City of Winfield, Kansas

Comprehensive Plan

1993





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INTRODUCTION TO THE PLANNING PROCESS

The Comprehensive Plan is designed to provide the City of Winfield with an analysis of existing physical and social conditions, and an inventory of public facilities, services, and utilities. The Plan also provides policies for development, recommendations for future improvements, and a land use plan which serves as the basis for zoning decisions. While the Plan is designed to provide long-term guidance to the City's decision makers in the form of goal statements, the City has also chosen to delineate short term "plans of action" for attaining specific goals. This approach reflects Winfield's desire to show incremental gains toward the attainment of specific goals, and to adjust specific strategies as conditions change.

The short-term nature of Winfield's strategic planning framework is also reflective, to some degree, of the revised state planning and zoning statute, which was adopted by the Kansas State Legislature in 1991, and became law in January 1992. The new statute provides, among other things, that the Planning Commission will have authority to provide review and comment to the governing body in matters of capital improvement funding and City investment in various utility and facility projects. In addition, the statute designated the governing body as the final approving authority for the Comprehensive Plan, rather than the Planning Commission.

The Planning Commission's increased involvement in the allocation of City resources calls for the Planning Commission to have a thorough working knowledge of all facets of the City's operations, and the ability to weigh yearly budgetary decisions against long-term planning goals. Winfield's Comprehensive Plan has therefore been structured in a way that addresses short term strategies in the context of attaining long term goals. As strategic targets are met, they may be set aside or adjusted in the yearly update of the Plan. Kansas state statutes require that the Plan itself should be updated on an annual basis, to address changing conditions. The requirement for approval of the Plan by the governing body also requires the City Commission to consider planning and zoning issues in the context of programming for utilities, public facilities, and fiscal issues.

Winfield has a long history of planning for the future, and has had comprehensive plans prepared, first in 1964, and again in 1975. In this edition of the Plan, citizen participation has been enhanced through the use of an opinion survey which was mailed to 1,000 households in the planning area, and which had an exceptionally high rate of return (49.5 percent). The results of the survey are intended to provide the City's decision makers with an expanded level of public input in the formulation of City goals, and support for policies and strategies for implementing the recommendations of the Plan. In addition, goals, and "plans of action" included in the Plan were formulated by specific Task Force committees which were comprised of City Staff, Planning Commissioners, and interested citizens.

To allow planning to work for the community, it is important to understand what is involved in the planning process. The planning process includes:

 an analysis of existing social, economic, physical, and environmental conditions and characteristics of the community;

- the application of accepted planning principles;
- development of goals and plans of action for future development, and;
- creation of policies and implementation tools to guide future decisions and actions.

The Comprehensive Plan for Winfield is intended to provide the City with a set of development policies, recommendations for future actions, and a Future Land Use Plan map that will help guide the City's anticipated future growth and development. The Plan includes the incorporated area of the City of Winfield and the unincorporated 3-mile area which surrounds it, and covers a planning period extending to approximately the year 2000.

This plan is intended for use by public and private officials in guiding decisions dealing with land use, public programs and services, and investments in public facilities. Decisions such as locations for new housing developments, and new industrial and commercial developments; road and utility improvements which might best foster additional development; and designating areas where annexations might be in the best interests of the community can all be guided by the Plan. By following the policies and recommendations of the Comprehensive Plan, it is possible to control the cost of providing public services to the City of Winfield more efficiently.

While the final Comprehensive Plan for Winfield contains specific goals, and recommendations for future action, it must be understood that the Comprehensive Plan is a <u>guide</u> based on existing conditions. These conditions, along with local concerns, priorities, and attitudes, will change over the course of time, and must be reviewed and incorporated into the Plan on a periodic basis.

Just as this effort is to update a previous Plan for the City of Winfield, future efforts must also be undertaken to adjust this Plan. Statutorily, the Plan must be reviewed annually by the City Planning Commission. A comprehensive update will not be necessary annually, but the City should not wait more than ten years to perform a comprehensive update. Change may not occur as quickly in Winfield as it does in some areas, but the pace at which change does occur is accelerating, and the impacts of national trends can be felt in Winfield much more quickly than once was the case. A commitment by the City to making a strong planning program a major part of the local government process is vitally important in allowing the City to be responsive to change when it occurs. Such an effort, coupled with an active and informed Planning Commission and City Commission, will allow this Plan to remain a dynamic document which will consistently reflect local attitudes and concerns, and serve the City well for years to come.

* * * * *



PHYSICAL/ENVIRONMENTAL FEATURES

A. LOCATION

Winfield is located in an area of relatively flat terrain with major variations occurring around the fringes of the present urban development. These major variations in terrain are the Walnut River to the west and south of the City, Timber Creek to the north, and the "Cup and Saucer" hills on the eastern fringe of the City. Very little development has occurred north of the present City boundaries, on the large area of low land between the Walnut River and Timber Creek, due to periodic flooding. Areas along both sides of the Walnut River and Black Crook Creek are also subject to flooding and very little new growth has taken place there. The confluence of these watercourses encircles nearly 80 percent of the City, creating serious barriers to contiguous development. Development that has gone beyond this barrier to the south and west is fairly scattered.

B. TOPOGRAPHY

The flat topography of the City is broken to the west of the Walnut River by a fairly high bluff which affords an excellent view of the urban area for persons entering from the west. The area north of Ninth Avenue and east of College Avenue has several prominent ridges. The Winfield State Hospital and Training Center, Winfield Correctional Facility, and Southwestern College are located on these ridges. Southeast of the urban area are two topographic features that rise above

the gently rolling terrain. These are known as the "Cup and Saucer Hills." Every effort should be made to preserve special topographic features for park and recreational facilities.

The relatively flat terrain, with minor ridge lines dividing the City into separate drainage areas, presents some problems in regard to serving these areas with adequate sanitary sewers. Lift stations are required in the area north of the Central Business District and the area in the southwestern portion of the City in order to provide sanitary sewers that are connected to the City's disposal plant. The largest portion of recent residential development has occurred in the south and western sections of the City. If this trend is to continue, engineering constraints will need to be resolved. Additional lift stations, and their associated expense, will be required for development to continue in the southern part of the City.

C. SOILS

The types of soil and general geologic features of the greater Winfield area are discussed in detail in the Soil Survey of Cowley County, Kansas, published in January 1980 by the U.S.D.A. Soil Conservation Service (SCS). This document provides detailed descriptions of the eight soil associations found in the Winfield area. It also provides an overview of the general characteristics of each of the soils, indicating the suitability or limitations of the soil for various uses. This information can be useful for general planning and engineering work, and will give public officials a better understanding of the general impacts of the soils in a particular location.

The SCS map is reproduced at Figure 2-1. Review of the soil classification map from the Survey shows two major soil types found in the Winfield area, with a third type in the extreme northern part of the City.

The Walnut River and floodplain areas are composed primarily of Verdigris silt loam, with smaller amounts of Brewer silty clay loam and Norge silt loam. The Verdigris-Brewer-Norge soil complex is characterized by deep, nearly level to moderately sloping, well-drained to moderately well-drained soils with slow to moderate permeability. A silty or clayey subsoil is found under these soils. These soils are well suited for crop production, woodland, and to a limited extent, pasture or rangeland, if erosion protection is provided. These soils have limited potential for most engineering uses because of flood hazards. The Verdigris-Brewer-Norge soils support a variety of native plant material. The plants found here range in size from shrubs like sumac, lilac, honeysuckle to deciduous trees including green ash, cottonwood, hackberry, honey locust, sycamore, hawthorne and Osage orange. Eastern red cedar and Austrian pine are two varieties of evergreens found growing in these soils.

The upland area east of the river consists primarily of Smolan silty clay loam and Sogn silty clay loam with areas of Labette silty clay loam. These soils are deep to shallow, gently- to moderately-sloping, well-drained to excessively well drained. Permeability is slow. A clayey and silty subsoil or lack of subsoil is the base for this soil complex. The Labette-Smolan-Sogn soil group supports a similar range of plant material. However, deciduous trees grow more slowly and may attain only half the height in twenty years as those growing in the Verdigris-Brewer-Norge soils. If protected against erosion, these soils have good potential for cultivation of crops and rangeland. The Labette-Smolan-Sogn group has high shrink-swell potential, low strength, and shallow depth to bedrock which requires consideration in construction planning.

The Vanoss-Tabler soil group occupies a small area in the north part of the City. This group is nearly level to moderately sloping; the Vanoss and Bethany soils are well-drained, and Tabler

soils are moderately well-drained. Vanoss soils have a silt loam surface layer and a silty clay loam and silt loam subsoil; Bethany and Tabler soils are also characterized by a silty clay loam surface layer and silty clay subsoils. These soils are well suited for crop cultivation, but may require drainage in level areas. They have high shrink-swell potential and low strength which must be considered in engineering and construction applications.

In summary, the Soil Survey of Cowley County, Kansas, provides a detailed analysis of the soil characteristics of Winfield and its planning area. This information should be used by the City in its review of future development proposals as a guide to understanding the general impacts of such proposals on soils. In addition, the information can be used in developing appropriate development regulations, construction standards, and building requirements and codes to account for the limitations these soils present.

D. **FLOODPLAINS**

The City of Winfield participates in the National Flood Insurance Program; Cowley County did not until the Fall of 1992. At that time, the County re-entered the program. Winfield entered the regular phase of the Floodplain Management Program in 1979. The Federal Emergency Management Agency (FEMA) issued a Flood Insurance Study for Winfield in August 1979. The study was updated in 1989, and provides the primary source of information on the extent of flood hazards within the city limits.

The Flood Boundary and Floodway Map gives information related to designated floodways and the location of the "floodway fringe" area. Figure 2-2 shows the extent of the 100-year floodplain in Winfield. Areas shown outside the city limits were interpolated from Winfield's Flood

Insurance Study. The floodway area is the portion of the floodplain subject to the greatest level of restrictions under the Flood Insurance Program. The floodway constitutes the main channel and immediately adjacent portions of the floodplain that naturally carry the greatest volume and velocity of flood waters. The determination of the extent of this area is based on the hydrologic and hydraulic analyses conducted as part of the preparation of the Flood Insurance Study.

Construction or development of any kind is virtually prohibited in the floodway because of the necessity of keeping this area open to carry flood waters.

The "floodway fringe" area constitutes the remaining part of the floodplain. It is subject to inundation during the 100-year flood, but the flood waters are not considered to be of as great a volume or velocity as in the floodway. The Flood Insurance Program allows some development to occur in the floodway fringe area, provided the development is floodproofed and the development does not increase the flood hazard on adjoining or upstream properties. The specific requirements for development in these areas are found in the Floodplain Regulations of the City's Zoning Ordinance

Due to its location in relation to the floodplains of the Walnut River and Timber Creek, flooding has historically been a major problem for Winfield. Severe floods occurred in 1904, 1923, 1928, and 1944, causing millions of dollars worth of property damage and inundating much of the City. Efforts to contain the rivers began in 1924 when a dike was constructed on Lincoln Street to Mill Street. It was extended to the South Santa Fe Bridge in 1936. After the 1944 flood, the dike was raised 3 feet above the high flood water level and extended from Lincoln Street to Harter Street.

Plans are currently underway to further extend the dike system in the southeast quadrant of the City. K-360, a planned highway bypass around the southeast portion of the City, will be built up so that it will serve as a portion of the dike. The project will incorporate an expanded level embankment, raised an average of three to four feet above the current dike with the road located on top of it. This will provide protection from the 100-year flood event in the southeast part of the City, in the vicinity south of Nineteenth Avenue.

E. MINING ACTIVITIES

As evidenced in the architecture of many of Winfield's older homes and buildings, limestone quarrying and rock cutting were once important components of the Cowley County economy. Mining of structural limestone no longer occurs in the area; some lesser-quality limestone and sand deposits are quarried for production of concrete and asphalt materials.

Oil and natural gas production formed the cornerstone of the Winfield economy in the 1920s. Oil and gas wells are still part of the local landscape, though to a much lesser extent than once had occurred. Oil production in Cowley County peaked at over 7 million barrels in 1925; production in 1988 was just over 1.2 million barrels.

* * * *





A. POPULATION

Understanding the components of a city's population and generating a population projection is an integral part of the comprehensive planning process. Population levels determine, to a great extent, demand for housing and business, utility and public facility needs, and land use in a community. Decisions based on population projections include those related to infrastructure, community service, public facility, and community programming needs for the future.

Understanding current population trends and the factors which influence changes in population are important elements of developing a Plan which will guide the community into the future.

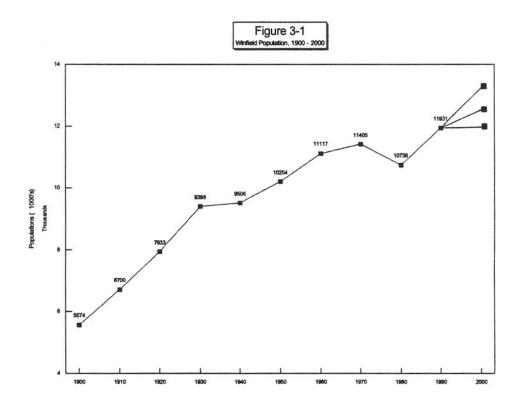
Projecting future population levels is greatly influenced by analyzing past population statistics.

Such an analysis provides an understanding of the conditions which have shaped a community's population over the years, and it is assumed that existing conditions and past trends will continue to some extent into the future.

One generally expects a community to display an historic population pattern based upon clearly identifiable local economic influences. Such was the case in Winfield between 1920 and 1930, when the City experienced rapid growth as a result of the oil and natural gas boom in this part of the country. A large supply of labor was needed in the oil fields, and the population expanded

quickly to accommodate this need. Since that boom, and from about 1950 to the present, Winfield has experienced slow but steady population growth.

In reviewing population figures from the 1990 Census, it appears that the rate of growth slowed between 1970 and 1990. However, the Census does not reflect rapid expansion or contraction of population which occurs in "boom-bust" cycles such as that which occurred in Winfield and this region of the country in the early 1980s, in conjunction with employment in the oil industry. Figure 3-1, which follows, shows Winfield's population from 1900 to the present. In addition, three population projections have been prepared for the year 2000 based on "low," "medium," and "high" growth scenarios.



The "low growth" scenario is based on figures prepared by the U.S. Bureau of the Census and is interpolated from the population projection for Cowley County as a whole. Under this scenario, population growth in Winfield would be less than 1 percent.

The "medium growth" scenario is based on an arithmetic average growth rate for the two decades from 1970 to the present and is probably the most accurate projection because it reflects a period of population decrease between 1970 and 1980, followed by an increase between 1980 and 1990 which would have a moderating influence on the overall average figure.

The "high growth" scenario is based on the average increase between 1980 to 1990, and tends to be unrealistically high because the 1980 figure was abnormally low, due to substantial outmigration in the late 1970s.

B. **POPULATION CHARACTERISTICS**

Understanding the characteristics of a city's population can help in determining community resources and needs, and identifying the user groups for various programs and facilities. For example, a high population of persons over age 65 would signal a potential need for an increase in programs or facilities for senior citizens; a high population of children in the 10-12 year old age group indicates a possible need for additional high school staff or facilities in the next 3-5 years.

1. AGE DISTRIBUTION

Figure 3-2 shows the age characteristics of Winfield's population, as reported in the 1980 and 1990 Census. There is a slight difference in reporting methodology, particularly for the

18-24 age groups which is reflected in the two figures. There are several notable characteristics, with implications for planning, shown in Figure 3-2.

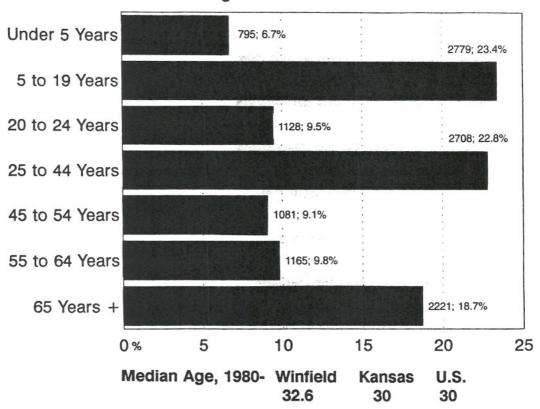
a. "Dependent" Populations

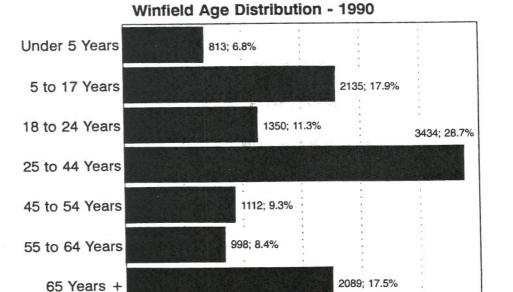
Both the 0-19 age group and the 65+ age group are considered "dependent" populations, that is, these groups are less likely to have full-time employment, but at the same time, exert a demand for more services than the age 20-64 population. In turn, that portion of the population must fund support services for the "dependent" population. This has important implications for the property tax base, which funds public education, and funding for senior citizen programs, which may be derived from income or sales taxes.

It is interesting to note the "under 5 years" and "5 to 17" and "5 to 19" categories in Figure 3-2. Given the differences in reporting for these groups, they have remained approximately the same size in 1990 as in 1980. This is of particular importance in planning for public schools; figures included in Part 7 of the Plan indicate that enrollments at the elementary and high school levels will reach new highs in 2-3 years, after a decade of lower enrollments. This will affect USD 465 in planning for facilities and staff.

The 55-64 age group may require services and facilities in the next 10 years; the 65+ age group is the existing client population for senior services. Interestingly, the 65+ population has declined slightly more than would be expected through natural decrease

Figure 3-2
Winfield Age Distribution - 1980





Winfield Kansas U.S. Median Age, 1990 - 34.1 32.9 32.9

10

0 %

15

20

25

30

(deaths) since 1980. This could indicate an out-migration of seniors from the Winfield area.

2. RACE AND ETHNICITY

Racial and ethnic composition for Winfield, Cowley County, Kansas, and the U.S. are shown for 1980 and 1990. Generally, Winfield and the state exhibit less change than that which occurred in the U.S. in the past decade.

There have been slight increases in the black population in Cowley County and Kansas over the last 10 years; however, these increases were much greater at the national level. The figures also indicate a slightly higher population of persons of Asian descent in Winfield than in the rest of the state. While there were no significant changes in the ethnic composition of Winfield over the last decade, a pattern of slowly increasing diversity is emerging. While few changes in policy are implied with the change in population, it is important for employers and the general public to be sensitive to diverse backgrounds and mindful of civil rights laws and the importance of nondiscriminatory practices in employment, housing, education, and all other areas.

C. POPULATION PROJECTION

There are numerous factors that may have potential effects on the size of the local population.

These factors include: location of major industries in or out of the area; increases or decreases in the rate of births and deaths; and annexation of land area and the resultant population increase.

Table 3-1 **Characteristics of Race/Ethnicity**

	Winfield		Cowley Co.		Kansas		U.S.	
Race	1980	1990 ²	1980 ¹	1990 ²	1980 ¹	1990 ²	1980 ¹	1990 ²
White	N/A ³	91.6%	92.0%	91.8%	89.3%	90.1%	75.8%	80.3%
Black	N/A ³	3.2%	2.4%	3.1%	5.2%	5.8%	12.4%	12.1%
American Indian, Aleut, Eskimo	N/A ³	0.9%	1.4%	0.9%	0.6%	0.9%	0.6%	0.8%
Asian, Pac. Islander	N/A ³	2.3%	2.6%	2.3%	0.6%	1.3%	1.6%	2.9%
Other	N/A ³	2.0%	1.6%	2.0%	0.2%	1.9%	3.1%	3.9%
Hispanic Origin (any race)	N/A ³	4.0%	4.0%	4.1%	3.3%	3.8%	6.5%	9.0%

- Sources: 1. U.S. Census of Population, 1980
 - 2. U.S. Census of Population, 1990
 - 3. Figures not available for City, but are generally considered to follow those shown for Cowley Co. in 1980.

As shown in Figure 3-1, the rate of population increase in Winfield has slowed significantly in the last decade. The numerical increase between 1980 and 1990 was 1195 persons, for a rate of increase of 11.1%. Based on population projections for Cowley County as a whole, the rate of population increase between 1990 and 2000 is expected to slow further, to a rate of 0.2%. This translates to a numerical increase of 27 persons in Winfield's population by the year 2000.

The implications of this "static" population are positive. The slow rate of growth makes Winfield a community which is not likely to be financially stressed by the pressures of extraordinarily high growth or population decline.

D. ECONOMY/LABOR FORCE

Most of the statistics relative to the local economy and labor force are available only for Cowley County rather than the City. Comparative statistics for employment and unemployment are shown in Table 3-2. These indicate that Cowley County experienced a slightly higher rate of unemployment in 1990 than did the remainder of Kansas and the U.S.

Employment data is also shown in Table 3-3. Cowley County has experienced a shift from manufacturing to service-sector employment since 1980; however, this shift has been somewhat less pronounced in Cowley County than in the U.S. as a whole. This is indicative of the strong manufacturing sector in the county, and slower growth of service-related enterprises than has occurred at the national level. It is interesting to note that there have been steep decreases in the "mining" and "construction" sectors since 1980; this is reflective of the decline in the oil industry since that time.

Table 3-2
Labor Market Profile-Cowley County

Civilian Labor Force — Place of Residence

	1980	1990
Civilian Labor Force	16,594	18,171
Employment Unemployment	16,087	17,106
Unemployment Rate	507	1,065
	3.1%	5.9%
1990 National Average, Unemployment 1990 Kansas State Average, Unemployment	5.5% 4.4%	

Nonfarm Wage and Salary Employment — Place of Work

	1980	1990 ¹
All Industries	14,419	14,292
Goods Producing Industries	4,301 (30% of Total)	3,600 (25% of Total)
Manufacturing Mining Construction	3,000 443 765	3,154 175 275
Service Producing Industries	9,293 (70% of Total)	10,400 (75% of Total)
Transportation & Utilities Trade (Wholesale & Retail) Finance, Insurance, Real Estate	1,006 3,015 440	433 2,575 405
Services	4,832	3,941
Government Farm Employment	N/A 825	3,895 718

Source: Kansas Dept. of Human Resources, Labor Market Information Services
1. Six month average, January through June, 1990

Table 3-3
Employment Data
Cowley County, Kansas
Yearly Averages, 1976-1990

Year	Total Labor Force	Employed	Unemployed	Unemployment Rate (Percent)
1976	15,986	15,430	556	3.5
1977	16,694	16,097	597	3.6
1978	16,607	16,186	421	2.5
1979	17,430	16,903	527	3.0
1980	17,907	17,077	830	4.6
1981	18,357	17,662	695	3.8
1982	17,753	16,173	1580	8.9
1983	17,326	15,939	1387	8.0
1984	16,812	15,729	1083	6.4
1985	17,923	16,876	1047	5.8
1986	17,282	16,051	1231	7.1
1987	17,964	16,949	1015	5.7
1988	17,878	16,882	996	5.6
1989	17,996	17,215	781	4.3
1990	18,171	17,016	1065	5.9

Source: Kansas Department of Human Resources, Labor Market Information Services Division.

A listing of the Winfield area's largest employers is also included in Table 3-4. As would be expected, major manufacturers and government agencies have the largest staffs.

E. CONSTRUCTION ACTIVITY

Another measure of a city's economic well-being is reflected in construction activity.

Figures 3-3, 3-4, 3-5, 3-6 and 3-7 which follow show the value of construction based on the value of building permits issued in the 10-year period of 1982 to 1992.

Figure 3-3 shows the total value of all permits for the 10-year period. While permit levels for some years were notably higher than others, the average value is over 6 million dollars annually. Those years in which building activity was lowest (1983, 1987, and 1989) generally coincide with national and regional trends.

Figure 3-4, which shows the number of residential units permitted, indicates that single family residential construction occurred at a steady pace, averaging 15 units per year. Multifamily construction varied widely. In four of the ten years, no multifamily units were constructed; a moderate number of units were permitted in five of the years. Overall, the number of multifamily housing units permitted was low.

Table 3-4
Major Employers in the Winfield Area
(Employers with 50 + Employees)

Name	Product/Service	No. of Employees
Binney & Smith Crayola-Hallmark	Art Supplies	400
CASCO South Inc.	Injection molding	156
City of Winfield	City Government/Utilities	162
Cowley County	County Government	130
First Community Federal S & L	Financial, S&L	51
First National Bank	Financial	58
General Electric	Jet Engine Overhaul	839
Gordon-Piatt Energy Group	Combustion Equipment	215
Greif Brothers	Steel Barrels & Containers	58
KSQ Inc.	Blowmolding plastic	125
Morton Buildings	Metal Pole Buildings	57
Newton Memorial Hospital	Medical	246
Rubbermaid Speciality Products Inc.	Coolers & Ice Chests	1,071
Southwestern College	Education	188
USD #465	Education	355
Wal-Mart	Retail Store	100
Webster Engineering & Manufacturing	Burner & Custom Steel Fabrication	70
Western Manufacturing Montgomery Elevators	Custom production of elevators	104
Winfield Correctional Facility	Minimum Security Corrections	103
Winfield State Hospital & Training Center	Medical	862

Source: Winfield Area Chamber of Commerce, August 1991

Figure 3-3
Value of All Building Permits, 1982-1992

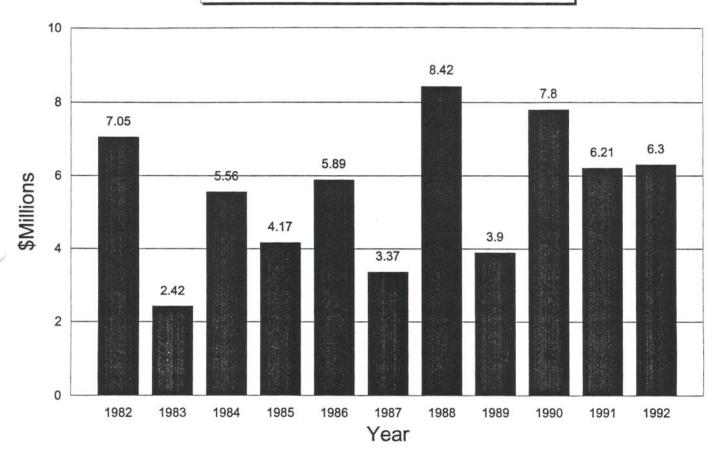
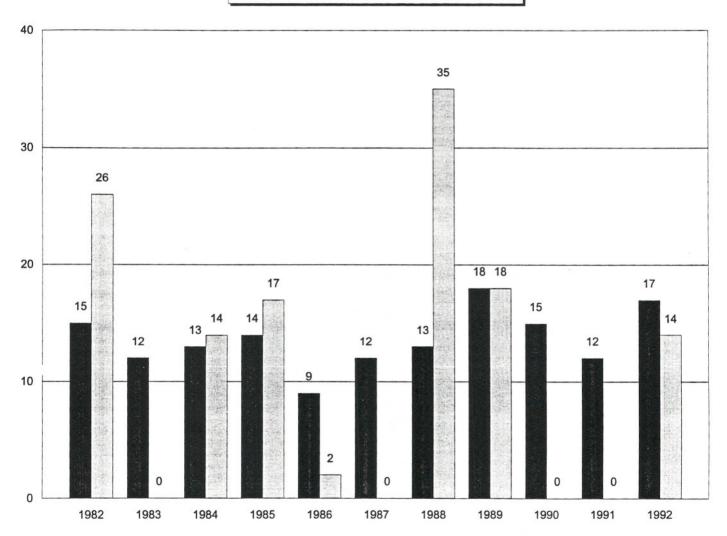
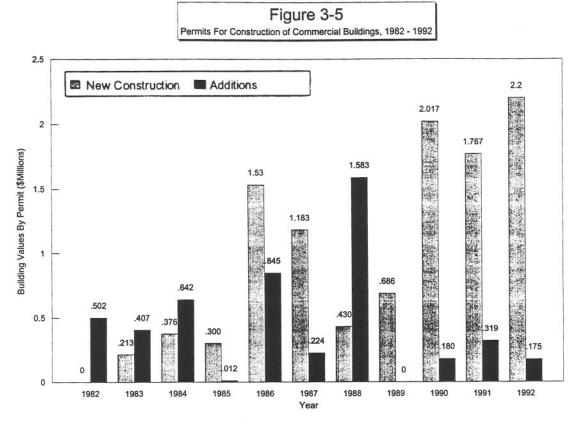


Figure 3-4
Number of Residential Units Permitted, 1982 - 1992



As discussed elsewhere in this plan, the shortage of housing for sale or lease in Winfield is a serious concern. The number of units permitted annually has not met housing demand.



Commercial construction, as depicted in Figure 3-5 shows an interesting trend. Significant growth has occurred in this sector in the past 6 years; 1990-1992 show the highest activity for the period.

Industrial construction, as illustrated in Figure 3-6 has consisted primarily of building additions rather than new construction. This indicates that existing industries are healthy and expanding. At the same time, this reflects little new construction, which is likely an indicator that few new industries have located in Winfield.

Figure 3-6
Permits for Construction of Industrial Buildings 1982 - 1992

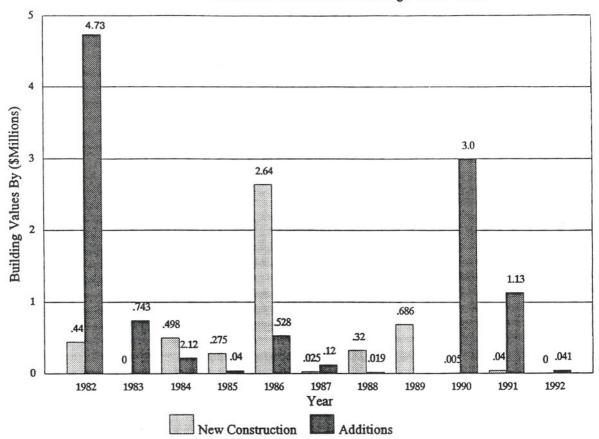
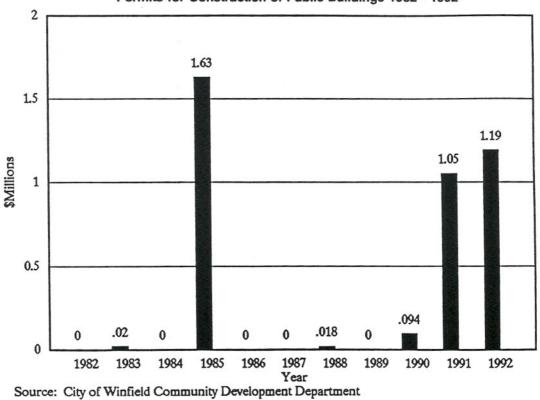


Figure 3-7
Permits for Construction of Public Buildings 1982 - 1992



Permit activity for public buildings is shown in Figure 3-7. In five of the 10 years of this period, there was no construction of public buildings. However, because Winfield is the county seat, construction of new public buildings and additions would be expected to occur from time to time. Major activity is reflected in figures for three of the last 10 years.

F. INCOME

Income data is not yet available from the 1990 Census. The figures presented in Tables 3-5 and 3-6 were derived from the "Survey of Buying Power," which is published annually by Sales and Marketing Management Magazine.

Table 3-6 shows the distribution of Effective Buying Income (EBI) by income level for Cowley County and several counties in the region. Cowley County has fewer households in the lower EBI groups (\$10,000-\$19,999 and \$20,000-\$34,999) and more households in the higher EBI groups (\$35,000-\$49,999 and \$50,000+) than Butler or Chautauqua Counties; there are fewer households in the higher EBI groups in Cowley County than in Sedgwick County. This data has important implications for the City as a whole and proprietors of commercial ventures in the area. For example, owners of retail stores in Winfield may wish to stock more moderately-priced varieties of goods than expensive ones. On the other hand, a store which stocks expensive merchandise may wish to advertise in the Wichita/Sedgwick County area in order to take advantage of higher income households.

Similarly, the City may use demographic information to gauge the need for facilities and programs to target various groups in the City. For example, development of the City golf course occurred after a demographic study indicated strong demand among potential user groups.

Table 3-5
Effective Buying Income - County Comparisons
Percent of Households by EBI Group

	\$10,000-\$19,999	\$20,00-\$34,999	\$35,000-\$49,999	\$50,000 +
Cowley Co.	22.5%	27.1%	16.5%	15.0%
Butler Co.	23.3%	30.8%	17.7%	9.5%
Chautauqua Co.	26.5%	25.1%	12.8%	12.7%
Sedgwick Co.	17.4%	26.4%	19.7%	24.0%

Source: Survey of Buying Power, Sales and Marketing Management Magazine, August, 1991.

Note: "Effective Buying Income" (EBI) is defined as disposable or "After Tax" income.

Table 3-6
Effective Buying Income and Retail Sales for Cowley County and Comparable Counties in Kansas, 1990

County	No. of Households (Thousands)	Median Household EBI ¹	Total Retail Sales (\$000)	Food ²	Eating & Drinking Places ³	General Mdse	Furniture Appliance	Auto ⁴	Drug
Cowley	14.0	\$26,140	\$202,981	41,241	19,358	28,885	6,051	36,965	8,861
Crawford	14.5	\$17,582	\$199,886	52,281	20,727	29,406	4,910	34,950	4,037
Harvey	11.6	\$24,920	\$172,480	43,501	19,722	14,934	7,590	23,970	2,768

Source: Sales and Marketing Management Magazine; Survey of Buying Power, August 19, 1991.

Notes: All sales figures are in thousands of dollars.

- 1) "Effective Buying Income" is disposable, after-tax income.
- 2) Unprepared foods, as sold in supermarkets and food stores
- 3) Includes restaurants, taverns and bars
- 4) Includes new and used autos, boats, recreational vehicles, and auto parts

G. HOUSING

1. **GENERAL HOUSING DATA**

Housing and housing-related issues are major concerns for City leaders in Winfield.

Housing was identified as an issue of top priority by both the Land Use and Economic

Development Task Forces. Of greatest concern is the lack of affordable housing for immediate sale or lease in the Winfield area.

Table 3-7 summarizes various housing characteristics for Winfield, the State of Kansas, and the U.S. There are 4,835 housing units in Winfield, according to U.S. Census data for 1990. Some comparisons of data from Table 3-7 are notable. First, the rates of owner-occupancy in Winfield and the rest of the state are slightly higher than the U.S. average. This may indicate the affordability of housing in Winfield and Kansas relative to other parts of the U.S. The cost of owner-occupied homes and rental units is quite low in Winfield, particularly when compared to costs in the remainder of the U.S.

A potential reason for the low cost of housing in Winfield is the age of the existing housing stock. Complete housing information is not yet available from the 1990 Census; however, some data is available from the Citizen Survey. The survey indicates that over one-third of the existing housing stock (42%) is over 50 years old. Approximately 10 to 15 percent of the remaining units have been constructed each decade since the 1940s.

Table 3-7
COMPARATIVE HOUSING CHARACTERISTICS

_	Winfield		Kansas		U.S.		
OCCUPANCY							
Owner-occupied	2,944	60.9%	641,726	61.5%	59,024,811	57.7%	
Renter-occupied	1,512	31.3%	302,964	29.0%	32,922,599	32.2%	
Vacant	379	7.8%	99,386	9.5%	10,316,268	10.1%	
Total	4,835	100.0%	1,044,112	100.0%	102,263,678	100.0%	
VALUE OF OWNER-OCCUPIED UNITS							
Median	\$39,200		\$52,200		\$79,100		
Less than \$50,000	65.3%		47.5%		25.4%		
\$50,000 to \$99,999	30.4%		39.9%		37.8%		
\$100,000 to \$149,999	3.3%		8.25	%	15.1%		
\$150,000 to \$199,999	.6%		2.5%		8.9%		
\$200,000 to \$299,999	.3%		1.3%		7.5%		
\$300,000 or more	.1%		.6%		5.3%		
CONTRACT RENT							
Median	\$224		\$285		\$374		
Less than \$250	61.4%		39.9%		24.5%		
\$250 to \$499	36.5%		50.2%		47.2%		
\$500 to \$749	1.7%		8.3%		20.3%		
\$750 to \$999	.3%		1.0%		5.3%		
\$1,000 or more	.1%		.69	%	2.7%		

Source: U.S. Census Bureau; Selected Population and Housing Characteristics, 1990.

The age of existing housing is also reflected in the number of dwellings demolished each year. Between 1980 and 1990, 91 demolition permits (an average of nine per year) were issued by the City.

2. HOUSING CONDITIONS

A survey of housing conditions was conducted in 1992 in conjunction with the preparation of this Comprehensive Plan. The areas surveyed fall into three distinct neighborhoods: the area west of Main Street, extending to the levee, between Fourth and 20th Avenue; the area between Eighth Avenue and North Street, between Main Street and College Street; and the area east of College Street, extending to Wheat Road, between Simpson and Chicago Avenue. These areas were chosen for survey because they have the highest concentration of housing units built before World War II, and therefore tend to have more houses in need of repair than newer areas. In addition, the City has, for the last several years, targeted these areas for infrastructure improvements and other projects through the federally-funded Community Development Block Grant (CDBG) program.

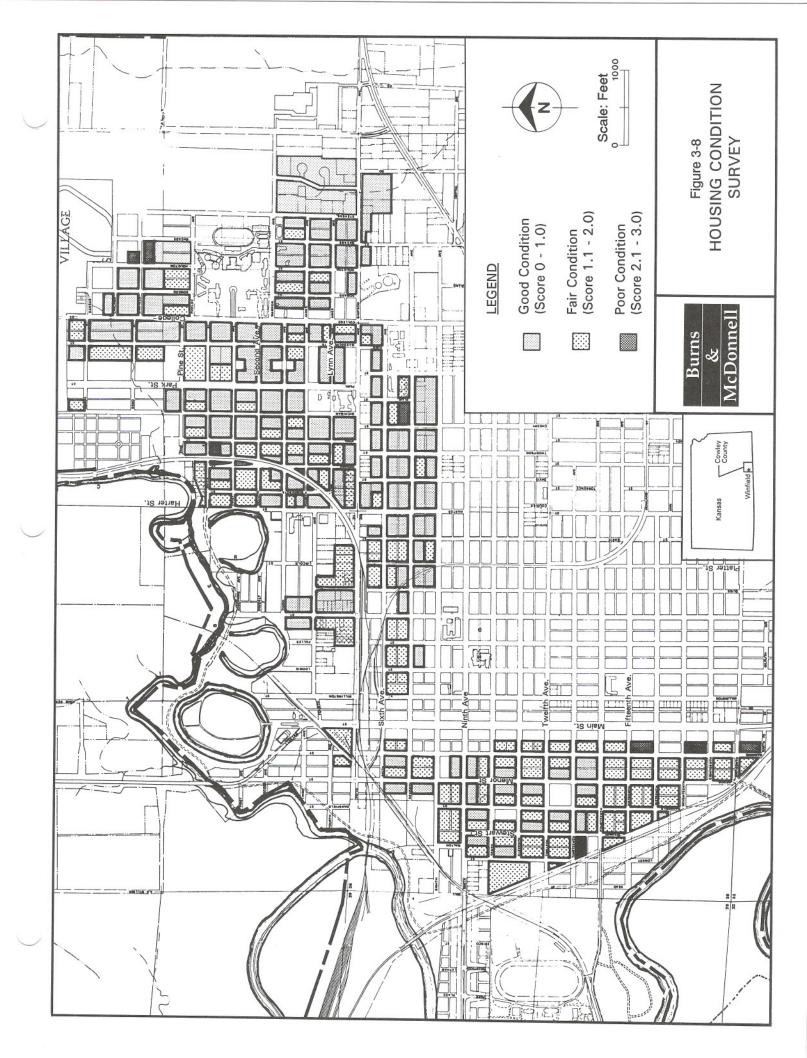
The external condition of each housing unit was rated on a scale from 0 (good) to 3 (poor). Ratings were assigned in whole numbers; no fractions were used. Those units which received a rating of 0 were those with no external evidence of deterioration. Paint, windows, roofing, and the foundation were all in good condition for these units. Units receiving a rating of "1" were those which were in need of minor repair, such as exterior paint, new shingles (but no major roof damage), one or two windows, etc. Housing units receiving a rating of "2" were those which would require substantial repair, but appeared to be "salvageable." For example, cracks or holes in foundations, broken siding, sagging

roofs, and broken or poorly-fitting windows were present in these housing units. Units which received a rating of "3" appeared to be beyond repair, with major structural problems.

Once the condition of individual housing units were rated, the scores were tallied and averaged on a half-block basis. That is, the scores of all of the houses on one side of a street were compiled to give that side an average score. These scores were then mapped in Figure 3-8. This was done for two reasons. First, average scores were used so that individual units could not be readily identified; and second, this allowed housing condition trends to be identified on blocks which face one another. This second objective is useful because it allows analysis of houses in the context of their surroundings. Simply put, a well-maintained house is more likely to remain in good condition when houses within the immediate area (next door and across the street) are in good condition. Conversely, there is less incentive for maintenance in a deteriorating neighborhood; this tends to have a "domino" effect over the long term.

In order to gain historical perspective, the 1975 Winfield Comprehensive Plan was reviewed. While it is impossible to know the perspective or training of those who performed the housing condition survey in 1975, it is interesting to note the following changes which have taken place in the past 18 years.

• The 1975 Plan designated as "poor" or "deteriorated" 63-69 percent of the housing in the area north of the CBD and west of Main Street, respectively. There appear



to be far fewer houses in poor condition in these areas today. This is apparently due to significant "reinvestment" and housing repair in these neighborhoods.

- The area south of the CBD had a high number of units (63 percent) rated "poor" in the 1975 survey. This area was not surveyed in 1992 because it is in generally good condition with few deteriorated housing units.
- There is evidence of some degree of ongoing maintenance and reinvestment in all three of the neighborhoods surveyed in 1992. The exception to this appears to be in the area west of Main Street, south of 13th Avenue. This area has the largest concentration of housing units rated "poor"; the majority of the housing between 13th and 20th was rated "fair."

Findings of the Citizen Survey, Housing Goals, and "Future Plans of Action" relative to housing are included in Part 9, Future Land Use.

* * * *

EXISTING LAND USE



A survey of existing land use was undertaken by Winfield Community Development Department staff in December 1990, and was updated in 1993 to reflect annexation and development of the new Quail Ridge subdivision, motel and City golf course south of 33rd Avenue at U.S. 77. This information was mapped and analyzed, with consideration given to several aspects of land use and the arrangement of uses within the City.

A. LAND USE INVENTORY - CITY

One way of analyzing general land use is to examine the total acreage occupied by each type of use, and then compare these totals with cities of similar size, national averages, or other "typical" situations. The land use composition of Winfield is fairly comparable to other cities of a similar size. However, Winfield has some unique characteristics that have a variety of implications for the Comprehensive Plan. These are discussed in more detail below.

1. **RESIDENTIAL LAND USE**

As shown in Table 4-1 which follows, residential land use is the predominant type of development in Winfield, occupying approximately 1078 (41%) of the 2631 developed acres within the City. Of the total area developed with housing, the majority (90%) is single family residential. Approximately 975 acres of residentially-developed land is occupied by individual detached single-family residences.

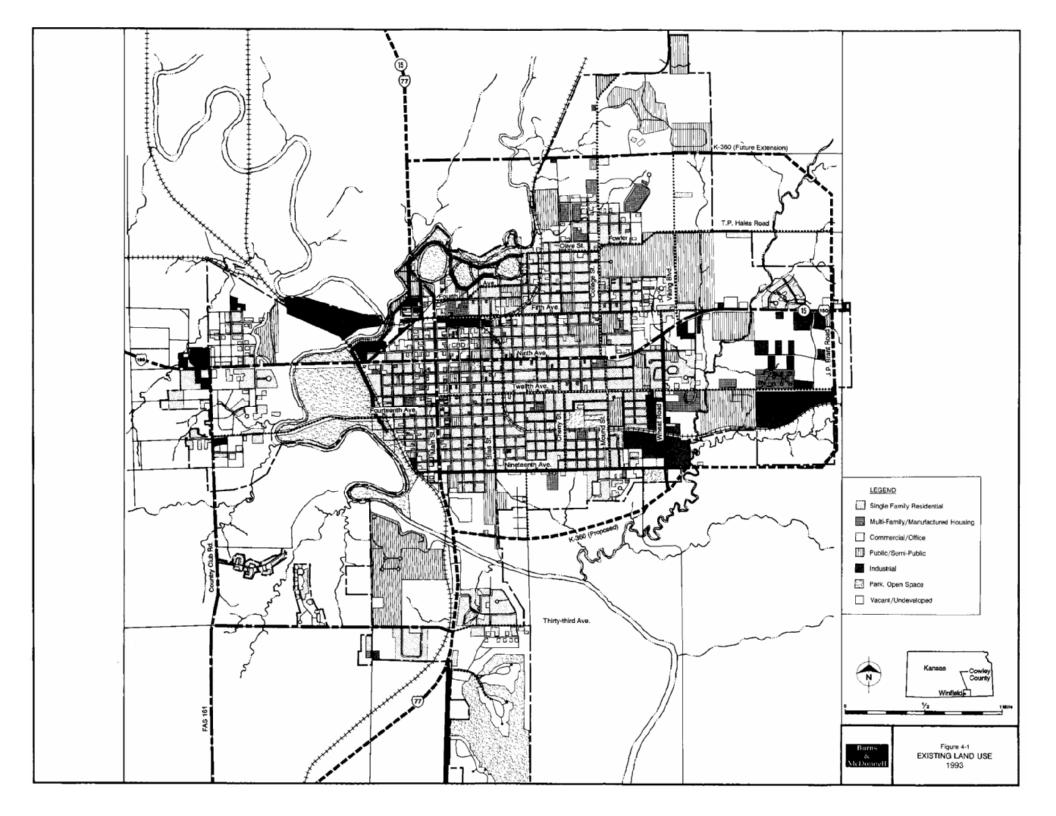


Table 4-1
Winfield Existing Land Use Totals 1993

Land Use Acres/	Single Family 975.3	Duplex 3.2	Multi Family 57.8	Mobile Home 42.5	Comm. 162.0	Indus. 160.8	Public 646.3	City Parks 570	Private Open Space 13.4	Total Dev. Area 2,631.4
% of develope area	37.0% d	0.1%	2.2%	1.6%	6.2%	6.1%	24.6%	21.7%	0.5%	100%
4.04	Total Dev. Area	Street R-O-W	Railroad R-O-W	Undev. Area	Tota Land					
Acres	2,631.4	607.7	180.9	1,664.2	5,084			2		
% of total	al 51.7% a	12.0%	3.6%	32.7%	100	%				

Assumptions:

- 1. Section line monuments shown on maps are correct, resulting in many quarter sections having more or less than 160 A.
- 2. Land use designations are correct.
- 3. Right-of-way dimensions are accurate.
- 4. Perimeter right-of-way was measured from the section line; interior right-of-way was measured in its entirety.
- 5. On some maps, duplexes were not differentiated from multi-family residences. Duplexes were tabulated separately where they were designated separately.
- 6. Vacant or undeveloped land was not calculated separately, but was assumed to be the remainder after developed area and right-of-way was subtracted from total land area.

Throughout the City, residential densities (i.e., the number of housing units per acre) vary, depending on the era in which the units were developed. Neighborhoods near the Central Business District (CBD) were developed before World War II, and reflect a development pattern that was popular at that time. Individual lots in this area are narrow (30-50 feet in width) and long (120-140 feet deep), and individual housing units are closer to one another and to the street than is typical in newer areas. The residential density in the near-downtown neighborhoods is approximately 4.5 to 6 units per acre. In newer areas, where lots are wider and there is more open space around individual housing units, the density varies from approximately 2 to 4 units per acre.

"High density" residential development is defined for the purpose of this plan as development in excess of 6 units per acre. Examples of "high density" housing include "attached" single family residences, such as duplexes, tri-plexes, and quadraplexes, and multiple-family dwellings, such as apartments or townhouses. Mobile home parks, and individual lots with more than one mobile home unit sited on the lot, were also counted toward the high density residential classification because of the relatively high density of these areas. Duplexes, apartments, and mobile homes account for the remaining 103 acres (4%) of developed land.

There is very little attached housing (duplexes, townhouses, etc.) in the City. Much of the existing multi-family development is scattered in the older part of the City; many of these residences were formerly large single-family residences which have been subdivided into several apartments. Development of this kind provides needed housing at an affordable cost; however, this spotty pattern of converted residences can also erode the residential character

of existing single-family areas. Also, because these areas were originally designed for development of single-family residences, there is generally inadequate space for the provision of off-street parking, setbacks, or landscaping which would be typical of newer duplex, townhouse, or apartment developments.

2. COMMERCIAL LAND USE

Commercial development in Winfield was historically centered in the Central Business

District, which lies generally between Sixth and Twelfth Avenues along Main Street. Over
time, a pattern of "strip" commercial development evolved along the U.S. 77/Main Street
corridor. This strip commercial development is characterized by "fast food" and
convenience uses, as well as more intensive commercial development, such as automotiverelated uses, discount stores, hardware stores, and grocery markets. Many of the strip
commercial uses are typified by high traffic volumes, which contribute to traffic congestion
on Main Street.

Commercial land use occupies approximately 162 acres, or 6 percent of the developed land area in Winfield. By dividing this land area by the population of Winfield, one derives a figure of approximately 1.3 acres of commercially-developed land per 100 persons in the City. If divided by the population of Cowley County (approximately 36,000) a more realistic "trade area," there are approximately 0.45 acres of commercial land per 100 persons. This is about average for a small-to-mid-sized population and corresponding trade area.

3. INDUSTRIAL LAND USE

Winfield is very well-positioned in respect to the land area devoted to industrial use, with 160 acres, or 6 percent of the developed area, being devoted to industry. The large area developed with industrial uses reflects several aspects of industrial development in the City. First, there are several very large industrial concerns in Winfield. These include Binney and Smith, Casco South, and Rubbermaid Specialty Products Inc. These manufacturers alone account for more than half (90 acres) of the developed industrial land within the City.

This large inventory of industrial land has positive implications for the City's tax and employment bases, and the City-owned electric utility. In recent years, Winfield has experienced significant growth in its industrial areas, due to expansion of existing businesses and plastics-related industries locating or relocating to the City.

During the early years of Winfield's development, industrial uses were clustered near the railroad tracks and yards in the area north and west of the CBD. The primary area for recent industrial development has been the southeast quadrant of the City, in the vicinity of Wheat Road, south of U.S. 160. Much of this development has been stimulated by City initiatives, namely the purchase and improvement of the 80-acre Winfield Industrial Park.

4. PARKS/RECREATION FACILITIES

Slightly more than 570 acres is developed with private or public recreation facilities. The majority of the City's park land is concentrated in large "city-wide" facilities, such as the Fairgrounds and Island Park. The amount of total land area dedicated to recreational use compares favorably with accepted standards for general "park" or open space. However,

there is a slight deficiency in the number of small neighborhood parks and "tot lots." This is discussed in greater detail in Part 7, "Public Facilities."

5. PUBLIC LAND USE

Winfield also has a large inventory of land which is dedicated to "public" use. Several differing types of uses, with varying characteristics, are included in the "public" land use category. "Low-intensity" uses, such as churches, schools, the library, and City offices are included in this classification; however, more "intense" uses with industrial characteristics are also included. Public utility installations, such as the municipal power plants and the wastewater treatment plant, are examples of more "intense" public uses. Also included in the public land use category are colleges, such as Southwestern College; care facilities, such as the Winfield State Hospital and Training Center; and the State Correctional Facility.

The land area dedicated to public use in Winfield is 646 acres, approximately 25 percent of the developed area. Because public uses are exempt from or subject to reduced property taxes, the large land area in public use can have impacts on the City's tax base. Further, because the state hospital, correctional facility, and the college have large staffs, shifts in state or federal funding for these facilities can have a broad effect on employment.

6. <u>UNDEVELOPED AREA</u>

Much of the land area (33 percent of the total) within the city limits is undeveloped. This is due, in part, to the large areas within the 100-year flood plains of the Walnut River and Timber Creek, which are not suitable for development. However, there is a fairly large inventory of vacant land within the city limits which is suitable for development.

B. LAND USE ANALYSIS

The pattern of existing land use is illustrated in Figure 4-1, which follows. The Existing Land Use Map allows an examination of land use patterns, and aids in identifying conflicts among differing land uses, areas where existing uses are inconsistent with zoning, and the implications of land use conflicts.

Conflicts between land uses can occur when uses with differing characteristics are located in close proximity to one another. Indeed, preventing conflicts between disparate uses (garment factories and housing) was a primary objective of zoning when the first zoning enabling acts were drafted in New York City in the 1920s. Locating a use which is not compatible with the area which surrounds it can have an adverse affect on surrounding property values and can, through a process of attrition, change the character of an entire area or neighborhood.

Some land use conflicts are unavoidable, simply because cities are dynamic and change over time. In addition, the nature of land use has evolved with changes in technology. Planning for land use changes and reducing the areas where land use conflicts occur can have a strong, positive impact on property values and many other facets of the City's development for years to come.

Areas where conflicts occur between incompatible land uses become evident when examining the Existing Land Use Map (Figure 4-1). Generally, the area where the most conflicts occur is in the area close to downtown. Conflicts between "intensive" uses and residences are evidenced by the "spotty" pattern of commercial, industrial and multi-family residential development adjacent to or facing single family residences in the vicinity of:

- 6th to 9th Avenue, extending west from Main Street to the Fairgrounds;
- 3rd to 9th Avenue, from Millington to Bliss Street;
- 16th to 19th Avenue, west of Main Street;
- The area around Southwestern College, particularly between Warren and Simpson Avenues, between Massachusetts Street and Wheat Road.

There are a number of factors that have led to the lack of a uniform development pattern in these areas. The primary contributing factor appears to be the large area of residentially-developed land which was zoned for more intensive development when the City's first Comprehensive Plan was adopted in 1965.

Subsequent to this widespread rezoning, some areas were developed or redeveloped in accordance with the less-restrictive zoning, so that commercial, industrial, and multi-family residences were scattered throughout neighborhoods which had formerly been almost completely developed with single family residences. In addition, the Zoning Ordinance was structured and administered in a "cumulative" fashion so that, for example, if a property was zoned "M-1, Light Industrial District," uses of a "lower intensity," such as commercial or multi-family residences, could also be developed in that zoning district. This contributed further to the mixed pattern that has emerged in the area near the CBD.

C. LAND USE IMPLICATIONS

Land use conflicts like those discussed above have numerous impacts on existing development, property values, aesthetics, and subsequent land use decisions. For example, in the 1960s, large areas surrounding the downtown were zoned for multi-family residential development, despite the existing single family residential character of the original townsite. This has led to redevelopment of individual lots with apartments or duplexes as older housing stock fell into disrepair, or the conversion of single family residences to multi-family units. This, in turn, can have the effect of providing an incentive for redevelopment and a lack of incentives for maintaining older single family residences.

Similarly, land which is developed more intensively than allowed by its existing zoning can have the effect of providing a rationale for allowing more intense land uses to be developed in an area. Over time, the scattered nature of development can erode property upkeep and contribute to blighting influences in an area. Policies and recommendations related to land use inconsistencies will be discussed in additional detail in Part 9, Future Land Use.

D. LAND USE IMPLICATIONS - COUNTY

1. EXISTING CONDITIONS

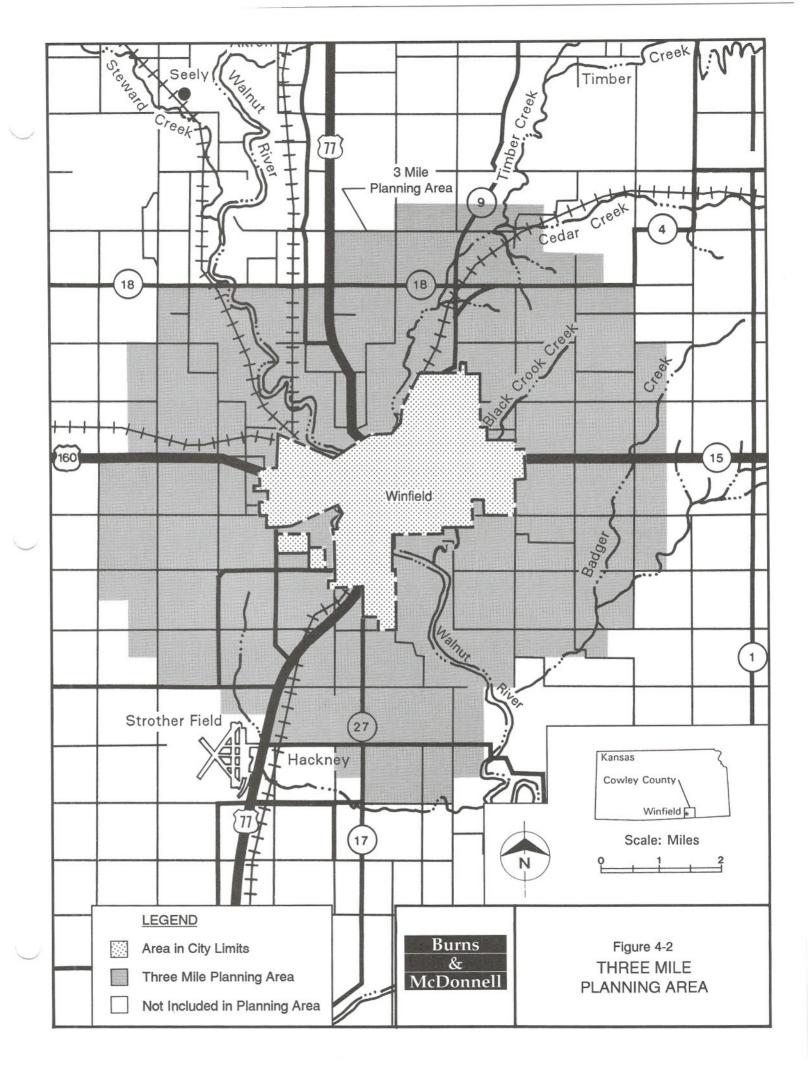
Land use development in areas outside the city limits has been an ongoing concern for several years, according to the Land Use Task Force and other community leaders. In order to assess existing land use constraints and opportunities in areas outside the City, land use was analyzed with aerial photographs and assistance from Winfield Community

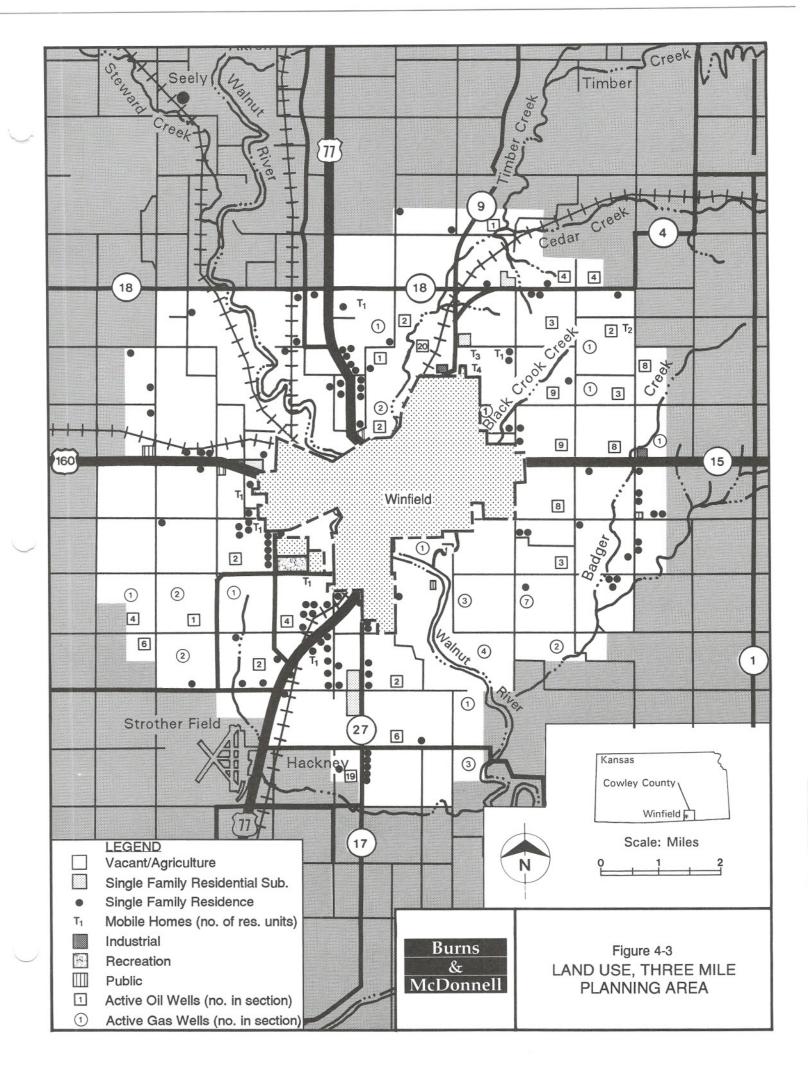
Development staff. Additional information was obtained from the Kansas Geologic Survey.

The three-mile planning area is shown in Figure 4-2; land use is depicted in Figure 4-3.

Uses identified in Figure 4-3 include the following:

- Vacant/agriculture: This includes land that is being actively cultivated for field or row crops; pasture; and open space that is not under cultivation.
- Single family residential subdivision: Includes land that is developed with more than five residences, and appears to be subdivided into relatively small (less than 5 acres) parcels.
- Single family residence: Individual residences on large (5+ acres) parcels of land.
- Mobile homes: Individual residential mobile home units. If more than one unit is located on a parcel of land, the number of units is noted.
- Active oil and gas wells: The number of active oil and gas wells within each section is denoted by a number within the symbol for each type of well.
- Public: Includes various public utility installations, or institutional uses.
- Industrial: Manufacturing or warehouse industrial uses.





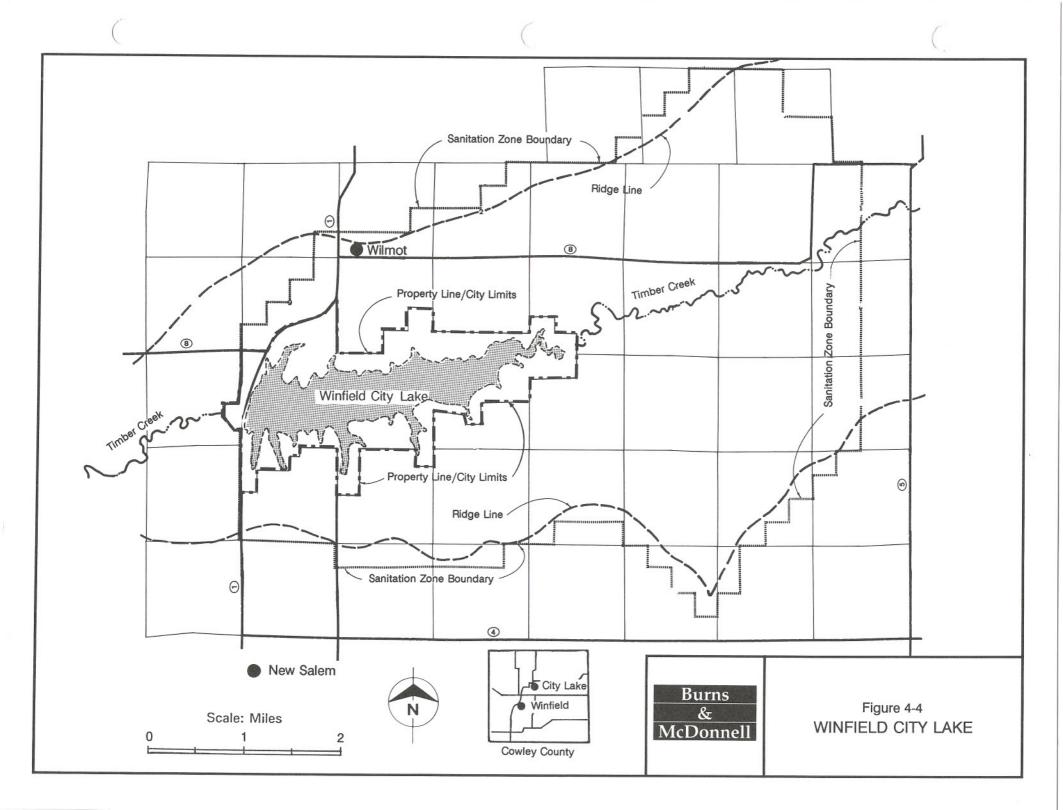
Land within 3 miles of the city limit boundary was included in the land use survey of the unincorporated area. In cases where the 3-mile boundary would be irregular, or would include only a small part of a section of land, it was designated as the nearest section or half-section line. In these instances, error was on the side of caution; this was to ensure that none of the property included was outside the 3-mile limit.

2. AREAS OF CONCERN

With respect to existing land use, the chief areas of concern are lands near residential areas and key entrances to the City, such as U.S. 77 and K-15/160. At the present time, there are no regulations in place that would prevent or restrict development of heavy industrial or commercial use in areas outside the incorporated area. Land use in the vicinity of the Winfield City Lake is also of concern. The City Lake and the adjoining land owned by the City are shown in Figure 4-4. The City owns the property immediately surrounding the lake and, therefore, controls land use in that vicinity. However, it is vital that the area within the entire watershed be protected so that the City's water source remains clean and healthful.

3. "EXTRATERRITORIAL" PLANNING

At the present time, regulation of land use in the unincorporated areas of Cowley County is minimal. The County adopted and rescinded zoning, so the only measures in place for regulating density and intensity of land use, are the County Sanitation Code and the Flood Insurance Rate Maps (FIRM) produced by the Federal Emergency Management Agency (FEMA). The Sanitation Code prescribes the requirements for the use of on-site sanitary waste disposal systems; the FIRM maps and the National Flood Insurance Program restrict or prohibit construction in regulatory floodplains and floodways.



Kansas Planning and Zoning Statutes authorize cities to implement planning and zoning programs in areas outside and within 3 miles of the city limits, in accordance with certain statutory restrictions. Planning and zoning land outside the incorporated area is known as "extraterritorial" planning/zoning. At the present time, approximately 45-50 Kansas municipalities have instituted extraterritorial planning and zoning programs, with varying degrees of success.

In order to work effectively, any planning or zoning program for land outside the city limits must be implemented gradually, so that effective input may be gathered from all concerned parties. If such a program were implemented, it should initially be limited to key areas (e.g., those within a half-mile) and/or near important entrances or sensitive land uses in the City. Additionally, implementation of any new regulatory program requires fairness and sensitivity to area landowners.

* * * * *





A. THE CHANGING FOCUS OF TRANSPORTATION PLANNING

Residents of Winfield, like most residents of the U.S., have become more reliant on personal automobiles and less reliant on transit, bicycles or walking for meeting their individual transportation needs. Recently, greater environmental awareness has led to a realization that relying on automobiles as a sole source of transportation contributes to air pollution, depletes energy resources, and increases dependence on foreign oil.

In response to this changing perspective, the federal government initiated new programs for funding transportation projects in 1991. Known as the Intermodal Surface Transportation Efficiency Act (ISTEA), this program is intended to replace the Federal Interstate Highway Act, which emphasized road construction, with a more comprehensive and regional approach to transportation planning. Under ISTEA, projects which reduce air pollution (such as transit programs in congested areas) receive funding priority over those for highway construction.

Projects designed to provide coordination between different transportation modes (e.g., highways with airports; transit stops with bicycle destinations) are also given priority. Transportation system "enhancements" such as sidewalks, bike trails, and scenic or historically significant structures or routes also receive priority. While the following discussion is focused on streets and

highways, with less emphasis on alternate transportation modes, it is important to be mindful of all modes of transportation, their interrelationship, and the implications for long-range planning.

B. RAILROADS

Historically, railroads have played an important part in the development of Winfield. The first railroad was the north-south route of the Santa Fe, which extended along the western edge of the City. The east-west routes of the Santa Fe followed, crossing the northern portion of the City. The "Frisco" line extended diagonally across the northwest corner of the City, and the Missouri Pacific entered from the southeast and merged with the western portion of the Santa Fe tracks just north of downtown. By 1911 rail lines were entering Winfield from nine different directions. Today rail service is provided on the north-south lines by the Santa Fe Railroad Company. A local freight company operates a line between Chanute and Wellington on the east-west rail lines. All trains stopping in Winfield are freight trains. No scheduled passenger service is available.

C. BUS SERVICE

There are no interstate bus lines serving Winfield. Shuttle bus service is provided to the elderly and handicapped residents, as well as the general public, by the Cowley County Council on Aging. The service is available on an "as-needed" basis for destinations within the City, and can be obtained by contacting the Council 24 hours in advance of the trip. The County vans are equipped with wheelchair lifts, and the service is free, although donations are requested. Service is also coordinated with the Arkansas City Bus Line; Strother Field is used as a transfer point between the two cities. Plans are underway to expand the service to evenings or Saturdays in addition to the present weekday schedule.

D. STROTHER FIELD

Strother Field is located 2 miles south of the City. The municipal facility is owned jointly by the cities of Winfield and Arkansas City. The airfield was built in the early 1940s and leased to the U.S. Government during World War II. After the war, ownership of the airport reverted back to the cities.

No scheduled passenger flights are available at the airfield; however, hangar rental, aircraft maintenance, and charter service are available. Approximately 20 aircraft are based at the field. In 1988, general aviation operations totaled 5,000; of those operations, 450 were jet aircraft.

The airport consists of two runways and several buildings. Both asphalt runways are in good condition. One is 5,500 feet in length and 150 feet wide; the other is 4,000 feet long and 75 feet in width. Two aircraft hangars and a passenger terminal are on the site.

Today, the field is governed by the Strother Field Commission, which is composed of City

Commissioners of both Winfield and Arkansas City, the two City Attorneys and the two City

Managers. Strother Field is a self-supporting entity, generating income by leasing industrial and
manufacturing space and farmland. The field has its own wastewater treatment plant and water

supply, and relies on the City of Winfield for natural gas and electrical service. Seven

manufacturers and several other tenants are currently located in the industrial park at Strother

Field. Recently, utilities were expanded to the west side of the field in order to develop additional industrial sites.

Plans of the Strother Field Commission include developing a Cowley County Economic Council to be based at the field and staffed by the airport manager. The mission of this economic/industrial council would be to attract new industry to the area and to help current industrial operations expand. An additional goal for Strother Field is to conduct a comprehensive survey of the field's infrastructure, evaluate deficiencies, identify needed improvements, and begin addressing facilities needs within 5 years.

E. STREET SYSTEM

1. EXISTING CONDITIONS

The City of Winfield is located at the crossroad of U.S. Highway 77 with U.S. 160/Kansas Highway 15. U.S. Interstate Highway 35, the Kansas Turnpike, is 23 miles west of Winfield. U.S. Highway 77 runs north-south and provides access to Wichita, 35 miles to the north and west, and to Oklahoma, 14 miles south of Winfield. In the area where U.S. 77 runs through the City, it follows the alignment of Main Street. U.S. Highway 160 travels through Winfield from the east and follows Ninth Avenue through the City. These major highways serve as the primary arterials in the City's transportation network, and carry the largest volumes of traffic. According to traffic count data supplied by the Kansas Department of Transportation (KDOT), 24-hour traffic counts for U.S. 77/Main Street vary from 4,470 at the Timber Creek Bridge to 15,445 trips at Main and Ninth. Traffic volumes on K-15/U.S. 160/Ninth Avenue vary from 3,780 trips at the Country Club Road intersection to 12,890 trips at Ninth and Bliss Street.

2. STREET SYSTEM CLASSIFICATION

Urban streets are generally classified by the function and purpose which they serve. In some cases, where the land use abutting a City street has changed, or there have been changes in volumes of traffic characteristics, it may be necessary or desirable to reclassify a street to a higher or lower classification, depending on the desired function of the street. Street classifications for Winfield are found in the 1975 Comprehensive Plan and A Roadway and Traffic Safety Plan, which was prepared in 1973 by the engineering firm of CH2M Hill. Generally, streets are classified in the following manner:

- Expressway A divided multi-lane arterial street designed for rapid, unimpeded
 movement of large volumes of traffic with full access control and grade separations.
- Major Arterial A multi-lane arterial street designed primarily for traffic movement, and secondarily for provision of access to abutting properties, with a minimum number of atgrade intersections. A right-of-way width of 80 to 120 feet is recommended for major arterials in the 1973 Roadway and Traffic Safety Plan.
- Minor Arterial A multi-lane facility for traffic movement and for provision of access to abutting property. Minor arterials provide connections between local and collector streets, and major arterials and expressways. Minor arterials provide for movement of relatively large volumes of traffic for short distances within the community. The recommended right-of-way width for minor arterials is 60 to 120 feet in the 1973 plan.

- Collector A street located within a neighborhood or other integrated use area, which
 collects and distributes traffic from local streets and connects with arterial streets or
 community or neighborhood facilities. The primary function of the collector street is to
 move traffic at low speeds while providing access to local streets. A right-of-way width
 of 60 feet is recommended for collector streets.
- Local Street A street which collects and distributes traffic between properties and collector or arterial streets, with the principal purpose of providing access to abutting property. The recommended right-of-way width for local streets is 50 feet.

The City's street system is incorporated into the Future Land Use Plan, which also functions as the Major Street Plan. Both existing and proposed streets are shown by street classification.

The function of the Major Street Plan is two-fold. First, it provides useful information to the Planning Commission and Governing Body that can be used in making decisions about zoning, land use, and capital improvements funding. For example, if a street is designated as a "minor arterial" because of its high traffic count, but is actually constructed to a lower standard, the City may wish to allocate funds to improve that street.

Second, the Major Street Plan also provides the statutory basis for requiring dedication of right-of-way and construction of street improvements for developing areas. That is, if a developer wishes to subdivide property that adjoins an unimproved "section line" road, the adopted Major Street Plan gives the Planning Commission and Governing Body the authority

to require dedication of right-of-way and improvement of that road in accordance with its designation in the Major Street Plan.

3. PROPOSED IMPROVEMENTS

An arterial loop is proposed around the southeast portion of the City to connect U.S. Highway 77 with U.S. 160 and ultimately, to continue north to H.N. Banner Road. The new highway will be called K-360; its approximate alignment is shown on the Major Street Plan Map. K-360 will initially be constructed as a two-lane highway, but the City is required to purchase adequate land to expand it to four lanes in the future. K-360 will begin at the intersection of K-15/U.S. 160 with J.P. Brant Road, and will extend south to 19th Avenue. At the crossing with K-360, 19th will be closed. The highway will follow the alignment of 19th in a westerly direction for approximately three quarters of a mile, then "dip" south toward Black Crook Creek. K-360 will then follow a southwesterly alignment on the north side of the creek, to an intersection with Main Street, just north of the Walnut River bridge. At-grade intersections are planned at the intersection of K-360 and Broadway, K-360/Wheat Road and K-360 and Twelfth Avenue.

It is expected that the bypass improvement will divert much of the through traffic which presently uses Main Street around the City, thus easing congestion on Main Street.

Congestion on 19th Avenue should also be eased with this improvement.

The estimated construction cost of the 3.4 mile highway is approximately \$8 million. Most of this funding will come from the state; approximately \$830,000 will be spent by the City for the purchase of right-of-way and utility easements. Funding for the City's share of the

project cost will come from sales tax revenue which was approved by Winfield voters in 1990.

4. EMERGENCY ROUTES

Snow and icing conditions are relatively rare in Winfield. However, the City does experience extreme difficulty when inclement weather strikes. In order to facilitate City snow removal and de-icing operations, it is recommended that the Governing Body prepare and adopt an "Emergency Snow Routes" ordinance. Such an ordinance would designate preferred "snow routes" for travel during heavy snow or ice conditions. Typically, such ordinances provide penalties for parking or driving without chains on roads which are designated as "Emergency Snow Routes".

F. PEDESTRIAN AND BICYCLE TRANSPORTATION

Until 1985, the City did not have a uniform policy relative to the construction of sidewalks, paths or other systems for pedestrian use. As a result, some parts of the City are well-served by sidewalks, while others are not served at all, or existing sidewalks are in a state of disrepair. This causes particular difficulty for pedestrians in areas where there is heavy automobile traffic.

Ninth Avenue, east of College Street, is one example of deficient sidewalks. In this area, the existing sidewalk which is on the north side of Ninth, ends just west of College. Because of the hilly terrain east of College, it would be impossible to continue the sidewalk on the north side of Ninth Avenue. At the same time, however, there is no sidewalk on the south side of Ninth Avenue, thus leaving pedestrians on this busy street without a level, safe place to walk.

Planning and coordination could have prevented this situation, and with the existing sidewalk policy in place, it is less likely that this scenario will be repeated. The present sidewalk policy, as stated in the City's Land Subdivision Rules and Regulations, requires construction of sidewalks on both sides of major streets, and in "major commercial districts." Because "major commercial districts" is not defined, and may not be applicable in some areas where sidewalks are needed, a more definitive requirement should be specified in the Subdivision Regulations.

Bicycles provide a form of nonmotorized transportation that is acceptable to most age groups, and can be used for business or leisure travel. The City has not, in the past, planned for bicycle use. However, bicycling has become more popular as a leisure pastime, and there is an increased demand for useable bicycle paths or routes. In order to meet this demand, the City should coordinate planning for bicycles with other improvements to the transportation system. Such planning would enhance the City's position relative to receiving federal ISTEA funds for transportation projects. In addition, bicycling for leisure could be enhanced by preparing a "greenway" parks plan as described in Part 7, Public Facilities. Task Force recommendations relative to construction of sidewalks and bicycle use also follow in this section.

G. TASK FORCE AND CITIZEN SURVEY INPUT

The Citizen Survey included only questions about local streets, and citizens' perceptions of local streets in their area. Approximately 36 percent of the survey respondents indicated that streets in their neighborhood were either "poor" or "very poor," and were in need of improvement; 38 percent of survey respondents indicated that the condition of their local street was "good" or "very good." This particular set of responses is indicative of the wide variation in street conditions in the older part of the City, where the original brick streets remain, versus newer

neighborhoods where streets are predominantly asphaltic concrete with curbs and underground storm drains.

H. TRANSPORTATION GOALS

The Transportation Task Force established goals and "Future Plans of Action" for all transportation modes, including highways serving the City, the City street network, freight rail service, Strother Field, and pedestrian and bicycle traffic.

- Meet transportation needs of the City in residential, commercial, and industrial areas; also
 provide improved means of travel for pleasure and emergency service providers.
- Plan to meet future transportation needs of the City to ensure a consistent and high level of service to the community.

I. FUTURE PLANS OF ACTION

1. RAILROADS

- a. Upgrade the Missouri Pacific rail line to better serve the industrial park.
- b. Promote the creation of a railhead near Strother Field.

2. STROTHER FIELD

Continue working with the Strother Field Commission in supporting existing businesses and attracting new industry. To that end, assist in efforts to identify infrastructure needs and required improvements and begin addressing these needs within five years.

3. STREETS

a. Highway Improvements

- Continue to pursue design and KDOT funding of the extension of the bypass
 (K-360) around the northeast part of the City.
- (2) Continue to participate in state programs that fund maintenance and improvements of state highways that pass through the City.

b. Arterial Streets

- (1) Develop an arterial street in the northwest part of the City. To that end, acquire abandoned railroad right-of-way between Fifth Avenue and Mill Street.
- (2) Improve traffic flow on Ninth Avenue between Loomis and Alexander Streets.
 To that end, convert this section of Ninth Avenue to a facility having one lane traveling each direction, with a center left turn lane.

(3)	Major improvements are needed on Country Club Road, Fifth Avenue, 12th	h
	Avenue, and Bliss Street.	

(4) To ensure that a funding source is available for major street projects, set aside a portion of the 1/2-cent sales tax for continuous funding. A minimum of \$75,000 would be required to fund basic projects of any size.

c. Local Streets and Repair Programs

- (1) Continue the City's 5-year maintenance plan for residential streets.
- (2) Computerize the City's pavement management system to aid in prioritizing repairs of local streets.
- (3) Initiate a regular replacement program for street and traffic signs.

d. Pedestrian and Bicycle Transportation

- (1) Adopt a uniform sidewalk policy.
- (2) Require construction of sidewalks along existing arterial and collector streets when major street or utility improvement projects are undertaken.

- (3) Consider the use of benefit districts for funding sidewalk and curb replacement projects. A ratio of 50 percent City funding, and 50 percent funding by property owners is suggested.
- (4) Encourage bicycle use through development of a bikeway master plan and development of a linear park/greenway system through the City.

* * * *

PUBLIC UTILITIES

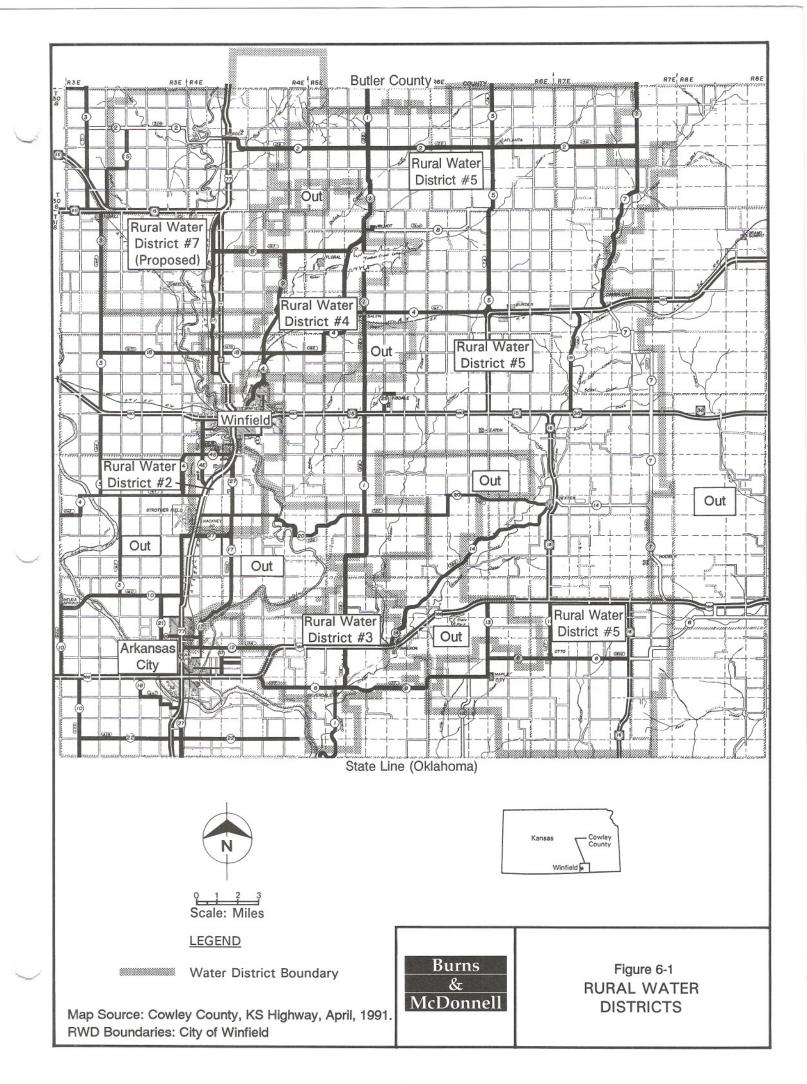


This section is an overview of the public utilities and services provided by the City of Winfield and other public entities. This summary is based on a study of previously-published reports and discussions with City officials.

A. WATER SYSTEM

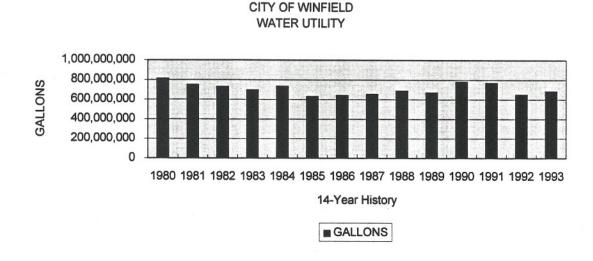
1. EXISTING CONDITIONS

The City operates a municipal water utility which serves the City, three rural water districts, and a portion of the City of Oxford. The City Commission has also given approval to supply water to the proposed Rural Water District (RWD) 7. This RWD is presently in the planning stages, and is not anticipated to be in place until 1995. As is the case in all areas of the Midwest, water is an important resource that should be protected and monitored for future needs. Many residents of Cowley County are also dependent upon the City's water utility; nearly two-thirds of the county receives treated water from the City (Figure 6-1). The City provides water service directly to 4,800 retail customers, with a population of approximately 14,000. The rural water districts which the City serves provide service to approximately 2,026 customers.



Water treatment and distribution has remained fairly constant for the past ten years. Figure 6-2, below, illustrates City water production from 1980 through 1993. In 1991, the City sold a total of 765 million gallons, for an average of 2.1 million gallons per day (MGD). Peak demand for 1991 was 4.2 MGD pumped on July 2. The highest demand ever placed on the water system was 4.7 MGD, on July 14, 1974. Projected water demand is illustrated in Figure 6-3, which follows.

Figure 6-2

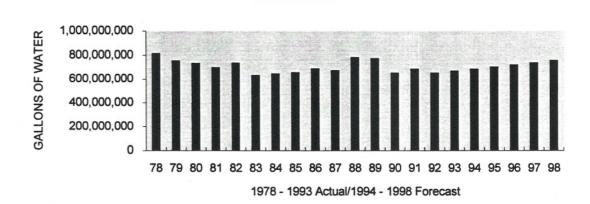


Raw water for the system is supplied by Winfield City Lake which is located approximately four miles northeast of the City. Raw water from the lake is conveyed via a 24-inch transmission main to the Winfield water treatment plant which is located on County Road 4, just north of the Winfield State Hospital. The treatment plant began operation in 1969, and has a rated capacity of 4 MGD. Water storage is provided by a 1.5 million-gallon reservoir at the treatment plant, and a 1 million-gallon elevated tank, which is located southwest of the

intersection of Simpson Avenue and Houston Street. The City's water distribution system consists of a network of water mains which generally follow major streets within the city limits, with additional mains extending beyond the city limits to the east to serve Rural Water District No. 5; to the west to serve the City of Oxford; and to the south along Highway 77 to serve Rural Water District No. 2. Rural Water District No. 4 has a meter for its supply in the area just west of the water treatment plant.

Figure 6-3

CITY OF WINFIELD WATER UTILITY



In 1985, the City contracted with the engineering firm of Black & Veatch to prepare a report on the water system. In that report, a schedule of recommended distribution system improvements was proposed. Particularly, the study recommended that the improvements be undertaken in three phases. Those improvements identified as "Phase 1" improvements were to provide adequate residual pressure to all areas within the distribution system. "Phase 2" improvements were required to provide reliability and transmission capacity within the system for projected future water demand.

Nearly all of the Phase 1 and 2 improvements have been completed. The majority of this work was funded through the annual operating budget, and completed with City personnel. Much of the activity has involved upgrading the size of water lines to provide adequate water for fire protection and increase pressure in areas that were annexed into the City in the early 1980s. The City has an Insurance Services Office (ISO) Fire Insurance Rating of "Class 4." This rating reflects the quality of the water distribution network, along with other public safety factors. Very few cities in Kansas have a Class 4 or lower rating.

In 1991, Black & Veatch Engineers were contracted to provide an engineering analysis of the City's water storage reservoirs. Several improvements were recommended, and in September, 1992, the City issued a revenue bond in the amount of \$850,000 for these improvements. Projects funded with this bond issue include construction of a new 160,000-gallon storage reservoir (to be used as a reservoir for back washing of filters and peak needs), major structural improvements and painting (interior and exterior) of the plant storage reservoir and the elevated tower, and the construction of a parallel 16-inch transmission main for treated water. The new main will extend from the treatment plant to the north part of the City, and will eliminate an existing capacity problem in transmission of water from the plant during peak water use conditions.

2. TASK FORCE AND CITIZEN SURVEY INPUT

Responses to the utility-related questions in the 1990 Citizen Opinion Survey indicated that many residents have no opinion or are "not sure" of the quality of city water service. If the "not sure" responses are counted, 68 percent gave ratings of "very good" or "good" to the quality of service; 49 percent gave high ratings for response time. When the "not sure"

ratings are eliminated, the corresponding percentages are 81 percent for quality of service, and 80 percent for response time.

3. GOAL OF WATER UTILITY

The goal of the water utility is to provide sufficient, safe, and pleasant water at adequate pressures, while maintaining fair, competitive and equitable water rates.

4. **FUTURE PLANS OF ACTION**

- a. Complete the construction of a 160,000-gallon water storage reservoir at the water treatment plant. This reservoir will be utilized as a filter back-wash reservoir while the existing reservoir is removed from service for maintenance. The reservoir will also be an asset during peak water demand periods.
- b. Complete major maintenance of the 1.5 million-gallon storage reservoir at the water treatment plant. This facility has not received major maintenance for over 20 years.

 The tank will be sand-blasted and painted on the interior and exterior. Structural maintenance will be completed on the bracing rods on the interior of the tank.
- c. Complete major maintenance of the 1.0 million-gallon elevated water tower. This facility was last painted in 1980. Maintenance will include interior and exterior sandblasting and painting. Structural needs include welding of exterior panels, grouting on a few foundation pads, and replacement of interior bracing rods.

- d. Complete the construction of a 16-inch water line from the water treatment plant to the north edge of Winfield. This line will be constructed parallel to an existing 16-inch line. The purpose of this line is to allow higher water volumes to be transmitted into the City. At peak periods of water consumption, water can be treated at a higher volume than can be transferred to the City. The existing line acts as a "bottleneck" in restricting the amount of water that can be transferred to the City. The new line will also serve as a backup transmission line, so that maintenance can be performed on either line without having to remove the treated water supply to the City from service.
- e. Complete all testing procedures required by the "Lead and Copper Rule," which was promulgated by the U.S. Environmental Protection Agency (EPA) in 1991. Action for remediation may or may not be required, based upon the results of the testing. Initial test results have indicated that this is not a severe problem for Winfield's water distribution system.
- f. Update the Water Distribution Master Plan that was completed in 1985. Many of the recommendations of the 1985 plan have been completed. Review of the water distribution system should be conducted following the completion of 1992 Bond Issue Improvements. A few capital items to be considered are as follows:
 - (1) Construct a 12-inch water line from College Street to the downtown business area. This will provide a looped water supply to the central business district and increase water pressure in this area.

- (2) Examine the water supply need to the Winfield Industrial Park area. A new 12-inch line from Viking Blvd. at Hale Road to the industrial park area would provide a looped supply to the east side of Winfield.
- (3) Examine the need for additional water storage facilities. Space is available at the water treatment plant for an additional 1.5 million-gallon reservoir. However, with additional growth and water consumption anticipated at the south and west edges of Winfield, a ground storage or elevated tower may prove beneficial to provide storage and maintain pressures in these areas.
- (4) Evaluate the growth of water consumption and determine when additional water treatment capacity will be required at the existing plant.
- g. Evaluate a backup water supply for the Winfield City Lake. This may include wells, river supply, construction of a new water supply reservoir, or a separate water source. Identification of this potential water supply will provide a direction for targeted improvements.
- h. Continue to respond and meet mandates from Federal and State environmental agencies. Compliance with new provisions of the Safe Drinking Water Act will need to be monitored. In addition, federal regulations imposed with promulgation of the Surface Water Treatment Rule may dictate future water plant improvements.

- Continue to make improvements to water distribution lines and fire protection hydrants
 in a preventive maintenance plan. In order to minimize construction-related delays,
 coordinate future water line maintenance projects with other infrastructure
 improvement projects.
- j. Monitor rates of other public water suppliers in Kansas and the region. Maintain competitive and equitable rates, and continue to make improvements to the treatment and distribution system.

B. WASTEWATER SYSTEM

1. EXISTING CONDITIONS

The City's wastewater treatment plant (WWTP) is located at the south end of Andrews Street in south Winfield. It was originally constructed in 1938, and improvements were made to the facility in 1957 and 1961. Additional capacity was constructed at the treatment plant in 1980. The WWTP provides primary and secondary wastewater treatment, with a capacity of 3 million gallons per day (MGD). Approximately 11,000 residents and several industries are served by the wastewater system; the average effluent treated is 1.25 MGD.

The wastewater treatment plant has adequate capacity to serve a population of approximately 15,000. While the treatment plant is adequate to meet present needs, continued monitoring is needed to ensure its efficient operation. If population growth continues at the present rate, it will be more than 20 years before the population of Winfield reaches 15,000. However, because of the considerable lead-time required to design, permit and construct wastewater

treatment facilities, the City should take steps toward planning for this improvement in the near future.

In 1991, the City initiated an innovative measure for reducing the amount of treated effluent discharged into the Walnut River. This entailed installation of an ultraviolet disinfection system and piping the treated effluent ("gray water") to provide water for the new City golf course. In addition to reducing the amount of wastewater discharged into the river, this has significantly decreased the amount of potable water needed to establish the greens and fairways on the new course.

The wastewater conveyance system consists of services lines, gravity flow mains, force mains, and interceptors which act as "collectors" for several mains in conveying wastewater to the treatment plant. Some mains in older parts of the City are root-infested, collapsed or in need of repair or replacement. To combat these problems, "television" monitoring equipment was purchased in 1988. This equipment can be placed into collection mains to perform a "visual" inspection. The equipment "crawls" through the pipe while recording locations of root intrusion, collapsed lines, improperly installed service taps, and similar problems.

With the monitoring equipment, it is possible to locate, excavate and replace only those sections of lines where problems exist. This saves the cost of replacing more sewer line mains than are necessary, thus reducing the costs of making repairs. Several feet of sewer main have been upgraded with this type of repair. In early 1989, the City began replacing several sections of lines that were in poor condition; a manhole repair/replacement program

has also been initiated. Water infiltration, which can overburden the treatment plant, can be greatly reduced by repairing collapsed lines and old manholes. Budgeted repairs on manholes are conducted on an annual basis.

In 1991, the utility invested in a Vaporooter Machine. This equipment is used to treat root intrusion into sewer mains. In places where roots gain entrance into a sewer main, they find an environment that is conducive to rapid growth and can quickly block a line. The Vaporooter injects a chemical foam solution that serves to kill the root back to a location outside of the line, allows the root to die and slough off, and treats the portion of root that is imbedded into the pipe (converting the root into a "cork" that will seal the crack in the pipe). Approximately 50 percent of the City's wastewater collection system has been treated with this process, and the treatment has proven to be effective.

Some areas such as Country Club Estates have relied on septic systems rather than City sewers; those systems are now failing, and eventually will need to be placed on City sewers. This will require the use of force mains and lift stations to pump effluent to the WWTP. Because of the expense of using lift stations to serve areas that cannot be served by gravity, the City should study the economic feasibility of connecting additional problem areas into the City sewerage system.

State and federal environmental regulations may require additional improvements or changes in operations in the future. For example, sludge from the wastewater treatment plant is disposed through a process of land application. Simply explained, when the sludge buildup in the final digesters accumulates to a point that removal is required, it is pumped into a

truck that transports the material to a nearby farm. The sludge is then spread onto farm land. This process allows sludge to be disposed of safely and economically, and provides free fertilizer to farmers. However, this practice is being scrutinized more closely by State and Federal environmental agencies. Many states require disposal of sludge in landfills or other "public access controlled" areas. The ability to dispose of sludge in this manner may be restricted by legislation in the future. Application is dependent on the lack of "heavy metals" in the sludge. Winfield does not have any industrial customers that contribute metals into the wastewater stream, but a new process at an existing industry or location of a new industry could change this fact. Sludge is analyzed annually; this laboratory analysis dictates whether sludge may continue to be disposed of through land application. The vehicle and equipment that is used to apply sludge will have to be replaced in the future. Prior to purchase of new sludge handling equipment, a study on the costs and benefits of a different type of sludge disposal should be thoroughly considered. Centrifuge or belt press machines provide alternative processes for disposing of sludge.

Regulation of ammonia levels in the treated effluent is the most recent federal restriction to be promulgated by the EPA. Winfield presently releases treated effluent from the WWTP into the Walnut River. Ammonia must be kept below allowable maximum levels to maintain compliance with water quality regulations. Operators are presently working on adjustments in treatment processes to keep ammonia levels in compliance.

Maintenance of the WWTP digesters is a major project that has been scheduled for 1993.

These digesters were placed into service in 1980, and have not had major maintenance since installation. The tanks will need to be drained, cleaned, and repair needs assessed. One

digester is showing leaks, and major concrete repair will be required, with an estimated cost of approximately \$100,000. This project is scheduled for Fall, 1993.

2. TASK FORCE AND CITIZEN SURVEY INPUT

For the City wastewater utility, 49 percent of the citizens surveyed gave "very good" or "good" ratings to the quality of service, 34 percent gave those ratings to response time.

When "not sure" responses are excluded, the corresponding percentages are 76 percent for quality of service and 74 percent for response time.

3. GOALS OF THE WASTEWATER UTILITY

The goal of the wastewater utility is to provide an efficient means of removing effluent from the water consumer's premises and transporting it to the wastewater treatment plant.

Wastewater treatment shall be done in an efficient manner, and will meet all requirements of state and federal environmental agencies.

4. **FUTURE PLANS OF ACTION**

a. Continue to utilize existing equipment in locating problems in the sewer collection system to the greatest extent possible, repair mains that exhibit problems with in-house personnel. Continue to utilize the Vaporooter equipment for annual treatment of root infiltration problems.

- b. Evaluate the cost and feasibility of performing a comprehensive "inflow and infiltration" study to pinpoint areas in the City wastewater conveyance system that require repair.
- c. Continue annual manhole repair and replacement program.
- d. Continue to monitor ammonia level of treated wastewater effluent. Take steps to meet compliance levels and become certified to perform ammonia testing in the wastewater treatment plant laboratory.
- e. Complete the repair of the digester system.
- f. Review areas within the City where septic systems can be converted to the utility's sewerage system.
- g. Evaluate the rates and charges for sanitary sewer service regularly to ensure that needed maintenance is funded.

C. ELECTRIC UTILITY

1. EXISTING CONDITIONS

The City operates its own electric utility, consisting of both distribution and generation, which was established in 1904. It includes two steam-electric generating units and one gas turbine unit with a total generating capacity of 50.4 megawatts (MW). The City also

purchases 14.1 MW of capacity from other sources, which consists of a 12.5-MW

Participation Contract with the Kansas City Board of Public Utilities (BPU) for Nearman

Power Plant (a coal fired power generating station) and 1.6 MW of capacity from the

Southwest Power Administration (SWAPA) from hydroelectric generation facilities. The

combined generation and purchased capacity of the utility is 64.4 MW. The City maintains

28 miles of 69-kilovolt (kV) transmission lines and approximately 267 miles of 12.5-kV

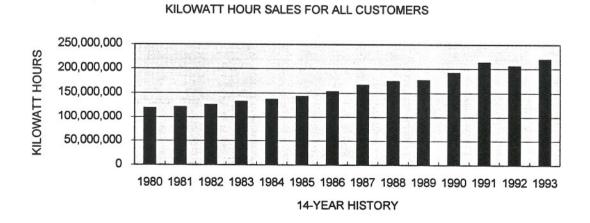
distribution lines. Winfield provides service to approximately 7,900 retail customers,

including customers in the cities of Burden and Dexter. The utility also provides retail

service to the Strother Field Industrial Park and wholesale service to the City of Udall.

In recent years, demand for electricity has increased dramatically in both kilowatt hours sold and peak demand loads. This growth has come primarily from industrial expansion and growth, but residential and commercial consumption have shown increasingly higher growth over the past three years. Figure 6-4 illustrates the significant growth curve of kilowatt sales from 1980 through 1991.

Figure 6-4

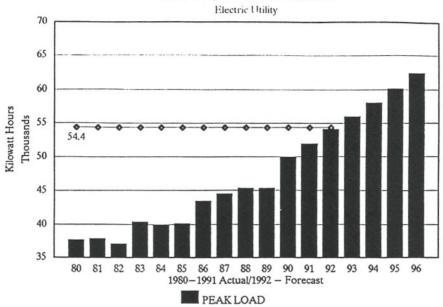


CITY OF WINFIELD - ELECTRIC UTILITY

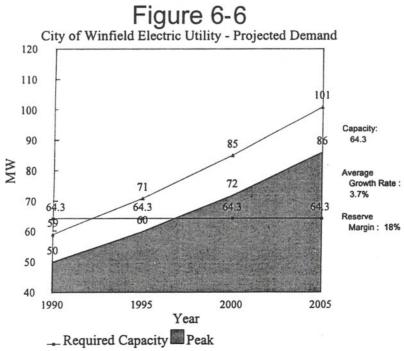
In 1980, the utility sold approximately 120 million kilowatt-hours (kWh), which compares to 1991 sales of 210 million kilowatt hours. This growth of 6.8% annual sales increases has been fairly constant, as can be easily noted by the graph. The annual peak demand has increased in a similar manner. Figure 6-5 illustrates the growth of the utility's peak demand from 1980 to 1991. The peak in 1980 was 38 MW, and has grown at an average annual rate of 3.9% to the 1991 peak demand of 52 MW.

The growth of this peak demand is a significant factor for the utility to consider in future planning. Presently, the utility has the ability to purchase inexpensive "Economy Energy." Economy energy is kilowatt hours that are purchased from other investor-owned utilities from the interconnect system. Presently, Winfield purchases Economy Energy from Western Resources for approximately 23 mills, with no demand charge associated with the purchase. Economy Energy can only be purchased on the condition that Winfield's utility has system capacity of 118% of the peak demand. In this case, a peak demand of 52 megawatts would require that the utility have a system capacity of 61.4 megawatts available. As noted above, the present capacity of the City's electric utility is 64.4 megawatts. When peak demand requirements exceed existing capacity, the utility will need to take action to acquire additional capacity. Failure to acquire additional generation or purchased capacity will cause the utility to be financially penalized for those increments of kilowatt demand that exceed the contractual requirements for the purchase of Economy Energy. Figure 6-6 exhibits the growth of the peak demand load in relation to the contractual capacity requirement of the utility. If demand continues to grow at the present rate, additional capacity could be required by 1995.

Figure 6-5 CITY OF WINFIELD





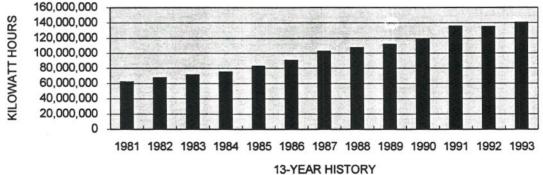


The growth pattern of the utility may be described as a moderate, steady increase in sales and peak demand. The community has been fairly successful in retaining and assisting existing industry in expansion, which translates into higher electric consumption. Figure 6-7 illustrates the growth in consumption of the Industrial or Power Rate Class customers. In 1980 the utility sold approximately 50 million kilowatt hours to the Power Rate customers. A growth rate of approximately 12% annually in this rate class has increased to total approximately 120 million kilowatt hours in 1990.

Figure 6-7

CITY OF WINFIELD - ELECTRIC UTILITY

INDUSTRIAL SALES ONLY



As with other utility functions, the electric utility must be able to provide for the peak loads. Much attention will need to be focused upon expansion of capacity - be it purchased capacity or the addition of generating capacity.

In 1988, a study and engineering analysis of the electric distribution system was completed and several improvements were identified. A \$5.8 million revenue bond issue was

completed in 1989, and several major improvement projects were completed. The projects were started in 1989 and completed in mid-1992. The bond issue improvements included rebuilding and voltage upgrade of the Central Business District distribution feeder; construction of a new 69-kV interconnect line between KG&E's Oak Substation and Strother Field; three new substations; a new 69-kV transmission line around north Winfield; and improvements at the West Power Plant. These improvements were completed for the following reasons:

- Rebuilding and converting the Central Business feeder from 4,160 volts to 12,470 volts was completed in 1990. The old system could not provide adequate capacity or sustain proper voltage to commercial customers. Likewise, the 4,160 volt system was the last of this sizing, and required a stocking of excess equipment and transformers for this small portion of the distribution system. The entire distribution system with the exception of the Winfield State Hospital & Training Center is now fed by the 12,470-volt substation. The State Hospital system is owned and operated by the State.
- Construction of the 69-kV transmission interconnect line from Oak Substation north of Arkansas City to Strother Field was completed in August, 1991. Load capacity of the old interconnect line was only 32 MW. This was not sufficient for carrying the summer peak load of 52 MW. If problems would have occurred at the East Power Plant, the generation at the East Power Plant (22 MW) plus the 32 MW capacity of the old interconnect line would have been extremely marginal in providing service for a peak load condition. The new City-owned interconnect line

has a 72 MW capacity. When combined with the old interconnect line, there will be adequate transmission capability for several years.

- Two new substations (Strother and Viking) and upgrades of the West and East substations are now fed by a 69-kV transmission loop that encircles the City.
 Loads can now be localized to various parts of town, reducing line losses and voltage drops which had caused severe problems with the old system. During storm outages or preventive maintenance procedures, it is now possible for loads to be switched or "back-fed" by utilizing the looped transmission facility.
- In-house projects have included provision of additional tie lines to the main circuits and installation of group-operated switches for redistribution of loads during equipment outages and repair operations. A 12,470 volt line from Strother Field to Winfield was completed in 1992. This line serves as an alternate source of power for Strother Field.
- Along with the major construction projects, City crews have added new underground service to areas in the southern part of the City, including Vizcaya Estates, Quail Ridge Subdivision, Crestridge Subdivision, and the new Quail Ridge Golf Course and Comfort Inn motel. It is anticipated that these areas will be the source of new load growth over the next several years.
- A Supervisory Control and Data Acquisition System (SCADA) will be installed in phases over the next few years. The initial phase will include control of the

Strother, Interconnect and East substations, and will be installed in 1993. This will provide monitoring for load, power factor, losses, and outage problems; it will also allow remote control of breakers and switches.

- Rates for Winfield electric system customers are at or below the state average.

 Rates are significantly lower than those of surrounding investor-owned utilities and cooperatives. The revenues from rates cover expenses for energy purchases and system improvements, distribution expansions, equipment replacements, labor and debt service on bond issues. A large reserve fund is required in the covenants of the bond issue. The bond issue will be retired in 2004.
- The recent KP&L Gas Service acquisition of KG&E (forming the new Western Resources company) may have a positive effect on Winfield's utility rates.
 Transmission charges are presently paid for access to two lines, KCPL and KG&E.
 KPL has agreed to build a tie line from their system to the Kansas City Board of Public Utilities. This will save approximately \$94,000 annually, and provide additional sources of Economy Energy from the KPL system. These savings will not begin until 1993; a Western Resources rate moratorium is in place through 1994.
- In the next 10 years plant expansions or additional purchased power capacity will be required. It is expected that future load requirements will dictate the installation or acquisition of capacity between 1995 and 2005. The size and frequency of these expansions will be dictated by load growth, debt service levels, and the Continuous

Emissions Monitoring requirements of the Clean Air Act. The City does have the option of selling or non-renewal of the 12.5-MW Nearman Participation Contract in 1997. This notification will have to be made in 1994. It is possible that a 29-MW generator could be purchased and installed for the equivalent cost of the Nearman Contract power. If this proves to be possible, it is the equivalent of obtaining 16 MW of capacity at minimal cost. A thorough engineering analysis should be completed in 1993 to determine the feasibility of replacing Nearman with a less expensive form of capacity and energy. If the City needs to acquire additional capacity prior to 1997, it is possible to purchase short term capacity and energy from other municipal or investor-owned utilities.

2. TASK FORCE AND CITIZEN SURVEY INPUT

In the Citizen Opinion Survey, almost three-fourths of the respondents (72 percent) gave "very good" or "good" ratings for quality of electric service; 66 percent gave high ratings for response time. Excluding responses of "not sure," the percentage for quality of service was 76 percent and response time was 79 percent.

3. GOAL OF THE ELECTRIC UTILITY

The goal of the Electric Utility is to provide adequate electrical power, at reliable voltage and minimal interruption, at a competitive cost that will encourage industrial growth and economic development.

4. **FUTURE PLANS OF ACTION**

- a. Complete the extension of feeder lines from the new substations to provide better load control and voltage to customers.
- b. Install a Supervisory Control and Data Acquisition System (SCADA) to all substations, power plants, and other locations on the distribution system. The SCADA will allow for monitoring and remote control of the system.
- MW of capacity and energy). The replacement capacity and energy evaluation should include evaluation of internal generation units, purchased capacity, or other alternative supply.
- d. Monitor the availability of short-term capacity or seasonal purchases to meet the contractual requirements of the Western Resources Interconnect Contract.

D. NATURAL GAS UTILITY

1. EXISTING CONDITIONS

Winfield operates its own natural gas utility, and purchases its transportation services from Arkla Energy, Inc. The gas utility has recently undergone a change of focus from status-quo maintenance of a safe system to a long range approach to operations. In 1991, the City

negotiated a new natural gas contract for short-term deliveries and is currently investigating other long-range natural gas supplies.

It is expected that the City and its gas customers will save almost \$800,000 per year as a result of the new gas supply contract, which is in effect through 1993. Abundant economical natural gas is available today and the outlook is very positive for strong supplies in the future. The price of natural gas is currently near a record low, and it is expected that low prices will be maintained through 1996. However, the City is investigating other options for obtaining reliable supplies of gas for the future.

As was mentioned previously, the City was able to negotiate a new natural gas contract in October, 1991. Prior to the new contract, the City was allowed to purchase 50% of its gas supply from a third-party gas supplier (usually at Index-based price) and pay a single part transportation rate (the same rate as the non-gas G-2 Tariff rate). The remaining 50% volumes of gas were required to be purchased from Arkla Energy Resources (AER) at the FERC approved G-2 Tariff rate. The rate for G-2 Gas has been approximately \$3.55 per mmBtu. The new contract reduced the amount of the G-2 requirements from 50% to 10%. In 1992, the average cost of gas purchased and transported under the new contract was approximately \$2.20 per mmbtu. Gas purchase prices vary by season. Over the past year, the lowest price was \$.97 per mmbtu; the highest price was \$2.17 per mmBtu.

In addition, the transportation service contract on the third party gas volumes was reduced from \$.55 per mmBtu to an average cost of \$.42 per mmBtu. The new transportation contract also was converted to a two part rate, with a "Reservation Fee" paid for guaranteed

space in the pipeline plus a "Commodity Fee" for each unit (mmBtu) of gas that is transported. The reservation fee was \$4.42 per unit (based on a demand of 6,000 mmBtu reservation) and commodity fee of \$.14 per mmbtu transported. This new transportation fee structure rewards the utility for maintaining a high load factor. Reductions in price for both the gas supply and transportation charges have resulted in substantial savings to the utility. The savings realized from this new contract have been passed directly back to the customers via the Purchased Gas Adjustment (PGA) on monthly utility bills.

In May, 1992, the City joined with 20 other municipalities to form the Kansas Municipal Gas Agency (KMGA). The KMGA, as one of its first functions, started a Pooled Gas Supply Acquisition Program. This program seeks to combine the gas supply needs of twenty municipal gas utilities in order to obtain better prices through "bulk purchasing." For example, gas supply prices from April, 1992, through October, 1992, were \$1.28 per mmbtu plus transportation costs. These prices were below the Index cost, and resulted in supplies for the local distribution company (LDC) and electric generation being purchased below the market price and "locked in" at a fixed price. Winter gas supplies were established at a fixed price of \$2.17 per mmBtu, while the Index price fluctuated between \$2.47 and \$2.30. The KMGA program has proven to be an effective and economical method of gas acquisition.

The City hopes to take the gas supply into even greater sophistication in 1993, as it will begin to build a multi-year supply portfolio. It is anticipated that annual gas supply needs will be divided for purchase into contracts with varying term lengths. A portion of the annual supply will be purchased on a six-month term, another portion on a one-year term,

while another portion may be a multi-year term. Theoretically, the shorter the term, the better the price. The reason for structuring multi-year terms is to "hedge" against large price fluctuations during the course of a year. If prices do increase over the long term, the portfolio will allow a utility to gradually phase into the higher market conditions.

Subsequently, there will not be a problem with "rate shock" of short term market changes and wide price fluctuations that could occur with a single shorter term contract for gas supply.

To provide more efficient maintenance of the distribution system, the gas utility has converted from the use of steel to polyethylene pipe. It was also decided, following a code change by the Kansas Corporation Commission (KCC), that the City would maintain customer-owned yard lines. Effective in September, 1991 all repairs and replacements became the responsibility of the City's gas utility. These are made at no charge to the customer.

Another suggestion for improving efficiency is to install a SCADA system to provide "real time" information on system performance, regulator and tail-end pressures, gas flow information and on-line industrial customer load data.

In terms of long-range capacity planning, it is expected that some improvements will be required within the next five years. The existing supply of natural gas is adequate to meet winter heating demand, which is 8,500 thousand cubic feet per day (mcf/day). However, approximately 11,800 mcf/day is required for generation of electricity during the summer months, and existing capacity is at the upper limit of that which is required. If additional

electric generating facilities are constructed in the future, the capacity of the gas delivery system would need to increase by approximately 10,000 mcf per day.

Several options exist and are being explored to meet future capacity requirements. One option is to tie into the Williams Natural Gas Pipeline located six miles from Winfield. This option would allow greater supply and transportation flexibility in the future. An additional option is to increase the pipeline capacity of Arkla Energy Resources, the current supplier.

Other issues that the gas utility faces are related to ongoing operation and maintenance of the distribution system. These include examining the existing rate structure to ensure that adequate capital is available for system and pipeline maintenance and replacement. Keeping pace with changing federal regulations and developing technologies are additional challenges that need to be met by the utility.

The City has several maintenance programs in progress; these are expected to be completed in the next 10 years.

- Gas Meter Relocation Approximately 150 meters are inaccessible or inconvenient for readers, and are being moved to preferred locations. At the present rate, all relocations will be accomplished by 1998.
- Temperature-Compensated Meters Temperature can have a significant effect on the measurement of gas, particularly for large industrial customers. In order to correct this effect, the utility has changed approximately 250 meters a year since 1989.

The gas utility staff has also recommended that house regulators be installed to prevent
accidental over-pressure in case of system failure at one of the major regulator stations
on high pressure gas mains.

The City's gas utility has also identified two future capital improvements which would enhance system safety and allow the City to better regulate the entire natural gas system.

Bare Steel Pipe Replacement - Half of the City's gas lines were installed prior to World
War II, and are bare steel pipe. The City staff estimates that, with a program of
replacing approximately seven miles of main and service lines per year, total
replacement could be accomplished by 2005. The cost of this program would be
approximately \$225,000 per year.

The utility is presently conducting a bare steel main replacement engineering analysis. This study utilizes a computer model that can assess the performance of the gas distribution system based upon hypothetical pipeline changes. For example, if one section of the distribution system is converted to higher pressure - is it possible to reduce the size of the pipe? Then, if the pipe is sized smaller can it provide the volumes required to various delivery points on the distribution system? Likewise, if pipe size is changed, should one area of the distribution system be prioritized over another area? This model will assist in answering these and other questions, and will assist in prioritizing the replacement of the entire bare steel system.

Once the prioritization of the bare steel replacement program is completed, the computer model will assist in the development of cost estimates and detailed material lists. It is anticipated that bare steel main replacements will be accompanied by replacement of yard/service lines that serve the customers on the main. Therefore, once a segment of the main is replaced, all mains, service lines, meters, and other line improvements will be completed at the same time. These lines should not require significant work or repairs for up to thirty years.

Supervisory Control and Data Acquisition (SCADA) System - Installation of this system would provide "real time" information and would replace some system adjustments which must now be performed manually. The estimated cost of this improvement is \$300,000.

One area of major significance that is presently taking place in the gas industry is the implementation of Order 636, which is promulgated by the Federal Energy Regulatory Commission (FERC). This Order will cause a tremendous shift in the duties of the interstate pipeline companies and local distribution utilities. In the early 1980's, local distribution utilities were required to simply "open the regulator stations and let the gas flow." The utility was dependent upon the pipeline company to find the gas, gather the gas, transport, nominate, balance, and ensure that gas was available at sufficient pressures. In addition, there was no negotiation of costs between the distribution company and the pipeline. The gas was delivered, and the distribution company received a bill.

In 1986, FERC began the "unbundling of services" of the gas pipeline. A local distribution company (LDC) could reserve space in the pipeline and find a separate third-party gas supplier. The LDC became responsible not only for the gas supply requirements of the utility, but had to begin managing the transportation of gas in the pipeline. This requires the utility to closely monitor the gas consumption on its distribution system, ensure that gas supply is available, make adequate nominations, balance nominations and actual consumption at the end of a month, and forecast for future months. Instead of getting one bill from the pipeline company, the LDC now receives a bill for each component of the "menu" of services that it utilizes.

Order 636 promulgated by FERC will take this "unbundling of services" one step further. The utility will not only have to make contractual arrangements for transportation, supply, storage, reserves, and other services, but the utility will be penalized for the improper use or failure to closely monitor the services that are purchased from the pipeline. For example, where the pipeline previously allowed the LDC to "carry over" unused gas from month to month (gas that had been nominated but not used during the month), there will be a penalty for missing nomination levels in excess of four percent. Likewise, any gas that is nominated but not used will be assessed a "storage penalty." Balancing will have to be accurately completed on a monthly basis. Simply stated, the utility will have to operate in a more sophisticated manner.

2. TASK FORCE AND CITIZEN SURVEY INPUT

Almost two-thirds (65%) of the 1990 Citizen Survey respondents gave "good" or "very good" ratings to the "quality of service" for the natural gas utility. Half of the residents rated response times as "good" or "very good."

3. GOAL OF THE GAS UTILITY

The goal of the gas utility is to provide safe, economical and reliable natural gas to the citizens of Winfield and the surrounding area.

4. **FUTURE PLANS OF ACTION**

- a. Closely monitor the implementation of FERC Order 636, and select the "menu of services" that best fit the operations of the Winfield Gas Utility.
- b. Develop gas supply options which provide competitive gas prices in sufficient quantity to meet current and future requirements of the community and industry. Examine multi-year contract terms for various quantities of gas to prevent "rate shock" that can occur from volatile market price fluctuations in gas supply. Multi-year contracts (locked in at varying prices) will allow the utility to overlap gas supplies, while absorbing price swings in the market that may occur from year to year. This portfolio of multi-year supply contracts allows the City to hedge against market price swings and guard against problems associated with single vendor delivery situations.

- c. Complete the engineering analysis of a bare steel main replacement program. This analysis will aid in establishing a priority schedule for the replacement and/or upgrading of bare steel mains and services on the distribution system.
- d. Review rate structure for the Gas Utility and make changes to ensure that adequate revenues are available for a multi-year bare steel main replacement program. It is anticipated that the Purchased Gas Adjustment (PGA) should be lowered to reflect the terms and lower rates of the new gas contract.
- e. Evaluate the installation of a SCADA system to assist in the monitoring of system pressure and performance on a "real time" basis. The SCADA will also include software to assist in the nomination, balancing and measurement of gas supply.
- f. Continue to investigate various methods to promote natural gas safety for homeowners and residents of Winfield.
- g. Continue to monitor changes promulgated by the Federal Department of Transportation that pertain to the transportation and pipeline operations of the gas distribution system.

E. STORM WATER MANAGEMENT

1. EXISTING CONDITIONS

The bulk of the City of Winfield is typified by very flat terrain with the exception of the northeast quadrant of the City, where the Winfield State Hospital and Southwestern College

are developed on ridges which are substantially higher than the surrounding area. In addition, the "Cup and Saucer Hills," which are located in the area south and east of Winfield, are typified by rolling terrain and areas of exposed rock outcroppings.

The City has experienced several major flood events in the course of its history, owing to the influence of the Walnut River and Timber Creek, and the substantial floodplains that surround them. The City experienced its most devastating flood in April, 1944. In that flood event, approximately half of the urban area was inundated. Another catastrophic flood occurred in 1951. In the late 1970s, the existing dike system, which was constructed in the 1930s, was upgraded to provide additional protection to the City. In addition, a number of upstream improvements were constructed on the Walnut River which greatly reduced the potential for inundation in Winfield.

Winfield participates in the National Flood Insurance Program which is administered by the Federal Emergency Management Agency (FEMA). The Flood Insurance Study and Flood Insurance Rate Maps were updated in 1989 and reflect the flood hazard boundaries, which were revised with construction of the levee improvement. It is anticipated that the dike will be extended along the southeast side of the City in connection with the south bypass project, known as K-360. That dike has received preliminary approval from the U.S. Army Corps of Engineers, and would afford additional flood protection to the south side of the City.

Most of the older area of Winfield was developed with streets which are crowned to carry water in aboveground gutters. Over time, the natural expansion and contraction of the soil

below the street surfaces has caused heaving in some areas and exaggerated the crowns and gutters. This has made the pavement irregular, and caused localized drainage problems.

2. TASK FORCE AND CITIZEN SURVEY INPUT

In the Citizen Survey, residents were asked to describe storm drainage on their property.

More than half (59 percent) indicated that their property drains well; 29 percent indicated that they have occasional problems; 12 percent reported that they have frequent drainage problems.

3. GOALS OF STORM WATER MANAGEMENT

The goal of storm water management is to protect public and private properties from potential adverse effects of storm runoff, including increased velocities, inundation, and ponding.

4. FUTURE PLANS OF ACTION

- a. Continue to work with the Army Corps of Engineers to ensure that the planned flood levee extension will be completed in a proper manner. The extension will protect the area south of Nineteenth Avenue (on the north side of the Walnut River), and prevent "back water" flooding on the Walnut River.
- b. During planning for the flood levee extension, evaluate various possible alternatives for the interior storm water detention ponds. The size, shape and location of the required detention pond and pumping station may be constructed to allow other compatible

public uses around the detention structure. Possible uses include public recreation facilities; open space areas to buffer residential areas from noise from the proposed K-360 bypass; or other beneficial public uses.

- c. Maintain existing surface street drainage systems to minimize local flooding.
- d. Conduct a storm drainage study for the entire City to coordinate internal drainage with the levee system. This study should identify and prioritize recommended improvements.
- Evaluate funding alternatives to repair and maintain larger drainage ways that are in extremely poor condition.
- f. Ensure that the "Flood Control Maintenance Fund" is adequately financed with the revenues from the sales tax funds designated for this purpose.
- g. Continue to evaluate plat and subdivision plans to ensure that future development will not adversely affect existing developments through storm water runoff or related drainage problems.

F. SANITATION UTILITY

1. EXISTING CONDITIONS

The City provides solid waste hauling services for all residential customers and nearly all of the commercial and industrial customers within the city limits. The equipment that is currently in operation consists of two commercial packer trucks; two residential packer trucks working in conjunction with one pick-up and trailer; and one pick-up and specialized recycling trailer. An additional pick-up is utilized to provide dumpsters to residential and commercial customers on a requested basis for special clean-up projects.

Residential waste and recycling pickup routes are operated Monday through Thursday.

Commercial pickup routes are operated Monday through Saturday. Specially-requested dumpsters are provided throughout the week, but are not picked up on the weekend.

Refuse is currently placed in the Cowley County Landfill, which is located southeast of the city limits. The useful remaining life of the landfill has been estimated to be between five and ten years, given the current volume of waste. The County Commissioners recognize the limited useful life of the landfill, and are beginning to take steps in the process of developing a new facility. Provisions of the Resource Conservation and Recovery Act (RCRA) which will include new requirements for developing and operating new landfills, and closing existing landfills, will take effect in upcoming years. While it is impossible to predict exactly what conditions will need to be met in the construction of future landfills, it is likely that impervious synthetic liners and installation of monitoring wells, methane recovery systems and equipment inspections will be minimum requirements. Despite the uncertainty

of future policy and regulations, increased costs for waste disposal are a certainty. Those costs will be passed on to users in the form of higher tipping fees, which will, in turn, mean an increase in rates for sanitation services.

In order to reduce the amount of solid waste being landfilled, Winfield started the first municipally-operated curbside recycling program in the State of Kansas. The City desired to start the program while it could be voluntary, so that citizens will be accustomed to separating recyclables when such programs become mandatory. Recycling is not an inexpensive alternative to hauling waste to the landfill. Despite the fact that Winfield operates a very efficient recycling program, the cost of collection is presently higher than the revenue derived from the sale of materials, as shown in Table 6-1. Thirty cents per month is built into residential sanitation rates to pay for recycling.

2. TASK FORCE AND CITIZEN SURVEY INPUT

The City's Sanitation Service received "good" and "very good" ratings from approximately 40% of the respondents of the 1990 Citizen Survey. Before its inception in the Summer of 1991, there was strong support for recycling in the community. Citizen Survey respondents indicated that over half (64 percent) of the residents would separate recyclable materials from waste prior to pickup. In addition, half of the survey respondents indicated that they were willing to pay at least 50 cents a month for recycling; the remaining respondents were not willing to pay any fee.

3. GOAL OF THE SANITATION UTILITY

The goal of the Sanitation Utility is to provide economical, efficient, and safe disposal of residential and commercial solid waste generated in the community. This goal includes the economical operation of a solid waste recycling program that is available on a voluntary basis to all households.

4. **FUTURE PLANS OF ACTION**

- a. Continue to operate a residential solid waste curbside recycling program on an
 economical basis. Evaluate expanding the recycling program to include commercial
 customers.
- b. Continue to examine and monitor markets for recyclable materials. While the existing system of disposal of recycled materials is functioning well, this system may not be available in the future. The key to a successful recycling system is the ability to find markets for recycled materials.
- c. Evaluate the possibility of a composting program for yard waste materials. Explore ways to compost on a large scale so that a program can be implemented before yard wastes are banned from Kansas landfills. Evaluate possible policies and/or economic incentives to encourage mulching lawnmower blades and backyard composting.
- d. Monitor the condition of the Cowley County landfill and stay current on the plans of the County Commission to expand future landfill areas. Monitor state and federal

legislation on landfill issues, and evaluate the impact of such legislation on the Cowley County landfill.

e. Enhance the existing vehicle maintenance practices of the Sanitation department to extend the life of packer vehicles and ensure safe operations for the crews.

* * * * *





A variety of public facilities and services are provided to the citizens of Winfield by the City and other public and quasi-governmental agencies. Descriptions of these services, relevant goals, and "future plans of action" are included in this section.

A. PUBLIC SAFETY

1. EXISTING CONDITIONS

Public safety services provided by the City are organized into two departments; the Police Department, responsible for police services, and the Fire Department, responsible for fire protection services. The two departments are currently located separately. The Police Department is located on Millington between Eighth and Ninth Avenues; the Fire Station is located on the northwest corner of Ninth Avenue and Fuller Street. The Fire Department is housed in a building which was constructed in 1886 and remodeled in 1931 and again in 1976.

a. Police Department

The Police Department presently employs 19 commissioned officers, 1 commissioned drug detection canine, 6 civilian employees, and 8 reserve officers. In addition to the usual law enforcement activities, the Department handles parking enforcement and

animal control. In 1988, the Winfield Police Department joined with the Cowley

County Sheriff's Department and the Arkansas City Police Department to form a drug
task force to confront drug problems.

b. Fire Department

The Fire Department employs a full time staff of 20, including 18 firefighters, 9 of whom have been certified as emergency medical technicians. The Department also employs two certified arson investigators. The Fire Department mans a rescue and basic life support vehicle, which is often the first vehicle called to the scene of an accident. In recent years, the Fire Department has purchased a new pumper truck and two "4 x 4" trucks.

The capabilities of the Fire Department are an important factor in the rating given a City by the Insurance Services Office (ISO). This rating determines the insurance rates of property owners within the community, and is based on the overall fire protection capabilities of the community. The City maintains a Class 4 rating, which reflects well on a city the size of Winfield. The ratings range from 1 to 10; 10 being the highest class, with the majority of communities falling in the mid-range of 4 through 6.

c. Ambulance Service

Ambulance service is provided by William Newton Memorial Hospital.

2. TASK FORCE AND CITIZEN SURVEY INPUT

The Citizen Survey conducted in the Fall of 1990 included questions about public safety services. Public safety operations were rated very highly. Close to two-thirds of the respondents supplying a specific answer rated the Fire Department "very good," both in quality of service and response time. Over half the responses to questions about the Police Department rated their response time and service quality "very good." These ratings indicate strong public support for public safety operations.

According to the Public Facilities Task Force, the major challenges facing the Fire

Department are old and overcrowded facilities, and provision of adequate services to those
areas of the City that have expanded west beyond the railroad tracks. The railroad lines
pose an obstacle to efficient response if trains are on the tracks. Construction of a Fire

Department substation within or adjacent to the south part of the City was proposed so that
quicker response times could be provided in this area. If sited properly, railroad traffic
delays could also be avoided by crews dispatched from this satellite facility.

The Task Force found that the Police Department is also in need of more space for its operations, and recommended construction of a structure to house the base operations of both departments. Locating the facility within or adjacent to the Central Business District was recommended by the Task Force.

3. GOALS OF THE FIRE AND POLICE DEPARTMENTS

- Address concerns about adequate public safety and provide effective fire protection in all areas of the City.
- b. Enhance public safety and working conditions by providing adequate space for base operations for the police and fire departments.

4. **FUTURE PLANS OF ACTION**

- a. Enhance fire protection service in areas of the City that are separated by natural and man-made barriers from the existing downtown-area station. To that end, study the feasibility of building a Fire Department substation in an area south and west of the Walnut River. Ideally, such a substation would be located to take advantage of the proposed K-360 bypass to optimize response times.
- b. Improve public safety by providing Police and Fire Department facilities with adequate space for operations of both departments. Locate the facility or facilities in or near the Central Business District and examine the feasibility and economy of providing joint facilities for both departments.

B. CITY BUILDINGS

1. EXISTING CONDITIONS

a. City Hall

City offices are located in several buildings throughout Winfield. City Hall, located at 200 East Ninth Avenue, houses the administrative offices of the City Clerk and Treasurer, the Director of Community Development, Director of Public Works, the City Manager's office, and others. Over the last several years, the size of the City Hall staff has grown to a point that there is no room for additional staff. The building was constructed in 1926 and because of its age, it is not fully handicapped-accessible, or equipped with an elevator.

b. Operations Center

The City Operations Center is located on the south side of Highway 160, east of Viking Road. The gas, water, wastewater, and electric utilities operations are dispatched from the Operations Center, as are street maintenance and refuse collection personnel. The Cowley County Civil Defense office is also housed at the Operations Center. Because of the gradual increase in City utilities staff in recent years, some overcrowding is also occurring at the Operations Center. It is expected that this will be alleviated with some interior remodelling, which is scheduled for 1995 or 1996. Remodelling will also make the building handicapped-accessible, as required by recent federal regulations.

2. TASK FORCE AND CITIZEN SURVEY INPUT

The Public Facilities Task Force concluded that the existing City Hall is no longer adequate to meet the needs of City government, and has an adverse effect on the efficient delivery of City services. Major improvements would be required to make City Hall handicapped-accessible in accordance with the Rights for Americans with Disabilities Act, which went into effect in January, 1992. The Task Force examined various options for making City Hall handicapped-accessible, including installation of an elevator, and concluded that the cost of improvements would be prohibitively expensive.

The Task Force was of the opinion that the most economically-feasible alternative for providing improved facilities for City offices would require moving offices to an existing City-owned building. The Public Facilities Task Force identified Meyer Hall at Baden Square as an appropriate location for the relocation of City offices. Moving City offices to Meyer Hall would give the City space for future building additions, and more parking is available at Baden Square than in the downtown area.

On the other hand, there are drawbacks to the Baden Square alternative. First, relocating City Hall could leave vacant office space in the downtown area, and the Baden Square location would be less accessible to some residents. In addition, related services and businesses such as banks, title companies, attorneys' offices and the County Courthouse are located near the present City Hall, and relocating out of the downtown area could hamper these interrelated functions.

There were no questions specific to renovating Baden Square for City offices included in the Citizen's Survey; however, there was a question which asked respondents to rate a number of alternatives for the adaptive use of Baden Square. There were four possible responses to this question; renovation of Baden Square for "general office space" was given a moderate priority, with a total of 36 percent of the respondents rating this alternative as "very important" or "important."

3. CITY HALL GOAL STATEMENT

Economically provide adequate space in a City Hall facility to efficiently and effectively conduct daily operations. Provide handicapped access to City Hall.

4. **FUTURE PLAN OF ACTION**

Examine the options of relocating City Hall to a city-owned structure, constructing an addition to the existing City Hall, or constructing a new building in order to facilitate growth and ensure sufficient parking. Maintain a downtown location for city facilities if economically feasible.

C. BADEN SOUARE

1. EXISTING CONDITIONS

The City of Winfield purchased the former St. John's College Campus in January 1988.

The cost of the purchase was \$700,000; \$600,000 was loaned to the City from local financial institutions through a lease-purchase agreement, \$300,000 of this amount was raised by the Winfield Public Library. Plans for renovation of the existing buildings on campus were then

prepared by planning students from Kansas State University as a Community Service Project.

The study team surveyed local residents and interested groups to determine community needs, assessed the existing college buildings and their condition, and prepared conceptual plans for rehabilitation of the buildings on campus. The findings and recommendations of the Community Service Program team are found in their report, which was released August 21, 1989. Since that time, many of the recommendations have been implemented.

- The former campus center building was improved using a \$200,000 federal Small Cities Block Grant. Several agencies, including the Winfield Arts and Humanities Council, the Winfield Recreation Commission, and the Cowley County Council on Aging have offices at the center. Southwestern College also operates a catering service at the center, and has capabilities to serve full sit-down meals or snacks to large or small groups.
- The former St. John's gymnasium was converted by the Winfield Recreation
 Commission for use as a community recreation facility in 1989.
- The St. John's College Library was purchased and renovated by the Winfield Public Library in 1989 and 1990. Funding for this project was obtained from a federal grant for \$140,000, and contributions from local citizens.
- There are also plans in place for converting Rehwinkel Hall for use as housing for senior citizens.

 Cowley County Community College, along with USD 465, is using Stevenson Hall for classroom space for outreach courses.

2. TASK FORCE AND CITIZEN SURVEY INPUT

A mail-in opinion survey was used to gauge public support for the St. John's College purchase and renovation when the Community Service program began its study. Generally, the survey indicated strong support for the City's purchase of the St. John's campus.

Opinions regarding the use of campus facilities by community organizations were mixed.

The Citizen Opinion Survey in 1990 also asked residents to rate their level of satisfaction with five specific reuses of Baden Square. The responses included high marks for the public library, the senior center, the community center, the recreation center and the overall appearance and maintenance of the buildings and grounds. Neither of the surveys included specific questions about adapting Baden Square for use as City offices. However, as mentioned above, there is strong sentiment both for and against the use of Baden Square for City administrative offices.

3. GOALS STATEMENT

Because many of the goals originally established have already been accomplished, the Task Force did not formulate any goals statements specific to Baden Square.

D. CULTURAL AND RECREATIONAL OPPORTUNITIES

1. EXISTING CONDITIONS

A wide variety of cultural and recreational opportunities are provided by several entities for the residents of Winfield. Southwestern College (SWCO) and the Winfield Arts and Humanities Council (WAHC) offer numerous fine arts and performing arts events. A number of parks and municipally-owned facilities provide a range of indoor and outdoor recreational activities and classes.

a. Arts and Fine Arts

The Arts and Humanities Council operates from the Centennial Center, and receives funding from the City to operate a wide variety of classes in visual arts, dance, crafts, art sales and exhibits. The Arts and Humanities Council in conjunction with the Winfield Recreation Commission, sponsors the Winfield Art Center. The Art Center has expanded facilities at Baden Square, and sponsors "Art in the Park," a festival for artists of all media, each Fall at Island Park. 1992 marked the 17th anniversary of this event. WAHC also provides resources and assistance to the Winfield Senior Center, local schools and churches, the Historical Museum, Horsefeathers and Applesauce, the Community Theater, and others. In 1990-91, 577 patrons were served by classes sponsored by the WAHC; and thousands of area residents benefitted from special festivals and events.

b. Public Library

The Winfield Public Library is housed in the former St. John's College Library Building. Over 36,000 volumes and a five year file of periodicals are maintained and available to local residents. A children's department sponsors a regularly-scheduled children's story hour.

c. Recreation Programs

The Winfield Recreation Commission operates and coordinates a number of recreational activities, including team sports such as baseball, basketball, volleyball, and softball for children and adults of all ages. The Commission is also responsible for staffing the City pool and the Fitness Center, which is developed with a gymnasium for court sports and a fully-equipped facility for weight lifting and strength training. The Fitness Center is the former St. John's College gymnasium, located on College Street and Seventh Avenue. The Recreation Commission staff is housed in the Centennial Center at Baden Square. In fiscal year 1990-1991, over 5200 patrons, including 263 sports teams, benefitted from organized activities operated by the Recreation Commission. An additional 7720 patrons benefitted from nonsponsored activities held at the Fitness Center and the Centennial Center.

d. Recreational Facilities

Public recreational facilities in Winfield include 570 acres of park land, a City lake, a municipal swimming pool, and the 18-hole Winfield Public Golf course, which was completed in 1992. An additional private golf course is located at the Winfield Country Club.

Parks: Island Park, the largest of Winfield's ten City parks, is located in the northwest quadrant of the City. This park was the site of the original Chautauqas in the City at the turn of the century. The park provides open space for picnicking and recreation, and as mentioned previously, is the focal point for many of the City's cultural events.

There are a number of private and public parks and open spaces which include a variety of facilities and play equipment for children and adults, including lighted ball fields, tennis courts, basketball courts, and a four-hole Frisbee golf course.

- Swimming Pool: The municipally-owned swimming pool is located just south of Island Park, where U.S. 77 curves west from Main Street. The pool and bath house were constructed in 1937, and are in a deteriorated condition. Specific recommendations of the Public Facilities Task Force are found in sections which follow.
- Fairgrounds: The Cowley County Fairgrounds, located on the west edge of town near the Walnut River, is the site of several annual events. During August, the County Fair is held, and includes livestock shows and sales, 4-H exhibits, merchants' displays, and live entertainment. Throughout most of the year, the local community theater group presents plays in the barn theater at the Fairgrounds. The internationally-recognized Walnut Valley Festival is held in September, and features bluegrass and acoustic musicians from across the country, as well as craft displays and sales. The Kansas Special Olympics Softball Tournament and the

Cherokee Strip Region A.A.C.A. Antique Auto Show and Swap Meet are also held each year at the Fairgrounds.

In 1990, the City undertook a project to renovate and expand existing facilities and provide new exhibit space at the Fairgrounds. This project included expansion of existing restrooms, provision of handicap access in the grandstand, and construction of exhibit buildings. The Fairgrounds ball diamonds were also improved in 1990.

- City Lake: Winfield City Lake is located approximately 4 miles northeast of the City, and covers approximately 1,100 acres. Camping, boating, fishing, and swimming facilities have been developed by the City and are widely used. A boat ramp and marina are located on the south side of the lake, and designated areas are open to hunting during waterfowl season.
- Memorials: Memorial Park, located near the Cowley County Court House, is the site of the new Vietnam War Memorial. A replica of the Washington D.C. War Memorial, Winfield's Memorial commemorates the 759 service men and women from the State of Kansas who were killed or declared missing in action during the Vietnam conflict.

The City maintains all public cemeteries. These include Highland Cemetery and mausoleum, located south of the Walnut River, west of U.S. 77; and the Graham

and Union Cemeteries located in the northeast quadrant of the City, near Michigan and North Streets.

In recent years, the mausoleum at Highland Cemetery has been closed to visitation because marble in the structure has deteriorated to a point that the structure has been determined unsafe. Repair of the mausoleum was designated as a priority by the Public Facilities Task Force.

2. RECREATIONAL STANDARDS

Several agencies and national organizations have established standards for "adequacy" for parks and recreational facilities. The degree to which standards can actually reflect community needs varies, depending on available information. The National Recreation and Park Association (NRPA) recommends an overall gross total of 6.25 to 10.5 acres of open space per 1,000 population, to be divided in a system of municipal parks of varying sizes and distances from residences. Table 7-1 illustrates recommended standards for local developed open space.

These standards are intended to be used as a **guide** in planning for recreational facilities, not as absolute requirements. The use of national standards for determining open space allocations can be problematic because local needs and preferences are not taken into account. However, national standards can be useful as a "starting place" for determining recreational needs.

Table 7-1
NRPA Standards for Local Developed Open Space

Туре	Use	Service Area	Desirable Size	Acres/1000 Population	Site Characteristics
Mini-park (tot lot)	Special facilities for small children or seniors	Less than 1/4 mi.	1 acre or less	0.25 - 0.5	Within neighborhoods, and close to apartments or other high density development.
Neighborhood park/playground	Intense recreational activities, such as field gams, playgrounds, picnicking, etc.	1/4 to 1/2 mi. radius- to serve population up to 5,000.	15+ acres	1.0 - 2.0	Easily accessible to neighborhood population via walking or bike access. May be developed as a school-park facility.
Community park	Area of diverse environmental quality. May include active recreation (ballfields, pools, etc.) and passive recreation areas, or a combination	Several neighborhoods; 1 to 2 mile radius.	25+ acres	5.0 - 8.0	May include natural features and areas suited for intense development. Easy access to neighborhood served.

Note: NRPA - National Recreation and Park Association

Based on the NRPA standard of 6.25 - 10.5 acres of open space per 1,000 population, Winfield is well-situated in meeting the needs of its citizens in respect to "gross" open space. However, as shown on Figure 4-1, the majority of this open space is in large parks such as the Fairgrounds and Island Park. There are few neighborhood parks or "tot lots" suitable for use by small children. This is particularly true in the northeasternmost part of the City.

3. TASK FORCE AND CITIZEN SURVEY INPUT

The Citizens Survey asked respondents to list four facilities improvements, in order of importance, for "Keeping Winfield A Desirable Place To Live." Those responses are presented graphically on the following page, Figure 7-1.

Interestingly, the highest priority of survey respondents was improvement of handicapped access at public facilities. Over 40 percent of the Citizen Survey respondents indicated that improvement of park and swimming facilities were "important" or "very important" actions for the City to take to keep Winfield a desirable place to live. Improving the fairgrounds was listed as a high priority, as was construction of additional indoor recreation facilities at the Fitness Center, and construction of additional improvements at the City lake.

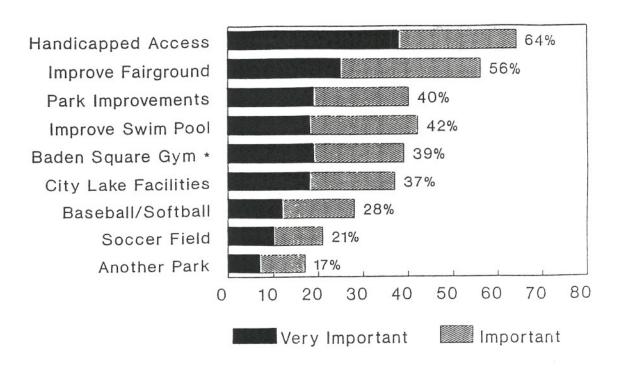
Development of additional sports fields and park facilities were also mentioned as desirable improvements, but with a lower priority.

The condition of the existing municipal swimming pool is an issue of particular concern to the Public Facilities Task Force. Because of its age and deteriorated condition, it has been determined that the pool leaks tremendous amounts of water and is not likely to last another

Figure 7-I

Actions to Keep Winfield a

Desirable Place in Which to Live



· Additional recreation facilities.

5 years. A feasibility study is recommended to determine the cost of major repairs to the pool, versus the cost of constructing a new pool.

Another important issue, according to the Task Force, was the condition of the mausoleum at Highland Cemetery. A recommendation for repair is included in the "Future Plans of Action," which follow.

4. RECREATION GOALS STATEMENT

Provide recreational and public facilities that are safe, appealing, and adequately maintained so that the people of Winfield may use and enjoy them to their fullest capacity.

5. **FUTURE PLANS OF ACTION**

- Determine user groups and plan for the addition of appropriate recreational facilities for all citizens.
- b. Relocate and rebuild the city pool in a central location that is easily and safely accessible to all Winfield residents. Acquire adequate land area (1.5 to 3 acres) to accommodate all required facilities and parking.
- c. Ensure that park equipment is in good condition and that areas are safe for adults and children.

- d. Allocate additional funds for the purchase of new park sites, equipment, or improvements for existing City-owned parks.
- e. Budget money necessary to repair/renovate the marble on the inside of the City mausoleum so that it is safe for public visitation.

E. SCHOOLS

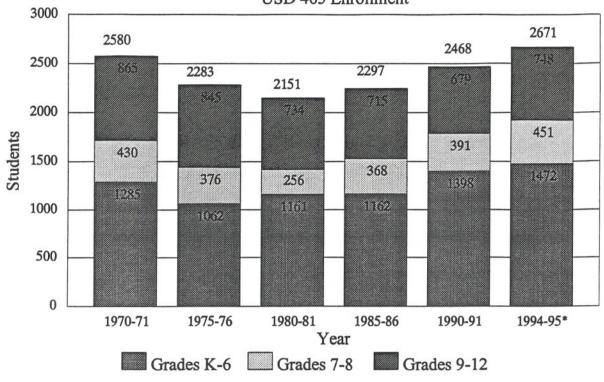
1. EXISTING CONDITIONS

The Winfield area is served by Unified School District (USD) No. 465 which is fully accredited by the Kansas State Department of Education, and four private schools. USD 465 operates a Head-Start program, six grade schools, one middle school and one high school.

Figure 7-2 shows past, current, and projected enrollment in USD 465. Total enrollment reached a low point in 1980 and has climbed steadily since then. Through the 1980s, high school enrollment remained relatively steady. The grade school population, however, increased almost 32 percent from a low of 1,062 students in 1975-76 to 1,398 pupils in 1990-91.

Total district enrollment is expected to increase to 2,671 students in 1994-95. Grade school enrollment is projected to increase by almost 200 students, to 1472 in 1994-95; this will exceed the previous high of 1,285 elementary students in 1970-71. Middle school enrollment is expected to be 451 students in 1994-95; this will be approximately equal to the 1970-71 school year, but up 75 percent from the low of 256 students in 1980-81. The

Figure 7-2 USD 465 Enrollment



SOURCE: USD 465

* Projected

Note: Figure does not include special education students.

increase in the number of students enrolled in grade school and middle school may create a need for expanded or additional school facilities in the future.

To keep pace with changing enrollment, USD 465 has updated its facilities several times in the last 20 years. With passage of a bond issue in 1985, almost \$2 million was allocated for additions and improvements to three elementary schools, and completion of the remodeling of the middle school. A public high school, located on Viking Boulevard near Southwestern College, was completed in 1974.

Present plans for meeting the projected increase in elementary school enrollment call for hiring additional elementary teachers. However, any increase in staffing will be contingent upon the availability of funding.

a. Special Programs

USD 465 sponsors the Cowley County Special Services Cooperative, which serves Winfield and five other school districts. The program provides services for children with special needs, including children who are gifted, mentally impaired, have learning disabilities, lack interpersonal skills, or have hearing, visual or physical impairments.

USD 465, in cooperation with the Arkansas City School District (USD 470) and Cowley County Community College, has implemented an alternative education program for students who are in danger of dropping out of school before graduation. In another effort, aimed at preparing high school students for college, USD 465 has entered into a cooperative program with Cowley County Community College to

enhance students' technical skills. Working with local businesses, the school district is involved in an effort to identify the skills needed by local businesses and industries and tailor programs to fill some of those needs.

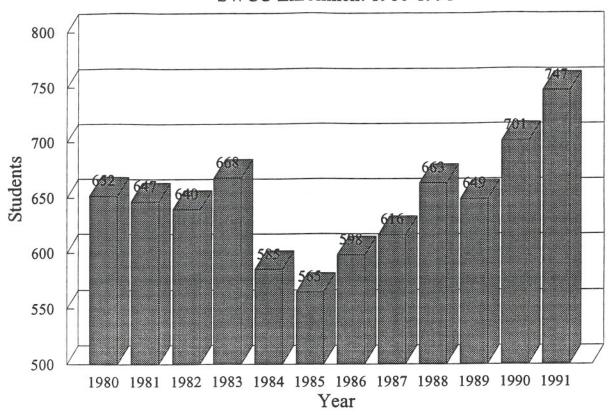
Private schools in Winfield include Rainbow Christian Preschool and Kindergarten, Grace Episcopal Preschool, Holy Name Parochial Grade School for kindergarten through sixth grade, and Trinity Lutheran School for students in preschool through sixth grade.

b. Continuing Education

Southwestern College (SWCO), a private four-year liberal arts college related by covenant to the Kansas West Conference of the United Methodist Church, is located in the northeast quadrant of Winfield. The college offers seven undergraduate degrees with majors in over 50 areas. Graduate degrees offered include Master of Education and Master of Liberal Arts. In addition to the core curriculum, continuing education courses are also available to community members. A special tuition rate is available for individuals who meet certain qualifications. Additionally, Cowley County residents over age 65 may take classes free of tuition charges.

Enrollment in Southwestern College dropped to a low point in 1985 after several years of being fairly stable. Since 1985, the number of students has increased steadily, and enrollment is predicted to continue in this manner. Figure 7-3 summarizes enrollment at SWCO for the past 10 years.

Figure 7-3
SWCO Enrollment 1980-1991



NOTE: INCLUDES FULL-TIME AND PART-TIME STUDENTS

Source: Southwestern College

Southwestern College and Cowley County Community College have recently established a Cooperative Baccalaureate Degree Program for which up to 24 hours of "life experience" can be credited toward attainment of a Bachelor's Degree in Human Resources or Engineering Technology. To accommodate "nontraditional" students, many classes are held on Saturdays or evenings, at on-campus locations and the work place.

In addition, SWCO and Newton Memorial Hospital cooperate in providing training for Registered Nurses. Scholarships and tuition assistance are available for many students; most of whom are "nontraditional."

The combination of these programs provide the Winfield area with exceptional educational opportunities. As the availability of education and advanced skills training becomes more important to the future economic development of the community, Winfield will be positioned very competitively with these excellent facilities and programs. A strong commitment to all levels of education and training will provide Winfield with an educated and skilled work force that will enhance and increase the ability to attract new industries and jobs to the area.

2. TASK FORCE AND CITIZEN SURVEY INPUT

Approximately 60 percent of the respondents to the Citizen Survey rated the quality of schools as an important factor in citing reasons for living in Winfield. Almost two-thirds of the residents surveyed rated the quality of education in Winfield as "good" or better."

The importance of good schools and the availability of additional training was also recognized by the Economic Development Task Force as an important facet of a well-rounded economic development program. Applicable goals and "Future Plan of Action" specific to the school system and continuing education are included in Part 8, Economic Development.

F. MEDICAL FACILITIES

William Newton Memorial Hospital provides a full range of medical services to Winfield and the surrounding area. The hospital is fully accredited by the Joint Commission for Accreditation of Health Care Organizations. The 100-bed facility offers general medical and surgical care including emergency treatment, cardiac and critical care, and rehabilitation services.

The Winfield State Hospital and Training Center is located in Winfield. Over 400 mentally and physically handicapped children and adults receive residential care at the State Hospital. In addition to daily care, professional and semi-professional staff provide a range of physical and activity therapies to Hospital residents.

* * * *





A. INTRODUCTION

"Economic development" is a term that can have many meanings to different people. In formulating goals and "future plans of action" for economic development, several "tangible" factors were identified; these include the need for expanding existing industrial areas and promoting downtown business interests. Other factors are "intangible," and are those that will enhance the overall "quality of life" in Winfield. Through the implementation of these varied programs and strategies, Winfield will continue to attract and retain the businesses, industries, and people that make it a strong and vital community.

B. EXISTING PROGRAMS

1. CITY

Winfield has traditionally been very proactive in promoting economic development. For example, the City purchased land and extended roads and utility services to stimulate industrial development in the Winfield Industrial Park in the early 1970s. Today, some of the City's premier industries are located in this 80-acre industrial area, and it is expected that additional land will need to be incorporated into the park soon. The City's Community Development Department provides substantial assistance in obtaining low interest state

economic development loans for new businesses or existing businesses that wish to expand their facilities. The City established and administered an Enterprise Zone under the authority of the state Enterprise Zone Act. Prior to being amended in 1992, this program gave certain tax incentives to stimulate business in depressed areas known as "Enterprise Zones." Under the amended statute, the Enterprise Zone Act has been reoriented so that tax incentives are oriented toward individual businesses and very small municipalities (population of 2,500 or less). The act is no longer tied to a mapped "zone."

In order to improve neighborhoods and housing opportunities, the City has actively pursued and obtained federal Community Development Block Grant (CDBG) funds. These funds are used to improve streets, sidewalks, and infrastructure in low income neighborhoods, thus encouraging individual investment in home maintenance. The City is also administering a housing rehabilitation grant program, and has recently begun working with "Habitat for Humanity" in providing housing for low income citizens.

In 1992, the City formed the Winfield Convention and Tourism Committee to promote

Winfield as a destination for tourists and visitors. The Committee is staffed by personnel in
the City Manager's office

2. CHAMBER OF COMMERCE

The Winfield Area Chamber of Commerce (WACC) is very active in promoting Winfield as a place to live, visit, and do business. The City provides limited funding to the Chamber on a case-by-case basis to support some Chamber activities.

There are several active Chamber committees with differing areas of interest and focus.

Some of the committees that promote traditional economic development activities are the Legislative Committee, the Retail Trade Promotion and Agribusiness Committee, the Business and Industry Committee, the Transportation Committee, and the Education Issues Committee. In addition to promoting Winfield, WACC has been active in working with business leaders in Arkansas City and Cowley County to better coordinate economic development activities. "Focus on the Future," a recent effort in encouraging interlocal cooperation and county-wide planning, was initiated by the Arkansas City and Winfield Chambers of Commerce in 1990. Members of WACC, the Arkansas City Chamber, and members of other Chambers of Commerce have formed the Cowley County Economic Development Council to stimulate cooperation and county wide planning.

3. EDUCATION/CONTINUING EDUCATION PROGRAMS

It is widely recognized that an educated work force is vital for maintaining a competitive position in today's global economy. Winfield is fortunate in having several notable programs in education and continuing education.

Winfield's School District, USD 465, and the Arkansas City School District, USD 470, have worked cooperatively to improve the quality of education for students enrolled in grades K-12. Continuing education programs are also available for adults who wish to advance in their present careers or change careers. These programs are described below.

a. K-12 Educational Programs

The Winfield School District (USD 465) is involved in an ongoing effort to improve the quality of education in grades K-12. The district has also worked with the Arkansas City School District (USD 470) and Cowley County Community College (CCCC) to implement alternative educational programs for students who are not part of the "main stream." USD 465 has benefitted from a close association with area businesses to improve students' preparedness for the working world, and continues to search for ways to enhance this relationship in the future.

In an effort aimed at preparing high school students for college, USD 465 has entered into a cooperative technical skills program with CCCC. The program was started during the 1991-92 school year, and is funded in part with federal grant funds. Specifically, this program is aimed at enhancing the technical skills (writing, mathematics, science) of high school juniors and seniors in order to prepare them for entering a community or four-year college. This program is not unique to Winfield; it has been implemented in several areas where there is a local community college.

USD 465 is presently involved in a program to identify the skills needed in local businesses and industries so that local programs can be tailored to fill some of those needs. The district is trying to obtain additional assistance from the local business community in the form of a "mentor" program where business leaders will work in the schools to stress academic achievement, and in a "school in the workplace" program which would allow students to learn in a business setting.

Another example of a program that benefits the school district is an ongoing relationship with Binney and Smith, which includes contributions of educational and instructional materials. The district is also in the early stages of implementing a plastics technology program at the Middle School in cooperation with local industries.

b. Continuing Education

(1) Cooperative Baccalaureate Degree Program - SWCO & CCCC

Southwestern College (SWCO) and Cowley County Community College (CCCC) have recently established a Cooperative Baccalaureate Degree Program for two different types of degrees; Human Resources, and Engineering Technology. Each curriculum generally requires prior attainment of an Associates' (two-year) Degree as a prerequisite for attainment of a Bachelors' (four year) Degree.

Alternately, up to 24 hours of "life experience" may be credited toward attainment of the degree. The Human Resources curriculum, with degrees in Human Resources and Servant Leadership, was started in the Fall of 1990. In the Fall of 1991, and in cooperation with Rubbermaid Specialty Products, Inc., Binney and Smith, and General Electric, degree programs in Engineering Technology and Manufacturing Technology were established.

Through agreements with individual employers, many of the classes are held at the workplace as well as on-campus locations. Many of the classes are held in the evening or on weekends to accommodate "non-traditional" students.

Tuition for the Human Resources curriculum is \$90 per credit hour. The cost for the Engineering curriculum is \$210 per credit hour; however, a scholarship program has been established through an agreement between the colleges and area employers to reduce the cost of tuition. Through this agreement, an individual employed by Binney and Smith, General Electric, or Rubbermaid Specialty Products, Inc. who participates in the degree program, is eligible to have his or her tuition reduced from the standard \$210 to \$140 per credit hour.

(2) William Newton Memorial Hospital - Nursing Program

Newton Memorial Hospital is the only skilled nursing facility in Winfield. In addition, the nursing staff offers home health care as an alternative to recovery in a hospital setting.

There is a high degree of cooperation between the hospital and Southwestern College (SWCO), from which both entities benefit. For example, eight or nine students per term serve as nursing assistants at the hospital. In addition, two or three SWCO graduates per year remain in Winfield and join the Newton nursing staff. As a result of SWCO's nursing program there is less of a nursing shortage "than would be expected".

In an effort to train and keep nurses in the area, a variety of scholarships, grants and loans are available for nursing students. Scholarships are available through a number of sources, including the Yeager Thomas Memorial Nursing Fund, and a scholarship fund administered by the hospital auxiliary. Grants are also available

for nursing students. For example, the Governor's Nursing Program and the hospital will share the costs of school tuition in exchange for years of service upon completion of the nursing degree. Tuition reimbursement, in the amount of \$300 per semester (maximum), is also available for nurses who are on-staff and completing a four-year degree at SWCO.

Approximately half of the students enrolled in Southwestern's nursing curriculum are "nontraditional" students, i.e., persons who are returning to obtain or complete a degree after being out of school for several years, or pursuing a second career.

C. CITIZEN SURVEY AND TASK FORCE INPUT

In the Citizen Survey, residents were asked to rate the importance of combining resources with those of Cowley County and Arkansas City to promote Economic Development. Almost half (49 percent) of the respondents indicated that pooling resources and coordinating economic development efforts with the County and Arkansas City is "very important;" approximately one-quarter (23 percent) of those surveyed indicated that combining efforts is "somewhat important."

Citizens were also asked to indicate their level of agreement with City involvement in six specific economic development activities. The strongest level of support was shown for "promotion of industrial development." Almost half (46 percent) of the respondents indicated that they "agreed strongly" and an additional 25 percent indicated that they "agreed" with the City's involvement in promoting industry.

Strong support was indicated for promoting retail development downtown. A combined total of 68 percent indicated agreement (29 percent) or strong agreement (39 percent) for this policy.

There was somewhat less agreement for promoting retail development outside the CBD. A combined total of 41 percent indicated "strong agreement" (18 percent) or "agreement" (23 percent) with this policy.

D. ECONOMIC DEVELOPMENT GOALS

The Economic Development Task Force formulated the following goals and "future plans of action." As noted previously, some of these action statements relate to "tangible" programs for attracting business and industry; those relating to "quality of life" are somewhat "intangible," but no less important in maintaining Winfield's strong economic position. The "future plans of action" are grouped by focus area - industrial, commercial, and senior's issues/health care.

- 1. Encourage the expansion of Winfield's business and job opportunities.
- Encourage projects or actions that will enhance Winfield's "quality of life," maintain its
 attractiveness as a place to start or expand a business, and not adversely affect the
 environment.

E. **FUTURE PLANS OF ACTION**

1. INDUSTRIAL FOCUS

- a. Continue to use regional and local economic development resources to attract industries which are compatible with existing industries and enhance Winfield's competitive position.
- b. Maintain county-wide cooperation in matters of economic development. Coordinate activities of city and county government, the Chamber of Commerce, "Focus on the Future" and other groups in attracting industry to appropriate locations.
- c. Assist in the identification and acquisition of appropriate sites for business and industrial growth and assist in extending public facilities and services to these sites as appropriate or necessary.
- d. Due to recent expansions of existing businesses, there is a decreasing inventory of property available in the Winfield Industrial Park. In order to ensure that there will be additional land available for industrial development, it would be appropriate for the City to acquire excess property in the area of Winfield Industrial Park when right-of-way is purchased for the K-360 bypass.
- e. In conjunction with the acquisition of additional land for expansion of the industrial park, provide aesthetic guidelines for development within the park.

- f. Recognizing that there are some industrial uses which could not meet strict aesthetic guidelines because of their functional requirements, identify areas where such uses should be located.
- g. In accordance with the revised State Planning Statute, include the Planning Commission in the process of reviewing the City's Capital Improvement Plan. Include improvements within the City which support new business and industrial development, economic growth, and enhance the community's overall quality of life.
- h. Provide appropriate support and promote continuing education and skills training through Southwestern College, Cowley County Community College, and USD 465 to help encourage young residents to remain and work in Winfield.

2. <u>COMMERCIAL/SMALL BUSINESS FOCUS</u>

- a. Support small businesses in Winfield by developing cooperation and coordination between public and private economic development groups (i.e., the City, County, Winfield Area Chamber of Commerce, Downtown Merchants Association). Identify the strengths of each group, optimize broad-based support of area businesses, and avoid duplication of effort.
- Assist Downtown-area merchants in encouraging expansion of existing businesses, and attract other compatible businesses.

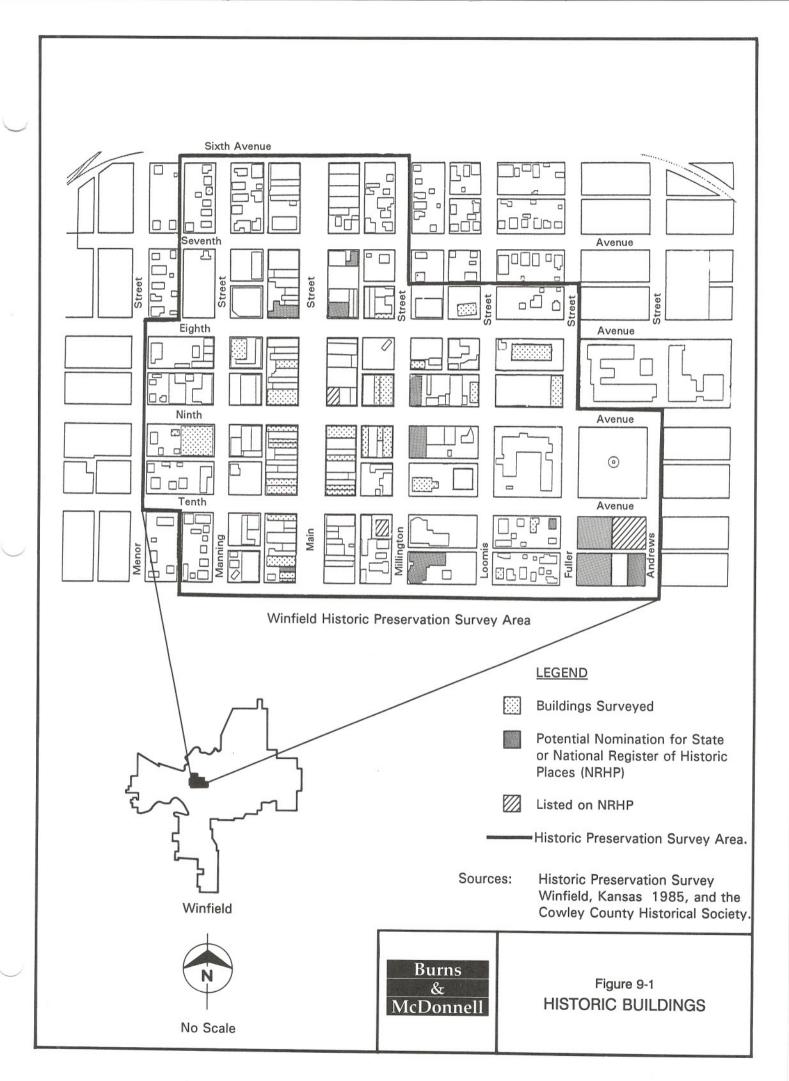
- c. Use appropriate strategies to support entrepreneurship in the community.
- d. Develop zoning regulations that do not unduly restrict mixed use activities such as
 "Home Occupations" or limited office-residential uses in appropriate locations.
- e. Encourage the establishment of an "incubator facility" which would provide support services to small businesses in Winfield.
- f. Recognizing the market potential in Wichita and Ponca City, work toward increasing Winfield's "share" of retail sales through "the marketing of Winfield" in these areas.
- g. Implement utility rate schedules, "load shaving" measures, and/or energy conservation programs that assist small businesses in saving operating costs through energy cost savings.

3. FUTURE PLANS OF ACTION - SENIORS/HEALTH CARE FOCUS

- a. Recognize that the senior population is an economic resource, and provide incentives that will encourage older residents to remain or move to the area after retirement.
- Encourage public and private employment opportunities that take full advantage of seniors' skills and experience.

c. Work with Newton Memorial Hospital and private physicians to provide health care services tailored for the senior population.

* * * *



FUTURE LAND USE



A. THE FUTURE LAND USE PLAN AS A BASIS FOR DECISION MAKING

The existing pattern of development in Winfield has evolved since the city's founding, and is influenced by the natural and built environment, past zoning and development decisions, the availability of utilities, and transportation facilities.

The existing land use pattern serves as a starting point for developing a Future Land Use Plan. The Future Land Use Plan is comprised of two elements; a set of policies and "Future Plans of Action," and a Future Land Use Map. Taken together, these elements reflect the City's desires for the direction of future growth, based on a number of interrelated considerations. These include compatibility with existing land use and zoning, existing and planned transportation facilities, utility availability, and compatibility with the natural environment.

The Future Land Use Plan is a tool that should be used regularly to guide the City in planning for infrastructure and other capital improvements, and in making land use decisions. Kansas State statutes, which form the basis for planning and zoning, require that zoning changes be in conformance with the adopted Land Use Plan. The Future Land Use Plan is also a valuable source of information for citizens, prospective developers, and for use in attracting industry and other economic development efforts.

B. PLAN FORMATION

1. INFLUENCE OF THE NATURAL ENVIRONMENT

a. Floodplains

There are several characteristics of the natural environment that have shaped and will continue to influence the development of Winfield. Among these are the floodplains and flood control levees of the Walnut River and Timber Creek, which pose some limitations on development of the north, west, and south parts of the City. The floodplain of Black Crook Creek, a tributary of the Walnut River, further limits development in the southeast part of the city.

While floodplains limit the developability of these areas, the mature vegetation and natural beauty of these streamway corridors present significant opportunities for development of parks and open spaces. Some of the City's most important parks and public facilities are already developed in or near floodplain areas. Island Park and the Fairgrounds are significant community assets which have been developed to take advantage of the floodplains of Timber Creek and the Walnut River, respectively.

Because of the prominence of the river and its tributaries, there are significant opportunities for the development of "greenway linkages" between existing parks.

These are discussed in additional detail in Part 6 of this Section.

b. Slopes

The majority of the city is developed on the level terrain of the Walnut River Valley; the "Cup and Saucer Hills" rise out of the valley on the northeast, south, and southwest edges of the urbanized area. The slopes in these areas are fairly severe, and pose some limits to development on the fringes of the city.

The "Cup and Saucer Hills" provide scenic views of the river valley, and are also the setting for some of Winfield's most important public uses and community assets. These include the Highland Cemetery in the southwest part of the city, the Winfield State Hospital and Training Center in the northeast part of the city, and Southwestern College in the east-central area of the city. Areas that are characterized by steep slopes are shown as "open space" on the Future Land Use Plan. This is because of the practical difficulties associated with developing areas with slopes in excess of 10 percent, and the limited amount of land which is affected by these slope conditions.

2. INFLUENCE OF THE BUILT ENVIRONMENT

a. Highways

U.S. Highway 77 forms the major north-south axis through the city; U.S. Highway 160/K-15 forms a major east-west axis through the north-central part of the city. Highway 160 is on an alignment with Fifth Avenue on the east and west sides of the city, and drops south to Ninth Avenue as it passes through the Central Business District (CBD).

Due to the high traffic volumes on both highways, particularly U.S. 77, a pattern of "strip commercial" development evolved along Main Street. This trend is also evident on U.S. 160/K-15 particularly on the east and west fringes of Winfield.

The present volume of traffic on Main Street is expected to decrease slightly with construction of the proposed K-360 bypass. Vehicles which formerly passed through the City (approximately 14 percent of all north-bound vehicles) will have the option of avoiding a slow-down by utilizing the bypass. This will ease traffic congestion on Main Street somewhat, particularly large truck traffic.

Construction of the K-360 bypass will also create significant new opportunities for commercial, industrial, and residential development in the south part of the city and the unincorporated area that adjoins the south city limits. Particularly, construction of the bypass will facilitate access to the industrial parks in the southeast quadrant, and possibly stimulate the development of highway-related commercial uses at major intersections. Opportunities for such development need to be balanced with the interests of downtown area merchants, so that commercial uses near the highway do not damage the viability of downtown businesses. In addition, there is some land outside the city limits that will have potential for development when K-360 is constructed. In order to ensure that development of this area occurs in an orderly manner, the City should consider annexation or adoption of extra-territorial zoning in this area. This recommendation is discussed in additional detail in Part 4 of this Section.

b. <u>Utility Availability</u>

The availability of utility services, particularly sanitary sewer and water service, is a major determinant in the development of the city. Areas which can be served by gravity-flow are more economical to develop than those that require pumping facilities for the conveyance of effluent to the wastewater treatment plant.

The Subdivision Regulations for the City of Winfield require that all buildings be connected to the public sanitary sewer system or an alternate system acceptable to the governing body. In those areas which cannot be served by gravity-flow sewers, pumping facilities are used to force the wastewater into the gravity-flow conveyance system. The installation, operation, and maintenance costs for those lift stations and force mains add to the cost of development in areas which cannot be served by gravity-flow sewers. Areas outside the city limits are not served by sanitary sewer, therefore, wastewater is disposed of on-site. Wastewater disposal is subject to the requirements of the Cowley County Sanitation Code and the Kansas Department of Health and Environment (KDHE). Acceptable treatment methods include the use of septic tanks and lateral fields, wastewater lagoons, or small "package" treatment plants. Water service, and the availability of adequate water volume and pressure, are other components necessary for urban development.

In order to minimize costs for development, it is in the best interest of the city to encourage development in areas that are presently served by city water and sewer, or are in close proximity to water and sewer mains.

C. FUTURE LAND USE GOALS AND POLICIES

Based on the influences of existing land use, the natural and built environment, utility availability, and the goals of the community, it is possible to identify patterns of land use that are desirable for future development. The land use goals that follow in this Section are intended to address problems or have been identified in the formation of this plan. Specific goals and " future plans of action" have been formulated to address the various types of land use identified in the plan: residential, commercial, industrial, public, and recreation.

Policies for development of the unincorporated area surrounding the city have also been prepared. Should the City Commission and Cowley County Commission wish to initiate a program of extraterritorial planning, these policies would serve as a guide for future development of the rural area.

1. LAND USE GOAL

The following goal was formulated as a basis for the more use-specific goals that appear later in this section.

 Provide opportunities for the orderly and efficient development of land which will achieve a fiscally sound land use pattern, while maximizing compatibility among different uses.

2. GENERAL POLICIES FOR NEW DEVELOPMENT

In the discussion of existing land use in Part 4, several areas of land use conflicts or incompatibility were identified. The following general recommendations were formulated for use as a guide for avoiding similar conflicts in the future. These recommendations are

more likely to address rezoning or proposals for new development that come before the Planning Commission and governing body in the future, and are therefore unlikely to remedy existing land use conflicts. However, if these general recommendations are considered carefully in rezoning or other development requests, the overall pattern of land use will improve over time.

General Land Use Recommendations:

- a. In order to prevent encroachment of incompatible land uses on established areas, discourage the disorderly development or redevelopment of small parcels. Implement this recommendation by denying requests for rezoning when they do not conform with the Comprehensive Plan.
- b. Land uses which are not compatible with the surrounding area should be located and designed to minimize potential negative effects. The following design measures are recommended:
 - Orient dissimilar uses so that they are back-to-back or back-to-side. Avoid siting dissimilar uses face-to-face.
 - (2) Use open space, natural features, or built features to provide buffering between incompatible uses.

- c. Minimize traffic congestion through design and siting. The following design measures are recommended:
 - (1) Avoid siting uses with differing traffic-generation characteristics near one another. The combinations of land uses that should be avoided are: industrial (heavy trucks) and commercial centers (automobile traffic); residential and commercial uses; and industrial and residential uses.
 - (2) Minimize traffic conflicts on public streets through the limitation of access ("curb cuts") to commercial and other uses that generate a large amount of traffic.
 - (3) Require that new commercial and industrial lots are of adequate size to accommodate all on-site traffic (such as loading areas, drive-through service lanes, etc.) and parking.
- d. Upgrade design and aesthetic requirements through the following measures:
 - (1) Incorporate provisions into the Zoning Ordinance and Subdivision Regulations that will "reward" superior projects (i.e., those exhibiting excellent design or amenity features) with increases in density or intensity. This recommendation would be implemented through incorporating additional aesthetic guidelines in the Planned Unit Development (PUD) district of the Zoning Ordinance, or adding design requirements to certain zoning districts (examples: commercial, industrial, and multi-family residential zones).

(2) Require or encourage the use of landscaping and/or open space in all new developments.

3. RESIDENTIAL LAND USE

a. Task Force and Citizen Survey Input

Housing and the unavailability of all types of housing was identified as the primary concern of City leaders and several of the task force groups that contributed to this plan. Responses to questions relative to housing in the Citizen Survey also identified several areas of concern. These concerns were related to the need for rehabilitating existing single family housing, constructing new housing, and affordability of housing to purchase. The lack of multifamily housing to lease was also a concern. Goals and "Future Plans of Action" for implementing programs to meet these goals are listed in the discussion of each level of residential density: low, medium, and high.

b. General Goal for Housing

Based on input from the Citizen Survey and various task forces, the following goal relative to housing was formulated:

 Work to assure sound, attractive, and affordable housing for all Winfield residents.

(1) Low Density Residential Development

As noted in Part 4, Existing Land Use, low density residential development is defined as development of two to four residential units per acre. This density is typical of newer areas in the City, and generally is found in the vicinity east of College Street, north of Simpson; and south of the Walnut River in the vicinity of 33rd Avenue (Vizcaya Estates, Country Club Estates, Lakeview Estates). The Future Land Use Plan identifies land in two general areas as appropriate for additional low density residential development. These recommendations are based on the availability of utility service and existing low density residential land use in the following areas:

- Unincorporated land east of Country Club Road between 14th and 33rd
 Avenues. Care must be taken to avoid limited areas of steep terrain and
 the Walnut River floodplain in this vicinity.
- Incorporated and unincorporated land in the vicinity east of Viking Boulevard, between Simpson Avenue and H.N. Banner Road.

(2) Medium Density Residential Development

Medium density residential development, as defined in Part 4, Existing Land Use, is a density of 4.5 to 6 units per acre, and is typical of the existing single family residential areas near the CBD. In recognition of the existing development in the area surrounding the CBD, a fairly large area has been designated as appropriate for medium density residential development in the Future Land Use Plan. The area included lies generally between 19th Avenue and Olive Street, and extends from the levee on the west to College Street on the east. Several additional

measures are recommended for stabilizing existing neighborhoods, and encouraging additional medium density residential development or redevelopment in areas near the CBD:

- (a) Encourage the renovation and rehabilitation of existing housing where practical, and the removal and replacement of housing units deemed beyond repair.
- (b) Promote development of affordable single family housing through appropriate policies.
- (c) "Down zone" those areas where existing land use does not conform with the existing zoning pattern. Areas recommended for down-zoning include land that is presently developed with single family residences but zoned for multifamily, commercial, or industrial use.
- (d) Support public works projects that will stimulate reinvestment and stabilize existing housing in the area near the CBD. Examples include road and sidewalk improvement projects, water and sewer line rehabilitation projects, and development or rehabilitation of parks or open space in these areas.

(3) High Density Residential Development

As defined in Part 4, "high density" residential development is typical of "attached" housing such as duplexes and quadraplexes, and multifamily housing, such as apartments or townhouses. The inventory of existing high density residential development is quite small, and in recent years, rezoning land for development of multifamily residences has been difficult or impossible.

In recognition of the limited inventory of multifamily housing, several areas were identified as appropriate for high density residential development in the Future Land Use Plan. These areas were identified based on proximity to employment centers, access to transportation, utility availability, and compatibility with existing land use.

In addition to designating these areas for high density residential development in the Future Land Use Plan, the following measures are also recommended:

- (a) Adopt zoning regulations or policies for development that will allow development or redevelopment to occur in appropriate areas. Such regulations should provide incentives for cohesive development and architectural compatibility with the surrounding area.
- (b) Adopt zoning regulations or development policies that will allow multifamily development in the CBD.

4. COMMERCIAL LAND USE

a. Central Business District

Development of Winfield's Central Business District (CBD) began in 1869 with construction of the community's first general store near the intersection of the streets that are now known as Main Street and Ninth Avenue. Growth of the CBD progressed primarily to the south and east, owing to the limitations imposed by the Walnut River and railroad tracks north and west of the area.

The dominant style of commercial development in the early to mid-20th Century dictated construction of commercial buildings up to the property line, with parking for automobiles provided on the street. As dependence on the automobile increased, this mode of development proved to be inefficient in meeting the parking needs of the shopping public. As a result, Winfield, like many other cities, razed a number of downtown buildings in order to construct surface parking lots. This practice disrupted the continuity of the downtown area, particularly on the fringes of the CBD, and resulted in the loss of several buildings that had figured prominently in Winfield's history.

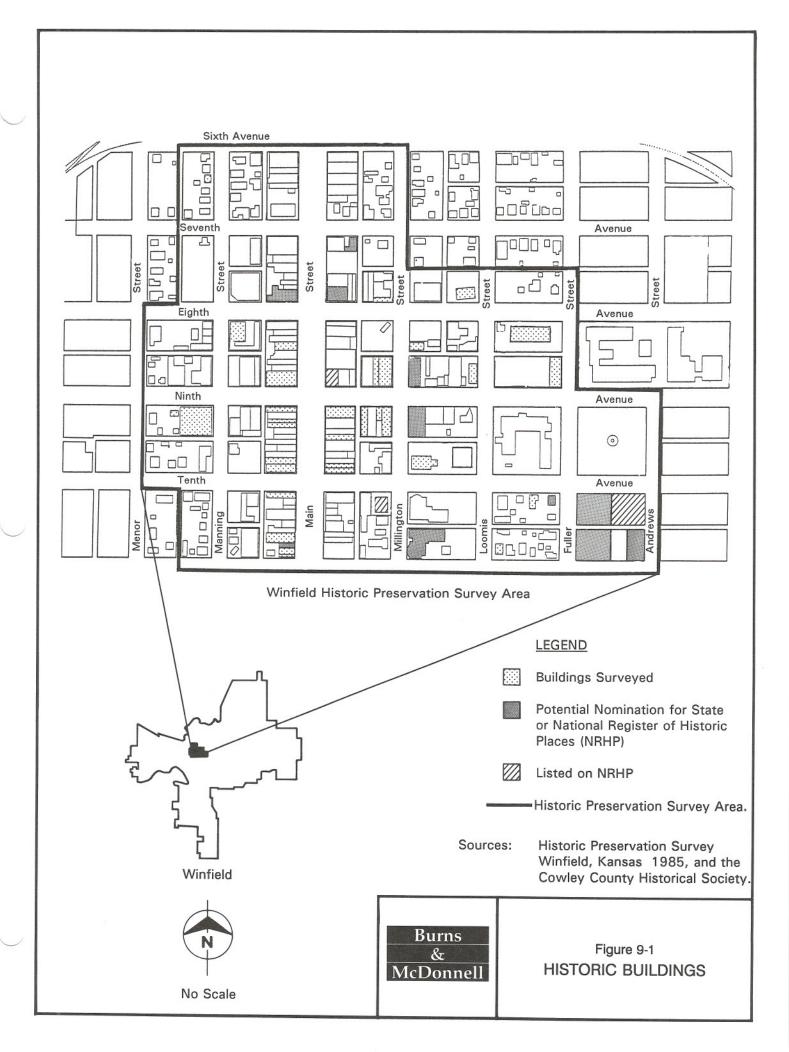
While some historically significant buildings were lost for the development of parking lots and newer structures in the CBD, others have been maintained or rehabilitated to ensure their continued viability as commercial enterprises or offices. In 1985, the Kansas State Historical Society, Historic Preservation Department, prepared an Historic Resources Survey of the CBD. Buildings in a 24 block area were evaluated

for potential historic significance. The survey found 43 buildings with some historic significance. Of these 43 buildings, the Historical Society recommended that 13 be considered for nomination for the State Register of Historic Places. These are shown on Figure 9-1. The Main Street corridor, particularly between Seventh and 10th Avenues, has maintained a strong historic character. This is also true on Ninth, 10th, and 11th Avenues, roughly between Menor and Andrews Streets. These existing assets, combined with past and ongoing improvements, could serve as the foundation for additional downtown improvements.

Public improvements have also been added downtown over the last several years.

These include the installation of traffic signals to improve traffic flow, the provision of street lights with a motif typical of the early 20th Century, and construction of a memorial to Kansas' Vietnam-era Veterans at Memorial Park, just east of the courthouse.

In recognition of the unique character of the CBD and the City's desire to maintain and enhance this area, the Future Land Use Plan includes a special designation for the Central Business District. Designating the area in this way establishes the foundation which will allow the City to implement zoning controls, and/or policies for development, to address the historic character and significant opportunities presented by the CBD.



b. CBD "Fringe"

The area designated as the Central Business District on the Future Land Use Plan is characterized by viable commercial and public uses, buildings in relatively good repair, and a consistent commercial zoning pattern. Land on the "fringe" of the CBD includes the area generally north of Sixth Avenue, extending from the levee to Maris Street; the area between Manning and Menor Streets between Seventh and 12th Avenues on the west; and the area between Andrews and Maris Streets between Seventh and 10th Avenues on the east. These fringe areas are developed with a mixture of industrial, heavy commercial, public, and residential land uses, and are characterized by a mixed zoning pattern. Generally, commercial buildings within the "CBD fringe" area are not as well-maintained as those within the CBD.

The pattern which has emerged on the fringe of the CBD has resulted from a number of factors. First, the railroad tracks and rail-dependent industrial uses that developed near the tracks have created a "barrier" to cohesive commercial development on the north end of the CBD. Areas surrounding the railroad tracks between the levee and Maris Street have been developed with a mixture of single-family residences, mobile homes, heavy commercial and industrial uses, and public and semi-public buildings.

While the areas on the fringe of the CBD do present some challenges, opportunities are also present. Much of the existing housing stock is in sound condition, and many homes in these areas are being refurbished. This older, moderately priced housing stock presents excellent opportunities for first-time home buyers, who can purchase an affordable home and increase its value through renovation.

The northern fringe is adjoined by Island Park and additional flood-prone land near Timber Creek; much of this land is owned by the City. This presents an opportunity for development of additional park or recreation facilities, or linkages to other parts of the City via the streamway.

There is also some vacant land within the fringe areas of the CBD which presents opportunities for development and redevelopment. In order to stimulate development or redevelopment activities in these areas, it is recommended that measures be incorporated into the Zoning Ordinance and development policies that will provide flexibility in development of the "CBD fringe." At the same time, these land use controls and policies must be designed to protect the surrounding residential areas from further encroachment of non-residential uses.

In addition to designating the Central Business District and "CBD Fringe" on the Future Land Use Plan, the following measures are recommended:

c. Goals and Future Plans of Action - "CBD and CBD Fringe"

Central Business District:

- (1) Develop land use regulations, development policies, and guidelines for the Central Business District that will preserve and enhance its historic character and maintain its attractiveness as a center for commercial, office, and government activities.
- (2) Encourage the continuation and development of land uses in the CBD that stimulate street life and night life. Examples of such land uses include:

- Specialty retail.
- Government and professional offices.
- Banking institutions.
- Recreation/entertainment.
- · Health care.
- Restaurants.
- Residential land use at appropriate locations.
- (3) Through adoption of a special "CBD Commercial" zoning district in the revised Zoning Ordinance, encourage the development of uses that are characterized by low parking demand and long-term parking. Conversely, discourage the development of uses with high parking demand and "convenience" uses characterized by heavy short-term parking demand.
- (4) Institute plan review procedures for development/ redevelopment activities in the CBD.
- (5) If deemed appropriate by the governing body, implement taxation policies or other fiscal incentives for preservation, restoration, or rehabilitation of existing structures.

CBD "Fringe":

- (1) Based on existing land use, building and housing conditions, traffic patterns, and socioeconomic factors, designate an area as the "CBD Fringe" on the Future Land Use Plan. Utilize this designation to encourage neighborhood investment or redevelopment activities as appropriate.
- (2) Adopt zoning regulations or development policies that will encourage reinvestment in stable housing areas, and will allow redevelopment activities to occur in appropriate areas. Such regulations should provide incentives for cohesive development and architectural compatibility with the surrounding area. For example, a policy which recommends use of a Planned Unit Development for rezoning areas in the "CBD Fringe" could be adopted. Alternately, the CBD Fringe could be adopted as an "overlay" zoning category which would require submittal of detailed plans for review for new development or redevelopment projects.

a. "Convenience Commercial" Development

During the preparation of this Comprehensive Plan, significant concerns were expressed relative to maintaining the viability of businesses in the CBD; these were discussed above. At the same time, it was also recognized that construction of the new K-360 bypass will likely act as a catalyst to commercial and industrial development in outlying areas.

In order to balance the potential for development of new commercial areas with existing downtown commercial interests, several recommendations have been included in the Future Land Use Plan and policies for development. First, the Future Land Use Plan includes a commercial land use designation of "Convenience Commercial", which is distinguished from the "Central Business District" designation. Generally, "convenience commercial" uses are those that serve the travelling public (motels, gasoline filling stations, convenience stores), or the general public in meeting everyday needs (grocery stores, fast-food restaurants, discount stores). "Convenience commercial" uses are typified by high traffic generation and parking demand; conversely, commercial uses that are identified as appropriate for development in the CBD are typified by lower traffic generation and parking demand.

Goals and Future Plans of Action - Convenience Commercial Uses

- (1) Adopt a "Convenience Commercial" zoning district designed specifically for development of "highway" commercial uses. In addition, designate areas near existing and planned highways (K-360) where development of convenience commercial uses would be appropriate.
- (2) Locations designated as appropriate for development of "convenience commercial" uses in the Future Land Use Plan are in the following areas:
 - The area south of 33rd Avenue, on the east side of U.S. 77. This
 location reflects development of the new motel and additional
 commercial developments planned for the area near the City Golf Course.

- The existing commercial areas on the north side of Simpson, east of Viking Boulevard, are designated as "convenience commercial". The area further east on Simpson, near J.P. Brant Road, is also designated as appropriate for convenience commercial uses, in recognition of the proposed extension of K-360 and planned development of an interchange at this location.
- Existing commercial developments near the intersection of U.S. 160 and Country Club Road are shown as "convenience commercial". In recognition of an existing undeveloped commercially zoned tract, additional "convenience commercial" is shown on the east side of Country Club Road, approximately one-quarter mile south of 14th Avenue.

In addition to designating these areas on the Future Land Use Plan as appropriate for development of convenience commercial uses, the implementation of the General Policies for Development, discussed previously in this section, is recommended. By implementing these policies for new commercial developments or redevelopment, some of the land use problems normally associated with commercial developments could be prevented.

1. INDUSTRIAL LAND USE

The Future Land Use Plan includes a distinction between "light" industrial uses that are dedicated to office-warehouse type activities, versus "heavy" industrial uses that are dominated by manufacturing.

a. Office-Warehouse Development

Some examples of office-warehouse development are found in the Winfield Industrial Park and other industrial areas in the city. These uses are typified by a relatively low number of employees, and little industrial activity evident outside the building.

"Office- warehouse" developments typically have fewer land use impacts than manufacturing uses, and are thus good "transitions" between "heavy" and less intense land uses. The Future Land Use Plan designates the area north of the CBD, and some areas in the vicinity of Wheat Road, between the industrial park and existing residential areas, as appropriate for development of office-warehouse uses.

b. Manufacturing

Industrial uses dedicated to manufacturing typically differ from office-warehouse development in their locational requirements, potential land use effects, and traffic generation characteristics. For example, manufacturing companies generally require larger sites and building areas, have more employees, and rely more on rail transportation than do office-warehouse developments. In addition, manufacturing industries typically have need for more outdoor storage, and may rely on "heavy" industrial processes that generate smoke, fumes, odors, or waste heat.

Manufacturing industries have, for the most part, been located in the southeast quadrant of the city in the Winfield Industrial Park. This area has good access to rail, and is typified by generally flat terrain, a requirement for construction of large clear span buildings.

With construction of K-360, access to highways will also be enhanced in the southeast quadrant. The City is in the process of purchasing right-of-way for construction of K-360 in this area. In keeping with its traditionally strong support of industry, the City intends to purchase adequate property for development of additional industrial tracts in this vicinity. This is reflected in the Future Land Use Plan, which shows expansion of manufacturing in the area south of K-15/U.S. 160 and east of J.P. Brant Road.

c. Goals and Future Plans of Action - Industrial Uses

- Encourage development of transportation-dependent uses in areas where truck traffic will not conflict with pedestrians, passenger cars, or on-street parking.
- (2) Assist in the identification of appropriate sites for business and industrial growth, and assist in extending public facilities and services to these sites as appropriate or necessary.
- (3) Develop land use regulations and development guidelines to ensure that business and industrial uses are protected from conflicting land uses. These regulations

and guidelines would serve as a tool in maintaining existing industries and attracting new ones to the City.

2. RECREATION/OPEN SPACE

a. Neighborhood Parks

As noted previously in Part 4, Existing Land Use, and Part 7, Public Facilities, the City is well-served by large scale park and recreation facilities, but is slightly deficient in smaller neighborhood-size parks and "tot lots." This is particularly true in the northeast quadrant of the City; there are no parks or play areas north of Simpson Avenue, between Bliss Street and the east city limit boundary. According to standards established by the National Recreation and Parks Association, it is preferable to have play areas for small children (tot lots) within 0.25 to 0.5 mile of each residence in the city. The present deficit in such facilities is noted in the Future Land Use Plan with a green asterisk; this indicates a need to acquire and develop property for suitable park land in the northeast part of the City.

Additional concerns relative to recreational facilities and open space are discussed in some detail in Part 7, Public Facilities. Recommendations concerning specific recreational facilities as they relate to land use and locational requirements follow.

b. City Pool

As noted in Part 7, Public Facilities, the City pool is in poor condition, and major repair or replacement will be required in the near future. There is significant concern

that the present location is not appropriate due to its limited size, and particularly that the heavy highway traffic in the present location makes it dangerous. Alternate locations for construction of a new pool were suggested by the Land Use Task Force. While no specific location has been identified, it is important that the new pool be centrally located so that it is accessible to all residents, particularly children. In addition, any new site must have a land area of 1.5 to 3.0 acres to accommodate all required facilities and parking.

c. Greenway/Path System

A major feature of the Future Land Use Plan is the area included in the Walnut River and Timber Creek floodplains, which has been designated as "open space/recreation." The area which has been designated for open space must remain undeveloped due to potential flood hazard. However, it is possible to construct some nonstructural improvements, such as pathways or play fields in flood prone areas. Because the relative possibility of flooding is low, these recreational improvements would be open for use almost all of the time.

As discussed in Part 7, Public Facilities, it is recommended that the City investigate the possibility of developing a path system and/or other recreational improvements in the area which has been designated as open space/recreation. Because of the extent and location of the major floodplains, it is possible that a continuous recreational trail could be developed from one end of the city to the other.

In fact, the City has recently applied for state funding for construction of a bicycle trail to the new City golf course. To date, that funding has been denied. However, it is recommended, as stated in Part 7, that the City investigate preparation of a City wide bikeway plan. This would serve as a blueprint for establishing a bike trail system, and would likely aid the City in its pursuit of state or federal transportation funds for construction of trails or paths.

3. PUBLIC USES

As noted in Part 4, Existing Land Use, a large part of the developed land in the City (27%) is dedicated to public or semi-public uses. These include facilities with few land use effects (e.g., churches, the library) as well as those with potentially negative impacts (e.g., the wastewater treatment plant, correctional facilities).

There are several areas of concern relative to City-owned public uses; recommendations for siting or construction of a new "satellite" fire station, combined Police and Fire Department headquarters, and City Hall are included in Part 7, Public Facilities.

Public uses were also an area of concern for the Land Use Task Force. Recommendations for City-owned public uses follow.

a. Goals and Future Plans of Action - Public Uses

(1) Fire Substation

Areas in the south and west parts of the City could potentially be underserved by fire protection due to distance from the existing station and physical impediments (rail crossings). Siting a "satellite" facility near the Highland Cemetery underpass is recommended. This location would allow easy access to K-360 and points west of the Walnut River. The proposed "satellite" fire station facility is shown as a blue asterisk on the Future Land Use Plan. This is intended to show a general location for such a facility; it is not intended to imply City ownership.

(2) Police/Fire Station

Construction or leasing of a combined central police/fire department facility is recommended. It is recommended that this facility be located downtown.

(3) City Hall

Based on the following factors, it was determined that the CBD is a preferable location for new or expanded City Hall facilities.

- Existing parking areas at Baden Square are not adequate for accommodating the expected level of traffic that would be generated by city offices at this location.
- Such a move would create a "vacuum" in the downtown area.

 Relocating City Hall to Baden Square would adversely affect the residential character of the surrounding area.

4. RURAL DEVELOPMENT AREA

As noted in Part 4, Existing Land Use, there is considerable concern relative to land use in the unincorporated area around the city. While it has been recommended that a program of "extraterritorial" planning and zoning be instituted, it is recognized that this is a program that would require caution and significant cooperation between the Winfield City Commission and the Cowley County Commission.

The Future Land Use Plan designates the majority of the unincorporated area surrounding the city as "Rural Development Area". This designation denotes those areas which are outside of the drainage basins which can be economically served by the City's wastewater utility. Without sanitary sewer service, or installation of a "package" waste disposal plant, it is not possible to develop land at an urban density. Therefore, the "Rural Development Area" denotes land that should be left in agricultural use or developed at a very low intensity, i.e., no more than one housing unit per 5 acres.

The unincorporated area in the vicinity of the proposed K-360 south alignment is of immediate concern. Part of this area will be purchased by the City for highway right-of-way, and will thus be under City control. However, instituting a mechanism to control land use in this vicinity will be of vital importance in the future development of this key area.

D. SUMMARY LAND USE GOALS AND "FUTURE PLANS OF ACTION"

Following is a summary of the goals and "Future Plans of Action" for land use. It is important to note that these goals and strategies for their implementation should not be considered as absolutes; rather, they represent the desires of Winfield's citizens as they exist in 1993. In order to "keep the plan current", it will be necessary to update the goals and strategies as changing circumstances warrant. Kansas statutes also require that the Comprehensive Plan be reviewed annually, and that any changes or amendments to the Plan be specified and officially adopted in the same manner as required for this Comprehensive Plan update.

It is also important to note that the Future Land Use Plan map is not a zoning map. It is a graphic representation of the City's land use goals that is to be used as a guide in making zoning decisions.

1. GENERAL GOAL FOR LAND USE

 Provide opportunities for the orderly and efficient development of land which will achieve a fiscally sound land use pattern, while maximizing compatibility among different land uses.

2. GENERAL LAND USE RECOMMENDATIONS

a. In order to prevent encroachment of incompatible land uses on established areas, discourage the disorderly development or redevelopment of small parcels. Implement this recommendation by denying requests for rezoning when they do not conform with the Comprehensive Plan.

- b. Land uses which are not compatible with the surrounding area should be located and designed to minimize potential negative effects. The following design measures are recommended:
 - Orient dissimilar uses so that they are back-to-back or back-to-side. Avoid siting dissimilar uses face-to-face.
 - (2) Use open space, natural features, or built features to provide buffering between incompatible uses.
- c. Minimize traffic congestion through design and siting. The following design measures are recommended:
 - (1) Avoid siting uses with differing traffic-generation characteristics near one another. The combinations of land uses that should be avoided are: industrial (heavy trucks) and commercial centers (automobile traffic); residential and commercial uses; and industrial and residential uses.
 - (2) Minimize traffic conflicts on public streets through the limitation of access ("curb cuts") to commercial and other uses that generate a large amount of traffic.

- (3) Require that new commercial and industrial lots are of adequate size to accommodate all on-site traffic (such as loading areas, drive-through service lanes, etc.) and parking.
- d. Upgrade design and aesthetic requirements through the following measures:
 - (1) Incorporate provisions into the Zoning Ordinance and Subdivision Regulations that will "reward" superior projects (i.e., those exhibiting excellent design or amenity features) with increases in density or intensity. This recommendation would be implemented through incorporating additional aesthetic guidelines in the Planned Unit Development (PUD) district of the Zoning Ordinance, or adding design requirements to certain zoning districts (examples: commercial, industrial, and multi-family residential zones).
 - (2) Require or encourage the use of landscaping and/or open space in all new developments.

3. GOALS AND "FUTURE PLANS OF ACTION" FOR RESIDENTIAL LAND USE

Work to assure sound, attractive and affordable housing for all Winfield residents.

a. Low Density Residential Development

Encourage low density residential development in areas that can be economically served by City utilities and where there is existing low density residential development.

b. Medium Density Residential Development

- Encourage the renovation and rehabilitation of existing housing where practical,
 and the removal and replacement of housing units deemed beyond repair.
- (2) Promote development of affordable single family housing through appropriate policies.
- (3) "Down zone" those areas where existing land use does not conform with the existing zoning pattern. Areas recommended for down-zoning include land that is presently developed with single family residences but zoned for multi-family, commercial, or industrial use.
- (4) Support public works projects that will stimulate reinvestment and stabilize existing housing in the area near the CBD. Examples include road and sidewalk improvement projects, water and sewer line rehabilitation projects, and development or rehabilitation of parks or open space in these areas.

c. High Density Residential Development

(1) Encourage high density residential development in areas that are close to employment centers, have access to transportation and utilities, and where such housing will be compatible with existing land use.

- (2) Adopt zoning regulations or policies for development that will allow development or redevelopment to occur in appropriate areas. Such regulations should provide incentives for cohesive development and architectural compatibility with the surrounding area.
- (3) Adopt zoning regulations or development policies that will allow multi-family development in the CBD.

4. GOALS AND "FUTURE PLANS OF ACTION" FOR COMMERCIAL LAND USE

a. Central Business District

- (1) Develop land use regulations, development policies, and guidelines for the Central Business District that will preserve and enhance its historic character and maintain its attractiveness as a center for commercial, office, and government activities.
- (2) Encourage the continuation and development of land uses in the CBD that stimulate street life and night life. Examples of such land uses include:
 - Specialty retail.
 - Government and professional offices.
 - Banking institutions.
 - Recreation/entertainment.
 - Health care.
 - Restaurants.

- Residential land use at appropriate locations.
- (3) Through adoption of a special "CBD Commercial" zoning district in the revised Zoning Ordinance, encourage the development of uses that are characterized by low parking demand and long-term parking. Conversely, discourage the development of uses with high parking demand and "convenience" uses characterized by heavy short-term parking demand.
- (4) Institute plan review procedures for development/ redevelopment activities in the CBD.
- (5) If deemed appropriate by the governing body, implement taxation policies or other fiscal incentives for preservation, restoration, or rehabilitation of existing structures in the CBD.

b. CBD "Fringe"

- (1) Based on existing land use, building and housing conditions, traffic patterns, and socioeconomic factors, designate an area as the "CBD Fringe" on the Future Land Use Plan. Utilize the "CBD Fringe" area as a transition zone between the commercial uses in the CBD and residential uses outside the CBD.
- (2) Adopt zoning regulations or development policies that will encourage reinvestment in stable housing areas, and will allow redevelopment of limited

office space or multi-family housing in appropriate areas. Such regulations should provide incentives for cohesive development and architectural compatibility with the surrounding area. For example, a policy which recommends use of a Planned Unit Development for rezoning areas in the CBD Fringe could be adopted.

Alternately, the CBD Fringe could be adopted as an "overlay" zoning category which would require submittal of detailed plans for review for new development or redevelopment projects.

c. "Convenience Commercial"

Adopt a "Convenience Commercial" zoning district designed specifically for development of "highway" commercial uses. In addition, designate areas near existing and planned highways (K-360) and major arterials where development of convenience commercial uses would be appropriate.

5. GOALS AND "FUTURE PLANS OF ACTION" FOR INDUSTRIAL LAND USE

- Encourage development of transportation-dependent uses in areas where truck traffic
 will not conflict with pedestrians, passenger cars, or on-street parking.
- b. Assist in the identification of appropriate sites for business and industrial growth, and assist in extending public facilities and services to these sites as appropriate or necessary.

industrial uses are protected from conflicting land uses. These regulations and guidelines would serve as a tool in maintaining existing industries and attracting new ones to the City.

6. GOALS AND "FUTURE PLANS OF ACTION" FOR RECREATION/OPEN SPACE

- a. Acquire and develop a small park or "tot lot" suitable for small children in the northeast quadrant of the city as indicated on the Future Land Use Plan.
- b. Relocate and rebuild the City pool in a central location that is easily and safely accessible to all Winfield residents. Acquire adequate land area (1.5 to 3 acres) to accommodate all required facilities and parking.
- c. Develop a master plan for development of a bikeway/trail system utilizing flood prone areas as indicated on the Future Land Use Plan.

7. GOALS AND "FUTURE PLANS OF ACTION" FOR PUBLIC FACILITIES

a. Enhance fire protection service in areas of the City that are separated by natural and man-made barriers from the existing downtown-area station. To that end, study the feasibility of building a Fire Department substation in an area south and west of the Walnut River. Ideally, such a substation would be located to take advantage of the proposed K-360 bypass to optimize response times.

- b. Improve public safety by providing Police and Fire Department facilities with adequate space for operations of both departments. Locate the facility or facilities in or near the Central Business District, and examine the feasibility and economy of providing joint facilities for both departments.
- c. Examine the options of relocating City Hall to a city-owned structure, constructing an addition to the existing City Hall, or constructing a new building in order to facilitate growth and ensure sufficient parking. Maintain a downtown location for city facilities if economically feasible.

8. GOALS AND "FUTURE PLANS OF ACTION" FOR THE RURAL DEVELOPMENT AREA

- a. After careful coordination with Cowley County, institute a program of extraterritorial planning and zoning for key areas outside the city limits. Institute this program incrementally so that it can be managed effectively.
- b. Encourage maintenance of agricultural land uses or very low density development in the unincorporated area which cannot be efficiently served by city utilities.
- c. In order to ensure that construction in the unincorporated area is of similar quality to that in the city, require that all new construction meets applicable city building codes.

