrial sites. The possibility of such a development should not be overlooked.

TRADE AREA

The area which was found to be Sterling's "trade area" is shown below in Plate 5. The designated "trade area" was found through use of Reilly's Law which is simply a mathematical equation designed to show the probably limits a potential customer will travel to a commercial center under certain special conditions. The equation consists of the following:

$$BP = \frac{d}{1 + \sqrt{\frac{P_b}{P_a}}}$$

With:

BP = (Breaking Point) Limits of Town a's trading area, measured in miles along paved roads to town b.

d = Distance in miles on major paved roads between two towns a and b (adjacent trading areas).

P_a = Population of Town a.

P_b = Population of Town b.

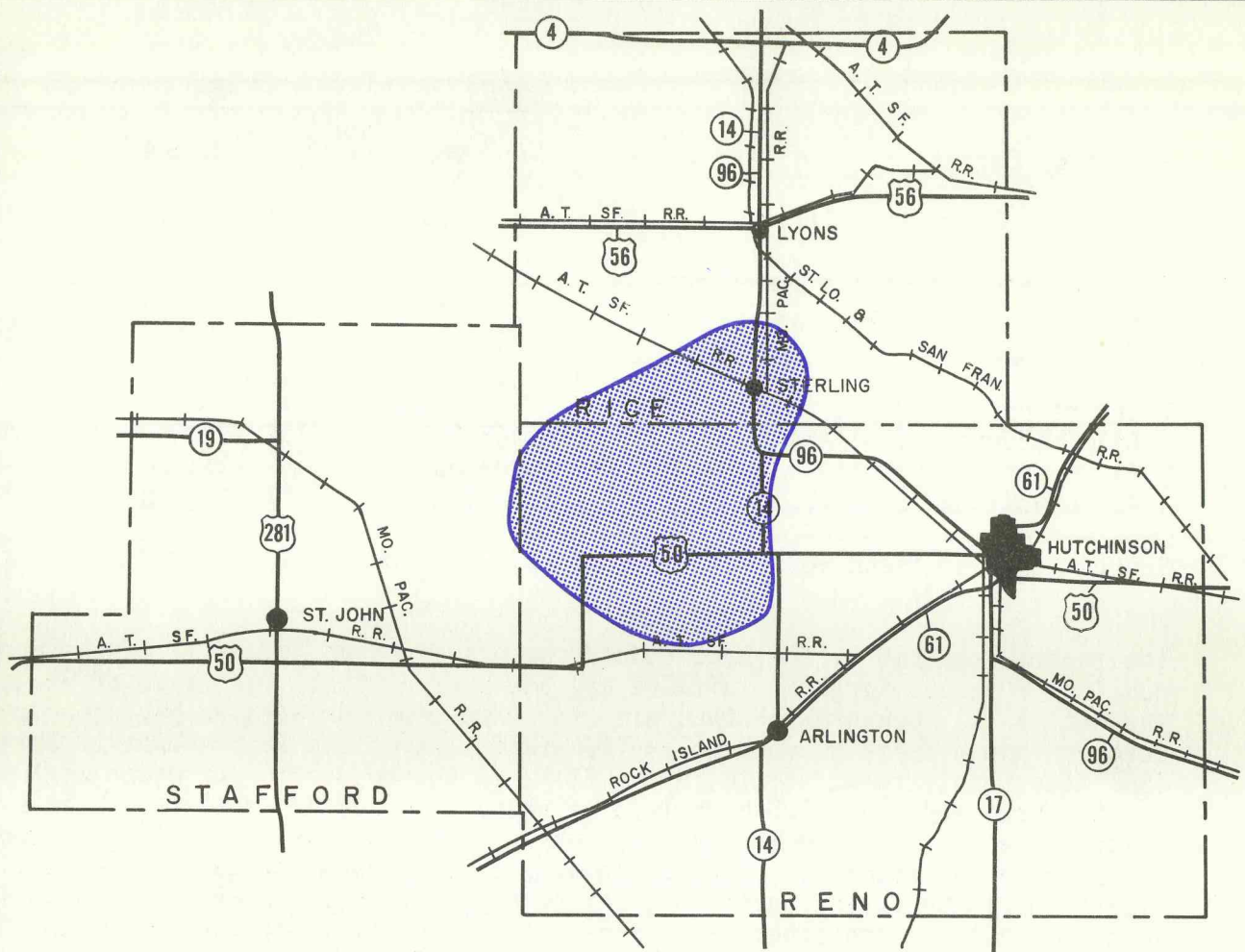
To clarify this further, an example of the "Breaking Point" between Sterling and Lyons is determined as:

$$BP = \frac{10}{1 + \sqrt{\frac{4,592}{2,303}}} = \frac{10}{1 + 1.993} = 4$$

It can be seen that the Breaking Point is four miles from Sterling. People closer than this will travel to Sterling to shop and those further than this will travel to Lyons. The "trade area" established would therefore be approximately four miles to the north; five miles to the southeast; seven miles to the south and 18 miles to the west. The designation of a "trade area" is at best only an approximation, but in the absence of a detailed survey, it is suitable in analyzing both existing and future economic trends in the Sterling area.

FARM FACTS

As was pointed out earlier and as can be seen below in Table 8 the size and number of farms in Rice County have been changing greatly over the past years. As the number of farms and farmers have been decreasing steadily, the size of farms has been increasing at the same rate. This trend is common among nearly all other counties in the State and for most of these counties is expected to continue for many more years. For Rice County it is felt that this trend will taper off within the next fifteen to twenty years and by 1990 will reach the point of near stabilization.



STERLING TRADE AREA MAP

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT,
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.

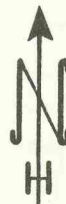


PLATE 5

TABLE 8
RICE COUNTY
FARM
SIZE - VALUES
1959 - 1964

	<u>1959</u>	<u>1964</u>	<u>Per Cent Change</u>
Number of Farms	982	854	-13.04
Average Size of Farms (acres)	475	547	+15.15
Average Value of Land & Buildings			
Per Acre (Dollars)	143	162	+13.28
Per Farm (Dollars)	69,084	90,000	+30.27
Value of Farm Products Sold			
All Products (Dollars)	11,442,000	12,770,000	+11.60
All Crops (Dollars)	6,423,000	5,735,000	-10.72
All Livestock (Dollars)	4,382,000	7,035,000	+60.54

Source: Kansas State Board of Agriculture

The income received by the Rice County farmers is based primarily on the production of wheat, sorghums, alfalfa hay and beef cattle. The value of wheat and cattle are much greater than are either sorghums or alfalfa hay; however, sorghums and alfalfa do make up an important part of the farm economy. During 1967 Rice County ranked ninth in the State in the production of wheat with the County producing 4,070,000 bushels at a value of 5,698,000 dollars. This situation, it appears, could be improved, when looking at the production derived in the surrounding counties. The possibility of increased irrigation and fertilizing should be investigated more thoroughly, not only for wheat but also for sorghums, alfalfa and other cash crops. The possibility of increasing the production of corn and milo should also be studied further since the yield capabilities in certain areas of the County are apparently very great for these two crops. If increased production of these two crops is seen, the number and size of cattle feedlots in the County should increase since both grains are the fundamental feed grains in most feeding operations.

FINANCIAL INSTITUTIONS

Financial institutions, both banks and savings and loan associations, make up a very important sector of a community's economic base. This applies to cities the size of Sterling as well as to large metropolises.

The City of Sterling has two banks, both of which are located within the central business district. These two facilities play the major role in the City's financial picture. They are the institutions which are often instrumental in attracting both people and industry into the City. The banks also serve as stimulants to the other businesses within the central business district with their ability to attract people into the area.

TABLE 9
BANK DEPOSITS AND ASSETS
IN STERLING
(\$1,000)

YEAR ENDING	FARMERS STATE BANK		FIRST NATIONAL BANK		TOTAL	
	ASSETS	DEPOSITS	ASSETS	DEPOSITS	ASSETS	DEPOSITS
1950	\$1,749	\$1,630	\$2,006	\$1,818	\$3,755	\$3,448
1955	2,095	1,909	2,348	2,085	4,443	3,994
1960	2,088	1,863	2,245	1,912	4,333	3,775
1961	2,379	2,152	2,500	2,150	4,879	4,302
1962	2,640	2,420	2,462	2,097	5,102	4,517
1963	2,305	2,078	2,312	1,909	4,617	3,987
1964	2,464	2,230	2,421	2,019	4,885	4,249
1965	2,511	2,273	2,482	2,062	4,993	4,335
1966	2,635	2,391	2,448	2,016	5,083	4,407
1967	3,191	2,932	2,891	2,437	6,082	5,369

Table 9 above shows a history of the bank assets and deposits in Sterling since 1950. Both assets and deposits have been increasing spasmodically since 1950, with both banks reaching their peaks in 1967. A slight increase in the total assets and deposits was experienced by these banks between the years 1950 and 1960; however, this trend appeared to culminate in the 1960's with the rate of growth increasing favorably. It is felt that this increasing rate of expansion will continue with the great increase that was experienced between 1966 and 1967.

The record of growth of the activities of Sterling's saving and loan association has been very good since 1950. When studying Table 10 below it can be seen that between 1950 and 1967 there was a total increase of 1,346 percent in total assets and near 1,500 percent in total savings. When realizing that during this time other business activity in Sterling was lagging behind several other areas in the State, this very impressive growth is complimentary and a very positive economic advantage. With this great record of expansion, it is felt that the increasing trend will continue, however, at a somewhat slower rate.

TABLE 10
SAVINGS AND LOAN
ASSETS AND SAVINGS
IN STERLING
(\$1,000)

<u>Year Ending</u>	<u>Total Assets</u>	<u>Total Savings</u>
1950	\$ 646	\$ 513
1955	1,427	1,197
1960	3,394	2,824
1961	4,796	3,950
1962	6,095	5,144
1963	7,202	6,163
1964	8,262	7,276
1965	9,342	7,961
1966	9,073	7,534
1967	9,337	8,145

This large scale savings and loan activity is very unique for a City the size of Sterling. It is apparent that many of the savings deposits come from people far beyond the City's normal trade area. This acts as an additional generator for Sterling's economic activity since many of these deposits are for long duration.

FAMILY INCOME

The incomes presented in Table 11 are described as family income with family income being defined as the combined incomes of all members of each family, residing in the same household. In studying these incomes, higher average incomes generally denote higher levels of spending and, thus, more commercial activity in the community. Cost-of-living adjustments should be taken into consideration when looking at income statistics, since the purchasing power of the dollar has decreased over the years.

Table 11 presents the family income figures for Rice County, the State of Kansas and the United States. It can be seen that Rice County's 1960 income figures do compare favorably with the State's figures; however, when compared with the U. S. the statistics do not compare as favorably. It is felt that the overall cost of living in Kansas and the U. S. is slightly higher than it is in Rice County and any comparisons with these figures should be made under this assumption.

It is interesting to note that when considering the decline in the purchasing power of the dollar the rise in median income between 1950 and 1960 is much less. When considering the 1950 dollar worth a dollar, the 1960 dollar is worth 83.1 cents. Therefore, when we multiply the 1960 median income of \$4,946 by .831 the figure becomes \$4,021. While this is a much less attractive picture, it still points out that people have extra money to spend on additional items which they could not in 1950.

TABLE 11
FAMILY INCOME
FOR STERLING, KANSAS AND U. S.

Income Groups	1960		1950		1960		1960
	Families		Families		Kansas		U.S.
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Families Per Cent
Under \$1,000	138	3.64	495	12.48	96,925	13	6
\$1,000-1,999	272	7.17	520	13.11	85,360	12	7
\$2,000-2,999	371	9.79	750	18.91	71,978	10	8
\$3,000-3,999	524	13.82	980	24.71	76,880	10	9
\$4,000-4,999	623	16.44	475	11.97	82,159	11	11
\$5,000-5,999	654	17.26	290	7.31	82,812	11	12
\$6,000-6,999	380	10.02	100	2.52	63,656	9	11
\$7,000-9,999	566	14.93	215	5.42	104,851	14	21
\$10,000 & Over	261	6.88	140	3.53	70,370	10	15
Total	3,789	100.00	3,965	100.00	734,991	100	100
Median Income	\$4,946		\$3,231		\$5,295		\$5,657

Of Rice County's 3,789 families over 20 percent had annual incomes at or below poverty level (less than \$3,000). While this is better than the State and about equal with the U. S. it is still a very unfavorable condition. It is felt that since 1960 this situation has been improved somewhat. Three trends in particular seem to substantiate this assumption. First, since the number of farmers has decreased and the total farm revenue has increased, farm incomes, in general, are up. Secondly, retail sales, particularly since 1963, have been rising. Thirdly, the deposits in both the City of Sterling's banks and savings and loan company have risen greatly since 1960.

STERLING COLLEGE

Sterling College, the City's Presbyterian co-educational institution, provides one of Rice County's largest payrolls. During the fall semester the total enrollment of the college was 610, with a total faculty of 74. This is a great increase over 1962 when the enrollment was just over 500, and the faculty numbered just over 50. When realizing the clothing, gasoline, meals and other commercial goods purchased by the 610 students the importance of Sterling College as an economic force becomes very important. The money spent by the faculty for housing, food and other necessities also makes up an impressive portion of the money spent in the City. It is important that all citizens in the City of Sterling realize the importance of Sterling College both as a part of its economic base and as a County-wide cultural center.

EMPLOYMENT PROJECTIONS

The population projections which were made earlier were based on past population trends, and in effect, the economic activities which were shown in this chapter. If many additional basic jobs are made available in Sterling, then the population projections will be invalid and will need to be re-evaluated. This is a primary reason for keeping a plan current and up-dating those changes, but also for the changes which have occurred in relation to the citizens' goals and objectives.

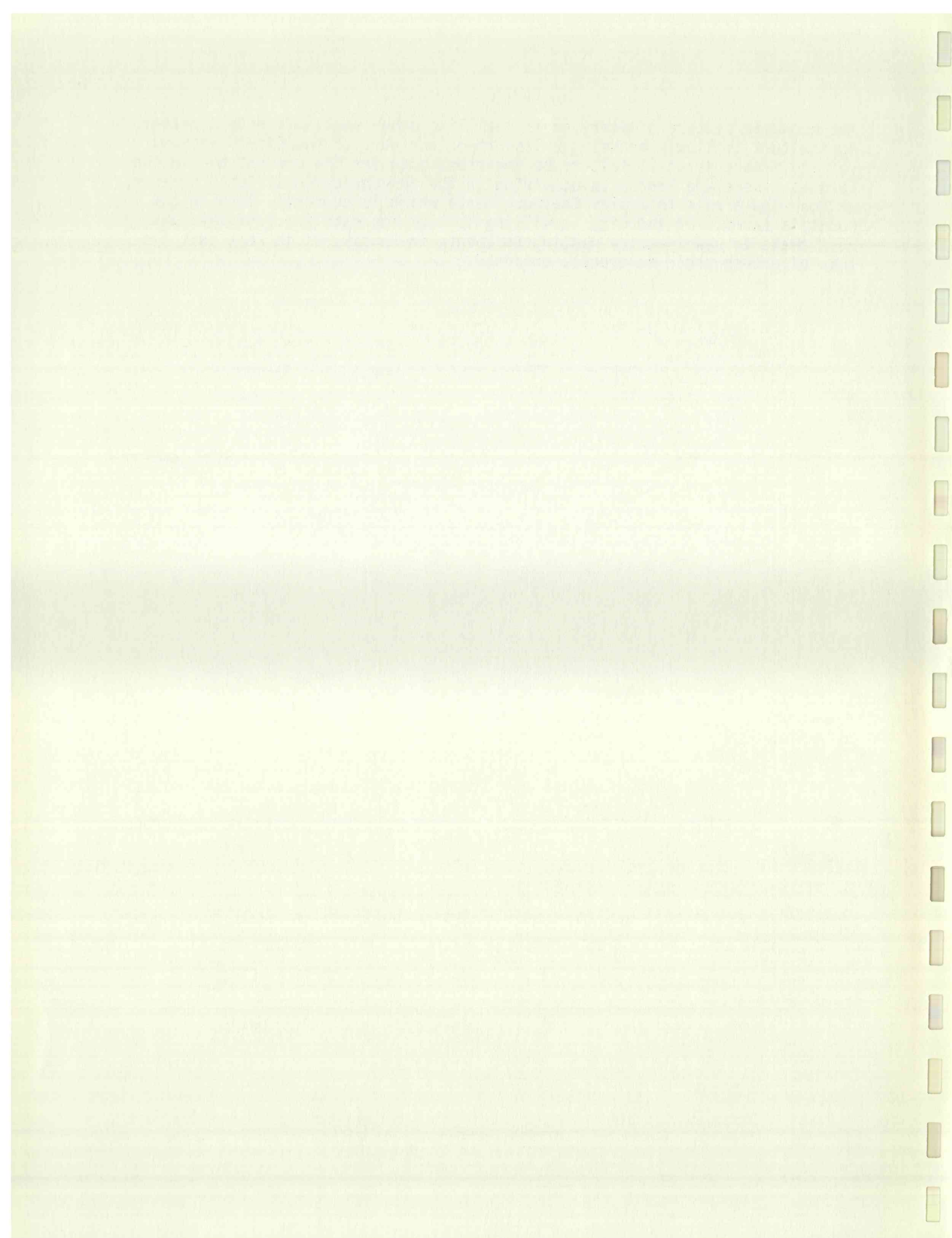
In the County, it is felt that the agricultural activities will continue much as they have been, however, at a much slower pace. Since agriculture and agriculturally based jobs are of primary importance, increased efforts should be made to increase and improve the agricultural output. The State's universities, through experimentation, are presently involved in developing new uses for the agricultural products which are now being grown in Kansas. If, through this experimentation, new uses and products are found, additional jobs may become available in the presently diminishing agricultural fields. Constant awareness of any new industrial enterprise concerned with farm machinery or products should be given. Since Rice County and in particular Sterling have agriculturally based economies, these types of industry seem most feasible. The salt and petroleum resources have been exploited while sand which is in abundance in the County has not been completely researched. There are concrete and concrete products manufacturers in the County, yet other types of sand-based industries are non-existent.

It is essential that Sterling and Rice County provide the type of atmosphere conducive to the encouragement of expanding existing industry, whether it be basic or non-basic. It is the opinion of the Consultant that if half the money spent on inducing new industry to the State were spent on encouraging expansion of what we now have, the end results would be very favorable for the citizens of the State and in turn Sterling.

SUMMARY

Population and economics, even when studied separately, are highly dependent upon one another; changes in one will cause changes in the other. In studying the population trends of Sterling an indication of a slowly increasing population was seen. The age distribution table for the 1960 population indicates a degree of growth potential based on an increase in the younger age groupings and in the number of persons in the retirement age group. It should be remembered that an overbalance of the retirement age persons can influence the development capabilities of a city, in respect to the financing needed to provide population-inducing facilities.

The economic picture of Sterling is much like other small midwestern cities. Agriculture is slowly becoming a less important part of the City's economy yet its impact is still felt to be important both for the present and in the future. There are increases occurring in the non-agricultural jobs, however, at too slow a rate to employ the work force which is currently leaving the County's farms. If the City is willing to back its existing industry, and keep awake to new industry wanting to locate in Kansas, it is felt that its rate of growth could be greatly enhanced.



CHAPTER THREE EXISTING LAND USE AND HOUSING CONDITIONS

An important block in the foundation to sound community planning is the knowledge of the location, type and intensity of land uses in the study area. The community facilities, public utilities, land values and transportation needs are greatly affected by the location and relationship of one land use type to another and the spacing of the various land use types (residential, commercial, industrial, etc.). Since the land use inventory provides an excellent gauge for measuring physical growth and the development of a community, it is necessary that the land use data for the Planning Area be collected, mapped, tabulated and analyzed so that a complete understanding may be reached. Land use maps and tabulations also provide a means for analyzing present and future transportation, community facility and public utility needs.

A detailed Land Use Inventory was conducted within the Sterling Planning Area during the summer of 1968. In conjunction with the land use inventory, a visual exterior inspection of each residence within the Planning Area was made. During this inventory, the information was recorded on maps and field sheets explaining each land use and housing condition. The land use was coded both by color and according to the Standard Land Use Coding Manual. The area included in the study was the City of Sterling and the three mile peripheral area within Rice County. The land use and housing condition categories are discussed below.

LAND USE CATEGORIES

RESIDENTIAL

- | | |
|--------------------------|--|
| SINGLE AND
TWO FAMILY | - residences occupied by one family and other related individual and "duplex" residences designed for or occupied by two households. |
| MULTI-FAMILY | - multiple occupancy dwelling, containing three or more individual residential units; also, including trailer parks having two or more mobile home trailers located on a single parcel or lot. |
| TRAILER | - one mobile home trailer located on a single parcel or lot used as a single residence. |

COMMERCIAL

- GENERAL COMMERCIAL - all land and buildings wherein trade or business is conducted for profit. This category includes among others: general retailing, business offices and personal service uses.

PUBLIC AND SEMI-PUBLIC

Uses developed by private and public capital which are essentially public in nature: such as churches, schools (private and public), governmental property and buildings, hospitals, cemeteries and other public institutions.

RECREATION

All land devoted to play or recreational uses, such as public lakes, parks and playfields.

INDUSTRY

All land and structures used for manufacturing, storage or processing. This category includes both heavy industry (those not conducive to human habitation, such as those expelling smoke, noise, vibration and obnoxious odors) and light industry (those industries producing little if any detrimental expulsions).

STREET AND ALLEY RIGHTS-OF-WAY

All land dedicated for the use of public streets and alleys.

RAILROAD RIGHTS-OF-WAY

All land devoted to railroad service.

VACANT

All land not given over to any urban or agricultural use even though it may be potentially available for development. The average city, as defined by the political boundary, often contains more land than is necessary for urban development. Control of this vacant land is critical because it permits the city to provide orderly future growth within its corporate limits. In general, smaller cities have a higher percentage of vacant land than does a larger urban complex.

AGRICULTURE

All land and structures used for farming, dairying, pasturage or agriculture. The agricultural classification does not include livestock processing industries such as cattle feed lots, which are by nature heavy industrial operations.

HOUSING CONDITION CATEGORIES

GOOD CONDITION

The residences included in this category did not need any repair or needed very minor repair.

NEEDS MINOR REPAIR

The residences which are included in this classification are generally in need of more surface repair than those in good condition. The residences included in this group were identified by peeling paint, worn roofing, sagging steps or porches etc.

NEEDS MAJOR REPAIR OR REDEVELOPMENT

This category included residences which had structural weaknesses most generally requiring major repair. Typical of this classification were inadequate weather protection, doors and windows out of plumb, a sagging or damaged foundation and highly damaged roofs. Many of the residences in this category are not worth repairing.

RESIDENTIAL LAND USE

The 1968 Sterling land use inventory shows 741 single family dwellings (includes house trailers which are parked alone or with one other trailer) and five multi-family dwellings (includes house trailer parks with three or more trailers). At the time of this inventory there were 25 mobile homes located within the corporate city limits. Of this total, nine were in trailer parks (or trailer grouping) and the remaining 16 were scattered throughout the City in the residential areas. The 25 trailers accounted for a little over 3 percent of all the dwelling units in the City.

Approximately 34.8 percent of the developed land within Sterling is devoted to residential uses. Of this total only 0.19 percent is used for multi-family uses, with the remaining 34.62 percent being single family and two-family residences. In comparing the land use figures for Sterling in Table 12 with the land use figures in Table 13 (Land Use Averages for Thirteen Midwest Cities), it can be seen that Sterling is below the average with respect to land developed for residential purposes.

Residential growth has occurred in all directions in Sterling; however, the area to the southwest has been limited by topography, thus experiencing little change. The area to the east has had limited residential development due to several factors, including topography, railroad tracks and industry which is located in the area. The largest residential growth has occurred to the north-east, near the high school and to the north, on Sixth Street, north of Cleveland Avenue. Residential growth is expected to continue in this area and in the north-west area near Sterling College.

Within the three-mile peripheral area there are 61 farm units (homes occupied by farmers), 35 single family units and eight trailers. These residences are well distributed throughout the area; however, there is a concentration of homes near the Sterling corporate limits.

COMMERCIAL LAND USE

The main concentration of commercial establishments and commercial activity within the planning area is located on Broadway Avenue, from Jefferson Avenue south to Van Buren Street. Other commercial business' are located throughout the City with little or no concentration of this activity. There are some commercial establishments located on State Highway 14, in the three-mile peripheral area.

In comparing the "Developed" figures in Table 12 with those in Table 13, it is noted that Sterling is approximately 0.5 percent lower in commercial uses than were the thirteen Midwest cities. While these figures may appear low for Sterling, it should be noted that a very small percent of the commercial buildings are vacant, a fact which is seldom true in other Midwest communities the size of Sterling.

PUBLIC AND SEMI-PUBLIC

Approximately 56.4 acres or 10.5 percent of the developed land is devoted to public and semi-public uses. This compares very favorably with the figures shown for this category in Table 13. The majority of this land was owned by the public schools in Sterling, with the City, hospital, churches and various clubs claiming most of the other uses in this category.

There are four public and semi-public uses within the three-mile area of the City. These were: A City shop south of town; a cemetery northeast of town, bordering the city limits; a play field connected with Sterling College, north of town, and the City Airport, which is a twenty acre facility, one mile north of Sterling.

RECREATION

There are four recreational facilities located in the city limits of Sterling. They account for approximately 21.0 acres, or 3.9 percent of the developed area. Sterling Park, in the southern part of the City, is the largest and most complete facility; however, the other three areas also have facilities which receive much use.

Within the three-mile area there is only one recreational facility. This is a nine hole sand greens golf course, located two miles west of Sterling.

INDUSTRIAL LAND USE

Land devoted to industrial uses in the city limits required about 6.6 acres or 1.23 percent of the developed land. This does not compare favorably with the "Thirteen Midwest Cities" as shown in Table 13. Outside the corporate limits and within the three-mile area, industrial development was found to be greater than inside the City, with 27 industrial units and four oil fields located here. Some of the industrial uses located in this area, such as valve houses, while being considered as industrial uses, usually do not require full-time personnel, and therefore do not materially affect the number of jobs available in industry to any great degree.

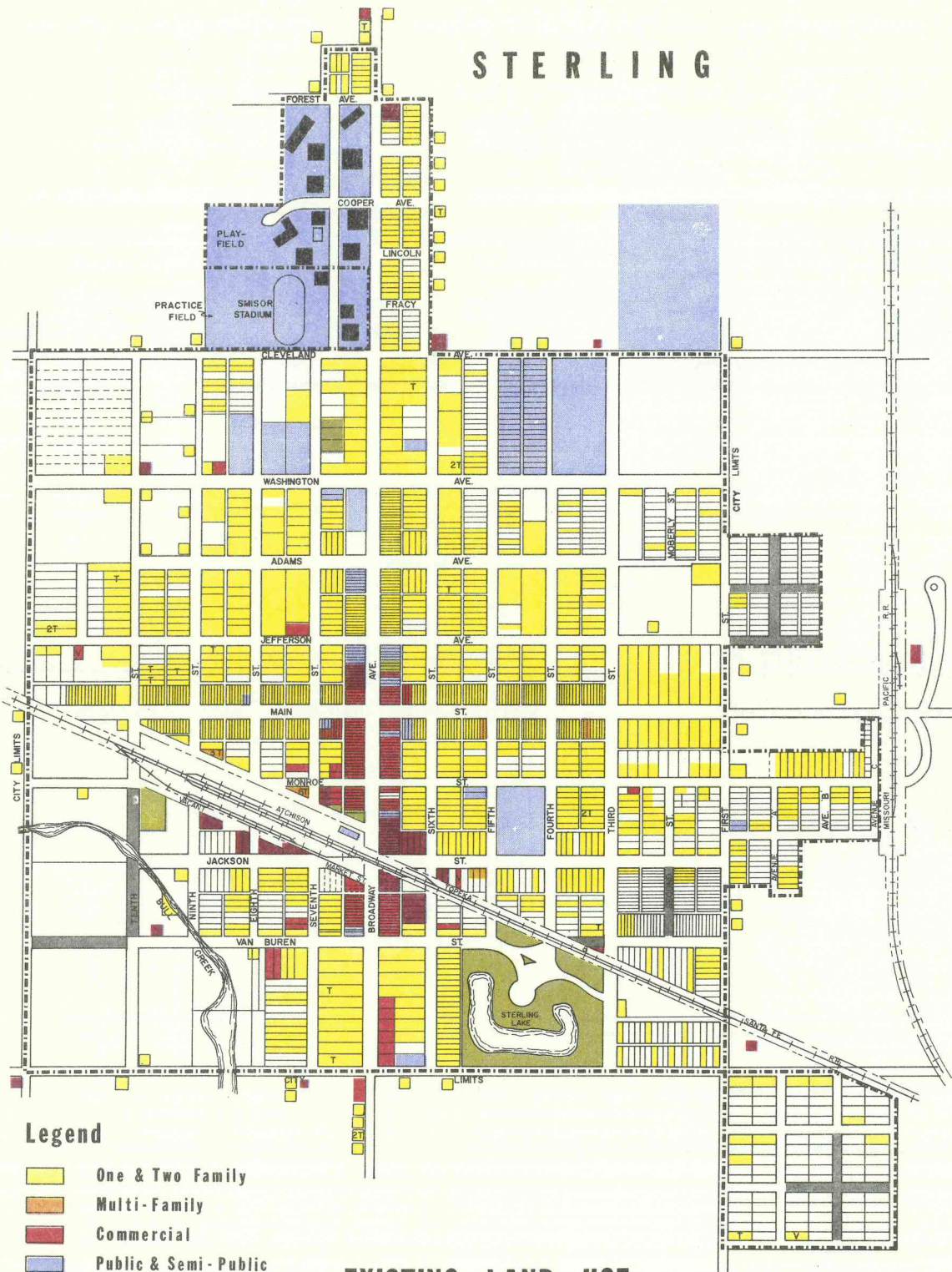
STREET AND ALLEY RIGHTS-OF-WAY

Street and alley rights-of-way consumed a greater percent of the developed land than any other category. The cause of this is primarily short blocks, which, in turn, require a greater number of streets. This fact does not alone reflect an unfavorable situation, but points up the need for adopting and enforcing subdivision regulations for future residential blocks.

RAILROAD RIGHT-OF-WAY

Irrespective of the fact that Sterling is served by two railroads, the land use

STERLING



Legend

- One & Two Family
- Multi-Family
- Commercial
- Public & Semi-Public
- Recreation
- Industry
- Unopened Street
- Vacant & Agriculture
- T Trailer
- V Vacant
- F Farm

EXISTING LAND USE

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT.
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.



400 0 400 800
SCALE IN FEET

Plate 6

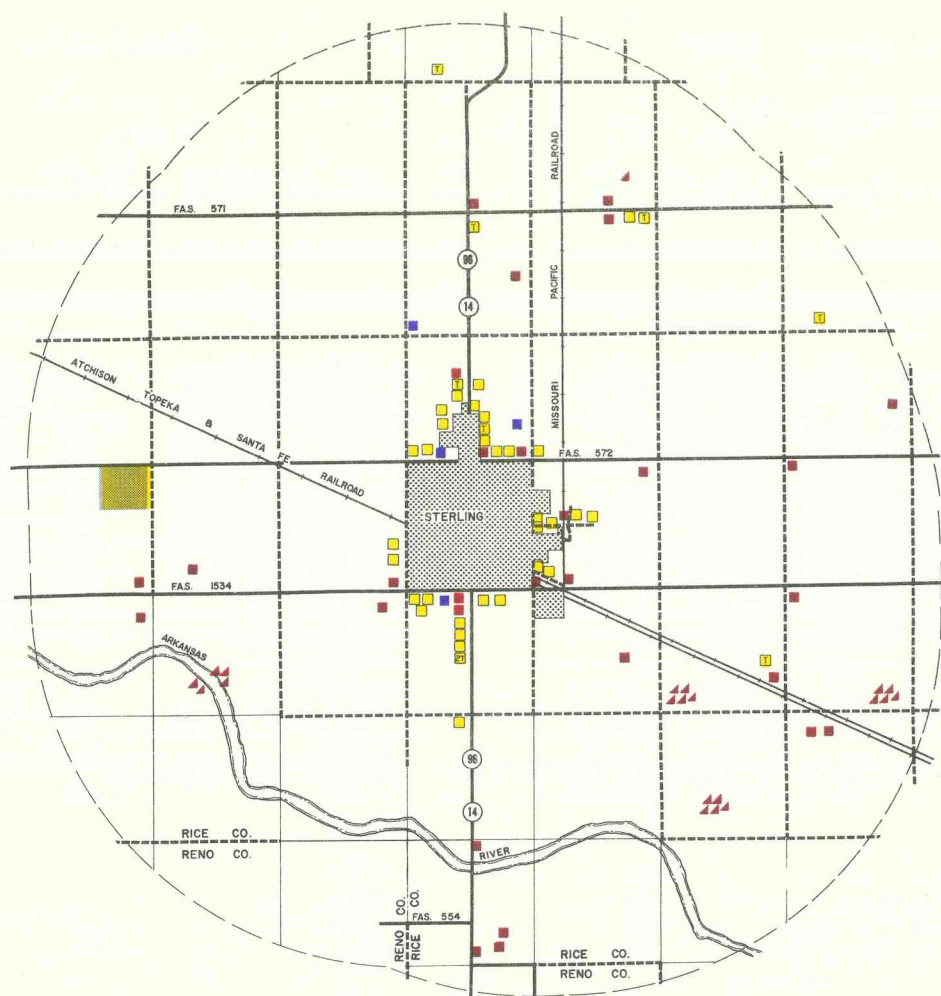
figures for this category are below the same category found in Table 13. As seen in Table 12, approximately 21 acres, or nearly four percent of the developed land is devoted to this use. This is nearly 2.5 percent lower than the average shown in Table 13. It is obvious that the availability of two railroads in Sterling will be of benefit to the City in the future.

VACANT AND AGRICULTURE

Of the total 773 acres in Sterling city limits, 30.67 percent, or 237.11 acres are vacant or being used agriculturally. As can be seen on Plate 6, the greatest percent of this land is located near the city limits. When realizing that nearly one-third of the land in Sterling is vacant, one may feel that the City is underdeveloped; however, in reviewing the similar category in Table 13, it is realized that other cities in the rural Midwest, share the same situation.

TABLE 12
LAND USE
STERLING
1968

<u>LAND USE CATEGORIES</u>	<u>ACRES</u>	<u>PERCENT OF LAND DEVELOPED</u>	<u>PERCENT OF TOTAL AREA</u>
One and Two Family	185.54	34.62	24.00
Multi-family	1.01	0.19	0.13
Commercial	11.98	2.23	1.55
Public and Semi-public	56.44	10.52	7.30
Recreation	21.03	3.92	2.72
Industry	6.57	1.23	0.85
Street and Alley right-of-way	232.08	43.30	30.02
Railroad right-of-way	21.34	3.99	2.76
Vacant and Agriculture	237.11	---	30.67
Total Land Developed	535.99	100.00	---
Total Area	773.10	---	100.00



STERLING 3-MILE AREA

EXISTING LAND USE

Legend

- One & Two Family
- Multi-Family
- Commercial
- Public & Semi-Public
- Recreation
- Industry
- T Trailer



TABLE 13
LAND USE AVERAGES FOR
THIRTEEN MIDWESTERN CITIES

<u>LAND USE CATEGORIES</u>	<u>PERCENT OF LAND DEVELOPED</u>	<u>PERCENT OF TOTAL AREA</u>
Residential	36.4	22.6
Commercial	2.7	1.8
Public, Semi-public and Recreation	9.9	6.0
Industrial	4.2	2.5
Street and Alley right-of-way	40.4	23.4
Railroad right-of-way	6.4	4.0
Agriculture and Vacant	---	<u>39.7</u>
Total	100.0	100.0

HOUSING CONDITIONS

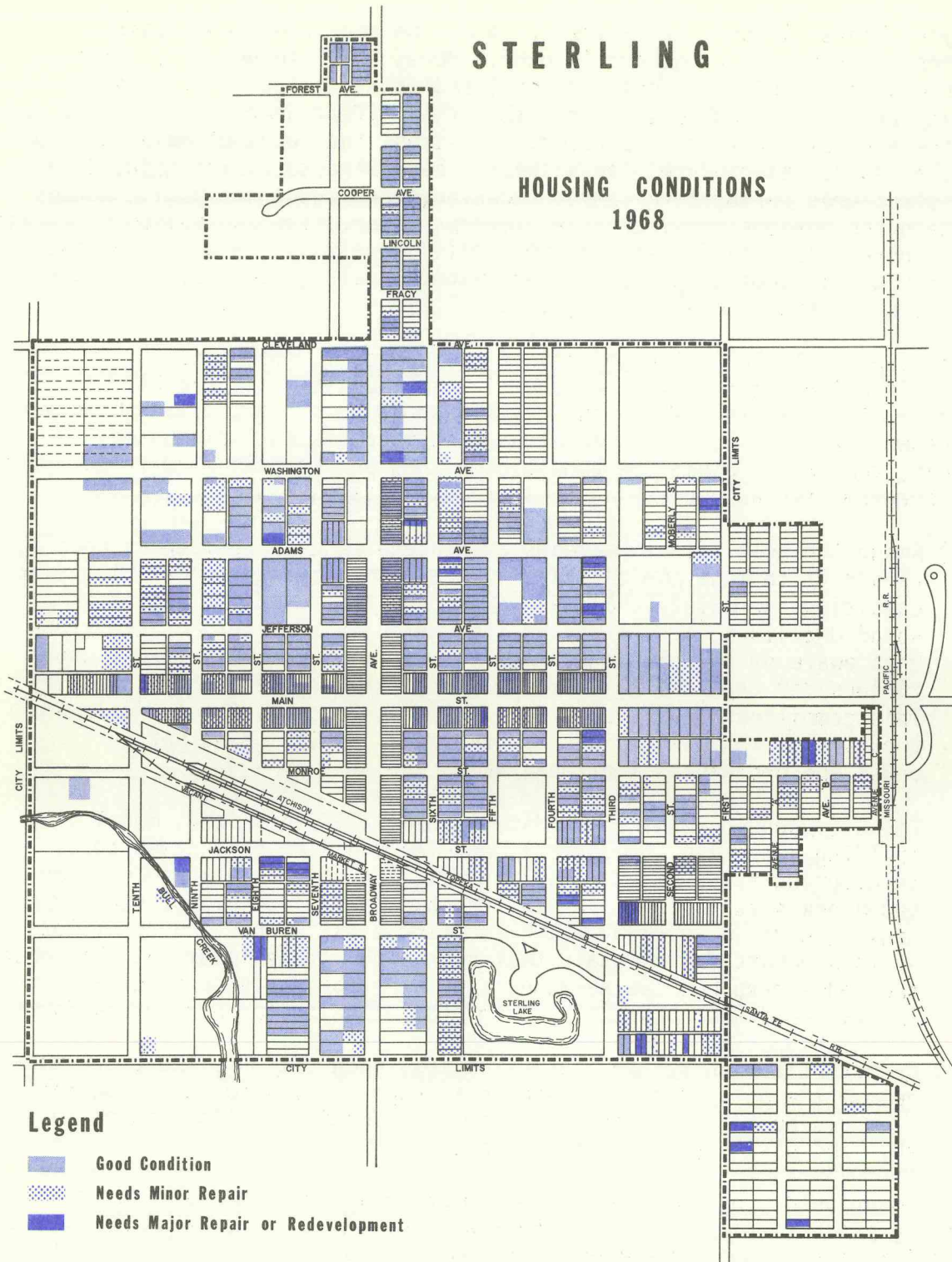
In Table 14 is shown the number of housing units and the condition of the housing units for the City of Sterling and the three-mile peripheral area. Mobile home trailers were not given condition classifications in this survey.

TABLE 14
HOUSING CONDITIONS FOR
STERLING AND THE THREE-MILE
PERIPHERAL AREA

<u>HOUSING CONDITION CATEGORIES</u>	<u>STERLING NUMBER</u>	<u>PERCENT</u>	<u>THREE-MILE AREA NUMBER</u>	<u>PERCENT</u>
Good Condition	471	65.0	65	67.7
Needs Minor Repair	228	30.9	27	28.1
Needs Major Repair or Redevelopment	<u>26</u>	<u>4.1</u>	<u>4</u>	<u>4.2</u>
Total	725	100.0	96	100.0

STERLING

HOUSING CONDITIONS 1968



In studying Table 14 above and Plate 8, it can be seen that the housing conditions in Sterling are generally good. However, while only 4.1 percent of the homes in the City are delapidated (needing major repair or redevelopment) they are well enough distributed that they effect nearly all the citizens, making the problem a city-wide problem. To stress the point of delapidation further, as homes deteriorate, the value of these structures are reduced (as are the structures surrounding them). However, the amount the public spends to maintain the various services i. e. sewers, water, fire and police protection, steadily increases. These costs are then paid largely by the owners of the homes which are in good condition or need minor repairs, since taxes paid on their residences are generally going to be higher.

As can be seen in Table 14 the percent of residences in good condition is higher in Sterling's three-mile peripheral area than it is in the City's corporate limits. While the housing conditions in both the City and County are in general favorable, it is important that programs be implemented, in both areas, that will reduce the amount of blight and keep it from re-occurring. Several programs for accomplishing this are discussed below.

- (1) Among the most effective means of contending with residences needing repair is to make the citizens in the community aware that blighting conditions do exist, and that as long as they do exist people in sound dwellings will be paying substantially to service these areas. Once aware of the problems, Sterling's citizens should form a group to consider programs which remedy the "creeping blight" in the City. This committee should serve as the advisory commission to implement programs of rehabilitation and conservation, including various codes and ordinances mentioned below.
- (2) The City should adopt up-to-date, nationally-recognized, model building, plumbing, electrical, housing and fire prevention codes. In adopting these codes, Sterling will not only be assured of more sound new structures in the future, but will also have, through the housing code, a means by which to bring existing housing conditions up to standard and maintain that standard. It is important that once the codes have been established, that they be reviewed annually since improvements are constantly being made allowing for higher standards.
- (3) By authorization of the State statutes, each city has the power to remove the delapidated residences through utilization of condemnation. It would be advisable for Sterling to investigate this program further and possibly put it into practice.

The above mentioned programs are only a few which are used to halt the deteriorating process. There are also Federal programs such as Urban Renewal which are used for this purpose; However, they don't appear to be feasible in Sterling with it's low number of delapidated buildings. It is, however, for Sterling to decide which method, or methods, may best be utilized. It is realized that rehabilitation programs, as is the case of many programs dealing with people, are not easy tasks. However, the satisfaction that can be attained in making the entire City of Sterling a more pleasant and attractive place in which to live, for all citizens, should make the efforts worthwhile.

CHAPTER FOUR COMMUNITY FACILITIES

The Community Facilities Plan is based on a composite of inventories, studies and projections made by City employees, other interested citizens and the Consultant. Such factors as population and economic trends, water and sewer facilities, building conditions and existing land use were considered.

This plan includes inventories and proposals of the publicly owned and supported facilities such as City offices, health facilities, police and fire facilities, schools and recreation areas. The primary objective of this plan is to logically locate the community facilities so that they will efficiently meet the requirements of the present and future population of Sterling.

The narrative which follows will divide the community facilities into three categories: Public Buildings - City Hall, Fire Station, Police Station, Medical buildings, Post Office and City Shops; Recreation Facilities - Parks, playfields and indoor recreation centers; and Schools - Sterling College, Sterling High School and Sterling Grade and Junior High School.

PUBLIC BUILDINGS

City Hall - The City Hall is located at 114 North Broadway on the east side of the street. The building provides an area of approximately 3,600 square feet and houses the City Commission meeting room, the City Clerk's office and the City Manager's office. This building was constructed in 1914 and is in good condition with the Commission meeting room and City Manager's Office having received a recent remodeling. There are presently no off-street parking facilities provided at the City Hall.

Fire Station - The City Fire Station is located at 116 North Broadway immediately north of the City Hall. This building was also constructed in 1914 and has an approximate area of 2,100 square feet. This building is presently in good condition. The fire department is equipped with one 250 gallon per minute capacity pumper and three 750 gallon per minute capacity pumpers. There are no full or part-time firemen; however, there are twenty (20) volunteer firemen. The area the department serves is as follows: the City of Sterling; Sterling Township; east and west Washington Township, Bell Township and Valley Township.

Police Station - The Police Station which was constructed in 1927 is located at 117 North Broadway across the street from the City Hall and Fire Station. The building provides an area of approximately 435 square feet which houses the police chief and police officers' office, City Court and City Jail. The police facilities at this station are inadequate for the efficient functioning of the department. There appear to be no shower facilities for the prisoners or an interrogation room. Also, the quarters are very crowded which endangers the security of the prisoners and the police officers.

On the police force there are three full-time, three part-time and two volunteer police officers. At their disposal is one police car with a two-way radio.

Sterling City Library - The City Library which is located at 138 North Broadway, was constructed in 1917. Even though the building is 52 years old, it is in good condition. During the last three years the structure has received a new tile roof, indirect lighting, a lowered ceiling, air conditioning furnace, interior painting, book shelves and an Abraham Lincoln display. There are presently 11,844 books in the Library and 1,679 people registered to use them. Of the registered users 821 are adult residents; 367 are junior residents, 407 are rural people and 84 are college students. There are 35 seats available for people using the collection.

Also provided at the library is a club room which acts as a meeting room for the scouts, 4-H Club, Camper Club and three book clubs. This meeting room has seating room for 100 people. Twenty-five on-street parking spaces and five off-street parking spaces are provided for the people using the library.

Three other libraries are located within the City. One is located in the grade school. This library has 5,000 volumes with seating available for 40 students. The second library is located in the High School. This library has 3,000 volumes and has seating available for 36 students. The remaining library is the Kelsey Library which is part of Sterling College. The facility was constructed in 1954 and provides seating for 115 people. The stacks contain 61,000 volumes with a capacity of 75,000 volumes. This facility also contains a microfilm library and a reader.

City Service Building - The City Service Building which was constructed in 1927 is located at 121 North Broadway. This building is located on a site of approximately 7,500 square feet and houses the offices of the water and light supervisor, sewer and street supervisor and serviceman (the police station is also located in this building). This building is presently in good condition.

SCHOOLS

In this portion of the study, concern is given to both the existing and future school facilities based on projected growth patterns in Sterling. It is hoped that from this study the school superintendent and other administrators in Sterling Unified District # 376 will be aided in making decisions in relation to future facilities.

Within Unified District #376 there are three schools. There is one high school with a 1968-69 enrollment of 211, one grade and junior high school in Sterling with a 1968-69 enrollment of 348 (including kindergarten) and Union 5 grade school, in rural route Sterling, with a 1968-69 enrollment of 40.

SELECTION AND DEVELOPMENT OF SCHOOL SITES

In looking back, it can often times be seen that many school districts have unwisely selected unsuitable parcels of land at inflated prices because of a lack of planning. This situation has resulted in many schools becoming prematurely

obsolete, a sizable tax increase to the area citizens and a decided loss of educational opportunities for the children.

For the benefit of all persons involved, it is advisable that site acquisitions be planned several years in advance of need. This should be the responsibility of the local Board of Education. A careful and intricate study must be made of population trends, industrial, commercial and residential developments and other factors which might indicate when and where these school sites would best be located.

There are many different factors involved in selecting the proper school site. Different areas may have different types of educational programs, public recreation programs, financial resources, or other significant factors. Any of these factors will effect the selection of school sites. There are, however, certain generally accepted criteria, which have been proven to be applicable. Several of these factors have been listed below:

HIGH SCHOOL SITES should be located on a minimum site of thirty (30) acres, plus an additional acre for each 100 pupils of projected ultimate maximum enrollment. Thus the minimum size site for a senior high school of 200-299 students, would be 32 acres. These schools should be located near a major street for maximum accessibility and the enrollment should not be over 1,500 students, as recommended by educational consultants.

JUNIOR HIGH SCHOOL SITES should be located as closely as possible to the center of their service areas. The junior high school should be near a major street, because more students are being transported by a vehicle, due to the larger service area of the junior high school.

The suggested minimum site for junior high schools is twenty (20) acres, plus one additional acre for each 100 pupils of projected ultimate maximum enrollment. Thus, a site of minimum size for a junior high school of between 300-399 students would be 23 acres. It is desirable that a junior high school not maintain an enrollment of over 750 students.

ELEMENTARY SCHOOL SITES should not be located contiguous to major streets or commercial and industrial areas. It is desirable that elementary schools be located within one-half mile walking distance from the homes of students. However, topographical and man-made barriers will frequently influence the size of a school's commuting areas. Elementary schools should be located at the center of a neighborhood, adjacent to a neighboring park and should be near a collector street in the neighborhood. However, the street system of the subdivision would be designed so that only local traffic utilizes the collector and local street system within the neighborhood.

Elementary students should not have to cross a major arterial street to reach the school site. The size of a school site should be, in part, determined by the anticipated maximum number of students to be accommodated in the school. For elementary schools, it is suggested there be provided a minimum of ten acres, plus an additional acre for each 100 pupils of projected ultimate maximum enrollment. Thus, the minimum size site of an elementary school of

100-199 students would be eleven (11) acres. The desired maximum enrollment of an elementary school should be approximately 500 students. Also, it does not appear to be economically feasible to operate an elementary school of less than 200 pupils in an urban situation.

It should be noted that the above standards were designed for neighborhoods of approximately 5,000 population. In general, these standards are relevant to the needs of Sterling. However, the distance from the schools for those living in rural areas should be measured in accordance to bussing time rather than blocks or fractions of miles to the school location. When bussing to school, a student should not have to be a passenger more than 45 minutes one way.

EXISTING SCHOOL FACILITIES

STERLING HIGH SCHOOL is located on east Washington Avenue on a site of approximately sixteen acres in size. The school was constructed in 1954 and occupied in 1955. In 1965 a choir room was added to the building. At the present time the enrollment of this school is 211, only fourteen (14) short of the capacity of 225 students. The condition of this school is good; however, it will be of inadequate size for future enrollments.

STERLING GRADE AND JUNIOR HIGH SCHOOL was constructed in 1926 with the junior high and kitchen added in 1961. This school is surrounded by Fifth Street on the west, Monroe Street on the north, Jackson Street on the south and Fourth street on the east. This building is in good condition and with proper maintenance should remain sound throughout the planning period. The enrollment at this school is 348 (including 27 kindergarteners), which is somewhat less than the 450 student capacity of the school.

UNION FIVE is a country school located outside the three mile peripheral area of Sterling. This school, presently has an enrollment of forty (40) pupils, five less than the school's capacity of 45. Even though the school is in good condition, it is inadequate by today's educational standards.

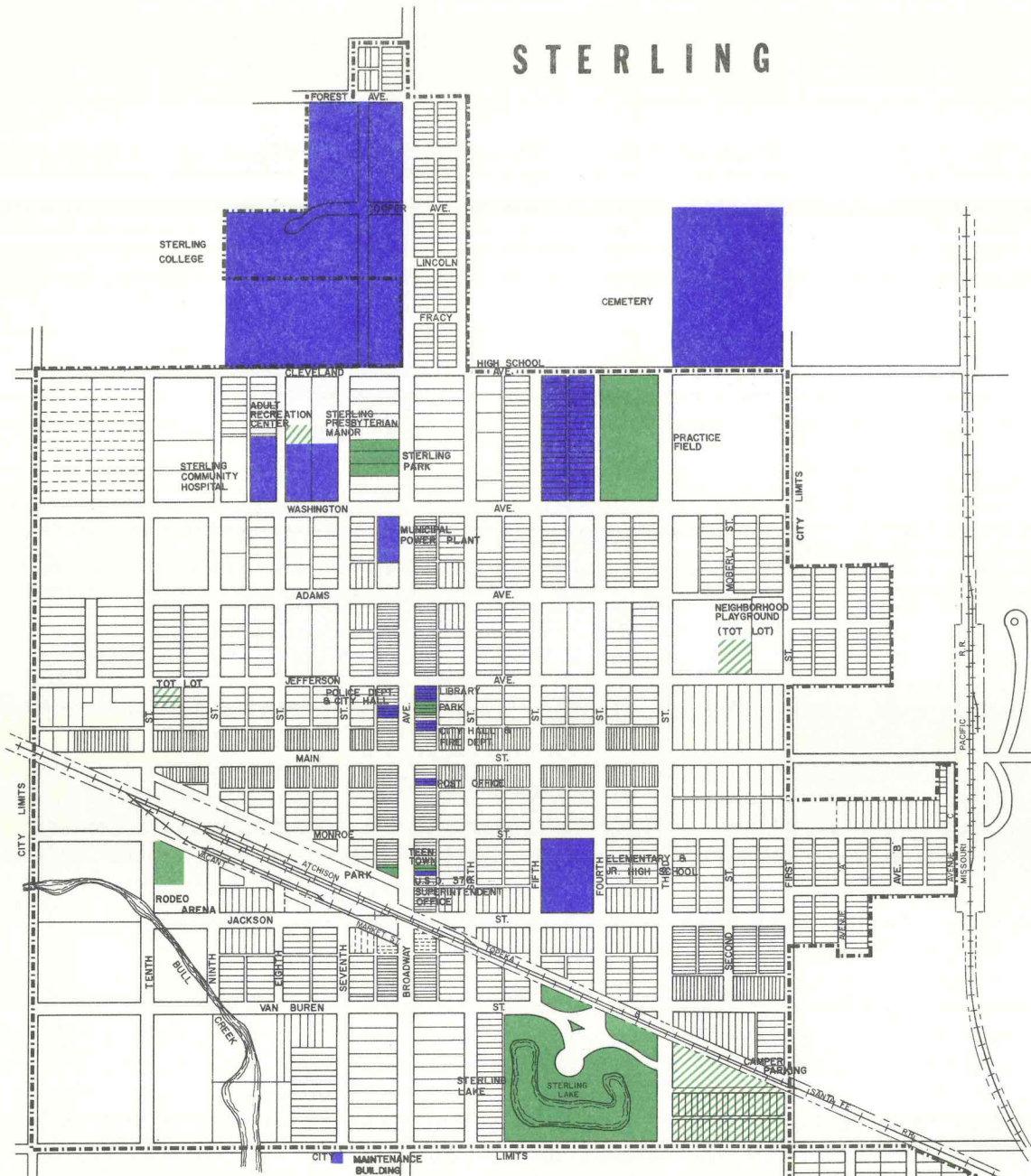
RECOMMENDATIONS

The projected school plan for Sterling can be seen in Table 15. These projections were based on the proposed population and enrollments of the schools and in turn on the population projection "B" made in Chapter One. It should be noted that Projection "B" showed the greatest growth and that the proposed capacity may be high. It is felt that it is more beneficial to stay ahead of the enrollment by using the higher projections instead of using the lower projections and possibly fall behind.

It is also important to note that further unification of the area's schools could greatly affect the proposed enrollment figures in the City's schools.

Utilizing population projection "B" figures in conjunction with the student population ratio for the most recent year, the following enrollment projections were formulated: 693 students in 1975; 732 in 1980; 776 in 1985; and 795 in 1990.

STERLING



Legend

	EXISTING	PROPOSED
PUBLIC BUILDINGS		
PARKS & RECREATION		

COMMUNITY FACILITIES

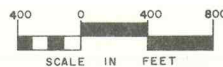


TABLE 15

<u>School</u>	<u>Enrollment</u>		<u>Capacity</u>		<u>Classrooms Required</u>
	<u>1968</u>	<u>1990</u>	<u>Existing</u>	<u>Proposed</u>	
Sterling High School	211	300	225	350	5
Sterling Grade & Junior High School	348	495*	450	550	4
Union Five	40	closed	45	---	---

* This figure includes students that would have attended Union Five school.

Based on the projected enrollment growth, it is estimated that two additional classrooms will be needed by the high school by 1975; one will be needed by the grade school by 1980; one for both the high school and grade school will be needed by 1985; and one by both the high school and grade school by 1990 for a total of four class rooms for the high school and three classrooms for the grade school and junior high (using a standard of twenty-five pupils per classroom). It should be noted that in Table 15 the projected capacities shown are greater than the enrollment figures; therefore, more classrooms are shown.

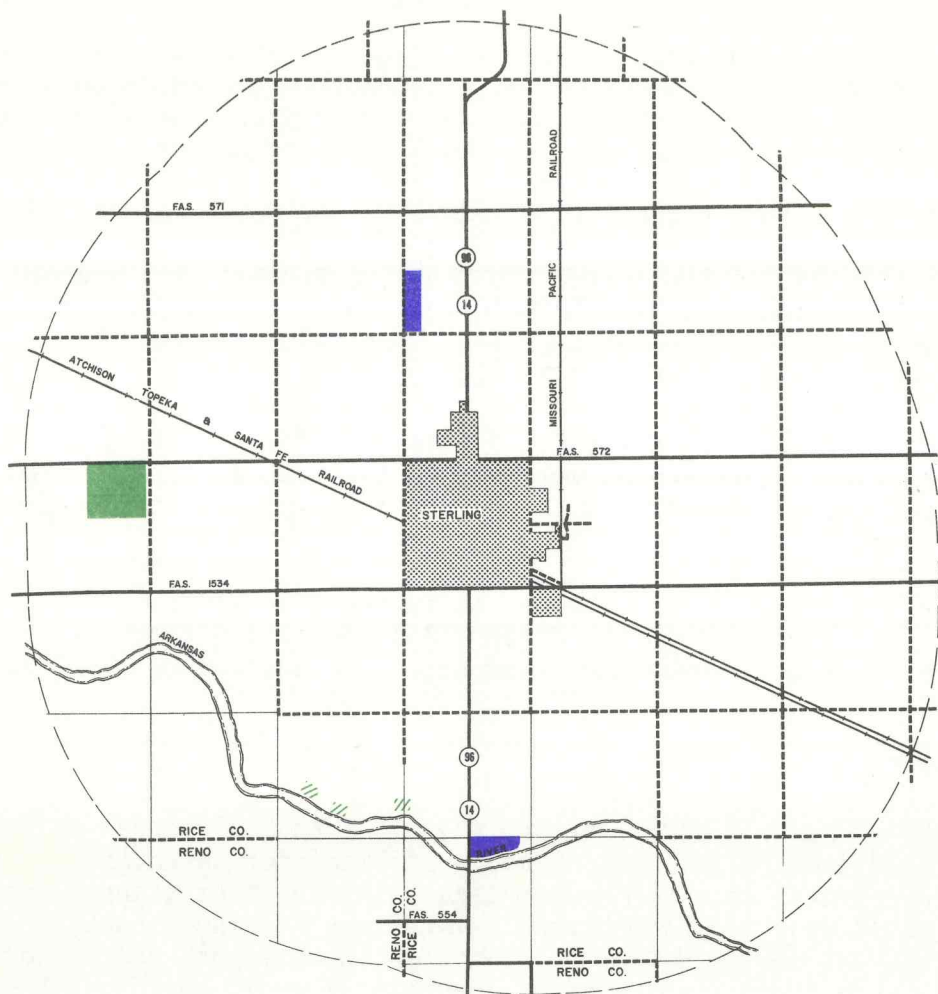
There appear to be several alternatives in meeting the projected deficiencies, two of which are presented in this study. The first alternative would be to construct an additional five classrooms to the high school (this, however, could vary depending upon the curriculum offered) and four classrooms to the grade and junior high school. While this alternate may be the least expensive it would not be the most desirable in respect to overall adequate space and learning atmosphere.

A second alternative would be the construction of a new high school (east of the practice field) and using the existing high school as the junior high school (Grades 7-9). While this alternate may be more expensive than the first, it will allow adequate space for the junior high and senior high schools and enable them to share such facilities as the playfield, busses and parking. By taking the junior high grades out of the grade school, the existing capacity will again be adequate.

The ultimate decision of the method to be used to meet these deficiencies is, of course, up to the local jurisdiction. The advantages of joint school and playground use is obvious and should be a factor in the ultimate decision.

STERLING COLLEGE

Sterling College which was chartered on October 26, 1886 was originally called "Cooper Memorial College" then on August 4, 1909 the official title became "Cooper College" and then finally on July 8, 1920 the name was changed to the present "Sterling College".



STERLING 3-MILE AREA

COMMUNITY FACILITIES

Legend

EXISTING	PROPOSED	
		RECREATION
		PUBLIC & SEMI - PUBLIC

Sterling College is a four-year liberal arts college associated with the United Presbyterian Church. The College is fully accredited by the North Central Association of Colleges and Secondary Schools as a four-year liberal arts college and by the State Board of Education for teacher certification.

The College is important to the City of Sterling for many reasons. It is an important part of its economic base, it provides the citizens with an outstanding library (Kelsey Hall), an Auditorium (Spencer), a football stadium which is used by both the College and High School, and provides many other facilities which are used by the citizens of Sterling. The value of the College should never be forgotten by the people of Sterling.

The enrollment history of Sterling College is very favorable. From the 1960-61 school year to the 1968-69 school year the enrollment has climbed from 473 to 659, an increase of 39 percent. With the present emphasis on education, a continuation of this trend is expected.

With the expected growth in enrollment, it is recommended that additional housing be provided, both for the single and married students and teachers. This housing could best be provided through the construction of apartments immediately south of the college.

RECREATION AREAS

EXISTING PARKS - The land use inventory reveals that 21.03 acres or 3.92 percent of the developed land in Sterling is being utilized for parks, playgrounds and other recreational uses. Sterling Lake Park, containing approximately 12 acres, is located west of Third Street between the Atchison Topeka and Santa Fe Railroad tracks and Garfield Avenue. Included in this park are children's play toys, a horse shoe court, tennis court, basketball goal, bathhouse and a lagoon which is used for swimming and fishing. Three other parks are located throughout the City. These are Masonic Temple Park, a one-half acre park located on the 200 block of South Broadway (this park has no facilities); Sterling Park, a one-half acre park located at 420 North 7th Street (this park has no equipment at the present time; however, picnic tables are to be added); and Library Park, a small park located at 126 North Broadway which has teeter boards and swings.

Other recreation facilities available within the City are the Rodeo Arena in the southeastern part of the City and "Teen Town" on the 200 block of South Broadway Avenue. Two miles to the west of Sterling there is a nine-hole, sand greens golf course.

In Sterling it appears that there is sufficient area devoted to parks when using the standard one acre of park land per 100 population. However in viewing these facilities in respect to locational factors, since these areas are geared for use of the younger people in a community and should be in close proximity to their home, deficiencies are evident.

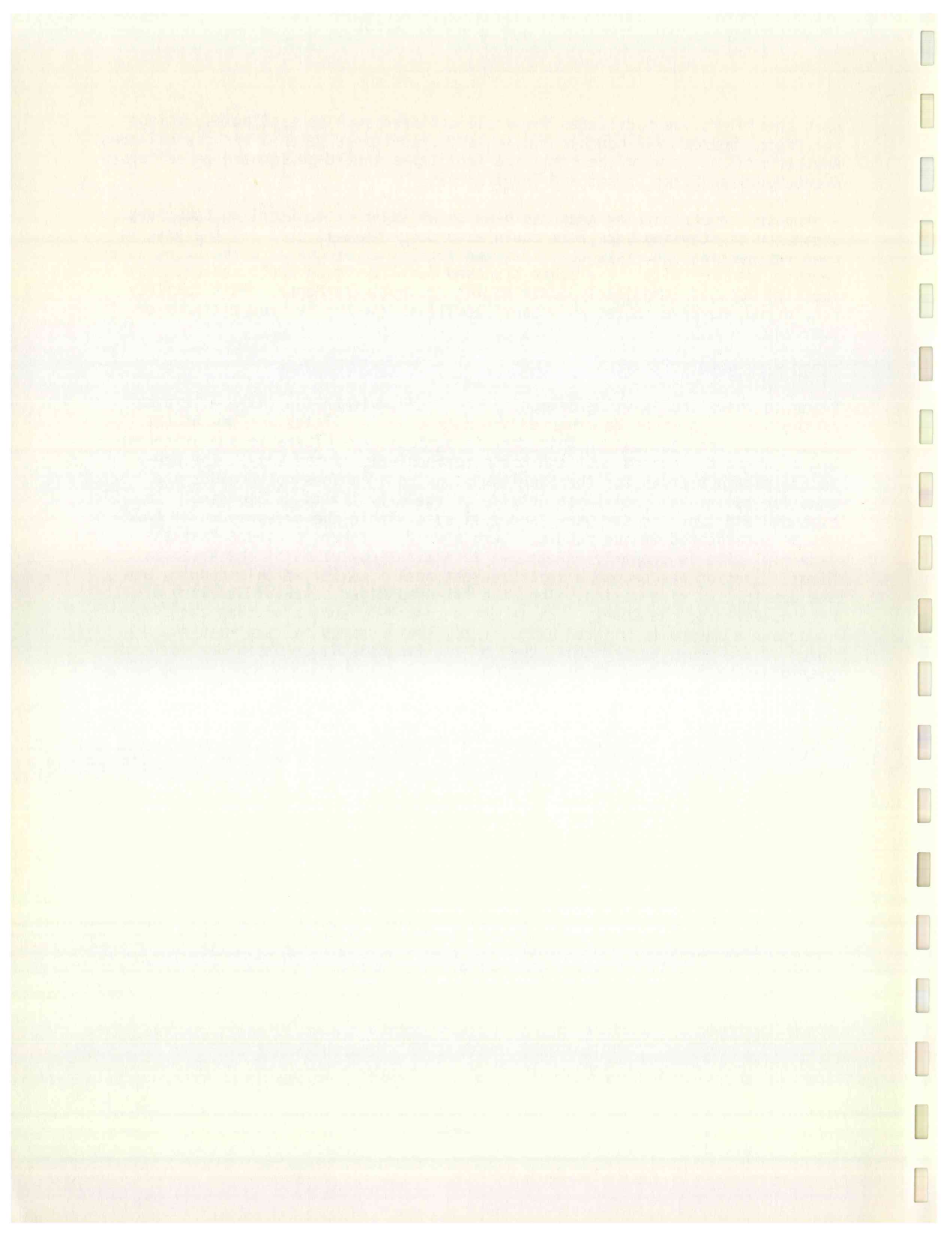
RECOMMENDATIONS - Four recommendations have been made in respect to the overall recreational facilities in Sterling. A small neighborhood park or "Tot Lot" has been suggested at the corner of Tenth Street and Jefferson Avenue. This

park should provide facilities for small children such as sand boxes, swings and teeter boards with benches available for adults to watch after the children. Another small park with the same type facilities should be located on Jefferson Avenue between First Street and Third Street.

A proposed camper parking area has been shown adjacent to Sterling Lake Park. Expansion of Sterling Lake Park could also occur in this area. If the area is used for parking, tourists could use the facilities at the park and bring added revenue into the City. The other proposed facility is an adult recreational facility located immediately north of the Presbyterian Manor. This facility should provide game tables and other facilities for the retired citizens of Sterling.

THREE MILE AREA

Plate 10 shows the existing Community Facilities within the three mile area of the City. As might be expected the number of facilities are few as the majority of the land use in this area is agriculture. There is a golf course and an airport, located west and north respectively of the City. The projected growth pattern for the Sterling planning area does not project the need for additional facilities outside of the city limits of Sterling. An expanded and improved sanitary land fill site within the areas south of town may be anticipated in the future. Care should be taken to assure that the land fill site is properly maintained to prevent pollution of the Arkansas River. Boating has become a major recreational activity in this country and the possibility of a marina, along the Arkansas River south of Sterling might be considered by the County. It is not necessarily suggested that the City undertake a marina as a local activity but that contact be made with the Corps of Engineers during this study of the Arkansas River basin due for completion in 1972.



CHAPTER FIVE THOROUGHFARE PLAN

STREET CLASSIFICATION

The street system in Sterling has been classified into three general groups; Major, Collector and Local routes. Each of these groups should serve a specific function in the movement of people and goods within and through the City.

Moving through traffic is the primary function of the Major Street, while a secondary function is servicing abutting properties. Basically speeds of thirty-five (35) to forty-five (45) miles per hour will be found on these throughways. Cross sections of Major Streets may vary from sixty (60) foot right-of-way, with a forty (40) foot pavement, to one hundred twenty (120) foot right-of-way or greater, incorporating median strips and perhaps service roads where needed.

Collector Streets are designed in the street system to provide easy movement of traffic between Major streets and Local streets. These facilities are usually designed for speeds of twenty-five (25) to thirty-five (35) miles per hour. Right-of-way widths range from fifty (50) to one hundred (100) feet, with pavement width of thirty-six (36) to forty-four (44) feet.

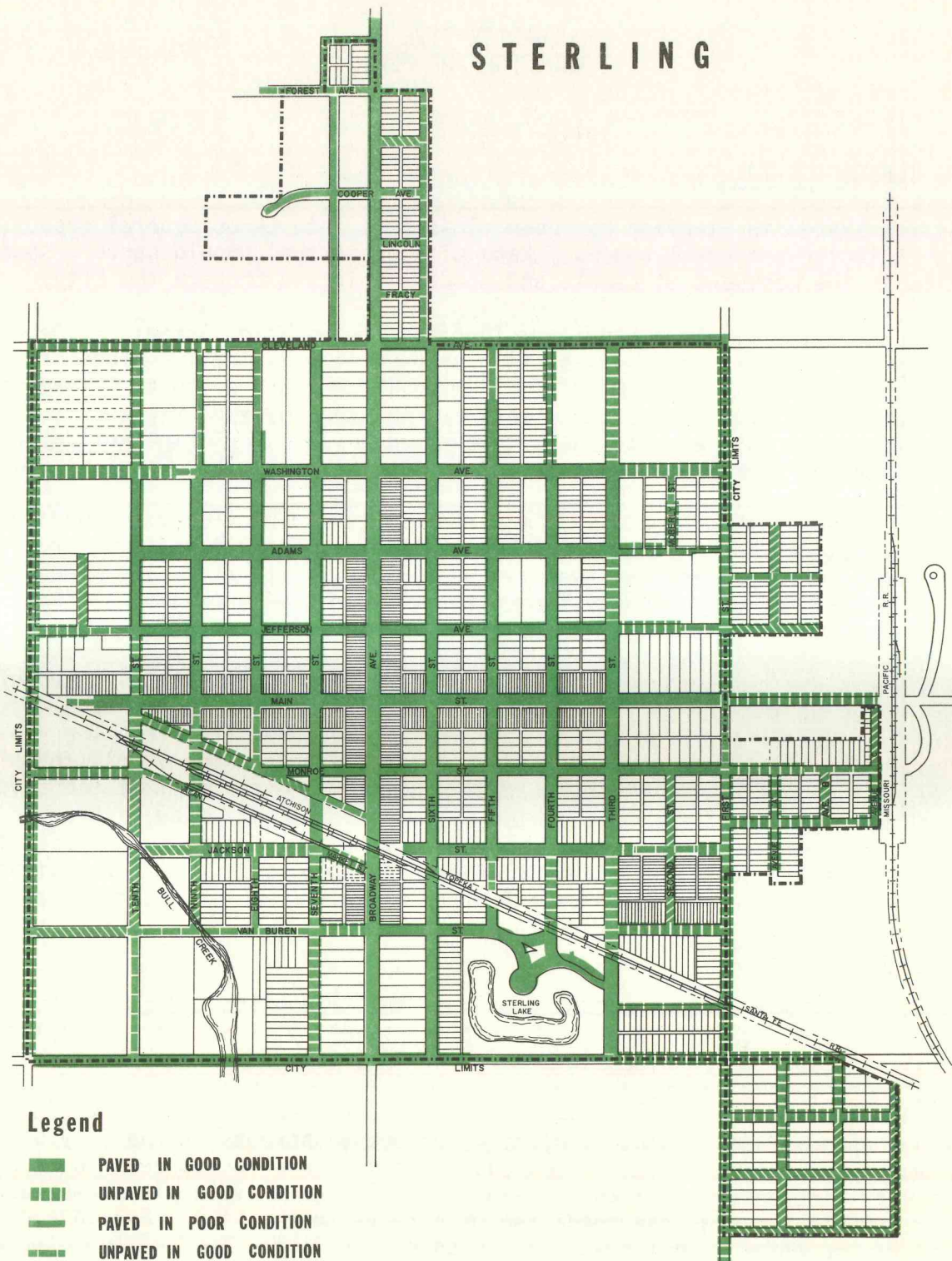
Local streets are designed primarily to serve abutting lands. This group of streets makes up the greatest percentage of total street mileage in the City, but are designed to carry on a small portion of the total traffic. The cross-sections of Local streets vary with abutting land uses and local policies of the City regarding on-street parking, weather conditions, etc. Most of the paved Local streets in Sterling are very wide allowing for smooth flow of traffic plus parking. Right-of-way widths range from fifty (50) to sixty-six (66) feet, with pavements from twenty-six (26) to forty-four (44) feet. In areas of high density residential a minimum pavement of thirty-six (36) feet is recommended.

EXISTING STREET SYSTEM

The existing street system in Sterling is of the grid pattern design with streets running east-west at about four hundred fifty (450) to five hundred (500) foot intervals and streets running south-north at intervals of three hundred (300) to four hundred (400) feet.

There are approximately twenty (20) miles of opened streets in the City of which about twelve (12) miles are paved. Most of the paved streets in Sterling have a very wide pavement width allowing easy flow of traffic plus on-street parking. Plate 11 shows the condition of streets in the City. Only a very small portion of the total street system is in poor condition. Most of the unpaved streets are in good condition. The past years paving program in this City is one of the best observed in Kansas for a city its size. There is very little underground or open ditch storm water runoff in the City. The majority of the storm water lies in the streets after rains due to the flat terrain of the City.

STERLING



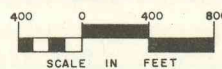
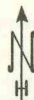
Legend

- PAVED IN GOOD CONDITION
- UNPAVED IN GOOD CONDITION
- PAVED IN POOR CONDITION
- UNPAVED IN GOOD CONDITION
- CLOSED STREETS

STREET CONDITIONS

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT,
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.



THOROUGHFARE PLAN

Broadway Street (State Routes 14 and 96) and Main Street are the nucleus of the street system in Sterling and are categorized as Major Streets on Plate 12. North-south Collector streets are First Street and the city limits road to the west of town. East-west Collector streets are Cleveland Avenue to the north and the south city limits road which virtually forms a box around the existing city limits of Sterling. The remaining streets are Local streets.

Proposed Collector streets in the system include an extension of First Street to the north connecting with Forest Avenue extended to the east. This will form a nucleus in and around the probable residential growth area of the City. Main Street to the east is shown as being extended dependent upon industrial growth east of the tracks.

STREET IMPROVEMENTS

The Major streets, as recommended, appear to be in fairly good condition. It is suggested that Main street be surfaced east of First street as industrial development demands. The pavement width on the existing Major streets are sufficient for the present and future traffic generation. The one improvement that is allied to Broadway is the need of new sidewalks in the business district. A suggestion might be that a downtown business group form an improvement district to accomplish this project. Cleveland Avenue west of Broadway should be widened and surfaced in view of the new field house being constructed at the college.

First Street from Main street to Cleveland Avenue is ranked very high on the priority list for improvement because of the growth tendencies in this direction. The remaining section of Collector streets hold a much lower priority in development and probably can wait until late in the twenty (20) year planning period for major improvement. The proposed extension of First street and Forest Avenue should be accomplished as the ground in the north east area is platted and is not suggested as an early City program. It may be that the developers should provide these extensions as that land is developed.

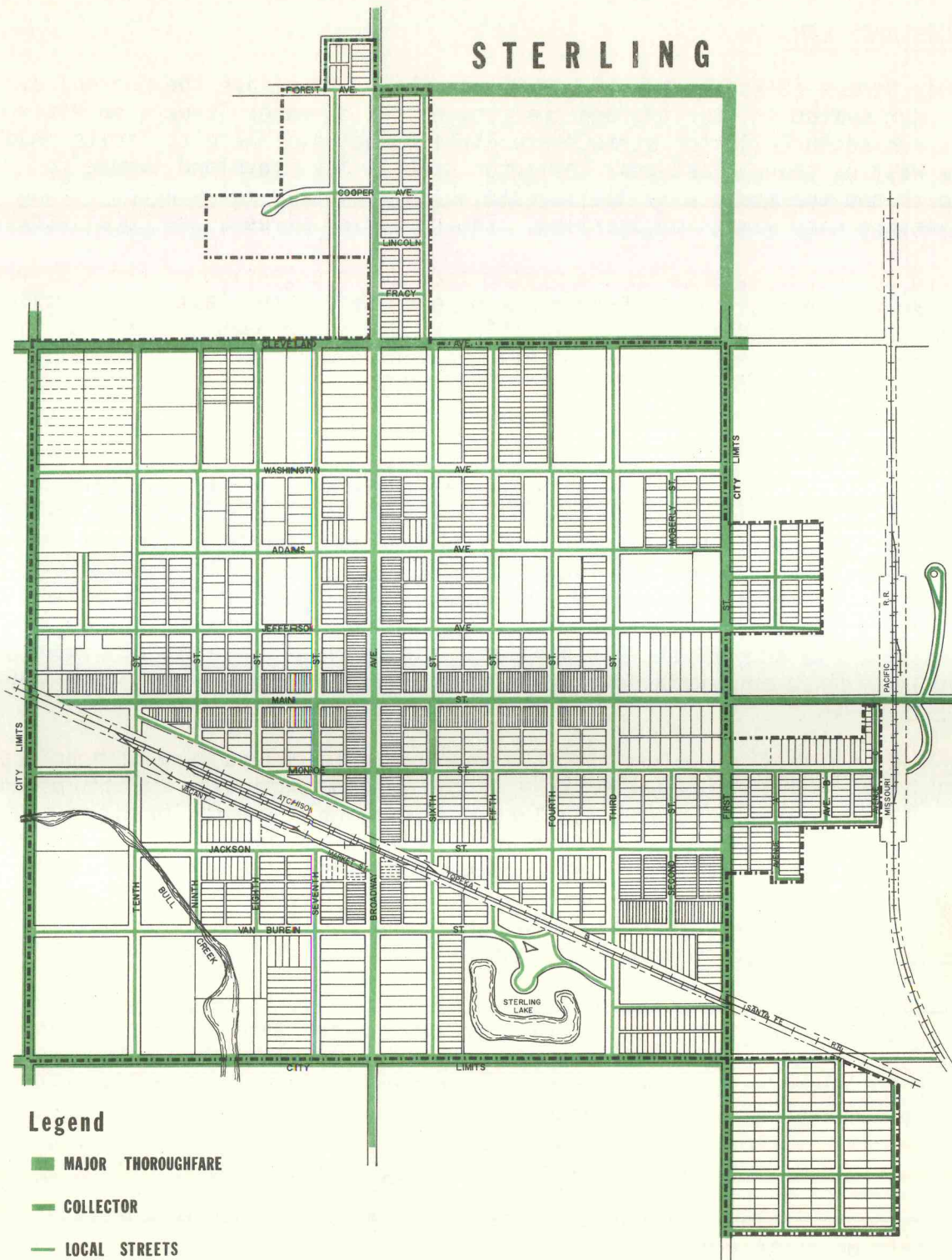
The very fine street resurfacing program of past years is recommended to be continued. However, it is suggested that storm water improvements be made in the City before many of the unsurfaced streets are developed. Therefore some of the resurfacing program may have to be delayed until the City can accomplish the storm sewer projects.

To enhance the effectiveness of the street program it is suggested that stop signs be placed at all streets intersecting a Major or Collector street where they are not existing at present. This will provide the needed through-flow of traffic on these routes.

BUSINESS DISTRICT TRAFFIC AND PARKING

The circulation of traffic and parking in the business area has been observed by the Consultant on several occasions. Because of the width of the major

STERLING



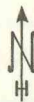
Legend

- MAJOR THOROUGHFARE
- COLLECTOR
- LOCAL STREETS

THOROUGHFARE PLAN

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT,
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.



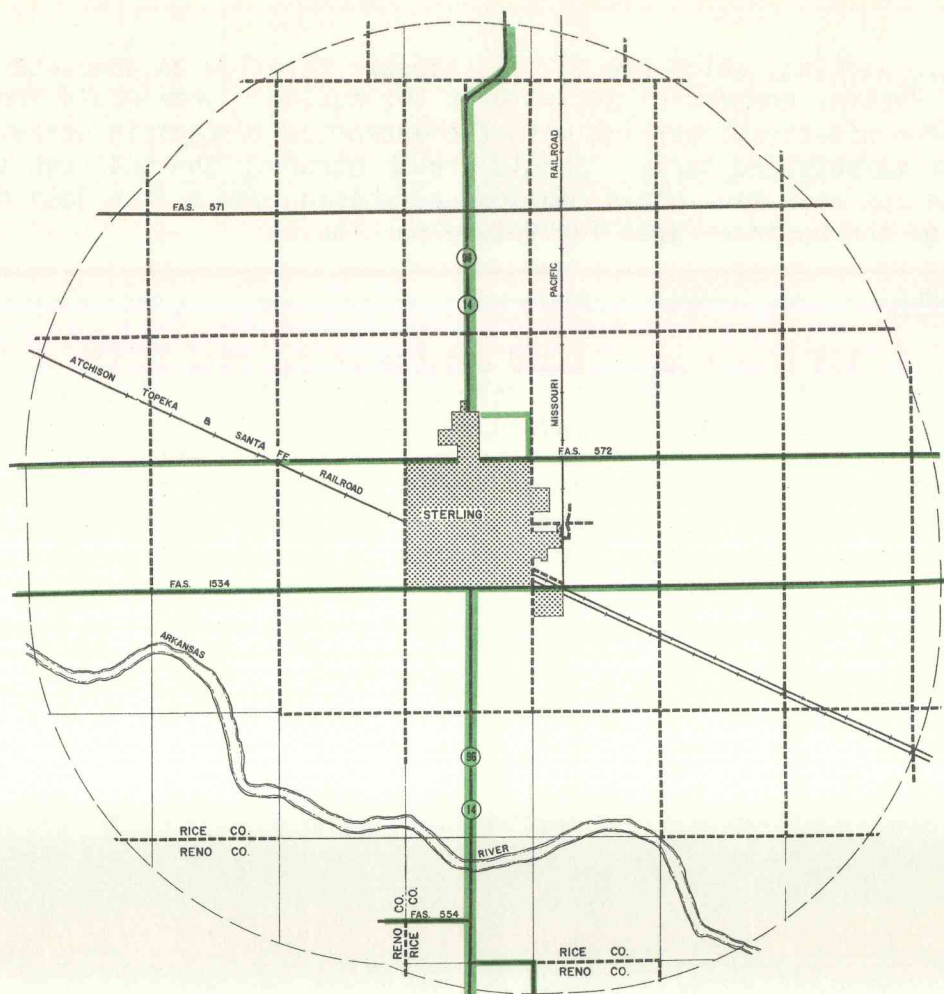
400 0 400 800
SCALE IN FEET

Plate 12

streets, angle parking, which now exists, appears to allow an adequate flow of traffic. Present commercial activity in the business area would indicate little need for off-street parking with the exception of certain activities such as super markets and banks. Should growth occur in the business area the City, the business men should consider purchasing one or two lots on either side of the business area for future parking.

THREE-MILE AREA

There is very little growth anticipated outside of the city limits of Sterling, with the exception of the northeast corner discussed above. The Thoroughfare plan for this area, therefore, is made up of existing State Highways and Federal Aid Secondary routes. No changes in this system are anticipated for the future. Should industrial growth occur to the east of town there may be a need for a good connector road between FAS 572 and 1534. Plate 13 is a reproduction of the existing and proposed system in the three mile area of Sterling.



STERLING 3-MILE AREA

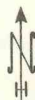
THOROUGHFARE PLAN

Legend

- MAJOR THOROUGHFARE
- COLLECTOR

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT,
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.



2000 0 2000 4000
SCALE IN FEET

Plate 13

CHAPTER SIX PUBLIC UTILITIES

Public utilities are provided in response to existing or impending development and become major instruments of planning policy. Through proper implementation of these policies, the community can influence the direction of growth and stimulate the development of selected areas.

WATER SYSTEM

Water and its availability is, for all practical purposes, mandatory to any developing community. This is true for domestic use as well as existing and potential industrial users. Care must be taken to assure not only an adequate supply of water, but also that the quality of the water is acceptable and that proper pressures are maintained. This part of the Community study is not intended to be a utility survey as such. Its purpose is to show, in very general terms, proposed utility extensions to meet present and anticipated growth trends. Before the City becomes involved in any major utility extension it is recommended that detailed engineering surveys be made of the utility situation in the City, which are beyond the scope of this study.

EXISTING WATER SYSTEM . . . The existing water supply in Sterling consists of 2 wells and a water plant. Three pumps are utilized, all of which are quite old. One pump is obsolete and parts are difficult to find. There are no storage facilities in the City. The wells can pump about 1,000 gpm and according to City officials the demand rarely goes above this. Should the City develop any major industry there will be a need for storage facilities and should be considered for the future.

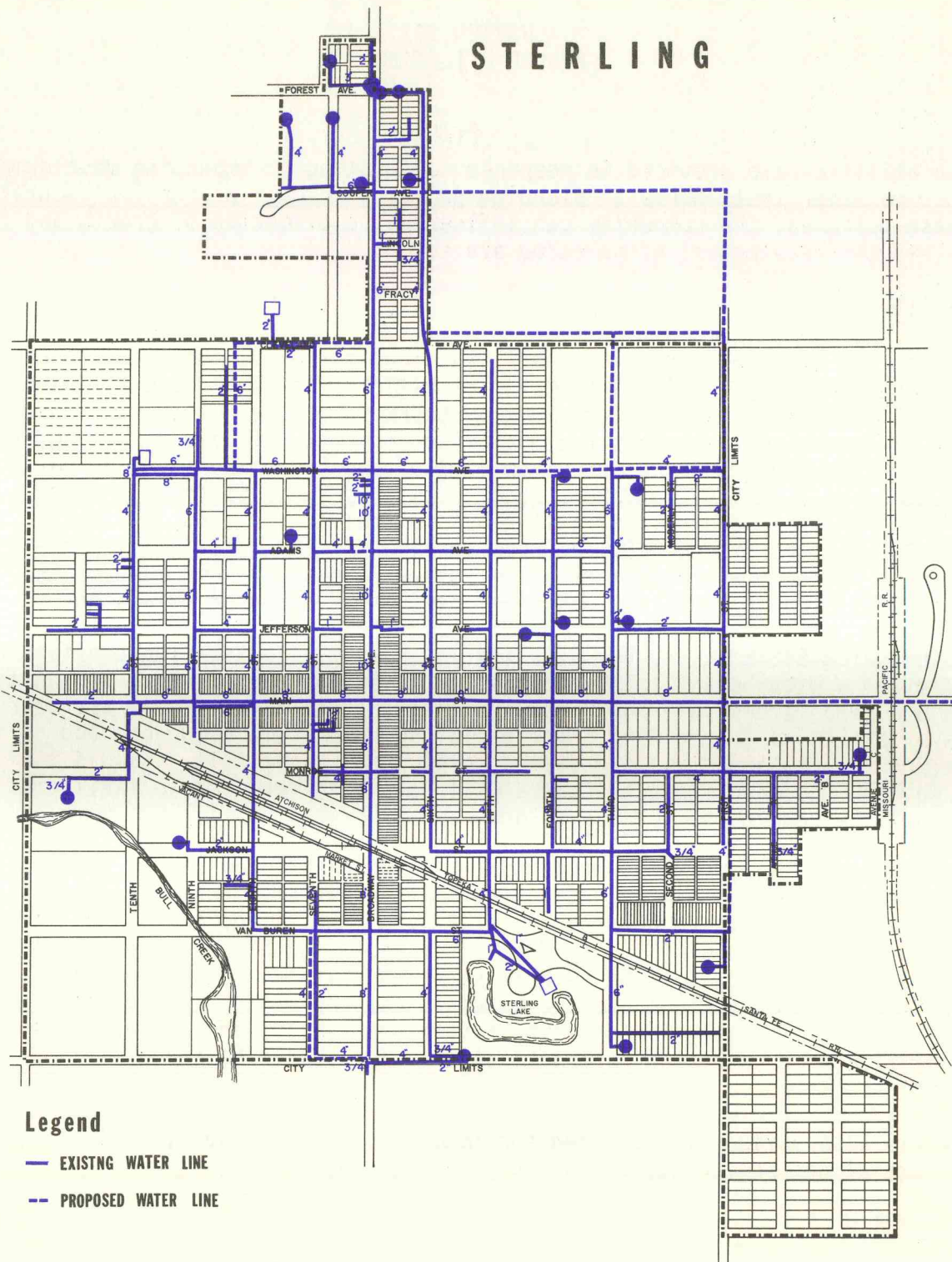
The distribution system is composed of 10, 8, 6, 4 and some 2 inch water lines. Plate 14 shows the existing distribution system and the projected extensions. It should be pointed out clearly at this stage that exact locations of proposed lines will vary from those shown on this map due to soil, topography, etc. which will be determined as the extensions are provided. The primary recommendations are the extension of the 8 inch line on Main Street to serve industry to the east of town when the demand arises. Also the anticipated growth area northeast of the City should be served with 6 inch mains.

There are also various loops shown for future City development, most of which are either scheduled, or in the planning stage.

SEWER SYSTEM

One of the most important services to residents of a city is the collection and treatment of sewage. This, along with the availability of water, is highly instrumental in being able to induce industrial development within an area.

STERLING



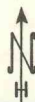
Legend

- EXISTING WATER LINE
- - - PROPOSED WATER LINE

EXISTING & PROPOSED WATER DISTRIBUTION SYSTEM

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT,
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM,
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.



400 0 400 800
SCALE IN FEET

Plate 14

EXISTING SEWER SYSTEM . . . The existing and proposed sewage system in Sterling is reproduced on Plate 15. The system is wholly within the City with the exception of the main leading to the treatment plant and the discharge line from the treatment plant. The mains consist of a 12 inch, 15 inch relief main and an 18 inch main to the plant. The laterals are 8 inch lines. Most of the area now served with water has sewer connections, and those areas projected for future water systems also are included in the future sewage recommendations. A main sewer line to the proposed industrial area east of town should be considered when development demands.

Extension of the system to the developing areas northeast will be required as the land is subdivided and developed. Because of the topography in the northwest section of the City it is recommended that the City complete an engineering survey of these areas in particular, for future extensions. The areas that will require sewage in the future are cross-hatched on Plate 15.

The sewage treatment plant has a rated capacity for about three thousand people (3,000) according to State officials. While the projected population does not reach 3,000 persons, the addition of an industry or two might require enlargement of the plant.

STORM DRAINAGE

The development of an adequate storm drainage system to handle surface water runoff is recommended for the City because of the flat topography and the incidence of standing water. The inadequate disposal of the surface water can have an adverse effect on the sanitary sewer system due to either direct connection to drains or to infiltration of ground water through joints in the sewer main and the manholes.

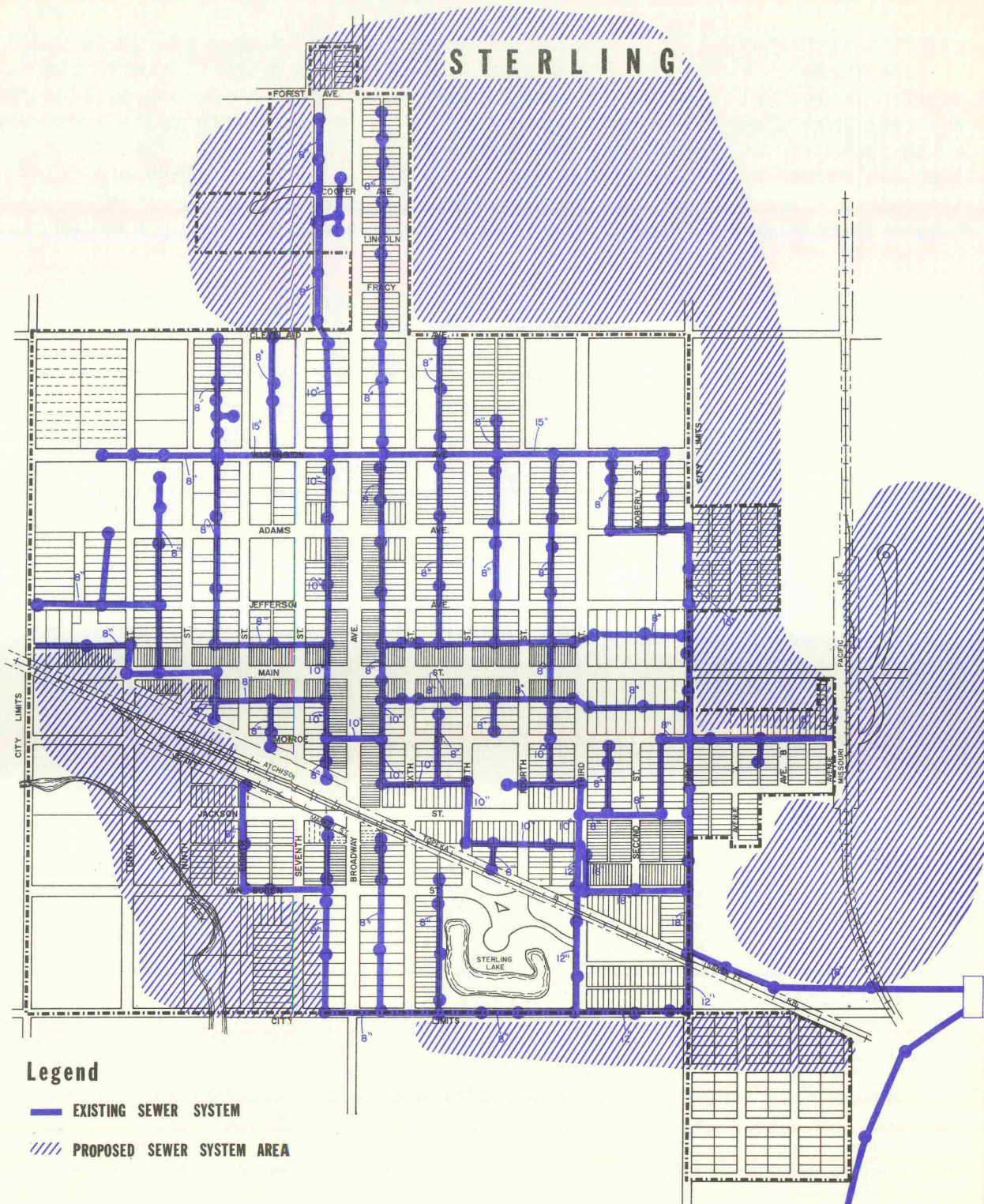
REFUSE DISPOSAL

At present the solid waste of the City is handled through private sources using the City land fill site south of town. According to City officials the system works well and the disposal is handled adequately. The City should continue to require close supervision on the dumping operations using recommended land fill standards to assure adequate health protection and possible reclaiming of the dumping site.

ELECTRICAL SYSTEM

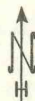
The City of Sterling generates and distributes electric power to the residents of the City. The distribution system has been greatly improved in the last three years and constant replacement of old lines is a policy of the City. Service to new customers has been no problem to the City in the past.

The electric plant has four engines generating electricity. Three (3) are gas engines and one is oil fed. These engines have a nameplate capacity of 3,190 KW. According to City officials there is a need for a new engine with a capacity of 2,500 KW to replace the smaller older engines.



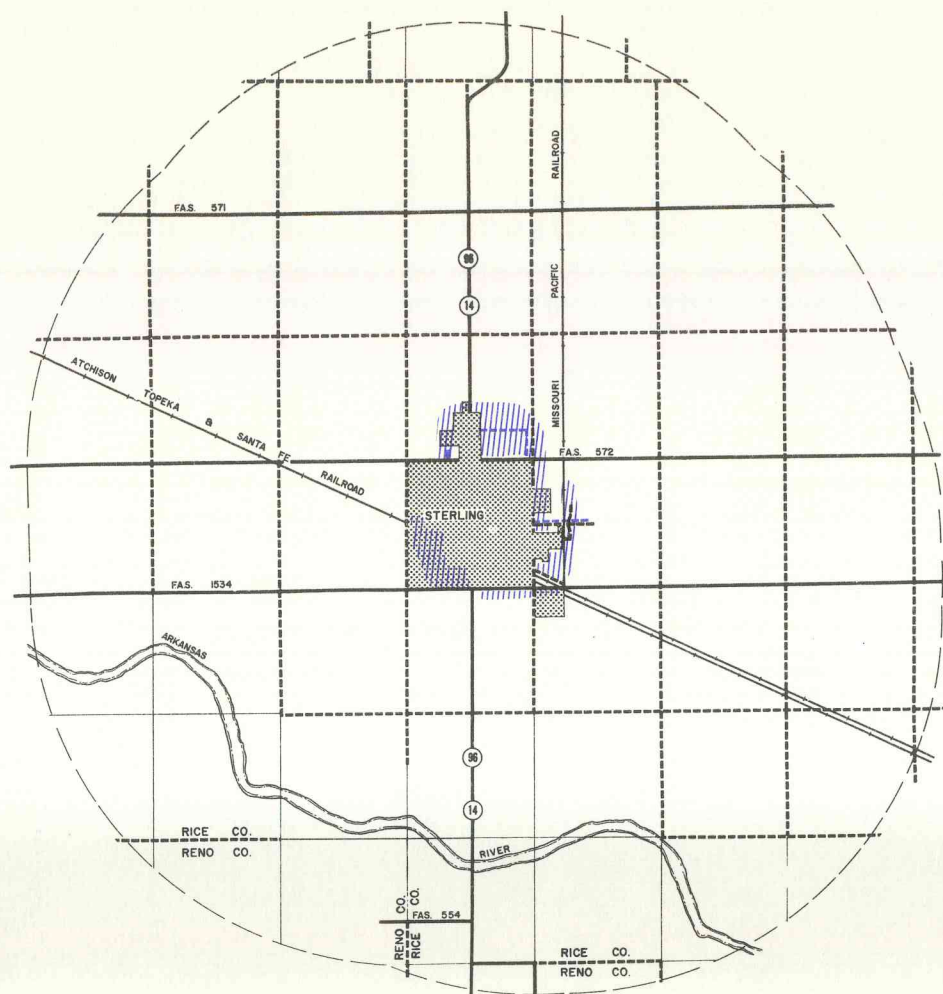
JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.






400 0 400 800
SCALE IN FEET

Plate 15



STERLING 3-MILE AREA PUBLIC UTILITIES PLAN

Legend

-  PROPOSED SEWER SYSTEM AREA
-  EXISTING SEWER SYSTEM
-  PROPOSED WATER SYSTEM

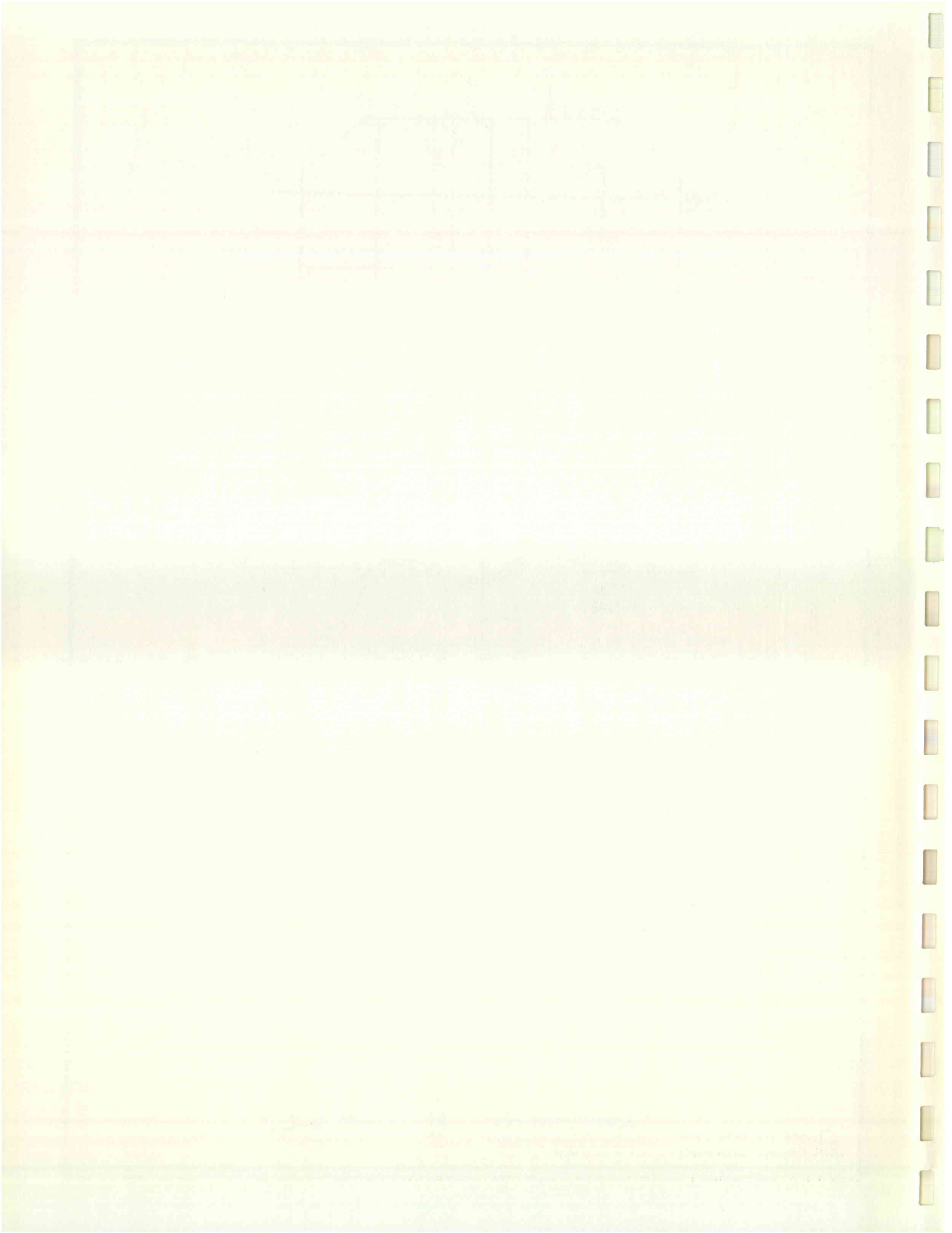
JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT,
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.



2000 0 2000 4000
SCALE IN FEET

Plate 15A



CHAPTER SEVEN DEVELOPMENT PLAN

GOALS AND OBJECTIVES

Prior to the final preparation of the development plan for the City, a reflection of the views and desires of the people of the community, acting through their elected and appointed officials, must be made in the form of policy statements. These statements are referred to as the goals and objectives of the planning process of the City.

Of primary consideration in this study are the people who make up the City and the relation of the planning process to the human resources and needs in the City. To achieve this the plan projects an arrangement of land use, coordinated to public facilities and utilities required to satisfy the needs of the population both existing and projected and prepares a thoroughfare system that ties the projected land uses together into a unified core.

The following generalized statements serve as guidelines to the preparation of the Sterling Community Plan. They are the views of the people, discussed by the Planning Commission, and reflect the way the City is to go in the future.

LAND USES - - - Protection of land uses through the development of compatible land utilization. Develop low-density residential land uses, avoiding crowding conditions, provide protection of land values both private and public, through well enforced regulatory controls.

ECONOMIC DEVELOPMENT - - - Promote policies, plans and programs to strive for a balanced economy. Strengthen both farm and non-farm activities in the area. Strive towards encouraging expansion of EXISTING industries through local bank financing and local sponsorship and endorsement of industries.

TRANSPORTATION - - - Using planned construction and repair, the City will continue to develop wide paved streets serving as the basis for a system that provides easy access from and to the living areas, the working areas, school areas and the shopping areas.

EDUCATION - - - Encourage expansion of the Sterling College activities. Assure proper land use control around the campus. Continue to update elementary and secondary education plants, facilities and teaching methods. Reserve more active year round use of ALL public and private school facilities.

COMMUNITY FACILITIES - - - Adopt plans for the logical extension of utilities when needed. Provide necessary funds for storm water studies and construction to relieve low-lying areas from storm water damage. Properly maintain and develop new public facilities as the demand rises.

PLANNING PROCESS - - - Retain a going planning administrative organization to review and up-date the planning process in the City.

FUTURE LAND USE PLAN

Plate 16 is an illustration of the proposed land use in and near the City of Sterling. It includes the various recommendations made in preceding sections of this study.

Future growth of the City will probably continue in the north east areas although proper storm drainage could enhance some development in other sections of the City.

The plan indicates a great deal of high density residential. This is not to be construed as an influx of apartments; rather this is a generalized area comprised mainly of single family residences on smaller lots; some duplexes and a few multifamily houses. The high density residential area south of Sterling College is an anticipation of probable student housing and teacher housing. The projected business area is surrounded by high density residential.

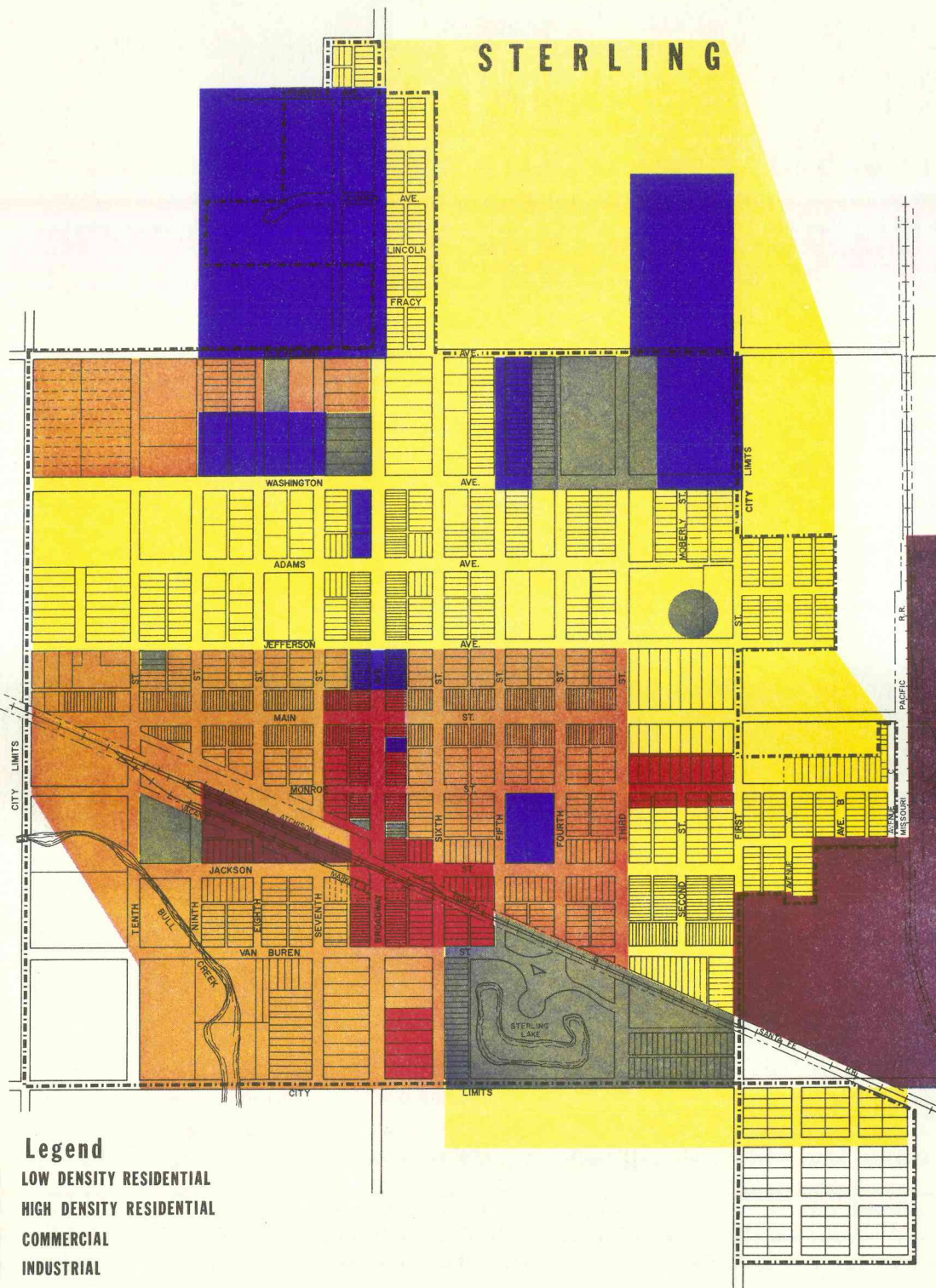
Low density residential is predominant in the north and northeast with a potential for some development south of the lake and park. The majority growth area for low density residential is shown in the northeast around the high school and cemetery.

Industrial areas are shown near mid-downtown and a much larger potential area to the east of town. If industrial development demands require lands west of the tracks up to the existing city limits, it is recommended that this land be developed into planned industrial districts so as to protect and enhance existing residential development.

The business area is shown as it now exists with some growth area. A firm policy by the downtown merchants to make the area more conducive to shoppers will be required to keep the majority of the retail business in the central area. There are two (2) neighborhood centers shown taking into account primarily existing retail operations.

The plan is intended to be a general appraisal of the probably uses of land in the future. This generalized plan used coordinately with the statistical data reviewed and analyzed in early sections of this report should serve as a long range guide when making planning policy decisions relating to the future growth of Sterling.

Based on projected population made in the population section, Table 16 was developed to give the City an idea of the amount of housing that would be required when the projected population increases are realized.



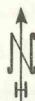
Legend

- LOW DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- PUBLIC & SEMI PUBLIC
- RECREATION - PARKS

FUTURE LAND USE

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY
AIDED THROUGH A FEDERAL GRANT FROM THE DE-
PARTMENT OF HOUSING AND URBAN DEVELOPMENT,
UNDER THE URBAN PLANNING ASSISTANCE PROGRAM
AUTHORIZED BY SECTION 701 OF THE HOUSING
ACT OF 1954, AS AMENDED.



400 0 400 800
SCALE IN FEET

Plate 16

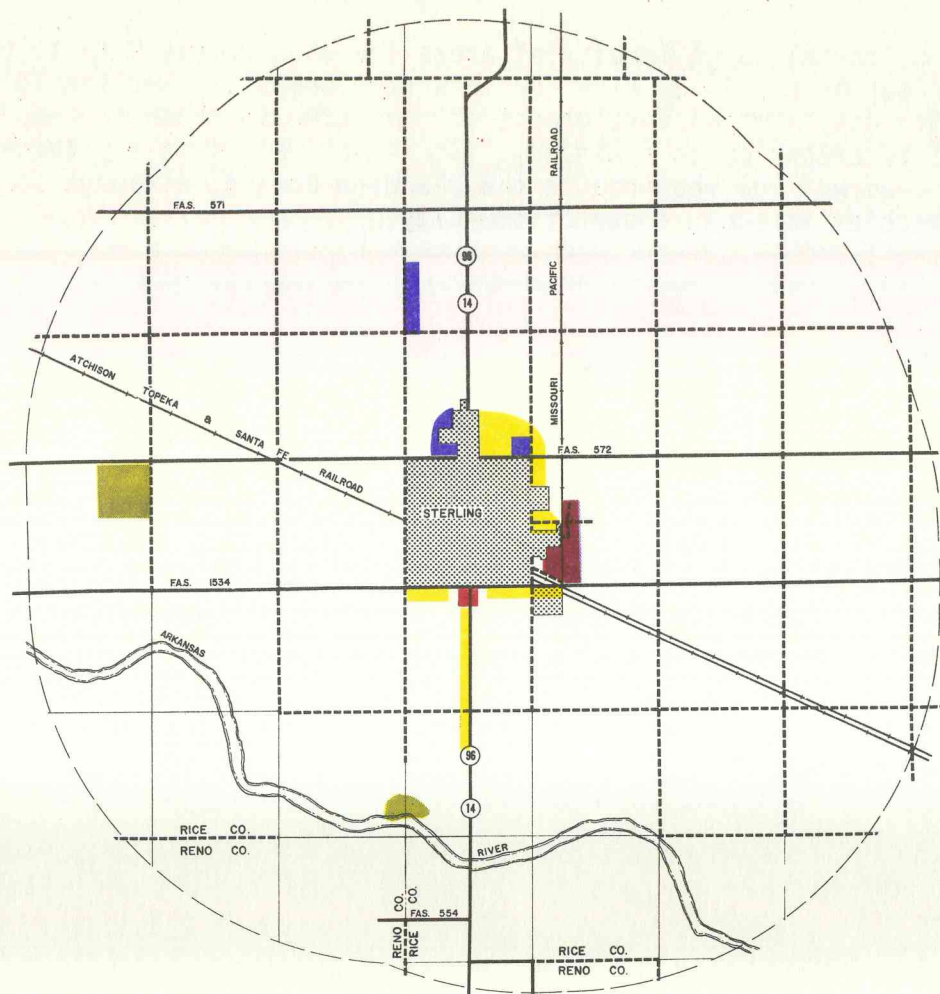
TABLE 16
RESIDENTIAL AREA REQUIREMENTS
STERLING

	<u>1960</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>Total For Planning Period</u>
Projected Population	2,303	2,418	2,476	2,614	2,721	2,842	2,842
Increase	--	115	58	138	157	71	539
Population per Dwelling	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Additional Dwelling Units Required	--	44	22	53	60	27	206
Land Requirements - Acres	--	14	7	17	20	9	67

In developing Table 16 , the high population forecast was used. It is important to remind the community that this plan must be flexible to allow for unforeseen changes; also, the complete development program in Sterling is based on an estimated growth for the planning period, not to any specific point on a predetermined time table. If projections are achieved earlier than suggested, the program must be stepped up; likewise if growth comes at a slower rate, or remains constant, then the planning period is extended. With the above limitations the probable area needed for residential development to accommodate the population projection of two thousand eight hundred forty-two (2,842) persons would be sixty-seven (67) acres. This figure includes access and open spaces around building lots. While there is at present more than two hundred (200) acres of vacant or agricultural land within the city limits, it is not anticipated that the future requirements for residential area will be met within this area. A number of reasons exist for this assumption the primary one being that developers find it easier to purchase uncluttered land for development. There, of course, will be some spotting of new residences but until storm drainage problems are relieved in certain sections of the City, development in these areas will proceed slowly if at all.

THREE MILE AREA

Plate 17 indicates the future land use for the three mile area surrounding Sterling. As mentioned previously very little growth will occur in this area under present conditions. The exception is northeast of the City and perhaps some residential dwelling will occur along the highway leading into town. Because of the tendency for certain uses to locate just outside the city limits, which are not always complimentary to an area, it is suggested that subdivision and zoning controls be exercised in the three mile area. While little growth can be visualized now, changes could occur which would then see growth in this area, at which time this plan should be updated.



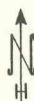
STERLING 3-MILE AREA FUTURE LAND USE

Legend

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- PUBLIC & SEMI PUBLIC
- PARKS & RECREATION

JCH and associates, inc.
PLANNING CONSULTANTS

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.



2000 0 2000 4000
SCALE IN FEET

Plate 17

Most of the potential large industrial areas lie outside the City to the east. Shown on the map is an area for this development. Care should be taken to allow only logical development of this area in order to keep the cost of utility extension to a minimum. It is not felt that any large commercial areas will be required in the planning period, although some highway commercial is shown south of the City.

CHAPTER EIGHT

CAPITAL IMPROVEMENT PROGRAM

Every unincorporated city in Kansas is required to prepare and adopt an annual budget. The process usually follows a standard procedure of analyzing current needs, studying the probable revenues, and subsequently budgeting these revenues to meet the operating needs of the city. The operating budget usually provides the services that a community demands for the ensuing year. Communities are becoming increasingly aware of the strains on the tax dollar to meet these required services, and consequently large-scale improvements come very slow, or are hastily conceived and developed through costly crash programs. The Capital Improvements program is designed to minimize the need for crash program development in a community and provide the community with a continuous look at the future required needs.

There are two terms used throughout the discussion in this chapter that require defining and understanding. These are the Capital Improvements Program and the Capital Budget. The Capital Improvements Program consists of a list of needed improvement projects, usually for a five or six year period, listed in priority rank, with estimated costs and methods of financing. The Capital Budget reflects the current year's capital improvements and becomes a part of the current city budget. As the current year of the Capital Improvements Program becomes a Capital Budget item, an additional year is added to the Capital Improvements Program, systematically allowing the community to look five or six years into the future for capital improvements. One of the very important reasons for continuously listing required improvements is that the community can plan and budget these items within the financial resources of the city.

Items found in the Capital Improvements Program are those items that normally cannot be financed through annual revenues, without seriously affecting these revenues. They include such projects as public buildings and equipment, streets, sewers, schools, and park developments. The annual review of the program provides the city with a certain amount of flexibility, to the extent that priorities may change, because of unforeseen occurrences, and projected costs can be refined and more accurate costs developed. There are numerous other reasons for developing a Capital Improvements Program, in addition to those mentioned above, and most of these reasons can be summarized in the five major objectives developed below.

1. The first objective is the effectuation of the General Plan by basing recommendations concerning the location and priority of proposed capital improvements on the General Plan.
2. Secondly, the Capital Improvements Program is intended to provide needed public facilities which are economically reasonable in light of probable city revenues and other financial resources.
3. The third objective is to create an opportunity for city officials, administrators and citizens alike, to discuss major questions on development policy. It allows an overview of what the future needs of

the community are, in relation to one another, which is not possible if proposals are presented separately on a crash program basis.

4. A fourth objective is to coordinate the various plans of each of the functions of the City Government, so that duplication of efforts or proposals are prevented, and to offer the various departments the opportunity to communicate and cooperate in the development of the community as a whole.
5. Finally, in the establishment of priority, the programs most needed and required are developed on the basis of their importance in relation to other required improvements.

FISCAL POSITION

A study was made of the present and projected resources of the City in order to project the financial capabilities of the City. Basic to this service is the tax-rate history and the bonded indebtedness policy of the City in addition to assessed valuation prospects.

ASSESSED VALUATION . . . Table 17 shows the assessed valuation for the City of Sterling in the years 1964 through 1968. This table indicated a slight increase of about three percent (3%) per year with the exception of 1966, when a small decrease occurred. The assessed valuation per capita showed a decreasing trend through 1966 and an increase in the latter two years. The increase in 1968 over 1964 was only slight.

TABLE 17
ASSESSED VALUATION
1964 - 1968

<u>Years</u>	<u>Population(1)</u>	<u>Assessed Valuation (\$000's)</u>	<u>Per Cent Change</u>	<u>Assessed Valuation Per Capita</u>
1964	2303	\$2,402	--	\$1,043
1965	2321	2,411	+ (2)	1,039
1966	2349	2,367	- .02	1,008
1967	2365	2,442	+ .03	1,033
1968	2389	2,526	+ .03	1,057

(1) Estimated Population

(2) Less than .01 Per Cent

TAX RATES . . . The total tax rate for Sterling during the years 1964 thru 1968 has been reproduced in Table 18. The tax rate remained very steady with the exception of 1966 when a sharp decline occurred. The decline occurred in the school levy. The City tax rate, which is the one that will be utilized in this financial study, remained quite constant during the five years showing a \$1.00 to \$2.00 increase each year except 1964 to 1965. This levy is applied to the assessed valuation of the community on the basis of the total levy for each \$1,000 in assessed valuation. It can be seen that theoretically the higher the assessed valuation, the lower will be the tax rate to produce a given amount. Thus, the importance of added tax base, such as new industries, becomes apparent.

TABLE 18
TAX RATES per \$1000 VALUATION
1964 - 1968

	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
CITY - Total	18.24	18.35	19.40	21.30	22.88
For Bonds (1)	2.80	2.64	3.00	2.65	4.00
COUNTY	15.61	16.77	20.85	20.73	20.84
SCHOOL	51.39	45.94	20.76	36.97	36.46
STATE	<u>1.75</u>	<u>1.50</u>	<u>1.50</u>	<u>1.50</u>	<u>1.50</u>
TOTAL TAX RATE	86.99	82.56	62.51	80.50	81.68

(1) Included in City Total

REVENUE AND EXPENDITURES . . . Total non-utility revenues to the City are shown by percent in Table 19 for the years 1964 to 1968. Revenues from tax sources have declined during the period reviewed with the increase being taken up by revenues from investments in the latter three years reviewed. Revenues from the park and pool concession have fluctuated with less revenue coming in 1968 than in 1964. Not included in this table are the cash balance brought forward from previous years budgets which will range from eighteen (18) to twenty-five percent (25%) of the total revenue for any given year.

Expenditure patterns for non-utility items are shown in Table 20. Nearly every item remained fairly steady during this period with the exception of street maintenance expenditures which fluctuated up or down every year reviewed. About eighteen percent (18%) of the total expenditures were allocated to payment of bonds and interest during the years reviewed, which is not extraordinarily high.

TABLE 19
REVENUES BY PER CENT (Non-Utility)
1964 - 1968

	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
From Tax Sources	71	74	65	65	60
Fines, Fees, Licenses, Permits	7	7	7	5	5
Parks and Pool	15	13	12	9	9
Interest on Investments	--	--	10	10	16
Other	<u>7</u>	<u>6</u>	<u>6</u>	<u>11</u>	<u>10</u>
Total-Per-Cent	100	100	100	100	100

Utility revenues and expenditures are, according to City officials, balanced so that maintenance and repairs are being made when needed and utility revenue bonds being paid on schedule.

TABLE 20
EXPENDITURES BY PER CENT (Non-Utility)
1964 - 1968

	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
General Administration	9	8	9	9	11
Fire and Police	25	22	28	30	32
Street Maintenance	18	27	18	23	16
Park Maintenance	13	9	10	10	9
Sewer Maintenance	16	16	18	12	14
Bonds and Interest	<u>19</u>	<u>18</u>	<u>17</u>	<u>16</u>	<u>18</u>
Total-Per-Cent	100	100	100	100	100

BONDED INDEBTEDNESS . . . The total bonded indebtedness as of May 31, 1969 for the city of Sterling is shown in Table 21. There is presently a balance of \$320,351.00 in general obligations and \$72,000.00 in outstanding revenue issues. Shown in this table is the estimated balances of these outstanding bonds by the end of 1974 which is the first five-year program of the City. As will be noted, the general obligation amount will be reduced slightly more than fifty percent (50%) and revenue bonds will be paid off.

TABLE 21
BONDED INDEBTEDNESS

	Balance 5/31/67	Estimated Balance 12/31/74
GENERAL OBLIGATION BONDS-		
1968 Street Bonds	\$159,534.00	\$ 80,000.00
"A" Street Bonds	9,000.00	---
"B" Sewer Bonds	35,000.00	15,000.00
"C" Street Bonds	94,000.00	47,000.00
Sewage Disposal Bonds	7,000.00	---
Temporary Street Notes	15,817.00	7,000.00
TOTAL G.O. BONDS AND NOTES	\$320,351.00	\$149,000.00
REVENUE BONDS		
Electric Revenue Bonds	\$ 72,000.00	---

In determining what the capacity of the City will be for the first five years, an estimation of the assessed valuation for 1974 was made and amounts to \$2,926,000.00. For the purpose of this study, the Consultant used twenty-five percent (25%) of total assessed valuation to arrive at the amount of capacity for the City by 1974. This amounted to approximately \$733,000.00. Deducting the estimated balance of outstanding bonds by 1974, shown in Table 21, the amount of estimated capacity for 1974 is about \$585,000.00, which puts the City in a most favorable position to accomplish recommended improvements.

TABLE 22
CAPITAL IMPROVEMENT PROGRAM
STERLING, KANSAS
1970 - 1974

<u>PRIORITY NUMBER</u>	<u>IMPROVEMENT</u>	<u>PROJECT COST</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>SOURCE OF FUNDS</u>
1.	STORM WATER SYSTEM	\$250,000	\$50,000	\$200,000				Bonds
2.	FIRST STREET IMPROVEMENTS Main to Cleveland	40,000		20,000	\$20,000			Bonds-Gas Tax
3.	CAMP SITE - Sterling Lake Park	15,000		9,000	6,000			Bonds-Federal and State Aid
4.	CLEVELAND - Broadway West	40,000			40,000			Bonds-Gas Tax
5.	STREET RESURFACING (As Required)	30,000			10,000	\$10,000	\$10,000	Bonds-Gas Tax
6.	2 TOT LOTS - 10th and Jefferson Jefferson between 1st and 3rd	5,000				5,000		General Funds
7.	NEW ELECTRIC GENERATOR ENGINE	<u>400,000</u>					<u>400,000</u>	Revenue Bonds
	TOTALS	\$780,000	\$50,000	\$229,000	\$76,000	\$15,000	\$410,000	
Other Improvements for later years (not ranked by priority)								
High School and Elementary School Addition		\$400,000						
Sewer and Water Study - (Engineering)		\$ 1,500						
Adult Recreation Center		5,000						
Public Safety Building		\$ 35,000						
Main Street Improvement - East to Industrial Area		\$ 20,000						
Street Resurfacing - Continuous		\$ 5,000 per year						

CHAPTER NINE IMPLEMENTATION

The planning process in Sterling is a comprehensive, continuing program consisting of two main objectives. First the development of the Comprehensive Plan, which is a statement of the community goals and objectives, expressed in terms of spatial distribution of activities and facilities and secondly, the effectuation of the Comprehensive Plan through governmental policy procedures, regulatory controls, Capital Improvements Programs and citizen participation programs.

The first objective has been fulfilled in the preceding sections of this report. The second objective, and probably most important, is putting the plan into action, which will be discussed in this chapter. Only by adopting the recommended effectuating programs, will the City of Sterling achieve the results desired from the investment made in the planning programs. It is the purpose of this chapter to outline the implementation procedure felt necessary to guide the planning process towards the desired goals.

The development of a City is made up of both public and private investments, and to assist in the achievement of the goals of the City, there must be a concentrated effort to assure continuity and co-ordination between these two segments of a City.

PUBLIC INVESTMENT

Techniques available for the effectuation of public works in Sterling are the Capital Improvements program procedures and mandatory referral of major public works to the City Planning Commission, for review as to conformity with the adopted development plan.

The Capital Improvements Program has been discussed in detail in Chapter 8, and only procedures will be discussed in this section. Once the Governing Body has adopted or recognizes the Comprehensive Plan as a guide for the development of Sterling, the logical function of the City Planning Commission is to make recommendations on needed public improvements in conformance with the comprehensive plan. One possible method of accomplishing this is to require that all government divisions within the City submit a list of needed improvements to the Planning Commission two or three months ahead of the budget setting date. The Commission will review the improvements requested as of the budget setting date. The Commission will review the improvements requested as to their conformity with the Comprehensive Plan of the City and report to the Governing Body. This would be the procedure for the 5 Year Capital Improvements Program and the recommended Capital Budget for the coming year. The Governing Body would then review the Capital Budget as part of the annual budget. Public hearings may be helpful during the preparation of the program to assist in keeping the public well informed on proposed public improvements for the City.

The mandatory referral element has been inferred in the above discussion. By definition it consists simply of consultation with the Planning Commission on matters affecting the physical development of the community, before final legis-

lative action is taken. This procedure in no way reduces the responsibility of the Governing Body to make the ultimate final decision on public improvements. It is intended to be advisory only, with respect to the effectuation of the Comprehensive Plan.

PRIVATE INVESTMENT

Major regulatory controls affecting private investment are the zoning and subdivision regulations, Minimum Standards Housing Ordinance, and other building codes.

ZONING ORDINANCE . . . The Zoning and Subdivision Regulations have been prepared, in a separate report, and were submitted to the City of Sterling. The Zoning Ordinance is a control used to determine the uses of land, by districts, in the planning area. The concept of zoning is positive, rather than negative as so many people think, in that it is used to group together those land uses which are harmonious in nature and complimentary to each other. Its purpose is to promote the "highest and best use" of the land, to conserve public and private property value, and to contribute to the orderly development of the City.

The administration of the zoning ordinance is a continuing function of the Governing Body, the Planning Commission and the Board of Appeals. The Planning Commission, under State Law, is not formally responsible for the mechanical procedures involved in zoning administration, but is and should be responsible for study and recommendation on any proposed zoning change or amendments that affect the development of the City, which includes virtually every proposed change in the zoning or use of property.

It must be emphasized, at this point, that the ultimate legal responsibility for administering and amending the Zoning Ordinance and Map lies with the Governing Body alone. Therefore close cooperation and coordination should be sought between the Planning Commission and the Governing Body so that the planning process will produce the best possible results for the citizens of Sterling.

Very little has been written concerning the Board of Appeals and their policy and procedures except in professional and technical papers. Under existing State Law, this agency has the power to make variances and special exceptions to the Zoning Ordinances. The Board of Appeals is, in fact, a legislative arm of the Governing Body, and appeals from the action of this Board must be made directly to the courts. The purpose of this Board is to give relief from the strict terms and interpretations of the Zoning Ordinance, in those cases that are UNIQUE. It is not intended to be, nor should it ever be allowed to give wholesale, or blanket variances from the ordinance because of pressures both political and private, or for any other of a host of reasons that have been illegally used in other cities. The law is quite specific relative to the conditions that must exist before the Board can legally grant a variance or exception. The Board may NOT, UNDER ANY CONDITIONS, ALLOW A USE, OR CHANGE OF USE, OR REZONING of a parcel of land to allow a use not specifically listed in the district in which the parcel is located. It is very important to the successful use of the Zoning Ordinance that the Board of Appeals members be cognizant of the planning goals, policies and principals of the City. It is recommended that periodic meetings be held

between the Board and the Planning Commission so that continuity of the planning process can be realized.

SUBDIVISION OF LANDS . . . The subdivision regulations offer the community several advantages in the control of land development such as: the dedication of roads and thoroughfares; the location of streets and their width; drainage and utility easements; and design standards for streets, lots, blocks and public improvements. It allows the City to integrate new land development into the framework of the Comprehensive Plan, and acts to protect the citizen from premature subdivisions, poor locations with respect to floods and other dangers, duplication of expensive public improvements and proper locations of community facilities.

HOUSING ORDINANCE . . . A brief description of the housing conditions in Sterling was given in Chapter 3, along with recommended procedures and action to assist in the elimination of poor conditions in Sterling. A Minimum Standards Housing Ordinance and other building codes are necessary to assure the citizens that they will have a safe and decent home in which to live. In this area we are dealing directly with the people of the community to a very high degree. Special consideration should be given, in the preparation of the Housing Ordinance, to circumstances that will undoubtedly occur in administering this code. This is not to infer that the Housing Ordinances should not be enforced equally to all persons and structures; on the contrary it is recommended that the ordinance be prepared in such form that it CAN be enforced fully. It can be anticipated that hardship cases will reveal themselves, if the ordinance is properly enforced. The City must assure itself and the citizens that there will be remedies available for these cases, in the form of adequate housing, within the means of the people being displaced, financial aid and assistance, relocation aid and assistance, and adequate counseling for complete understanding of the program and its problems. Even though the goal of this process is to give the City safe and decent structures, the affected people must be given top priority, or the program cannot be fully successful.

CITIZEN PROGRAMS . . . Citizen participation and education programs, by their very nature, are required in order to have an effective community planning program. Citizens must be informed about the nature of planning, the Comprehensive Plan as it relates to the community and community life, and there must be a motivating force to stimulate public interest and encourage active support for the planning process.

Information programs are often helpful in achieving citizen participation. All forms of information dissemination should be used including newspapers, radio and television, civic and social clubs, churches and schools, and personal contacts. Representatives from the various groups mentioned above should be appointed to attend City meetings and functions and report back to the group for discussion and reactions. Personal contacts by members of the City Government and Planning Commission can be very helpful in keeping the citizens informed on planning matters. Special efforts should be made in the local schools to inform the students about local community problems and the planning programs in the City.

All citizens should be encouraged to attend public hearings on planning matters

as well as other City activities. Everyone should be invited to speak out on matters that concern the City. This is helpful not only to a fuller understanding by the citizens but it gives the City Government the opportunity to interpret the thinking of the people in the community on City problems and developments.

INTERGOVERNMENTAL COOPERATION . . . There is no progressive community in our land today that lives within a vacuum. Our society is too complex to draw imaginary lines of demarcation between "city-folk" and their "rural friends". Cooperation is not only needed, but is required to assure the desired growth and development the community seeks. Laws are passed to give City controls over adjacent lands, but to be completely effective, the people living within these areas must be as informed of the planning process as are those that reside in the City. This cooperation reaches all levels of government, from the local community to the Federal Government.

Intergovernmental cooperation has been evidenced by the participation of the Federal Government and State of Kansas in the preparation of this important planning program for Sterling, and every effort should be made to assure a continuing cooperative spirit between these agencies and the City of Sterling. Many State agencies were contacted and assisted in the preparation of certain elements of this plan including the Kansas Department of Economic Development; the Highway Commission; the State Education Department; and the State Health Department. These agencies have the trained personnel and resources to offer continuing assistance, in their related fields, to Sterling, and can be very helpful in the endeavors of the City to effectuate the Comprehensive Plan.

ANNEXATION . . . Annexation programs of the City should be consistent with the development of the area adjacent to the corporate limits. As these lands become urban in character, they should be annexed to allow proper development of the City. Positive annexation programs usually receive greater understanding and support by future citizens of a community when the annexation is accomplished through a definite program of annexation according to the Comprehensive Development Plan of the City.

SUMMARY

The Sterling Comprehensive Plan has proposed a long-range guide to community development. The Plan consists of a positive program of desirable land utilization practices, community facilities requirements and locations, thoroughfare considerations and financial implementation plans. This chapter dealt with the basic methods of Plan effectuation including controls and citizen participation programs. With the stimulating interest and support of the citizens of Sterling for the planning programs outlined in this report, it is very likely that the City will be a more convenient, efficient, economical and attractive community in which to work, live and raise children. The completion of this study is but the beginning of the planning process in Sterling. It will now be necessary to constantly review, re-analyze and update the future recommendations to meet the changes that will surely occur in our society.