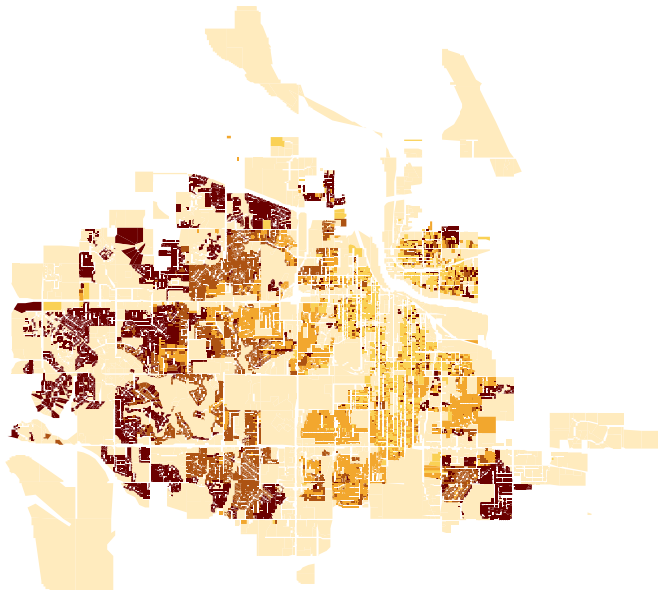


Research  
Report

**The Pace of Growth of  
Real Estate Development in  
Lawrence, Kansas**

**How the City has let the Growth of Supply  
Outpace the Growth of Demand**



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## **Executive Summary**

Lawrence has grown in population and income, and that is good. But the growth in real estate development has outpaced the demand for that real estate, and that is bad. It causes disinvestment and blight, and all too often the taxpayers suffer.

### *Housing Development*

Demand Growth over Time: Population.

From 1990 to 2000, the population grew:

- About 700 households per year,
- About 2.0 percent per year.

Since 2000, the population is growing more slowly at:

- About 400 households per year,
- About 1.7 percent per year.

Supply Growth over Time: Housing Stock.

From 1990 to 2000, the housing stock grew:

- About 900 units per year,
- About 3.0 percent per year.

Since 2000:

- The housing stock grew by 800 units per year
- Stock grew by 2.1 percent per year

Matching growth in demand with growth in supply.

Developers have added units at a much greater rate than the growth in population:

- During the 1990s, the growth of supply outpaced the growth of demand by 200 units per year.
- Since 2000, the growth of supply outpaced the growth of demand by 400 units per year.

The surplus stock totals to about 5,000 units. This means that developers have built surplus units that are more than the size of Eudora, all within the city limits of Lawrence.

Implications:

- The surplus has brought about an out-migration from older neighborhoods resulting in a loss of units.
- The loss of units resulted in a loss of value and deterioration in the city's older neighborhoods.

*Retail Development*

Demand Growth over Time: Retail Spending:

- Inflation adjusted growth in retail spending since 2000 is growing at 0.2 percent per year, enough to support about only 25,000 to 30,000 additional square feet per year.

Supply Growth over Time: Retail Space:

- From 2000 through 2007, the stock of retail square feet is growing at 3.1 percent or about 150,000 square feet per year.

Matching growth in demand with growth in supply:

- From 1995 through 2007, the supply of space grew at a rate of over four times the pace of growth of demand for that space
- From 2000 through 2007, the supply of space grew at a rate of over ten times the pace of growth of demand for that space

Implications:

- The developers added about 1.3 million square feet beyond what the growth in retail spending could support. This is approximately the size of the retail space in the entire downtown or about one-fourth of the total stock of space.
- The situation is rapidly becoming worse as an additional 750,000 square feet of space have been approved for West 6<sup>th</sup> Street from Folks Road to the South Lawrence Trafficway. If all of this space is built, it will swell the stock of surplus space to over two million square feet.
- The surplus development has stalled redevelopment plans downtown and has pushed the vacancy rates so high that disinvestment and blight now threaten several older shopping centers.

*Industrial, Warehousing, and Office Development*

Demand Growth over Time: Employment:

- Employment growth in the community is an indicator of the growth in demand for industrial, warehousing, and office space.
- Employment growth, like population growth, has slowed since 2000. It has declined for manufacturing and warehousing jobs but continues to grow slowly for office jobs.

Supply Growth over Time: Industrial, Warehouse and Office Space:

- Manufacturing space grows in incremental steps as facilities are added. However, there have been no significant additions to the stock of manufacturing space since 2003.
- The supply of warehousing space is growing at about 2 percent per year, adding about 85,000 square feet each year.
- Office space is growing at about 2.3 percent per year, adding about 67,000 square feet each year.

Matching growth in demand with growth in supply:

- Manufacturing space has stabilized with no additions because demand for the space is contracting rather than growing. This means that empty space is available on the market.
- Warehouse space is growing despite declining employment. This means a surplus condition exists.
- Office space is growing slowly at a rate close to the rate of growth in employment.

Implications:

- Manufacturing space is usually owner-occupied; little is developed on a speculative basis. Ventures into speculative industrial space very often fails as it has in Lawrence. The “Spec Building” in the East Hills Industrial Park has been empty ever since it was built years ago.
- While the stock of space has stabilized in size, employment in the sector has fallen (both locally and nationally) indicating declining, not growing, demand for this type of space.

- Warehousing space is growing, despite stagnant employment in this sector of the economy. This means that the community has little need for additional space.
- The office sector is reasonably balanced with growth in supply closely matching growth in employment, but the market is negatively impacted by the surplus of retail space that is being offered as office space.

*Conclusions.*

Growing supply faster than growth in demand adds to costs.

- Infrastructure: Unneeded roads, sewer lines, water lines are built to service this space.
- Services: Police and fire protection must be provided even if the space is empty.

Growing supply faster than growth in demand does not stimulate more demand.

- Lawrence has been overbuilt for years.
  - Surplus housing has not attracted more population.
  - Surplus retail stores have not attracted more vendors.
  - Surplus industrial and warehouse space has not attracted more employers.

Growing supply faster than growth in demand causes older areas to deteriorate.

- Older neighborhoods are not receiving sufficient investment in the form of replacement homes and improvements to existing homes to maintain their value.
- Older neighborhoods are losing value, schools and people.
- Downtown, which is one of Lawrence's strongest attractions, is stagnating and failing to attract vendors into its newly renovated shops.
- Employment centers sit empty while the City rushes to build more.

*Lessons to learn*

Growth in supply is not growth in demand

- City (and county) leaders, and their planners, should view it as part of their job to fix a failure in the marketplace, which is the propensity to overbuild.

- These leaders should view it as their job to keep the growth of supply in balance with the growth in demand. This means limiting growth to just that amount that can be absorbed without harm to the community at large.
- In housing, no more permits should be issued than the growth in population indicates can be absorbed.
- In retail, no more permits should be issued than the growth in retail spending indicates can be absorbed.
- In industrial and office space, no more permits should be issued than the growth in employment indicates can be absorbed.

The community is overbuilt, and a long cooling off period is needed. The city should stop adding to the problem and work toward redirecting growth into existing space.

- Because this overbuilding has been allowed to go on for so long, the community has a large stock of unused and underutilized space.
- The community needs to stop the overbuilding and permit only very selective development that can clearly demonstrate that it responds to an unmet need, despite the surplus stock that exists.
- In the housing sector, the city needs to take steps to redirect growth away from new sprawling subdivisions on the perimeter of the city and toward the older neighborhoods that are suffering from disinvestment and decay.
- In the retail sector, the city needs to protect and enhance its downtown, the retail district that attracts the coveted tourist dollars. The city needs to stop the unneeded expansion of retail space at the perimeter of the city and help to redirect retail spending to the downtown and the other shopping centers distributed around the city.
- In the industrial and office sector, the city needs to carefully gauge the pace of growth of employment and limit the expansion of employment centers, whether office parks, industrial parks, or other form of employment center, to just that level that can be absorbed.
- None of these steps means a complete moratorium on development. Moratoria have been tried and failed in other communities. Except in a few short-term situations, they do not work. (See Asabere and Huffman. 2001.)

- However, city leaders need to realize that the stock of real estate is in trouble largely because the city has pursued a pace of growth that cannot be sustained. The large stock of surplus housing is causing the deterioration and decay of the city's older neighborhoods. The large stock of surplus retail space is causing the deterioration and decay of the city's older shopping centers, and it is inhibiting the redevelopment of the downtown. The large stock of employment centers is far beyond what the city needs and causes older employment centers to suffer from disinvestment.

With such a large stock of surplus space, the city needs to exercise extreme caution before allowing more space to be built.

- In the housing sector, the city should stop the development of any new subdivisions until it is clear that more are needed. Evidence of this would be found in low vacancies among existing homes and small inventories of homes for sale.
- In the retail sector, the city should avoid adding to the problem by approving any more retail proposals. However, from time to time, a neighborhood center may be needed because it will serve a newer subdivision that does not have a neighborhood center. Despite the retail market being overbuilt, some small quantity of new space may be needed to service the homes in this new subdivision. However, the city has approved several new retail developments that, if built, will be harmful to the city as a whole. Some of these developments cannot go further because they are unable to obtain the needed leases to leverage loans from banks. The development permission given to these projects runs for 18 months. As this permission expires, it is customary for the city to grant extensions without scrutiny of the impact of these unneeded projects upon the remainder of the city. This should be stopped. Until such time as the city can easily absorb new space without hurting existing shopping districts, the city should stop renewing the development approvals. When these retail developments come up for renewal, they should be shelved.
- In the industrial and office sector, the city should avoid adding to the problem of surplus employment centers. While land needs to be available for the small number of new firms that may locate in Lawrence, there is already an ample stock of unused and underutilized buildings. The city should make every effort to make use of these structures before sprawling into new sites. In addition, the city should make every effort to use the existing employment center land before bringing more onto the market. Sprawling development, whether housing or manufacturing or

office space, adds unnecessary and costly public improvements, and it stretches city services that are already stretched.

**The Pace of Growth of Real Estate Development in Lawrence, Kansas:  
How the City has let the Growth of Supply Outpace the Growth of Demand**

**HOUSING**

***Growth in demand for housing: Population Growth***

Growth in population is what drives demand for new real estate development. It is the uncontrollable factor in the development process. People are free to move into and out of a community. Their incomes may grow, fall, or stagnate. This movement of population and the changes of the population's income is what drive the real estate development process.

If developers accurately match the growth of supply with the growth in demand, then market equilibrium is achieved and cities prosper.

If developers build too little space, then the existing supply will experience low vacancy rates and rapid price appreciation. While this is a windfall for the owners of existing property, it creates a hardship for consumers seeking to buy homes or to find shopping opportunities. It can also create the loss of business expansion opportunities.

If developers build too much space, then the total supply of space will experience high vacancy rates and low or no price appreciation. This will discourage investment in existing real estate because it will compete poorly with the newly built space. This reduced investment hastens the deterioration of properties and leads to blight. Existing property owners experience reduced values and the community as a whole suffers due to a reduced capacity to attract new growth and a diminished tax base. While low prices help consumers seeking to buy homes, the reduced value, deterioration, and blight hurts the entire community.

Table 1 shows that the growth in population has slowed in Lawrence, although the population is still growing. During the 1990s, the population grew by about 2.0 percent per year. Since 2000, this growth has slowed to about 1.7 percent per year, still a healthy growth rate. However, there are signs that this may be an overly optimistic estimate and that the true growth rate may be lower. These signs include high rental housing vacancy rates, large inventories of unsold new homes, very sluggish retail sales growth, and slow growth in the number of jobs.

The population forms itself into households. A household is one or more persons who occupy a dwelling unit. As housing becomes more plentiful or prices fall or incomes rise, these conditions permit the population to form more households with a smaller average household size. This often results in the rate of household formation growing faster than the pace of population growth. As housing becomes more scarce or prices rise, or income falls, the rate of household formation usually falls below the pace of growth of the population.

In Lawrence during the 1990s, the city saw households form faster than population growth, helping to absorb the housing units that were built. However since 2000, the rate of household formation has fallen off dramatically. Households are growing at only 1.2 percent per year while the population is growing at 1.7 percent per year. As households are growing slower than population, it means that the population is forming fewer and larger households. This will aggravate the surplus housing condition that exists now as the reduced rate of household formation translates into weakening demand for these surplus housing units.

**Table 1. Growth in Population and Households 1990 to 2007**

<b>Population</b>					
<i>Year</i>	<i>Total Population</i>	<i>Population Added</i>	<i>Annual Growth Rate</i>	<i>Source</i>	
1990	65,657			1990 Census	
2000	80,083	14,426	2.0%	Census 2000	
2006	88,587	8,504	1.7%	American Community Survey 2006	
2007	89,852	9,769	1.7%	Census Population Estimates Program	
<b>Households</b>					
<i>Year</i>	<i>Total Households</i>	<i>Households Added</i>	<i>Annual Growth Rate</i>	<i>Source</i>	
1990	24,522			1990 Census	
2000	31,435	6,913	2.5%	Census 2000	
2006	33,743	2,308	1.2%	American Community Survey 2006	

Source: U.S. Bureau of the Census, 1990 Census, Census 2000, American Community Survey, Census Population Estimates Program

***Growth in Housing Supply***

The housing stock is growing each year, many units are built and a few units are demolished. It is possible to look at the size of the stock and determine the net growth (additions minus demolitions) over time. This measures the growth in supply.

This housing stock is really two sets of housing units, single-family homes and multi-family homes. Single-family are largely owner-occupied, while multi-family are largely renter-occupied. Lawrence has about 41,000 housing units with 19,000 of these being single-family detached units. The remaining 22,000 units contain about 6,000 townhouses (single-family attached homes) with 16,000 multi-family units.

*Single-Family Homes*

The pace of growth of the stock of single-family homes has been relatively steady. During the 1990s, the single-family stock grew by 412 units per year. This paced slowed to 378 units per year after 2000.

As a percentage, these additional units indicate that the single-family stock grew by 3.1 percent per year during the 1990s. From 2000 through 2007, the pace fell off to 2.1 percent per year. (See Table 2.)

**Table 2. Single-Family Homes by Year Built**

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<i>Year Built</i>	<i>Total Units</i>	<i>Units Added</i>	<i>Percent Growth</i>
1990 or earlier	11,988	328	
1991	12,370	382	3.2%
1992	12,810	440	3.6%
1993	13,244	434	3.4%
1994	13,736	492	3.7%
1995	14,162	426	3.1%
1996	14,546	384	2.7%
1997	15,002	456	3.1%
1998	15,363	361	2.4%
1999	15,782	419	2.7%
2000	16,228	446	2.8%
2001	16,696	468	2.9%
2002	17,097	401	2.4%
2003	17,544	447	2.6%
2004	17,859	315	1.8%
2005	18,283	424	2.4%
2006	18,617	334	1.8%
2007	18,809	192	1.0%

412 Average units added per year 1990-1999  
 378 Average units added per year 2000-2007

3.1% Annual growth rate 1990 through 1999  
 2.1% Annual growth rate 2000 through 2007

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Source: Office of the County Appraiser, Douglas County, Kansas

*Multi-Family Homes*

The multi-family stock grew and continues to grow at comparable rates. During the 1990s, multifamily stock grew by 462 units per year. This pace fell slightly, to 419 units per year, from 2000 through 2007. This translates into annual growth rates of 3.0 percent per year during the 1990s and 2.1 percent per year since 2000.

Table 3. **Multi-family Units by Year Built**

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<i>Year Built</i>	<i>Total Units</i>	<i>Units Added</i>	<i>Percent Growth</i>
1990	14,121	369	2.7%
1991	14,534	413	2.9%
1992	15,051	517	3.6%
1993	15,542	491	3.3%
1994	16,086	544	3.5%
1995	16,578	492	3.1%
1996	17,009	431	2.6%
1997	17,529	520	3.1%
1998	17,917	388	2.2%
1999	18,376	459	2.6%
2000	18,846	470	2.6%
2001	19,370	524	2.8%
2002	19,806	436	2.3%
2003	20,263	457	2.3%
2004	20,588	325	1.6%
2005	21,068	480	2.3%
2006	21,451	383	1.8%
2007	21,730	279	1.3%

462 Average units added per year 1990-1999

419 Average units added per year 2000-2007

3.0% Annual growth rate 1990 through 1999

2.1% Annual growth rate 2000 through 2007

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Source: Office of the County Appraiser, Douglas County, Kansas

*All Homes (Single-Family plus Multi-family)*

The pace of growth of the complete stock of homes, including both single-family and multi-family units, has been brisk. Nearly 900 units per year were added during the 1990s and falling only slightly to about 800 units per year in the years since 2000. This means a pace of growth of 3.0 percent per year before 2000 and 2.1 percent per year after.

**Table 4. Housing Units by Year Built**

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<i>Year Built</i>	<i>Total Units</i>	<i>Units Added</i>	<i>Percent Growth</i>
1990 or earlier	26,109	697	2.7%
1991	26,904	795	3.0%
1992	27,861	957	3.6%
1993	28,786	925	3.3%
1994	29,822	1,036	3.6%
1995	30,740	918	3.1%
1996	31,555	815	2.7%
1997	32,531	976	3.1%
1998	33,280	749	2.3%
1999	34,158	878	2.6%
2000	35,074	916	2.7%
2001	36,066	992	2.8%
2002	36,903	837	2.3%
2003	37,807	904	2.4%
2004	38,447	640	1.7%
2005	39,351	904	2.4%
2006	40,068	717	1.8%
2007	40,539	471	1.2%

875 Average units added per year 1990-1999  
798 Average units added per year 2000-2007

3.0% Annual growth rate 1990 through 1999  
2.1% Annual growth rate 2000 through 2007

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Source: Office of the County Appraiser, Douglas County, Kansas

*Matching the Growth in the Demand for Housing with the Growth in Supply*

The pace of growth of housing supply has far outstripped the growth in demand for that housing.

Table 5.      **Housing Units by Year Built**

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	<i>Demand</i>	<i>Supply</i>	<i>Surplus</i>
	<i>Households added per year</i>	<i>Housing units added per year</i>	<i>Excess housing added per year</i>
1990 through 1999	691	875	183
2000 through 2007	385	798	413

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Source: Douglas County, Kansas Tax Appraiser's Office  
U.S. Bureau of the Census, 1990 Census, Census 2000, American Community Survey, Census Population Estimates Program

Over the 17-year period from 1990 through 2007, the builders and developers of Lawrence have added about 300 surplus units per year for a total of about 5,000 units. This is about 12 percent of the total supply of homes.

This does not mean that all of the homes added were not necessary. However, it does mean that many of the homes were not needed. The stock grew by 849 units per year from 1990 through 2007. The population growth suggests that the housing stock should have grown by only 542 households per year. Thus, most of the additional housing units were needed, about 550 units per year. However, of the approximately 850 units added each year, about 300 simply added to the overall surplus.

**The Implications of Excessive Growth in Housing.**

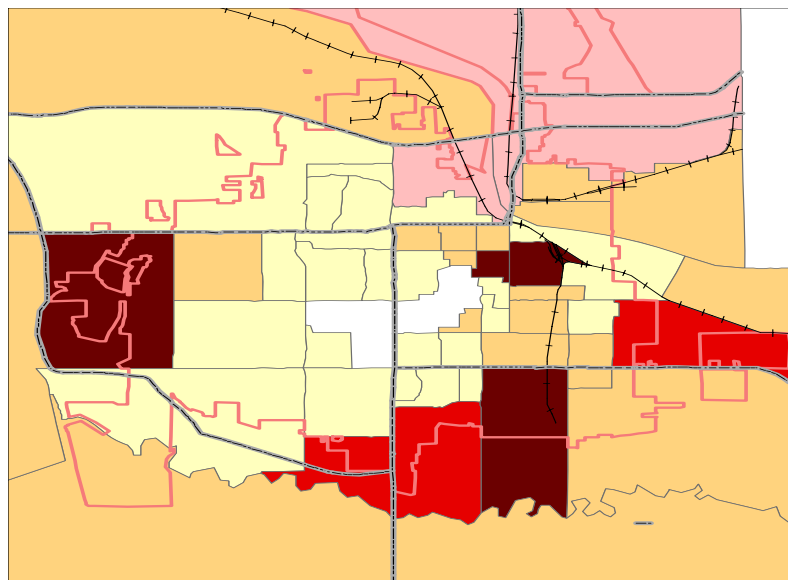
The implications of building up a large surplus are dramatic. They are:

*1. Home values fail to rise in the older neighborhoods*







Home values in Lawrence rose for many years. During the 1990s, the typical home rose in value by 67 percent which is over twice the rate of inflation, which rose about 32 percent over the decade. This appreciation in home values varied widely across the city. In the extreme eastern and southern parts of the city, values actually fell. In North Lawrence, home values rose, but they did not keep pace with inflation. In far western Lawrence and a few neighborhoods of central Lawrence, homes appreciated at very

Map 1. **Median Home Value Gained or Lost 1990 to 2000**  
**Block Groups of Lawrence**

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**Change in median home values 1990 to 2000**

-  City Limits of Lawrence
-  Lost Value
-  Gained less than inflation (32%)
-  Gained less than city average (67%)
-  Gained 67% to 120%
-  Gained more than 120%

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Source: U.S. Bureau of the Census, 1990 Census and Census 2000  
GeoLytics, Inc. CensusCD 1990 Long Form Data in 2000 Boundaries.

high rates, gaining more than 120 percent over the decade. Finally, for many parts of the city, the homes did appreciate but that appreciation fell below the city average of 67 percent.

Some variation is to be expected. As new, very expensive homes are added to a very high-priced subdivision, median home values will show a rapid rise. In older, very modestly priced neighborhoods, appreciation rates will be lower. However, for a growing community, the growth should be well distributed such that no neighborhood actually loses value. Despite Lawrence's growth, several neighborhoods have lost value and some have witnessed such meager growth that the value of the homes has not kept up with inflation.

## *2. The population leaves older neighborhoods as it migrates to the newer units*

The population is not growing in all parts of the community. The growth is disproportionately found in the western and southeastern parts of the city. The central and eastern parts of Lawrence, plus North Lawrence, are losing population.

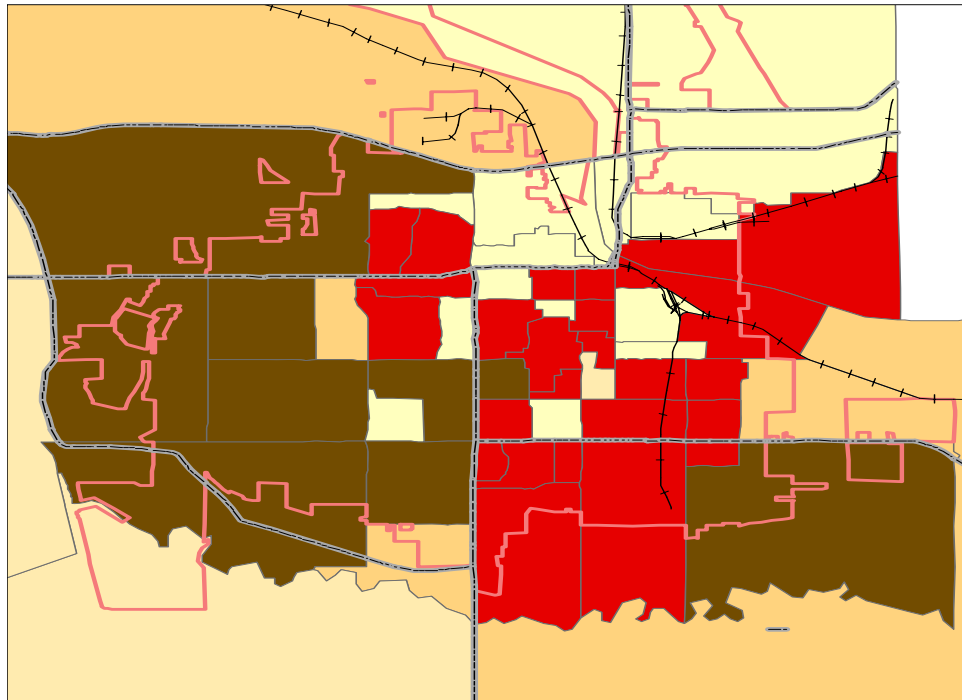
Map 2 illustrates the neighborhoods of Lawrence in terms of population change. Rather than every neighborhood enjoying some measure of the benefits of growth, a select few neighborhoods are growing while others are suffering losses in population.

Map 3 shows that neighborhoods in Lawrence also range widely in terms of the change in the count of housing units from 1990 to 2000. Those neighborhoods in the western and southeastern parts of the city experienced strong growth. This growth reflects the new subdivisions added. However, other neighborhoods did not fare so well. Many neighborhood in the central and eastern parts of the city actually lost units.







In a growing city, there is no reason that any neighborhood should lose housing units. Smart growth management would direct the growth well so that all neighborhoods would benefit from the growth.

Map 2. **Population gained for lost 1990 to 2000  
Block Groups of Lawrence**

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**Population Gained or Lost**

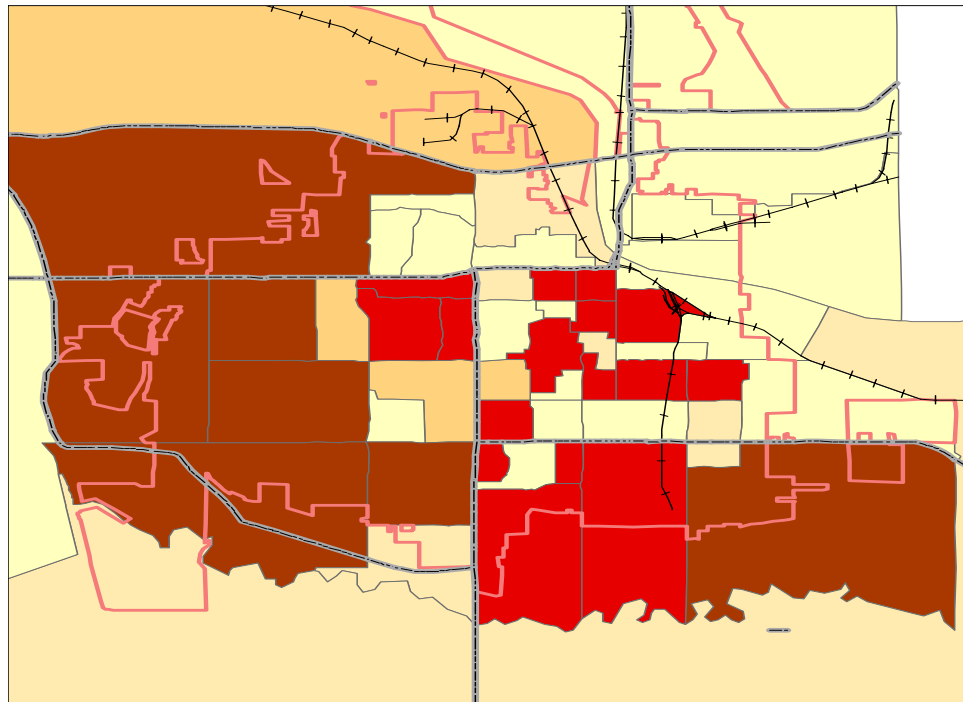
-  City Limits of Lawrence
-  Lost 1 to 370 people
-  Gained 1 to 200 people
-  Gained 201 to 400 people
-  Gained 401 to 1000 people
-  Gained 1001 to 2800 people

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Source: U.S. Bureau of the Census, 1990 Census and Census 2000  
GeoLytics, Inc. CensusCD 1990 Long Form Data in 2000 Boundaries.

Map 3. **Housing units gained for lost 1990 to 2000  
Block Groups of Lawrence**

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**Housing Units Gained or Lost**

- City Limits of Lawrence
- Lost up to 150
- Gained 1 to 100
- Gained 201 to 200
- Gained 201 to 400
- Gained 401 to 1100

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Source: U.S. Bureau of the Census, 1990 Census and Census 2000  
GeoLytics, Inc. CensusCD 1990 Long Form Data in 2000 Boundaries.

## RETAIL SPACE

The demand for retail space is approximated well by retail spending. As spending grows, the demand for retail space grows. Lawrence imposes a local retail sales tax at 1 percent of spending. The growth in this retail sales tax revenue shows the growth in demand for retail space in Lawrence. These sales tax dollars need to be adjusted for inflation. The Consumer Price Index (CPI) for the Kansas City Metropolitan has been used to make this adjustment.

### Growth in Demand for Retail Space: Growth in Retail Spending

Table 6. Growth in Retail Spending

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Year	Retail Sales Taxes Current Dollars Fiscal Year	CPI	Retail Sales Tax Revenues 2007 Dollars	Annual Real Growth Rate
1995	8,457,814	145.3	11,320,490	
1996	8,310,127	151.6	10,660,588	-5.8%
1997	8,747,295	155.8	10,918,904	2.4%
1998	9,350,557	157.8	11,523,999	5.5%
1999	9,701,568	160.1	11,784,830	2.3%
2000	10,398,461	166.6	12,138,549	3.0%
2001	10,615,276	172.2	11,988,666	-1.2%
2002	10,730,359	174.0	11,993,273	0.0%
2003	10,876,300	177.0	11,950,350	-0.4%
2004	11,153,509	180.7	12,004,003	0.4%
2005	11,583,544	185.3	12,157,345	1.3%
2006	12,195,664	190.1	12,476,594	2.6%
2007	12,302,591	194.5	12,302,591	-1.4%
Annual Real Growth Rates				
1995 through 2007				0.7%
2000 through 2007				0.2%

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Sources: Kansas Department of Revenue.  
U.S. Bureau of Labor Statistics

Inflation adjusted retail sales tax dollars have fluctuated since 1995. The annual growth has been as high as 5.5 percent, and the annual decline has been as large as 5.8 percent. During 4 of the last 12 years, the city witnessed a reduction in real spending from one year to the next. It grew or stayed flat the other 8 years.

The growth in spending was higher in the early years of the period from 1995 through 2007. Overall, the growth was about 0.7 percent per year, but this has fallen to only 0.2 percent per year from 2000 to 2007.

This means that Lawrence can absorb only about 0.2 percent more retail space per year as that is the pace of growth of retail demand.

### **Growth in Supply of Retail Space**

Unfortunately, Lawrence has allowed its stock of retail space to grow much faster. Typically, Lawrence has allowed its stock of space to grow at 2.1 to 3.1 percent per year.

The amount of space added in any single year has varied widely from zero to over 300,000 square feet. However, the average growth has been about 150,000 square feet per year. This is approximately the equivalent of adding a new Target store every year.

While the pace of growth has slowed somewhat over the years, the pace remained high at over 2 percent per year from 2000 through 2007.

This already high pace of growth may grow even higher as the city has approved proposals by developers to add space at an even greater rate. These additions are located along West 6<sup>th</sup> Street from Folks Road out to the South Lawrence Trafficway.

Table 7. **Retail Space by Year Built**

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<i>Year built</i>	<i>Square Feet Cumulative</i>	<i>Square Feet Added</i>	<i>Annual Growth Rate</i>
Built prior to 1990	3,095,492		
1990	3,184,013	88,521	2.9%
1991	3,184,013	-	0.0%
1992	3,194,397	10,384	0.3%
1993	3,381,135	186,738	5.8%
1994	3,541,060	159,925	4.7%
1995	3,826,887	285,827	8.1%
1996	4,120,730	293,843	7.7%
1997	4,266,132	145,402	3.5%
1998	4,383,542	117,410	2.8%
1999	4,550,082	166,540	3.8%
2000	4,757,265	207,183	4.6%
2001	4,847,312	90,047	1.9%
2002	5,014,303	166,991	3.4%
2003	5,136,331	122,028	2.4%
2004	5,172,863	36,532	0.7%
2005	5,487,953	315,090	6.1%
2006	5,487,953	-	0.0%
2007	5,498,731	10,778	0.2%
Average square feet added			
1990 to 2007		133,513	
1990 to 1999		145,459	
1995 to 2007		150,590	
2000 to 2007		118,581	
Annual growth rate			
1990 to 2007			3.3%
1990 to 1999			3.6%
1995 to 2007			3.1%
2000 to 2007			2.1%

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Source: Office of the County Appraiser, Douglas County, Kansas

### Comparing Growth in Retail Demand with Growth in Retail Space

The pace of growth in demand for retail space has been insufficient to support all of the space that has been added. Retail demand grew by only 0.7 percent per year while the stock of space grew by 3.0 percent per year. This means that the supply of space grew at a rate of over four times the pace of growth of demand for that space.

In recent years, the situation actually worsened. The rate of growth in demand fell to only 0.2 percent per year from 2000 through 2007. The rate of growth in supply fell as well but not nearly enough to match the growth in demand. The supply continued to grow at 2.1 percent per year. Thus, retail space grew by 10 times that pace of growth in demand from 2000 through 2007.

This means that the stock of space was growing by 2 percent or more per year faster than the demand could support.

Table 8. **Comparing retail growth in demand and supply**

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	<i>Demand</i>	<i>Supply</i>	<i>Surplus</i>
<i>Annual Real Growth Rates</i>	<i>Retail Sales</i>	<i>Retail Square Feet</i>	<i>Growth Rates</i>
1995 through 2007	0.7%	3.0%	2.3%
2000 through 2007	0.2%	2.1%	1.9%

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Sources: Kansas Department of Revenue.  
U.S. Bureau of Labor Statistics  
Office of the County Appraiser, Douglas County, Kansas

Table 9 provides a way to assess the extent of the overbuilding in Lawrence. The table begins with the assumption that the market was balanced in 1995. This may or may not have been true. There may have been some level of surplus space in 1995. Both the Tanger and Riverfront malls were struggling to maintain occupancy. There certainly was no shortage of retail space at that time. The assumption that the market was balanced in 1995 may be overly optimistic. However, the demand data do not go back prior to 1995 necessitating some assumption be made about that year.

If the market was in balance in 1995, it would have been desirable to add retail space equal to the pace of growth in retail spending in the following years. In 1995, retail spending averaged \$296 per square foot in 2007 inflation adjusted dollars. Because the space grew faster than demand, the spending per square foot figure has fallen to \$224, a 24 percent drop. Had the \$296 spending level been maintained, the community would have grown to only 4.1 million square feet compared to the 5.5 million square feet that now exists. Thus, the developers added about 1.4 million square feet beyond what the growth in retail spending could support. This is approximately the size of all the retail space in the entire downtown. It comprises about one-fourth of the total stock of space.

Given the slow growth in retail spending, the market cannot support large increases in the stock of retail space if the market is to remain healthy. To stay at the desirable \$300 retail spending per square foot level, the city could absorb 330,000 square feet from 1995 to 2007. This translates into about 25,000 to 30,000 square feet per year. Instead, the city allowed developers to build an average of 139,000 square feet in each year.

As bad as the situation is now, it may become worse in the near future. Various City Commissions have approved the addition of even more retail space. A second Wal-Mart is being built at 6<sup>th</sup> Street and Wakarusa Drive, adding 132,000 square feet. Additional retail space is planned for that intersection both at the northeast corner (the Bauer Farms development at 72,000 square feet) and at the southeast corner (the expansion of the Dillon's store with 25,000 square feet). Additional retail space has been approved further west along 6<sup>th</sup> Street at the South Lawrence Trafficway. The Mercato development at the northeast corner of the intersection has been approved for 337,000 square feet. The Northgate development at the southeast corner of the intersection has been approved for 198,000 square feet. Both of these projects have stalled, but their approvals remain in force. If these developments are added to the stock of space, and demand continues to grow at the 0.2 percent rate experienced over the last eight years, then the surplus stock will grow to over 2 million square feet. This surplus stock would be about one-third of the entire stock.

Table 9. **Retail Space by Year Built, Actual and Projected**

Year	Retail Sales 2007 Dollars	Square Feet Retail Space	Sales per Square Foot	Square Feet If Balanced Growth	Surplus Square Feet
1995	1,132,049,008	3,826,887	295.8	3,826,887	-
1996	1,066,058,832	4,120,730	258.7	3,603,807	516,923
1997	1,091,890,362	4,266,132	255.9	3,691,131	575,001
1998	1,152,399,857	4,383,542	262.9	3,895,683	487,859
1999	1,178,482,975	4,550,082	259.0	3,983,857	566,225
2000	1,213,854,920	4,757,265	255.2	4,103,432	653,833
2001	1,198,866,586	4,847,312	247.3	4,052,764	794,548
2002	1,199,327,292	5,014,303	239.2	4,054,321	959,982
2003	1,195,034,999	5,136,331	232.7	4,039,811	1,096,520
2004	1,200,400,264	5,172,863	232.1	4,057,948	1,114,915
2005	1,215,734,514	5,487,953	221.5	4,109,786	1,378,167
2006	1,247,659,410	5,487,953	227.3	4,217,707	1,270,246
2007	1,230,259,050	5,498,731	223.7	4,158,886	1,339,845
2008	1,232,620,525	5,655,731	217.9	4,166,869	1,488,862
2009	1,234,986,532	6,263,445	197.2	4,174,867	2,088,578

<sup>1</sup> Add Walmart and Dillon's Expansion at 6th and Wakarusa

<sup>2</sup> Add Bauer Farms, Mercato, and Northgate

Sources: Kansas Department of Revenue.  
 U.S. Bureau of Labor Statistics.  
 Office of the County Appraiser, Douglas County, Kansas.  
 City of Lawrence, Planning Department.

## **Implications of an Overbuilt Retail Market**

This excessive growth in space has been very hard on the community. Many projects, both public and private, have failed.

### *Downtown*

- The Downtown 2000 project has been crippled. The community built the \$8 million parking garage in the 900 block of New Hampshire. About one half of the costs of this garage were to be paid for by the tax revenues to be generated by the office, hotel, residential and retail space planned for this project. It was never able to attract enough leases to make good on its promises. All that was built was a small building at 10<sup>th</sup> and New Hampshire with a fast-food restaurant. The office space in the upper floors is leased, in large part, by the city, a clear indication of weak demand for the space.
- The Hobbs-Taylor Building is one of the largest structures added to the downtown in decades. Its condominium units have been popular and sold briskly. However, the ground floor and second floor were intended for retail space and office space. The only tenants are participants in the ownership of the building. Thus, the speculative space available to the market remains empty.
- The west side of the 600 block of Massachusetts underwent significant redevelopment a few years ago. The retail space was rebuilt taking it from some of the weakest properties downtown to the very best. Thus, the health of these retail properties reflects the overall health of the retail market as they are the top locations. Presently, this space has large vacancies indicating an unhealthy market.
- The Riverfront Mall was a 150,000 square foot fashion outlet shopping center built in 1990 when the nation was adding this new type of shopping center at a frantic pace. It was added with a significant public investment as the city paid for the parking garage. The goal of the investment was to make the mall a downtown retail anchor that would revitalize the area and serve as a catalyst to further investment downtown. It failed. When it failed, there was insufficient interest in the property to continue its operation as a retail space. It was converted to a combination of hotel and office space and is no longer in the retail inventory.

### *North Lawrence*

- The Tanger Mall, another fashion outlet mall, was built in 1993, adding to the surplus of this type of space. It was planned as a larger facility, but the city asked Tanger to build it in phases to minimize the harm to the city if the market could not support this much space, especially this much fashion outlet mall space. Tanger built 95,500 of the total planned 135,000 square feet. Tanger's mall failed as well, leaving a vacant and deteriorating space in North Lawrence. In addition, the site to the south of the mall sits vacant and covered in weeds.

This is where the second phase of the mall was to be built. This empty mall has a blighting influence on the rest of North Lawrence, adding to its many problems with older deteriorated properties and insufficient demand so that they can be properly maintained.

- The Tanger Mall serves as an example of another problem generated by the surplus of retail space. Because the retail market is so glutted, the space is being offered for other uses, such as office space. This means that the regular office market must deal with competition from dead malls making it harder for the regular office space to find tenants.

*Elsewhere in the community*

- The community has many retail shopping centers that are struggling. The vacancy rate in a healthy mall should be no more than 5 percent, but few centers in Lawrence can maintain this level. Completely or nearly empty shopping centers can be found along North Second Street in North Lawrence (in addition to the Tanger Mall) and along East 23<sup>rd</sup> Street in East Lawrence. Other shopping centers are partially occupied but suffer from high vacancy rates. These can be found in North Lawrence, East Lawrence, South Iowa Street, and along West 23<sup>rd</sup> Street. Finally, what should be desirable locations are sitting empty. Some have never been occupied, such as the pad sites at the Home Depot center, and others were occupied but have been empty for a long period, such as the Pizzeria Uno building on South Iowa Street.

## MANUFACTURING, WAREHOUSE AND OFFICE SPACE

### Growth in Manufacturing, Warehouse and Office Employment

Employment data provide the best available indicator of the demand for manufacturing, warehouse, and office space. As this space is built, it seeks to attract firms that will hire workers. As the workforce grows, so grows the need for space for these workers. In order to fine tune the analysis, the workers can be categorized by industry. These categories include private sector manufacturing workers (a measure of demand for industrial space), private sector warehousing and distribution (a measure of demand for warehouse space), and the combined private sector categories of finance, insurance, restate, plus professional and health services (a measure of demand for office space).

Table 10. **Employment in the Manufacturing, Warehousing, and Office Sectors  
Non-Farm Private Sector Employees (in thousands)  
Douglas County, Kansas**

Year	Total	Manufacturing Goods Producing	Warehousing Trade Transportation Utilities	Office Business Health Ed serv
1990	25.2	5.1	5.6	4.8
1991	25.8	5.1	5.8	5.1
1992	27.1	5.4	5.9	5.6
1993	27.8	5.2	6.1	5.7
1994	29.3	5.6	6.7	6.1
1995	30.8	5.8	7.2	6.4
1996	31.8	6.0	7.5	6.6
1997	33.5	6.2	7.8	7.5
1998	34.5	6.2	8.1	8.1
1999	35.3	6.5	8.5	8.5
2000	35.6	6.8	8.6	8.8
2001	37.4	6.8	8.4	9.6
2002	36.8	6.8	8.0	9.5
2003	36.6	7.0	8.0	10.2
2004	37.2	7.1	8.2	10.5
2005	37.0	6.9	8.1	10.3
2006	37.2	6.6	8.0	10.3
2007	37.1	6.3	8.1	9.9
Annual growth rate				
1990 to 2007	2.3%	1.3%	2.2%	4.4%
1990 to 1999	3.8%	2.7%	4.7%	6.6%
2000 to 2007	0.6%	-1.1%	-0.9%	1.7%

Source: Kansas Department of Labor

Employment data by industry are not available for just the city of Lawrence, but they are available for Douglas County. Lawrence makes up 95 percent of the manufacturing space in the county, 94 percent of the warehousing space, and 95 percent of the office space in the county. This suggests that assessing the growth of employment and commercial space in Douglas County will provide a very good measure of the supply and demand conditions in Lawrence.

Private sector jobs in Douglas County have grown in most years since 1990. Only in the recession years of 2002, 2003 and 2005 were small declines experienced. Otherwise, the growth in jobs closely parallels the growth in population. The jobs grew by 3.8 percent per year during the robust 1990s, but they have slowed to a meager 0.6 percent since 2000, further suggesting that the current population growth estimates may be optimistic.

Significant variation is found across the categories of jobs.

Manufacturing grew slower than total job growth during the 1990s, peaking in 2003. However, manufacturing employment has declined since that peak with a net loss of over 1 percent per year since the year 2000.

Warehousing and distribution employment enjoyed a greater rate of increase than did total jobs in the 1990s peaking in 2000. However, this sector has also declined since 2000 at a rate of just below 1 percent per year.

Office employment has enjoyed growth throughout most years. However, as with the other sectors, office employment has peaked and begun to decline. The peak was in 2004 with a small decrease since that year.

### Growth in Supply of Manufacturing Space

Manufacturing space has grown at relatively stable rates, growing only 0.7 percent per year from 1990 through 2007. This compares favorably to the 1.3 percent annual increase in manufacturing employment. The problem in the industrial sector is that employment is now declining, not rising. This suggests that there will be less demand for industrial space in the future and that existing space is sitting empty.

Table 11. **Growth of Manufacturing Space**

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<i>Year built</i>	<i>Square Feet Cumulative</i>	<i>Square Feet Added</i>	<i>Annual Growth Rate</i>
Built prior to 1990	3,426,218		
1990	3,426,218	-	0.0%
1991	3,426,218	-	0.0%
1992	3,426,218	-	0.0%
1993	3,431,458	5,240	0.2%
1994	3,501,361	69,903	2.0%
1995	3,572,860	71,499	2.0%
1996	3,572,860	-	0.0%
1997	3,585,508	12,648	0.4%
1998	3,751,656	166,148	4.6%
1999	3,770,237	18,581	0.5%
2000	3,770,237	-	0.0%
2001	3,833,473	63,236	1.7%
2002	3,847,273	13,800	0.4%
2003	3,882,391	35,118	0.9%
2004	3,882,391		0.0%
2005	3,882,391	-	0.0%
2006	3,882,391	-	0.0%
2007	3,882,391	-	0.0%
Average square feet added			
1990 to 2007		26,834	
1990 to 1999		34,402	
2000 to 2007		16,022	
Annual growth rate			
1990 to 2007			0.7%
1990 to 1999			1.1%
2000 to 2007			0.4%

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Source: Office of the County Appraiser, Douglas County, Kansas.

### Growth in Supply of Warehouse Space

Warehouse space has grown between 2 and 3 percent per year since 1990. Again, this compares favorably with the pace of growth of warehouse employment. As with manufacturing space, the analysis is complicated by the decline in warehouse employment in recent years. The drop in employment was largely a one-time event in 2000; employment in this area has been flat since that time. This suggests that there may be little or no need for additional warehouse space in the near future.

Table 12. **Growth of Warehouse Space**

---

<i>Year built</i>	<i>Square Feet Cummulative</i>	<i>Square Feet Added</i>	<i>Annual Growth Rate</i>
Built prior to 1990	2,398,673		
1990	2,498,210	99,537	4.1%
1991	2,512,380	14,170	0.6%
1992	2,512,380	-	0.0%
1993	2,593,980	81,600	3.2%
1994	2,819,826	225,846	8.7%
1995	3,072,949	253,123	9.0%
1996	3,124,724	51,775	1.7%
1997	3,312,708	187,984	6.0%
1998	3,337,960	25,252	0.8%
1999	3,373,880	35,920	1.1%
2000	3,563,237	189,357	5.6%
2001	3,606,451	43,214	1.2%
2002	3,781,026	174,575	4.8%
2003	3,790,626	9,600	0.3%
2004	3,808,747	18,121	0.5%
2005	3,969,799	161,052	4.2%
2006	4,040,329	70,530	1.8%
2007	4,053,529	13,200	0.3%
Average square feet added			
1990 to 2007		91,936	
1990 to 1999		97,521	
2000 to 2007		84,956	
Annual growth rate			
1990 to 2007			2.9%
1990 to 1999			3.4%
2000 to 2007			1.9%

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Source: Office of the County Appraiser, Douglas County, Kansas.

### Growth in Supply of Office Space

The office space market has shown the most balanced growth of the real estate sectors in Lawrence. It grew by 4.1 percent per year during the 1990s and 2.3 percent per year

Table 13. **Growth of Office Space**

---

<i>Year built</i>	<i>Square Feet Cumulative</i>	<i>Square Feet Added</i>	<i>Annual Growth Rate</i>
Built prior to 1990	1,167,462		
1990	1,319,790	152,328	13.0%
1991	1,396,357	76,567	5.8%
1992	1,421,589	25,232	1.8%
1993	1,466,580	44,991	3.2%
1994	1,567,410	100,830	6.9%
1995	1,626,866	59,456	3.8%
1996	1,704,455	77,589	4.8%
1997	1,837,195	132,740	7.8%
1998	1,881,222	44,027	2.4%
1999	1,889,788	8,566	0.5%
2000	2,076,921	187,133	9.9%
2001	2,250,492	173,571	8.4%
2002	2,299,103	48,611	2.2%
2003	2,305,768	6,665	0.3%
2004	2,337,734	31,966	1.4%
2005	2,415,034	77,300	3.3%
2006	2,430,181	15,147	0.6%
2007	2,430,181	-	0.0%
Average square feet added			
1990 to 2007		70,151	
1990 to 1999		72,233	
2000 to 2007		67,549	
Annual growth rate			
1990 to 2007			3.7%
1990 to 1999			4.1%
2000 to 2007			2.3%

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Source: Office of the County Appraiser, Douglas County, Kansas.

during the years since 2000. This compares favorably to the growth rates in office employment. Employment growth grew faster than office space growth during the 1990s. However, employment growth has slowed to below 2 percent per year.

The office market is hurt by the surplus space found in the retail market. Surplus retail space is being used as office space in the Tanger Mall, the Southern Hills Mall, and the 10 Marketplace Mall. Because of this competition for office tenants, it is hard for office developers to fill their developments.

## **CONCLUSIONS**

When a city allows its supply to grow faster than the growth in demand, it adds to the costs of running the city. There are infrastructure costs including unneeded roads, sewer lines, water lines that are built to service this space. There are service costs must be absorbed including police and fire protection that must be provided even if the space is empty.

Allowing the supply of real estate to grow faster than the growth in demand does not stimulate more demand. Proof of this can be seen in our city's own history. Lawrence has been overbuilt for years. Yet, the surplus housing has not attracted more population. The surplus retail stores have not attracted more vendors. Finally, surplus industrial and warehouse space has not attracted more employers.

Growing supply faster than growth in demand causes older areas to deteriorate. Older neighborhoods are not receiving sufficient investment in the form of replacement homes and improvements to existing homes to maintain their value. Rather, older neighborhoods are losing value, schools and people.

The downtown, which is one of Lawrence's strongest attractions, is stagnating and failing to attract vendors into its newly renovated shops. Employment centers sit empty while the city rushes to build more.

There are lessons to learn from this experience.

Growth in supply is not growth in demand

City and county leaders, and their planners, should view it as part of their job to fix a failure in the marketplace, which is the propensity to overbuild. These leaders should view it as their job to keep the growth of supply in balance with the growth in demand. This means limiting growth to just that amount that can be absorbed without harm to the community at large.

- In housing, no more permits should be issued than the growth in population indicates can be absorbed.
- In retail, no more permits should be issued than the growth in retail spending indicates can be absorbed.
- In industrial and office space, no more permits should be issued than the growth in employment indicates can be absorbed.

The community is overbuilt, and a long cooling off period is needed. The city should stop adding to the problem and work toward redirecting growth into existing space.

- Because this overbuilding has been allowed to go on for so long, the community has a large stock of unused and underutilized space.
- The community needs to stop the overbuilding and permit only very selective development that can clearly demonstrate that it responds to an unmet need, despite the surplus stock that exists.

The city and (where applicable) the county need to address the problem in each sector.

- In the housing sector, the city needs to take steps to redirect growth away from new sprawling subdivisions on the perimeter of the city and toward the older neighborhoods that are suffering from disinvestment and decay.
- In the retail sector, the city needs to protect and enhance its downtown, the retail district that attracts the coveted tourist dollars. The city needs to stop the unneeded expansion of retail space at the perimeter of the city and help to redirect retail spending to the downtown and the other shopping centers distributed around the city.
- In the industrial and office sector, the city needs to carefully gauge the pace of growth of employment and limit the expansion of employment centers, whether office parks, industrial parks, or other form of employment center, to just that level that can be absorbed.

The responses need to be well reasoned and decided on a case-by-case basis.

- None of these steps means a complete moratorium on development. Moratoria have been tried and failed in other communities. Except in a few short-term situations, they do not work. (See Asabere and Huffman. 2001.)
- However, city leaders need to realize that the stock of real estate is in trouble largely because the city has pursued a pace of growth that cannot be sustained. The large stock of surplus housing is causing the deterioration and decay of the city's older neighborhoods. The large stock of surplus retail space is causing the deterioration and decay of the city's older shopping centers, and it is inhibiting the redevelopment of the downtown. The large stock of employment centers is far beyond what the city needs and causes older employment centers to suffer from disinvestment.

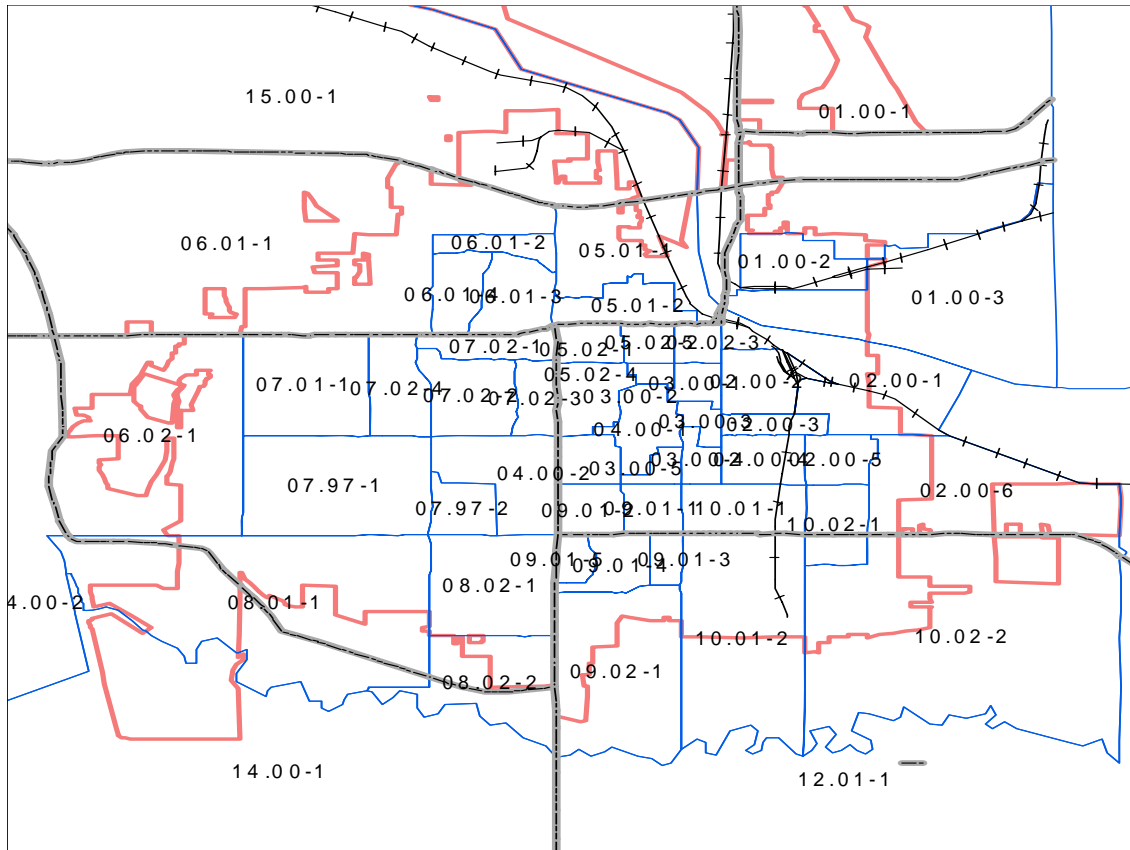
With such a large stock of surplus space, the city needs to exercise extreme caution before allowing more space to be built.

- In the housing sector, the city should stop the development of any new subdivisions until it is clear that more are needed. Evidence of this would be found in low vacancies among existing homes and small inventories of homes for sale.
- In the retail sector, the city should avoid adding to the problem by approving any more retail proposals. However, from time to time, a neighborhood center may be needed because it will serve a newer subdivision that does not have a neighborhood center. Despite the retail market being overbuilt, some small quantity of new space may be needed to service the homes in this new subdivision. However, the city has approved several new retail developments that, if built, will be harmful to the city as a whole. Some of these developments cannot go further because they are unable to obtain the needed leases to leverage loans from banks. The development permission given to these projects runs for 18 months. As this permission expires, it is customary for the city to grant extensions without scrutiny of the impact of these unneeded projects upon the remainder of the city. This should be stopped. Until such time as the city can easily absorb new space without hurting existing shopping districts, the city should stop renewing the development approvals. When these retail developments come up for renewal, they should be shelved.
- In the industrial and office sector, the city should avoid adding to the problem of surplus employment centers. While land needs to be available for the small number of new firms that may locate in Lawrence, there is already an ample stock of unused and underutilized buildings. The city should make every effort to make use of these structures before sprawling into new sites. In addition, the city should make every effort to use the existing employment center land before bringing more onto the market. Sprawling development, whether housing or manufacturing or office space, adds unnecessary and costly public improvements, and it stretches city services that are already stretched.



**Appendix**

Appendix

Map A-1. Block Groups of Douglas County



Census Block Groups and City Limits

-  Census Tract - Block Group
-  City Limits of Lawrence

**Table A-1. Block Group Data from the 1990 Census and Census 2000  
Block Groups of Lawrence, Kansas  
Population and Housing Units**

<i>Tract-Block Group</i>	<i>Area</i>	<i>2000 Population</i>	<i>1990 Population</i>	<i>Change in Population</i>	<i>2000 Housing Units</i>	<i>1990 Housing Units</i>	<i>Change in Housing Units</i>
01.00-1	Lawrence	588	580	8	259	229	30
01.00-2	Lawrence	1,205	1,068	137	517	465	52
01.00-3	Lawrence	754	812	-58	355	330	25
02.00-1	Lawrence	709	782	-73	375	315	60
02.00-2	Lawrence	1,549	1,529	20	742	752	-10
02.00-3	Lawrence	806	785	21	412	369	43
02.00-4	Lawrence	889	1,010	-121	498	513	-15
02.00-5	Lawrence	1,148	1,340	-192	501	538	-37
02.00-6	Lawrence	1,396	972	424	513	413	100
03.00-1	Lawrence	2,231	2,303	-72	876	881	-5
03.00-2	Lawrence	808	708	100	412	389	23
03.00-3	Lawrence	1,350	1,630	-280	804	680	124
03.00-4	Lawrence	1,876	1,641	235	569	715	-146
03.00-5	Lawrence	481	769	-288	215	197	18
04.00-1	Lawrence	409	562	-153	71	101	-30
04.00-2	Lawrence	5,543	4,328	1,215	832	607	225
05.01-1	Lawrence	2,067	2,004	63	923	805	118
05.01-2	Lawrence	1,559	1,391	168	776	733	43
05.02-1	Lawrence	1,206	1,063	143	674	489	185
05.02-2	Lawrence	959	1,068	-109	445	470	-25
05.02-3	Lawrence	568	583	-15	298	300	-2
05.02-4	Lawrence	2,823	3,180	-357	941	843	98
06.01-1	Lawrence	3,828	1,473	2,355	1,622	563	1,059
06.01-2	Lawrence	1,083	995	88	446	368	78
06.01-3	Lawrence	1,192	1,194	-2	588	565	23
06.01-4	Lawrence	1,565	1,593	-28	657	641	16
06.02-1	Lawrence	1,205	8	1,197	609	3	606
07.01-1	Lawrence	4,034	1,274	2,760	1,379	438	941
07.02-1	Lawrence	1,055	1,164	-109	465	523	-58
07.02-2	Lawrence	2,325	2,548	-223	1,098	1,112	-14
07.02-3	Lawrence	1,056	973	83	486	502	-16
07.02-4	Lawrence	1,847	1,303	544	718	457	261
07.97-1	Lawrence	3,713	2,436	1,277	1,621	1,143	478
07.97-2	Lawrence	1,248	1,208	40	586	522	64
08.01-1	Lawrence	3,448	1,139	2,309	1,432	457	975
08.02-1	Lawrence	4,805	3,711	1,094	2,012	1,551	461
08.02-2	Lawrence	1,065	653	412	445	273	172
09.01-1	Lawrence	628	583	45	231	224	7
09.01-2	Lawrence	1,261	1,631	-370	440	497	-57
09.01-3	Lawrence	1,062	1,119	-57	527	563	-36
09.01-4	Lawrence	1,941	2,116	-175	985	979	6
09.01-5	Lawrence	1,221	1,326	-105	712	718	-6
09.02-1	Lawrence	1,995	2,361	-366	848	953	-105
10.01-1	Lawrence	1,499	1,636	-137	765	745	20
10.01-2	Lawrence	1,080	1,275	-195	271	308	-37
10.02-1	Lawrence	1,977	2,065	-88	834	729	105
10.02-2	Lawrence	3,485	821	2,664	1,150	300	850
12.01-1	Lawrence	1,614	1,146	468	590	452	138
12.02-1	Eudora	1,233	1,017	216	487	421	66
12.02-2	Eudora	2,100	1,313	787	864	512	352
12.02-3	Eudora	2,109	1,590	519	729	559	170
12.03-1	Baldwin	1,035	727	308	352	272	80
12.03-2	Baldwin	1,608	1,023	585	611	354	257
12.03-3	Baldwin	1,193	1,093	100	371	344	27
12.03-4	Baldwin	1,579	1,728	-149	605	582	23
14.00-1	Clinton	1,867	1,494	373	662	505	157
14.00-2	Clinton	1,387	1,164	223	528	459	69
14.00-3	Clinton	1,295	1,101	194	582	391	191
15.00-1	Lecompton	1,257	590	667	513	245	268
15.00-2	Lecompton	1,143	1,100	43	421	419	2
		99,962	81,799	18,163	40,250	31,783	8,467

Table A-2. **Block Group Data from the 1990 Census and Census 2000  
Block Groups of Lawrence, Kansas  
Median Home Value and Median Household Income**

TRACT-GROUP		H084001	H061A001		P053001	P080A001	
Tract-Block Group	Area	2000 Median Home Value	1990 Median Home Value	Percent Change In Median Home Value	2000 Median Household Income	1990 Median Household Income	Percent Change In Median Household Income
01.00-1	Lawrence	97,900	90,019	9%	42,176	32,879	28%
01.00-2	Lawrence	80,900	42,200	92%	33,636	25,536	32%
01.00-3	Lawrence	75,100	43,041	74%	31,250	19,526	60%
02.00-1	Lawrence	50,400	36,001	40%	25,116	21,046	19%
02.00-2	Lawrence	75,900	33,000	130%	28,906	13,917	108%
02.00-3	Lawrence	83,300	40,700	105%	25,707	19,740	30%
02.00-4	Lawrence	90,400	51,000	77%	24,141	21,667	11%
02.00-5	Lawrence	72,400	47,400	53%	32,156	18,958	70%
02.00-6	Lawrence	25,800	34,100	-24%	32,656	20,673	58%
03.00-1	Lawrence	134,400	55,000	144%	15,096	10,445	45%
03.00-2	Lawrence	96,900	48,000	102%	24,935	11,848	110%
03.00-3	Lawrence	93,000	61,000	52%	12,027	8,046	49%
03.00-4	Lawrence	93,600	58,317	61%	17,784	10,698	66%
03.00-5	Lawrence	126,200	64,100	97%	48,478	27,917	74%
04.00-1	Lawrence	0	68,400		35,188	10,781	226%
04.00-2	Lawrence	99,500	0		15,694	7,858	100%
05.01-1	Lawrence	54,100	50,300	8%	28,925	24,814	17%
05.01-2	Lawrence	80,000	52,049	54%	33,250	19,372	72%
05.02-1	Lawrence	165,600	87,500	89%	17,309	16,420	5%
05.02-2	Lawrence	122,900	63,900	92%	29,191	24,392	20%
05.02-3	Lawrence	141,700	67,000	111%	38,482	18,864	104%
05.02-4	Lawrence	146,100	97,900	49%	24,728	16,837	47%
06.01-1	Lawrence	130,300	82,054	59%	55,373	45,651	21%
06.01-2	Lawrence	119,800	72,900	64%	50,993	41,406	23%
06.01-3	Lawrence	167,000	122,400	36%	29,924	24,167	24%
06.01-4	Lawrence	168,200	106,200	58%	52,955	37,619	41%
06.02-1	Lawrence	227,400	86,455	163%	63,472	43,275	47%
07.01-1	Lawrence	187,900	93,500	101%	77,917	46,736	67%
07.02-1	Lawrence	97,800	71,117	38%	45,156	25,098	80%
07.02-2	Lawrence	123,600	89,100	39%	33,839	27,000	25%
07.02-3	Lawrence	145,300	96,900	50%	28,589	22,039	30%
07.02-4	Lawrence	110,200	72,200	53%	42,258	46,071	-8%
07.97-1	Lawrence	233,800	143,600	63%	62,314	46,927	33%
07.97-2	Lawrence	113,900	76,100	50%	39,919	34,196	17%
08.01-1	Lawrence	112,100	69,543	61%	39,531	34,246	15%
08.02-1	Lawrence	132,000	86,700	52%	39,327	30,439	29%
08.02-2	Lawrence	13,500	69,400	-81%	24,722	15,147	63%
09.01-1	Lawrence	89,000	61,100	46%	37,455	30,294	24%
09.01-2	Lawrence	92,600	57,900	60%	36,384	27,941	30%
09.01-3	Lawrence	87,100	61,600	41%	21,211	15,960	33%
09.01-4	Lawrence	128,000	82,700	55%	21,816	14,773	48%
09.01-5	Lawrence	97,300	65,700	48%	22,485	9,695	132%
09.02-1	Lawrence	74,700	84,900	-12%	36,702	30,230	21%
10.01-1	Lawrence	91,200	52,719	73%	41,448	26,445	57%
10.01-2	Lawrence	98,400	35,681	176%	42,708	41,211	4%
10.02-1	Lawrence	84,100	50,274	67%	31,910	28,171	13%
10.02-2	Lawrence	109,400	53,409	105%	57,449	30,059	91%
12.01-1	Lawrence	165,700	83,837	98%	52,500	36,322	45%
12.02-1	Eudora	130,300	72,075	81%	48,810	32,065	52%
12.02-2	Eudora	103,800	50,249	107%	42,321	25,676	65%
12.02-3	Eudora	96,800	53,900	80%	45,761	31,944	43%
12.03-1	Baldwin	142,600	66,168	116%	62,000	41,945	48%
12.03-2	Baldwin	157,400	48,600	224%	59,464	30,938	92%
12.03-3	Baldwin	94,300	56,200	68%	40,455	31,953	27%
12.03-4	Baldwin	101,200	58,500	73%	47,109	31,071	52%
14.00-1	Clinton	168,900	93,500	81%	67,422	40,542	66%
14.00-2	Clinton	147,400	78,457	88%	57,019	38,198	49%
14.00-3	Clinton	132,200	52,400	152%	55,156	33,187	66%
15.00-1	Lecompton	127,800	61,621	107%	55,400	37,292	49%
15.00-2	Lecompton	85,800	58,296	47%	45,288	32,405	40%

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