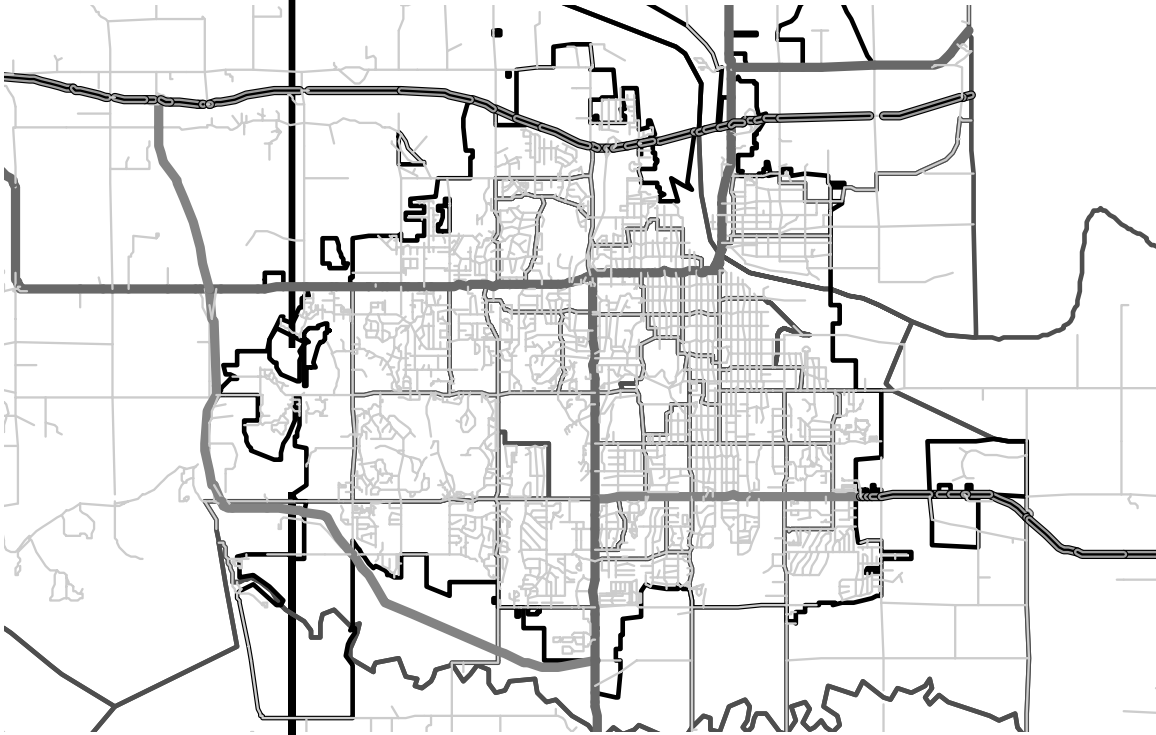


Research Report

# Growth and Change in the Workforce of Lawrence, Kansas 1996 to 2002



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# **Growth and Change in the Workforce of Lawrence, Kansas 1996 to 2002**

## *Abstract*

*Job growth in Lawrence is strong, but wages levels are low relative to the State of Kansas or the Kansas City area in all private-sector employment categories. The workforce of Lawrence is changing; manufacturing is a declining share of employment and the service sector has grown to dominate the workforce. This is comparable to the state as a whole and to other metropolitan areas. Despite the changing composition of the labor force, job growth in Lawrence is good, outpacing the State but falling behind the Kansas City area. Lawrence suffers from particularly low wages levels in all private-sector job categories, below those found across the state and in the Kansas City area. This pattern of job growth with low wages suggests that Lawrence needs to refocus its economic development planning actions. It should focus less on manufacturing jobs and focus more on the quality of the jobs being created, striving to bring wage levels up to levels commensurate with the Kansas City area.*

## **Introduction**

In order to give focus to its economic development effort, the City of Lawrence needs to understand the nature of its workforce and the wages being earned. In economic development, the City needs to build on its strengths and rectify its weaknesses. To do so means understanding the labor assets that are available in Lawrence. It also means taking stock of the manner in which that labor is put to use. Specifically, the City needs to address a set of questions:

- How is the labor force changing, and are the City's economic development policies well suited to these changes?
- How is the labor force paid, and are the City's economic development policies contributing toward improving the pay levels of the workers?
- In what sectors should the City concentrate its future economic development efforts?

## Growth and Change of the Labor Force

The labor force in Lawrence is simultaneously growing and changing composition. The number of workers in Lawrence in 2002 was about 46,000 of which about 35,000 (77 percent) were in the private sector. Given the presence of a state university, a federal university and a normal number of other government employees, the public sector employment in Lawrence at 23 percent of the labor force is about 5 percentage points higher than found for the state as a whole. (See table 1.)

Table 1. **Jobs by Sector in the Lawrence Metropolitan Area, the State and the Kansas City Metropolitan Area 2002 and 1996**

	<i>2002 Jobs by Sector</i>			<i>1996 Jobs by Sector</i>		
	<i>State of Kansas</i>	<i>Kansas Portion of Kansas City MSA</i>	<i>Lawrence MSA</i>	<i>State of Kansas</i>	<i>Kansas Portion of Kansas City MSA</i>	<i>Lawrence MSA</i>
<b>Total Workforce</b>						
Number of jobs	1,303,586	396,090	46,192	1,200,877	338,272	40,227
Percent of total jobs	100%	100%	100%	100%	100%	100%
<b>Private-Sector Workforce</b>						
Number of jobs	1,064,613	341,255	35,366	979,486	289,214	31,506
Percent of total jobs	82%	86%	77%	82%	85%	78%
<b>Construction</b>						
Number of jobs	62,957	21,100	2,474	56,525	17,418	2,010
Percent of total jobs	5%	5%	5%	5%	5%	5%
<b>Manufacturing</b>						
Number of jobs	181,112	33,027	3,532	196,093	38,459	5,016
Percent of total jobs	14%	8%	8%	16%	11%	12%
<b>Wholesale Trade</b>						
Number of jobs	60,807	23,977	811	75,103	28,538	1,560
Percent of total jobs	5%	6%	2%	6%	8%	4%
<b>Retail Trade</b>						
Number of jobs	154,033	47,304	5,616	228,284	63,726	10,015
Percent of total jobs	12%	12%	12%	19%	19%	25%
<b>Service/Other</b>						
Number of jobs	605,703	215,847	22,933	423,481	141,073	12,906
Percent of total jobs	46%	54%	50%	35%	42%	32%
<b>Government</b>						
Number of jobs	238,974	54,835	10,826	221,391	49,058	8,720
Percent of total jobs	18%	14%	23%	18%	15%	22%

Source: Kansas Department of Human Resources Annual Employment and Wages 2002 and 1996  
Calculations by author

The labor force of Lawrence is experiencing the kinds of changes in its composition being found elsewhere. The percentages of the work force employed in construction, wholesale trade, and government all remained relatively stable, consuming approximately the same shares of total employment over the six-year period studied.

Employment in the retail trade has fallen off dramatically. In Lawrence, retail employment fell from 25 percent of the work force in 1996 to only 12 percent of the work force. Some of this decline may result from the cooling of the economy, which was booming in 1996 but was in recession in 2002. It may also be the result of the retail market having overbuilt in the mid- to late-1990s in Lawrence. Many stores were opening to compete for the finite retail dollar available within the community. As surplus stores have failed, their retail employment has not been replaced. Rather, the total retail employment seems to have returned to a normal share of the total, which is now on a par with that of the State and the Kansas portion of the Kansas City metropolitan area.

Another significant change of importance to Lawrence is the shift out of manufacturing and into the service sector. This is a change that is being experienced to varying degrees throughout the nation. Manufacturing is a shrinking share of total employment while the service sector is a growing share. Statewide from 1996 to 2002, manufacturing employment fell from 16 percent of the total workforce to 14 percent. In Lawrence, the fall was larger, dropping 4 percentage points from 12 percent to 8 percent. The shift in Kansas City was similar from 11 percent to 8 percent.

At the same time, service sector employment has grown in dominance. This sector includes employment in what is commonly referred to "office jobs," that is, jobs in the finance, insurance and real estate sectors as well as jobs in health services, publishing/broadcasting, lodging/restaurant and a variety of other

service positions. In 2002 for the first time, the service sector consumed 50 percent of the total workforce, up from only 32 percent only 6 years earlier.

This shift means that manufacturing is both a declining share of total employment and a declining number of jobs. However, these jobs are more than offset by the growth in service sector jobs, which is growing in share and in total employment. (See Table 2.)

Table 2. **Growth Rate of Jobs in the Lawrence Metropolitan Area, the State and the Kansas Portion of the Kansas City Metropolitan Area 2002 and 1996**

	<i>1996-2002 Growth in Jobs</i>		
	<i>State of Kansas</i>	<i>Kansas Portion of Kansas City MSA</i>	<i>Lawrence MSA</i>
<i>Total Workforce</i>			
<i>Change in number of jobs</i>	102,709	57,818	5,965
<i>Percent change in jobs</i>	8%	17%	15%
<i>Private-Sector Workforce</i>			
<i>Change in number of jobs</i>	85,127	52,041	3,860
<i>Percent change in jobs</i>	9%	18%	12%
<i>Construction</i>			
<i>Change in number of jobs</i>	6,432	3,682	464
<i>Percent change in jobs</i>	11%	21%	23%
<i>Manufacturing</i>			
<i>Change in number of jobs</i>	-14,981	-5,432	-1,484
<i>Percent change in jobs</i>	-8%	-14%	-30%
<i>Wholesale Trade</i>			
<i>Change in number of jobs</i>	-14,296	-4,561	-749
<i>Percent change in jobs</i>	-19%	-16%	-48%
<i>Retail Trade</i>			
<i>Change in number of jobs</i>	-74,251	-16,422	-4,399
<i>Percent change in jobs</i>	-33%	-26%	-44%
<i>Service/Other</i>			
<i>Change in number of jobs</i>	182,222	74,774	10,027
<i>Percent change in jobs</i>	43%	53%	78%
<i>Government</i>			
<i>Change in number of jobs</i>	17,583	5,777	2,106
<i>Percent change in jobs</i>	8%	12%	24%

Source: Kansas Department of Human Resources Annual Employment and Wages 2002 and 1996  
Calculations by author

## Wages Paid to Workers

Wages in Lawrence are lower than found elsewhere. In 2002, the wages for all employees averaged about \$27,000 per year, well below the \$31,000 across the State of Kansas and even further below the \$37,000 found in the Kansas City area. (See Table 3.) With government jobs removed, the problem worsens with Lawrence providing an average private sector wage of about \$24,000 per year.

Table 3. **Average Annual Wages Lawrence Metropolitan Area, the State and the Kansas Portion of the Kansas City Metropolitan Area 2002 and 1996**

	<u>2002 Annual Average Wages</u>			<u>1996 Annual Average Wages</u>		
	<i>State of Kansas</i>	<i>Kansas Portion of Kansas City MSA</i>	<i>Lawrence MSA</i>	<i>State of Kansas</i>	<i>Kansas Portion of Kansas City MSA</i>	<i>Lawrence MSA</i>
<i>Total Workforce</i> <i>Average Annual Wages</i>	\$30,824	\$37,116	\$26,631	\$24,608	\$28,808	\$21,198
<i>Private-Sector Workforce</i> <i>Average Annual Wages</i>	\$31,060	\$37,262	\$23,814	\$24,573	\$28,640	\$19,048
<i>Construction</i> <i>Average Annual Wages</i>	\$34,131	\$41,520	\$31,436	\$26,762	\$32,245	\$23,739
<i>Manufacturing</i> <i>Average Annual Wages</i>	\$40,544	\$43,984	\$35,063	\$32,960	\$37,011	\$28,539
<i>Wholesale Trade</i> <i>Average Annual Wages</i>	\$42,620	\$52,745	\$40,751	\$33,250	\$40,552	\$25,987
<i>Retail Trade</i> <i>Average Annual Wages</i>	\$19,916	\$22,898	\$17,028	\$13,395	\$15,340	\$11,678
<i>Service/Other</i> <i>Average Annual Wages</i>	\$29,578	\$37,245	\$22,322	\$24,884	\$29,512	\$19,509
<i>Government</i> <i>Average Annual Wages</i>	\$29,772	\$36,210	\$35,833	\$24,764	\$29,798	\$28,967

Source: Kansas Department of Human Resources Annual Employment and Wages 2002 and 1996  
Calculations by author

A \$10,000 per worker per year wage differential is an extremely large gap in earnings of workers. However, Lawrence is a college town. This means that it has an inordinately large cohort of citizens in the 18 through 21 years old. While many college students do not work while attending school, many others are participating in the workforce. Many of these students are in the service sector catering to this large cohort of consumers, working in the poorly paid food service sector. This can skew downward the average wages of a college town. To control for this effect, the wage information is reported by industry. This permits comparison of the wages paid in jobs in Lawrence to the state and the Kansas City area within each industrial category. Some categories of employment by industry should not be influenced by the presence of student employment. For example, construction workers in Lawrence confront the same type of work as do construction workers in Kansas City. Similarly, manufacturing work in Lawrence is comparable to manufacturing work elsewhere. As such, the compensation for that work should be the comparable.

Table 4 lists the wage differentials by industrial category comparing wages in Lawrence to wages across the State of Kansas and the Kansas portion of the Kansas City metropolitan area (Leavenworth, Wyandotte, Johnson and Miami counties.) This table shows that all private sector jobs combined pay about \$13,000 per worker per year less in Lawrence than are paid in the Kansas City area. The wage differential varies from industry to industry. In no private sector industrial category do Lawrence workers earn more than their Kansas City counterparts, although government employees in Lawrence do earn more than their counterparts across the state.

The private sector wage differentials in 2002 vary widely. The low of \$5,800 per year is found in retail trade. Ironically, this sector has the lowest differential in an industrial category that would be expected to reflect the high incidence of college students which may serve to expand rather than reduce the wage

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Table 4.

**Wage Differential Between Lawrence MSA and the State and the Kansas Portion of the Kansas City Metropolitan Area 2002 and 1996**

	<u>2002 Lawrence MSA</u>		<u>1996 Lawrence MSA</u>	
	Annual Average Wages Compared to		Annual Average Wages Compared to	
	State of Kansas	Kansas City	State of Kansas	Kansas City
<i>Total Workforce</i>				
<i>Differential in wages</i>	-\$4,193	-\$10,485	-\$3,410	-\$7,610
<i>Lawrence as a percent</i>	86%	72%	86%	74%
<i>Private-Sector Workforce</i>				
<i>Differential in wages</i>	-\$7,246	-\$13,448	-\$5,525	-\$9,592
<i>Lawrence as a percent</i>	77%	64%	78%	67%
<i>Construction</i>				
<i>Differential in wages</i>	-\$2,695	-\$10,084	-\$3,023	-\$8,506
<i>Lawrence as a percent</i>	92%	76%	89%	74%
<i>Manufacturing</i>				
<i>Differential in wages</i>	-\$5,481	-\$8,921	-\$4,421	-\$8,506
<i>Lawrence as a percent</i>	86%	80%	87%	74%
<i>Wholesale Trade</i>				
<i>Differential in wages</i>	-\$1,869	-\$11,994	-\$7,263	-\$14,565
<i>Lawrence as a percent</i>	96%	77%	78%	64%
<i>Retail Trade</i>				
<i>Differential in wages</i>	-\$2,888	-\$5,870	-\$1,717	-\$3,662
<i>Lawrence as a percent</i>	85%	74%	87%	76%
<i>Service/Other</i>				
<i>Differential in wages</i>	-\$7,256	-\$14,923	-\$5,375	-\$10,004
<i>Lawrence as a percent</i>	75%	60%	78%	66%
<i>Government</i>				
<i>Differential in wages</i>	\$6,061	-\$377	\$4,203	-\$831
<i>Lawrence as a percent</i>	120%	99%	117%	97%

Source: Kansas Department of Human Resources Annual Employment and Wages 2002 and 1996  
Calculations by author

differential. The largest wage differential is found in the service sector at about \$15,000 per worker per year. Of particular interest in terms of local economic development policy is the wage differential among manufacturing employees. The wage differential in Lawrence for 2002 was about \$8,900 per worker per year when compared to workers in Kansas City. This differential grew from about \$8,500 per worker per year compared to Kansas City workers in 1996. Tables 5a and 5b break down the industrial categories further showing few areas where Lawrence workers are paid commensurately with Kansas City workers.

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Table 5a. **Average Annual Wages Lawrence Metropolitan Area, the State and the Kansas Portion of the Kansas City Metropolitan Area by 3-Digit Industrial Category 2002**

Industry	Lawrence		Kansas	KC Metro	Difference in Annual Average Wages Between Lawrence and	
	Annual Average Employ	Annual Average Wages	Annual Average Wages	Annual Average Wages	Kansas	KC Metro
<b>Total (Including all codes)</b>	46,192	26,631	30,824	37,116	-4,193	-10,485
<b>Private Sector</b>	35,366	23,814	31,060	37,262	-7,246	-13,448
<b>Agriculture</b>	54	18,491	25,488	25,757	-6,997	-7,266
<b>Construction</b>	2,474	31,436	34,131	41,520	-2,695	-10,084
236 Construction of buildings	638	30,174	34,541	44,505	-4,367	-14,331
237 Heavy and civil engineering construction	360	34,833	38,776	46,310	-3,943	-11,477
238 Specialty trade contractors	1,476	31,155	32,728	39,741	-1,573	-8,586
<b>Manufacturing</b>	3,532	35,063	40,544	43,984	-5,481	-8,921
311 Food manufacturing	37	27,355	32,392	41,882	-5,037	-14,527
314 Textile product mills	91	35,627	21,854	17,367	13,773	18,260
322 Paper manufacturing	418	39,713	40,688	43,991	-975	-4,278
323 Printing and related support activities	150	26,054	33,475	38,092	-7,421	-12,038
325 Chemical manufacturing	305	58,027	54,344	52,943	3,683	5,084
327 Nonmetallic mineral product manufacturin	101	27,448	37,857	45,397	-10,409	-17,949
333 Machinery manufacturing	123	36,135	37,502	41,744	-1,367	-5,609
336 transportation equipment manufacturing	112	34,560	53,703		-19,143	
337 Furniture and related product manufacturi	287	27,853	26,328	31,386	1,525	-3,533
339 Miscellaneous manufacturing	338	31,617	33,416	37,118	-1,799	-5,501
<b>Wholesale Trade</b>	811	40,751	42,620	52,745	-1,869	-11,994
423 Merchant wholesalers, durable goods	421	43,050	42,779	50,584	271	-7,534
424 Merchant wholesalers, nondurable goods	308	29,688	38,480	50,918	-8,792	-21,230
425 Electronic markets and agents and brokers	82	70,488	55,107	64,272	15,381	6,216
<b>Retail Trade</b>	5,616	17,028	19,916	22,898	-2,888	-5,870
441 Motor vehicle and parts dealers	529	35,086	31,965	40,040	3,121	-4,954
442 Furniture and home furnishings stores	167	20,805	26,506	30,569	-5,701	-9,764
443 Electronics and appliance stores	233	26,767	32,596	39,821	-5,829	-13,054
444 Building material and garden supply stores	256	21,387	24,240	27,316	-2,853	-5,929
445 Food and beverage stores	938	13,687	15,035	17,288	-1,348	-3,601
446 Health and personal care stores	283	20,957	22,981	21,558	-2,024	-601
447 Gasoline stations	262	13,421	14,425	20,081	-1,004	-6,660
448 Clothing and clothing accessories stores	439	12,904	16,111	15,799	-3,207	-2,895
451 Sporting goods, hobby, book and music	398	11,353	14,053	16,408	-2,700	-5,055
452 General merchandise stores	1,528	14,185	16,125	17,973	-1,940	-3,788
453 Miscellaneous store retailers	568	12,884	16,421	18,999	-3,537	-6,115
454 Nonstore retailers	16	27,986	24,509	26,960	3,477	1,026

Source: Kansas Department of Human Resources Annual Employment and Wages 2002 and 1996  
Calculations by author

Note: Jobs in each 3-digit category may not total to the whole as some 3-digit categories have too few workers to report.

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Table 5b. **Average Annual Wages Lawrence Metropolitan Area, the State and the Kansas Portion of the Kansas City Metropolitan Area by 3-Digit Industrial Category 2002**

Industry	Lawrence		Kansas	KC Metro	Difference in Annual Average Wages Between Lawrence and	
	Annual Average Employ	Annual Average Wages	Annual Average Wages	Annual Average Wages	Kansas	KC Metro
	<b>Service Sector</b>	22,933	22,322	29,578	37,245	-7,256
Transportation and Warehousing	1,260	30,810	31,898	33,772	-1,088	-2,962
484 Truck transportation	183	29,964	32,520	36,315	-2,556	-6,351
485 Transit and ground passenger transportati	332	12,889	14,590	17,790	-1,701	-4,901
488 Support activities for transportation	54	20,419	33,149	37,891	-12,730	-17,472
492 Couriers and messengers	86	34,890	32,327		2,563	
Information	2,366	33,622	46,871	58,232	-13,249	-24,610
511 Publishing industries, except Internet	1,701	34,941	34,549	44,296	392	-9,355
512 Motion picture and sound recording industr	62	12,643	10,706	14,292	1,937	-1,649
517 Telecommunications	376	32,935	56,007		-23,072	
518 ISPs, search portals and data processing	47	39,728	40,564	60,395	-836	-20,667
Finance and Insurance	1,018	37,654	42,956	52,712	-5,302	-15,058
522 Credit intermediation and related activities	582	36,460	36,898	45,614	-438	-9,154
524 Insurance carriers and related activities	185	42,733	45,737	52,257	-3,004	-9,524
Real Estate and Rental and Leasing	790	20,895	26,209	32,414	-5,314	-11,519
Professional and Technical Services	2,436	27,863	43,184	50,799	-15,321	-22,936
Management of Companies and Enterprises	109	25,857	50,723	56,650	-24,866	-30,793
Administrative and Waste Services	1,041	20,205	23,251	27,268	-3,046	-7,063
Educational Services	685	26,206	26,024	29,302	182	-3,096
Health Care and Social Assistance	4,456	22,350	29,139	34,391	-6,789	-12,041
621 Ambulatory health care services	2,363	28,982	40,834	45,813	11,852	16,831
623 Nursing and residential care facilities	800	17,617	18,327	22,614	710	4,997
624 Social assistance	1,293	13,158	15,773	17,334	2,615	4,176
Arts, Entertainment and Recreation	485	9,922	13,441	15,001	-3,519	-5,079
Accommodation and Food Services	5,692	9,457	10,834	14,005	-1,377	-4,548
721 Accommodation	709	11,494	13,104	18,401	1,610	6,907
722 Food services and drinking places	4,983	9,167	10,566	13,619	1,399	4,452
Other Services, except Public Administration	2,326	24,078	21,335	24,143	2,743	-65
811 Repair and maintenance	597	27,349	26,997	30,985	352	-3,636
812 Personal and laundry services	438	17,547	17,358	17,683	189	-136
813 Membership associations and organization	1,216	25,690	20,529	25,606	5,161	84
814 Private households	76	10,242	12,688	17,480	-2,446	-7,238
<b>Government</b>	10,826	35,833	29,772	36,210	6,061	-377
Local	5,590	29,576	25,381	31,736	4,195	-2,160
State	4,666	42,827	37,285	36,634	5,542	6,193
Federal	571	39,939	46,788	54,008	-6,849	-14,069

Source: Kansas Department of Human Resources Annual Employment and Wages 2002 and 1996  
Calculations by author

Note: Jobs in each 3-digit category may not total to the whole as some 3-digit categories have too few workers to report.

## **Implications for Economic Development Planning**

Economic development is the process of improving the economic base of a community, expanding its supply of jobs and its taxable base. In an ideal setting, the jobs generated from economic development activities will bring in dollars from outside the local economy so as to permit economic growth. These jobs are referred to as jobs in the basic sector, as opposed to non-basic sector jobs, which do not bring new money into the local economy.

Economic development is often focused on manufacturing because nearly all manufacturing facilities generate products for sale outside of the community bringing in those coveted external dollars. Manufacturing jobs also tend to pay more than jobs in other sectors, making these jobs the ideal target for economic development planning, thus Lawrence is correct to focus some of its efforts in attracting and retain manufacturing jobs. However, the manufacturing sector is contracting in response to forces far beyond the control or influence of Lawrence.

Service sector jobs pay less than manufacturing jobs; in 2002 service sector jobs paid an average of \$23,300 per year well below the \$35,100 per year average for manufacturing jobs. This does not mean that all service sector jobs are undesirable or part of the non-basic sector. Rather, it means that the City needs to exercise greater care in its efforts to attract firms. Service sector jobs in such fields as research, engineering, and financial services can generate higher paid basic jobs than are now being generated though the City's economic development efforts.

Job growth in the Lawrence areas is healthy with the number of jobs up 2.3 per cent per year from 1996 to 2003. This is strong growth especially given the recession that has plagued the economy for the last 2 to 3 years. This job growth is out pacing the population growth, which the Census Bureau estimates

at about 1.0 percent per year. The principle concern for the City is the quality of the jobs and the wages paid.

Wages are low in Lawrence. In the vast majority of industrial categories, workers in Lawrence are paid less than their counterparts elsewhere in the State and especially in the nearby Kansas City area.

This suggests that Lawrence should refocus its economic development strategies. Lawrence should:

- Continue to provide for the expansion of new manufacturing facilities. As the City grows, more space may be needed, but the decline in manufacturing employment suggests that the City should move cautiously. Investment in industrial park space can be an expensive mistake if the manufacturing sector continues to shrink.
- Reduce or eliminate its use of tax abatements as the primary tool of its economic development strategy. This has proven to be wasteful and ineffective as it rewards firms who do not provide the jobs or investment promised and do not pay wages that improve the low wage standing of workers in Lawrence.
- Focus the economic development actions on improving the quality of the jobs created and the level of the wages paid.