

## PART II – Chapter 7: PATTERNS AND TRENDS

### 1.0 INTRODUCTION AND PURPOSE

Tracking development trends helps paint a picture of how rural, suburban, and urban areas coexist and how transitions occur. It also reveals how geographic, demographic, economic, and governmental forces influence growth.

This following information was compiled and analyzed as part of the process leading to the development of this Plan. This chapter contains background data that was used to identify and assess existing geographic (e.g., land uses) and socio-economic (e.g., population and economic) trends and conditions affecting development in the unincorporated.

The information contained in this chapter serves as a resource for public or quasi-public agencies and for private individuals or businesses interested in knowing and understanding the geographic and demographic influences on development within the unincorporated area of Johnson County.

### 2.0 GEOGRAPHIC FACTORS

Geographic conditions play a significant role in the development pattern of urbanizing areas, so they have played an important role in directing the physical growth and configuration of development in Johnson County. While the physical terrain and natural characteristics of the County have not posed a major constraint to growth, they have had a notable affect upon the location of transportation corridors, utilities, and subsequent land use and development patterns.

The majority of Johnson County consists of rolling to flat terrain. Some steep slopes

and bluffs define river and creek valleys. These areas of difficult terrain, however, are not widely prevalent. As such, Johnson County's topography has been largely conducive to a range of land use activities including industrial and commercial uses in addition to residential development.



The majority of Johnson County consists of rolling to flat terrain.

In many ways, the existing alignments of major highways in the County (most notably, Interstate 35) are essentially the same corridors blazed by the early pioneer trails and rail lines. The configuration of these earlier routes followed high ridges and river valleys and served as the impetus for the location of villages and towns. Many of the original villages in Johnson County served as refueling and supply centers. When technology changed, some of these communities diminished while others thrived by maintaining a rail related function and/or assuming a broader economic base.

The pattern of urbanization in the northeastern portion of Johnson County, spawned by the momentum of economic development activity occurring in adjacent Kansas City, Missouri, was likewise influenced by geographic conditions. A

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key factor has been the establishment of a transportation system linked primarily to Missouri that was preceded by an interurban line to downtown Kansas City, Missouri.

In northeastern Johnson County, the Turkey Creek valley, which is oriented in a northeasterly direction, guided development patterns in a two-fold manner. First, it served as a physical barrier to contiguous growth spreading westward from Kansas City, Missouri and channeled this development in a southwesterly direction through Johnson County. Second, Turkey Creek valley, as it emerged from the higher flat terrain extending in a southwesterly direction, provided the same barrier-free alignment through Johnson County as it did for the early trails and railroad improvements. This corridor, in turn, enabled the transportation linkage between Kansas City, Missouri and Johnson County. In effect, the Santa Fe Trail, then U.S. Highway 56, then I-35 and later its loop I-435, became the backbone of the County and combined, have largely influenced the industrial and commercial land use development patterns within the area. In addition, establishment of prime residential development relatively close to the County Club Plaza has further strengthened a link between Johnson County and Kansas City, Missouri as suburbanization occurred.

Due to the flat to moderately rolling terrain in the County, major thoroughfares have generally followed the convenience of section line roads. This has resulted in a physical development pattern of square mile grids with commercial development along portions and intersections of major arterials with residential development contained within the interior of each section. This pattern of development has been generally consistent, as urbanization has expanded in a continuous fashion south and westward. While lower residential

densities have generally accompanied movement away from the northeast portion of the County, development has been increasing in intensity beyond the fringe of the urbanized area and development patterns are becoming more decentralized.



Due to the slight terrain, major thoroughfares within the County generally follow section lines.

The relative relationship of Johnson County and Kansas City, Missouri can be seen in the percent of Kansas City area population by County. As home to Kansas City, Jackson County is first with the greatest population, followed by Johnson County, Clay County (where the Kansas City International Airport is located), and then Wyandotte County with Kansas City, Kansas.

Johnson County's link to Wyandotte County and Kansas City, Kansas also has been shaped by the transportation connections between the two counties. The Turkey Creek valley also enabled a road network into Wyandotte County and encouraged a street system and a travel demand through the region. This is evident in Shawnee and in Merriam, particularly along Merriam Drive. For a long time, major northbound travel was generally restricted to the extreme northeast corner of Johnson County. This changed in 1958 when the 18<sup>th</sup> Street Expressway that connects with Roe

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Avenue was opened to Wyandotte County. A year later I-35 was opened from the 18<sup>th</sup> Street Expressway south to Miami County, improving convenient access between Johnson and Wyandotte Counties. The access between the two Kansas counties has further improved since the opening of I-635 and the completion of I-435.

As Kansas City, Kansas expands economically with the opening of the NASCAR

track and attendant development; the north central portion of Johnson County, particularly within the cities of Shawnee and Lenexa, may be anticipated to experience increased growth.

Table 8 shows the change in population growth for Johnson County and the Kansas City Metropolitan Area between 1990 and 2000.

**TABLE 8: PERCENT OF KANSAS CITY METROPOLITAN STATISTICAL AREA BY COUNTY, 2000**

Counties	Population		% of 2000 KC MSA Pop.	Change 1990 - 2000	% Change 1990 - 2000
	1990	2000			
Jackson, MO	633,232	654,880	36.87%	21,648	3.42%
<b>Johnson, KS</b>	<b>355,054</b>	<b>451,086</b>	<b>25.40%</b>	<b>96,032</b>	<b>27.05%</b>
Clay, MO	153,411	184,006	10.36%	30,595	19.94%
Wyandotte, KS	161,993	157,882	8.89%	-4,111	-2.54%
Cass, MO	63,808	82,092	4.62%	18,284	28.65%
Platte, MO	57,867	73,781	4.15%	15,914	27.50%
Leavenworth, KS	64,371	68,691	3.87%	4,320	6.71%
Lafayette, MO	31,107	32,960	1.86%	1,853	5.96%
Miami, KS	23,466	28,351	1.60%	4,885	20.82%
Ray, MO	21,971	23,354	1.31%	1,383	6.29%
Clinton, MO	16,595	18,979	1.07%	2,384	14.37%
<b>KC MSA Total</b>	<b>1,582,875</b>	<b>1,776,062</b>	<b>100.00%</b>	<b>193,187</b>	<b>12.20%</b>

*Source: U.S. Census, 1990, 2000*

*MSA – Metropolitan Statistical Area*

*Note: Clinton County was added to the Kansas City MSA with the 2000 U.S. Census. For comparison, the table includes Clinton County's population in the 1990 MSA as well.*

### 3.0 HISTORICAL FACTORS

An overview of Johnson County history traces a number of factors that together established the development pattern and character of Johnson County today. These factors are as follows:

1. The intensive contiguous development patterns that have

occurred in northeast Johnson County have been economically tied to the Kansas City metropolitan area. As new economic centers (i.e. College Boulevard,

Corporate Woods, South Metcalf Avenue) emerged, contiguous development in the northeast was supplemented by increased

scattered urbanization and a decentralized development pat

From 1990 to 2000, Leawood, Olathe, Overland Park and Shawnee experienced population increases from 26% to 47%. Gardner and De Soto's populations though relatively small, increased 195% and 99% respectively illustrating how the growth is further decentralizing. See Table 21 (page 7-17) entitled Johnson County Population by Jurisdiction 1940 to 2000 for the population changes that have occurred throughout the County over the past 60 years.

2. The early residential developments in northeastern Johnson County as well as cities dating back to the mid-1800's have resulted in deep-rooted feelings of identity within these respective cities. While activity and development patterns throughout the County have become more integrated and interdependent, these political jurisdictions have remained intact with respect to their responsibility for the delivery of public services and facilities. As the cost of providing services increases, cooperative efforts to share costs have become more common (e.g., libraries, Sheriff, MedAct).
3. While large-scale residential developments have been a notable feature of Johnson County's growth, this has not been characteristic of the unincorporated area where an average of a hundred residential building permits have been issued for each of the past ten years. If a decentralized development pattern continues, more pressure for such residential development in the unincorporated area will place additional demands on County services.
4. The terrain of Johnson County is conducive to most types of land use development. The pace and extent of development has been governed by the prevailing economic circumstances and the growth management requirements of the respective communities that are developing. The vast remaining balance of undeveloped land in the County possesses minimal topographical constraints for development.
5. Development has been closely related to transportation, which will continue to be an important factor. A good transportation network is essential for the County to retain its economic viability and benefit from service as well as distribution-oriented businesses.
6. As portions of the County have remained unincorporated over time, residents within the area have developed a strong affinity for the natural and rural characteristics found there. As urbanization continues and cities grow, conflicts have sometimes arisen between cities and rural areas with residents who do not want to live within incorporated areas. Rural residents may eventually face conflicts between the desire to remain in the unincorporated area, and the desire to have a higher level of public services. Some rural residents may also face conflicts of

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wanting to live in a rural area, until they choose to rezone or obtain approval to subdivide their land.

### 4.0 EXISTING LAND USES

Currently, land uses within Johnson County's unincorporated area are predominantly agriculture and scattered residential development. More concentrated residential areas are found in and around the Aubry-Stillwell area, Gardner Lake, and the Blue River Valley area. Except for some areas on U.S. Highway 69, U.S. Highway 169, I-35, and at the New Century AirCenter, commercial and industrial uses primarily are found in the cities.



A majority of land uses within the unincorporated area are comprised of agriculture and scattered rural residences.

A significant amount of single-family residential land uses are located east of the U.S. 69 Highway corridor to the southern County line (215<sup>th</sup> street). There are also small pockets of residential development that existed prior to 1986 throughout the unincorporated area.

Few residential subdivisions are contiguous to other developments; a typical square mile in a developing portion of rural Johnson County may have 2 or 3 free standing subdivisions along section-line roads with much of the land area still in agricultural use, and many of the platted lots vacant.

Table 9, Unincorporated Area Land Uses, shows the number of acres and percentage comparisons of the most common land uses found within the unincorporated area of the County.

Not surprisingly, agriculture is the largest single land use within the unincorporated area. Based upon Table 9, agricultural land uses account for nearly 172 square miles or 76% of the approximately 225 square miles that comprise the total unincorporated area of Johnson County. Agricultural land uses account for 36% of the total 477 square miles of combined incorporated and unincorporated area.

Government/public/quasi public land uses is the second largest land use category (7%) in the unincorporated area. This land use category, however, is dominated by the former Sunflower Army Ammunition Plant (9,065 acres) that was declared "surplus" by the U. S. Army in 1997 and which accounts for approximately 87% of the total 16.5 square miles in this land use category. Other land uses in this category include schools, churches, and public utilities.

Single-family residential land uses is the third largest category accounting for approximately 6.5% or nearly 14.8 square miles.

Rights-of Way and "undesigned" is the fourth largest category accounting for approximately 3.5% or 8 square miles. Rights-of-Way are comprised mainly of the land reserved for roads. Undesigned includes all other categories of land uses not included in Table 9.

Park and Recreation land uses is the fifth largest category accounting for nearly 2% or approximately 4.5 square miles. Included in this calculation is Heritage Park, located just south of Olathe and that covers nearly two square miles.

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Combined, light and heavy industrial land uses account for 2.3% or approximately 5.3 square miles. As noted above, most of the land uses area limited to a few locations, including New Century AirCenter, located adjacent to the city of Gardner and on south Metcalf Avenue in the Aubry-Stilwell area.

identified in Table 9. Map 10, also shows the existing land uses for all of the incorporated area of the County. This map provides a good illustration of how little development there is within the unincorporated area compared to the extensive development found within the County's cities.

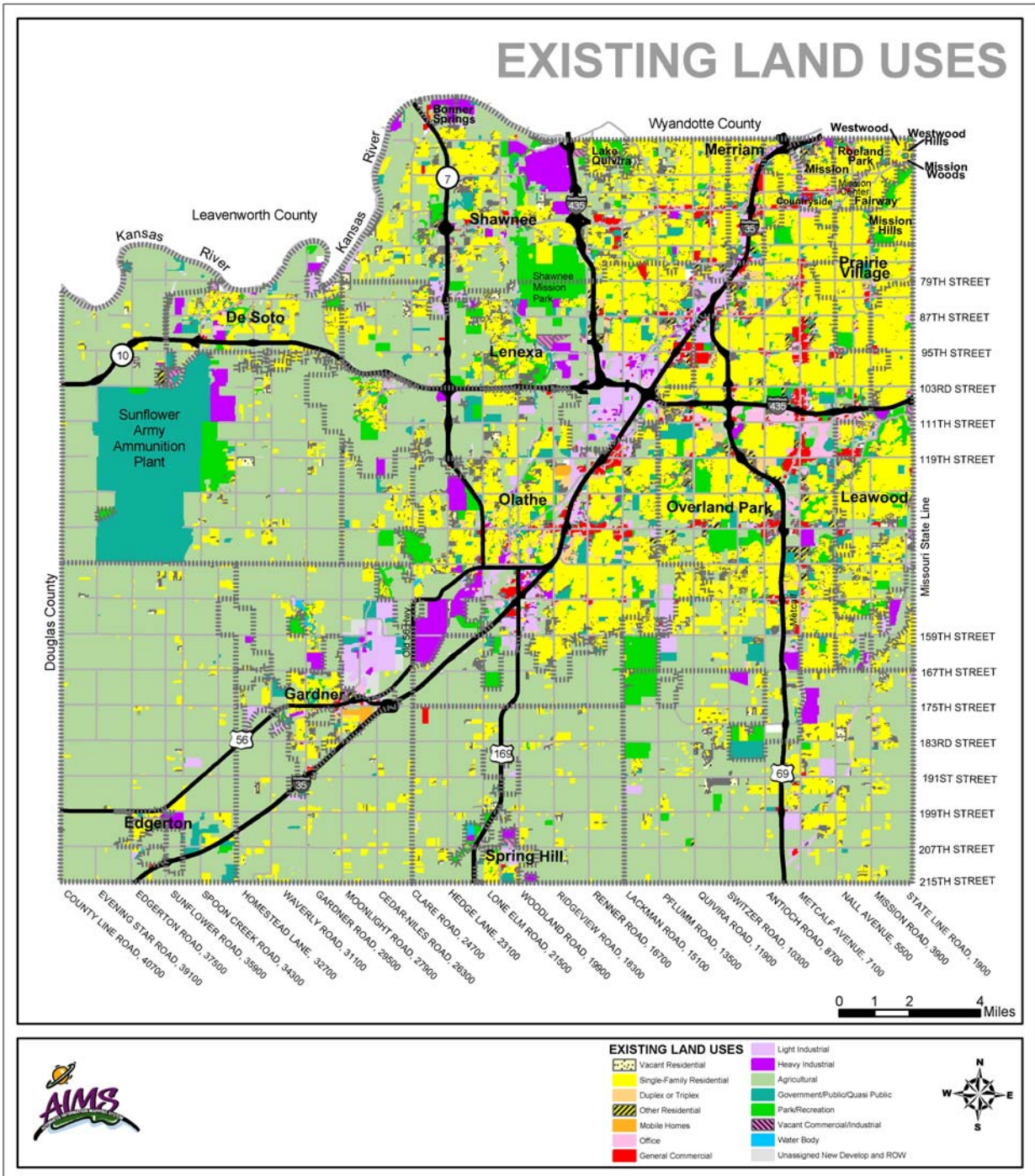
Map 10: Existing Land Uses on page 7-7 shows the locations of the land uses

**TABLE 9: UNINCORPORATED AREA LAND USES**

	<b>Acres</b>	<b>% of Total</b>
Agricultural	109,584	76.08%
Government/Public/Quasi Public	10,442	7.25%
Single-Family Residential	9,496	6.59%
Rights-of-Way or Unassigned	5,121	3.56%
Park/Recreation	2,750	1.91%
Vacant Residential	1,804	1.25%
Light Industrial	1,794	1.25%
Heavy Industrial	1,601	1.11%
Other Residential, and Mobile Homes	622	0.43%
Vacant Commercial/Industrial	415	0.29%
General Commercial	220	0.15%
Office	90	0.06%
Water Body	88	0.06%
Duplex or Triplex	5	0.00%
<b>Total Unincorporated Area Acres</b>	<b>144,032</b>	

Source: Johnson County AIMS, 2002

MAP 10: EXISTING LAND USE



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### 5.0 RECENT PATTERNS – URBAN/RURAL INTERFACE

The U.S. Census shows that Johnson County is becoming denser and more urban. In 2000, Johnson County crossed the threshold of having more land in cities than outside of cities. Generally, rural lands become urban after they are annexed into cities. Table 10, Rural and Urban Areas, below shows the percentage of the incorporated area in Johnson County from 1980 to 2002.

**TABLE 10: RURAL AND URBAN AREAS**

Total Square Miles in County	476.776 sq. mi.	% Increase by Decade
Year	Percent of Land Incorporated	Total
1980	33%	
1990	45%	12%
2000	51%	6%
2002	53%	2%

Over the past decade, an average of approximately 1,800 acres of land has been annexed annually by cities in Johnson County. Currently, De Soto, Edgerton, Gardner, Olathe, Overland Park, and Spring Hill are the only remaining cities in the County that are not landlocked and capable of extending their boundaries. If this pattern of annexation continues, it will take nearly 80 years for all of Johnson County to be incorporated.

Table 11: Johnson County Incorporated/Unincorporated Area Population, shows the total population and percent of population within the incorporated and unincorporated areas of the County from 1980 to 2000. Over the past 20 years the population in the unincorporated area has remained relatively small (3%-6%) in comparison to the incorporated area population.

**TABLE 11: JOHNSON COUNTY INCORPORATED/ UNINCORPORATED AREA POPULATION**

Year	Incorporated Area	%	Unincorporated Area	%
1980	252,711	94	17,558	6
1990	339,103	96	15,951	4
2000	436,044	97	15,042	3

*Source: U.S. Census*

### 5.1 Countywide Growth

The land use patterns and growth pressures experienced in the unincorporated portions of Johnson County are the result of the growth occurring throughout the entire County. Johnson County's population and economic growth from 1990 to 2000 placed it in the top 2% of fastest growing counties in the United States.

Over the past 20 years the County has sustained an average net population growth of nearly 10,000 new residents per year. This accounts for half the net population growth in the 11-county Kansas City Metropolitan Statistical Area (MSA). As far as economic growth is concerned, Johnson County added an average of 419 new business establishments per year, accounting for 58% of new businesses in the Kansas City MSA (from *The Johnson County Advantage* by the County Economic Research Institute, Inc.). In 2001, according to U.S. Census Bureau population estimates, Johnson County became the largest County in Kansas when its population exceeded Sedgwick County's by 9,542 people.

### 5.2 Unincorporated Area Growth

Unincorporated Johnson County, predominantly agricultural in character, continues to experience pressures for sprawling rural residential development. The stimulus has been the economic growth and employment opportunities in



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northeast Johnson County and the Kansas City metropolitan area. The proximity and convenience of outlying properties to employment, shopping and cultural centers within urban areas, while providing the desirable amenities associated with an open space setting, has made the low-density residential environment of unincorporated Johnson County attractive to prospective home buyers. Some issues associated with development in the rural areas are as follows:

1. Physical land use conflicts between agricultural and rural residential development,
2. Limited roads, maintenance, and traffic controls serving subdivisions,
3. Scattered development in portions of the County where there is a minimal water supply, and
4. Failing on-site wastewater disposal systems and potential water quality hazards where environmental constraints were not properly considered and addressed when these areas developed years ago.

### 5.3 Fringe Development

The general annexation pattern in Johnson County has been for areas to be annexed just prior to their development. An exception to this pattern occurred in the mid 1980's with the extensive annexations of rural areas in the western portions of Lenexa and Shawnee and the southern portions of Overland Park.

The County is now facing the prospect of new sewer districts forming in the unincorporated area ahead of annexation. An example of this occurred in 2002 when the County expanded the Unified Wastewater District into Blue River No. 12

just south of the city limits of Olathe. New sewer districts cause pressures for denser development in areas with rural service levels.

Cities are particularly concerned about development in the unincorporated area if the development does not fully adhere to city standards or comply with city plans. Development within the unincorporated area is also exempt from city excise taxes, fees, or exactions. As a result, once these areas are annexed, they may require costly public improvements or higher public maintenance expenditures.

In the past, the difference between municipal and unincorporated development standards has promoted "leapfrog" development in which semi-urban residential areas have been created in rural territory, bypassing suitable sites within municipal boundaries. The cost differential includes both capital costs for arterial and collector street paving and less property taxes due to the absence of a city tax in unincorporated developments. The basic County property tax rate applies equally to city and unincorporated territory and there is no current provision for a special rural tax rate to finance semi-urban services.

### 5.4 Paying for Development - City Fees

Many cities within Johnson County have adopted excise taxes on new development to assist in paying for the impacts of growth. The unincorporated area of Johnson County, however, does not currently have an excise tax, which has lead some developers to seek County approval for their subdivisions prior to annexing into cities. The Table 12, on the following page, shows the excise tax rates for several jurisdictions in Johnson County in 2002.

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**TABLE 12: EXCISE TAX COMPARISON (2002)**

Jurisdiction	Excise Tax Rate (Per square foot of platted land)	Excise Tax Rate for a 40-acre Subdivision
De Soto	\$0.13	\$226,512.00
Gardner	\$0.17	\$296,208.00
Lenexa	\$0.16	\$270,943.20
Olathe	\$0.17	\$296,208.00
Overland Park	\$0.19	\$322,344.00
Shawnee	\$0.15	\$261,360.00
Spring Hill	\$0.06	\$108,028.80
Johnson County	--	--

*Source: Peridian Group, Inc. March 7, 2002 presentation to Spring Hill Chamber of Commerce.*

In the future, Johnson County may want to consider using an excise tax or other fees within the unincorporated area to help defray the County's costs, as well as to preclude some developers from seeking County approval of their subdivisions prior to annexing into a city.

### 5.5 Coordinating City/Rural Development

Because there are few natural impediments to growth in Johnson County, managing infrastructure is particularly important to a rural/urban relationship. Implementing city standards for rural areas is difficult due to a difference among cities and the need to work with a variety of special service districts.

There has not been a unified or coordinated strategy for the extension of water, sewers, and other public facilities and services within unincorporated Johnson County. Each of the autonomous special service districts, which provide

public facilities and services (i.e., sewers, water, fire protection, schools) to Johnson County residents, funds and administers its own capital facilities and operations and exercises its own expansion plans and service extension policies. The decisions to extend public services are often made independent of other agencies responsible for providing related support services to a particular geographic area.

*Preserving Our Future* (POF), an infrastructure-planning project undertaken by the County with input from utility providers and the cities, recommended the need to establish a means for working together to overcome some of the institutional and other barriers to coordination. As a result, efforts are now underway by various County, municipal, and utility officials to regularly meet and discuss matters of mutual interest and concern.

### 5.6 Lot Sizes

From 1986 to 2002, the County's *Rural Comprehensive Plan* supported a range of lot sizes from less than 1 acre to 10 acres in the areas adjacent to cities and then a 10-acre minimum lot size elsewhere. Since 1994, when updated County Zoning and Subdivision Regulations were adopted, developments of less than 10-acre lot sizes have been contingent upon having adequate infrastructure to service the development.

**TABLE 13: LOT SIZE BREAKDOWN**

Acreage Range	Number of Lots	Percentage by lot	Total Acreage	Percentage by Acres
> 1.9-Acre	1,954	36%	1,285	1%
2.0-4.9-Acre	1,025	19%	3,372	3%
5.0-9.9-Acre	699	13%	6,164	6%
10.0-19.9-Acre	547	10%	7,535	8%
20.0-39.9 Acre	414	8%	12,900	13%
< 40+-Acre	753	14%	67,256	68%
Totals	5,392	100%	98,512	100%

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As Table 13 above shows, while most of the unincorporated area is in large acreages, there are smaller lots, which do not seem to fit any pattern. Many of the smallest lots were created prior to the County's first adoption of the Rural Comprehensive Plan in 1986. These older lots lack a development pattern, which indicates that the subdivision of land has been somewhat at the discretion of the landowner without full regard for the eventual provision of public utilities and roads. The more recent subdivisions follow a pattern of occurring along existing paved roads.

Johnson County has been a highly speculative investment area for residential, industrial and commercial (office) construction, resulting in large land holdings by developers (particularly in the unincorporated area) awaiting the appropriate economic factors, market conditions and public facilities (i.e., roads, utilities) for development of their properties.

Zoning and subdivision regulations were administered within unincorporated Johnson County for many years without reliance upon a plan or guide for development. Planning is a necessary first step in determining the appropriate type and level of zoning and subdivision regulations, as well as other responsive land use management tools, to protect the County's land and environmental resources, and to attain desired development objectives.

Most of unincorporated Johnson County is zoned Rural District, (RUR), which requires new lots to be at least 10 acres. In recent years, several farm acreages have been platted into 10-acre lots fronting on existing section line roads, commonly called "piano key lots". Often those lots are about ¼-mile deep and have a lot-depth-to-width ratio of about 4:1. Such

narrow, deep lots may not fit the topography well, may obstruct future sanitary sewer district expansions, and may be difficult to subdivide further in the future. In some instances, 10-acre lots may be larger than the owners want or care to maintain. In 2002, seeking to limit the creation of piano key lots, the County adopted subdivision regulations limiting the number of driveways with direct access onto major roads.

### 6.0 AGRICULTURE

Part of the urban/rural split in Johnson County is characterized by the viability of farming. With the continued rise in farming costs, however, the economic feasibility of farm operations in some portions of unincorporated Johnson County is uncertain. There appears to be, however, a significant amount of agricultural farmland remaining in the County as well as an apparent desire to maintain farming operations within the unincorporated area. As noted on page 7-6 above, existing agricultural land uses, alone, comprise 76% or nearly 172 square miles of the unincorporated area.

#### 6.1 Farms by Size

The U.S. Department of Agriculture *U.S. Census of Agriculture* provides information about farming operations in Johnson County. The *U.S. Census of Agriculture* definition of a farm is "any place from which \$1,000 or more of agricultural products were produced and sold or normally would have been sold, during the census year."

The most recent *U.S. Census of Agriculture* for 1997, shows Johnson County, as a whole, had 604 farms covering 135,787 acres (212 sq. miles). This is only down slightly from 1992 when 596 farms covered 141,386 acres (220 sq. miles) of the County. (It should be noted that some of

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the land designated as farmland by the *U.S. Census of Agriculture* is located within cities in the County as well as land located within the unincorporated area.)

Table 14, on the following page, shows that approximately one-third of the properties the *U.S. Census of Agriculture* identified as farms were between 10 and 49 acres in size. About 15% of those properties in 1997, and about 20% of those properties in 1992, were between 180 and 499 acres in size.

Based upon staff observations, discussion with County Extension Council representatives and County residents, including farmers, it is recognized that much of the land identified above may not be in traditional or intense agricultural production. This is particularly true of farms identified as being less than 50 acres in size. Another indication of this is that, according to the *U.S. Census of Agriculture*, 155 or 25% of the 604 farms identified in 1997 were horse farms with a combined total of nearly 1,300 horses.

### 6.2 Farm Tenancy

Of the total 604 farms reported in 1997 for Johnson County, Table 15 shows full or part time owners operated 558 farms or 92%, while tenants operated only 46 farms or 8%. In 1997, 439 or 73% farm operators resided on their farm, while 133 or 22% did not reside on their farm (32 or 5% did not report where they resided). Over 62% or 376 operators indicated that farming was not their principal occupation and 38% said that farming was their principal occupation. The average tenancy on farms was 20.2 years.

Although it may be difficult to derive definitive conclusions from these tables, it is apparent the majority of farms in the County are owned in whole or part by individuals who reside on their farm but

farming is not necessarily the principal occupation of the individual who resides on the farm.

Other characteristics of farm ownership and length of ownership are summarized in Tables 16 and 17:

**Table 14. FARMS BY ACREAGE**

Size	1997	1992
1 to 9 acres	44	36
10 to 49 acres	207	183
50 to 179 acres	184	181
180 to 499 acres	97	120
500 to 999 acres	38	47
1,000 acres or more	34	29
Total	604	596

**TABLE 15. FARM TENANCY, 1992, 1997**

	Full/Part Owners		Tenants	
	1997	1992	1997	1992
Number of Farms	558	544	46	52
Acres	113,806	114,059	21,981	27,327
Harvested Cropland Farms	385	405	38	44
Harvested Cropland Acres	57,402	59,415	9,964	12,088

**TABLE 16. FARM OPERATOR'S RESIDENCY AND OCCUPATION**

	1997	1992
Operator Resides on Farm Operated	439	435
Does Not Reside on Farm Operated	133	126
Residence Not Reported	32	35
Farming as Principal Occupation	228	267
Principal Occupation Not Farming	376	329

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**TABLE 17: OPERATOR'S YEARS ON PRESENT FARM**

	1997	1992
2 years or less	37	25
3 or 4 years	31	40
5 to 9 years	89	81
10 years or more	371	355
Average	20.2	20.2

### 6.3 Harvest Records

Johnson County's agriculture harvest for 1997 and its comparison to the State harvest is summarized in the following two Tables 18 and 19:

**TABLE 18: 1997 AGRICULTURAL HARVEST**

Product (bushels or as stated)	Quantity	% of Kansas Total
Corn for grain or seed	980,662	2.7%
Sorghum for grain or seed	119,501	.5%
Wheat for grain	313,919	.7%
Oats	42,938	.9%
Soybeans for beans	831,802	1%
Hay - Alfalfa, other tame, small grain wild, grass silage, green chop, etc.	38,486	.6%

**TABLE 19: FRUITS AND VEGETABLES**

Product	Acreage	% of Kansas Total
Vegetables overall	100	3.2%
Hot Peppers	1	25%
Sweet Corn	18	2.2%
Tomatoes	7	6.1%
Turnips	1	9%
Orchards overall	29	.4%
Apples	24	2.7%

### 6.4 Agricultural Nurseries

Table 20 below shows an increase of 23 nursery type operations between 1992 and 1997 as well as a substantial increase in sales (37%) for this same period. Table 20 also shows an increase in greenhouse space (up 220% from 1992) and nursery acreages show the shift from traditional crops to a more diverse type of agriculture activity. This shift may have implications for land use in the unincorporated area as these types of uses generally generate more on-site sales and customer traffic than other farming operations.

**TABLE 20: NURSERY AND GREENHOUSE CROPS, CUT CHRISTMAS TREES HARVESTED, MUSHROOMS, AND SOD GROWN FOR SALE**

	1997	1992
Farms	50	27
Square Feet Under Glass	376,483 sq.ft.	117,484 sq.ft.
Acres in Open	1,942 acres	1,650 acres
Sales	\$5,195,000	\$3,798,000

### 6.5 Agriculture Conclusions

Overall, the *U.S. Census of Agriculture* indicates that the number of farms in Johnson County is not significantly different from 1992 to 1997. Farming appears to be still a viable option for landowners in the County. The major difference appears to be a shift in the type of farm operations, including 25% involved in horse raising and a substantial increase in greenhouse and nursery operations.

As pressure for development in the unincorporated area continues along with attendant increases in land values, it may be anticipated more and more agricultural land will be eventually converted from production to development. This will be particularly likely in areas near to cities or other existing development where there

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is adequate infrastructure (e.g., roads and central water) available to support new development.

### 7.0 POPULATION

Most of the population growth in Johnson County is occurring in the fringe cities of Leawood, Lenexa, Olathe, Overland Park, and Shawnee. From 1970 through 2000, the incorporated area accounted for 98.5% percent of the County's growth while unincorporated Johnson County comprised approximately 1.5% percent of the total population growth during this same period. Gardner Township, Lexington Township, and Olathe Township experienced decreases in population, largely due to land being annexed into adjacent cities.

The 1940 to 2000 decennial censuses reveal Johnson County's urbanization began in the 1950s with rapid population growth of its cities. Between 1990 and 2000, Overland Park and Olathe accounted for nearly 70% of the County's growth. These two cities have also experienced significant development of retail, service, and entertainment services. In 1960, when Overland Park became an incorporated city, it had a population of approximately 28,000. The U.S. Census indicates Overland Park's 2000 population is now over 149,000 making it the second largest city in Kansas. Much of the city's growth has occurred east and west along I-435 and north and south on U.S. 69 Highway.

Table 21, Johnson County Population 1940-2000, on page 7-16 shows the population changes that have occurred to the cities and townships (unincorporated area) over the past 60 years.

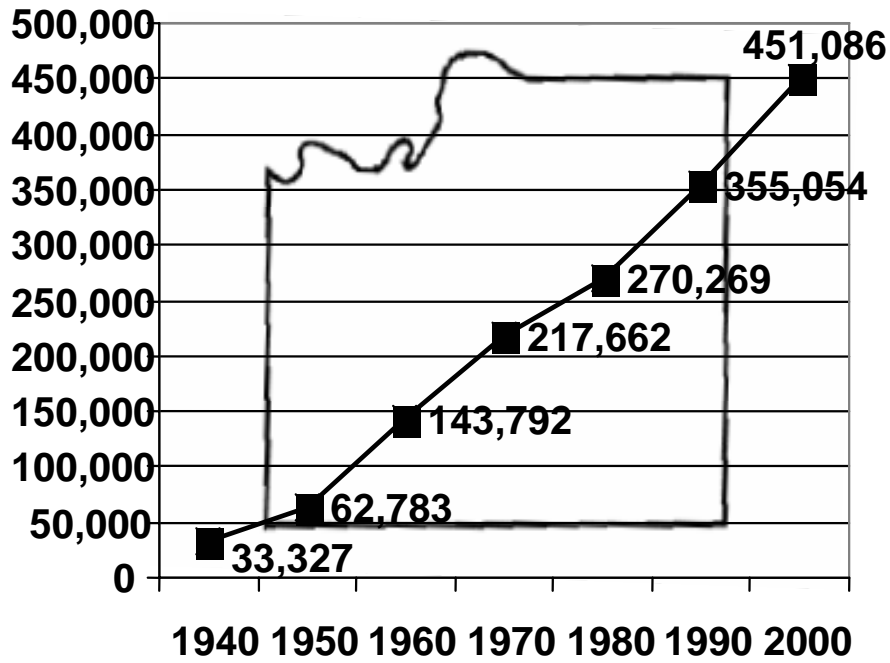
In 1960, Olathe had a population of approximately 10,987. In 2000 Olathe's population was approximately 93,000 per-

sons. During this time, most population growth occurred east of I-35, west toward Kansas Highway 7 (K-7), and South along U.S. Highway 169. Olathe's growth is expected to continue west of K-7 and south between U.S. Highway 169 and Pflumm Road. Table 22, page 7-17, shows the percentage increase in population between 1990 and 2000.

Most of the cities in northeast Johnson County continued to grow through the 1970's with some experiencing modest decline in the last twenty years. These declines from 1980 to 2000 are generally attributed to lower household sizes as the result of aging families and individuals. For example, Prairie Village added housing units in the 1990's but the persons per household size went from 2.38 in 1990 to 2.23 in the year 2000. Table 23, on page 7-18, shows the changes in housing units and household size for Johnson County between 1990 and 2000.

The developing fringe cities experienced annual growth rates in the 1960's and 1970's ranging from 4% to 20%. In the 1990's the rates were between 2% and 5% per year. The greatest change in growth rates in the latter part of the 20<sup>th</sup> Century occurred in the rural area cities. As noted, in the 1990's De Soto grew by 99% and Gardner grew by 194%. Of the townships, between 1990 and 2000 Aubry was the only one continuing to add significant population in the unincorporated area.

FIGURE 2: JOHNSON COUNTY POPULATION 1940-2000



## PART II -- Chapter 7: PATTERNS AND TRENDS

Table 21, below, entitled Johnson County 1940-2000 Population Change, shows the

changes in population within the County between 1940 and 2000.

**TABLE 21: JOHNSON COUNTY POPULATION 1940 TO 2000**

	1940	1950	1960	1970	1980	1990	2000	Num. Change 1990-2000	Pct. Change 1990-2000
<b>Northeast Cities</b>									
Countryside			428	403	346	312	295	-17	-5.4%
Fairway		1,816	5,398	5,133	4,619	4,173	3,952	-221	-5.3%
Lake Quivira (part) (1)					1,029	943	883	-60	-6.4%
Merriam			5,084	10,851	10,794	11,821	11,008	-813	-6.9%
Mission			4,626	8,376	8,643	9,504	9,727	223	2.3%
Mission Hills		1,275	3,621	4,177	3,904	3,446	3,593	147	4.3%
Mission Woods		205	243	242	213	182	165	-17	-9.3%
Prairie Village			25,356	28,138	24,657	23,186	22,072	-1,114	-4.8%
Roeland Park			8,949	9,974	7,962	7,706	6,817	-889	-11.5%
Westwood		1,581	2,040	2,329	1,783	1,772	1,533	-239	-13.5%
Westwood Hills		431	495	414	437	383	378	-5	-1.3%
<b>Total</b>		<b>5,308</b>	<b>56,240</b>	<b>70,037</b>	<b>64,387</b>	<b>63,428</b>	<b>60,423</b>	<b>-3,005</b>	<b>-4.7%</b>
<b>Developing Fringe Cities</b>									
Leawood		1,167	7,466	10,349	13,360	19,693	27,656	7,963	<b>40.4%</b>
Lenexa	502	803	2,487	5,242	18,639	34,034	40,238	6,204	<b>18.2%</b>
Olathe	3,979	5,593	10,987	17,917	37,258	63,352	92,962	29,610	<b>46.7%</b>
Overland Park (2)			21,110	76,623	81,784	111,790	149,080	37,290	<b>33.4%</b>
Shawnee	597	845	9,072	20,482	29,653	37,993	47,996	10,003	<b>26.3%</b>
<b>Total</b>	<b>5,078</b>	<b>8,408</b>	<b>51,122</b>	<b>130,613</b>	<b>180,694</b>	<b>266,862</b>	<b>357,932</b>	<b>91,070</b>	<b>34.1%</b>
<b>Rural Area Cities</b>									
Bonner Springs (part) (1)						3	1	-2	n/a
DeSoto	383	518	1,271	1,839	2,061	2,291	4,561	2,270	<b>99.1%</b>
Edgerton	264	266	414	513	1,214	1,244	1,440	196	<b>15.8%</b>
Gardner	510	676	1,619	1,839	2,392	3,191	9,396	6,205	<b>194.5%</b>
Spring Hill (part) (1)	489	619	909	1,186	1,963	2,084	2,291	207	<b>9.9%</b>
<b>Total</b>	<b>1,646</b>	<b>2,079</b>	<b>4,213</b>	<b>5,377</b>	<b>7,630</b>	<b>8,813</b>	<b>17,689</b>	<b>8,876</b>	<b>100.7%</b>
<b>City Total</b>	<b>6,724</b>	<b>15,795</b>	<b>111,575</b>	<b>206,027</b>	<b>252,711</b>	<b>339,103</b>	<b>436,044</b>	<b>96,941</b>	<b>28.6%</b>
<b>Townships (Unincorporated Area)</b>									
Aubry	922	888	918	1,246	2,989	4,294	5,440	1,146	26.7%
Gardner	639	1,075	2,201	1,852	2,595	2,888	2,143	-745	-25.8%
Lexington	1,221	4,866	1,178	2,854	1,978	1,876	1,315	-561	-29.9%
McCamish	605	537	577	559	922	857	878	21	2.5%
Monticello	1,186	1,164	1,618	1,526	2,813	134	0	-134	-100.0%
Olathe	1,523	1,604	1,289	965	1,564	1,931	1,187	-744	-38.5%
Oxford	1,457	1,457	1,709	961	2,491	1,925	2,020	95	4.9%
Shawnee (3)	5,759	8,416	11,728	1,174	620	106	0	-106	-100.0%
Spring Hill	420	436	426	498	1,586	1,940	2,059	119	6.1%
Mission	12,871	26,545	10,573	0	0	0	0	0	n/a
<b>Unincorporated Total</b>	<b>26,603</b>	<b>46,988</b>	<b>32,217</b>	<b>11,635</b>	<b>17,558</b>	<b>15,951</b>	<b>15,042</b>	<b>-909</b>	<b>-5.7%</b>
<b>County Total</b>	<b>33,327</b>	<b>62,783</b>	<b>143,792</b>	<b>217,662</b>	<b>270,269</b>	<b>355,054</b>	<b>451,086</b>	<b>96,032</b>	<b>27.0%</b>
(1) The cities of Bonner Springs, Lake Quivira, and Spring Hill have additional population in other counties.									
(2) Overland Park was not incorporated until May, 1960, after the official census day of April 1.									
(3) Possible Census miscalculation of 1990 Shawnee Township population.									
Note: Where population is not listed for a city indicates the city was not yet incorporated.									
Source: U.S. Census, 1940-2000; Compiled by Johnson County Planning Office, 2001									



## PART II -- Chapter 7: PATTERNS AND TRENDS

**TABLE 22: JOHNSON COUNTY 1990 – 2000 POPULATION CHANGE**

Listed in order of population change		Listed in order of percent change 1990 - 2000	
City/Township	Increase	City/Township	Percent Change
Aubry Township	1,146	Aubry Township	26.7%
Spring Hill Township	119	Spring Hill Township	6.1%
Oxford Township	95	Oxford Township	4.9%
McCamish Township	21	McCamish Township	2.5%
Shawnee Township	-106	Gardner Township	-25.8%
Monticello Township	-134	Lexington Township	-29.9%
Lexington Township	-561	Olathe Township	-38.5%
Olathe Township	-744	Shawnee Township	-100.0%
Gardner Township	-745	Monticello Township	-100.0%
Township Total	-909	Township Total	-5.7%
Overland Park	37,290	Gardner	194.5%
Olathe	29,610	De Soto	99.1%
Shawnee	10,003	Olathe	46.7%
Leawood	7,963	Leawood	40.4%
Gardner	6,205	Overland Park	33.4%
Lenexa	6,204	Shawnee	26.3%
De Soto	2,270	Lenexa	18.2%
Mission	223	Edgerton	15.8%
Spring Hill	207	Spring Hill	9.9%
Edgerton	196	Mission Hills	4.3%
Mission Hills	147	Mission	2.3%
Bonner Springs	-2	Westwood Hills	-1.3%
Westwood Hills	-5	Prairie Village	-4.8%
Mission Woods	-17	Fairway	-5.3%
Countryside	-17	Countryside	-5.4%
Lake Quivira	-60	Lake Quivira	-6.4%
Fairway	-221	Merriam	-6.9%
Westwood	-239	Mission Woods	-9.3%
Merriam	-813	Roeland Park	-11.5%
Roeland Park	-889	Westwood	-13.5%
Prairie Village	-1,114	Bonner Springs*	*
City Total	96,941	City Total	28.6%
County Total	96,032	County Total	27.0%

\*Population changed from 3 to 1 between 1990 and 2000.

Notes:

- Declines in some townships are primarily attributed to annexations into cities.
- The cities of Bonner Springs, Lake Quivira, and Spring Hill have some of their population in other counties.
- Total 2000 population of Bonner Springs, 6,768; Lake Quivira, 982; and Spring Hill, 2,727.
- The 1990 Census counted 106 persons as residents of Shawnee Township. A review (March 1991) indicates that population would be in an area already annexed into the City of Shawnee.

Source: U.S. Census 1990, 2000

**PART II -- Chapter 7: PATTERNS AND TRENDS**

**TABLE 23. TOTAL HOUSING UNITS AND HOUSEHOLD SIZES, 1990 - 2000**

Listed in order of 2000 U.S. Census						
Townships	Total Housing Units		Average Population Per Household		1990 – 2000 Changes in Housing Units	1990 – 2000 Changes in Household Sizes
	1990	2000	1990	2000		
Aubry	1,441	1,839	2.98	2.96	398	-0.02
Gardner	1,176	793	2.46	2.70	-383	0.24
Spring Hill	637	686	3.05	3.00	49	-0.05
Oxford	580	681	3.32	2.97	101	-0.35
Lexington	839	449	2.24	2.92	-390	0.68
Olathe	593	404	3.26	2.94	-189	-0.32
McCamish	307	347	2.79	2.53	40	-0.26
Monticello	42	0	3.19	--	-42	-3.19
Shawnee	0	0	--	--	0	--
<b>Township Total</b>	<b>5,615</b>	<b>5,199</b>	<b>2.82</b>	<b>2.89</b>	<b>-416</b>	<b>0.07</b>
<b>Cities</b>						
Overland Park	47,998	62,586	2.33	2.38	14,588	0.05
Olathe	22,401	33,343	2.83	2.79	10,942	-0.04
Shawnee	15,232	19,086	2.50	2.51	3,854	0.01
Lenexa	13,487	16,378	2.52	2.46	2,891	-0.06
Leawood	7,212	10,129	2.73	2.73	2,917	0.00
Prairie Village	10,028	10,126	2.31	2.18	98	-0.13
Mission	5,233	5,329	1.82	1.83	96	0.01
Merriam	5,399	5,042	2.19	2.18	-357	-0.01
Gardner	1,251	3,533	2.55	2.66	2,282	0.11
Roeland Park	3,330	3,115	2.31	2.19	-215	-0.12
Fairway	1,852	1,842	2.25	2.15	-10	-0.10
De Soto	863	1,730	2.65	2.63	867	-0.02
Mission Hills	1,334	1,318	2.58	2.73	-16	0.15
Spring Hill (total)	789	1,014	2.78	2.69	225	-0.09
Westwood	833	731	2.13	2.10	-102	-0.03
Edgerton	413	500	3.01	2.88	87	-0.13
Lake Quivira (total)	386	388	2.55	2.40	2	-0.15
Westwood Hills	131	173	2.92	2.18	42	-0.74
Countryside	133	131	2.35	2.25	-2	-0.10
Mission Woods	78	78	2.33	2.12	0	-0.21
<b>City Total</b>	<b>138,383</b>	<b>176,572</b>	<b>2.45</b>	<b>2.47</b>	<b>38,189</b>	<b>0.02</b>
<b>County Total</b>	<b>143,998</b>	<b>181,771</b>	<b>2.47</b>	<b>2.48</b>	<b>37,773</b>	<b>0.01</b>
Note: Persons per household is calculated as population divided by total housing units. Vacancy rates are not accounted for in this summary. *Includes 509 housing units annexed into the City of Gardner, March 1990 Source: U.S. Census Bureau						

## PART II -- Chapter 7: PATTERNS AND TRENDS

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### 8.0 UNINCORPORATED AREA POPULATION

Preceding Table 21, Johnson County Population 1940 to 2000, shows that population within the townships (unincorporated area) has remained relatively stable over the past four decades ranging from: 11,635 in 1970 to 17,558 in 1980, to 15,951 in 1990, and 15,042 in 2000.

This appearance of stability, however, is primarily the result of annexations that have occurred over these past four decades. As much of the population increases within the unincorporated have been near cities, this population is no longer included as part of the unincorporated area after annexation has occurred.

For example, Figure 3, entitled Johnson County Township Population Comparison 1990 and 2000, illustrates that changes in population have occurred within the unincorporated area over the past decade. The township with the largest population in the unincorporated area is Aubry Township, which increased by 1,146 persons or 27% between 1990 and 2000. Spring Hill Township had the second largest population increase of 119 persons for a 6% increase for the same period.

Overall, however, the total population within the unincorporated area declined by 909 persons from 15,951 in 1990, to 15,042 in 2000. This decline is believed to be primarily the result of annexations by adjacent cities. Townships experiencing the largest population declines were: Lexington Township - lost 561 persons, Olathe Township - lost 744 persons, and Gardner Township - lost 745 persons.

Although it is apparent that there have been continual population increases within the unincorporated area, it is also apparent that much of this population

growth has been, and likely will continue to be offset by annexations. An awareness of this pattern further reinforces the need for the County to work closely with nearby cities to coordinate development and infrastructure improvements as well as to plan together for additional population growth.

### 9.0 POPULATION FORECAST

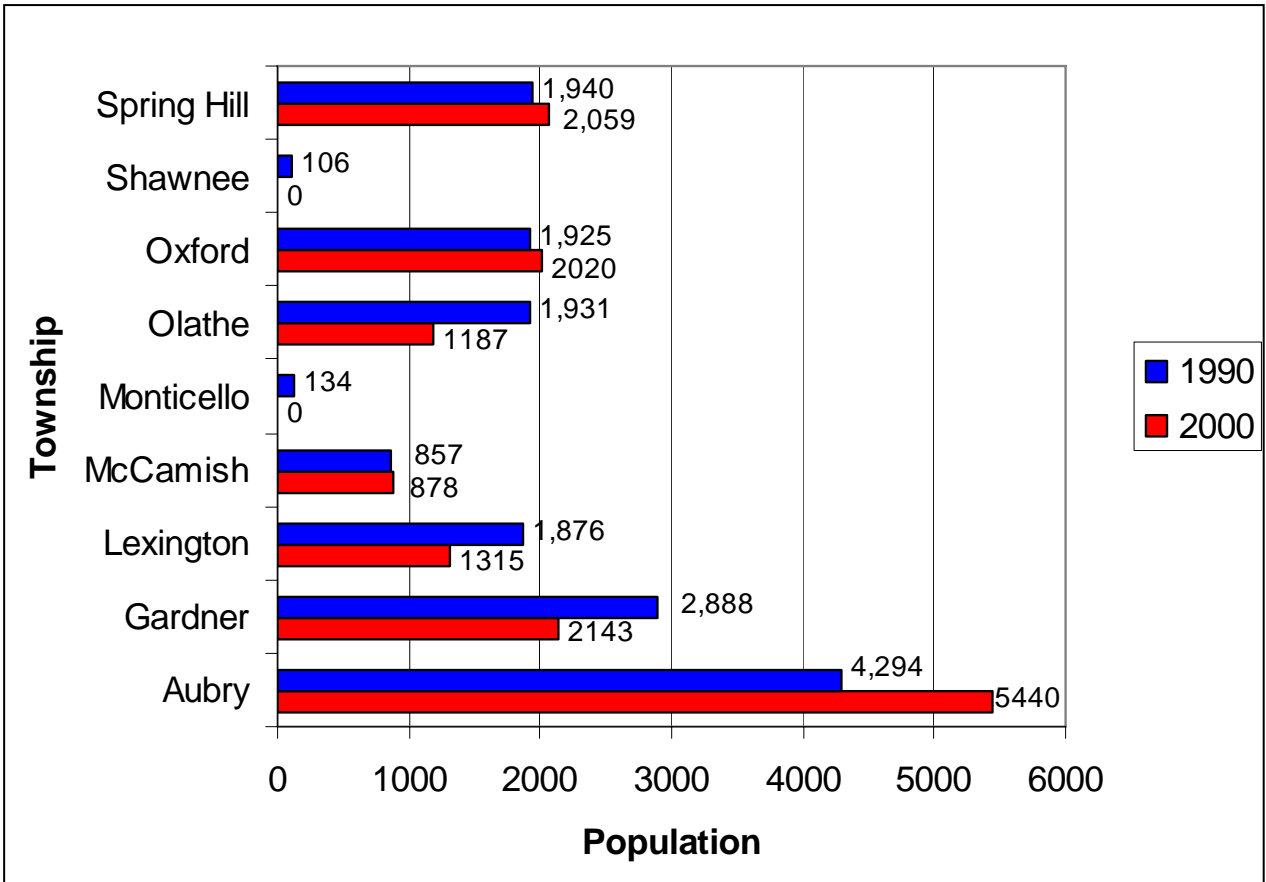
#### 9.1 Countywide Forecast

The Mid-American Regional Council (MARC) has forecast Johnson County's population to increase from 451,086 in 2000 to 644,559 in 2020. This would be a 43% increase of 193,473 persons, or an average of approximately 9,675 persons annually for the next 20 years. This is similar to the previous 20-year trend in population growth for the County.

Table 24, entitled Johnson County Population Forecast, on the following page shows the County' population growth from 1980 to 2000, and the MARC forecast for population growth for the years 2010 and 2020 are highlighted.

PART II -- Chapter 7: PATTERNS AND TRENDS

FIGURE 3: JOHNSON COUNTY TOWNSHIP COMPARISON 1990 AND 2000



JOHNSON COUNTY POPULATION FORECAST  
MID AMERICA REGIONAL COUNCIL (MARC), 2002

TABLE 24: JOHNSON COUNTY POPULATION FORECAST

Year	Population	Change	% Change
1980	270,069		
1990	355,054	84,985	31%
2000	451,086	96,032	27%
2010	550,904	99,818	22%
2020	644,559	93,655	17%

## PART II -- Chapter 7: PATTERNS AND TRENDS

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### 9.2 Unincorporated Area Forecast

Developing a population forecast specifically for the unincorporated area of Johnson County is difficult due to the way U.S. Census information is tabulated. The census tract boundaries used by the U.S. Census Bureau for Johnson County overlap city and unincorporated area boundaries, making it difficult to differentiate jurisdictional populations. Therefore, although not exclusively for the unincorporated area, the following MARC forecast provides a useful estimate of the extent of the overall growth that may be expected in the southern and western portions of the County outside of the current urbanized area.

Generally the unincorporated area of Johnson County is forecast to account for approximately 25% of the County's population growth between 2000 and 2020 will. Over this 20-year period, MARC forecasts an increase of approximately 45,500 persons that will live within the approximately 225 square miles that now makes up the unincorporated area of Johnson County.

It is imperative to note, however, that of this forecasted increase, most of the population growth is expected to occur within the County's urban fringe and rural cities as these communities continue to expand and annex over time and as infrastructure becomes available (e.g., sanitary sewers). Overland Park and Olathe are the County's two major urban fringe cities expected to continue their expansion and the smaller rural communities of Gardner, Spring Hill, De Soto, and Edgerton also have plans to expand their boundaries over time.

Equally imperative to note is that over this 20-year period, population growth within the remaining unincorporated area is anticipated to continue to be low. This is

because much of the future development anticipated to occur within the unincorporated area outside of cities would continue to be relatively slow and low-density (1 dwelling per 10 acres), particularly in comparison to the growth within the County's cities.

This low level of growth is due, in part, to the limited availability of infrastructure to support denser development and is substantiated by the past 10-year trend of an annual average of approximately 100 residential building permits being issued within the unincorporated area compared to approximately 4,840 residential permits issued within the cities over the same period.

Table 25, Johnson County Rural and Urbanized Area Population Forecast on the following page, is based on the MARC, *Kansas City Regional Forecast 2002*. This table shows current and forecasted population within the area designated by MARC as the "Balance of Johnson County." This area is comprised of the southern and western portions of the County, including the townships of Lexington, McCamish, Gardner, Spring Hill, and Aubry, and the rural cities of Gardner, De Soto, Spring Hill and Edgerton that are located within these five townships. The table shows 29,539 persons living within the area designated as the Balance of Johnson County in 2000 and 44,571 and 75,040 persons in this same area forecasted respectively for 2010 and 2020.

In contrast, the vast majority of the County's population now lives in and is forecast to live in the area designated by MARC as the "Urbanized Area" of Johnson County. Table 25 shows 421,547 persons living within the Urbanized Area in 2000 and 506,333 and 569,519 persons forecasted to live in the same area respectively for 2010 and 2020.

**PART II -- Chapter 7: PATTERNS AND TRENDS**

**TABLE 25: JOHNSON COUNTY RURAL AND URBANIZED AREA POPULATION FORECAST**

Rural Area	2000	2010	2020
Lexington Township	5,876	9,440	12,767
McCamish Township	2,318	2,481	2,627
Gardner Township	11,553	16,640	23,822
Spring Hill Township	4,350	5,144	9,936
Aubry Township	5,442	10,866	25,888
Township Total or "Balance of Johnson County"	29,539	44,571	75,040
Urbanized Area	421,547	506,333	569,519
Total	451,086	550,904	644,559



Townships

**10.0 DENSITY**

As the population has increased in Johnson County, so has density. Table 26, Johnson County Population Density, below illustrates this increase. In 1980 there were 567 persons per square mile in the County compared to 946 persons per square mile in 2000.

**TABLE 26: JOHNSON COUNTY POPULATION DENSITY**

Johnson County Population Density	
Year	Persons per square mile
1980	567
1990	745
2000	946

*Source: U.S. Census  
(Divided total population by 476.776 square miles.)*

Table 27, Percent of Land Area in Cities and Townships on the following page, provides a summary of density per square mile, total square miles, and population for each city and township in Johnson County for the year 2000.

While from 1980 to 1990, the townships in the unincorporated areas became more densely populated, this increased more slowly from 1990 to 2000. Table 28 on page 7-25 shows that in the 1990's the majority of the townships stabilized or the density went down. The two significantly denser townships are Aubry, which is the only one with a growing unincorporated village (Stilwell) and Oxford, which had a significant portion annexed into Overland Park in 2002. In general, Johnson County is becoming denser and more urban except for Gardner, Lexington, and McCamish Townships, and to a certain extent Spring Hill Township.

**PART II -- Chapter 7: PATTERNS AND TRENDS**

**TABLE 27: PERCENT OF LAND AREA IN CITIES AND TOWNSHIPS**

	Density	Land Area		% Of Total
	Persons/ Sq. Mi.	Sq. Mi. (2000)	Population (2000)	Sq. Mi. in County
<b>CITIES</b>				
Westwood Hills	5,512	0.1	378	0.01%
Roeland Park	4,198	1.6	6,817	0.34%
Mission	3,846	2.5	9,727	0.53%
Westwood	3,792	0.4	1,533	0.08%
Prairie Village	3,547	6.2	22,072	1.31%
Fairway	3,469	1.1	3,952	0.24%
Overland Park	2,627	56.7	149,080	11.93%
Merriam	2,551	4.3	11,008	0.91%
Countryside	2,450	0.1	295	0.03%
Gardner	1,898	4.9	9,396	1.04%
Leawood	1,833	15.1	27,656	3.17%
Mission Hills	1,783	2	3,593	0.42%
Olathe	1,716	54.2	92,962	11.37%
Mission Woods	1,519	0.1	165	0.02%
Lenexa	1,174	34.3	40,238	7.20%
Shawnee	1,150	41.7	47,996	8.76%
Edgerton	1,128	1.3	1,440	0.27%
Lake Quivira	894	1	883	0.21%
Spring Hill	852	2.7	2,291	0.56%
De Soto	403	11.3	4,561	2.38%
Bonner Springs	2	0.5	1	0.10%
<b>City Subtotal</b>	<b>1800</b>	<b>242.3</b>	<b>451,086</b>	<b>50.81%</b>
<b>TOWNSHIPS</b>				
	<b>Density</b>	<b>Land</b>	<b>Pop.</b>	<b>%</b>
Oxford	313	6.5	2,020	1.36%
Aubry	112	48.7	5,440	10.22%
Spring Hill	76	27.1	2,059	5.69%
Olathe	70	16.9	1,187	3.56%
Gardner	55	39.3	2,143	8.25%
Lexington	25	52.1	1,315	10.94%
McCamish	20	43.4	878	9.10%
Monticello	0	0.4	0	0.08%
Shawnee	0	0.1	0	0.02%
<b>Township Subtotal</b>	<b>64</b>	<b>235</b>	<b>15,042</b>	<b>49.19%</b>
<b>County Totals</b>	<b>946.1</b>	<b>476.8</b>	<b>451,086</b>	<b>100.00%</b>
<i>Source: U. S. Census, 2000</i>				

## PART II -- Chapter 7: PATTERNS AND TRENDS

**TABLE 28. TOWNSHIP AREA AND DENSITY, 1990 - 2000**

Township	1980		1990		2000	
	Area	Density	Land Area	Density	Land Area	Density
	Sq. Mi.	Persons/ Sq. Mi.	Sq. Mi.	Persons/ Sq. Mi.	Sq. Mi.	Persons/ Sq. Mi.
Aubry	49.5	62	49.5	87	48.7	112
Gardner	42.25	61	42	69	39.3	55
Lexington	61	32	57.4	33	52.1	25
McCamish	44.5	21	44	20	43.4	20
Monticello	32.8	86	5.6	24	0.4	0
Olathe	38.8	40	28	69	16.9	70
Oxford	18.3	136	7	275	6.5	313
Shawnee	6.3	98	0.1	1060	0.1	0
Spring Hill	29	55	27.5	71	27.1	76
Totals and Averages	321	55	261.1	61	235	64

*Source: U.S. Census Bureau, and 1980 Johnson County Comprehensive Plan*

### 11.0 EMPLOYMENT AND BUSINESS GROWTH

#### 11.1 Countywide Labor Force

Johnson County's labor force has been the largest in Kansas since 1993. Employment growth within Johnson County over the past 30 years reflects that the County has evolved from a residential service oriented economy to a viable component of the metropolitan regional economic base. According to Johnson County Economic Research Institute (CERI) in 2000, there were more jobs available in Johnson County than there were Johnson County residents to be employed.

Table 29 on the following page, entitled Johnson County, Sedgwick County, and Kansas Labor Force Comparisons, shows the number of persons in the labor force for Johnson and Sedgwick Counties and for Kansas from 1990 through 2000. The labor force is generally comprised of County residents over 18. The table shows that in 2000, Johnson County had a larger

labor force than Sedgwick County and that Johnson County's labor force accounted for 19% of the total Kansas labor force.

#### 11.2 Countywide Jobs/Employment

Table 30 also on the following page shows that, according to MARC, between 1970 and 2000 the number of jobs available in Johnson County increased from 73,232 to 364,721. MARC has forecast Johnson County's jobs to increase to 487,210 in 2010, and to 590,731 in 2020.

#### 11.3 Countywide Business Growth

Table 31 also on the following page, entitled Johnson County Business Establishments, shows the large growth in businesses for various years between 1975 and 1999. During this period, nearly 10,800 new businesses have opened in Johnson County. Between 1990 and 1999 just over 3,900 businesses opened, for an average of 430 new businesses each year.



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**TABLE 29: JOHNSON COUNTY, SEDGWICK COUNTY, AND KANSAS LABOR FORCE COMPARISONS**

Year	Johnson County	% of Kansas	Sedgwick County	% of Kansas	Kansas Labor Force
1990	211,356	16.6%	216,499	17.0%	1,276,000
1995	234,976	17.6%	219,011	16.4%	1,338,000
2000	269,773	19.1%	235,385	16.7%	1,411,000

*Sources: County Economic Research Institute, Inc. & Kansas Department of Human Resources*

**TABLE 30: JOHNSON COUNTY TOTAL JOBS, 1970 - 2020**

Year	Number	Percent Difference
1970	73,232	--
1980	145,973	99%
1990	241,291	65%
2000	364,721	51%
2010	487,210	34%
2020	590,731	21%

*Source: Mid America Regional Council*

**TABLE 31: JOHNSON COUNTY BUSINESS ESTABLISHMENTS**

Year	Johnson County Business Establishments
1975	4,718
1980	6,539
1985	9,571
1990	11,601
1995	13,622
1996	14,043
1997	14,793
1998	14,971
1999	15,507

*Source: U.S. Census Bureau*

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### 12.0 EMPLOYEES BY INDUSTRY

#### 12.1 Countywide Employment

Johnson County's four largest labor sectors are: 1) Education, Health and Social Services, 2) Professional, Scientific, Management, Administrative and Waste Management, 3) Retail Trade, and 4) Finance, Insurance, Real Estate and Rental and Leasing.

(Note: the incorporated Johnson County figures include total workers from Lake Quivira and Spring Hill, which also have land areas in Wyandotte and Miami Counties, respectively.) Figure 4, on the following page, shows the percentage of workers by industry for the incorporated areas of Johnson County.

#### 12.2 Unincorporated Area Industry Employment

When comparing incorporated and unincorporated Johnson County, it is noted that the percentage of workers in each sector are very similar. The significant differences are in the Construction and Agriculture areas. Even though the incorporated area employs more agriculture workers (694) as compared to the unincorporated area's 275, the unincorporated area has a significantly higher percentage of agricultural workers at 3.2% (incorporated 0.3%). Construction is the other big difference at 5.3% for the incorporated area and 9.3% of unincorporated workers.

Figure 5, on the following page, shows the percentage of workers by industry for the unincorporated area of Johnson County.

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FIGURE 4: JOHNSON COUNTY WORKERS BY INDUSTRY (2000)

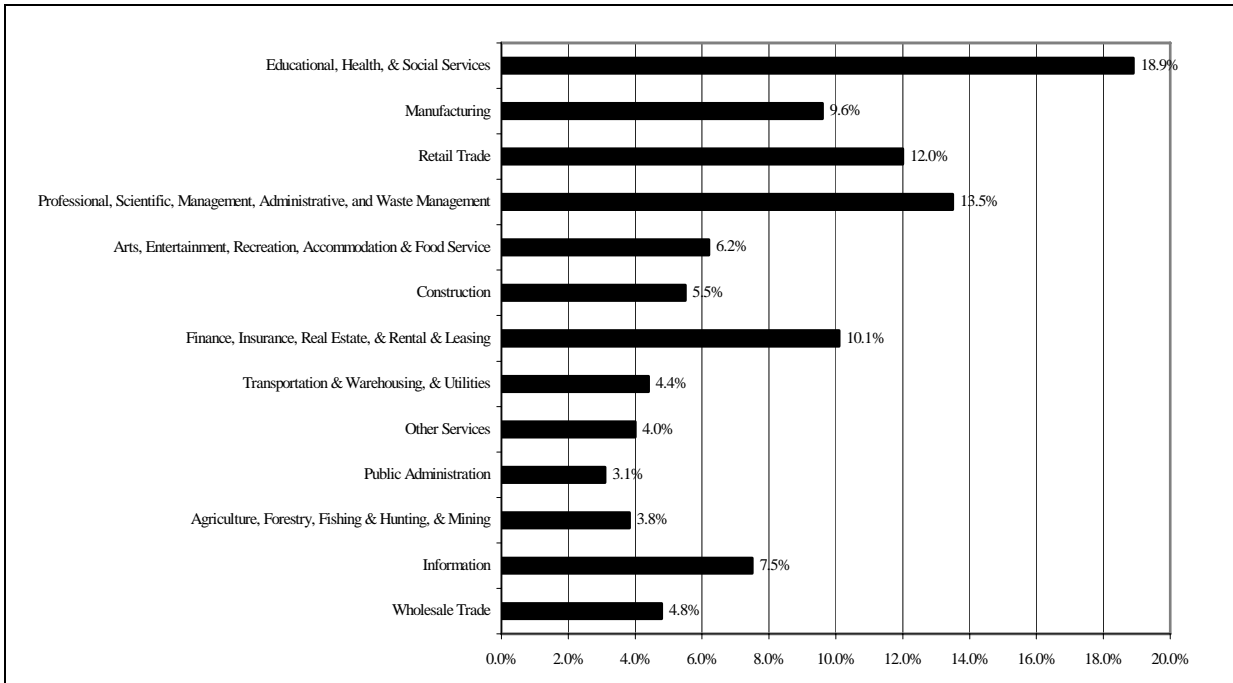
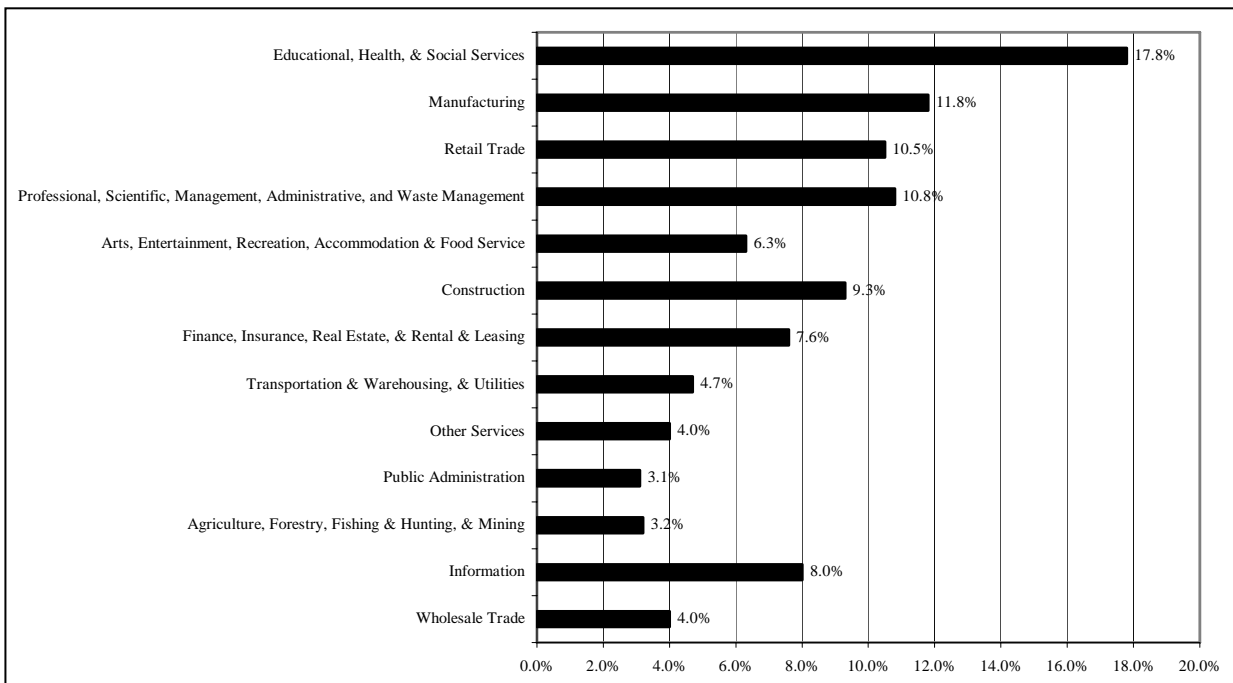


FIGURE 5: UNINCORPORATED JOHNSON COUNTY WORKERS BY INDUSTRY (2000)



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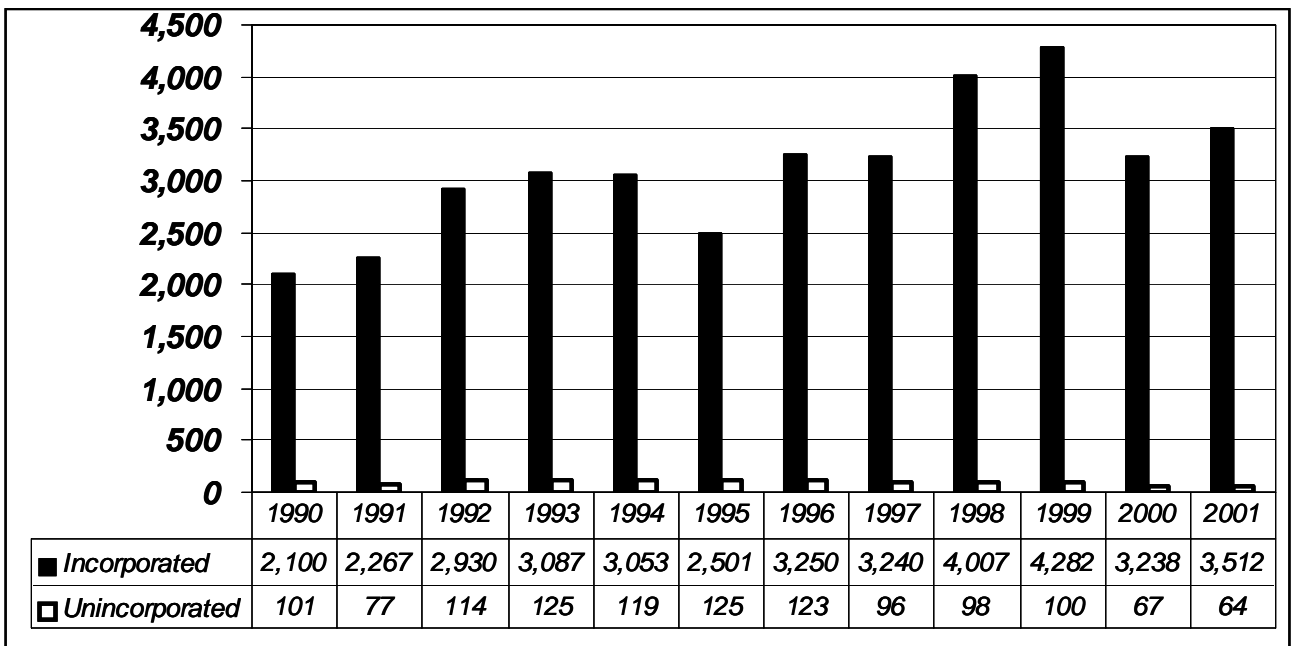
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**13.0 BUILDING PERMITS - RESIDENTIAL**

Within the unincorporated area of Johnson County from 1990 to 2001, an average of 100 single-family building permits were issued each year, compared to a combined average of 3,122 permits issued by the cities in the County.

Figure 6 below, entitled Johnson County Single-Family Building Permits 1990-2001, shows a comparison of the building permits issued by these two areas.

**FIGURE 6: JOHNSON COUNTY SINGLE-FAMILY BUILDING PERMITS (1990-2001)**



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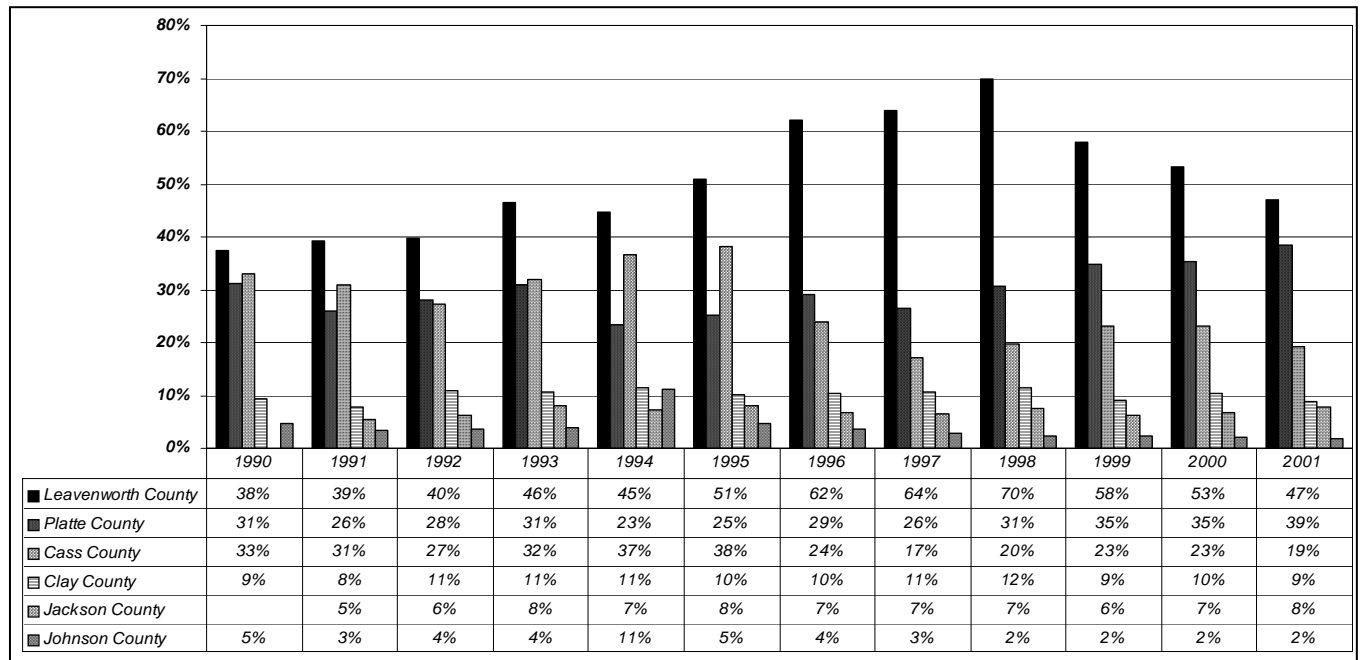
Table 32 below, entitled Single-Family Building Permits Unincorporated Areas, shows the number of permits issued in Johnson County and each of the five other counties within the region. When unincorporated Johnson County is

compared to other unincorporated areas around Kansas City, Johnson County is found to be issuing the least amount of single-family building permits and the lowest percentage of total permits, see Figure 7 below.

**TABLE 32. SINGLE FAMILY BUILDING PERMITS – UNINCORPORATED AREAS**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Leavenworth County	117	108	143	137	154	146	216	215	261	237	187	160
Cass County	157	160	179	220	246	220	144	116	129	162	136	117
Platte County	126	112	176	167	130	120	169	153	171	234	196	201
Jackson County		88	134	173	168	171	157	134	153	148	133	157
Clay County	83	74	129	119	146	139	160	147	160	138	132	111
<b>Johnson County</b>	101	77	114	125	119	125	123	96	98	100	67	64

**FIGURE 7. UNINCORPORATED AREAS PERCENT OF TOTAL SINGLE-FAMILY BUILDING PERMITS ISSUED BY COUNTY**



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As previously noted and shown in Table 33, below, the Aubry Township has had the most residential building permits issued in unincorporated Johnson County, followed by Olathe and Oxford Townships. These

unincorporated areas are influenced by the growth of the cities of Overland Park and Olathe, following the southerly development pattern radiating out of Kansas City.

**TABLE 33: SINGLE-FAMILY BUILDING PERMITS, UNINCORPORATED JOHNSON COUNTY BY TOWNSHIPS (1980, 1990, 2000)**

TOWNSHIP	1980	1990	Difference 1980 - 1990	2000	Difference 1990 - 2000	Total 1980 - 2000
Aubry	26	45	19	23	-22	94
Gardner	15	16	1	7	-9	38
Lexington	10	11	1	13	2	34
McCamish	9	5	-4	4	-1	18
Monticello	20	0	-20*	0	0	20
Olathe	10	13	3	22	9	45
Oxford	23	9	-14**	13	4	45
Shawnee	0	0	0	0	0	0
Spring Hill	9	11	2	20	9	40
<b>TOTALS</b>	<b>122</b>	<b>110</b>		<b>102</b>		<b>334</b>
<i>Source: Johnson County Planning, Development, and Codes Department</i>						

\*Nearly all of Monticello Township was annexed into Shawnee or Lenexa in the late 1980s.

\*\*A large part of Oxford Township was annexed into Overland Park and Leawood in the mid-1980s.

Various portions of unincorporated Johnson County are suitable for and reflect different types of developments and residential densities. Those areas having appropriate environmental conditions, available utilities and a generally favorable community sentiment toward development (e.g., eastern Aubry Township) lend themselves to more intensive development. In contrast, other areas, which are largely agricultural in nature without basic support facilities, reflect their relatively greater distance from the urbanized area or may be indicative of an overall community desire to maintain its rural character (e.g., McCamish Township).

### 14.0 BUILDING PERMITS – COMMERCIAL AND INDUSTRIAL

As noted, there are relatively few commercial or industrial uses in the unincorporated areas of the County. The few areas of commercial and industrial development that do occur are generally located within New Century AirCenter (a County-owned former naval air station) and along the major thoroughfares such as I-35, 69 Highway, and 169 Highway. Besides New Century AirCenter, much of the property that is zoned commercial or industrial obtained such zoning before 1986. Much of this land has remained undeveloped possibly because of the lack of

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public facilities, or because the real estate market has not yet reached these remote rural areas.

While the overwhelming majority of commercial and industrial construction occurs within cities, around 18 commercial and industrial building permits are issued each year for the unincorporated area. Primarily, these permits have been issued in the New Century AirCenter in Gardner Township and along the South Metcalf corridor in Oxford and Aubry Townships. (see Table 34, below.)

There is some pressure for the small-unincorporated community of Stilwell to have commercial uses, but the lack of adequate infrastructure limits this type of growth.

**TABLE 34: UNINCORPORATED JOHNSON COUNTY  
COMMERCIAL AND INDUSTRIAL PERMITS, 1995-2000**

	1995	1996	1997	1998	1999	2000	Total
Aubry	2	6	4	1	8	8	29
Gardner	4	4	9	10	10	0	37
Lexington	0	0	0	0	0	4	4
McCamish	0	0	0	0	0	0	0
Monticello	0	0	0	0	0	1	1
Olathe	0	2	1	0	1	1	5
Oxford	3	5	7	6	5	4	30
Shawnee	0	1	0	1	0	0	2
Spring Hill	0	1	0	0	0	0	1
<b>Total</b>	<b>9</b>	<b>19</b>	<b>21</b>	<b>18</b>	<b>24</b>	<b>18</b>	<b>109</b>

*Source: Johnson County Planning, Development, and Codes Department*

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### 15.0 GROWTH AREAS

Notable features influencing future development within the unincorporated area of Johnson County include:

- New Century AirCenter,
- Former Sunflower Army Ammunition Plant,
- Blue Valley Middle School and High Schools,
- Big Bull Creek Park,
- Heritage Park,
- Kill Creek Park,
- Gardner Lake,
- Major transportation corridors (K-7 Highway, K-10 Highway, Interstate 35, Interstate 435, U.S. 56 Highway, U.S. 69 Highway, and U.S. 169 Highway), and
- The Aubry/Stillwell area.

There are locations within unincorporated Johnson County, which, due to prior private and public investment decisions, are experiencing growth pressures. Concentrated development within these areas will require greater attention to land use relationships, environmental constraints, traffic circulation, and coordinated and fundable levels of public improvements and services. In addition, these potential growth centers will probably affect activity and development patterns throughout the County, so they are of countywide importance. The primary growth areas are described as follows:

- The eastern portions of the Blue Valley area (Oxford Township and Aubry Township);

- The New Century AirCenter;
- The proposed and developing sanitary sewer districts in the Indian Creek, Tomahawk Creek, Blue River, Mill Creek and Cedar Creek drainage basins, (e.g. the Cedar Creek Development located within the city limits of Olathe, west of K-7 Highway, within Cedar Creek Sewer Sub-District #1); and
- The K-10 Highway corridor located within north central and northwestern Johnson County.

Certain village areas platted years ago with small lots and narrow streets for predominantly residential dwellings are undergoing a transition to more intense uses. These include, for example, the shift from residential to commercial and industrial uses in Stilwell. As this shift in the intensity of property uses occurs, residential dwellings within these areas may be negatively impacted. These areas should be given special attention related to the appropriate direction for, and orderly transition of land uses.

### 16.0 FORECASTED GROWTH TRENDS

As noted above, recent employment growth and current construction activity indicate sustained economic growth in the County in the near term. Long-range forecasts are more difficult to formulate because they are dependent on external factors that contribute to the health of the local and regional economy.

According to regional forecasts by MARC in 2002 and shown on Table 35 on the following page, the metropolitan economy should experience steady growth through the year 2010. MARC forecasts that Johnson County will account for 44% of all the new households in the region; 47% of



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all employment gains; and 50% of the region's new population from 2000 to 2010. Recent construction activity shows that economic growth, both in the metropolitan area and in Johnson County, is in line with those forecasts. To facilitate and accommodate this trend, the County's implementation of the goals, policies, and action steps contained in Chapter 2 of the Plan will help to promote orderly and coordinated growth.

In recent years, the ability to attract economic growth has become more important to sustain the population of an area. Declining family size and the increase of labor force to population ratio makes population growth more dependent upon employment growth. The MARC study forecasted an annual average population growth rate of 2.1% for

Johnson County from 2000 to 2020. The population projection assumes that the economy will continue to expand through the year 2020 at a slower pace than was experienced from 1995 to 2000.

According to this projection, Johnson County's population will continue to experience steady growth but because of the larger population base, the rate of growth would slow. The County's rate of population growth between 1990 and 2000 was 27%. The rate of growth between 2000 and 2010 is forecast by MARC to be 22%, and down to 14% between 2020 and 2030. The table below provides a summary of the MARC forecasts for Johnson County and the Kansas City metropolitan area to the year 2030.

TABLE 35. KANSAS CITY REGIONAL POPULATION FORECAST

County	1970	1980	1990	2000	2010	2020	2030	1970-00	2000-30
Jackson	654,178	629,266	633,232	654,857	684,840	702,429	719,372	679	64,515
Clay	123,702	136,488	153,411	184,006	212,386	236,914	260,275	60,304	76,269
Platte	32,081	46,341	57,867	73,781	88,432	101,488	113,752	41,700	39,971
Wyandotte	186,845	172,335	162,026	157,901	157,417	154,800	151,816	-28,944	-6,085
<b>Johnson</b>	<b>220,073</b>	<b>270,269</b>	<b>355,054</b>	<b>451,086</b>	<b>550,904</b>	<b>644,559</b>	<b>733,334</b>	<b>231,013</b>	<b>282,248</b>
Cass	39,488	51,029	63,808	82,092	101,004	119,018	135,942	42,644	53,850
Leavenworth	53,340	54,809	64,371	68,695	75,032	80,471	85,715	15,355	17,020
Ray	17,599	21,378	21,971	23,346	24,383	25,192	25,948	5,747	2,602
Region	1,327,266	1,381,915	1,511,740	1,695,764	1,894,399	2,064,872	2,226,154	368,498	530,390

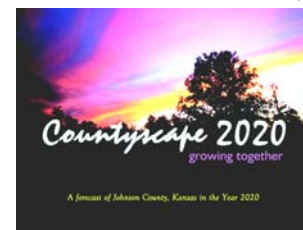
Source: MARC, 2002.

### 17.0 DEVELOPMENT CORRIDORS – UNINCORPORATED AREA

The following is a general forecast of how development is envisioned to evolve in the developing areas of southern and western Johnson County. This forecast is taken from excerpts of *Countyscape 2020*, which is part of the Board of County Commissioner's 2001 Strategic Plan.

The intent here is to establish a general idea for where and what type of development may be expected to occur in the existing rural portions of the County.

*Countyscape 2020* was written as if one were able to look ahead to 2020 and describe what "will have



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occurred". The following, therefore, is a summary of the development anticipated to have occurred along, or near by, these major transportation corridors relative to future development in the unincorporated area of Johnson County.

It should be noted, however, that based upon the goals, policies and action steps in Chapter 2 of the Plan, most of the development referenced in the following excerpts from *Countyscape 2020* will have occurred within areas annexed by cities that have adequate public resources, services, and infrastructure to support the extent of development envisioned.

### 17.1 I-35 Highway Corridor

The I-35 Highway corridor will have continued to be an important direct route from Johnson County to downtown Kansas City, Missouri, and a major connection to the regional Interstate, U.S., and State highway network. Development along this traffic route will have continued to be highway-oriented commercial uses with increasing warehouse/ freight operations taking advantage of adjacency to the North American Free Trade Agreement (NAFTA) highway trade route connecting Mexico and Canada to the Mid-West.

New Century AirCenter will have become a major employment center for light manufacturing and will have an important role in NAFTA. The businesses at the AirCenter will have helped to diversify the County's economy and provide a major source for light manufacturing labor.

Both the cities of Olathe and Gardner will have taken advantage of their strategic locations on I-35 along with their rail access. Both cities will have experienced significant light manufacturing and warehouse development next to this major traffic corridor. Olathe's residential development east of Highway 169 will have

reached 175<sup>th</sup> Street, as new sewers will have been installed there.

As recommended in Gardner's 1998 *Comprehensive Plan*, the major share of the city's residential development will have occurred on the west side of the community and its industrial development will have occurred in New Century AirCenter and on the city's east side near I-35.

Through working cooperatively, the County and the cities of Gardner and Olathe will have prevented the kind of development near the AirCenter that would conflict with intensive aviation activity. This cooperation will have enabled the AirCenter to expand to accommodate the continually growing demand for air transport service.

New development regulations prepared by the County in coordination with Gardner Lake residents will have been tailored to the special needs of this lake-front community. The Gardner Lake community will have become fully developed and the lake will have been completely restored for recreational use.

The city of Edgerton will also have benefited from its location adjacent to I-35. Although its growth will have been modest compared to other Johnson County cities, Edgerton will have taken advantage of its location near the newly developed Big Bull Creek Park to the east and Hillsdale Reservoir in Miami County to the south.

Building on the successful restoration and conversion of its old historic downtown bank to a new library, Edgerton will have adhered to its comprehensive plan prepared in 2000. This growing community will have provided a convenient location for residents seeking a "small town" feeling along with quality low-cost housing and relatively convenient access from I-35 to

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major employment centers within the County and in the region.

### **17.2 K-10 Highway Corridor**

As envisioned by the County and the K-10 Association in the early 1990s, the K-10 Highway corridor will have become an increasingly important traffic artery as well as a location for high quality residential and high-tech development. Daily traffic volumes between Lawrence and Lenexa will have reached 60,000 vehicles as forecast by the Kansas Department of Transportation (KDOT) in 2000.

The completion of the combined Cedar Creek/Kill Creek Wastewater Treatment Facility will have enabled new urban density development to have occurred along the K-10 Highway corridor between K-7 Highway and Edgerton Road, just west of De Soto. This new development will have been a mix of residential and non-residential uses, including development in the former Sunflower Army Ammunition Plant property.

Because of its strategic location on K-10, the city of De Soto will have significantly increased its population. It will have become a growing employment center as well as a community known for its excellent school system and offering a wide range of housing opportunities. In cooperation with the County, De Soto will have managed the development along the K-10 Highway in accordance with the plans and regulations jointly adopted by both jurisdictions in 2000. The attractive appearance of development along the K-10 corridor will be orderly and will reflect positively as a gateway to Johnson County as well as to De Soto.

### **17.3 Sunflower Army Ammunition Plant**

The 14 square mile Sunflower Army Ammunition Plant will have been

transferred by the U.S. Army to a private developer and cleaned to EPA residential standards. The mixed-use development that will have occurred there will have followed the *Land Use Concept Plan - "Community in a Park"* adopted by the County for the site in 1998.

The 2,500-acre greenbelt park surrounding the site will have been developed as part of the County's adjacent Kill Creek Regional Park with an extensive network of pedestrian and bicycle trails interconnecting with the regional trails system. A complete and updated system of utilities, including sanitary sewers will serve the site. The neo-traditional town center will have been gradually developing as planned as the commercial and cultural center of the community. Mixed, primarily low-density, residential development will have been increasing in areas that will have been remediated. New schools and a library will serve the community.

As recommended in the *Sunflower Army Ammunition Plant Plan*, development of the business park on the north portion of the site will have included a growing number of high tech, research and development firms. These new businesses will have provided jobs for local and regional residents. A multi-modal transportation facility will have provided transportation options, including bus service, carpooling, and light rail. Direct bus service will have been available to the KU campus and downtown Lawrence as well as to eastern Johnson County and the metropolitan area.

### **17.4 U. S. Highway 169 Corridor**

Development along U.S. Highway 169 will have been restricted in accordance with the comprehensive plans of Olathe, Spring Hill, and the County. Continued commercial development will have occurred in Olathe near the U.S. Highway 169 and I-35

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interchange at 151<sup>st</sup> Street. This development will have included further expansion of Olathe Hospital and nearly full development of the area north of the Great Mall that will have been redeveloped as a mixed office, retail, and hospitality center serving the growing south central portion of the County.

Development in Spring Hill will have been in three directions along U.S. Highway 169. Large-lot residential development will have occurred to the west near the city's golf course, along with some mixed residential and manufacturing development occurring to the north. South, into Miami County, Spring Hill's development will have been primarily residential with some limited commercial uses to serve the growing neighborhoods in this area.

### **17.5 U. S. Highway 69 Corridor**

Developments along U.S. Highway 69 will have been well planned and will have adhered to the Blue Valley Area Plan prepared jointly in 1996 by Johnson County and the City of Overland Park. As new sewers will have become available, limited commercial development will have been allowed to expand, primarily to serve the growing residential population in the surrounding area.

Because of its convenient access to U.S. Highway 69 and to Metcalf Avenue, the Aubry/Stilwell community will have continued to grow in population. Within 20 years, sanitary sewers will have reached this area enabling commercial development as well as increased residential development to have occurred. This development will have been similar to a small village development with limited neighborhood services and conveniences, including a small community center with cultural and recreational facilities (pool, outdoor play areas, etc.) to serve the growing population.

### **18.0 FUTURE ANNEXATION BOUNDARIES**

In preparation for coordinated growth and orderly development, four cities within the County have established boundary agreements for future annexations. In 1988, the Cities of Gardner and Olathe established such an agreement and then in 1989, the City of De Soto joined into a similar annexation agreement with both Gardner and Olathe. In 2003, the Cities of Olathe and Spring Hill also entered into an annexation agreement.

Map 11, Annexation Boundary Agreements, on the following page shows the locations of these agreed upon future city boundaries.

MAP 11: ANNEXATION BOUNDARY AGREEMENTS

