

RENO COUNTY, KANSAS

PHASE I

COMPREHENSIVE COUNTY PLAN

SECTION I – POPULATION SECTION II – LAND USE

October 4, 2013

**Prepared at the Direction
of the
COUNTY PLANNING COMMISSION**

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SECTION I

POPULATION

INTRODUCTION

Across the county, observable patterns of development reflect the diverse needs and desires of the resident population. In this sense, everything about the man-made environment in the rural area, as well as in the incorporated cities, has been shaped and formed by the requirements of the population, and exists in scale with the number and size of the population to be accommodated. Because needs, aspirations and resulting physical development preferences are relatively consistent and tend to continue with only slight alteration over time, estimates of future population numbers are among the singularly most important factors in the process of estimating potential future development patterns during the planning period. Accordingly, analysis of existing population levels and forecasts of potential future demographic trends provide a scale for future development which enables estimation of potential need for public facilities, institutions and countywide infrastructure.

Although population estimates are important to the planning process, forecasting long-range demographic trends with certainty is always difficult due to a wide range of highly variable factors which directly influence rates of growth or decline in the local population. Among the most significant of these is economic change, which can be either positive or negative. An economic decline will influence a pattern of out-migration, or people leaving the community, while the opposite will be true in a positive environment.

The second factor of population change, which is also closely tied to general economic conditions, is natural increase, that is, the difference between resident births and deaths. Like migration patterns, natural increase factors can be either positive or negative. In a healthy economic climate, the community will typically experience a net in-migration pattern, and at the same time a natural increase due to generally elevated birth rates.

Although economic opportunity is the dominant factor in population change, many other factors also influence individual decisions about place of residence. It is the purpose of this section of the Comprehensive Plan to review and analyze these influences as a means of developing a foundation for estimating probable future county population levels over the 20-year planning period.

HISTORIC STATEWIDE POPULATION

Over the past 150 years, the populations of Kansas and the Great Plains, as well as that of the entire nation, have become increasingly urban in character, reflecting an ever-diminishing agricultural manpower requirement coupled with growing economic opportunity represented by available jobs in urban areas. This process has been especially noticeable in states like Kansas, which were subject to rapid population growth during the last decades of the 19th century due to the opening of the western frontier for settlement following the Civil War. The burgeoning farm population on the Plains occasioned need for centers of supply and transportation, and almost immediately, the trend toward urbanization was begun.

Table 1 illustrates the numerical effects of these influences in the state population. Statistics are presented by decade for the period 1860 to 2010.

The statistics illustrate the intensifying trend toward urbanization over the period, and show that for each decade since 1890, the rural population has decreased as a percentage of the total. This continuing trend has resulted in a statewide population which is over 74 percent urban by classification based on the population counts assembled for the 2010 decennial census.

The table shows that the portion of the overall population classified as urban has increased in each decade since 1860, while the rural population demonstrated a pattern of growth prior to 1910 followed losses over much of the 20th century. The exception was the decade between 1970 and 1980 when the country was undergoing a major economic restructuring due to shifts in the global petroleum supply. During this period of uncertainty, the rural population grew as numbers of urban dwellers moved back to the security of more rural environs. This trend, however, was short lived, and with the return of more normal economic conditions, the trend toward urbanization resumed once again.

**TABLE 1
POPULATION OF KANSAS, URBAN AND RURAL***

Census Year	State	Percent Change	Urban	Percent Change	Rural	Percent Change	Percent of Total	
							Urban	Rural
1860**	107,206	—	10,045	—	97,161	—	9.4	90.6
1870	364,339	239.9	51,870	416.4	312,529	221.7	14.2	85.8
1880	996,096	173.4	104,956	102.3	891,140	185.1	10.5	89.5
1890	1,428,108	43.4	269,539	156.8	1,158,569	30.0	18.9	81.1
1900	1,470,495	3.0	329,696	22.3	1,140,799	- 1.5	22.4	77.6
1910	1,690,949	15.0	492,312	49.3	1,198,637	5.1	29.1	70.9
1920	1,769,257	4.6	616,485	25.2	1,152,772	- 3.8	34.8	65.2
1930	1,880,999	6.3	729,834	18.4	1,151,165	- 0.1	38.8	61.2
1940	1,801,028	- 4.3	753,941	3.3	1,047,087	- 9.0	41.9	58.1
1950***	1,905,299	5.8	993,220	31.7	912,079	- 12.9	52.1	47.9
1960	2,178,611	14.3	1,328,741	33.8	849,870	- 6.8	61.0	39.0
1970	2,246,578	3.1	1,484,870	11.8	761,708	- 10.4	66.1	33.9
1980	2,363,679	5.2	1,575,899	6.1	787,780	3.4	66.7	33.3
1990	2,477,574	4.8	1,712,564	8.7	765,010	- 2.9	69.1	30.9
2000	2,688,418	8.5	1,920,081	12.1	768,337	0.4	71.4	28.6
2010	2,853,118	6.1	2,116,961	10.3	736,157	- 4.2	74.2	25.8

* *Source: U.S. Department of Commerce, Bureau of the Census*

** *Population of that part of Kansas Territory lying within present limits of the State*

*** *New definition of urban area*

DEMOGRAPHIC PATTERNS IN RENO COUNTY

The continuing pattern of urbanization affecting the state is especially evident in Reno County, particularly in the southeastern quadrant, where increasing acreages of agricultural land are being converted to non-farm residential uses. This trend is fueled by the economy of the Wichita metropolitan area which has resulted in rapid population growth with spillover development across the Reno County line into adjoining rural areas.

Concerning historic demographic patterns for Reno County, Table 2 outlines a summary of population trends for the 120-year period from 1890-2010.

TABLE 2
DEMOGRAPHIC PATTERNS, 1890-2010*
Reno County, Kansas

<u>YEAR</u>	<u>POPULATION</u>	<u>NUMBER CHANGE</u>	<u>PERCENT CHANGE</u>
1890	27,079	----	----
1900	29,027	+1,948	+7.2
1910	37,853	+8,826	+30.4
1920	44,423	+6,590	+17.4
1930	47,785	+3,362	+7.6
1940	52,165	+4,380	+9.2
1950	54,058	+1,893	+3.6
1960	59,055	+4,997	+9.2
1970	60,765	+1,710	+2.9
1980	64,983	+4,218	+6.9
1990	62,389	-2,594	-4.0
2000	64,790	+2,401	+3.8
2010	64,511	-279	-0.4

** Sources: U.S. Department of Commerce, Bureau of the Census*

The demographic summary indicates a continuing pattern of general population increase throughout the 120-year statistical period, except for small declines between 1980 and 1990, and between 2000 and 2010. Within this pattern, there was even increase between 1890 and 1900, a period marked by general economic collapse coupled with severe and prolonged drought which resulted in major declines in the rural population over most of the Central Plains. With return of more favorable climatic and economic conditions, the population rebounded after 1900, resulting in growth of over 30 percent between 1900 and 1910 in Reno County, the single greatest 10-year expansion on record for the county. Overall, except for the two decades of small declines noted above, increases have averaged 9.8 percent per decade over the period, resulting in a population expansion of 138.2 percent between 1890 and 2010.

POPULATION TRENDS IN INCORPORATED CITIES

Throughout its history, much of the county population has been centered in several incorporated cities. A summary of population patterns over the past half-century for these population centers is presented in Table 3.

TABLE 3
POPULATION TRENDS, 1950 - 2010 *
INCORPORATED CITIES
Reno County, Kansas

City	1950	1960	1970	1980	1990	2000	2010	Percent Change
Abbyville	99	118	143	123	140	128	124	+25.3
Arlington	405	466	503	631	457	459	434	+7.2
Buhler	750	888	1,019	1,188	1,277	1,358	1,331	+77.5
Haven	720	982	1,146	1,125	1,198	1,175	1,157	+60.7
Hutchinson	33,574	37,571	36,885	40,284	39,308	40,787	40,795	+21.5
Langdon	128	97	93	84	62	72	71	-44.5
Nickerson	1,013	1,091	1,187	1,292	1,137	1,194	1,147	+13.2
Partridge	221	221	302	268	213	259	251	+13.6
Plevna	200	117	124	115	117	99	98	-51.0
Pretty Prairie	484	525	561	655	601	615	602	+24.4
Sylvia	496	402	390	353	308	297	292	-41.1
South Hutchinson	1,045	1,672	1,879	2,226	2,444	2,539	2,540	+143.1
Turon	632	559	430	481	393	436	428	-32.3
Willowbrook	---	62	100	109	95	36	87	+40.3

* *Source: US Dept. of Commerce, Bureau of the Census*

In general, the statistics tend to show that most incorporated cities across the county registered some degree of growth since 1950, with only 4 of the 14 cities evidencing declines, those being Langdon, Plevna, Sylvia, and Turon. Of the group, the table shows that the cities of Buhler, Haven, and South Hutchinson demonstrated particularly strong expansions reflecting the presence of a favorable job market in the metropolitan Hutchinson area. These cities, as well as unincorporated suburban areas at the periphery of Hutchinson, evidence the pressure for residential development to meet the growing demand of families who derive employment in the city but prefer the living environment in a more rural setting.

With respect to South Hutchinson, the fastest growing incorporated area, the city adjoins Hutchinson and contains significant elements of commerce and industry with associated economic opportunity which has helped to influence the 143.1 percent population expansion since 1950. Similarly, Buhler, at 77.5 percent expansion, and Haven at 60.7 percent also reflect available economic opportunity plus the opportunity for a small town living environment.

Those cities losing population, Langdon, Plevna, Sylvia and Turon, on the other hand, are more remote from the metropolitan job market and have experienced economic declines in recent decades. For the period 1950 to 2010, these losses ranged from 32.3 percent at Turon to 5.0 percent at Plevna, with Langdon at minus 44.5 and Sylvia at minus 41.1 percent. These declines illustrate the difficulty of building and maintaining a strong and growing local economy capable of generating new permanent jobs of a type and in the numbers required to support sustained population growth.

GENERAL POPULATION CHARACTERISTICS

Among the data available from the federal decennial census is a summary of general characteristics for the overall countywide population. This information is outlined in the Table 4:

TABLE 4
GENERAL POPULATION CHARACTERISTICS, 2010*
Reno County, Kansas

Total Population	64,511
Persons Per Household	2.38
Number of Households	25,794
Number in Group Quarters	3,129
Female	32,196
Male	32,315
Black	1,930
Hispanic Origin	5,209
Percent Under 18 Years	23.6
Percent 65 Years and Over	17.0
Median Age (Years)	39.9

* *Source U.S. Department of Commerce, Bureau of the Census*

The demographic information shows that of the 64,511 residents recorded during the 2010 census, males and females were evenly split, with the female population being slightly smaller. The population documented by the census contained relatively few minorities.

The numbers also indicate a trend toward general aging of the overall population. With the average person per household at 2.38, the percentage of population 65 and over at 17 percent, and the median age at 39.9 years, it is apparent that except for the numbers of young families in the cities and associated suburban areas, overall population of the county contains an increasing percentage of older persons. In an expanding economic climate which is creating substantial numbers of new jobs, for instance, the median age will typically be in the upper 20's to low 30's. Concerning detailed characteristics of the 2010 county population, Table 5 provides a summary of demographic data by specific age bracket for 1990 and 2010.

TABLE 5
AGE SPECIFIC POPULATION CHARACTERISTICS *
Reno County, Kansas

POPULATION COMPONENT	1990		2010		Percent Change
	Number	Percent	Number	Percent	
All persons	62,389	100.0	64,511	100.0	+3.4
Male	30,658	49.1	32,315	50.1	+5.4
Female	31,732	50.9	32,196	49.9	+1.5
Under 5	4,298	6.9	4,254	6.6	-1.0
5 to 14 Years	9,205	14.8	8,485	13.2	-7.8
15 to 24 Years	7,905	12.7	8,385	13.0	+6.1
25 to 44 Years	18,722	30.0	14,819	23.0	-20.8
45 to 54 Years	6,330	10.1	9,349	14.5	+47.7
55 to 64 Years	5,810	9.3	8,225	12.7	+41.6
65 and Over	10,119	16.2	10,994	17.0	+8.6
Number of Households	24,239	---	25,794	---	+6.4
Persons Per Household	2.46	---	2.38	---	-3.3
Population in Group Quarters	2,837	4.5	3,129	4.9	+10.3

* *Source: US Department of Commerce, Bureau of the Census*

The numbers indicate that while the overall population of the county expanded by 3.4 percent between 1990 and 2010, there has been considerable change in the detailed characteristics of the population. Significant enlargements were registered in the 45 to 54 year group as well as the 55 to 64 year group while a significant decline was recorded for the 25 to 44 year group. Small losses were also registered for the under 5 years and the 5 to 14 year groups. A modest gain of 8.6 percent was also recorded for the 65 years and over age category.

These figures illustrate the effects of birth rate fluctuations coupled with the impacts of economic change. In this respect, the nearly 48 percent increase in the 45 to 54 age bracket is by far the strongest demographic change in the statistical makeup of the county population. These are the individuals and families which are at the peak earning capacity and which have the financial capability of choosing place of residence. This degree of change over a 20-year period is indicative of strong net in-migration for this age group.

The demographic data for the period also show that the number of persons per household registered a slight decline of about 3 percent, while the number of households increased from 24,239 in 1990 to 25,794 in 2010. As noted earlier, these trends indicate a gradual aging of the general county population.

BIRTH AND DEATH RATES

The previous review of detailed demographic patterns in the county population show that while migration patterns resulting from economic change are the dominant factors in population shifts over time, natural increase, or the net difference between births and deaths, is also a factor. This is evident in the nearly 9 percent decrease in the numbers of population under 14 years of age, and the 8.6 percent increase in the numbers of population aged 65 and up. With respect to long term trends in natural increase, Table 6 shows birth and death rates in Reno County during the period 1985-2009.

TABLE 6
NATURAL INCREASE FACTORS, 1985-2009*
Reno County, Kansas

Year	Live Births	Rate**	Deaths	Rate**	Natural Increase
1985	961	14.8	632	9.7	+ 329
1986	957	14.7	642	9.8	+ 315
1987	903	13.9	661	10.2	+ 242
1988	812	12.6	649	10.0	+ 163
1989	840	13.0	615	9.5	+ 225
1990	830	13.3	647	10.4	+ 183
1991	790	12.6	641	10.3	+ 149
1992	769	12.5	592	9.6	+ 177
1993	782	12.5	654	10.5	+ 128
1994	783	12.5	694	11.1	+ 89
1995	754	11.9	669	10.6	+ 85
1996	836	13.3	838	10.1	- 2
1997	816	13.0	663	10.1	+ 183
1998	838	13.3	685	10.8	+ 153
1999	820	12.9	697	10.9	+ 123
2000	886	13.7	699	10.8	+ 187
2001	866	13.5	703	10.9	+163
2002	842	13.2	701	11.0	+ 141
2003	809	12.7	640	10.0	+ 169
2004	835	13.1	599	9.4	+ 236
2005	814	12.8	715	11.2	+ 99
2006	876	13.8	699	11.0	+ 177
2007	843	13.4	721	11.4	+ 122
2008	851	13.4	692	10.9	+ 159
2009	847	13.4	692	10.9	+ 155

**Source: Annual Summary of Vital Statistics, Selected Years, Kansas Department of Health and Environment*

***Per 1,000 Population*

The history of natural increase patterns shows that over the 25 year period shown in the table, birth rates have ranged from a high of 14.8 per 1,000 population in 1985 to a low of 11.9 per 1,000 in 1995, and have averaged 13.2 overall. At 13.4 per 1,000, the 2009 birth rate indicates a moderate increase from the statistical low in 1995.

Death rates have followed a similar pattern, but have been generally lower over the period. As shown in the table, the high rate of 11.4 deaths per 1,000 population occurred in 2007, with the low rate of 9.4 per thousand occurring in 2004. Overall during the 25-year period, death rates have averaged 10.4 per 1,000, with most years being close to the average figure.

Based on these historic rate patterns, the numbers yield a net positive increase throughout most of the period ranging from 85 to 329 per year. Within this pattern, the difference between births and deaths has yielded an average population increase of 166 persons per year. Those numbers indicate that although a positive natural increase is occurring, significant population growth will be dependent upon a positive net in-migration pattern.

POTENTIAL FUTURE POPULATION

Estimates and forecasts of potential future population size are useful tools to make judgments about probable future growth patterns. Developing accurate and dependable demographic projections is a difficult and imprecise process at best. The background information suggests that natural increase factors have been, and will likely remain, mildly to moderately positive. Net migrating will be that the primary variable in the rate of population growth or decline.

Since the full range of underlying social and economic reasoning for choice of resident location is extremely complex and subject to substantial variation over time, it is usually beneficial to the long range planning process to consider a number of possible population forecasts based on varying assumption about the area-wide economy. As economic conditions vary, there will be proportional alterations in natural increase rates and patterns of migration which combine to influence long range demographic trends. Accordingly, it is important to consider the range of possibilities in order to arrive at a potentially agreeable future population which can be used to assess future countywide development patterns.

In this context, Table 7 outlines a series of long range population forecasts, each representing different forecasting methods and/or assumptions about long range economic conditions.

**TABLE 7
FUTURE POPULATION FORECASTS
Reno County, Kansas**

<u>FORECAST</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>
Historic Trend Line					
• Since 1890	64,511	68,308	72,329	76,586	81,093
• Since 1950	64,511	65,551	66,609	67,685	68,779
• Since 1990	64,511	64,698	65,248	65,806	66,400
Cohort Method I	64,511	66,075	67,951	69,947	72,060*
Cohort Method II	64,511	66,738	69,167	71,573	74,782
Cohort Method III	64,511	67,164	70,067	73,248	77,002

*Selected by the Planning Commission for use in planning program.

The range of forecasts illustrate the extreme variation possible in long term growth rates, depending upon which set of economic assumptions ultimately prevails. As illustrated by the trend line forecasts, recent trends indicate a slow increase which, if continued, would yield a small to modest growth over the 20-year planning period. The figures include the entire population of the county, both urban and rural, and as such include the growing suburban areas surrounding Hutchinson as well as the non-farm development in the southeastern quadrant. In this context, growth in the urban portions of the county both inside and outside incorporated communities will represent the primary factor in the process of population expansion.

The range of forecasts illustrate the extremely complex nature of demographic change and the associated difficulty of developing dependable projections of future population for use in the comprehensive planning program.

Concerning the trend line forecasts, if the overall population pattern between 1890 and 2010 were to continue, an increase of over 25 percent would result, while an increase of up to about 6 percent would result if the pattern between 1950 and 2010 were to prevail. The most recent trend from 1990 to 2010 would produce a very small increase of slightly less than 3 percent over the course of the 20-year planning period. None of the trend forecasts appear adequate as representations of probable county demographic potential in the foreseeable future.

The Cohort forecasts on the other hand are based on varying rates of births, deaths and migration, which allows population forecasts to be factored to account for differing assumptions about future social and economic conditions. On this basis, the 3 Cohort forecasts assume progressively stronger social and economic influence with resultant impact to rates of potential population expansion.

Cohort forecast I, utilizes historic rates of natural increase and migration similar to those evident in the 1950 trend line, which would result in about a 12 percent expansion, while forecast number II, which also utilizes average birth and death rates with progressively positive net in-migration rates ranging from 0.4 percent to 0.5 percent per year and would yield a long term increase of nearly 16 percent.

Cohort forecast III, on the other hand, is based on average birth and death rates and positive net in-migration of 0.5 to 0.8 percent per year. This is indication of a very strong economic expansion coupled with substantial net in-migration. If these patterns were to prevail, a population expansion of over 19 percent could be possible. This would result in substantial expansion of both the urban and rural populations of the county.

In general, of the range of forecasts outlined above, the Cohort methods appear to represent the most realistic possibilities. In order to assure an adequate scale for comprehensive planning, it is likely that Cohort forecast I or II would be the most realistic for use in the planning program.

FUTURE POPULATION DISTRIBUTION

Based on countywide demographic patterns recorded by the federal decennial census of 2010 and the potential for population increase suggested by Cohort forecast I, Table 8 outlines an estimate of population distribution over the 20-year planning period.

TABLE 8
ESTIMATED FUTURE POPULATION DISTRIBUTION*
Reno County, Kansas

Location	2010		2020		2030		Percent Increase
	Number	Percent	Number	Percent	Number	Percent	
Abbyville	124	0.2	117	0.2	110	0.2	-11.3
Arlington	434	0.7	423	0.6	412	0.6	-5.1
Buhler	1,331	2.1	1,349	2.0	1,367	1.9	+2.7
Haven	1,157	1.8	1,167**	1.7	1,186	1.6	+2.5
Hutchinson	40,795	63.2	41,532***	61.1	42,269	58.8	+3.6
Langdon	71	0.1	76	0.1	81	0.1	+14.1
Nickerson	1,147	1.8	1,153****	1.7	1,158	1.6	+10
Partridge	251	0.4	274	0.4	296	0.4	+17.9
Plevna	98	0.1	90	0.1	82	0.1	-16.3
Pretty Prairie	602	0.9	603	0.9	604	0.8	+0.3
Sylvia	292	0.5	284	0.4	276	0.4	-5.5
South Hutchinson	2,540	3.9	2,590	3.8	2,620	3.6	+3.2
Turon	428	0.7	448	0.7	457	0.6	+6.8
Willowbrook	87	0.1	83	0.1	79	0.1	-9.2
Unincorporated	<u>15,154</u>	<u>23.5</u>	<u>17,772</u>	<u>26.2</u>	<u>21,063</u>	<u>29.2</u>	<u>+39.0</u>
TOTAL	64,511	100.0	67,951	100.00	72,060	100.00	+11.6

*Based on Cohort Forecast I

**City Plan Forecast = 1,395

***City Plan Forecast= 41,500 – 48,000

****City Plan Forecast=1,521

The figures in Table 8 illustrate the potential population distribution across the county toward the end of the 20-year planning period if current and future trends continue as anticipated. The statistics show that the county will likely experience continuing expansion of incorporated cities with a corresponding but larger percentage increase in the rural population as well due to continuing build-up of urban uses outside area cities. While some degree of growth is possible in all areas of the county, the larger cities and their associated suburban fringe areas, and the southeastern quadrant of the county are expected to demonstrate the strongest potential for continued growth.

Based on the estimated population distribution shown Table 8, the cities most likely to experience significant growth over the next 20 years include Partridge at almost 18 percent, Langdon at about 14 percent, Buhler at nearly 3 percent, Turon at about 7 percent, and Hutchinson and South Hutchinson each over 3 percent. These figures reinforce the probability that the predominance of population growth and new development will occur in, around, or near existing population centers, and along the rapidly urbanizing major road corridors in the southeastern quadrant.

SUMMARY

The demographic history of Reno County shows that throughout the course of the past 120 years there has been a fairly consistent and continuing pattern of population growth and increasing urbanization. A substantial portion of this growth has been centered in and around the City of Hutchinson. However, following completion of Cheney Reservoir, the southeastern quadrant of the county also became subject to a strong pattern of urbanization, substantial portions of which have occurred outside the boundaries of incorporated cities. Within this overall pattern, the northwestern quadrant of the county is the least urbanized in terms of both development and population.

The population history of Reno County and the forecasts of potential future demographic trends indicate the likelihood of continuing population expansion throughout the 20-year planning period, with varying levels of possibilities depending upon prevailing economic conditions. Because precise prediction of future economic and demographic patterns is difficult and uncertain at best, it will be important to continually monitor emerging trends as part of the continuing planning program. Because actual patterns of population growth or decline will seldom match the smooth progression evident in the forecasts, maintenance of long range demographic forecasts will be dependent upon regular annual review of emerging trends as part of the plan maintenance procedures mandated by state statute.

Maintenance of the continuing planning program in all aspects, including monitoring of population change, is a primary responsibility of the Planning Commission acting in its role of official advisor to the County Commissioners. Where this process is keyed to emerging community characteristics, the population forecasts as well as the comprehensive planning directions generally can be kept viable and useful throughout the 20-year planning period and beyond.

SECTION II

LAND USE

INTRODUCTION

The central purposes of the Land Use Study are to review current patterns of development across Reno County in order to understand and identify the constraints and conditions which will combine to influence use of land resources during the 20-year planning period and to estimate potential future land use patterns and growth trends. As in other parts of the Great Plains, settlement patterns in Reno County have been substantially influenced by the presence of natural features such as hills and rivers, and by major man-made facilities such as railroads, highways, and airports, which in combination with existing topographic conditions, have produced the broad patterns of land utilization that characterize the region.

Based on reviews of past and present land use characteristics and development constraints coupled with forecasts of probable future population levels, the land use study also projects potential expansion of developed urban land uses over the 20-year planning period, or through the year 2030. Included in the study of Reno County's future development trends is the review of growth patterns associated with incorporated cities in the county, as a significant percentage of future growth in urban uses of land resources will be associated with these communities. It is in these emerging areas of urban development where the planning directions can have the greatest impact with regard to identification and maintenance of standards for development with accompanying enhancement of the associated living environment.

In this context, it is the intent of the land use study to provide a practical guide for long-range development which will promote an efficient pattern of development where all of the interrelated elements of the county can be sized and located according to the needs of the population to be accommodated. As part of this process, potential future land use patterns are estimated and presented graphically to provide a summary overview of countywide expansion patterns toward the end of the planning period.

EXISTING DEVELOPMENT

Development patterns across Reno County reflect a much higher density in the eastern half where most of the larger incorporated cities are located. Development densities are also significantly higher in suburban areas surrounding the City of Hutchinson and in the southeastern quadrant near Cheney Reservoir. Lake area development reflects the nearby presence of the Wichita-Sedgwick County metropolitan area together with major vehicular corridors including K96, K14, US 54, and 21st Street. In this respect, the incidence and density of rural area urban development increases sharply from northwest to southeast.

In western areas of the county, development outside incorporated cities is typically associated with farms and ranches, and occurs in relatively low densities. Facilities associated with petroleum production also occur in a scattered random pattern at very low densities. Incorporated cities in the western portion of the County are much smaller than those in the east and typically have much smaller associated areas of suburban development.

Existing development patterns across the county have also been heavily affected by the presence of numerous floodplain areas. Major flood hazard areas are associated with the Arkansas, Little Arkansas and North Ninescaw Rivers and their associated tributary streams such as Cow Creek which flows through the City of Hutchinson. In general, however, coverage of mapped flood hazard areas across the county is most extensive in the east and southeast and least extensive in the west and northwest. Countywide, areas of flood hazard have had a significant impact upon observable patterns of development.

The following inventory and analysis of land use patterns across Reno County indicate the spatial extent and density of current development as well as estimates and forecasts of potential future growth over the course of the 20-year planning period.

LAND USE DEFINITION AND SURVEY

Developed uses of land encompass all aspects of human development. Associated activities may be residential, a commercial enterprise, the production of goods, or the offering of various services. Uses of available land resources are so numerous and activities so diversified that for study purposes they are grouped into general classifications by related activity. These groupings are in accordance with the *North American Industry Classification System (NAICS)*, published by the Federal Office of Management and Budget. These categories include:

Residential

- Single Family
- Two Family
- Multiple Family
- Manufactured Housing

Commercial

- Retail Trade
- Service Business

Industrial

- Light Industry
- Heavy Industry

Public and Quasi-Public

Transportation

Undeveloped Land and Water Areas

In order to establish existing development patterns, a field survey of current land use patterns across the county was prepared in the Spring of 2012. The survey included the unincorporated areas of the county, including settlements and fringe areas adjacent to incorporated cities. The survey was conducted on the basis of an inventory of each land parcel in the study area, with the resulting data assembled into data tables and depicted on area maps for inclusion in the comprehensive plan. In order to depict and analyze data in the most efficient and functional manner, the county planning jurisdiction was divided into four study quadrants. [Figure 1](#) delineates the boundaries of the planning quadrants within the overall county planning jurisdiction.

CURRENT POPULATION ESTIMATE

A detailed estimate of current rural population by quadrant is outlined Table 9.

TABLE 9
ESTIMATED RURAL POPULATION, SPRING 2012*
Reno County, Kansas

QUADRANT	OCCUPIED DWELLING UNITS	PERSONS** PER UNIT	PERSONS** PER FAMILY	POPULATION RANGE
Northeast	3,742	2.38	2.94	8,806 – 11,002
Northwest	432	2.38	2.94	1,029 – 1,271
Southeast	1,141	2.38	2.94	2,716 – 3,355
Southwest	<u>402</u>	2.38	2.94	<u>957 – 1,182</u>
TOTAL	5,717			13,608 – 16,810

**Does not include populations of incorporated Cities*

*** Source: 2010 Federal Decennial Census*

The current population estimates show that the northeast quadrant of the county contains over 65 percent of the total rural population. Together with the nearly 20 percent of the total estimated to be in the southeastern quadrant, the figures show that as of Spring 2012, the eastern half of Reno County contained over 85 percent of the total countywide rural population.

The remaining 15 percent of the population was split between the northwestern and southwestern quadrants which together had an estimated population range of 1,986 to 2,453, which was split relatively even between the two quadrants.

These figures are another indication of the changing character of the eastern portion of the county, in particular the accelerating urbanization which is resulting in a substantial increase in the number of residents living outside incorporated cities. As shown by the population estimates, this trend has been especially strong in the northeastern quadrant.

EXISTING LAND USE CHARACTERISTICS

Current patterns of developed uses of land resources in Reno County as of Spring 2012 are summarized statistically Table 10.

Table 10
EXISTING LAND USE ACREAGE
Reno County, Kansas 2012

CLASSIFICATION	NE	SE	NW	SW	TOTAL ACREAGE	PERCENT OF DEVELOPED ACREAGE	PERCENT OF TOTAL ACREAGE
Residential							
Single-Family	4,529.13	1,215.99	611.67	418.80	6,775.59	12.54	0.83
Two-Family	11.88	0.00	0.00	0.00	11.88	0.02	0.00
Multi-Family	2.53	0.00	0.00	0.00	2.53	0.00	0.00
Manufactured Homes	<u>701.38</u>	<u>183.40</u>	<u>42.02</u>	<u>70.05</u>	<u>996.85</u>	<u>1.84</u>	<u>0.12</u>
Subtotal	5,244.92	1,399.39	653.69	488.85	7,786.85	14.41	0.96
Commercial							
Service Commercial	243.16	141.92	1.75	2.44	389.27	0.72	0.05
Retail Commercial	<u>226.27</u>	<u>97.01</u>	<u>13.25</u>	<u>6.02</u>	<u>342.55</u>	<u>0.63</u>	<u>0.04</u>
Subtotal	469.44	238.93	15.00	8.46	731.83	1.35	0.09
Industrial							
Light Industrial	500.16	78.62	389.22	134.92	1,102.92	2.04	0.14
Heavy Industrial	<u>1,407.40</u>	<u>392.47</u>	<u>27.91</u>	<u>445.94</u>	<u>2,273.73</u>	<u>4.21</u>	<u>0.28</u>
Subtotal	1,907.57	471.09	417.13	580.86	3,376.65	6.25	0.41
Transportation, Communications, and Utilities							
Streets & Roads	6,559.18	5,301.68	4,867.74	5,133.05	21,861.65	40.46	2.69
Railroads	697.43	136.51	298.17	241.06	1,373.17	2.54	0.17
Utilities	<u>146.58</u>	<u>60.56</u>	<u>10.62</u>	<u>50.21</u>	<u>273.97</u>	<u>0.51</u>	<u>0.03</u>
Subtotal	7,403.19	5,504.98	5,176.53	5,424.32	23,508.79	43.51	2.89
Cultural, Entertainment, and Recreation							
Public/Quasi-Public	459.51	295.74	132.59	238.87	126.70	2.09	0.14
Parks/Open Space	<u>2,349.97</u>	<u>14,309.95</u>	<u>710.43</u>	<u>130.52</u>	<u>17,500.86</u>	<u>32.39</u>	<u>2.15</u>
Subtotal	2,809.48	14,605.69	843.01	369.38	17,627.56	34.48	2.29
Total Developed Land	17,834.59	22,219.86	7,105.35	6,871.88	54,031.69	100.00	6.64
Total Undeveloped Land	165,443.32	182,788.31	191,348.95	198,557.87	738,138.45	----	----
Total Rural Area	183,277.91	205,008.17	198,454.30	205,429.75	792,170.13	----	----
Land Within City Limits	<u>18,852.75</u>	<u>843.88</u>	<u>1,125.53</u>	<u>1,178.27</u>	22,000.43	----	----
Quadrant Total	202,130.66	205,852.05	199,579.83	206,608.02	814,170.56	----	----
TOTAL COUNTY ACREAGE =	814,170.56						

The summary outlines categories of developed uses of land resources by estimated acreage and percent of total for the unincorporated areas of Reno County. The numbers show that of the more than 54,000 acres of development at the time of the survey, 33.8 percent was located in the Northeast Quadrant; 41.1 percent in the Southeast Quadrant; 13.1 percent in the Northwest Quadrant; and 12.7 percent in the Southwest Quadrant. Together, 74.1 percent of the estimated developed acreage was located in the eastern half of the county, while on a north-south basis, 53.8 percent of the total is located in the southern half of the county. Overall, developed uses of land in the rural area account for only about 6.6 percent of the total acreage countywide.

In addition to rural area uses, the table also contains estimated acreage within the incorporated cities by quadrant. This information shows that there is a total of 22,000.43 acres of land within the cities, of which 85.7 percent is located in the Northeast Quadrant, reflecting the presence of the Cities of Hutchinson and South Hutchinson, as well as Haven and Buhler.

NORTHEAST QUADRANT

The land use field recorded almost 18,000 acres of development in the rural portion of the Northeast Quadrant, which represented nearly 9 percent of the total area of the quadrant, and over one-third of the total countywide developed acreage in the rural study area. In this rapidly urbanizing portion of the county, the most extensive use is for transportation and utilities which accounted for almost 7,000 acres, followed by residential acreage at over 5,200 acres. As in all rural areas, the largest developed acreage is usually for roads which typically account for a sizable percentage of the total. Residential acreage, however, at over 14 percent of the developed acreage in the quadrant was significantly higher than a typical rural area, and three to 10 times greater than residential development in the other three quadrants.

The other categories of developed use were relatively light in proportion, with about 2,377 acres of commercial and industrial uses and slightly more than 2,800 acres of public and recreation uses. As the numbers suggest, the primary feature of rural area use of land resources in the Northeast Quadrant is for suburban non-farm residential development.

SOUTHEAST QUADRANT

This area of Reno County is different from the other quadrants due to the very large acreage of park and recreational uses associated with Cheney Reservoir. This results in the quadrant having the statistically highest volume of developed acreage of any of the four study areas. However, in terms of non-farm urban types of development, the Southeast Quadrant ranks second behind the Northeast Quadrant with only about one-third as much residential, commercial and industrial acreage. These types of uses in the Southeast Quadrant, while less than the Northeast Quadrant, are yet, in terms of acreage, three to 10 times greater than those of either the Northwest or Southwest Quadrants.

Overall, of the more than 22,000 acres of development recorded in the Southeast Quadrant, residential uses account for 6.3 percent; commercial uses account for 1.1 percent; industrial development accounts for 1.8 percent; transportation, communications & utilities account for 25.2 percent; while cultural, entertainment & recreational uses account for 65.6 percent.

Due to location with regard to the lake, incorporated cities, and major transportation systems, the Southeast Quadrant is generally more urban than either the Northwest or Southwest Quadrants, but substantially less than the Northeast Quadrant.

NORTHWEST QUADRANT

Experiencing far less pressure for development of non-farm urban uses than the Northeast Quadrant, the Northwest Quadrant contains only about 7,000 acres of development, which represents about 13 percent of the countywide total. Within the quadrant, transportation and utilities are the big users of developed acreage at 74.8 percent. Residential uses account for 9.1 percent; commercial and industrial uses account for 5.3 percent; with all other uses accounting for only 10.8 percent of the developed acreage total.

SOUTHWEST QUADRANT

This intensely rural area of the county contains the smallest rural area developed acreage of any of the quadrants. At 6,872 acres, developed uses in the rural area account for only 13 percent of the countywide developed acreage and only 3.3 percent of the total area of the quadrant. Transportation and utilities represent 80.6 percent of the developed acreage, residential uses account for 7.1 percent; public and recreation uses account for another 10.5 percent; while commercial and industrial acreage make up the remaining 1.8 percent of the total.

Due to the rural character of this quadrant, the area contains substantially smaller acreage of commercial and industrial uses than in the other quadrants. Additionally, the Southwest Quadrant has a small area of incorporated cities. These characteristics show that the Southwest Quadrant has experienced the least pressure of all the quadrants with respect to demand for non-farm rural area development.

EXISTING DEVELOPING PATTERNS

Locations and types of developed uses of land resources across Reno County as of Spring 2012 are shown graphically on the [Figures 2 through 13](#). The maps illustrate sub-areas of the planning quadrants in order to allow a high degree of detail presentation. Locations of the sub-area mapping units are depicted on the following illustrations.

In addition to the nine sub-area mapping units, the scope of land use documentation also includes detailed mapping of six unincorporated rural settlement areas, many of which exhibit development densities approaching urban standards. Prevailing patterns of land development in these areas are also included in [Figures 12 and 13](#).

INCORPORATED CITIES

The land use maps for Reno County show the location of several incorporated cities, which in the aggregate account for about 22,000 acres and 2.7 percent of the total county area. Estimated sizes of these cities based on the land use field survey of 2012 are outlined in Table 11.

**TABLE 11
INCORPORATED CITIES
RENO COUNTY, KANSAS 2012**

CITY	ESTIMATED ACREAGE	PERCENTAGE OF TOTAL CITY ACREAGE	PERCENTAGE OF TOTAL COUNTY ACREAGE*
Abbyville	171.24	0.8	<0.1
Arlington	791.91	3.6	0.1
Buhler	462.13	2.1	<0.1
Haven	482.13	2.2	<0.1
Hutchinson	15,798.93	71.8	1.9
Langdon	87.97	0.4	<0.1
Nickerson	828.39	3.8	0.1
Partridge	192.23	0.9	<0.1
Plevna	145.85	0.7	<0.1
Pretty Prairie	361.75	1.6	<0.1
South Hutchinson	2,015.23	9.2	0.2
Sylvia	188.13	0.8	<0.1
Turon	284.31	1.3	<0.1
Willowbrook	<u>190.22</u>	<u>0.8</u>	<u><0.1</u>
TOTAL	22,000.42	100.00	2.7

*Total County Acreage = 814,170.56

The numbers show that in terms of acreage, the largest city is Hutchinson at 72.8 percent of the total incorporated acreage and 1.9 percent of the total area of the county. Next in size is South Hutchinson with 9.2 percent of the incorporated acreage and 0.2 percent of the county total. The other 12 cities together account for 19 percent of the incorporated acreage but only 0.6 percent of the overall county acreage. In the aggregate, the incorporated cities currently contain an estimated 22,000.42 acres which represents 2.7 percent of the total land within Reno County. As suggested by the earlier population distribution forecast, several cities have the potential for significant enlargement in both population and physical size over the course of the 20-year planning period.

FUTURE LAND USE FORECAST

Forecasts and projections of potential patterns of land resource utilization in terms of developed acres are among the primary means of estimating the probable general development characteristics of the county toward the end of the 20-year planning period. When the results of the studies of land use characteristics are coupled with estimates of future population size, a foundation is established upon which a forecast of future land use demand can be formulated. Additionally, the forecast provides the major basis for the estimation of potential need for housing, infrastructure, roads, and other interrelated aspects of county growth and development.

The land use forecast, based on the influences noted above, is grounded in the assumption that future development patterns will result from a range of social and economic factors similar to those responsible for recent expansion patterns. Based on these guidelines, Table 12 illustrates a forecast of future land use acreage in Reno County through the 20-year planning period, or until the year 2030.

The land use forecast indicates that if the population expands as expected and land use trends continue generally the same, the rural areas of the county could experience up to a 24 percent increase in non-farm development over the next two decades. The greatest degree of increase in terms of acreage is noted for residential development followed by transportation, communications and utilities. These two categories will expand as a result of continuing urbanization in the eastern portion of the county and suburban development near incorporated cities. A moderate acreage increase is also likely for the cultural, entertainment and recreational category which contains most of the public and quasi-public uses.

Other categories of developed use having the potential for additional growth include commercial and industrial businesses which could expand by over 1,800 acres over the 20-year planning period. Obviously, these categories are specifically tied to the strength of the local and regional economy, and accordingly, are probably the least predictable of any of the formal categories of non-farm development. Additional modifiers include annexation policies of area communities and the zoning practices of county government. However, based on the results of the land use field survey, the incidence of businesses and industries outside the corporate limits of cities has been increasing in recent years.

TABLE 12

**LAND USE FORECAST
RENO COUNTY, KANSAS**

Classification	Existing	Percent of Developed Land	Acres Per <u>100 Population</u>		Estimated		Percent of Developed Land	Percent Increase 2012- 2030
	Acres 2012		2012*	2030*	Acres Added	Acres 2030		
Residential								
Single-Family	6,775.59	12.54	44.55	45.50	2,808.08	9,583.66	14.27	41.44
Two-Family	11.88	0.02	0.08	0.12	13.44	25.28	0.04	113.13
Multi-family	2.53	0.00	0.02	0.03	3.79	6.32	<0.01	149.80
Manufactured Homes	<u>996.85</u>	<u>1.84</u>	<u>6.55</u>	<u>7.00</u>	<u>477.35</u>	<u>1,474.20</u>	<u>2.20</u>	47.89
Subtotal	7,786.85	14.41	51.20	52.65	3,302.61	11,089.46	16.52	42.41
Commercial								
Service Commercial	389.27	0.07	2.56	3.18	281.67	670.94	1.00	72.36
Retail Commercial	<u>342.55</u>	<u>0.63</u>	<u>2.25</u>	<u>1.86</u>	<u>49.17</u>	<u>391.72</u>	<u>0.58</u>	14.35
Subtotal	731.85	1.35	4.81	5.04	330.83	1,062.66	1.58	45.21
Industrial								
Light Industrial	1,102.92	2.04	7.25	8.00	582.12	1,685.04	2.51	52.78
Heavy Industrial	<u>2,273.73</u>	<u>4.21</u>	<u>14.95</u>	<u>15.10</u>	<u>906.78</u>	<u>3,180.51</u>	<u>4.74</u>	39.89
Subtotal	3,376.65	6.25	22.20	23.10	1,488.90	4,865.55	7.25	44.09
Transp., Comm. & Utilities								
County Roads & Highways	21,861.65	40.46	143.74	135.95	6,769.42	28,631.07	42.64	30.96
Railroads	1,373.17	2.54	9.03	5.86	-139.05	1,234.12	1.84	-10.13
Utilities	<u>273.97</u>	<u>0.51</u>	<u>1.80</u>	<u>2.00</u>	<u>147.29</u>	<u>421.26</u>	<u>0.63</u>	53.76
Subtotal	23,508.79	43.51	154.57	143.81	6,777.66	30,286.45	45.11	28.83
Cultural, Entertainment & Recreational								
Public/Quasi-Public	1,126.70	2.09	7.41	7.20	389.84	1,516.54	2.26	34.60
Parks/Open Space	<u>17,500.86</u>	<u>32.39</u>	<u>115.07</u>	<u>86.98</u>	<u>817.13</u>	<u>18,317.99</u>	<u>27.28</u>	4.67
Subtotal	18,627.56	34.48	122.48	94.18	1,206.97	19,834.53	29.54	6.48
TOTAL DEVELOPED LAND	<u>54,031.69</u>	<u>100.00</u>	<u>355.26</u>	<u>318.78</u>	<u>13,106.97</u>	<u>67,138.68</u>	<u>100.00</u>	24.26

* Based on a rural population estimate of 15,209

** Based on a rural population forecast of 21,063

FUTURE DEVELOPMENT DIRECTIONS

In general, it is likely that current development trends will continue throughout much of the planning period. Based on these directions, probable primary locations of future development by land use type are summarized below.

RESIDENTIAL EXPANSION

The land use forecast notes the potential for over 3,000 acres of new residential development over the course of the next 20 years. While a portion of the total will be for scattered rural residences throughout the county, the majority of new residential expansion is anticipated to be for non-farm homes located in the eastern half of the county, principally in suburban areas near Hutchinson and in portions of the county near Cheney Reservoir and along the K-96 corridor. These areas have experienced brisk development in recent years and this trend will likely continue.

COMMERCIAL DEVELOPMENT

Most of the new expansion in this category will likely occur near incorporated cities and in the eastern half of the county. Forecast to expand by about 330 acres, much of the increase will likely be near Hutchinson, South Hutchinson, and Buhler due to the presence of high grade vehicular travelways, but also in several of the smaller incorporated cities. The land use survey indicated that Haven, Nickerson, and Pretty Prairie all have commercial enterprises as well as locations near Langdon, Partridge, and Turon. It is likely that these areas will experience future commercial development as well.

INDUSTRIAL ENTERPRISE

Across Reno County, industrial uses of land resources are associated with supply and handling of agricultural commodities, such as grain handling and storage of bulk fuels and fertilizers, and also with mineral extraction such as sand pits, salt mines and petroleum production, as well as manufacturing. As such, rural area development of industrial uses is scattered throughout the planning jurisdiction with a particularly heavy local concentration in the Hutchinson-South Hutchinson area. It is anticipated that most of the forecasted 1,488 acres of new industrial development will also occur in the same areas as well.

TRANSPORTATION, COMMUNICATIONS AND UTILITIES

This category of land use contains items of infrastructure which are, in effect, induced by growth in the other types of developed uses. Included are roads and highways, railroads and utilities. As a group, this category of public uses is expected to enlarge by about 7,000 acres, or over 28 percent during the 20-year planning period. Within the group, roads and highways are expected to expand by over 6,000 acres. Railroads, however, are forecasted to decline by up to 139 acres or more as portions of rail lines and sidings are removed in a pattern typical of most of the Midwest.

Utilities, as the third element of this category, is forecasted to enlarge by about 150 acres as older infrastructure is updated and extended to new areas of development. In general, the uses in this group will expand, for the most part, in direct proportion to enlargement in the other categories of developed land use.

CULTURAL, ENTERTAINMENT AND RECREATION

This category contains the public facilities and amenities of community life. Included are parks, churches, cemeteries, county and city administrative facilities, and quasi-public facilities such as are owned and operated by social, fraternal, philanthropic and similar semi-public groups and organizations. Due to the extent of existing development, this category is forecasted to expand by only about 6 percent during the 20-year planning period. Most expansions in this category of use are expected to occur in the eastern half of the county where enlargement in the other categories of developed uses is most likely.

RENO COUNTY FUTURE LAND USE PLAN

The potential effects of the Land Use forecast for Reno County are shown graphically on the Land Use Plan, which is presented in sub-area format to allow ready comparison of existing and projected future land use patterns. The Future Land Use Plan illustrates strong expansions of urban uses particularly around area cities and the major transportation corridors. In this aspect particularly strong expansion of urban uses are depicted in the eastern half of the county, much of which is expected to occur in the Northeast Quadrant.

In general, patterns of future development are expected to follow present trends and directions, with the fringe areas of incorporated cities and lands adjacent to major roads subjected to especially strong development pressures. In all quadrants, future expansion patterns will also be subjected to the coverage of defined floodplain areas, which will have a continuing impact upon the ability of area cities to absorb future urban development through annexation.

Based on these influences and the indications from the statistical analysis and long range forecast, the Future Land Use Plan for Reno County is shown graphically in [Figures 14 through 22](#).

The subarea based Future Land Use Plan for Reno County shows that like historic trends, future expansion of urban uses will be particularly extensive in the east and least extensive in the west. Overall, the studies and review indicate a strong trend toward continuing urbanization of the county throughout the 20-year planning period, both through enlargement of existing incorporated cities and through urban development in unincorporated suburban locations.

LAND USE POLICIES

Because the growth potential is strong, and the associated potential for negative impacts to the natural and human environment is substantial, it will be particularly important that the county adopt and implement measures to monitor and guide further urban expansions in the rural area to help assure that a safe, healthful and efficient living environment can be maintained. One of the effective means for guiding continuing development is through application of land use policies which are oriented toward defined quality and functional parameters. Base on the findings of the field research and the potential future direction suggested by the Land Use Forecast, the following paragraphs outline land use policy statements for implementation during the planning period.

FUTURE LAND USE POLICY STATEMENTS

The following policies outline the intentions of Reno County with regard to future development trends, patterns and practices.

GENERAL POLICIES

- Policy GP.1. The Future Land Use Plan shall constitute the official guide to long term development of Reno County and shall be updated regularly to remain viable and in correspondence with the needs and desires of the citizens consist with sound planning practice.
- Policy GP.2. All future rural area non-farm development shall generally conform with the directions and intent of the adopted Future Land Use Plan.
- Policy GP. 3. The direction and intent of the Future Land Use Plan shall constitute a basis for all future decisions concerning application of the Zoning Regulations.
- Policy GP. 4. Prime farmland and rare or unique agricultural production acreage shall be protected from unreasonable encroachment by non-farm urban development.
- Policy GP. 5. Non-farm development shall not be located in mapped flood hazard areas without proof of compliance with the floodplain regulations of County, State and Federal Government.
- Policy GP. 6. Future development shall adopt appropriate conservation measures to control wind and water erosion as part of the project planning process.
- Policy GP. 7. Future non-farm development shall incorporate buffering and/or screening as appropriate to protect less intensive land uses and farming operations.
- Policy GP. 8. Future development shall be located and designed to make efficient use of energy resources, public travelways, facilities and services.
- Policy GP. 9. Future development shall demonstrate appropriate, reasonable and efficient use of the land resources of Reno County.

URBAN FRINGE AREA POLICIES

- Policy UF. 1. Future suburban development in the fringe areas of incorporated Cities in the County shall conform to the City's Future Land Use Plan and Land Use Regulations.

- Policy UF. 2. All suburban developments are encouraged to utilize the infrastructure of the adjacent City, including potable water, sanitary sewer, and street extensions in accordance with the standards of the City and Reno County.
- Policy UF. 3. Suburban development shall provide for adequate drainage consistent with the drainage characteristics and requirements of the adjacent City and Reno County.
- Policy UF. 4. New development shall provide for proper access by emergency service providers under all weather conditions.
- Policy UF.5. New suburban development shall provide evidence of funding necessary for installation of needed improvements.
- Policy UF. 6. The County will cooperate with area Cities in the process of joint planning for application of appropriate City and County regulations in suburban development areas including extraterritorial jurisdictions where appropriate.

RESIDENTIAL DEVELOPMENT POLICIES

- Policy RD. 1. Encourage rural non-farm residential development to locate near established communities in order to access urban infrastructure.
- Policy RD. 2. Rural non-farm residential development not located so as to be served by urban utilities shall be on tracts of sufficient size to assure safe and adequate water supply and sewerage disposal practice.
- Policy RD. 3. Rural non-farm development shall be located adjacent to established major travelways so as to assure appropriate access by emergency service responders.
- Policy RD. 4 Residential development shall not be located in defined flood hazard areas without proof of compliance with applicable floodplain regulations of Federal, State and/or Reno County.
- Policy RD. 5. Rural non-farm residential development shall provide for buffering and/or screening as appropriate to avoid conflicts with adjacent agricultural or farming operations.
- Policy RD. 6. Rural non-farm residential development shall be located on a platted tract of land conforming to the Subdivision Regulations of Reno County and/or the adjacent incorporated city.

RURAL SETTLEMENT POLICIES

- Policy RS. 1. Allow a mix of urban uses in typical low to moderate urban densities.
- Policy RS. 2. Encourage appropriate locations for the different uses through application of effective zoning techniques.
- Policy RS. 3. Maintain a special use permit system through zoning to help assure compatibility of the various use types within the community setting.
- Policy RS. 4. Require platting of new non-farm development in accordance with the Reno County Subdivision Regulations.
- Policy RS. 5. Encourage provision of appropriate infrastructure including potable water, sewerage disposal, solid waste collection and vehicular travelways.

Policy RS. 6. Assure adequate and appropriate emergency response capabilities including fire, law enforcement and health services.

COMMERCIAL AND INDUSTRIAL POLICIES

Policy CI. 1. Encourage commercial and industrial businesses to locate near existing incorporated cities to have access to urban infrastructure.

Policy CI. 2. Commercial and industrial businesses should locate adjacent to major travelways to assure high grade vehicular access.

Policy CI. 3. Commercial and industrial businesses shall be appropriately buffered and screened to assure protection of less intense uses, including areas of residential development.

Policy CI. 4. Commercial and industrial tracts shall be platted and zoned in accordance with the regulations of the adjacent City or Reno County as appropriate.

RURAL AGRICULTURAL AREA POLICIES

Policy AC. 1. Protect prime, rare and/or unique agricultural land from encroachment of non-farm urban types of uses.

Policy AC. 2. Prohibit development in defined special flood hazard areas except upon proof of compliance with County, State and Federal floodplain regulations.

Policy AC. 3. Require appropriate separation with buffering and screening as necessary to protect the natural and human environments from quasi-agricultural uses such as confined animal feedlots, mineral extraction and petroleum production.

Policy AC. 4. Require feedlots, mineral extraction, petroleum production and similar activities to provide and implement positive action plans for control of erosion, water pollution, negative odors and vehicular traffic.

Policy AC. 5. Promote best management practices for farm and rangelands with emphasis on protection of existing drainages, outstanding natural features, and scenic and environmentally sensitive lands.

Policy AC. 6. Encourage preservation of unique land resources such as wetlands and riparian vegetation.

Policy AC. 7. Encourage further low-density development of natural river areas for public recreation.

Policy AC. 8. Protect the rural unincorporated area of Reno County from non-farm development in order to preserve the agricultural characteristics and the viability of the land resources of the county for agricultural uses.

Once adopted, the policy statements provide a framework for decision-making with regard to future development patterns and application of land use regulations. Proposals for future development should be screened for compliance with the policies, planning goals, and objectives of the county.

IMPLEMENTING THE LAND USE PLAN

Implementing the long-range land use plan for the county is a continuing process carried forward by the daily decisions of government officials. To a high degree, the ultimate quality and utility of future development will depend on the policies, controls and actions of the county with respect to guiding future growth and expansion toward development patterns which are consistent and suitable and which will contribute to an orderly and economical growth pattern. Implementing the land use plan is facilitated through official development policies and application of appropriate environmental controls. Realization of the full scope and intent of future development guidelines is dependent upon close cooperation of both the public and private sectors to achieve a balanced and cohesive development which can continue to offer a healthful and quality living environment.

Some specific actions the county can take with regard to planning implementation include the following:

Advance Land Acquisition. Land for parks and other open spaces should be acquired in advance of need. Land reserved in this manner can, if reserved in appropriate areas, become significant points of interest for the public.

Code Enforcement. The county should pursue an active policy of development code enforcement aimed at preservation of property values, providing safe and sanitary living accommodations and providing community amenities.

Drainage Improvement. It should be the policy of the county to encourage cities to maintain area-wide drainage plan, review all development proposals for conformance with established guidelines, and to assist in the development of such guidelines as necessary. Easements should be established along all drainage courses and the adjacent expansion areas in order to provide for increased runoff volumes which will result from continued development. Development in defined floodplain areas should be discouraged.

Historic Preservation. A policy aimed at restoration and preservation of districts and structures having historical significance should be adopted. Buildings and districts treated in this manner have increased value and utility and contribute to community pride.

County and City Beautification. Where applicable it should be the policy of the county as well as cities to enhance the environment through tree planting programs and landscaping of all parks and public buildings, and to encourage appropriate landscaping of all private property.

Public Education. It should be the policy of the county to keep the general public constantly informed about countywide growth issues through all available means. Experience has shown that the success of the planning implementation program will be greatly aided or hindered by the degree of understanding of the general public. As citizens become more knowledgeable about the structure and process of county government, there is heightened cooperation with a resultant benefit to the processes and practices of building the future living environment.

SUMMARY

The background inventory and study of existing uses of land resources in Reno County show that the entire area is becoming much more urban than in previous decades. This is particularly true at the present time in the eastern half of the county due to the influence of the nearby Hutchinson metropolitan area. This trend toward increasing suburban development is complicated in much of the region by floodplains, occasional high water tables and other conditions which are not conducive to the higher density patterns that are characteristic of rural non-farm urban types of development. In this respect, the land use forecasts anticipate present trends to continue and to intensify over the course of the 20-year planning period.

In order to control development and guide future expansion toward the most efficient and beneficial patterns, the county should adopt and enforce land use policies based on established goals and objectives as well as effective zoning and subdivision regulations. These measures in combination with appropriate sanitary regulations for safe water supply and sewerage disposal will help assure continued growth will not result in dangerous or unsafe living conditions.

The land use studies show that the county will likely experience significant change in the coming decades, due both to expansion of existing incorporated cities and to continuing suburban development in the rural area. These changes will present many challenges to county government which must be effectively managed for the common good of all the citizens.

It is the purpose of the land use studies and the comprehensive planning process in general, to provide a guide for decision making with the intent to influence future development patterns which are consistent with the rural character of the county and the development capacity of the land.

While the primary impetus for plan implementation must come from government, full-range implementation will ultimately require the understanding and cooperation of all elements of the private sector as well. This coordination of governmental policies with the development actions of the private sector is one of the important responsibilities of the Planning Commission. Acting in its official capacity as technical advisor to the governing body, the Planning Commission can have a significant influence on long-range development patterns through the process of participating in the formulation of day-to-day policy actions and decisions. Ultimately, the course and effect of these actions will significantly impact long range planning direction, and will be a primary ingredient in the effort to maintain a quality living environment for citizens in all areas of Reno County.

APPENDIX "A"