

Kearney, Missouri

Comprehensive Plan

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Comprehensive Plan

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SECTION 1:

Plan Introduction

1.1 Creating a Vision for 2024

Planning for future city growth and development is full of uncertainties and unforeseen challenges. Failing to plan, on the other hand, ensures lost opportunities and the chance to become a better place for future generations is difficult to achieve. Kearney is a community wanting to seize its prospects and position itself as a place of enduring value and character.

This plan has been developed with the expectations that Kearney will balance the interests of a growing city with the desire of preserving its small town character. This will not be an easy task in a world of market-place driven residential and commercial development that does not always value what the community believes important and worth protecting. Regardless of future challenges, Kearney defined a set of guiding principles and future land use plan for achieving their vision of the future. The premise of the vision is simple: build a quality place that people view as desirable to live and work.

Implementing this vision is not uncomplicated because it involves creating a place where natural assets are protected and integrated into the community. It involves working with developers to take the extra steps to create a pedestrian-friendly environment or respecting community character over corporate design practices. It also means private and public investments are judged for their value in what they contribute to the quality of life and economic strength of the community.

1.2 Study Area Boundary

The study area for this plan includes an expansive district covering approximately 9 miles wide by 11 miles long containing 59,873 acres. As a point of reference, the City of Kearney is 6,100 acres in 2004. City officials were interested in taking a long-term assessment of the cities growth when the study area boundary was defined. The study boundary is designed to provide sufficient opportunity for continued urban growth. With growing communities located nearby, Kearney wants to ensure that their ability to expand is not curtailed or hindered by the actions of other jurisdictions, including Clay County. See Existing Physical Characteristics Map in Section 4 Natural Environment for a map of the study area boundary.

1.3 Regional Context

The City of Kearney is situated at the outer urban development boundary in the Kansas City SMA. Currently, it defines the metropolitan rural fringe on the North I-35 Corridor as the point where city and farm merge. Because of its location on I-35, it is classified as a “Gateway Community” to the Kansas City Urban Region.

1.4 Purpose of Plan

The City of Kearney experienced tremendous population growth and land development during the decade of the 1990's. In 2003, city leaders understood that a new comprehensive plan was necessary to guide growth and development. Rapid growth creates new challenges and opportunities for the community. It was clear to city leaders that without a blueprint to guide new development, Kearney could lose the small town characteristics and features that make it an attractive place to reside.

This plan presents a future land use pattern for an area defined as the "Urban Growth Area". The urban growth area as used in this plan delineates what the city leaders' view as the logical growth area of their city. The city is committed to protecting what it perceives as a rationale expansion area. Equally important to city leaders is the construction of a new interchange on I-35. The city invested in a study to identify options for locating a new interchange and is continuing to pursue the means to finance and construct a new interchange. Once again, city leaders recognize that a land use plan and local circulation plan was needed to support a new interchange and that their new comprehensive plan needed to anticipate what could be possible if an interchange is authorized.

This comprehensive plan goes beyond guiding land use decisions and defining what the city considers its logical growth area. The plan incorporates policies and principles that spell out how Kearney envisions their community growing and developing. City leaders desire to build partnerships with land developers to ensure that Kearney becomes a unique and special place in the year 2024. Quality of life and livability are taken seriously in Kearney and city leadership defines a vision of how they would like their city to be for future residents and businesses. Through the interpretation and enactment of this comprehensive plan, Kearney leadership charts a course to promote continued growth and guide new development in hopes of creating a competitive and livable community for the next generation.

1.5 Plan Preparation Process

The following is timeline of events and activities involved in preparing the plan document

November, 2002	Project initiation meeting between consultant, Board of Aldermen, and Planning Commission
June, 2003	Public participation workshop to identify community goals and planning objectives
August, 2003	Public participation workshop to define plan goals and development strategies
October, 2003	Public participation workshop to create future land use plans and schemes
January, 2004	Consultants presents recommended future land use map
May, 2004	Planning Commission conducts public hearing

SECTION 2: Population & Demographics

2.1 Spotlight on Missouri

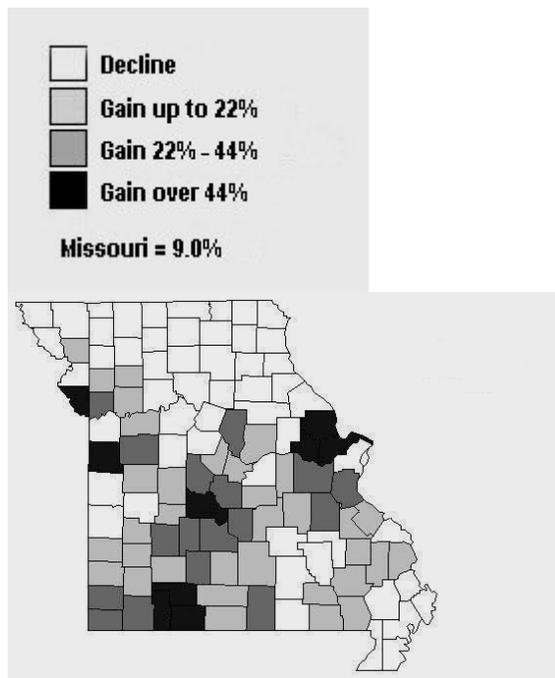
In 2003, Missouri ranks as the 17th most populous state. The state slipped from 15th in 1990 to 17th in 2000 as Indiana and Tennessee gained population at a faster rate during the decade. By 2025, Missouri is expected to be the 19th most populous state.

Missouri's population base is the result of modest but sustained growth throughout the 20th Century (see Table 2.1) in approximately 60 of the 114 counties, concentrated around and south of Interstates 70, 55, 35, and generally adjacent to its 6 metropolitan areas. This change in rank was expected as the rate of population growth for the state drops every decade since 1950, except for the period 1990 – 2000 when there was an unexpected rate increase. Although the 1990 – 2000 rate of change is the largest experienced in the 20th Century, it still falls well short of the U.S. national decade average – 13.2 percent.

Decennial Rates of Population change in Missouri.

- 1950s - 9.2 percent
- 1960s - 8.3 percent
- 1970s - 5.1 percent
- 1980s - 4.1 percent
- 1990s - 9.3 percent

SIDEBAR 2.1
Expected Growth and Decline In Missouri Over the Next 30 Years



Source: Missouri Census Data Center, 2002.

TABLE 2.1
Components of Population Change For Missouri 1900 - 2000

Year	Population	Number Change 1900-2000	Number Change 1950-2000	Number Change 1990-2000	% Change 1900-2000	% Change 1950-2000	% Change 1990-2000
1900	3,106,665	2,488,546	1,640,558	478,138	80.1	41.4	9.3
1910	3,293,335						
1920	3,404,055						
1930	3,629,367						
1940	3,784,664						
1950	3,954,653						
1960	4,319,813						
1970	4,677,623						
1980	4,916,686						
1990	5,117,073						
2000	5,595,211						

Demographics and population change factors for Missouri are both similar and distinctly different from many of the Sunbelt and Western States. Similarities include heavy population losses in traditional rural counties (especially in north Missouri) and significant population gains at the metropolitan fringe of its urban areas. Key differences are net-migration, birth/deaths rates and fertility rates.

Rural Counties and Population Loss

Missouri is a transitional state that adjoins a group of declining Great Plains States on the west and a group of dynamic Midwestern States on the east. To a certain extent, Missouri shares some of the characteristics of both groups of states. Approximately 35 rural counties located north or near Interstate 70 are classified as chronic population losers throughout this century. Eight counties near the Kansas border in the (central) southwest portion of the state and eight more counties in southern Missouri are also persistent population losers.

These rural counties suffer from a set of socio/economic conditions common to many rural areas throughout the Great Plains States: loss of jobs, depleted natural resources, declining small towns, consolidation of family farms and a rapidly aging workforce. To overcome these losses, Missouri must depend on metropolitan dynamics, immigrants seeking amenities and recreation opportunities and maintaining its image as a retirement destination state.

Net Migration, Birth/Deaths and Fertility Levels

Fertility has been the fundamental agent of change in Missouri demographics [MO Division of Budget and Planning, page 1]. Fertility is the measure of live births during the childbearing years. At one time (1935) the rate reached a low of 1.99 children per childbearing woman. During the 1960s, when the “Baby Boom” peaked, the average was 3.66 children. Projections indicate that Missouri’s fertility rate will cycle around the 2.0 children level over the next 20 years. This translates to 70,000 – 76,000 new births per year located mainly in the “key growth” counties within the I-70, I-35, and I-44 Corridors.

Table 2.2 contains population projections for Missouri from 2005 to 2020. These data are in three series originally prepared by the Missouri Division of Budgeting and Planning in 1994 – 1995. The projection error for the year 2000 was 251,516 persons: 5,595,211 persons actual count as compared to 5,343,695 projected count. Therefore, the data in Table 2.2 are based on revised methodology. Scenario L, the lowest series projection, assumes that migration patterns will return to their 1970 – 1980 level. The result is a modest 20 year increase of 10.0 percent that is only slightly more than the total rate of population change from 1990 – 2000. Scenario R, the middle projection, uses long term migration, stable death rates, and modestly increasing birth rates to arrive at a 14.3 percent increase over the 20 year period 2000 – 2020. Scenario Z is based on the assumption that trends prevalent from 1990 to 2000 will continue forward until 2020. These trends are: very heavy core city to suburban/metropolitan migration; out-of-state and international in-migration to outer counties around St. Louis, Kansas City and Springfield; and accelerated de-population of surrounding rural, agriculture counties. This would yield a 17.1 percent growth rate over the 20 year period.

TABLE 2.2
Series Data and Population Projections for Missouri 2005 - 2020

Date	Current	Scenario L	Scenario R	Scenario Z
1990	5,117,073			
2000	5,595,211	5,595,211	5,595,211	5,595,211
2005		5,728,801	5,788,342	5,799,658
2010		5,796,801	5,802,615	5,831,393
2015		5,992,006	5,972,500	6,157,143
2020		6,155,211	6,395,211	6,551,487
Increase 2000-2020		(10.0%)	(14.3%)	(17.1%)

Source: Woods & Poole, Missouri 2001; Missouri Division of Budgeting and Planning; U.S. Census Bureau; Missouri Census Data Center; Phillips & Assoc., Excel Macro Spreadsheet Extrapolations, 2003.

State and County Growth Rates

Population estimates for Missouri are important indicators of local growth during the next 20 years. For instance, a general decentralization of population that occurs between 2000 and 2020, as demonstrated in Scenario R, could slow growth in the outer metropolitan counties and favor recreation/amenity counties in southern Missouri as retirements accelerate around 2015. On the other hand, the type and intensity of growth experienced in Missouri from 1990 to 2000 sent population flowing into suburban and outer metropolitan counties at the expense of rural, agricultural counties. Under this assumption (high growth), Clay County, the City of Kearney and the neighboring communities will experience sustained growth above the national average.

Table 2.3 is a list of the top ten growth counties in Missouri ranked according to three different growth assumptions in Scenarios A, B, and C. The data were

originally generated by the Missouri Division of Budgeting and Planning and then updated in 2003 by Phillips and Associates.

Column 2 of Table 2.3 shows the final population count of each county for the 2000 Census. Column 3 is labeled Scenario A. This column displays the projected population of each county in rank order by size for the year 2020. Scenario A was provided by the Missouri Division of Budgeting and Planning and is based on the assumption that population levels will cycle downward over the next 20 years. Scenario A is based primarily on 1994 estimated population data and probably has a wide margin of error. Scenario B is in column 4 of Table 2.3 and this contains projected population data generated by Woods & Poole. It is based primarily on data from the 2000 Census (early counts). Column 5 with Scenario C is an updated projection by Phillips & Associates. The assumptions used in Scenario C are a mixture of Woods & Poole projections, Clay County Economic Development Data and the Missouri Census Data Center at the University of Missouri.

In 2000, Clay County ranked 7th in Missouri in population size. Under scenario A and B, it would remain in the 7th rank over the next 20 years as each County essentially holds a constant share of the new population growth each year. However, under Scenario C Clay County moves to the 5th rank as it passes Jefferson and Greene Counties.

TABLE 2.3
Top Ten Missouri Counties by Population Size 1990 - 2020

Group and Rank	2000		Scenario A 2020		Scenario B 2020		Scenario C 2020	
	County	Pop.	County	Pop.	County	Pop.	County	Pop.
1	St. Louis	1,016,315	St. Louis	983,990	St. Louis	1,100,585	St. Louis	1,075,161
2	Jackson	654,880	Jackson	626,649	Jackson	600,237	Jackson	725,595
3	St. Louis City	348,189	St. Charles	391,340	St. Charles	383,844	St. Louis City	475,033
4	St Charles	283,883	St. Louis City	270,760	Greene	259,778	St. Charles	270,977
5	Greene	240,291	Greene	248,222	Jefferson	254,255	Clay	264,740
6	Jefferson	198,099	Jefferson	234,351	St. Louis City	223,261	Greene	255,699
7	Clay	184,006	Clay	188,879	Clay	205,792	Jefferson	236,799
8	Boone	135,454	Boone	156,679	Boone	166,393	Boone	154,187
9	Jasper	104,686	Franklin	105,253	Franklin	111,248	Jasper	123,516
10	Buchanan	85,998	Jasper	98,839	Cass	102,654	Franklin	111,562

Source: Woods & Poole, Clay County Data, 2000; Phillips & Assoc, 2003; Missouri Census Data Center, 2002.

Conclusions

Missouri is best characterized as a “transition” state that marks the demarcation point between the slow growth Great Plains States and the more rapidly growing states in the Midwest. Missouri’s growth rates are moderate but sustained throughout much of the 20th Century and are expected to continue in this fashion for the next 20 – 30 years.

Missouri's growth components are its metropolitan areas, recreation and retirement counties, and places located along its interstate highway corridors. Rural counties, clustered in the northern and southern sections the state, are generally depopulating and increasingly dependent on country towns and regional centers such as Kirksville, Moberly, Cameron, Columbia, and Cape Girardeau. Projections indicate that the two most important factors for long-term city/county growth are metropolitan outer county location and interstate adjacency.

From 1990 to 2000 the population living in incorporated places (towns and cities) increased by 8.1 percent but population living outside the limits of any town or city increased by 12.3 percent. A metropolitan location and interstate adjacency similar to Kearney's heavily favors the opportunity for population growth.

2.2 The Kansas City Missouri Metropolitan Area

The Kansas City Kansas – Missouri Metropolitan Statistical Area is the Nation's 26th largest metropolitan area. U.S. Metropolitan Rank:

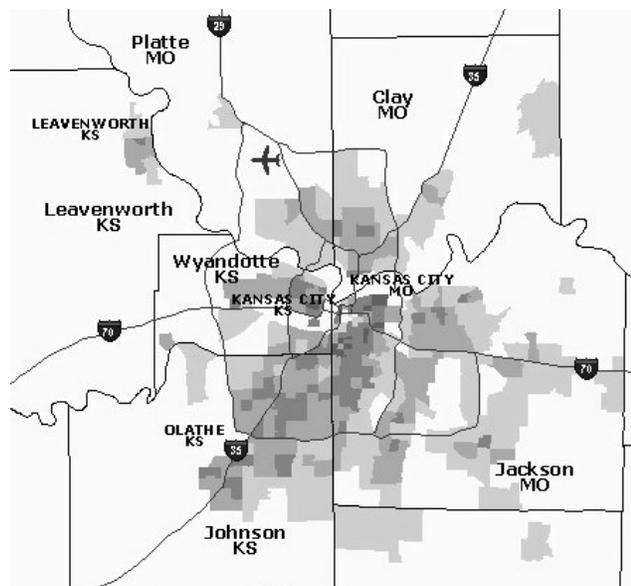
- 23rd Portland – Salem, OR
- 24th Cincinnati – Hamilton, Ohio- KY-In
- 25th Sacramento – Yolo, CA
- 26th Kansas City Kansas - Missouri
- 27th Milwaukee – Racine, WI

The 2000 Census population for the Kansas City Kansas-Missouri SMA is 1,776,122. This represents a population rate change of 12.1 percent (1,582,874) from 1990 and is greater than the average rate of decade change for the State of Missouri.

The Kansas City Missouri-Kansas SMA is economically linked to the Lawrence, Kansas and St. Joseph SMAs in the "Greater Kansas City Urban Area." The Kansas City Missouri portion of the SMA is composed of seven core counties; Missouri has Clay, Jackson, Cass, Ray, Platte, Lafayette and Clinton. The Kansas portion of the SMA includes Miami, Johnson, Wyandotte and Leavenworth Counties. The Greater Kansas City Area (Urban Area) includes several more counties. Table 2.4 and Figure 2.1 contain the SMA and the Greater Kansas City Urban Area 2000 Census population counts and current estimates. The highest

SIDEBAR 2.2

Population Distribution Pattern in the Kansas City Metro. Area - 2002



Kansas City Area Development Council, 2002

rate of growth for the Kansas City SMA occurred between 1950 and 1960 with a 26.0 percent rate of change while the lowest SMA growth rate (4.8 percent) was 1970 - 1980. Except for the early part of the last century, the growth rate has always been higher in the Missouri portion of the SMA. Typically, 35 - 45 percent of all new growth is in Kansas and 50 - 60 percent in Missouri.

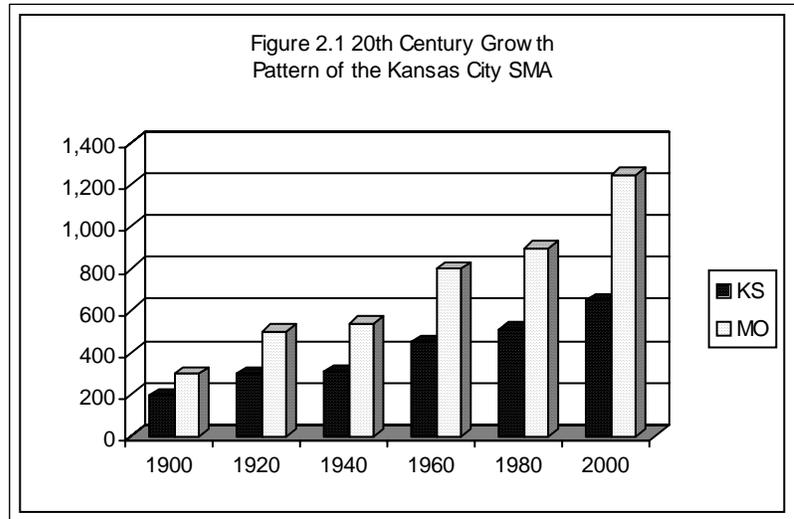


TABLE 2.4
Kansas City Urban Area Counties

Kansas	Population		1990	County Seat
	2000 Census	2001 Estimate	Population	
Atchison	16,774	16,687	16,932	Atchison
Douglas	99,962	100,005	81,798	Lawrence
Johnson*	451,086	465,058	355,021	Olathe
Leavenworth*	68,691	70,261	64,371	Leavenworth
Miami*	28,351	28,780	23,466	Paola
Shawnee	169,871	170,080	160,976	Topeka
Wyandotte*	157,882	158,004	162,026	Kansas City
Missouri	Population		1990	County Seat
	2000 Census	2001 Estimate	Population	
Buchanan	85,998	85,367	83,083	St. Joseph
Cass*	82,092	85,630	63,808	Harrisonville
Clay*	184,006	188,241	153,411	Liberty
Clinton*	18,979	19,530	16,595	Plattsburg
Jackson*	654,880	655,855	633,234	Independence
Johnson	48,258	48,888	42,514	Warrensburg
Lafayette*	32,960	32,975	31,107	Lexington
Platte*	73,781	76,223	57,867	Platt City
Ray*	23,354	24,431	21,968	Richmond
K.C. Metro	1,776,122		1,582,874	

*These counties are part of the Census defined Kansas City Missouri-Kansas MSA
Source: Smart City - The Kansas City Area Development Council; U.S. Census Bureau, Table CO-99-2 Final Count County Population for 1990.

SMA Comparisons

Under current definitions, the Census Bureau lists 280 SMAs – the largest SMAs (over 1,000,000 population) are designated as Level A and the smallest (under 100,000 population) as Level D. The Kansas City SMA is the 26th largest and ranks 34th in the number of persons gained by all SMAs from 1990 – 2000 (193,187 persons). Kansas City's rate of growth (12.2 percent) from 1990 – 2000 ranks 142nd among all SMAs during the same time period.

- Joplin MO SMA – 16.6 percent rate of change
- Columbia MO SMA – 20.5 percent rate of change
- Lawrence KS SMA - 22.2 percent rate of change
- Springfield MO SMA – 23.2 percent rate of change
- Kansas City MO – KS SMA – 12.1 percent rate of change
- St. Louis MO-IL SMA – 4.5 percent rate of change

The Kansas City SMA gained approximately 193,000 persons in its 144 municipalities and 11 counties for the 10 year period 1990 – 2000. About one half of this increase is the result of an excess of births over deaths, mainly in Johnson County, Kansas and Clay and Cass Counties in Missouri. The remaining half is due to net migration gains from other counties in Kansas and Missouri, or from other states, and from other countries.

Characterization and Potential

The Kansas City SMA is an eclectic mix of older suburbs and two core cities surrounded by outer counties where growing small towns and developing “Edge Cities” meet the countryside. The Kansas City Metro is also defined as an

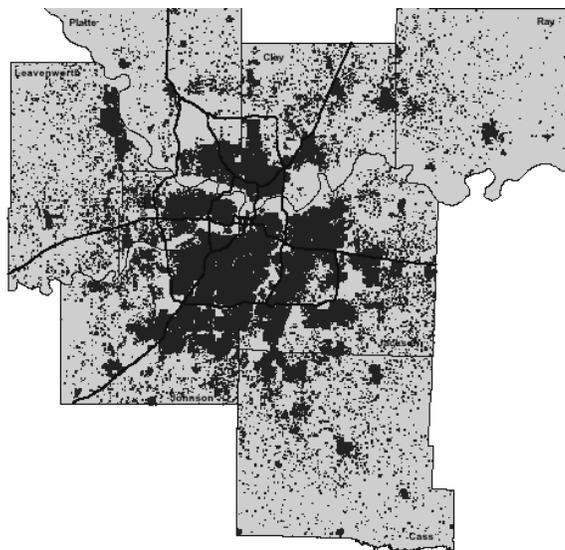
automobile oriented city that ranks it, in terms of road miles per capita, among the top five SMAs in the United States. While some of the older parts of the SMA – those developed before 1950 – are compact and “center oriented”, the majority of the K.C. Metro reflects expansive growth along interstate highways and roads that connect the interstate highways. This urban pattern can be seen in Sidebar 2.3 in the outer counties of the Kansas City Metropolitan Area.

The growth potential of the Kansas City SMA for the next 25 years is

difficult to assess. Several forecast were prepared in the 1990s but have not been benchmarked to the 2000 Census. The growth rate from 1990 was

SIDEBAR 2.3

Density & Growth – Area Map of the KC Metro Area



unexpectedly high and scenarios need to be reassessed. If growth trends for the Kansas City Metro return to 1970 – 1990 rates, then the Wendell – Cox or the Mid America Regional Council’s projections might accurately reflect a slowing growth trend. However, if the 1990 – 2000 trend holds constant for the next 20 years the “Growth Trend” projection could portray a higher rate of metropolitan growth.

TABLE 2.5
Population Estimates for the Kansas City SMA 2010 - 2025

Source	2010	2015	2020	2025
Wendell Cox Consultants, 2001	1,918,500			2,010,400
Mid American Regional Council	1,834,659		2,030,384	
Growth Trend	1,989,765	2,122,700	2,255,784	

2.3 Clay County Missouri – the I-35 Corridor

Clay County, Missouri, an integral part of the Kansas City Kansas-Missouri SMA, has a 2000 Census population of 184,006 with an estimated 2002 population of 188,200. The critical components of population change in Clay and several benchmark counties are displayed in Table 2.6. Jackson County is not included in the data to eliminate the urban bias among the suburban counties.

Clay is the fastest growing county in the Kansas City, Missouri portion of the SMA based on an increase of 30,595 persons between 1990 and 2000. Cass County had a greater rate of change (28.7 percent as compared to Clay’s 20 percent) during this 10 year period but the total population change of 18,284 persons was far less than Clay County’s increase. Platte County also registered a higher rate of population increase from 1990 to 2000 but an actual increase of about 16,000 persons.

TABLE 2.6
Critical Population Components for Selected Missouri Counties in the Kansas City SMA

County	Pop. 1930	Pop. 1940	Pop. 1950	Pop. 1960	Pop. 1970	Pop. 1980	Pop. 1990	Pop. 2000	Change 1990 - 2000
Cass	20,962	19,534	19,325	29,702	39,448	54,029	63,808	82,092	28.7%
Clay	26,811	30,417	45,211	87,474	123,702	136,488	153,411	184,006	20.0%
Clinton	13,505	13,261	11,726	12,462	12,642	15,916	16,595	18,979	14.4%
Lafayette	29,259	27,856	25,272	25,247	26,626	29,931	31,107	32,960	6.0%
Platte	13,819	13,862	14,973	23,350	32,081	46,341	57,867	73,781	27.5
Ray	19,846	18,584	15,932	16,075	17,599	21,378	21,971	23,354	6.3%

Source: Missouri County Historical Data, University of Missouri Extension, Office of Social and Economic Data Analysis, 1999; U.S. Census Bureau, Final Count of Population – 2000.

Clay County’s growth pattern should be characterized as “strong and persistent” through the 20th Century. Clay’s rate of change exceeds the national average in

every decade since 1930. During the past 70 years Clay County experienced a net gain of slightly more than 151,000 persons – this is nearly equal to Jackson County’s total net gain of 162,778 during the same period.

Cass, Clay and Platte Counties have similar growth patterns and demographic profiles and therefore serve as “benchmarks” in the Kansas City Metro area. All three counties are expected to follow similar growth paths for the next 20 -25 years. Generally speaking, Platte County has less infrastructure capability or strategic location opportunities compared to Clay and Cass Counties. Clay is more urbanized than Platte and Cass Counties. The 2000 census lists Clay’s population as 89.4 percent urbanized as compared to 80 percent in Cass and 62.6 percent for Platte County.

Table 2.7 contains age component data for Clay and the two benchmark counties – Cass and Platte. The table includes age/cohort data for Clay, Cass and Platte, and for the Kansas City Missouri-Kansas SMA as reported in the 2000 Census. The “cohort” is an age group and in this case is measured in four-year blocks beginning at birth (age 0 – 4) and continuing until age 24. Thereafter, the age groups (cohorts) are nine years apart until age 85.

TABLE 2.7
General Age and Family Profile – K C Metro Benchmarked Counties - 2000

Category	K.C. SMA	Clay County	Cass County	Platt County
Total Population	1,728,084	184,006	82,092	73,781
Percent Male	48.8%	89,433	40,196	36,531
Percent Female	51/2%	94573	41,896	37,250
Under 5 years	7.3%	7.2	7.4%	6.8%
5 – 9 years	7.4%	7.2	8.0%	7.2%
10 – 14 years	7.8%	7.1	8.4%	7.3%
15 – 19 years	6.9%	6.7	6.8%	6.9%
20 – 24 years	5.7%	6.3	5.2%	5.9%
25 – 34 years	14.1%	15.5	12.7%	14.4%
35 – 44 years	17.4%	17.0	17.4%	18.2%
45 – 54 years	14.1%	13.7	13.2%	15.4%
55 – 59 years	5.1%	4.8	5.4%	5.6%
60 – 64 years	3.3%	3.7	3.8%	3.6%
65 – 74 years	6.1%	6.0	6.4%	4.7%
75 – 84 years	4.0%	3.6	3.7%	3.1%
85 and over	0.9%	1.2	1.6%	1.1%
Median Age	35.4 years	35.0 years	35.8 years	35.9 years
Average Household	2.53 persons	2.50 persons	2.69 persons	2.5 persons
Average Family	3.10 years	3.0 persons	3.09 persons	3.0 persons

Source: Office of Social and Economic Data Analysis, University of Missouri Outreach and Extension, 2000.

At present, there are no significant variations among demographic age components in the three benchmarked counties. Platt has the highest median age (35.9 years) but this is mainly a reflection of its rural, small town heritage in

the northern part of the county. Cass County has the highest proportion of persons aged 85 years and older but Platte County will surpass this level within the next 15 years as its large cohorts in the early “baby boomer” years pass through the life cycle.

All three counties appear to be impacted by the impending process of age compression. In 1990 Cass County reported that 12.8 percent of the total population was aged 63 and over (8,139 persons). In 2000, this increased to 13.8 percent (11,323 persons). Likewise, the number of persons aged 63 and over in Clay County grew from 15,865 in 1990 to 19,886.

Growth Sectors – Population Change in the Townships

The U.S. Census Bureau tabulates population information by census tracts and block groups. One of the most common census tracts is the “township”. The township is classified as a “Minor Civil Division” and the data is very useful for examining extended growth around a community. This gives a clearer picture of the real population of a town with growth spread around its boundaries and of population change in different parts of the county.

Table 2.8 is a summary of population change in Clay County’s Townships from 1970 to 2000. The township total also includes the population of all incorporated places within its boundaries. For example, Kearney Township’s population in 2000 is 10,263. This includes the residents of Holt (405) and Kearney City (5,472). This leaves 4,386 persons who live outside municipal boundaries.

TABLE 2.8
Population Change in Minor Civil Divisions – Clay County 1970 - 2000

Township	1970	1980	1990	2000	% Change 1990 - 2000
Chouteau	29,825	29,923	34,755	41,134	18.4%
Fishing River	10,345	10,987	10,538	10,764	2.1%
Gallatin	58,190	61,511	64,251	67,862	5.6%
Kearney	2,407	4,680	5,951	10,263	72.5%
Liberty	17,109	20,895	26,606	38,184	43.7%
Platt	3,915	4,972	7,196	11,045	53.5%
Washington	1,911	3,520	4,114	4,754	15.6%

Source: U.S. Census Bureau Censuses of Population & Housing 1990, CPH – 2 – 26.

The fastest growing (1990 – 2000) townships in Clay County are Kearney, Liberty and Platt. The growth rate of each of these three townships exceeds the national growth average by a factor of 4 to 5 times.

Clay County Growth Factors and Projections

Explanations for growth, decline, and change are seldom simple. But in most cases, especially in Metropolitan Statistical Areas, explanations are highlighted by four or five critical components.

1. Metropolitan Overspill – Urban “backwash” occurs when an urban core no longer retains a critical mass of goods, services and amenities. In this case, Jackson County’s urban core, Kansas City, Missouri, began its period of decline between 1946 and 1960. Population migrated from Jackson to outer counties in response to changing conditions and the pull of attractive small towns and developing suburbs. This backwash phase, which to a certain extent still occurs 50 years later, is evident when new population arrives in the SMA and “spills over” to adjacent counties.
2. Interstate Adjacency – The Kansas City SMA is an auto oriented urban area. The influence of the urban core on Clay County’s growth potential is a necessary but not a sufficient condition for widespread migration. The Interstate 35 Corridor and its associated road network form the critical infrastructure necessary to fuel a sufficient population growth.
3. K.C.I. Airport – The convergence of I-35, I-435, the location and construction of the K.C.I. airport and aggressive annexations and economic development initiatives in the “Northland” by Kansas City, Missouri channeled growth to Clay and Platte Counties in the early 1960s.,
4. Growth Anchors – When metropolitan growth “overspills” from the original urban core county(ies) to outer, more rural counties, it seeks an “anchor point” to provide rapid access to jobs (high speed roads) and critical infrastructure (sewer, water, communications) that will accommodate moderate density growth patterns. The ideal growth anchors for metropolitan expansion are small cities that have the capability and willingness to expand and provide services. Liberty, and then a decade later Gladstone, served as anchors to both attract growth (beginning in the early 1960s) and then provide infrastructure for expansion in the late 1960s and early 1970s.
5. Opportunity, Affluence & Sprawl – Sprawled development is popular and requires far fewer resources than town growth. It is transportation oriented and therefore it must have an accessible road network. It can exploit rural water or ground water. Lots must be sufficiently large to overcome the lack of wastewater collection systems. A part of Clay County’s growth component is sprawl, but only about 7 percent of the total population (13,067 persons) lives in areas that meet the technical definition of “disconnected growth”.

If the five growth factors discussed above hold constant over the next 20 – 30 years, how will they impact change and development in Clay County? First, Clay County is well positioned to continue to attract metropolitan overspill. It is ideally situated in the metropolitan area and its proactive, “fast growth” mode makes it an attractive place to live, educate children, and seek jobs. Clay County contains the right mix of small city anchors and continues to develop new opportunities in its smaller towns, including Smithville, Kearney and Excelsior Springs. Clay County will continue to reduce its dependency on the urban core as new jobs are created in Liberty, Excelsior Springs, Gladstone and in the “Northland” in general.

Table 2.9 contains population data and forecasts for several municipalities in Clay County and for Clay County. Several models were used for the projections, including “straight line” and “growth models” that assume that past growth trends will continue in the future. Other projections provided by the Missouri Department of Budgeting and Planning, are based on estimated changes in births/deaths and migration patterns over time. Finally, one projection for Clay County, assumes that trends in the Kansas City Metro Area from 1970 – 1990 will dictate change and development over the next two years.

TABLE 2.9
Population Trends and Projections for Area Towns and Clay County 1980 - 2025

Place	1980	1990	2000	2010	2020	2025
Liberty	16,251	20,459	26,232	30,962	35,952	38,447
Gladstone	24,990	26,243	26,365	27,241	27,929	28,272
Excelsior Springs	10,424	10,354	10,670	10,729	10,852	10,975
Smithville	1,873	2,525	5,537	6,976	8,808	9,724
Pleasant Valley	1,545	2,763	3,349	4,356	5,258	5,709
Clay1	136,488	153,411	184,006	223,670	264,740	286,230
Clay2	136,488	153,411	184,006	192,530	205,792	
Clay3	136,488	153,411	184,006	205,486	229,245	241,124
Clay4	136,488	153,411	184,006	211,348	245,396	265,162

Straight line (linear) projection methods were used for Liberty, Excelsior Springs and Gladstone. Growth models were used for Smithville and Pleasant Valley. Baseline years for the projections were 1980, 1990 and 2000. Liberty, Smithville and Pleasant Valley show a trend of strong growth over the 25 year period.

The projection for Clay1 is from data provided by *Woods & Poole, Economics, Inc.* and is by far the most optimistic growth trend in Table 2.9. The projection foresees Clay County growing at an increasing rate for the next 25 years. The Woods & Poole data do not account for the significant changes in Jackson/Cass Counties to the south of Kansas City in the Lee’s Summit vicinity that will inevitably command a heavy share of the region’s growth. The most conservative projection, shown as Clay2, is from the Missouri Census Data Center prepared by the Office of Budgeting and Planning. This projection indicates that Clay County will enter a “flat line” growth mode sometime around 2020. Clay3 was prepared by Phillips and Associates for this plan. It is a simple straight line projection that assumes that population growth between 1980 and 2000 was typical and will continue for the next 25 years. Clay4 was also prepared by Phillips and Associates but relies heavily on assumptions put forth by MARC (Mid America Regional Council) in 2001. MARC used several growth models based on housing, growth policy changes, and economic development opportunities. Phillips and Associates modified this model to acknowledge a shift of growth between Cass and Clay Counties over the next 20 to 25 years.

2.4 Kearney and Vicinity

The City of Kearney is situated at the outer boundary of urban development in the Kansas City SMA. Currently it defines the metropolitan rural fringe on the North I-35 Corridor as the point where city and farm merge. Because of its location on I-35, it is classified as a “Gateway Community” to the Kansas City Urban Region.

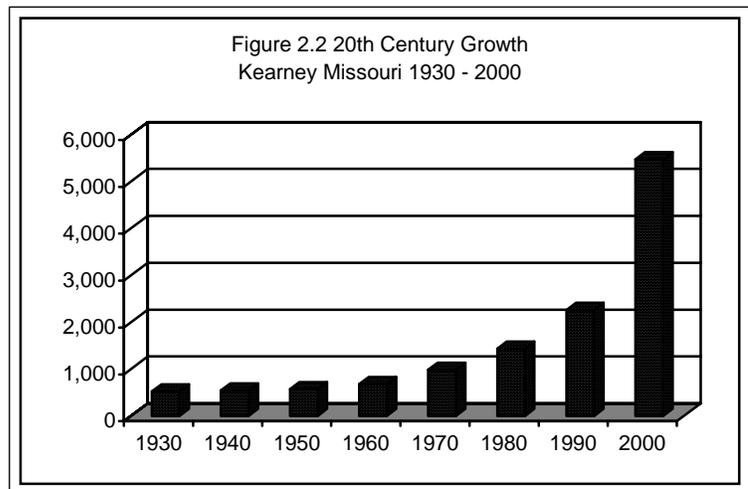


Non-Urban Growth Connection

Kearney is a connection point for residential growth in the unincorporated areas of Clay County. Smithville, about 13 miles to the west of Kearney, is also an essential ingredient in this non-urban growth pattern since it forms another “Gateway” to the Kansas City Urban Area via Highway 169. From Platte City on the west end to Kearney on the east side, Route 92 offers all of the essential resources for sprawl growth. The most notable resources are Route 92 itself, aggressive rural water districts, good schools, and a willingness to commute between 15 – 40 minutes one way each day. This growth is disconnected from communities, services, and essential infrastructure. It is a mixture of declining rural farms, low density and large lot subdivisions, estates, and single family homes on small tracts. Residents travel to Kearney, Smithville and Platte City for essential goods and daily retail shopping needs. At the present rate of increase, the sprawl line will continue to pass through Kearney on Route 92 to Excelsior Springs and beyond. This sprawl is ubiquitous and its effect is seen everywhere in central Clay County.

20th Century Growth Patterns

Kearney was a very small, rural town before the formation of the outer Kansas City SMA, the advent of I-35 and the construction of the Kansas City International Airport. Its growth pattern began to change when I-35 was completed in the 1960s. When the community was integrated into the metropolitan fringe during the 1980s, its status as a Gateway Community was assured and growth came rapidly. From 1990 to 2000



Kearney’s population more than doubled from 2,260 to 5,472 persons. This rate of growth is much faster than normal in “bedroom communities” and is probably attributable to the development of new firms, businesses, services and public employment in and around Kearney from 1985 to 2000. Kearney’s rate

of population change from 1990 to 2000 is 205.7 percent, placing it among the top “fastest growing communities” in Missouri along with St. Charles, O’Fallon and St. Peters, all near St. Louis.

Comparison to Nearby Communities

Table 2.10 compares the components of population change to similar or “benchmarked” communities in Clay County and to Missouri as a whole. Kearney, when compared to other fast growing community, contains significantly more children (0 – 14) and younger aged persons (25 – 39) than comparable communities. However, the other three communities have more persons aged 45 – 56 than Kearney. Also, there is a drop of post high school graduates in Kearney when compared to Liberty and Excelsior Springs (aged 19 – 24).

TABLE 2.10
General Age and Family Profile – K C Metro Benchmarked Cities - 2000

Category	Kearney	Missouri	Liberty	Excelsior Springs	Smithville
2000 Population	5,472		26,232	10,847	5,514
Under 5 years	9.5%	6.6%	6.7%	7.6%	8.3%
5 – 9 years	10.1%	7.1%	7.8%	6.8%	7.7%
10 – 14 years	9.5%	7.4%	8.1%	7.3%	7.7%
15 – 19 years	6.5%	7.4%	8.7%	9.2%	7.1%
20 – 24 years	4.4%	6.7%	6.7%	7.1%	4.1%
25 – 29 years	17.5%	6.5%	6.4%	7.0%	7.5%
30 – 34 years	10.0%	6.7%	7.0%	6.4%	8.7%
35 – 39 years	9.8%	7.9%	8.6%	7.0%	9.7%
40 – 44 years	8.2%	7.9%	8.2%	7.6%	8.3%
45 – 49 years	5.5%	7.1%	7.4%	5.9%	6.6%
50 – 54 years	4.9%	6.2%	6.3%	6.1%	5.8%
55 – 59 years	3.8%	5.0%	4.5%	5.0%	4.0%
60 – 64 years	2.1%	4.1%	3.2%	3.9%	2.7%
65 – 69 years	2.3%	3.7%	2.7%	3.5%	3.0%
70 – 74 years	1.7%	3.4%	2.4%	3.2%	3.0%
75 – 79 years	1.8%	2.8%	2.3%	2.3%	2.3%
80 – 84 years	1.2%	1.9%	1.6%	2.0%	1.7%
85 and over	1.4%	1.8%	1.3%	2.2%	1.5%
Median Age	31.1 years	36.1 years	34.0 years	33.8 years	34.3 years
Average Household	2.84 persons	2.48 persons	2.62 persons	2.50 persons	2.62 persons
Average Family	3.24 persons	3.02 persons	3.08 persons	3.01 persons	3.07 persons

Source: Office of Social and Economic Data Analysis, University of Missouri Outreach and Extension, 2000.

This drop in post high school graduates is normal in rural communities but not necessarily in established small cities with educational facilities and/or plentiful job opportunities.

The comparison of median ages in Table 2.10 demonstrates the greatest difference between Kearney, Liberty, Excelsior Springs, and Smithville. The median age in Missouri is 36.1 years which is very near the national average. The Kansas City SMA’s median age is 35.4 years, which is also similar to Clay

County's 35.0 years. In contrast, Kearney's median age of 31.1 years is significantly less than the state, regional and local benchmarks.

Growth Potential

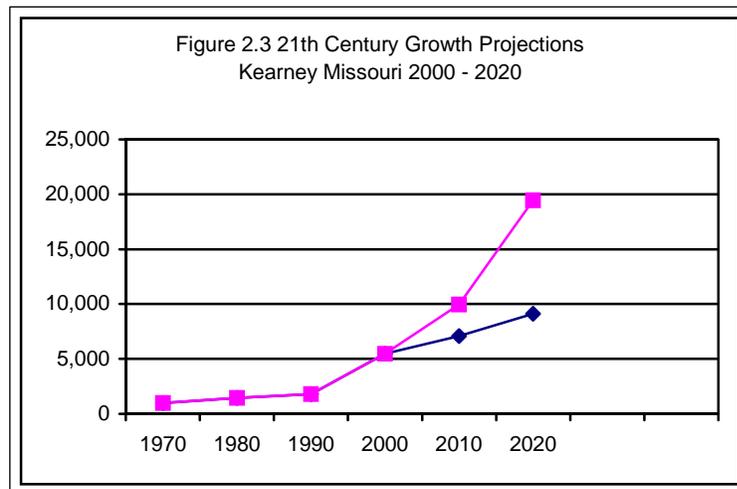
Very fast growing communities pose a special set of problems in population forecasting. Most rapidly growing towns are associated with tourism, natural resources, or metropolitan overspill. The most important question for the forecaster is: How long can the community's resources, infrastructure, and finances sustain the burst of growth that started 10 - 20 years ago?

The two projections shown in Figure 2.3 are based on limited data but both are consistent with growth rates for communities located on the fringe of the Kansas City Metropolitan Area and for Clay County as a whole. The lower growth rate is based on a "linear" or straight-line model. This model "smoothes out" the low (1970 - 1990) growth and high growth (1990 - 2000) years. It assumes that Kearney cannot sustain another decade rate of change of 205 percent and will return to an average rate of change. Under this assumption Kearney would have a population of 7,094 in 2010 and 9,114 in 2020. The second projection is based on a "growth model." This type of projection does not try to equalize the low and high growth years but rather assumes that the total rate of change will determine future growth. The high rate of change from 1990 to 2000 has a significant impact on this type of model causing it to yield unrealistically high growth rates if the model is allowed to project too far into the future. If the growth model is accurate, then Kearney's 2010 population will be 9,956 (+or - 590) and then double to 19,454 (+ or - 700) in 2020.

Several other models were used to simulate Kearney's growth. A cohort-survival model,

which approximates, births, deaths and migration yields unrealistic projections because of the large number of child and younger aged adults. Several types of "regression" curves were also attempted in order to smooth population growth but these mathematical models are not as accurate as the growth or linear models. The basic problem is that Kearney was once a low growth, rural community and is now a very high growth area apparently on its way to becoming a small city.

The U.S. Census Bureau uses a housing formula model to make its yearly estimates of population for counties and towns over a minimum population size. On the average since 1990, 90 - 105 dwelling units are started each year in Kearney. Kearney's average household size is currently 2.8 persons. If building permits, on the average, keep pace with the number issued for the past 10 years, the total population of Kearney could be in the range of 8,700 to 9,200 persons in 2010.



2.5 Conclusions

All of the common growth indicators confirm that Kearney will undergo profound change in the next 20 – 30 years. Kearney's interstate highway setting, status as a Gateway Community, and location within a high growth region of a high growth county point to the simple fact that the town will gain a considerable number of persons from births and in-migration over the next 10 years. The projections for the 20 year range are uncertain and will depend on Kearney's ability and willingness to serve a rapidly expanding population base. And, also, will depend on whether the 1990 – 2000 rate of population change is now "typical" or if the high rate of growth is temporary and Kearney will soon return to its 1980 – 1990 level.

It is probably that Kearney will hold its position as a metro fringe community for some time to come. There is no other town conveniently located in the I-35 Corridor north of Kearney that is strategically positioned to attract growth – other than the attraction of sprawl itself. This, of course, assumes that Clay County will retain its strong growth charter or whether the growth "hot spots" are moving southward toward the Lee's Summit vicinity and into Cass County.

Many communities throughout the United States will soon undergo "age compression" because of the aging of the baby boomers. The community impact resulting from this age compression will range from moderate to severe when measured in terms of the social services and benefits required by an aging population. Kearney is not likely to be a community impacted by an increasing proportion of elderly within its population ranks. However, its burdens may be equally as challenging. The percent of the population in Kearney dependent on the "working population" will be as challenging in the early ages as it is in some communities in older age. Kearney's youthful population will demand as many services as the elderly. Education services will be especially costly due to the high birth rates in Kearney and Platte Townships.

Kearney's growth is the result of additions and annexations to the original town. More opportunities from growth will come from increased metropolitan expansion. In a real sense, it is this type of growth and land use change that will present the greatest challenge to Kearney as more and more services, jobs, and traffic demands will be placed on the community.

In summary, a high rate of growth, significant land use changes and an increasing demand for infrastructure appear to be in store for Kearney for the next 10 – 15 years and quite possibly for the next 20 -25 years. If the growth trends documented in this section continue unabated until 2005, the community should seriously consider adopting policies to contain development within an urban growth boundary and perhaps programs to pace and time growth to meet the fiscal resources of the community.

SECTION 3:

Housing

3.1 Introduction

This section examines the housing stock and household characteristics of Kearney. Using 2000 and 1990 Census data, a comparative analysis of tenure, structure type, housing age, and household characteristics is assessed. Local building permit data from City Hall is also assessed to document residential construction activity from 1980 through 2002. Approved and planned subdivision plats are inventoried to identify anticipated new residential development. The last element of this section concentrates on housing demand and a land use demand forecast for Kearney through 2020.

The intent of this section is to understand the composition and changes occurring in the housing stock, households, and near term growth potential in the housing sector. As this section reveals, Kearney experienced tremendous housing construction activity during the 1990's. The rapid growth in single family home construction resulted in several changes.

3.2 Household Characteristics

Understanding current household composition provides insight to both short and long-term housing needs in a community. As illustrated in Table 3.1, Kearney has a high percentage of married-couple families with children under 18. Depending on household income, this often translates to increased demand for traditional, detached single-family housing, which in turn typically means greater demand on schools, day care, and parks and recreation programs.

Household composition also influences the real estate market. Community demographics determine the demand for housing products. For example, according to 2000 Census data, Kearney is a city comprised of 14% single-parent families and 18.6% 1-person households. In order to accommodate these various types of households, there should be alternative housing choices available to meet both rental and owner needs. In addition, 19% of the family households consist of a householder age 65 years and over. The senior citizens often seek a housing product that is maintenance free, secure, and with less than 1,200 square feet on a single floor.

TABLE 3.1
Households by Type and Housing Unit Characteristics, 2000 and 1990

	2000		1990	
	Number	Percent	Number	Percent
Households by Type				
Total Households	1,925		738	
Family Households	1,531	79.5%	510	74.9%
Married-couple family	1,261		434	
Male householder, no wife present	93		10	
Female householder, no husband present	177		66	
Total Nonfamily Households	36	01.9%	171	25.1%
Male Householder	7		43	
Female Householder	29		128	
1-person Household	358	18.6%		
Male Householder	133			
Female Householder	225			
Householder 65 years and over	291			
Married-couple family	156			
Female Householder, no husband present	29			
Non-family households	135			

3.3 Housing Tenure

Although housing units in Kearney reflect household composition, another important measure is tenure. This indicates whether housing is rental or owner occupied. According to the 2000 Census, of the 1,987 total housing units in Kearney 96 percent were occupied and 4 percent were vacant. Of the total 1,902 occupied units, 75 percent were owner-occupied and 25 percent renter-occupied. The average household size of owner-occupied unit was 3.10. For renter-occupied units, the average household size was 2.07.

Table 3.2 substantiates the boom in single-family homes during the 1990's. Kearney experienced a major shift in owner-occupied housing units by recording a 300 percent increase in owner-occupied housing from 1990. This was in contrast to a 44 percent increase in renter-occupied housing. Another indicator of the shift to owner-occupied housing is that in 1990, 51 percent of the occupied units were owner-occupied compared to 49 percent renter occupied. By the year 2000, the percent of owner-occupied housing rose to 75 percent and renters declined to 25 percent.

TABLE 3.2
Comparison of Housing Change in Tenure, 2000 and 1990

	1990	2000	Number Change	Percent Change
All Housing Units	738	1,987	1,249	169.2%
Occupied Units	692	1,902	1,210	174.9%
Owners	355	1,418	1,063	299.4%
Renters	337	484	147	43.6%
Vacant	46	85	39	84.8%
% Owner Occupied	51.4%	74.5%	+23.1%	
% Vacant	6.2%	4.3%	-1.9%	

3.4 Housing Structure Type

The federal housing census data provides an inventory of the Kearney housing stock by describing structure type based on the number of units in a structure. In 1990, there were 510 1-unit structures, by 2000 there were 1,645. This represents a 222 percent increase from 1990 to 2000.

Table 3.3 indicates that the growth in 1-unit structures (e.g. single-family home) results in a decrease of the housing mix. In 1990, 15 percent of the housing stock was found in 2 to 4-unit (e.g. duplexes), but by 2000 it had decreased to 11 percent. Taking into account multi-family housing (5 to 19+ units), the housing stock in 1990 was comprised of 15 percent multi-family. Kearney's housing stock in 2000 consisted of 6.5 percent multi-family housing.

TABLE 3.3
Comparison of Housing Change in Units by Structure Type, 2000 and 1990

	1990		2000		Change	
	Number	% of Total	Number	% of Total	In Number	In Percent
1 unit	510	69.1%	1,645	82.8%	1,135	222.5%
2 to 4 units	112	15.2%	212	10.7%	100	89.2%
5 to 19 units	70	9.5%	74	3.7%	4	1.4%
20 + units	41	5.5%	56	2.8%	15	36.6%
Other	5	0.7%	---	---	-5	
Total	738	100.00%	1,987	100.00%	1,249	---

3.5 Age of Housing

Of the total housing units in 2000, 57.6 percent were built during the decade of the 1990's. This compares to 1990 when 49.4 percent of the housing units had been built in the decade of the 1980's. The proportion of older units (40+ years old) was 12.7 percent in 1990, while in 2000 the percent of older units decreased to 8.1.

TABLE 3.4
Summary of Housing Characteristics, 2000 and 1990

	2000		1990	
	Number	Percent	Number	Percent
Occupancy & Tenure				
Total Housing Units	1,987		738	
Occupied Housing Units	1,902	95.7%	692	93.8%
Vacant Housing Units	85	04.3%	46	06.2%
Total Occupied Units	1,902		692	
Owner-Occupied Units	1,418	74.5%	355	51.3%
Renter-Occupied Units	484	25.5%	337	48.7%
Average Household Size of Occupied Units				
Owner-Occupied Units	3.10			
Renter-Occupied Units	2.07			
Year Structure Built				
1999 to March 2000	134	06.7%		
1995 to 1998	537	27.0%		
1990 to 1994	475	23.9%		
1980 to 1989	392	19.7%	366	49.4%
1970 to 1979	180	09.1%	166	22.4%
1960 to 1969	107	05.4%	75	10.1%
1940 to 1959	88	04.4%	39	5.3%
1939 or earlier	74	03.7%	94	12.7%
Total	1,987	99.90%	740	99.90%
Units in Structure				
1, detached	1,516	76.3%	434	58.8%
1, attached	129	06.5%	76	10.3%
2 units	115	05.8%	54	7.3%
3 or 4 units	97	04.9%	58	7.9%
5 to 9 units	48	02.4%	40	5.4%
10 to 19 units	26	01.3%	30	4.1%
20 to 49 units	38	01.9%	41	5.5%
50 or more units	18	00.9%	0	0
Mobile home	0	0	0	0
Other	0	0	5	0.7%
Total	1,987	100.00%	738	100.00%

3.6 Housing Construction Activity, 1980-2002

Table 3.5 shows the number of residential building permits issued by the City of Kearney from 1980 to 2002. This reveals several important details about the housing construction trends in Kearney.

- In the years from 1980-1989, 156 single-family permits were issued, while from 1990-1999, 1,004 permits were issued.
- One clear circumstance about the housing construction activity during the last 20 years is that the majority of multi-family housing were constructed during the 1980's (116 units). This compares to 48 units of multi-family units built in the 1990's.
- The construction of duplexes in Kearney has been comparatively consistent for the last twenty years. In the decade of the 1980's, developers built 68-units (34 duplex structures). Ten years later in 1999, builders constructed 84-units (42 duplex structures) in the decade of the 1990's.

TABLE 3.5
Building Permit Data, for Residential, Multi-Family, and Commercial Construction, 1980-2002

Year	Single Family Building Permits	Duplex Building Permits	Multi-Family Building Permits	Commercial Building Permits
1980	7		3 (6)	1
1981	3		1 (4)	0
1982	6	2 (4)		0
1983	5	2 (4)		3
1984	13	6 (12)	2 (16)	2
1985	9	9 (18)	1 (24)	1
1986	29	15 (30)	2 (36)	4
1987	25	0	4 (24)	2
1988	40	0	2 (6)	8
1989	19	0	0	3
Total	156	34(68)	15(116)	24
1990	37	0	0	8
1991	101	0	1 (24)	6
1992	127	5 (10)	0	6
1993	121	6 (12)	0	8
1994	137	5 (10)	0	18
1995	103	5 (10)		11
1996	98	0	1 (4)	13
1997	96	14 (28)	0	17
1998	84	5 (10)	1 (20)	14
1999	100	2 (4)	0	18
Total	1,004	42(84)	3(48)	119
2000	132	0	0	23
2001	124	0	0	27
2002				

3.7 Planned Residential Development

Table 3.6 presents an inventory of available lots in developed subdivisions. According to city staff, the developers of these subdivisions indicate that all lots will be sold and/or occupied by 2003-2004. The development of these subdivision phases creates 610 single-family lots or households.

TABLE 3.6
Inventory of Available Lots in Developed Subdivisions

Subdivision Name	Subdivision Phase	Year Plat Approved	No. of Approved Lots/Sites
Brooke Haven,	1st Plat	2000	3
Brooke Haven,	2nd Plat	2001	60
Brooke Haven,	3rd Plat	2003	37
Clear Creek,	1st Plat	1997	7
Clear Creek,	2nd Plat	1998	10
Clear Creek,	3rd Plat	1999	8
Greenfield Village		1999	18
Meadows of Greenfield	1st Plat	2001	46
JAMESTOWNE,	3rd Plat	1987	7
Village Of JAMESTOWNE,	1 st Plat	2001	26
River Meadows,	3rd Plat	1998	34
Village of River Meadows	1 st Plat	2003	15
Hills of River Meadows	1 st Plat	2000	59
SHADOWBROOK,	1st Plat	1993	43
SHADOWBROOK,	2nd Plat	1996	22
SHADOWBROOK,	3rd Plat	2001	94
STONELAKE,	1st Plat	1997	45
Whitegates,	5 th Plat	2000	15
Hills of Westwood	1st Plat	2001	34
Westwood Village	1st Plat	2003	27
Total			610

Table 3.7 presents a listing of approved preliminary plats and the potential number of single-family lots. City staff expects these subdivisions to develop between the years 2002-2007. The housing stock of Kearney increases by 2,526 households when these preliminary plats are built-out.

TABLE 3.7
Inventory of Potential Lots Based on Approved Preliminary Subdivision Plats

Subdivision Name	No. of Lots
Approved Plats	
Brookhaven	309
Clear Creek	32
JAMESTOWNE, 4th Phase	9
JAMESTOWNE Addition	70
River Meadows	137
SHADOWBROOK	93
Planned Plats	
Greenfield	269
Cedarwood	732
Hills of Westwood	530
WestBrooke	345
Total	2,526

3.8 Housing and Land Demand

Dwelling unit demand forecasts usually depend on household composition, tenure (rental or owner occupied), income and expected population growth. Kearney's household and family size appear to be stable rather than decreasing in size and reflects an influx of old or younger, single one or two person households. The school enrollment trends analyzed in another part of this plan support the stable family/household size assumption. Conversely, housing tenure is undergoing rapid change in Kearney. There is a substantial change in the number of renter and owner occupied units in the community since it appears that three out of four housing starts are owner occupied.

Kearney's housing mix is distinctly "low to moderate density". Demand forecasts, therefore, assume that this density mix will continue into the near future. There is also an assumption that Kearney will follow the national trend of decreasing lot sizes, less private open space, and smaller yards consistent with the principle no/low maintenance developments and compact growth.

TABLE 3.8
Housing Need and Land Use Demand Forecast – Kearney 2010 - 2020

Model	2010		2020		S.F. Units	M.F. Units	Acres Needed
	Est. Pop.	Est. Units	Est. Pop.	Est. Units			
Linear	7,100	542	9,100	666	966 (80%)	242 (20%)	362 acres
Growth	10,000	1,509	19,500	3,166	3,740 (80%)	935 (20%)	1,401 acres
Census	9,200	1,242	13,000	1,266	2,006 (80%)	501 (20%)	751 acres
Average		1,097		1,699	2,236 (80%)	559 (20%)	838 acres
Scenario 1		700		950	900 (60%)	660 (40%)	230 acres

Source: Census 2000, Population and Housing; Phillips and Assoc., 2003.

Table 3.8 shows four possible forecasts for housing and land demand in 2010 and 2020. These forecasts are based on the assumption that the factors driving housing and land demand in Kearney from 1980 to 2000 will generally remain constant from 2000 to 2020.

The three methodologies used for forecasting in Table 3.8 are the linear, growth and census models. The linear model takes the average decade rate of growth from 1970 to 2000 and projects a “straight line” 20 years into the future. This method yields the smallest population growth. The growth model is a compounding method that gives the highest forecasted rate of growth for Kearney. The reason for this is that Kearney’s rate of growth increased slowly but steadily from 1970 to 1990 but from 1990 to 2000, the rate of change was over 200 percent. Since the growth model uses a compound rate, the population increase becomes larger each decade – within 30 to 40 years it is unrealistically large. The census model relies on the number of residential building permits issued each year, family size, household composition, and inward or outward migration. It is often a good compromise between the linear and growth models; however, the census model is often unresponsive to rapidly changing demographics in fast growing communities. Row 4 shows an “average” calculation and helps to smooth out the difference between the highest and lowest forecasts.

Columns 1 – 4 in Table 3.8 contain population estimates for 2010 and 2020. Beside each estimate is a dwelling unit forecast for each decade. The housing unit estimate is calculated by taking the new increment of population times (X) the mean of the average household size (2.84 persons) and the average family size (3.24 persons) in Kearney, which is about 3.0 persons. For example, the growth model indicates that 1,509 new dwelling units will be need between 2000 and 2010 and 3,166 new units will be required to house new residents (or new households) by 2020. Generally speaking, new households are created faster than population growth due to divorce and “unbundling.” Unbundling is a term used to describe the process that occurs when several young, single persons living together move out to acquire their own living quarters.

Columns 6 and 7 in Table 3.8 contain estimates of the number and type of dwelling units needed in Kearny from 2003 to 2020. The assumption is the 80 percent of the new units constructed over the next 17 years will be single family – either detached, or two, three or four units attached. This would leave 20 percent as multi-family residential dwellings containing five or more units in one structure.

Column 8 in Table 3.8 contains an estimate of the number of acres needed to accommodate the new housing units until 2020. This is calculated by dividing the total single-family housing units by three and the multi-family units by six. This approximates three single-family units per acre and six multi-family units per acre with the necessary streets, sidewalks, and utility easements. Definitions of low and moderate density vary from community to community. Typically, low density is defined from between two and six units per acre and assumes a habitable basement with two above ground floors. Moderate density can mean from seven to 15 units per acre in single-family units using a zero lot line and greatly reduced yards and setbacks, or it can mean up to 25 multi-family units per acre in three story buildings.

Scenario 1 is in row 5 of Table 3.8. This illustrates that marginal change can significantly affect housing mix and land demand. In this example, the number of new housing units per decade is approximately the average of the highest and lowest forecasts. The percent of single and multi-family buildings change from 80 and 20 percent respectively to 60 percent single-family and 40 percent multi-family. The unit density changes from three to five units per acre and multi-family changes to 12 units per acre. The results of Scenario 1 can be compared with other estimates of land demand in column 8.

Housing demand is difficult to predict for more than three to five years into the future; determining the ratio of land needed to housing demanded is even more difficult because of the wide range of densities involved in the development process. If Kearney's housing demand keeps pace with the dwelling unit permits issued from 1990 – 2000, there will be between 1,100 and 1,300 residential dwelling units added to the current base. In turn, this could result in a population increase of 3,100 to 3,700 persons by 2010. Land demand by 2010 would range from 360 to 450 acres if the general pattern of three units per acre continues. Kearney has an estimated supply of 2,739 residential lots that will be permit ready by 2007. On the average, this estimated supply could accommodate about 7,800 new residents if the mean household size remains around 2.84 persons. The anticipated supply of lots should be sufficient to satisfy housing demand well past the year 2020 at the rate of 90 permits per year or until 2020 at the rate of 150 single-family units per year (1 – 4 dwelling units per structure).

If the housing demand projections are compared to the population forecasts for Kearney, it appears that only the "growth model" would outstrip available lot supply before 2020. The growth model predicts a 2020 population of nearly 20,000 persons compared to an estimated population of 6,400 – 6,600 in 2003. The additional population would require approximately 4,800 residential lots by 2020. This would exhaust the projected available lots around the year 2014.

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SECTION 4:

Natural Environment

4.1 Introduction

In order to make sound planning decisions within the Urban Growth Area of Kearney, it is necessary to evaluate the possible limitations and constraints that can be placed on urban expansion by the surrounding environment. It is essential to understand and address environmental constraints and opportunities as the City of Kearney grows. By doing so, intelligent planning and realistic cost efficient development can occur. This section includes looking at the physical characteristics of the Urban Growth Area.

4.2 Floodplain

One of the unique natural features of the Urban Growth Area of Kearney is the amount of land located in designated flood hazard zones associated with Clear Creek and Fishing River. Approximately 2,357 acres of 100-year floodplain lies within the Urban Growth Area. See Existing Physical Characteristics Map for further details. A challenge facing the planning of the Urban Growth Area is to reduce flood damage to the built environment by managing urban development in the floodplain. Since chronic flooding is a destructive environmental limitation to development, land use planning should respect the natural system and determine appropriate locations for both the encouragement and prohibition of development.

Federal Emergency Management Agency (FEMA) breaks down flood zones into two categories: 100-year floodplain and 500-year floodplain. The 100-year floodplain is a statement referring to a “100-year storm”, which is an indicator of probability that a storm has a one percent change occurring each year. It does not mean that such a storm will occur only once in a 100-year period.

Good planning and construction practices suggest that very little construction activity if any at all should not occur within the 100-year floodplain. Limited construction may occur within the 500-year floodplain. Overall, it is genuinely best to keep development within the floodplain to a minimum.

4.3 Soils and Slopes

The Soils Conservation Service Soil Survey for Clay County provides the soil classification for the Urban Growth Area for Kearney. Soil Classifications identified within the study area are:

Greenton Series

This series consists of deep, somewhat poorly drained, slowly permeable soils on uplands. Slopes range from 5 percent to 14 percent. Slopes are eroded to severely eroded. The soil type combined with volatile slopes, rate

the soil as severe for site development and sanitary facilities.

Lagonda Series

This series consists of deep, somewhat poorly drained, moderately slowly permeable soils on uplands. Slopes range from 2 percent to 14 percent. Slopes are eroded. The soil type combined with volatile slopes, rate the soil as severe for site development and sanitary facilities.

Ladoga Series

This series consists of deep, moderately well drained, slowly permeable soils on uplands. Slopes range from 2 percent to 14 percent. Slopes are eroded to severely eroded. The soil type combined with volatile slopes, rate the soil as moderate for site development and sanitary facilities.

Zook Series

This series consists of deep, poorly drained, slowly permeable soils on moderately wide flood plains. Slopes range from 0 percent to 2 percent. The soil type combined with the flat slopes causes periodic flooding, rate the soil as severe for site development and sanitary facilities.

Bremer Series

This series consists of deep, poorly drained, moderately slowly permeable soils on stream terraces. Slopes range from 0 percent to 2 percent. The soil type combined with the flat slopes causes periodic flooding, rate the soil as severe for site development and sanitary facilities.

Wiota Series

This series consists of deep, poorly drained, moderately slowly permeable soils on stream terraces. Slopes range from 0 percent to 2 percent. The soil type combined with the flat slopes causes periodic flooding, rate the soil as severe for site development and sanitary facilities.

Nodaway Series

This series consists of deep, moderately well drained, moderately permeable soils on flood plains or alluvial fans along tributary streams of the Missouri River. Slopes range from 0 percent to 2 percent. The soil type combined with the flat slopes causes periodic flooding, rate the soil as severe for site development and sanitary facilities.

Armster Series

This series consists of deep, moderately well drained, moderately slowly permeable soils on uplands. Slopes range from 5 percent to 20 percent. Slopes are eroded to severely eroded. The soil type combined with volatile slopes, rate the soil as severe for site development and sanitary facilities.

Grundy Series

This series consists of deep, somewhat poorly drained, slowly permeable soils on uplands. Slopes range from 2 percent to 9 percent. This soil type has a severe rating for site development and sanitary facilities.

Macksburg Series

This series consists of deep, somewhat poorly drained, moderately slowly permeable soils on uplands. These soils are formed in loess. Slopes range from 5 percent to 9 percent. This soil type has a severe rating for site development and sanitary facilities.

Sharpsburg Series

This series consists of deep, moderately well drained, moderately slowly permeable soils on uplands. These soils are formed in loess. Slopes range from 2 percent to 14 percent and slopes are slightly eroded. This soil type has a moderate rating for site development and sanitary facilities.

Wabash Series

This series consists of deep, very poorly drained, very slowly permeable soils on flood plains along tributaries of the Missouri River. These soils are formed in clayey alluvium Slopes range from 0 percent to 2 percent. The soil type combined with the flat slopes causes periodic flooding, rate the soil as severe for site development and sanitary facilities.

Snead Series

This series consists of moderately deep, moderately well drained, slowly permeable soils on uplands. Slopes range from 5 percent to 30 percent. The soil type combined with volatile slopes, rate the soil as severe for site development and sanitary facilities.

While most of the soils identified within the Urban Growth Area are rated poor and severe for development, current engineering practices during the construction phase, insures quality development. The primary constraint for development within the Urban Growth Area will be floodplain restrictions, highly eroded slopes and steepness of grade.

Urban development can be very difficult to construct on slopes 15 percent or greater. The City of Kearney Urban Growth Area has isolated pockets of slopes 15 percent or greater along tributaries; Gilmore Creek, Clear Creek, Rock Creek, Carroll Creek, and Fishing River. These tributaries drain into the Missouri River.

4.4 Stream Corridors, Woodlands, and Riparian Areas

There are five tributaries that contribute to the Missouri River; Clear Creek, Gilmore Creek, Rock Creek, Carroll Creek, Fishing River, and Holmes Creek. The majority of the tributaries lie within the 100-year and 500-year floodplains. Existing large mature tree cover is disbursed throughout the tributaries.

Oak-Hickory Community

Found predominantly on north facing upland slopes, bounded by Oak-Savana on the top of the slope and by floodplain community on the bottom of the slope. Typical species found within this community are:

- White Oak, Red Oak, Shagbark hickory
- Flowering dogwood, Ohio Buckeye, American Hophornbeam

Mixed Floodplain Community

Occupies higher elevations along stream and river corridors, with periodic flooding. Typical species found within this community are:

- Elm, Green Ash, Common Hackberry
- Eastern Redbud, Eastern Wahoo, American Bladdernut

River Hills Community

Follows water courses and is susceptible to spring flooding, which can delay growth ground cover plants due to prolonged submersion. Typical species found within this community are:

- Silver Maple, Basswood, Cottonwood
- Silky Dogwood, Sandbar Willow

4.5 Hazardous and Contaminated Sites

A review of the State of Missouri, Department of Natural Resources, 2002 Annual Register of Hazardous Sites indicates that there were no known or abandoned hazardous sites in the Urban Growth Area.

4.6 Aquifer Protection District

In order to protect an underground aquifer, the city adopted specific land use regulations designed to protect public water supplies by regulating land use and the storage of hazardous materials.

SECTION 5:

Existing Land Use

5.1 Introduction

Existing land uses within the City of Kearney and Urban Growth Area were inventoried to assess the existing land use mix. Table 5.1 presents a complete breakdown of the land use pattern, while the Map 5.1 shows the existing land use configuration.

5.2 Historical Context

The historical development (and subsequent land use pattern) of Kearney is originally linked to the expansion of the railroad in the 1860's. The original town plat is consistent with a T-town pattern where the main commercial street extends perpendicular from the railroad tracks. Agricultural related land uses (grain elevators) located adjacent to the railroad, commercial businesses fronted main street, and housing was built in a traditional "gridiron" pattern radiating outward from downtown. Many of these pre-automobile development patterns, land uses, and structures remain and now contribute to defining the character and sense of place that defines Kearney's contemporary downtown.

Highway 33 is probably the second biggest influence on the land use pattern of Kearney. The highway and the subsequent growing reliance on automobiles contributed to commercial land uses locating adjacent to the highway. The existing land use map shows commercial uses extending north and south from the center of downtown along Highway 33. While there remain a few single-family homes fronting Highway 33 in the original town neighborhood, it is clear that a majority of the land adjacent to Highway 33 has been converted to commercial land uses over the past 40-years.

Interstate 35 represents the third significant factor that has determined the development/land use pattern of Kearney. The most obvious influence of I-35 is that it divides Kearney. Until the mid-1990's, Kearney was primarily a city on the east side of I-35. This is going to change in the 21st century, thus requiring consideration to providing public and private services to both sides of the interstate, and to create a circulation network that links the community together. I-35 is the principal reason for Kearney's recent economic and population growth.

I-35 and the Highway 92 interchange is the fourth element influencing the land use pattern. In addition to offering opportunities for "highway commercial" activities, Highway 92 functions as a "primary arterial" linking the physical fabric of Kearney to I-35. It only follows that property adjacent to the arterial is viewed by the marketplace as commercial property because of the high volumes of local traffic moving to I-35. The vast majority of commercial land uses are located adjacent to either Highway 33 or 92.

5.3 Land Use Categories and Definitions

Phillips & Associates performed a windshield survey of the City of Kearney to identify existing land uses. The land use survey used the following categories:

- **Agriculture/Vacant:** Land used for production agriculture (crop, pasture, livestock, etc.). Vacant land includes undeveloped lots or tracts within plat subdivisions or undeveloped land in unplatted tracts or parcels.
- **Residential Estates:** Land used for single-family residences on platted lots between 2-10 acres. Individual on-site septic systems or private lagoons typically serve the lot or parcels.
- **Low Density Residential:** Land primarily used for single-family or duplex dwelling units, accessory buildings to the dwelling units, and common pedestrian areas around the dwelling units.
- **Moderate-High Density Residential:** Land used for garden apartments, townhouses, or tri-plex units. Also includes land used for congregate care housing or clustered units for senior citizens.
- **Commercial:** Land used to support the sale of services or merchandise. In addition, land used to support professional activities such as medical and dental practices, attorney practices, and financial institutions. Examples: storage facilities, shopping centers, automobile dealership, restaurant, bank, medical office building, bed and breakfast, and hotel.
- **Industrial:** Land used to support manufacturing of goods. Examples: bakery products manufacturing, light manufacturing, commercial printing, and cement manufacturing.
- **Transportation:** Transportation uses can include land used for railroad transportation, automobile transportation, right-of-way (private and public), and parking.
- **Public/Institutional:** Land occupied by governmental facilities and utilities, hospitals or other health centers, educational facilities, places of worship, and buildings used by community organizations and social services.
- **Park & Recreational:** Land used primarily for public recreation. Also includes private golf courses or other private recreational activities.

TABLE 5.1
Urban Growth Area Existing Land Use Summary, March 2003

Land Use	City of Kearney		Unincorporated Portion of Urban Growth Area		Total Urban Growth Area	
	Acres	% of Total	Acres	% of Total	Acres	% of Total
Agriculture/Vacant	3,206	52.6%	6,091	61.9%	9,297	58.3%
Rural Estates	26	0.4%	3,088	31.3%	3,114	19.5%
Low Density Residential	1,597	26.2%	134	1.4%	1,731	10.8%
Multi-Family Residential	25	0.41%	1	0	26	0.16%
Commercial	148	2.42%	0	0	148	0.93%
Industrial	73	1.2%	0	0	73	0.46%
Public/Institutional	206	3.4%	4	0	210	1.3%
Park & Recreational	197	3.2%	0	0	197	1.2%
Mixed Use	311	5.1%	0	0	311	2.0%
Transportation	311	5.1%	529	5.4%	840	5.3%
Total	6,100	100%	9,847	100%	15,947	100%

5.4 Summary Overview of Existing Land Use

Residential

- All multi-family housing is located in or near the original town of Kearney and there is no multi-family housing located south of Highway 92.
- Low-density single family, as of 2003, has not developed on the west side of I-35. This situation is not expected to continue with the anticipated development of the Cedarwood, West Brooke, and Hills of Westwood preliminary plats.

Commercial

- **Downtown Kearney** is the historic commercial core district, as defined by age of structures. The downtown retail district is generally limited to the vicinity of Washington Street. The development of the Old Church Plaza in 2002 added 26,450, square feet of retail space in downtown. The downtown retail mix includes restaurants, general retail, and services. Kearney City Hall and the Police Department are also located in downtown.
- **Highway 33** commercial strip is a variety of commercial land uses are located along the corridor, such as general retail, automobile service and repair, professional offices, and construction trades.
- **I-35 Interchange** is transforming from a pure “highway service center” to serving the growing retail needs of Kearney. The area includes a grocery store, banking, restaurants, and multi-tenant centers.
- **Highway 92** commercial strip (eastside of I-35) is providing community retail and services. The types of businesses along this corridor include a grocery store, banking, restaurants, hotel, etc.
- There are several outlying retail clusters. For example, these include the home improvement store on east Highway 92 and a landscape nursery on north Highway 33.
- Located outside the City of Kearney on Highway 92 (west edge of the city) is a pocket of retail activities (southwest corner of Highway 92 and Nation Road).

Industrial

- The Innovation Industrial Park west of I-35 on Highway 92 is the largest existing and planned industrial development in Kearney. The largest tenant as of 2003 is the Platte/Clay Electric Cooperative.
- Other industrial uses are arranged near the BNSF railroad tracks west of Downtown. This general area represents the original industrial base of the community.
- A small grouping industrial uses (Williams Brothers pipeline /propane storage and sales) are located along Highway 33 at the northern edge of town.

Public/Institutional

- The Kearney R-1 School District owns the largest amount of public land in Kearney.
- Religious institutions and places of worship are generally located in the original town area, 19th Street and Highway 33, and along Highway 33 west of I-35.

SECTION 6:

Transportation

6.1 Introduction

The City of Kearney is a community that is growing very quickly. One of the consequences of growth is the strain to which growth can place on the existing roadway network. Evaluating the existing and proposed transportation classifications within the community can aid in understanding current traffic patterns and potential impacts that future roadway improvements will have on the City of Kearney.

6.2 Functional Classification

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of traffic service that they are intended to provide. There are three functional classes: arterial, collector and local roads. All streets and highways are grouped into one of these classes, depending on the character of traffic (i.e., local or long distance) and the degree of land access that they allow.

The Street Functional Classification Map for the City serves two main functions. The first is the administration of the federal-aid transportation program. The classification map designates major streets within the urbanized area boundary that are eligible to receive federal grants. The second function is to guide the development of both streets and abutting land. Standards for the design of the street itself and allowable access from the street will be assigned to each type of street classification.

Currently, there are conflicts between the Master Plan, The City of Kearney Development Guide, Ordinance 212 and the Engineering Standards regarding roadway classification definitions.

The City of Kearney adopted land use plan map contained in 1993 Master Plan classifies existing and proposed arterials and collector streets. The plan recommends spacing of arterial streets on approximately mile spacing with 100-foot right of way widths. 80-foot right of way widths are recommended for collector streets at locations and alignments approved by the City as development occurs.

The City of Kearney Development Guide classifies roadways as Highways, Thoroughfares, Collector Streets and Minor Streets.

Ordinance 212 referenced in the Kearney Development Guide classifies roadways as Class III standard four-lane roadway, Major Collector, Minor Collector and Residential Street.

The current Public Works Standard Specifications and Design Criteria for roadways adopted by reference (Section 5200, Design Criteria for Streets Kansas City Metropolitan Chapter of the American Public Works Association) classify roadways as Arterials, Collectors and Local.

In order to avoid further confusion, adoption of a Functional Street Classification Map in accordance with M.S.A. utilizing The Federal Highway Administration's (FHWA) standard Functional Classification designations is the first step in providing consistency between the Comprehensive Plan, Engineering Standards and the Development Guide.

The significant population growth that Kearney has experienced over the past decade has put a strain on the existing transportation system. Furthermore, while there is currently planned roadway projects to handle the short-term growth within the community there is concern among City officials that physical constraints to the existing roadway system raise the need to look at additional roadway improvements to maintain the quality-of-life for the residents of Kearney.

6.3 Street Classification

The following list is a description of the Street Classification system.

Interstate

A divided limited access facility with no direct land access and no at-grade crossing or intersections. Interstates are intended to provide the highest degree of mobility serving potentially large traffic volumes and long trip lengths linking communities together. I-35 is the only interstate in Kearney.

Arterials Streets

Major Arterial Streets: Streets that serve the highest traffic volume corridors and the longest trips. Provides travel between business districts and outlying residential areas and connects communities to major state and interstate highways. No or limited access is allowed from residential streets. Access is usually partially controlled. Spacing of major arterial streets is generally from one mile to five miles.

Minor Arterial Streets: Streets that interconnect and augment the major arterial streets. No or limited access is allowed from residential lots. Accommodate trips of moderate length at a lower level of travel mobility than major arterial streets. Spacing of minor arterial streets is generally from one-half mile to three miles.

Collector Streets

Commercial Collector: Streets that collect traffic to and from commercial or industrial areas and distribute it to the arterial streets.

Residential Collector: Streets that collect traffic to and from residential areas and distribute it to the arterial streets. Limited access is allowed from residential lots. Desirable maximum ADT = 3,000 for residential collector streets.

Local Streets

Residential Local Streets: Streets that only carry traffic having its origin and destination within the immediate neighborhood. Desirable maximum ADT = 1,000 for local streets. (ADT = ten trips per day per typical single-family residence)

Residential Access Streets: Streets that carry traffic between residential lots or residential collector streets. Residential access streets usually carry no through traffic and include short loop streets, cul-de-sacs, and courts. Desirable maximum ADT = 200 for cul-de-sacs and 400 for loop streets. Maximum length of cul-de-sacs = 500 feet and 1,000 feet for loop streets. (ADT = ten trips per day per typical single family residence.)

6.4 Potential Interstate 35 Interchanges

Missouri Department of Transportation (MODOT) completed a Corridor Master Plan in June 2002 for Missouri Routes 92 and 10 Highways. The study projected Kearney's land use growth to occur west of Interstate 35 and predominantly north of Missouri Route 92 Highway. Projected growth west of Interstate 35 raises concerns for the east/west access across the interstate and a perceived need for additional connections to Interstate 35.

Options evaluated for Kearney were to consider a north/south bypass that reflects the desire to obtain additional interchanges on Interstate 35 in the attempt to relieve congestion from Missouri Route 92 Highway. The discussion centered on an interchange located at Route 33 or 19th Street. Both locations do not meet the interchange spacing criteria (two mile spacing). The study indicated that, "while some corridors could be developed to meet the spacing, operational and physical characteristics suggest that the issues are internal circulation and crossing the barrier".

Improvements to Missouri Route 92 Highway were completed in the fall of 2002. These improvements included the addition of two (2) through lanes in each direction, left turn bays and shared center left turn lane east of the interchange. However, there is only one through lane between the interchange terminals. These improvements will relieve some of the congestion that occurs along the corridor. As Kearney grows it is predicted that increased traffic will put a strain on the existing roadway network.

The City of Kearney hired HNTB Architects, Engineers & Planners in 2002 to conduct Interchange Feasibility Study and Break-In-Access Request. The study was completed in July 2002. Five alternatives for potential interchange locations were analyzed:

1. 172nd Street
2. Missouri Route 33 Highway
3. 19th Street
4. 136th Street
5. Massey Road

After evaluation, the study recommends 136th Street location as the best alternative for an interchange location. The location is approximately two-miles from the existing Missouri Route 92 Highway Interchange and two-miles from the

future Interstate 435 extension to Interstate 35. This spacing meets the interchange spacing criteria (minimum of two miles). This alternative would serve the existing and future traffic and relieve traffic along the Missouri Route 92 Highway Corridor.

Supporting roadway network will need to be in place to serve the motorists for the new interchange. A small portion of the network would need to be in place for the interchange. Improvements include; Nations Road to Route 92, 136th Street to Nations Road and Route 33. For the long-term, supporting roadway network improvements include; Petty to 136th Street, Platte-County Way to 19th Street, and 19th Street over-pass. According to the study, “these supporting roadway network improvements would provide local connectivity, allowing the interchanges to facilitate the regional trips for the interstate system intended”.

An interchange located at 172nd Street remains as a long-term option if growth starts to occur within the vicinity. The 136th Street is a primary option while the 172nd Street would be a secondary option.

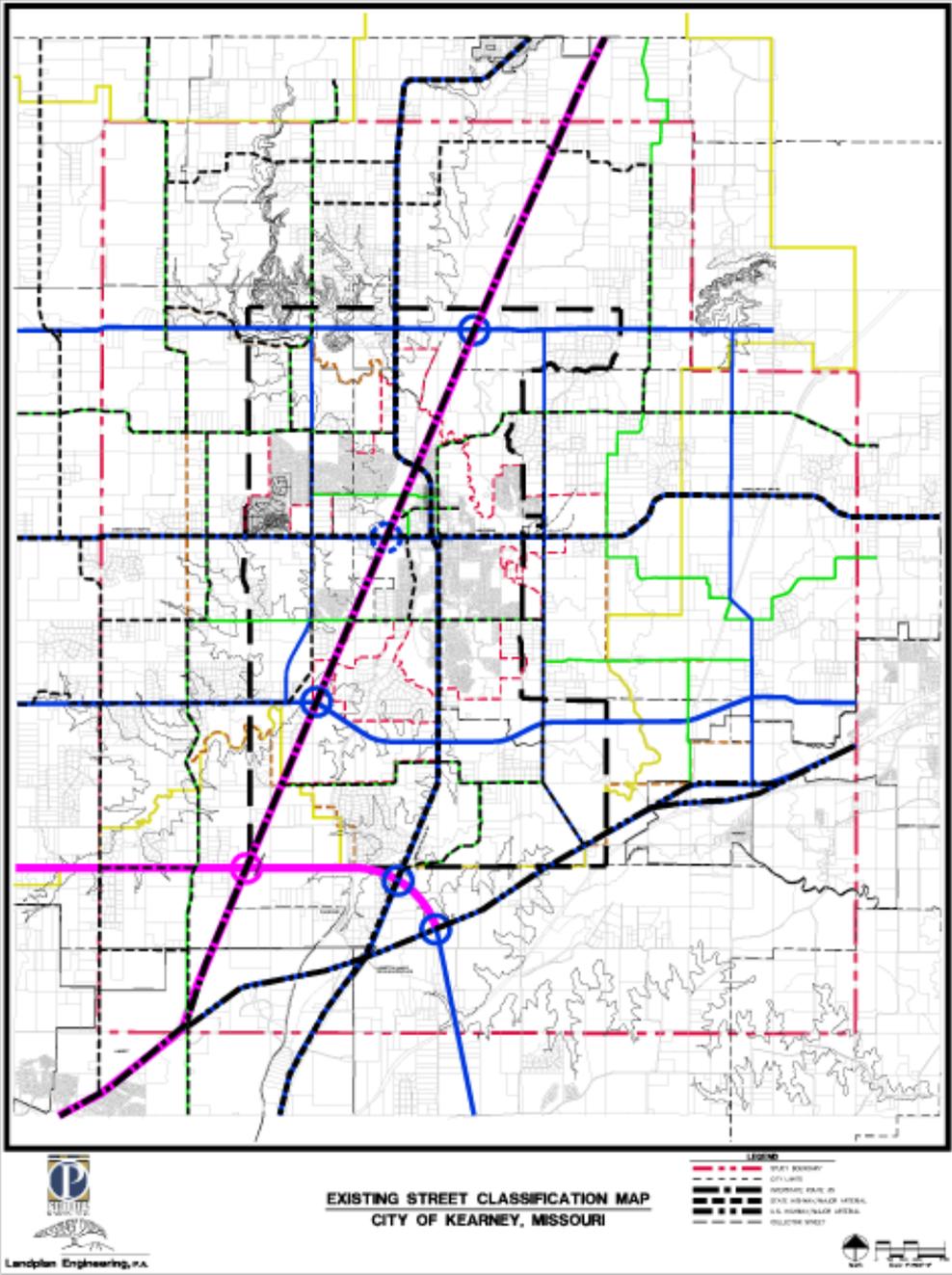
See Existing and Future Transportation Map

6.5 Planning Standards for New Roadways

	Major Arterial	Minor Arterial	Industrial/ Commercial Collector	Residential Collector	Residential Local	Residential Access
Number of Through Traffic Lanes	4-6	3-4	2-4	3	2	2
Minimum Width of Traffic Lanes (Excluding curb & gutter).	12 ft.	12 ft.	12 ft.	11 ft.	12 ft.	10.5 - 12 ft.
No. of Parking Lanes	0-2	0-2	0	0-2	0-2	0-1
Width of Parking Lanes	8 ft.	8 ft.	0	8 ft.	8 ft.	8 ft.
Width of Median	16 ft.	0 - 16 ft.	0	0	0	0
Min. R/W Width	100 - 150 ft.	80 ft.	60 - 80 ft.	60 ft.	50 ft. (2) 45 ft. (1)	40 ft.
Min. Design Speed mph	50	40	35	30	25	20
Minimum Stopping Sight Distance	400 - 475 ft.	275 - 325 ft.	225 - 250 ft.	200 ft.	150 ft.	125 ft.
Min. K Crest Vertical. Curve	110 - 160	60 - 80	40 - 50	30	20	10
Min. K Sag Vertical. Curve	90 - 110 (55 w/lighting)	60 - 70 (35 w/lighting)	50 (27 w/ lighting)	40 (20 w/ lighting)	30 (14 w/ lighting)	20 (9 w/ lighting)
Min. Radii Horizontal Curves	1,091 ft. (2% Super- elevation)	700 ft.	500 ft.	300 ft.	185 ft.	100 ft.
Min. Horizontal Sight Distance	(Per AASHTO Requirements)					
Sidewalks	2	2	2 Comm. 1 Industrial	2	1 - 2	0 - 1
Maximum Grade	6%	7%	6%	8%	10%	12%
Minimum Grade	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Curb Return Radius	35 - 50 ft.	35 ft.	30 ft. Comm. 50 ft. Indust.	25 ft. 35 ft. Desirable	20 ft. 25 ft. Desirable	20 ft. 25 ft. Desirable
Min. Distance from Intersection of R/W to Driveway Curb-cut	250 ft.	200 ft.	150 ft.	100 ft.	25 ft.	25 ft.
Intersection Sight Distance	(See Article 5203.9)					
Maximum Grade at Intersection w/stop	--	--	--	3% (within 75 ft.)	5% (within 50 ft.)	5% (within 25 ft.)
Minimum Spacing of Similar Roadways	See Section 5202)			¼ mile	200 ft.	175 ft.

NOTES:

1. At end of cul-de-sac, minimum design speed = 10 mph, with corresponding minimum horizontal radius = 25 ft., minimum stopping sight distance = 75 ft.; minimum K Crest = 3, and minimum K Sag = 5 (2 w/lighting).
2. All street design is subject to local governing agency approval.
3. K values for crest and sag vertical curves may be determined in accordance with AASHTO – A Policy on Geometric Design of Highways and Streets. Figure III-41 and III-43. The upper range K value shall be used unless otherwise approved by the local governing agency.
4. Consideration should be given to providing a 15 ft. minimum wide utility easement along each side of the right-of-way for residential access streets and 10 ft. wide utility easements for all other streets.
5. Absolute maximum grade = 10% for residential collectors, 13% for residential local streets, and 15% for residential access streets.
6. Absolute minimum grade = 0.8% and should only be used for relatively short distances.
7. The 10.5 ft. lane width for residential access streets shall only be used in a planned development where a minimum of four off-street parking spaces are provided for each dwelling unit.
8. 30 mph design speed with corresponding horizontal and vertical curve design criteria may be used for industrial commercial collector streets under special conditions when approved by the City Engineer.
9. The minimum radii shown is based on the AASHTO design for low-speed urban streets with no superelevation except for major arterials. The minimum radii for major arterials is based on 2% superelevation.



SECTION 7

Infrastructure

7.1 Introduction

This section includes an evaluation of existing sanitary sewer collection and water line distribution systems for the community of Kearney. As growth continues within the City of Kearney, it is important to evaluate current and future improvements to existing utility infrastructure because this will determine if the City has the capacity in place for currently planned and anticipated future growth.

7.2 Existing and Proposed Sanitary Sewers

Currently the existing sanitary sewer collection system covers approximately 2,500 acres of watershed area. Existing pipe materials are clay tile, ductile iron and PVC. As of 2003 it has been determined that there is no immediate need for sewer rehabilitation, but the immediate need is to expand the current services and increase the capacity.

The limits of the current sanitary sewer collection system are:

- North end of the City: Existing sanitary sewer terminates just east of Interstate 35 and Hall Road.
- South end of the City: Existing sanitary sewer terminates approximately 2800 feet east of Route 33 at the existing wastewater treatment plant.
- East end of the City: Existing sanitary sewer terminates approximately 1000 feet east of the intersection of Route 92 and Jesse James Farm Road. Two lift stations are located approximately 1800 feet west of the intersection of Route 92 and Jesse James Farm Road and just north of the Brook Haven residential subdivision.
- West end of the City: Existing sanitary sewer terminates at the intersection of Nation Road and West Major Street.

Extensions of the existing sanitary sewer collection system are needed to support currently planned development as well as anticipated future growth. Some planning has been conducted by the City of Kearney to determine sewer system expansion is warranted.

The limits of the proposed sanitary sewer collection system are:

- North, northwest, and east side of the City: The proposed sanitary interceptors extend north from the existing lift station located approximately 1800 feet west of the intersection of Route 92 and Jesse James Farm Road to Hall Road and northwesterly to NE 172nd Street

and the new water tower. These proposed interceptors are known as the Gilmore Branch and Clear Creek Interceptors.

- South, southwest and west of the City: The proposed sanitary interceptors extend south along the BNSF railroad right-of-way to N.E. 128th and N.E. 130th Streets and northwesterly to the N.E. 162nd Street and the new water tower. These proposed Interceptors are known as the Rock Creek and Fishing River Interceptors.

The new sewer systems are designed for ultimate development using criteria of ten (10) persons per acre. Ten percent of each watershed area assumes the land cannot be developed because of; parks, floodplains, railroad right-of-way, and road right-of-way. The proposed interceptor lines will range in size from 12 to 30 inches in diameter.

The following figures in Table 7.1 indicate the watershed coverage areas for the proposed interceptor systems

**TABLE 7.1
Watershed Coverage Areas for Proposed Interceptor Systems**

Watershed	Acres
Gilmore Branch/Clear Creek (includes existing coverage)	6,541
West Creek/Fishing River (includes existing coverage)	9,291
Ten percent classified as undevelopable	1,583
Net coverage	14,249

The Urban Growth Area consists of approximately 18,644 acres. The proposed sanitary sewer collection system would cover approximately 80 percent of the Urban Growth Area. The existing coverage area is approximately 2,500 acres and the proposed improvement coverage is five times larger than the existing coverage area.

With the increase in coverage, there is a need to evaluate possible expansion of the existing wastewater treatment plant or consideration of a new facility at a location further east.

7.3 Existing and Proposed Treatment Systems

The existing wastewater treatment plant, located on the south side of the city, currently houses three (3) SBR cells as part of the current collection system. However, with the amount of anticipated growth and increased coverage provided by the new collection systems, the capacity of the existing plant may not be sufficient. The City is currently looking into two options to resolve this problem.

The first option is to build a new wastewater treatment plant to the east next to the Clay County Airport. The new plant would sit on approximately 40 acres and would be a joint effort between the City of Kearney and Clay County. There is a possibility that state funds could be available to help fund the plant construction. The goal for siting the treatment plant in the proximity of the airport is that it will provide sewer service within the outlying area around the

airport and increase opportunities for economic development around the airport.

A second option is a joint arrangement between the City and Clay County to expand the existing wastewater treatment plant, by adding two new SBR treatment cells or locate an entirely new wastewater treatment plant. The size of the existing property may limit the amount of expansion that can occur. A third option may be land acquisition to allow for a full expansion.

In conclusion, as construction of these interceptors is completed and expansion of the existing treatment plant or construction of a new wastewater treatment facility is undertaken, the City of Kearney will have efficient sewer capacity for the next 20 years of growth.

7.4 Existing and Proposed Water Supply

The limits to the existing water supply for the City of Kearney are:

- North end of the City: Existing water lines terminates at Hall Road and Interstate 35.
- South end of the City: Existing water lines terminate just south of N.E. 140th Street
- East end of the City: Existing water lines terminate approximately 1,000 feet west of the intersection of Jesse James Farm Road and Route 92.
- West end of the City: Existing water lines terminate at the intersection of N.E. approximately 2,500 feet west of the intersection of N.E. 162nd Street and Nation Road. The location of the recently construction of the new water tower and water supply line.

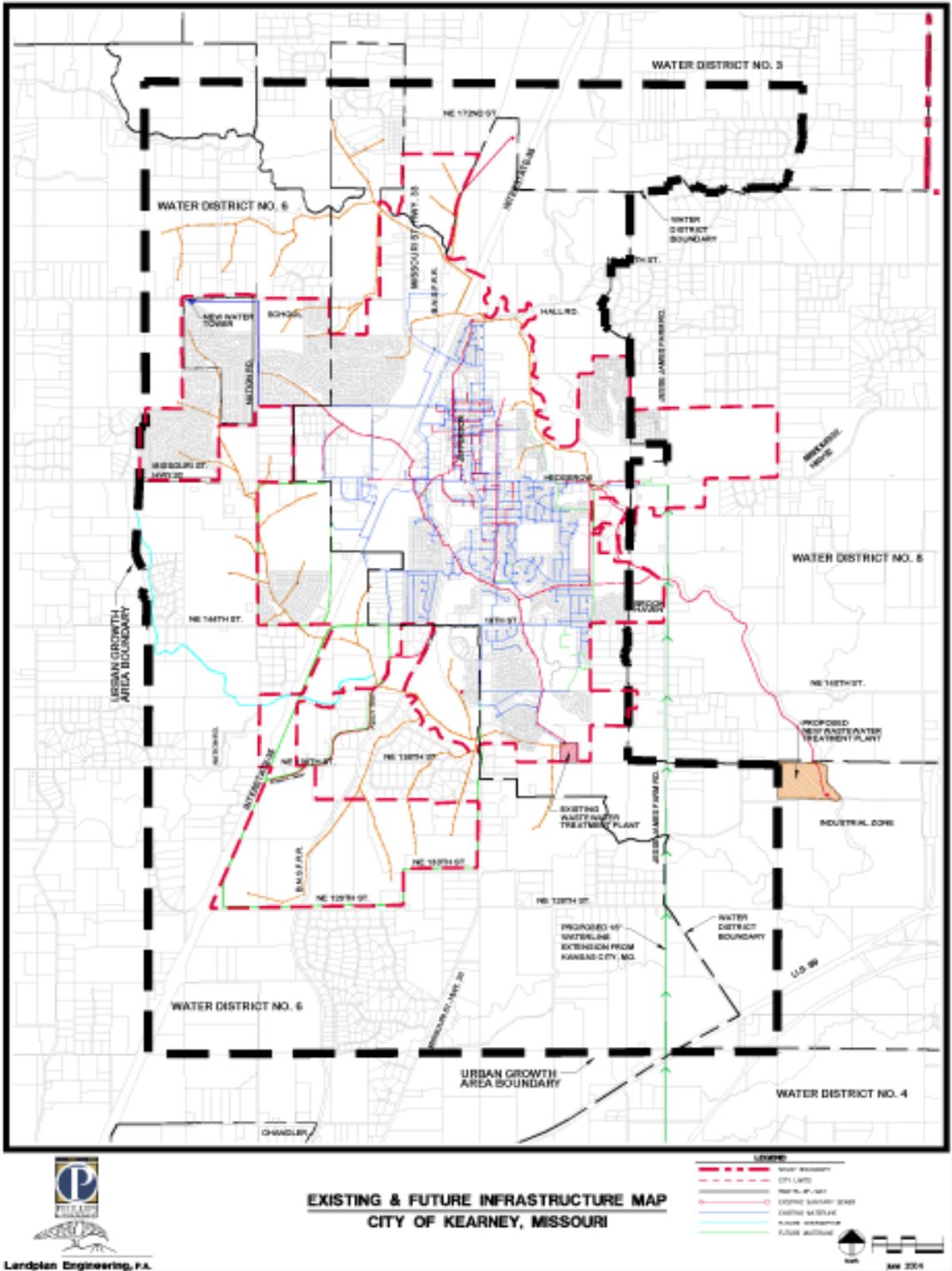
The following are proposed future improvements to the existing water supply system for Kearney:

- Water line extension approximately 2,600 feet west of Jesse James Farm road from 19th Street to Route 92.
- Water line extension from Route 92 to East Washington Street.
- Water line improvement from the intersection of Sam Barr Drive and Missouri State Highway 92 to N.E. 144th Street, Interstate 35, and connect to existing line located approximately 1,500 feet south of Route 92.
- Water line improvement from existing service located south of N.E. 140th Street extend south along Route 33 to N.E. 130th Street, west to 128th Street, west to Interstate 35, north along the interstate right-of-way to an existing water main on 19th Street.

In 2003, the City of Kearney negotiated with the City of Kansas City Missouri to extend an 18-inch waterline to the north along Jesse James Farm Road to Route 92 to provide a guaranteed maximum of 2.9 MGD. Extension of the existing 12-

inch waterline approximately 1,000 feet west of the same intersection will be required to connect to the existing water supply.

These improvements to the existing water supply network and providing new supply connections from the City of Kansas City, Missouri will provide the necessary water supply for the City of Kearney as growth occurs over the next 40 years.



SECTION 8:

Community Services & Facilities

8.1 Introduction

Several important community services and facilities are examined in this section to understand how they influence future land use patterns and community needs. The elements reviewed in this section include; public schools, public parks and recreation, and fire protection services

The Kearney R-1 School District is studied to comprehend their future student growth and planned facilities or buildings needed to accommodate their growth. The public school system is a critical component contributing to the growth of Kearney. Equally important, schools contribute to the social and physical fabric of a neighborhood. They create neighborhood identity, contribute to livability, and attract new families. School officials prepared a strategic plan that has been instrumental in guiding their decision-making regarding new school construction and acquisition of land for expansion purposes.

The existing parks and recreation facilities have been reviewed to understand how the community is being served. The current inventory of parkland provides an important baseline for planning future park and recreation needs to accommodate the future residents of Kearney. The National Recreation and Park (NRPA) classification system for local parks and recreation open space is included in this section. These guidelines are intended to serve as a performance standard allowing the city to evaluate if they are meeting future park needs. Based on population projections from Section Two, future parkland needs are included to assist in the preparation of the future land use plan.

The final key element in this section is an overview of fire protection and EMS services. Since the City of Kearney is served by special district, it is reasonable to examine the long range plans of the district. A summary of the district is presented, along with understanding how protection services are planned for future city growth.

8.2 Kearney R-1 School District

The City of Kearney is located within the Kearney R-1 School District, which serves the communities of Kearney and Holt and surrounding unincorporated area. The district covers 100 square miles. Table 8.1 presents the district enrollment from 1997-2003. The district is experiencing significant growth in their student population. In the five year period 1998-2003, the district student population increased by 466; this translates into an average annual increase of 93 students.

TABLE 8.1
Kearney R-1 School District Enrollment, 1997-2003

Year	Fall Enrollment	Number Change	Percent Change
1997-98	2,842		
1998-99	2,892	50	1.76%
1990-00	2,972	80	2.77%
2000-01	3,091	119	4.00%
2001-02	3,227	136	4.39%
2002-03	3,308	81	2.51%

The total population of the district in 2000 was 14,336. The number of persons residing in Kearney and Holt was 5,341, the number of persons residing in the rural areas were 8,995, and 263 persons lived on farms. Accordingly, 65% of the total population resided in the unincorporated areas of the school district, while 45% lived in the two cities.

Census data indicates that between 1990 and 2000 the total number of persons living within the school district increased by 5,595, or a 64 percent increase. This can be compared to a 20 percent population increase in Clay County's or a 205 percent increase in Kearney from 1990 to 2000.

Table 8.2 shows the growth in school enrollment between 1990 and 2000. During the ten-year period, the student population grew by 1,356 students. On an annual average basis, 135 new students enrolled in the Kearney school district.

TABLE 8.2
Kearney R-1 School District Total Enrollment, 1990 & 2000
Comparison

	1990	2000	Number Change	Percent Change
Enrolled in grades K-12	1,909	3,265	1,356	71%
Enrolled in private schools K-12	51	232	181	354%

School Enrollments

Table 8.3 contains the growth by grade in the entire district for the years 1999 through 2003. This recent trend data illustrates how each grade has experienced changes in student population.

TABLE 8.3
Kearney School District Total Enrollment by Grade, 1999-2003

Grade	1999	2000	2001	2002	2003
K	205	222	237	233	235
1	228	216	238	226	249
2	215	233	219	248	241
3	240	227	258	232	283
4	231	255	249	273	226
5	210	236	255	254	285
6	228	217	246	262	285
7	251	234	221	255	292
8	230	263	239	225	264
9	234	235	265	244	237
10	218	233	234	262	242
11	211	207	225	226	250
12	191	194	205	213	219
Total	2,892	2,972	3,091	3,153	3,308

School Facilities

The Kearney School District consists of five elementary schools, one junior high school, and one high school. Table 8.4 present a summary of the district educational buildings showing the year built, grade span served, and building capacity.

TABLE 8.4
Inventory of Kearney R-1 School District Facilities, 2003

School	Year Built	Grade Span	2002-03 Fall Enrollment	Building Capacity
Kearney High School	1988	9-12	947	1,000
Kearney Junior High School	1920	7-8	557	695
Holt Elementary	1931	K-5	247	325
Kearney Elementary	1959	K-2	492	520
Kearney Intermediate	1975	2-3	353	350
Southview Elementary	1995	4-5	427	460
Summit Ridge (Phase I & II)	2000/02	6th	285	900

Kearney High School located at 715 E. 19th Street, was the first building on the south campus. The school was constructed in 1988 and as of 2003 houses grades nine, ten, eleven, and twelve. There is 113,111 square feet in this facility. The estimated maximum student capacity is 1,000.

Kearney Junior High School is located at 305 South Grove Street and serves grades seven and eight. This building was the former high school and contains 62,025 square feet. The original building was constructed in 1920. Four additions have been added to the original structure. The maximum estimated capacity for students is 695.

Kearny Elementary is located at 902 S. Jefferson Street. In 2003, the school houses kindergarten, first and part of second grade students. The building was constructed in 1959 and has had one expansion. There is 26,452 square feet in the facility with upper and lower level classrooms. The maximum estimated capacity for students is 520.

Kearney Intermediate is located at 1915 South Jefferson and the corner of 19th Street. In 2003, the school houses remaining sections of second grade and third grade. The building was built in 1975. There is 34,620 square feet in the facility. The building has an estimated maximum capacity of 350 students.

Southview Elementary is located at 7 South Campus Drive and part of the south campus. The building houses grades four and five in 2003. The building was constructed in 1995 and contains 43,527 square feet. The maximum capacity for students is 460.

Summit Ridge is the newest facility on the south campus. The building was constructed in two phases: Phase I was completed in 2000-2001 and contains 64,046 square feet and phase II was finished in 2001-2002 creating an additional 83,933 square feet. The facility is used for sixth grade enrollment in 2003. The total estimated maximum capacity is 900 students.

Enrollments Forecasts

According to the school districts strategic plan, school enrollment is projected to grow at a five percent annual growth rate. Actually, the annual student enrollment appears to be increasing at an average annual rate of three rather than five percent. Table 8.5 shows the five percent rate of growth enrollment forecast prepared by the school district in the first four rows and the projection updated by Phillips and Associates at the three percent live rate.

TABLE 8.5
Kearney R-1 School District Enrollment Forecast, 2000-2004

	2000-01	3,091
	2001-02	3,314
Based on 5% annual growth	2002-03	3,401
	2003-04	3,555
	2001-02	3,153
Based on 3% annual growth	2002-03	3,308
	2003-04	3,401

Planned School Facilities

The South Campus consists of 100 acres with approximately 13 acres of developable land remaining. The school district does not envision constructing any additional daily attendance buildings at the South Campus. This is primarily because of concerns about traffic congestion and safety of children.

The school district purchased 75 acres of land at the corner 162nd Street and Nations Road. The site is located south of the water tower tract. The site is located within a planned mixed-use development. Residential land uses are planned adjacent to the school site.

A conceptual master plan for the entire West Campus site has been prepared and is shown in Figure 8.1. The plan contemplates the site being developed to support several other schools and athletic fields.

The school district also owns 53 acres of land in Holt, which is planned to accommodate future school construction needs.

8.4 Parks & Recreation

Table 8.6 presents an inventory of existing parkland in Kearney. During the rapid residential growth of the 1990's, the City of Kearney acquired two major parks and programmed them with recreational facilities. In 1999 Kearney purchased a 134 acre Jesse James Festival Grounds "community park." Gorden & Cowger Engineers prepared a master park plan for the Jesse James Festival Grounds.

**TABLE 8.6
Kearney Public Parks and Walking Trails, 2003**

Name of Park	Acreage	Park Facilities	Parking
Jesse James Festival Grounds	134 acres	11 soccer fields, concession area, portable restrooms, trail system in progress, concrete slab for dances and events.	40 stalls and parking permitted in all grass areas.
Mack Porter Park	40 acres	6 baseball/softball fields, 7 picnic tables, concession area with restrooms, toddler, and youth play area, mulched walk area in trees.	160 total in both parking lots
Lions Park	3 acres	Slides, swings, play equipment, stage, shelters, barbeque equipment, and picnic tables.	15-20 stalls and parking around perimeter on streets.
District No. 3 water area		Practice area for soccer, kids fest, etc. This area is not owned by the city, but allowed for recreation purposes.	Parking is located in Mack Porter Park.
Walking trails	22,737 linear feet (±4 miles)		

The preparation of the plan relied on the participation of various community groups to identify local park needs and park layout. In addition, the city mailed 350 questionnaires to allow citizens to identify their recreational priorities. The master plan for the park investigated potential design and cost options to extend sanitary sewer service to the park and researched the issue of providing a second access point to the park from Highway 33. A list of key park elements in the Jesse James Festival Grounds master plan includes:

- Community Center with a full-size gymnasium, Olympic-size swimming pool, and a 200-400 seat theater
- Recreational Pool
- 4 baseball/softball fields
- 11 soccer fields
- 2 outdoor basketball courts
- 2 outdoor tennis courts
- Volleyball courts
- Outdoor multi-cultural event arena with a 2,500 to 3,000 seat amphitheater
- Historic village from the early or mid-1800's
- RV parking for 63 spaces with electrical hookups

The second major park and recreation accomplishment has been the development of a "pedestrian trail system" throughout the community. The trail system links various residential subdivisions, Kearney High School and Southview Elementary School. Larkin Associates prepared a master plan for the Kearney trail system in 1997.

There are two private recreation facilities operated in Kearney. This includes a private swimming pool and 18-hole par 3 golf course.

Park System Classification and Standards

Table 8.7 presents the National Recreation and Park (NRPA) classification park for local recreation open space. These standards are intended to guide the city in creating a citywide system of parks. As with any national standards, local officials need to be flexible when designing a park system. Privately owned park and recreation facilities have not been included in the classification. However, commercial recreation operations can provide important facilities to a community. Their contribution to meeting local recreation and leisure needs should be accounted for when park facilities and park size are being determined.

**TABLE 8.7
National Recreation & Park Association Classification System**

	Use	Service Area	Desirable Size
Recreation Nodes	Similar to a neighborhood park with both active and passive facilities designed for a specific purpose. Facilities are based upon public input, facilities can include playgrounds, scenic areas, and lunchtime seating areas.	Less than ¼-mile radius in a residential neighborhood, accessible by way of interconnecting trails, sidewalks, and low volume residential streets.	Up to 5 acres
Neighborhood Park	Basic unit of the park system in meeting the active and/or passive needs of the neighborhood. Create a sense of place for a wide variety of ages living in the service radius. Neighborhood parks can be for active or passive recreation or a combination of both. Facilities can include ball fields and game courts picnic and sitting areas, play equipment, trails and passive areas with natural features.	¼ to ½-mile service radius uninterrupted by non-residential roads and other physical barriers accessible from throughout its service radius by way of interconnecting trails, sidewalks, or low volume residential streets.	5 to 10 acres minimum
Community Park	Meets the broader recreational needs of several neighborhoods. Provides for both active recreation and preservation of unique landscapes. Allows for group activities neither desirable or feasible in neighborhood parks.	½ to 3 mile service radius, served by arterial and collector roads and accessible from throughout its service area by way of interconnecting trails.	30 to 50 acres
School/Community Park	Combines the resources of two public entities to allow for expanded recreational, educational, and social opportunities in a cost-effective manner. Development should be based upon the criteria of other park classifications. If athletic fields are developed, they should be oriented towards youth than adults.	Based on the distribution of the schools. The location can guide how it fits into the park system classification. Service area depends upon the type of use of the site.	Depends on intended use.
Athletic Complex	Consolidates heavily programmed athletic fields and associated facilities in fewer sites to allow for economy of scale, improved management, greater control over impacts to neighborhood and community parks such as over-use, traffic congestion, parking, and domination of facilities by those outside the neighborhood.	Strategically located community-wide facilities within reasonable driving times; near non-residential uses if possible.	Depends on intended use.
Special Purpose Facility	Parks and recreation facilities that are oriented toward a single purpose use such as historic landscapes, social sites, cultural features, indoor recreational facilities, golf course or any other	Strategically located facilities versus serving well-defined neighborhoods or areas of the community.	Facility requirements determine the size.

Natural Resource Area/Preserve	<p>single purpose facility.</p> <p>Parks and recreation facilities that are oriented toward the preservation of significant natural features, open space, special landscapes, buffering and visual aesthetics.</p>	<p>Areas that, when preserved, can enhance the livability and character of the community by preserving as much of its natural features as possible</p>	<p>Dependent upon quality and extent of the resources and opportunity for preservation</p>
Greenways	<p>Linear trail corridors that tie park system components together to form a continuous park environment allowing for safe uninterrupted pedestrian movement between the parks and around the community and provide people with a desired outdoor recreation opportunity. Greenways emphasize use to a greater extent than natural resource areas.</p>	<p>Most desirable location is in conjunction with trail system planning.</p>	<p>25' minimum in a sub-division; 50' standard; and 200'+ desirable</p>

Source :Park, Recreation, Greenway and Open Space Guidelines, National Recreation and Park Association, 1996

Park Classification Applied to Kearney

Comparing the existing parks in Kearney with the National Recreation Park Association park classification suggests the following findings:

- In terms of total parkland acreage, Kearney meets national standards for providing a “community park”.
- The distribution of “neighborhood parks” in residential neighborhoods is insufficient. This is due to the concentration of parkland in the Jesse James Festival Grounds.
- The existing trail system in Kearney is an extensive network and contributes significantly towards creating community-wide pedestrian trail system.
- Residents of Kearney benefit from the close proximity (5 miles) to the Watkins Mill State Park.

Park & Recreation Opportunities

- The BNSF railroad right-of-way may eventually create an opportunity to extend the walking trail system and contribute to the increase of greenways.
- The floodplain land in Kearney presents an opportunity to work with landowners and developers to use floodplain property for recreation, greenway, wildlife preserve, or open space.
- Consideration should be given to working with school district officials to create a “recreation node” with active recreation equipment for young children at both the South Campus and West Campus.

- The topography and natural streambeds in the planning area provide an opportunity to create “greenways” within the community and incorporate the pedestrian trail system.
- The City of Kearney is located within the Recreational District. The boundary of this regional recreation district corresponds with the school district boundary. As of 2003, the Recreation District has not purchased any recreational land. Coordination between the City of Kearney and the Recreation District is important to adequately serve the citizens of Kearney and avoid duplication of recreational programs and facilities.
- The City of Kearney needs to coordinate short-term planning with the Kearney Holt Recreation Association to ensure that recreational needs are served. From a long-range viewpoint, the City of Kearney needs to evaluate if recreational programming should become a function of the Parks & Recreation Department.

Projecting Future Parkland Needs

Park, greenway and recreation planning for Kearney is beyond the scope of this plan. Specific plans will be required as Kearney continues to change over the next 20 – 25 years. It appears that this planning is underway with the master plan for the Jesse James Festival Grounds.

The projections in Table 8.8 are based on average standards. Both the type of parks or recreation areas listed in Table 8.8 is typically required for a growing community such as Kearney. Although the Jesse James Festival Grounds will meet the “community – regional” park need of Kearney until 2025, a second community park around the 50 acre size is included in the projections. This would help to tie together the linear trail and the various neighborhood parks that should be provided over the next two decades.

The “high” population series taken from the population and demographics section of this plan were used to calculate the estimated parks and acreage needs. The high projection was selected because of the large number of persons who live near Kearney in the unincorporated portion of Clay County. These families use Kearney’s services, including local parks and recreational facilities.

From 2005 until 2025 the projections suggest that Kearney will need to acquire between 130 – 150 acres for small parks and recreation nodes. At least two major land acquisitions will be required to link the linear trail to the new recreation areas but linear feet for these additions to the trails cannot be calculated until sites are selected for the new parks.

The concept of recreation and leisure has changed dramatically over the past 30 years – and is still changing. A number of reputable studies indicate that the public places a high value on recreation and open space. So, it is reasonable to assume that the expected level of service will change in Kearney as the population increases.

**TABLE 8.8
Estimated Parks and Acreage Needed For Recreation 2005 - 2025**

Year	Type of Facility (ies)	Number Needed	Acres Needed	Pop. Served
2005	Recreation Node	1	3	7,144
	Neighborhood Park	2	14	
2010	Recreation Node	2	4	9,956
	Neighborhood Park	1	8	
2015	Neighborhood Park	3	22	15,100
	Linear Trail Addition			
2020	Community Park	1	40	19,500
	Linear Trail			
	Neighborhood Park	2	15	
2025	Recreation Node	2	8	23,000
	Neighborhood Park	1	15	
Totals		15	129	

Source: National Recreation and Park Association Guidelines; Phillips and Associates, 2003.

8.5 Public Safety

Fire protection and EMS service is provided to the City of Kearney from the Kearney Fire and Rescue Protection District, which was established in August of 1990. A three member Board of Directors currently governs the district. The residents of the district elect the board and serve 6-year terms. The board will increase to five members with the April 2003 election. . The Board of Directors appoints a District Chief and administrative assistant that serve as the Secretary Treasurer to the district. The district provides service to the City of Kearney but also a total of 85 square miles surrounding Kearney with a total vehicle fleet of nine vehicles.

Information supplied for 2003 show there are twelve full time personnel with four being on duty on a 24/48 hour shift configuration. These personnel are dual trained as firefighters and also EMT's or Paramedics. There are six part time personnel that work two shifts per month and about thirty volunteers that can also work two paid shifts per month. The district has mutual aid with all surrounding departments and automatic mutual aid for structure fires within our district.

The district strategic plan calls for the replacement of pumpers on a 15-year cycle, tankers 15-20 years, and ambulances 12-15 years. The 2003 fleet of vehicles is as follows.

- 1990 Emergency One 1,200 GPM pumper
- 2001 Pierce Quantum 1,500 GPM pumper
- 1998 Pierce Quantum 75" Quint with a 1,500 GPM pump
- 1986 Chevrolet 1,800 gallon tanker w/250 GPM pump & foldatank
- 1991 Chevrolet 1,800 gallon tanker w/250 GPM pump & foldatank

- 1988 Ford brush truck w/225 gallon tank & 250 GPM pump
- 1996 Chevrolet brush truck w/225 gallon tank & 250 GPM pump
- Two 2001 Freightliner MedicMaster ALS Type 1 Ambulances

The district station was originally constructed in 1981, with two ambulance bays added in 1994. In 2003, the district station is being totally remodeled and expanded. The station remodel consists of a training/board room, dormitory to accommodate 12 personnel, kitchen/day room area, conference room, three offices, physical fitness room, two bath/shower areas, EMS supply room and bio hazard room. There is also a 2,500 square foot storage area on a second floor and a full basement for future expansion to include a possible back up dispatching and an emergency operating center for the city and district.

The current station is located in the center of the district and response times are monitored on a monthly basis as well as the response areas are broken down into one square mile increments. This allows the district to identify where the next station should be located along with planned future subdivisions. Road access also determines potential locations for future stations. Chief Pratt estimates a second station in the next 5-7 years as the district goes through projected additional full time personnel hiring in 2005 and 2008.

The district uses a tanker/shuttle water operation for structure fires, since there were not any fire hydrants in the rural part of our district. Neighboring jurisdictions also provide automatic mutual aid with pumpers and tankers. With the recent addition of the 18" Kansas City water line coming through our district this will provide us additional fill locations for our tankers, and Water District No. 6 is now installing hydrants in the new subdivisions. The district is hoping to have fire hydrants installed in Water District No.8 to provide fill sites. The current ISO classification for the city improved from a class 7 to a class 6 effective June 1, 1994. The rural area within five road miles of the station improved from a class 9 to a class 7 effective December 1, 1994. The City was reevaluated in October 2002 and should be receiving notification in January 2003 of the results. The rural area should be reevaluated the first quarter of 2003 with the additional hydrants being installed for fill sites.

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SECTION 9:

Future Land Use & Guidance

9.1 Introduction

The future land use plan for the City of Kearney is presented in this section. There are four complementary planning elements identified in this section to guide the future growth and development of Kearney. The four elements consist of plan goal statements, guiding principles, land use policies, and a future land use map. Taken together, these elements are intended to guide decision-making about the future land use pattern, the intensity and scale of development, aesthetic quality, and transportation network of Kearney.

The future land use map is designed to illustrate a generalized land use pattern. In other words, the future land use map is an idealized picture of how the land use pattern of Kearney should unfold in the future. Each land use decision must be evaluated against the map, as well as the plan's goals and policies. Instances may occur when a land use request (change of zoning) for a specific piece of property does not comply with the proposed land use depicted on the map, but when judged against plan goals, guiding principles, and land use policies the request is determined to be acceptable. The desired outcome is to allow community leaders and developers the flexibility to respond to changing market demands and conditions. At the same time, the future vision of Kearney is clearly defined in this section and must not be abandoned for the sake of convenience or expedience that circumvents the future defined in this plan.

Public workshops were conducted on June 24, 2003 and August 5, 2003 to encourage citizen involvement in the identification and discussion of planning goals for Kearney. A range of key planning topics were discussed in "roundtable" settings. In addition to relying on citizen participation to assist in formulating plan goals and objectives, issues identified in the fall of 2002 at a Board of Aldermen strategic planning session have also been incorporated into this report.

9.2 Urban Growth Framework

The purpose of defining a city growth framework is to identify the long-term view about how city officials view expansion and development of Kearney. This type of framework informs landowners located in the unincorporated areas surrounding the community, Clay County officials, and officials from nearby cities where future urban development is to be anticipated. The intent is to promote efficient, as well as cost-effective, urban growth by assessing utility extensions and environmental suitability and constraints.

A challenge facing the future growth of Kearney is to manage the rural sprawl developing in and around the urban fringe. City officials recognize that these rural, large-lot subdivisions create challenges requiring creative solutions to allow for urban growth, yet balancing the interests of homeowners. From the city's perspective, many of these rural subdivisions illustrate the importance of defining a city growth framework and protecting the urban fringe from premature development or inappropriate and inefficient land uses.

The urban growth framework contains two guiding principles to lead the long-term planning and development of Kearney: urban growth area and urban fringe management. The first principle is to delineate an urban growth area boundary. By defining an urban growth boundary, the City of Kearney recognizes that cooperation with Clay County and other local jurisdictions must occur to coordinate and monitor land use and development. The second principle spells out the city's vision and intentions for managing the unincorporated areas of the urban growth area. This is coined as urban fringe management. A goal statement is included with each guiding principle to clarify the intent and purpose. Additionally, a series of policy statements are included to guide the planning and decision-making that will occur as Kearney grows and expands.

Urban Growth Area

Kearney is expected to experience continued residential growth and commercial development during the life of this comprehensive plan. This is due in large part because Kearney is considered a metropolitan "gateway" community because of location on I-35 and convenient commuter access to the metropolitan area.

Urban expansion and growth brings changes in land use patterns placing demands on utilities, schools, services, and roads. Growth also brings changes in the livability of a community. The overwhelming consensus of workshop participants about the future of Kearney is that every effort should be made to maintain and enhance its small town "sense of place." As the population of Kearney grows and the city physically expands, the resident's desire is to enhance the unique and attractive atmosphere of locally owned retail businesses. At the same time, residents recognize there is an emerging need for new community and neighborhood commercial centers to meet needs of new residents. To help balance the demands of growth while maintaining a small town character, the city must provide housing, educational, employment, retail and recreational opportunities for all citizens. The focus is to promote the growth of Kearney in a compact, orderly fashion, based on the ability to extend city services and infrastructure.

An important element of this comprehensive plan is to identify the areas where urban growth should be encouraged, both during and after the life of this plan. In effect, the urban growth area demarcates where the City of Kearney plans to extend municipal utilities, infrastructure, and services and encourage urban growth.

The consultant team working with city officials identified a boundary that defines the urban growth area of Kearney. Factors used to identify the urban growth boundary are noted below:

- An assessment of water and sewer extension service areas
- An assessment of environmental features to delineate constraints or limitations for urban development
- An annexation statement of intent showing the City of Kearney's long-range intentions regarding the future city boundary
- A traffic study showing potential interchanges on I-35
- The R-I Kearney School District boundary
- Evaluation of existing land uses
- Population projections and forecasts for land use demands

The Existing and Future Infrastructure Map shows the urban growth area boundary. The total amount of land in the urban growth area, including land located within the Kearney city limits, is approximately 18,644 acres. Of this total, about 12,000 acres is available for development when land in floodplains and land already developed for rural or urban housing, commercial, or industry, park are excluded.

Urban Growth

GOAL No.1:

Anticipate and provide for community growth that is economically viable and supports efficient use of public and private infrastructure.

URBAN GROWTH POLICIES

- Policy 1. Promote expansion in areas contiguous to existing urban development and insist on connectivity between new and old.*
- Policy 2. Encourage growth through the orderly extension of urban services and municipal water and sanitary sewer facilities.*
- Policy 3. Prohibit scattered housing served by individual on-site waste systems or private lagoons and platted subdivisions in the Urban Growth Area Boundary.*
- Policy 4. Promote a compact urban form and development pattern to reduce the cost of providing infrastructure and a less land-consuming pattern of urban development.*

Urban Fringe Guidance

Land not needed to support growth during the 20 year planning period (2004-2024) is termed as “urban reserve land”. The City of Kearney wants to provide the opportunity for continued urban growth beyond the year 2024 and minimize those factors, such as sprawl, that prevent orderly urban growth. The City of Kearney is committed to promoting continued growth and taking steps to enhance new opportunities for urban development. The city is working with the Missouri Department of Transportation to evaluate the feasibility of a new interchange on I-35 within the urban growth area. If a new interchange is approved by state and federal officials, undoubtedly new opportunities for urban development and growth will emerge.

Urban Fringe

GOAL No.2:

Promote coordination and participation with federal, state, and county agencies to ensure a regional planning framework for the continued growth of Kearney.

Kearney's growth framework spells out a long-term vision and signals its intention to encourage continued urban growth, but the accomplishment of this vision rests on managing the development of the unincorporated area within the urban growth area or "urban fringe". Management of the urban fringe is critical because of the need to preserve development options. This requires coordinating land use decisions with Clay County to discourage non-urban development within the urban fringe.

The intent is to cooperate with Clay County to restrict development of rural, non-farm residential tracts from being scattered along roadways within the urban fringe and direct platted large-lot subdivisions to be connected to urban services and infrastructure.

URBAN FRINGE POLICIES

- Policy 1. Establish an Urban Growth Area Boundary outside the current city limits. Land use within the boundary will be regulated and/or guided by the city in cooperation with other local jurisdictions and Clay County.*
- Policy 2. Implement the orderly annexation of land within the Urban Growth Area Boundary to ensure the extension of future urban infrastructure or that adequate land is available for future urban development.*
- Policy 3. Coordinate land use planning, zoning, and subdivision decisions in the urban fringe with Clay County.*
- Policy 4. Evaluate the feasibility of implementing extra-territorial zoning and subdivision authority within the Urban Growth Area Boundary.*
- Policy 5. Review and evaluate the comprehensive plan to ensure compatibility with regional and metropolitan plans adopted by Clay County and the Mid-America Regional Council.*
- Policy 6. Work with the City of Liberty and City of Excelsior Springs to reach an annexation boundary agreement identifying future city boundaries.*
- Policy 7. Low-density residential development (i.e., 3-5 acre tracts) shall not be allowed to locate in the urban growth area.*
- Policy 8. Large-lot rural residential subdivisions relying on individual septic tanks or lagoons shall not be allowed to locate in the urban growth area.*
- Policy 9. Residential subdivisions seeking approval in the urban fringe area shall connect to municipal water and sewer service, seek annexation, and be required to meet municipal subdivision regulations.*

Open Space & Ecological Assets

Some of the special amenities of the Kearney Urban Growth Area are the stream corridors, rolling hills, and wooded riparian lands. These natural amenities are community assets and enhance property values of nearby developable lands. A guiding principle of this plan is to preserve significant natural areas as Kearney

grows and develops. The objective is to foster support within the private development sector that protecting and preserving these natural amenities is sound economics and contributes to making Kearney a more marketable place. The objective is to capitalize on existing scenic, ecological, and natural assets and provide Kearney with a competitive edge over cities that fail to design with nature.

Open Space

GOAL No.1:

Promote community growth and development that efficiently uses natural resources and when feasible preserves and protects sensitive environments.

OPEN SPACE POLICIES

- Policy 1. Promote the creation of open space corridors by encouraging the protection and preservation of riparian areas adjacent to Fishing Creek and Clear Creek, and their tributaries. These conservation corridors should be located on both sides of each creek and generally be 100-feet wide at a minimum.*
- Policy 2. Promote the development of a “greenway” by incorporating the BNSF railroad right-of-way into the linear trail system and open space corridors.*
- Policy 3. Prepare a citywide stormwater management plan based on watersheds, and when feasible create lakes and ponds for the dual purpose of stormwater management and recreation.*
- Policy 4. Preserve and protect natural wooded areas, bodies of water, and areas of critical habitat.*
- Policy 5. Preserve and protect floodplains as natural areas by discouraging urban development and encouraging as recreational open space and facilities.*
- Policy 6. Create a network of greenways, open space corridors, and pathways to interconnect neighborhoods to one another.*
- Policy 7. Design new residential subdivisions and multi-family developments in a manner that ensures pedestrian and vehicular connections to existing and planned parks, greenways, and the linear trail system.*
- Policy 8. Coordinate public planning and private land development between city, county, landowners and developers to preserve areas of critical environmental features, including steep slopes, floodplains, riparian lands, and wetlands.*
- Policy 9. Devise incentives that encourage landowners and developers to preserve critical environmental features.*
- Policy 10. Continue to protect the aquifer zone through proper zoning.*

9.3 Future Land Use Map

The arrangement and location of different land uses in the urban growth area illustrates how the urban growth area could reach ultimate development. The future land use map is the "foundation" of the comprehensive plan: it forms the basis for policies on development and redevelopment. Therefore, it must represent the "best practices" available to decision makers and complement planning goals, strategies, and statements contained in the comprehensive plan. The future land use map must adapt to community needs over time and undergo frequent changes through yearly review. The future land use map establishes broad guidelines for land use patterns and should be applied in combination with the goals, land use principles, and policies contained in the comprehensive plan.

Land Use Categories

Presented below in Table 9.1 is a summary of the land use categories depicted on the future land use map. The table allows for a quick reference of the typical land uses and the range of density or acreage estimated for each category. To assist in the interpretation of the future land use map, a series of more detailed policies describing the criteria for location, density, layout, design of each land use category are presented on the following pages of this section.

Land Use Category	Range of Density/Acreage	Typical Land Uses
Rural Estate	Minimum acreage is 3 acres for a lot on an individual septic tank intended for very low-density, housing. In some instances, lots or tracts may reach the 10-20 acre range.	Development can include a sell-off for a single lot or a large-lot platted residential subdivision. Usually located in the urban fringe and not served by municipal utilities or urban standard roads.
Single-Family Residential	Density begins with dwelling units on less than one acre up to a density of six homes per net acre.	A variety of low-density housing can develop in this category. <ul style="list-style-type: none"> ■ Conventional subdivision layouts accommodating detached single-family homes. ■ Planned developments in the neo-traditional approach offering a variety of housing types combined with commercial and community uses in a compact, walkable plan. ■ Clustering of homes to permit the preservation of land in a natural state and minimize visual and environmental impact ■ Single-family attached homes often called a duplex or triplex. To achieve a single-family detached image, careful architectural design and proper massing is required.
Multi-Family Residential	A density range of between 7- 19 dwelling units per net acre.	A variety of moderate to high density housing can develop in this category. <ul style="list-style-type: none"> ■ Small lot single family, duplexes, or four-plexes. ■ Townhouses, garden apartments,

		<ul style="list-style-type: none"> ■ Mixed housing types and densities.
Community Commercial	Typically anchored by a larger nation chain and contains smaller-scale retail. In order to maintain the desired scale and character sought with the planning principles of this plan, no tenant shall exceed 45,000 square feet of gross floor area in a community center.	Anchors usually consist of general merchandise, grocery, apparel, appliances and electronics, hardware, lumber, and other household goods. Smaller complementary uses, such as restaurants, books, computers, florist, gifts, professional offices, health and services.
Neighborhood Commercial	Typically requires a site of approximately 5-8 acres, but may vary, ranging from as small as 1-3 acres to as large as 10-15 acres. The radius of the service area can range from ¼ to one mile.	Primary uses consist of retail stores that provide personal services, such as dry cleaning, video rental, florist, banks, insurance, and personal care. Grocery stores, drug stores, convenience stores (with gasoline sales), restaurants, and offices can also locate in neighborhood commercial.
Mixed-Use	Flexible depending on size of tract and site design characteristics.	Through the application of a Planned Unit Development a mixture of land uses can be arranged to accommodate various housing densities, commercial activities, office and institutional uses.
Office	Suburban office parks generally range between 5-25 acres.	<p>A variety of office development can occur in this category.</p> <ul style="list-style-type: none"> ■ Campus-style development consisting of low-rise structures. May include smaller office complexes consisting of single-use tenants. ■ Urban village development containing taller office buildings in a campus-style development. Typically includes corporate headquarters, or research and development.
Industrial	The goal is to encourage industrial parks that are planned, developed, and operated as an integrated facility for a number of individual uses. Acreage varies depending on market intent and design criteria.	A variety of light and heavy manufacturing, warehousing and distribution operations can occur in this category.
Institutional	Not Applicable	Non-profit, religious, or public use, such as a church, library, public or private school, hospital, or government owned or operated building, structure, or land used for public purpose.
Parkland	Depending upon park criteria, parks typically need 10 acres, but may vary, ranging from as small as 1-3 acres to as large as 30-50 acres.	<ul style="list-style-type: none"> ■ Recreation Node ■ Neighborhood Park ■ Community Park <p>See Section 8.4 for complete description</p>
Open Space	Generally includes property located in the floodplain or has been preserved through a purchase, donation, or conservation easement.	The purpose is to provide space for neighborhood or scenic parks, trails, or habitat preserves.

Future Land Use Map Area Distribution

The table below shows the amount of acreage depicted in each of the land use categories as shown on the future land use map for the entire urban growth area.

Land Use Category	Total Area Shown on the Future Land Use Map	
	Acres	Percent
Rural Estate	2,895	15.5%
Single-Family Residential	10,160	54.5%
Multi-Family Residential	1,424	7.6%
Commercial	1,011	5.4%
Mixed Use	311	1.7%
Office	150	0.8%
Industrial	728	3.9%
Institutional	293	1.6%
Parkland	837	4.5%
Transportation	837	4.5%

9.4 Residential & Neighborhood Development

Neighborhoods constitute the places where we live, learn and play, and increasingly work. Kearney's growth is driven by housing availability, services, and the quality of life the community has to offer new residents. Other factors certainly played a role in the growth of Kearney, such as convenient mobility to places of work and quality public education, to name a few. Yet the message is clear, people are choosing Kearney because of livability, which means a comfortable environment with essential support for everyday life. The desire to protect the value of this resource makes the idea of protecting existing, and creating new neighborhoods, a guiding principle of the plan.

The creation of new neighborhoods requires identifying which features or characteristics make a "quality place" to live. This helps developers grasp what Kearney expects when designing subdivisions and shopping centers. What follows below is a series of objectives that are intended to guide the development and creation of neighborhoods in Kearney.

As defined in this plan, an area of approximately 160 acres delineates the boundary of a neighborhood. Kearney should use the neighborhood unit concept to ensure that new housing developments are consistent with this plan. The neighborhood unit is defined by size and function and is expressed in terms of walking or biking distance to enable people to connect with their neighborhood and community. What follows below is a list of key characteristics that contribute to creating a traditional neighborhood. The following design characteristics are specific objectives of this plan and shall apply when plans or plats are prepared by private developers and reviewed by public officials.

Traditional Neighborhood Design Characteristics

- Incorporate “life-cycle” housing options within a neighborhood to offer different kinds of household’s different types of housing and different locations, including townhouses, apartments, four-plex, or other types of housing products. It is important during site design review and approval to ensure that the location, size of the project (i.e., total acreage), density, building size and mass, open-space proportions, and architectural design of apartment or townhouse compliment surrounding detached single-family homes.
- Incorporate schools into the neighborhood by providing pedestrian connections, integrating school grounds into the city’s system of linear trails, parks, and open space.
- Allow home offices to accommodate workers that can telecommute.
- Foster development patterns that incorporate a compact mix of uses, including employment uses to allow short travel distances to work.
- Incorporate public parks or civic plazas to serve as a focus of neighborhood life. They should be located next to public streets, residential areas, and retail uses.
- Incorporate shade trees along all streets. Tree species should be selected to create a unified image for the street, provide an effective canopy, and avoid sidewalk damage.
- Include sidewalks on all streets and incorporate the city’s linear trail when feasible.
- Design the street network to create a safe, comfortable pedestrian and bicycle environment. Incorporate narrower streets to slow traffic and create a human-scale environment.
- Design the street network to promote connectivity with schools, parks, commercial areas; create multiple connection routes throughout the neighborhood to major arterials.
- Incorporate “pedestrian-oriented retail centers” to provide goods and services to local residents in the neighborhood.
- Encourage new neighborhoods to respect historical patterns, precedents, and boundaries. When feasible, encourage new subdivisions to adhere to the grid street/block pattern.
- Preserve existing natural amenities that might exist within a neighborhood boundary, such as woodlands, water bodies, and stream corridors.

Specific Area Plans

Successfully creating “traditional neighborhood developments” requires coordinated planning and implementation of public improvements such as streets, pedestrian paths, bikeways, parks and plazas. Because of the fragmented land ownership pattern in the urban growth area, multiple landowners may need to jointly prepare a single development plan. An alternative is to work with the Kearney Planning Department and prepare a strategic plan to achieve an integrated neighborhood using the above design characteristics.

As new housing projects and subdivisions are developed in Kearney over the next 20 years, a goal of city leaders is to ensure that a sense of community is maintained and created with each new housing development. The purpose is to create identifiable “neighborhoods” where people connect with each other and a sense of community emerges. The intent is to create various forms of traditional neighborhoods with a mix of uses and a walkable scale, but recognize that livability is defined differently by different people.

Subsequently, this plan seeks to accommodate various housing development approaches by offering choices to a variety of households. Regardless of the housing types or development approaches, a critical objective is to establish a sense of place that respects the small town character and atmosphere of Kearney. This means requiring developers to build streets with a civic realm where people are encouraged to walk by building tree-lined streets with sidewalks. Neighborhoods need defined “edges” to inform residents that they have arrived, and there needs to be sufficient open space or civic space to allow people to gather.

Housing

GOAL No.1:

Create functional neighborhoods when planning and developing new residential areas and regard neighborhoods as the central organizing element for planning residential areas.

HOUSING POLICIES

- Policy 1. Ensure that new housing areas of the community are connected with walking trails or sidewalks.*
- Policy 2. Encourage various types of housing to meet the diverse needs of the community.*
- Policy 3. Promote various architectural styles of housing to provide diversity within a subdivision and the community.*
- Policy 4. Encourage the planting of street trees in new residential areas of the community.*
- Policy 5. Promote development of neighborhoods and residential subdivisions that protect natural areas when possible and practical.*
- Policy 6. Accommodate residential developments using the design principles of “New Urbanism” or “Smart Growth”.*
- Policy 7. Coordinate the development of individual subdivisions to ensure vehicular and pedestrian connectivity.*
- Policy 8. Accommodate innovative housing types to provide affordable housing so that people at different stages of the life cycle can remain or move to Kearney.*
- Policy 9. Integrate a variety of housing types including multi-family, duplex, and single-family detached units in planned neighborhoods.*

Policy 10. Require all new multi-family developments to provide buffering and screening when located adjacent to low-density housing or commercial uses, unless designed to create pedestrian and vehicular connectivity.

Policy 11. Require residential development adjoining an arterial road to create a minimum 15-foot landscaped buffer zone between the right-of-way and rear lot lines.

9.5 Commercial Development & Redevelopment

The commercial base of Kearney has seen numerous changes in recent years with the addition of new shopping centers, businesses, and national franchises entering the emerging retail market. Most of the 1990's commercial construction occurred within a quarter-mile of the I-35 and Highway 92 interchange.

As Kearney's population grows, there will be increased demand for additional retail goods and services. Accordingly, new retail areas need to be accommodated and planned to meet the needs of the community and residential neighborhoods. The challenge facing a growing community is to accommodate new commercial development, while at the same time allowing existing commercial centers, districts, and corridors to remain viable. This includes the historic commercial district of Downtown, which is viewed as an essential community asset and is expected to remain an important shopping district of the community, and continuing to play a key role in creating a "sense of identity" for Kearney.

While the community has experienced a linear commercial land use pattern along Highways 92 and 33 in the past, the plan is not to allow this trend to continue in the future. The desire is to allow these commercial corridors to adapt to changing market conditions in the decades ahead by encouraging redevelopment to occur within an organized framework or redevelopment plan. The long-term redevelopment of these corridors will focus on controlling roadway access, streetscape, sidewalks, storm drainage improvements, and upgrading parking areas. The aim is to improve the safe operation of traffic and pedestrian movement within the corridor, and enhance the aesthetic appearance of the corridor. These improvements will enhance the competitiveness of these older commercial areas with the construction of new commercial centers.

Commercial

GOAL No.1:

Foster new commercial developments to occur as the community grows, but at the same time allow existing commercial centers, districts, and corridors to remain viable

GENERAL COMMERCIAL POLICIES

Policy 1. New commercial centers should be distributed throughout the community to provide convenient access for all residents and minimize the need for cross-town vehicle trips.

- Policy 2. Locate new commercial development in identified community, neighborhood, downtown, or commercial corridor areas and contained within planned shopping centers or retail clusters.*
- Policy 3. Discourage the development of commercial areas in linear, "strip" configurations along roadways.*
- Policy 4. Encourage new commercial development or redevelopment in designated commercial corridors. Design all commercial redevelopment and infill projects to incorporate a mix of uses, pedestrian orientation, streetscape, and landscaping in coordination with a redevelopment framework of the entire corridor.*
- Policy 5. Develop and adopt "Design Standards and Guidelines" for commercial development. The document will provide design standards and guidelines for parking, pedestrian connections and circulation, access, public spaces, and building architecture, placement and orientation.*
- Policy 6. Ensure that commercial retail centers or individual uses have controlled access to an adjacent arterial or collector street.*
- Policy 7. Support the development and continued operation of small businesses and locally owned retail businesses.*
- Policy 8. When national retail and service franchises and corporate mass-merchandise retailers seek to locate in the community, work with developers to locate them in a planned community or neighborhood retail center, limit their square footage to coincide with community goals to create pedestrian-friendly retail environments, and create architecturally attractive buildings based on approved design guidelines.*

Neighborhood Commercial Development

New retail commercial development serving residential neighborhoods should be compact, mixed-use, based on human-scale design focusing on compatibility between buildings, pedestrian movement, and visual coherency.

Neighborhood commercial centers typically require a site of approximately 5-8 acres, but may vary, ranging from as small as 1-3 acres to as large as 10-15 acres. The radius of the service area can range from ¼ to 1 mile.

Neighborhood retail centers in general include retail stores that provide personal services, such as dry cleaning, video rental, florist, banks, insurance, and personal care. They can also include grocery stores, drug stores, convenience stores (with gasoline sales), restaurants, specialty shops, and offices.

Pedestrian-oriented Retail Centers

Smaller, limited use centers shall be fully integrated into the surrounding neighborhood. These limited use centers should become a focal point for the neighborhood. The desired outcome is a balance between recreating the look and feel of "Main Street" and allowing consumers the convenience of driving for short

trips to the store. No tenant shall exceed 5,000 square feet of gross floor area in a small-scale neighborhood center. Each neighborhood retail center requires careful urban design, attention to public spaces, and the streetscape. For this type of neighborhood center, the intent is to accommodate both automobile traffic and pedestrian linkages to surrounding residential neighborhoods. The desire is to discourage conventional strip centers, which are designed primarily to serve the automobile, and encourage neighborhood retail centers based on the following design concepts:

- Retail buildings should front onto a street providing a continuous frontage of shops, entrances, and window shops.
- Parking should be allowed in front of a building only if it is on-street, parallel, or head-in parking.
- Mixed-use buildings with retail on the ground floor and offices or housing above should be allowed.
- Large parking lots should be located at the rear of retail buildings and connected to the front sidewalk by well designed pedestrian pathways. Parking lots should be well landscaped.
- Rear business entrances should be encouraged.
- Rear lot trash receptacles should be well integrated into the architecture or well screened.
- Retail buildings should be designed with display windows and awnings.

Large-scale Neighborhood Centers

Neighborhood commercial centers often serve a larger “service area radius”, which results in a larger scale and character. A larger neighborhood commercial center often serves more than one nearby neighborhood. In these instances, larger retail tenants will locate in these centers and result in larger parking areas. These centers shall also meet a basic level of architectural variety, sensitivity to building placement and orientation, and pedestrian movement. When practical parking areas should be located in front, sides, and rear of buildings, as opposed to placing all parking in front of the retail shops. Landscape amenities and plantings shall be provided to soften the appearance of parking lots, enhance the streetscape, and provide perimeter buffering. No tenant shall exceed 15,000 square feet of gross floor area in a large-scale neighborhood center.

Locate neighborhood centers to take advantage of daily activity patterns, such as the corner of a residential collector street, at the entrance to a neighborhood, or in conjunction with a park, school, civic use, or public space.

Community Commercial Development

New retail commercial development functioning as a community commercial center is intended to support mixed-uses or a multi-purpose activity center combining retail, office, recreational, and residential uses.

These centers shall be designed with a unified architectural, signage, and landscaping for both principal buildings and out-parcel buildings. A community commercial center can range between 10 and 30 acres. The radius of the service area can range between 2-5 miles.

Community centers are typically anchored by larger national chain stores and contain smaller-scale retail. Community retail centers generally contain the following types of businesses as an anchor: general merchandise; grocery; apparel; appliances and electronics; hardware; and other household goods. In order to maintain the desired scale and character sought with the planning principles of this plan, no tenant shall exceed 45,000 square foot of gross floor area in a community center. Community centers may also include the smaller types of retail stores also found in neighborhood centers.

Community retail centers shall be designed based on the following guidelines:

- Each project shall form a well-designed center incorporating architectural features that contribute to a unified theme. Projects must utilize building materials and designs that are appropriate to the scale and character of the surrounding area.
- Landscaping along the perimeter property lines and against the building shall be used to mitigate the large scale of property and buildings in this area.
- Clear, separate pedestrian access shall be provided from the street to the buildings and between buildings, including buildings on separate lots, including use of special surfacing of major walkways and crosswalks.
- Any outside display areas and nursery areas must be designed to complement the building and site design, and shall be confined to the approved designated area only and shall not interfere with pedestrian or vehicular circulation.
- All roof equipment shall be screened from view on all sides with roof screening that is architecturally integrated with the building.
- Noise-producing vents, fans, compressors and other mechanical equipment, as well as truck parking, storage or loading areas where similar equipment may be operated, shall be oriented away from residential areas and screened from view from public roadways.
- Parking lots shall incorporate landscaping islands to break up large expanses of surface parking. When practical parking areas should be placed on the sides and rear of buildings.

I-35 Commercial Development

The Interstate-35 corridor represents a logical location for commercial, office, and industrial development given its access and visibility to the highway. The corridor also plays a significant role in defining the image of Kearney, since the first views of Kearney are created when traveling along the interstate.

The prime commercial development potential of the corridor rests on the presence of an interchange. Since the land use plan presumes a second and potential third interchange along I-35, it is critical to identify a land use plan and transportation plan that enhances the social, economic, and physical livability of the community, while accommodating the development of the corridor. The goal of this plan is to promote the I-35 Highway as a mixed-land use pattern supporting commercial, office, and housing.

Future commercial development within the I-35 corridor is expected to be multi-functional, which means meeting the criteria of community, regional, and

highway commercial development. Highway commercial development includes a wide-range of commercial goods and services. Businesses serving the public traveling on the interstate (i.e., food, gasoline, and lodging) are examples of highway retail. Regional commercial development includes auto sales, farm implement dealers, and furniture. Development known as “category killers” or major discounters (i.e., Wal-Mart, Home Depot, Lowe’s, Dick’s Sporting Goods, and others) are also likely business candidates seeking locations with access to a major highway.

Sufficient local or regional market conditions must be present to support these types of commercial business. The point is that the I-35 corridor is potentially suitable for these types of commercial development. Kearney is also capable of providing commercial needs for the extensive number of households located throughout the unincorporated areas of the county.

The basic land use design concepts being advanced within the corridor begin with promoting the highest intensity uses at the highway interchanges. The first element is to create a limited, linear commercial ribbon at the Highway 92 Interchange extending approximately one-half mile on each side of the interstate. . The objective is to create opportunities for multi-functional commercial development at the I-35 and Highway 92 Interchange. A variety of commercial activities serving community and highway retail needs already exist at this location and is envisioned to accommodate new commercial development intended to meet expanded commercial retail needs.

The second element is to create a higher-order commercial node at the proposed 136th Street Interchange. The intent is to capitalize on creating additional opportunities for commercial development and also promote mixed-uses by integrating office and multi-family. Since it may be 2014 before a second interstate interchange is constructed, the Highway 33 interchange will experience the greatest pressure for commercial development. This is why it is important to establish standards for traffic access, street design, pedestrian movement, landscaping, site planning and amenities.

If action steps are not implemented with this plan, city officials will be placed in a reactive mode by 2020 and will be seeking solutions to traffic congestion, vehicular conflict points, and insensitive site design that failed to take a holistic approach to developing a cohesive and positive image of Kearney. Kearney can set in motion a context-sensitive design process to ensure that the entire I-35 corridor functions in an integrated way where roads connect to surrounding districts, public space and neighborhoods, and makes the entire community economically stable, safe, and productive. The key is to make the I-35 corridor become a positive reflection of the entire community, and not a place to recreate a suburban commercial strip corridor of repetitive, indistinguishable retail landscape.

I-35 CORRIDOR DEVELOPMENT POLICIES

- Policy 1: New commercial development should be located in existing established commercial areas or designated commercial areas and contained within planned shopping centers or retail clusters.*
- Policy 2: Discourage strip or isolated spot commercial development along I-35.*

- Policy 3: Encourage planned shopping centers or retail clusters, subject to the following criteria:*
- *Development shall utilize a uniform architectural design that is in scale and harmony with surrounding uses.*
 - *Site design shall ensure attractive views of the development from I-35, and provide for adequate screening, safe pedestrian movement, and parking areas.*
 - *Site design shall contain landscape plantings that enhance the architectural features or provide shade, buffering or screening.*
 - *Exterior lighting, when used, shall enhance the building design and the adjoining landscape. Lighting standards and building fixtures shall be restrained to avoid excessive brightness.*
 - *All signs shall have appropriate scale and proportion in their design and visual relationship to buildings and surroundings. Every sign shall be designed as an integral architectural element of the building and site.*
- Policy 4: Ensure that commercial retail centers or individual uses have controlled access to an adjacent arterial or collector street.*
- Policy 5: Encourage the use of shared driveways and access between commercial sites.*
- Policy 6: Restrict the number, height, and size of individual business pole signs within the I-35 corridor.*
- Policy 7: Ensure buildings that present a rear elevation facing I-35 incorporate building materials similar to materials used on the front elevation, use design features to prevent a long expanse of blank wall space, use parapet walls to screen roof-mounted HVAC units.*
- Policy 8: Prohibit billboards within the I-35 corridor.*
- Policy 9: Require traffic impact studies for new commercial development proposals to ensure that for the street network and intersections do not exceed a level of service of D.*

Downtown Kearney

The Kearney downtown shopping district represents the historic commercial core of the city. A guiding principle of this plan is to revitalize and strengthen the economic and civic role of downtown and ensure that future generations living in Kearney retain a connection with the heritage of the community.

The vision for downtown is a vibrant, compact commercial center that reinforces Kearney's sense of community and historic significance. Improvements to the civic spaces include new sidewalks, historic street and sidewalk lighting, landscaping, adequate parking, and a public gathering space or plaza. A critical element is to keep City Hall and other municipal and civic functions downtown. Commercial space should be available to provide convenient services to serve the retail needs of daily life and to offer opportunities to gather, relax and be entertained. It is also important that downtown Kearney serve as a focus for tourism and meet the needs and interests of the regional population. Housing

should remain an important component of the downtown. A diverse mix of housing types ought to be promoted in the downtown area, including homeowner reinvestment to ensure owner-occupancy. Selected housing units could be converted to shops, accommodations and offices. Public investments are important to upgrade storm drainage systems, local streets, and pedestrian sidewalks. The downtown should invoke a sense of tradition, stability and provide small town atmosphere and character.

Downtown

GOAL No.1:

Promote the revitalization of downtown Kearney by promoting a sense of place and creating an inviting downtown that encourages people to shop.

DOWNTOWN POLICIES

- Policy 1. Work with local merchants to create a “marketable image” of the downtown district, including defining a market niche to draw people downtown.*
- Policy 2. Prepare and adopt a “Downtown Revitalization Strategy” identifying conceptual plans for accommodating new commercial development, public parking, streetscape improvements, and architectural design standards.*
- Policy 3. Work with local merchants and the Chamber of Commerce to identify business recruitment strategies and incentives.*
- Policy 4. Evaluate and identify sidewalk improvements from surrounding residential areas to allow convenient access to downtown.*
- Policy 5. Create a “Downtown Merchants Association” to assist in marketing, recruitment, sponsor special events, and strengthen existing business.*
- Policy 6. Make downtown pedestrian-friendly with wide sidewalks, safe street-crossings, and convenient parking.*
- Policy 7. Capitalize on the distinctive older architecture and promote façade improvements.*
- Policy 8. Enhance pedestrian and streetscape connections between the retail shops and Lions Park.*
- Policy 9. Design surface parking facilities to blend with the prevailing character by providing theme lighting, and landscaping.*
- Policy 10. Analyze future traffic demands of Highway 33 on downtown and identify alternative traffic routes.*
- Policy 11. Plan, develop, and support the establishment of a “Museum District” to encompass downtown to highlight tourism.*

- Policy 12. Promote aesthetic harmony and historical continuity by controlling the appearance, scale, placement, and orientation of buildings and the intensity of uses.*
- Policy 13. Construction of new building shall be sensitive to the historic character of the area.*
- Policy 14. Encourage City Hall, Police Department, and municipal court to remain in downtown.*
- Policy 15. Create a "Historic District" to encompass downtown to preserve and guide the development of the area.*
- Policy 16. If existing housing in the downtown area converts to service, office, or retail use, it should be required to retain its residential appearance.*

9.6 Industrial Development

A solid base of industrial, office, manufacturing, production, and distribution businesses is important to the economic health of the city and its ability to provide a full range of municipal facilities and services. Industrial development involves creating opportunities for business to locate in Kearney. The intent is to expand the manufacturing/office economic base to bring new jobs to the community and expand the local tax base. A guiding principle for industrial development is to encourage the clustering of similar or compatible activities to locate in planned business parks.

Industrial

GOAL No.1:

Create and maintain a dynamic and diverse economy capable of providing local jobs and a wide range of business opportunities.

INDUSTRIAL POLICIES

- Policy 1. Identify areas on the future land use map to ensure an adequate supply of land for industrial uses to encourage a diversified local economic and tax base.*
- Policy 2. Ensure that industrial development is provided with landscape or natural buffers separating industry from adjacent residential uses.*
- Policy 3. Promote industry to locate in industrial/business parks which have been planned as unified, fully-integrated districts with convenient access to major highways.*
- Policy 4. Truck traffic should be routed on major arterials and avoid residential areas as much as possible.*

- Policy 5. Promote industrial uses that are considered clean industry and have minimal noise, visual, air and water pollution.*
- Policy 6. Support the development of an industrial park near the Clay County Regional Airport.*
- Policy 7. Encourage planned industrial areas subject to the following criteria:*
- Loading areas shall be located to avoid conflict between pedestrian and vehicular traffic away from adjacent residential areas and adjoining roads.
 - Outdoor storage areas shall be fenced and/or screened.
 - The number and location of vehicular access points shall be limited to minimize disruption to traffic flows.
 - Lighting shall be directed to minimize impacts on adjacent residential uses.
 - Off-street parking areas, loading or storage areas and site service areas shall be screened and landscaped.
 - The site has direct access to roads that can accommodate the anticipated traffic generated by the proposed development;
- Policy 8. When properly designed and controlled with covenants and design standards, business parks can accommodate mixed-use development, including office and retail uses.*

9.7 Transportation

The importance of transportation planning for the future of Kearney is critical with continued expansion of residential development and urban growth. Three guiding principles are key transportation planning elements: (1) accommodating a new interchange on Interstate Highway-35; (2) planning for urban development on both sides of I-35, and (3) ensuring mobility, efficiency, and safety of the motoring public.

This plan seeks to use a network of roads and arrangement of land uses to create an integrated circulation system where mobility contributes to community livability. In other words, roads and the movement of people and cars should be supportive of neighborhoods and provide a circulation network with multiple connections and relatively direct routes into and through the community.

Transportation

GOAL No.1:

Provide an integrated, all-mode transportation system which offers the efficient, effective, and safe movement of people and goods, and provides mode choice wherever possible while enhancing the livability of neighborhoods.

TRANSPORTATION POLICIES

- Policy 1. Encourage the construction of a new interchange on I-35 at approximately 136th Street.*
- Policy 2. Ensure proper access management near highway interchanges with local access roads, median controls, clearly identifiable access points, and consolidated signage.*
- Policy 3. Implement access control for all development occurring adjacent to arterial and collector streets.*
- Policy 4. Adopt “traffic impact fees” for new development provided a reasonable balance is achieved concerning the fee structure and the ability of developers to absorb additional costs.*
- Policy 5. Support traffic calming techniques provided it occurs within a planned community supported with mixed-uses.*
- Policy 6. Evaluate alternatives forms of public transportation for the community.*
- Policy 7. Provide for safe and convenient pedestrian travel throughout the community.*
- Policy 8. Continue to make improvements to the existing street and roadway system.*
- Policy 9. Provide for the safe and convenient travel by bicyclist throughout the community.*
- Policy 10. Adopt an overall “Traffic Management Plan” for the community identifying access management standards, policies for acceptable levels of service, and identify traffic control improvements to mitigate deficiencies and/or comply with established guidelines.*
- Policy 11. Arterial, collector, and local streets should include street trees and sidewalks as integral elements of design and construction.*

9.8 Parks & Recreation

Comparing the existing parks in Kearney with the National Recreation Park Association park classification suggests the following conclusions:

- In terms of total parkland acreage, Kearney meets national standards for providing a “community park”.
- The distribution of “neighborhood parks” in future residential neighborhoods is anticipated to be insufficient. This is due to the concentration of parkland in the Jesse James Festival Grounds.
- The existing trail system in Kearney is an extensive network and contributes significantly towards creating community-wide pedestrian trail system.
- Residents of Kearney benefit from the close proximity (5 miles) to the Watkins Mill State Park.

Two central themes came out of the public workshops regarding the future planning of parks and recreation. The first theme focused on ensuring that an organized and planned system of parks is designed to accommodate residents’ needs over the next 20 years. Parks and open space are envisioned as an integral component in creating new neighborhoods and promoting the livability of Kearney. The second theme is to continue offering the residents of Kearney a variety of parks and recreation programs and facilities.

Park & Recreation Opportunities

- The BNSF railroad right-of-way may eventually create an opportunity to extend the walking trail system and contribute to the increase of greenways.
- The floodplain land in Kearney presents an opportunity to work with landowners and developers to use floodplain property for recreation, greenway, wildlife preserve, or open space.
- Consideration should be given to working with school district officials to create a “recreation node” with active recreation equipment for young children at both the South Campus and West Campus.
- The topography and natural streambeds in the planning area provide an opportunity to create “greenways” within the community and incorporate the pedestrian trail system.
- The City of Kearney is located within the Recreational District. The boundary of this regional recreation district corresponds with the school district boundary. As of 2003, the Recreation District has not purchased any recreational land. Coordination between the City of Kearney and the Recreation District is important to adequately serve the citizens of Kearney and avoid duplication of recreational programs and facilities.
- The City of Kearney needs to coordinate short-term planning with the Kearney Holt Recreation Association to ensure that recreational needs are served. From a long-range viewpoint, the City of Kearney needs to evaluate if recreational programming should become a function of the Parks & Recreation Department.

Parks

GOAL No.1:

Encourage the creation and development of neighborhood and community parks throughout the city.

PARK LAND POLICIES

- Policy 1. Ensure that a 5-10 acre neighborhood park is planned and developed for approximately each 160 acres of residential development.*
- Policy 2. Require residential subdivisions and multi-family developments to provide safe and convenient pedestrian access to existing and planned parks, greenways, pathways, and the linear trail network.*
- Policy 3. Adopt design standards defining how residential subdivisions and multi-family development need to provide pedestrian paths to allow for walking and biking connections to a neighborhood park.*
- Policy 4. Adopt a public policy defining the procedures of reserving public park land on preliminary plats.*
- Policy 5. Promote development of park and/or recreational facilities jointly with the Kearney R-1 School District*
- Policy 6. Prepare a strategic comprehensive park plan to identify suitable sites for future neighborhood and community parks; identify potential funding sources to purchase or place options on the property; and, begin negotiations with property owners.*
- Policy 7. Identify potential nature preserves within the floodplain and integrate within recreational activities, such as a natural interpretive trail.*

Recreation

GOAL No.2:

Provide new recreation programs and facilities into city parks based upon local needs and trends.

RECREATION POLICIES

- Policy 1. Encourage the development of recreational facilities, such as; skateboard park, swimming pool, tennis courts, and amphitheatre.*
- Policy 2. Encourage the development of a community center.*
- Policy 3. Prepare a 5-year facility plan identifying existing and new recreation facilities and programs.*

9.9 Neighborhood Conservation & Reinvestment

Recognizing that older neighborhoods are important to the overall economic and social health of community life is an important principle of this plan. Local officials should make a concerted effort to ensure that public dollars are reinvested in older neighborhoods to upgrade sidewalks, install streetlights, or improve storm drainage. Individual homeowners need to know that City Hall is committed to older neighborhoods by investing in public infrastructure and vigorously enforcing appearance codes and building/life safety codes. Homeowners are less likely to maintain and invest in older homes if they perceive that local government is hesitant to invest in public infrastructure or has a “hands off” attitude to homeowners in the older sections of town. The key to neighborhood preservation is to develop a multifaceted effort that includes voluntary action, public investment in infrastructure, public and private partnerships to offer assistance to those in financial need, and the enforcement of property maintenance and housing codes

Neighborhood

GOAL No.1:

Encourage the conservation of established and core older neighborhoods in the original town site near Downtown Kearney.

NEIGHBORHOOD POLICIES

- Policy 1. Preserve and enhance existing and established neighborhoods. While neighborhoods change over time, there are certain fundamental characteristics of most neighborhoods, such as natural features and landscaping, building and street patterns, historic and cultural features, parks, open space and schools, that need to be preserved in order to maintain their character.*
- Policy 2. Evaluate land use proposals in existing, stable neighborhoods on the basis of projected changes in scale, traffic patterns, and intensity of use, pedestrian orientation, and relationship of the site to adjacent development.*
- Policy 3. Use municipal code enforcement to reinforce neighborhood stability and protect property values.*
- Policy 4. Protect the integrity and character of existing neighborhoods as transportation improvements are planned and constructed.*
- Policy 5. Protect residential neighborhoods from the encroachment of incompatible activities or land uses, which may have a negative impact on the residential living environment.*
- Policy 6. Support development of a retirement or elderly housing development and encourage it to locate within walking distance to downtown, shopping, churches, and community facilities.*

- Policy 7. Preserve structures of historic significance to the community.*
- Policy 8. Eliminate deteriorated, dangerous, or hazardous structures.*
- Policy 9. Require that non-conforming commercial and industrial uses in residential areas be modified or eventually phased out and replaced with appropriate land uses.*

