

THE UNIVERSITY OF KANSAS  
Center for Economic and Business Analysis  
Policy Research Institute

**Business vs. Residential Tax Burden  
in  
Lawrence/Douglas County**

*Prepared for the*  
**Lawrence Chamber of Commerce**

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December 2002

Report 268

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## Introduction

In November of 2002 the Lawrence Chamber of Commerce asked me to look at available data on the relationship between local commercial growth and residential expansion to determine if imbalances in growth rates had resulted in an increase in the tax burden on residents. More generally, the Chamber expressed an interest in how local growth patterns have affected the cost of living in the area. This report addresses these issues to the extent that the available data permit.

### Executive Summary:

1. In the city of Lawrence employment has grown slightly faster than population from 1990 to 2000. At the county level, employment has grown substantially more rapidly than population, as have payrolls and the number of firms.
2. In Lawrence, the ratio of property taxes collected from commercial and residential sources has remained nearly constant between 1996 and 2000. Estimated city property tax receipts for this period show 46 percent growth from commercial sources compared to 49 percent from residential sources.
3. In Douglas County, inflation adjusted property taxes per firm increased more (5.1 percent) than did per capita residential property taxes (1.9 percent) from 1996 to 2000.
4. There has been a shift in city revenues toward greater emphasis on sales taxes and a reduction in the contribution of property taxes. Property taxes are still the largest single source of revenues, accounting for 44 percent of Lawrence tax revenues, but sales taxes have increased to 38 percent of the total.
5. It is not possible to assign the burden of increased sales taxes between commercial and residential sources with existing data, but it seems most reasonable to conclude that such changes, if any, are not and have not been coherently influenced by overall local commercial growth or lack of it.
6. Nominal cost of living for residents has been increasing over time due to inflation at the national level and the effects of local growth. Nonetheless, income per capita grew even more quickly.

## **Business growth in Lawrence has kept pace with residential growth**

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According to the Census Bureau, population in Lawrence increased 22 percent in the last decade, from 65,657 in 1990 to 80,098 in 2000. Again from the Census the number of people who worked in their place of residence (Lawrence) increased 23.1 percent for the same time period, from 26,347 jobs to 32,424 in 2000 (Table 1).

County-wide, population grew 22.2 percent compared to a 39.5 percent increase in the number of jobs available. Other residential growth measures for the decade of the 1990's are available at the county-level, such as the number of housing units (increased 26.6 percent) and total households (27.7 percent). On the business side in Douglas County we can also look at the number of firms, which grew 40 percent to 2,624 establishments in 2000. Total annual payrolls of all firms in Douglas County grew over 100 percent in the 1990's (Table 1).

## **The ratio of business to residential property tax has remained steady**

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### *Lawrence Property Taxes Collected*

Neither the city nor the county keep records of property tax receipts by source, where source is broken down in terms of residential or industrial. However, Douglas County does have records of assessed valuations by classifications of use going back to 1996.<sup>1</sup> From these, it is possible to estimate property tax revenues by classification by applying the Lawrence mill levy (Table 2.B) for each year to the assessed valuations (Table 2.A).

The result of this calculation is presented in Table 2.C. It is estimated that total Lawrence property tax revenues derived from commercial entities has risen 46 percent since 1996; from residents the growth has been closer to 50 percent.

The relative shares of both have hardly shifted. In 1996 the relative share of urban commercial property tax revenues to urban residential stood at 31.7 to 68.3, respectively. Six years later the ratio was 31.2 to 68.8 (Table 2.C).

Comparing the growth of residential property tax collections to the growth in population in Lawrence, nominal per capita property tax payments rose nearly 12 percent from 1996 to 2000. When adjusted for inflation, the growth in property taxes paid by Lawrence residents increased only 1.9 percent (Table 2.E).

Although per capita residential tax burdens increased slightly in real terms (1.9 percent), they fell relative to income. As a share of income residential property tax payments decreased a substantial 8.9 percent over the same time period (Table 2.E).

Comparing commercial property tax collections to business growth, there was a 15.2 percent increase in nominal commercial property tax payments per firm from 1996 to 2000<sup>2</sup>. Adjusted for inflation the increase is 5.1 percent, but this was still more than the increase felt by local residents (1.9 percent). Since estimates of firm 'income' are typically closely guarded by businesses in a competitive environment, I was unable to calculate property tax payments as percentage of commercial income.

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<sup>1</sup> The data by classification include all urban areas in Douglas County, so they include properties in cities such as Baldwin and Eudora. Nevertheless, the vast majority of the assessments are from within the city limits of Lawrence, so the estimate is close enough to suffice.

<sup>2</sup> As noted before the commercial property tax data actually pertain to all urban areas in the county.

### *Lawrence Property Taxes as Share of Other Revenue Sources*

The city operates on a budget with funding coming from several sources. Over time, and especially in the last decade, tax revenues to the city have increasingly been comprised of sales taxes, though in 2001 the property tax was still the largest single source of government income. In 1981 property tax sources comprised nearly 60 percent of city tax funding and the sales tax only 19 percent. In 2001 the ratio had shifted drastically to 45 percent from property taxes and 38 percent from the sales tax (Table3 and Figures 1 and 2).

Growth in sales tax receipts has not been due to sales tax *rate* increases, at least in the last decade: since October 1990, the Lawrence rate has remained steady at 1 percent. Nor has the declining share of tax revenues from property taxes been due to decreasing collections: as also seen in Table 3, total Lawrence property tax collections increased from 8 million dollars in 1990 to nearly 13 million in 2001. Therefore, the growing share of sales tax revenues as a percent of the total in Lawrence's coffers has been entirely due to the tremendous expansion of retail activity within the city.

### *Sales Tax as a Burden on Local Residents and Commerce*

Both local residents and businesses pay sales taxes, as well as a great many non-residents who come here to shop. It is not possible to determine what share of the sales tax 'burden' falls on local residents as compared to local businesses. Firms in Lawrence do purchase sales-taxable goods, though certainly not in as high a quantity as the total of all local residential retail consumption. On the other hand, this is partly due to the fact there are simply more people here than businesses.

Assuming the entirety of sales taxes were paid by local residents, from 1990 to 2000 per capita sales tax payments would have increase over three-fold, from \$47 dollars per person to \$133 in 2000. However, this doesn't necessarily mean residents in Lawrence pay more sales taxes: it could mean simply they pay more sales taxes here than elsewhere. The explosive growth of new local retail stores in the past several years undoubtedly keeps more retail spending here; likewise it draws more consumers from the outside into Lawrence. Even if it can be shown residents do pay more in sales tax these days than ten years ago, in the absence of rate increases the most logical conclusion would be that people have *chosen* to purchase more retail goods: perhaps due to rising incomes they are more able to do so.

In any case, though it is impossible to meaningfully separate sales tax burden as it falls on local commerce versus local residents, it would be safe to say that resident's retail purchasing decisions are not coherently linked to overall commercial growth or lack of it; therefore, if the burden has increased predominant causes should most reasonably lie elsewhere.

## **The impact of overall cost of living increases on local residents and businesses**

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The national Consumer Price Index as reported by the Bureau of Labor Statistics grew 31.7 percent from 1990 to 2000. Average wage per job in Lawrence (from the Bureau of Economic Analysis) grew 38 percent over the same time period, which works out to a 4.5 percent increase in wage wealth to Lawrencians over ten years, after factoring out growth in consumer prices. So in absolute terms the average resident here is still better off than he or she was a decade ago.

Theoretically though, growing communities do face cost of living increases not associated with those where population levels are stable. Commercial growth, such as that experienced in Lawrence, creates jobs which attract people. The resulting expansion in population is the most

important driver of land values. Rising land values do result in increased taxes, which are undeniable factors in household cost of living. But they also are an increase in the wealth of property owners whose assets have increased in value. Furthermore, large places have higher costs of living than small places due to increased complexity in a variety of facets of life, all which come at an expense.

## Summary

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There is little evidence to support the claim that commercial growth in Lawrence has not kept pace with residential growth, and for the County as a whole such a claim is clearly incorrect.

Residential and commercial property tax shares have not changed significantly in the five years for which they can be calculated. Inflation-adjusted per capita and per firm tax payments have increased more for firms than residents. As a percent of income the residential property tax burden has actually decreased 9 percent since 1996.

The property tax is increasingly being replaced by sales tax revenues for city income as retail establishments continue to expand in Lawrence. This has happened even though the city sales tax rate has remained unchanged for 13 years. It is difficult to say whether the sales tax burden has increased for local residents or not, but even if it has the reason is unlikely related to overall commercial growth or lack of it.

Moving away from taxes, data up to 2000 also indicate that average wage growth in Lawrence has outpaced inflation, meaning residents today continue to become better off over time, though only slightly so.

All the same, commercial growth and the resulting population growth does have its expenses, both because the act of growing is costly and because larger cities in general are more expensive to live in than smaller ones.

**Table 1**  
**Lawrence/Douglas County Demographics**  
**1990-2000**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Change (%) 1990-2000
<b>A. Residential Growth</b>												
1. Lawrence												
Population	65,657	66,476	67,280	68,847	69,714	70,687	71,739	73,128	74,244	78,911	80,098	22.0
2. Douglas County												
Population	81,798	83,683	85,379	87,926	89,683	91,408	93,381	95,706	97,566	99,490	99,962	22.2
Housing Units	31,782	-	-	-	-	-	-	-	-	-	40,250	26.6
Households	30,138	-	-	-	-	-	-	-	-	-	38,486	27.7
<b>B. Business Growth</b>												
1. Lawrence												
Employment (place of work)	26,347	-	-	-	-	-	-	-	-	-	32,424	23.1
2. Douglas County												
Employment (place of work)	45,208	46,831	47,604	49,005	50,256	53,261	54,942	57,750	59,823	61,637	63,072	39.5
Total Payroll (\$1,000)	\$ 405	420	446	487	529	547	600	662	731	780	817	101.8
Number of Firms	1,874	1,921	2,039	2,154	2,251	2,334	2,436	2,510	2,590	2,594	2,624	40.0

Source: U.S. Bureau of the Census, U.S. Bureau of Economic Analysis.

**Table 2**  
**Property Tax Burden**  
**1996-2001**

	1996	1997	1998	1999	2000	2001	Change (%) 1996-2001
<b>A. Assessed Valuation</b>							
1. Urban commercial	\$ 107,381,410	118,457,140	131,762,465	141,242,080	153,569,570	167,517,125	56.0
2. Urban residential	231,352,975	252,057,725	275,312,885	299,394,855	332,721,370	369,264,890	59.6
3. Combined commercial/residential	338,734,385	370,514,865	407,075,350	440,636,935	486,290,940	536,782,015	58.5
<b>B. Lawrence Mill Levy</b>							
	116.948	111.194	98.428	104.993	101.506	109.454	-6.4
<b>C. Approximate Lawrence Tax Collected</b>							
1. Commercial	\$ 12,558,041	13,171,723	12,969,116	14,829,430	15,588,233	18,335,419	46.0
2. Residential	27,056,268	28,027,307	27,098,497	31,434,364	33,773,215	40,417,519	49.4
3. Combined commercial/residential	39,614,309	41,199,030	40,067,613	46,263,794	49,361,448	58,752,939	48.3
<b>Share of Combined Tax (%)</b>							
4. Commercial	% 31.7	32.0	32.4	32.1	31.6	31.2	-1.6
5. Residential	68.3	68.0	67.6	67.9	68.4	68.8	0.7
<b>D. Population and Businesses</b>							
						<b>Change 1996-2000</b>	
1. Population (Lawrence)	71,739	73,128	74,244	78,911	80,098	11.7	
2. Number of firms (Douglas County)	2,436	2,510	2,590	2,594	2,624	7.7	
3. Total employment, place of work (Dg. Co.)	54,942	57,750	59,823	61,637	63,072	14.8	
<b>E. Per Capita Property Tax</b>							
1. In nominal dollars	\$ 377	383	365	398	422	11.8	
(CPI-U, All U.S. Cities)	156.9	160.5	163.0	166.6	172.1	9.7	
2. In year 2000 Dollars	414	411	385	412	422	1.9	
(Per Capita Personal Income, Dg. Co.)	18,534	19,750	20,941	21,461	22,747	22.7	
3. As percent of income	2.03	1.94	1.74	1.86	1.85	-8.9	
<b>F. Per 'Firm' Property Tax (All Douglas County)</b>							
1. In nominal dollars	\$ 5,155	5,248	5,007	5,717	5,941	15.2	
2. In year 2000 Dollars	5,655	5,627	5,287	5,906	5,941	5.1	
Total Annual Payroll	599,954	662,077	730,759	780,416	817,075	36.2	
3. As percent of total payroll	0.86	0.79	0.69	0.73	0.73	-15.4	

Source: Douglas County Appraiser's Office, U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis.

**Table 3  
Tax Receipts by Source  
1981-2001**

	Property	Sales	Franchise	Motor Vehicle	Alcoholic Beverage	Payment-in-lieu	Total
<b>A. Revenues</b>							
1981	\$ 4,845,176	1,558,816	1,079,164	519,589	248,643	-	8,251,388
1990	8,540,817	3,076,469	1,777,760	1,412,185	488,644	-	15,295,875
2001	12,773,484	10,997,729	3,466,443	1,528,257	-	105,418	28,871,331
<b>B. Percent of Total</b>							
1981	% 58.7	18.9	13.1	6.3	3.0	-	
1990	55.8	20.1	11.6	9.2	3.2	-	
2001	44.2	38.1	12.0	5.3	-	0.4	
<b>C. Change (%), 1981-2001</b>							
	-24.7	101.6	-8.2	-15.9	-	-	

Source: Lawrence Comprehensive Annual Financial Report 1990 & 2001

