

# **Performance Audit: Financial Indicators**

**July 2009**

City Auditor  
City of Lawrence, Kansas

July 9, 2009

Members of the City Commission

This performance audit of financial indicators for Lawrence is intended to identify significant existing or emerging financial problems, put the city's finances in context, and encourage discussion of the city's finances.

The analysis of financial indicators for 2008 suggests that the city's financial condition is mixed. Taken as a whole, governmental activities' finances remained about the same as last year, while business-type activities worsened. Business-type activities include providing water, sewer, solid waste, parking, stormwater, and golf. Both the financial position and financial performance of the business-type activities trended down and were below the median of similar cities.

Important limitations to this analysis are that it doesn't include information about the quality of government services and only covers 2003 through 2008.

This sort of analysis gives a broad overview, but doesn't include detailed analysis to pinpoint causes of strengths or weaknesses. Rather, it points the way toward further questions and suggests areas where further work may be appropriate. In particular, further analysis of the performance of business-type activities may be warranted.

I make no recommendations in this report. Because I make no recommendations, I did not ask the City Manager to provide a written response, though I shared the draft with him on July 6, 2009.

Michael Eglinski  
City Auditor

---

# Performance Audit: Financial Indicators

---

## Table of Contents

Results in brief .....	1
Financial ratios help understand Lawrence's financial condition.....	3
Government activities ratio analysis .....	6
Debt, revenue and expenditures trends .....	11
Business-type activities ratio analysis .....	13
Scope, methods and objectives .....	20
Appendix A: Graph Summary .....	24

---

## Performance Audit: Financial Indicators

---

### Results in brief

This analysis of financial indicators for Lawrence is intended to identify significant existing or emerging financial problems, put the city's finances in context, and encourage discussion of the city's finances.

The analysis of financial indicators for 2008 suggests that the city's financial condition is mixed. Taken as a whole, governmental activities' finances remained about the same as last year, while business-type activities worsened. Business-type activities include providing water, sewer, solid waste, parking, stormwater, and golf. For the business-type activities, both financial position and financial performance trended down and were below the median of similar cities. Figure 1 summarizes the analysis of financial ratios, identifying stronger and weaker measures, and highlighting changes compared to last year's analysis.

The analysis of governmental funds shows that per capita revenue increased slightly in 2008 while expenditures decreased and were at the lowest level in the period of 2003 through 2008.

Important limitations to this analysis are that it doesn't include information about the quality of government services and only covers 2003 through 2008.

The report makes no recommendations.

By comparing both the trends over time and the levels compared to the median, each ratio can be characterized as relatively stronger or weaker. Figure 1 summarizes the ratio analysis.

**Figure 1 Summary of ratio analysis**

		<b>Governmental activities</b>		<b>Business-type activities</b>	
		Public safety, public works, and general government represent over 80 percent of the expenses		Water and sewer and solid waste represent 90 percent of the expenses	
		Measure	Change	Measure	Change
<b>Stronger measures</b>	Ability to maintain provision of services		○	Access to resources to meet immediate needs	○
	Mix of general tax revenues, grants, and service charges		↑		
	Access to resources to meet immediate needs		○		
<b>Weaker measures</b>	Burden of long-term debt		○	Burden of long-term debt	○
	Growth of resources to provide services and operate		○	Mix of general tax revenues, grants, and service charges	↓
	Current impact of paying interest		○	Ability to maintain provision of services	↓
				Growth of resources to provide services and operate	↓

Change compared to last year's analysis:

Improved                   ↑  
 Remained the same      ○  
 Worsened                   ↓

---

## Performance Audit: Financial Indicators

---

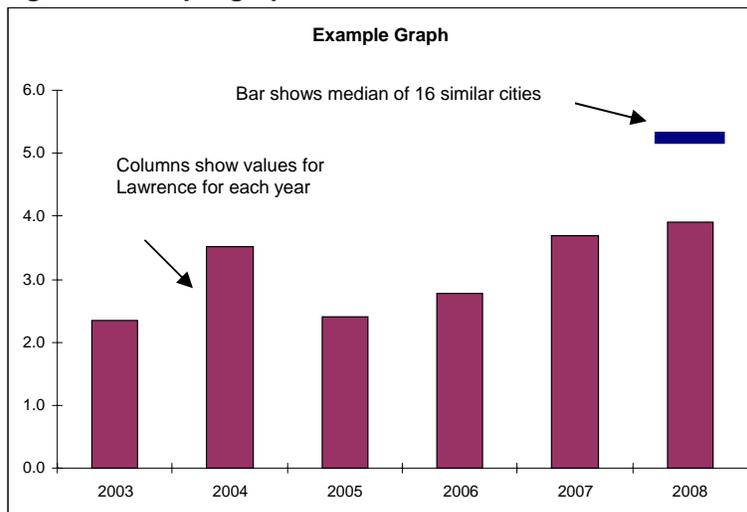
### Financial ratios help understand Lawrence's financial condition

This performance audit, which analyzes financial ratios, provides the City Commission and city management with an assessment of Lawrence's finances. The performance audit is intended to encourage discussion of the city's finances and to:

- identify significant existing or emerging financial problems
- put the city's finances in context by compiling data for six years and comparing to the median of 16 cities

Financial ratios are presented as graphs throughout the report. To evaluate the ratios, consider both the trend and the level compared to the median (see figure 2). Trends can be characterized as more favorable, less favorable, or unclear. Likewise, levels can be characterized as more favorable, less favorable, or neutral. Characterizing each indicator using this method allows for overall conclusions about relative strengths and weaknesses of the city's finances.

**Figure 2 Example graph**



The City Auditor selected ratios to include in the performance audit. Most of the ratios come from *The New Governmental Financial Model: What it Means for Analyzing Government Financial Condition*.<sup>1</sup>

This report includes 6-years of data for Lawrence (2003-2008), and compares data for Lawrence with medians based on an analysis of similar cities. Medians are based on 16 cities – Lawrence and 15 similar cities. Comprehensive annual financial reports provide most of the data. Information from the annual financial reports provides consistent, reliable data because it conforms to generally accepted accounting principles and is audited under generally accepted government auditing standards.

**What is the source of the financial information in this report?**

Comprehensive annual financial reports from Lawrence and the similar cities provide the financial data used in this performance audit. Nearly all of the information comes from the government-wide financial statements. Those statements rely on “full accrual” accounting. That means that the financial statements include capital assets and long-term liabilities as well as current assets and liabilities. The government-wide financial statements report all revenues and costs of providing government services, not just those received or paid in the current year or soon after.

The government-wide financial statements provide information about the cost of government services, including the cost of consumption of capital as well as financial resources. Capital resources include buildings, machinery, roads, and other assets.

The cities used for comparison have characteristics similar to Lawrence. Based on 2006 data from the U.S. Census Bureau, the areas have similar urban area population, portion of population under the age of 18, per capita income, and median age of housing. See the Scope, Method and Objectives section for more detailed information on the similar cities.

Analyzing financial ratios provides an assessment of Lawrence’s financial condition, but it is important to recognize strengths and limitations to this sort of analysis. Figure 3 highlights some strengths and limitations of the ratio analysis

---

<sup>1</sup> Barbara A. Chaney, Dean Michael Mead, and Kenneth R. Scherman, “The New Governmental Financial Reporting Model: What it Means for Analyzing Government Financial Condition,” *Journal of Government Financial Management*, Spring 2002.

**Figure 3 Strengths and limitations of the ratio analysis**

<b>Strengths</b>	<b>Limitations</b>
Lawrence data compiled under consistent accounting principles and audited under Government Auditing Standards	Analysis provides a broad overview rather than detailed analysis
Ratios developed independent of city management and provides a new view of Lawrence finances	Excludes information on level and quality of services and infrastructure
Comparative data compiled under consistent accounting principles and audited under Government Auditing Standards	Excludes external factors, such as demographic and economic trends, that may affect city finances
	Provides historical analysis rather than projections of future condition

**Impact of economic conditions on local governments**

Evaluating the city's financial ratios requires recognition of the broader economic conditions affecting the nation. Moody's described the impact of the credit crisis and recession on local governments:

...few local governments will escape the difficult choice between raising taxes in the face of local economic stress and cutting services in order to balance their budgets....Moody's baseline expectation is that the majority of municipalities will manage through this period successfully with a combination of spending cuts and revenue enhancement plans.

Most municipalities have a reasonable degree of fiscal flexibility and have demonstrated an ability to adapt to economic and fiscal cycles in the past. This recession, however, is likely to be deeper and longer-lasting than recent ones.

Source: *Impact of the Credit Crisis and Recession on Local Governments*, Moody's Investors Service, December 2008.

---

## Government activities ratio analysis

Governmental activities include public safety, public works, and general government, and are mostly supported by taxes. Figure 4 summarizes the analysis of ratios for governmental activities.

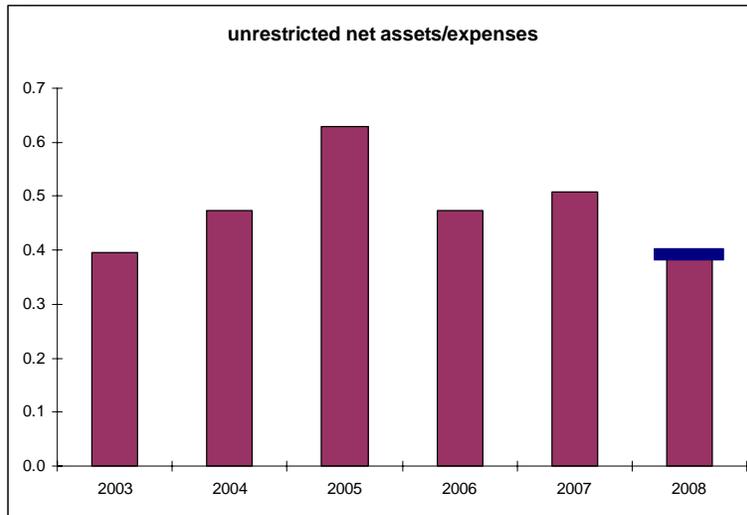
**Figure 4 Governmental activities: summary of ratio analysis**

<b>Lawrence finances</b>	<b>Indicator</b>	<b>Compared to last year</b>
<b>Stronger measures</b>	Ability to maintain provision of services (see figure 5, financial position)	Remained the same
	Funding mix of general tax revenues, grants and service charges (see figure 7, general support)	Improved
	Access to resources to meet immediate needs (see figure 9, liquidity)	Remained the same
<b>Weaker measures</b>	Burden of long-term debt (see figure 10, long-term liabilities)	Remained the same
	Growth rate of resources to provide services and operate (see figure 6, financial performance)	Remained the same
	Current impact of paying interest (see figure 11, interest coverage)	Remained the same

### **Financial position**

Lawrence's financial position shows no clear trend and is very near the median (see figure 5). Financial position measures the city's ability to maintain the provision of services.

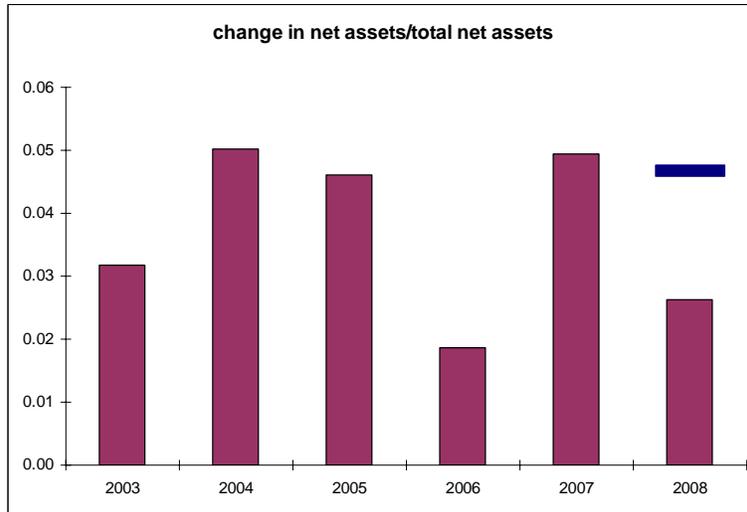
**Figure 5 Governmental activities: financial position ratio**



**Financial performance**

Lawrence’s financial performance shows no clear trend and is below the median (see figure 6). Financial performance measures the rate at which the city’s net resources grow. Compared to the median, Lawrence’s net resources grew more slowly.

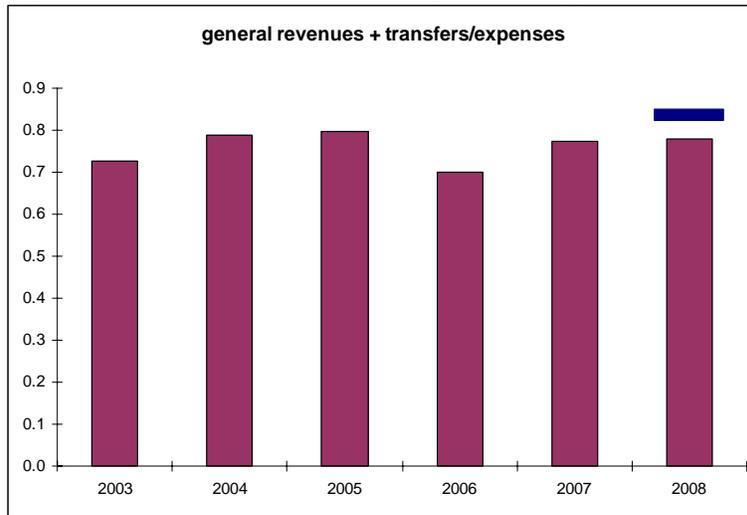
**Figure 6 Governmental activities: financial performance ratio**



**General support level**

The level of general support for government activities shows a gradual increasing trend over the last three years and is below the median (see figure 7). General support level reflects the extent to which the city relies on general taxes, rather than services charges and grants, to pay for expenses. In evaluating the general support level, focus on any unexpected substantial changes more than the level.

**Figure 7 Governmental activities: general support ratio**



In addition to general revenues and transfers, the city uses program revenues to cover expenses. Program revenues include charges for services and intergovernmental grants and contributions. Compared to the median, Lawrence relied a bit more on charges for services and less on intergovernmental funding in 2008 (see figure 8).

**Figure 8 Governmental activities program revenues comparison**

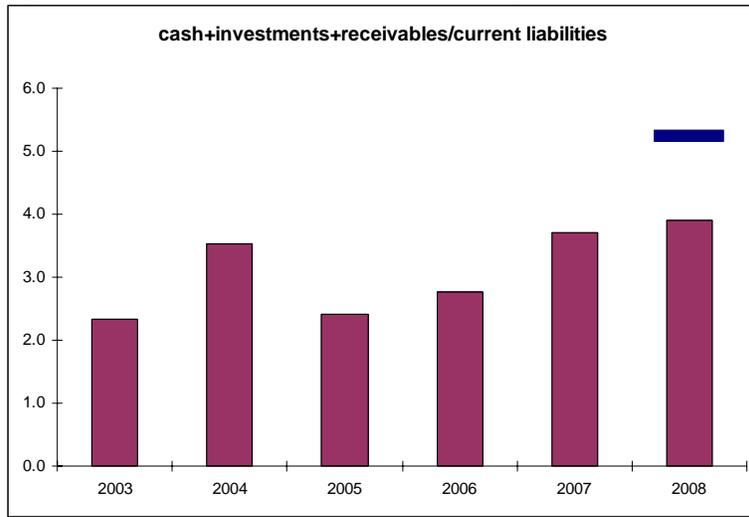
	Charges for services (as a percent of expenses)	Operating and capital grants and contributions (as a percent of expenses)
Lawrence	14%	13%
Median	12%	20%

The city began collected new sales taxes in April 2009. Those taxes, approved by voters in November 2008, generate revenue for infrastructure, fire vehicles and transit. Because the taxes didn't go into effect until 2009, the associated revenues are not incorporated in the analysis in this report.

**Liquidity**

Lawrence's liquidity ratio shows a favorable trend and is below the median (see figure 9). Liquidity measures access to resources to meet immediate needs. For this analysis, current liabilities include those long-term liabilities that are due within one year.

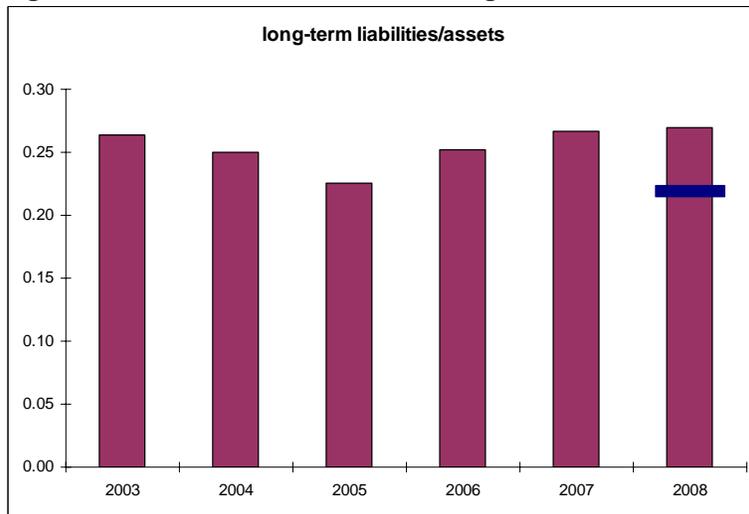
**Figure 9 Governmental activities: liquidity ratio**



**Long-term liabilities**

Lawrence's measure of long-term liabilities shows a gradual increasing trend and is above the median (see figure 10). The ratio measures debt burden and suggests that Lawrence's debt burden is higher than the median of the similar cities.

**Figure 10 Governmental activities: long-term liabilities ratio**



The appropriate level of debt depends on a community's needs, operating costs, revenue, and willingness and capacity to raise additional revenue if needed. When a city borrows, it creates both an asset and a liability. Usually, cities borrow to create infrastructure that services the community and, by borrowing, the city is able to create the infrastructure sooner rather than later.

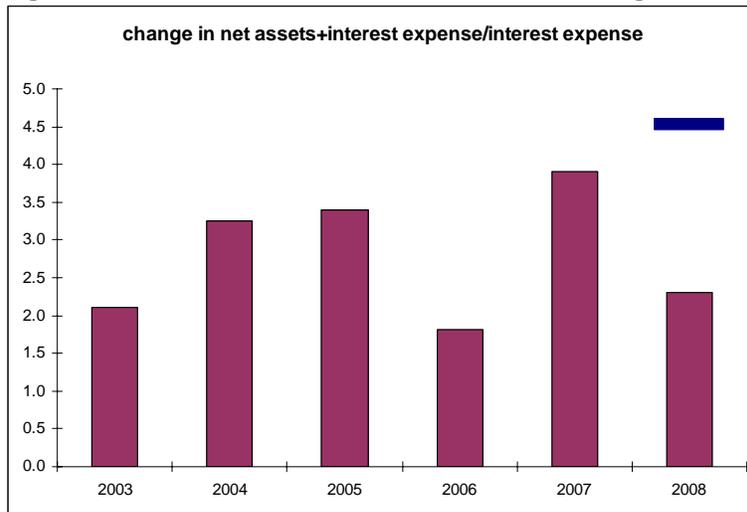
Because borrowing creates a long-term liability and has direct costs, such as interest expense, a city should control and manage it. Lawrence has a debt policy and debt issuance guidelines.

Last year the City Auditor recommended that the City Manager should provide the City Commission with regular reports showing where the city stands in relation to the measures in the debt issuance guidelines. The City Manager included that analysis in the response to the report. Staff plans to monitor the indicators and provide annual updates to the City Commission in conjunction with issuance of debt.

### **Interest coverage**

Lawrence's interest coverage shows no clear trend and is below the median (see figure 11). The ratio evaluates the extent to which interest payments reduce flexibility in the near term. Lower levels indicate that an city has less near term flexibility because resources are devoted to making interest payments. Lawrence's level suggests that the impact of interest payments is larger in Lawrence than the median of similar cities, which is expected because the level of long-term liabilities is above median.

**Figure 11 Governmental activities: interest coverage ratio**



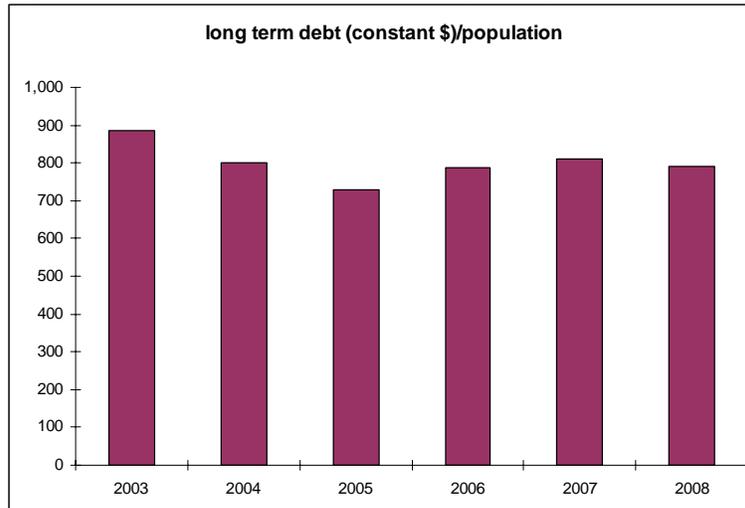
---

## Debt, revenue and expenditures trends

Debt, revenue and expenditure trends for governmental funds provide information on financial flexibility and sustainability. The graphs show data for all governmental funds on a per capita basis and adjusted for inflation. In this analysis, the governmental fund indicators aren't compared to medians.

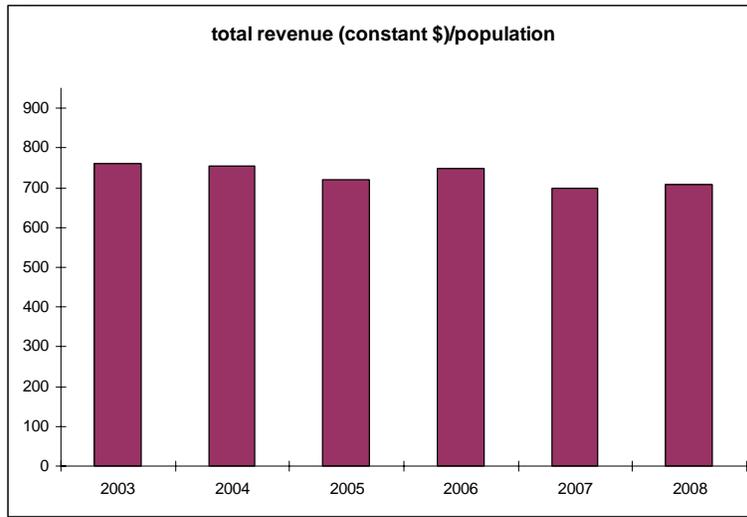
Long-term debt per capita decreased in 2008 after increasing the previous two years (see figure 12).

**Figure 12 Governmental funds: debt per capita**



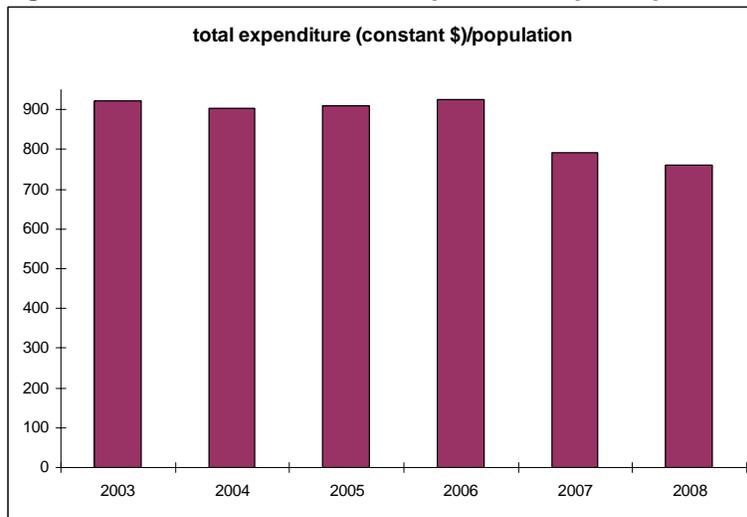
Revenue increased in 2008 (see figure 13). The two years, 2007 and 2008, were the lowest revenue years in the period reviewed.

**Figure 13 Governmental funds: revenue per capita**



Expenditures decreased in 2008 and were at the lowest level in the period reviewed (see figure 14).

**Figure 14 Governmental funds: expenditures per capita**



Throughout the period reviewed, governmental fund expenditures exceeded revenues. Transfers and issuance of general obligation bonds make up the difference between revenues and expenditures. The decreases in expenditures in 2007 and 2008 narrowed the gap between revenues and expenditures.

## Business-type activities ratio analysis

Business-type activities include water and sewer and solid waste, and are mostly supported by user fees and charges. Figure 15 summarizes the analysis of ratios for governmental activities.

**Figure 15 Business-type activities: summary of ratio analysis**

Lawrence finances	Indicator	Compared to last year
<b>Stronger measures</b>	Access to resources to meet immediate needs (see figure 24, liquidity)	Remained the same
<b>Weaker measures</b>	Burden of long-term debt (see figure 25, long-term liabilities)	Remained the same
	Funding mix of general tax revenues, grants and service charges (see figure 22, general support)	Worsened
	Ability to maintain provision of services (see figure 17, financial position)	Worsened
	Growth rate of resources to provide services and operate (see figure 18, financial performance)	Worsened

The City provides five business-type activities. Water and sewer and solid waste represent 90 percent of the business-type expenses (see figure 16). The other services – parking, stormwater and golf – are much smaller.

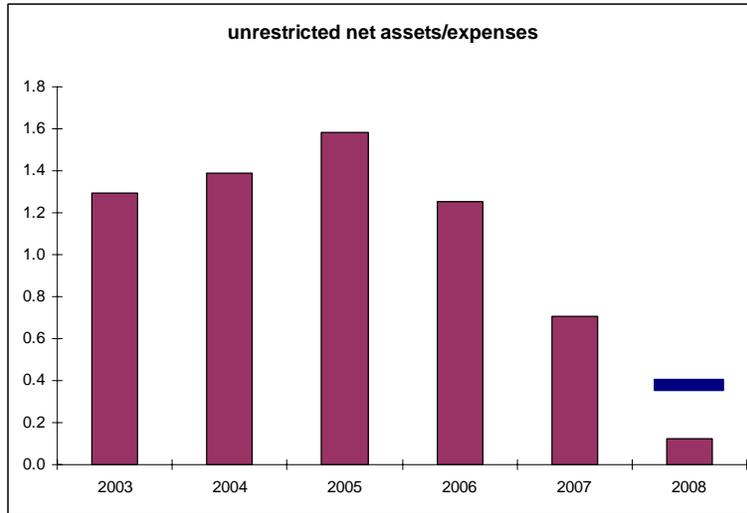
**Figure 16 Business-type expenses**

Activity	Expenses 2008
Water and sewer	25,644,004
Solid waste	10,048,229
Parking	1,259,311
Stormwater	1,776,832
Golf course	999,551

### Financial position

The financial position for business-type activities shows a less favorable trend in recent years and is below the median (see figure 17). This ratio weakened compared to last year, when the city's ratio was slightly above the median. Financial position measures the ability to maintain the provision of services.

**Figure 17 Business-type activities: financial position ratio**



Some of the decline in unrestricted net assets reflects the Utilities Department's increasing use of internally generated cash to fund water and sewer capital improvements.

### Setting charges and fees

Business-type activities are mostly supported by user fees and charges. The Government Finance Officers Association supports use of charges and fees and recommends cities establish charge and fee setting processes. Cities should:

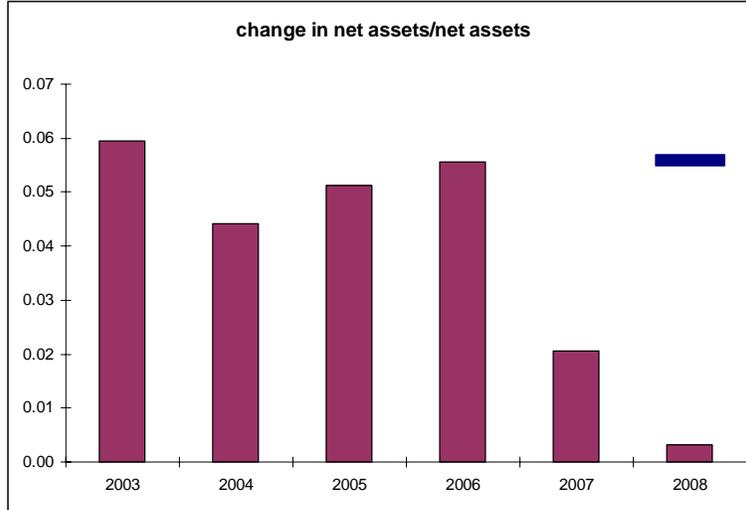
- Adopt a formal policy on charges and fees;
- Calculate the full cost of providing the service to provide a basis for setting the charge or fee;
- Review and update charges and fees periodically; and
- Provide information to the public on charges and fees, including the policy on cost recovery.

Source: *Recommended Practice: Setting of Government Charges and Fees*, Government Finance Officers Association, 1996.

**Financial performance**

Business-type financial performance shows a less favorable trend in recent years and is below median (see figure 18). Financial performance measures the rate at which resources grow.

**Figure 18 Business-type activities: financial performance ratio**



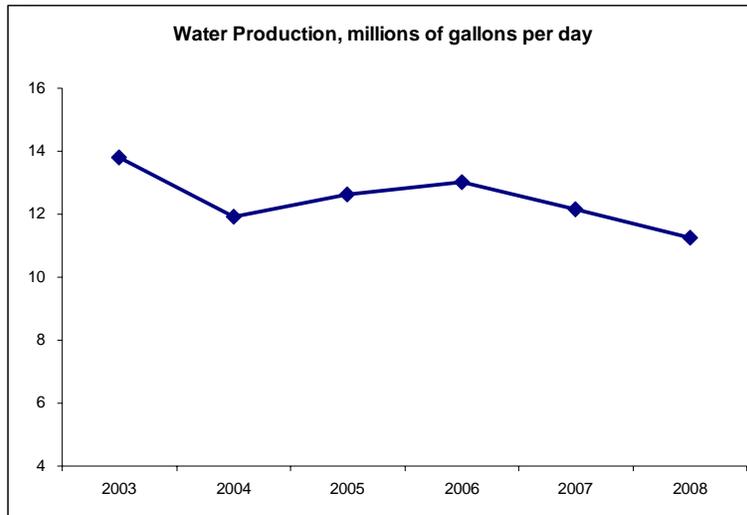
Net revenue declined in 2008 for all of the business-type activities except stormwater (see figure 19). Solid waste, parking, and golf program revenues did not cover expenses. Net revenue is simply the difference between revenue the activity generates and expenses. Net revenue provides a simple measure of the financial performance of business-type activities.

**Figure 19 Business-type activities net revenues**

	2003	2004	2005	2006	2007	2008
Water sewer	6,170,411	4,901,114	6,226,612	6,694,331	4,124,858	2,309,731
Solid waste	668,189	285,911	-45,666	-322,906	-595,396	-767,215
Parking	-15,554	-104,118	-90,799	20,457	-233,451	-240,839
Stormwater	1,555,816	1,518,971	1,301,282	1,085,129	1,058,478	1,113,553
Golf	-153,338	-181,909	-56,584	82,828	-2,301	-83,312

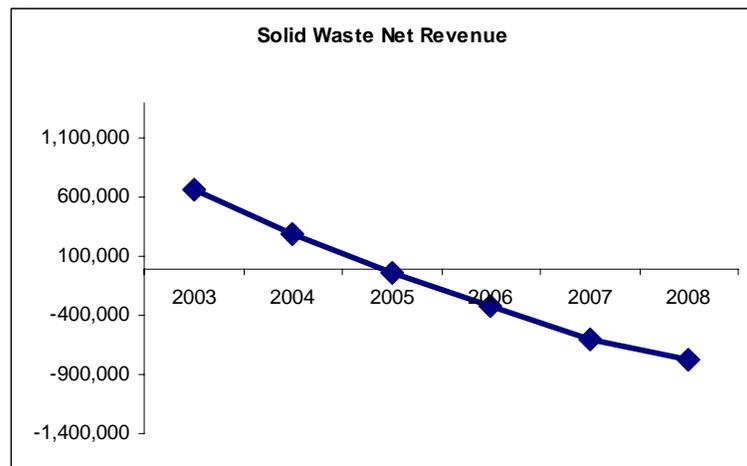
Water production declined in recent years (see figure 20). As a result, despite increases in rates, revenue from sales has remained relatively flat. Wetter summers, resulting in less irrigation, explain some of the decline in water consumption.

**Figure 20 Water production**



Solid waste program revenues haven't covered expenses in the last four years and the gap has grown (see figure 21). The graph shows a steady decline in net revenue.

**Figure 21 Solid waste net revenue**



If Lawrence's solid waste performed at the median of solid waste services in similar cities, then expenses and revenues would have been nearly even in 2008. At the median level, solid waste would have had net revenue of about \$74,000. In fact, Lawrence had solid waste expenses of about \$767,000 more than revenues.<sup>2</sup>

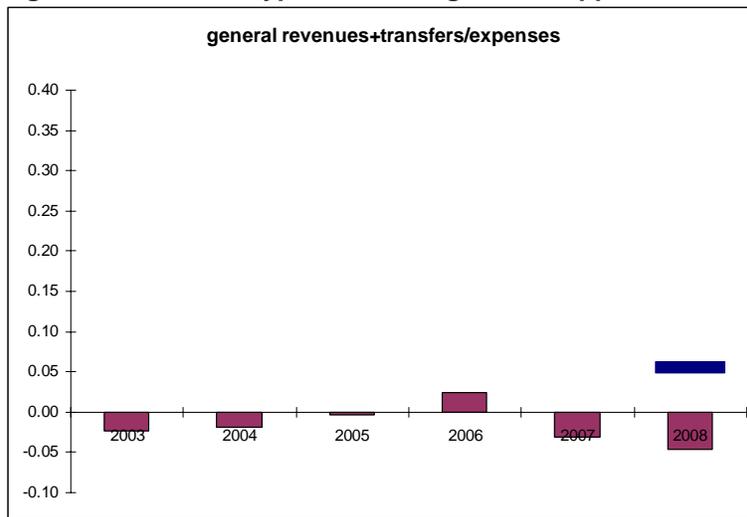
---

<sup>2</sup> Lawrence and 10 of the similar cities provide solid waste services and include information on expenses and revenues in the annual financial reports, allowing for comparisons. Six of the 11 cities had revenues that exceeded expenses for solid waste. The median had revenue that was about 1 percent greater than expenses. Lawrence had expenses greater than revenues.

### General support level

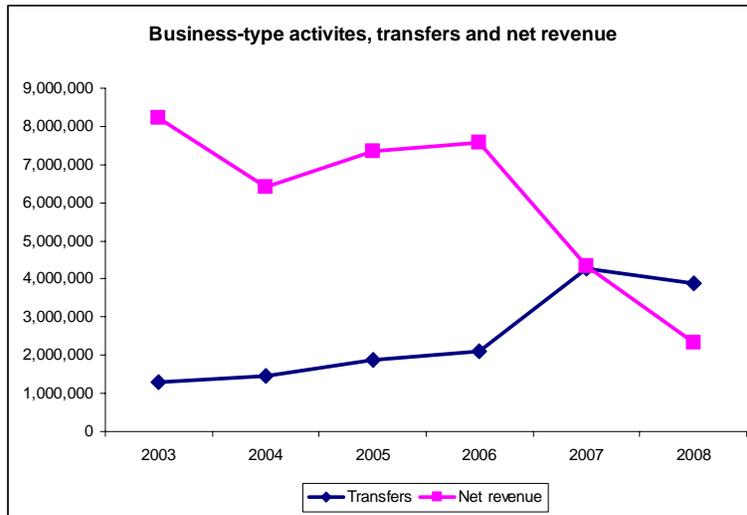
The level of general support for business-type activities shows a declining trend in recent years and is below the median (see figure 22). General support measures the extent to which taxes, rather than service charges, support business-type activities. A ratio of zero means that the business-type activities, taken as a whole, don't require support from general revenues or transfers. A negative ratio means that the business-type activities, taken as a whole, provide transfers to governmental activities. Business-type activities have low levels of support because they rely largely on charges for services to cover expenses.

**Figure 22 Business-type activities: general support ratio**



Transfers and net revenue from the business-type activities decreased from 2007 (see figure 23). While the actual amount of transfers decreased, those transfers represent a larger portion of the money that remains after covering expenses.

**Figure 23 Business-type activities transfers and net revenues**

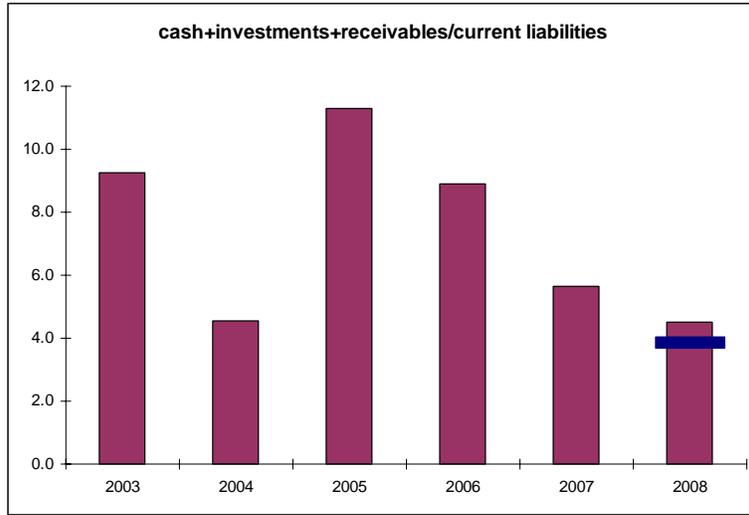


Last year the City Auditor recommended that the City Manager should document the method for allocating general overhead to the enterprise operations and the basis for transfers related to that overhead. In the 6-month follow-up to that recommendation, the City Manager noted that transfers predominantly assist with administrative overhead for specific services, including the use of city right-of-way, and are provided in lieu of franchise fees or payments in lieu of taxes charged to private utilities. The City Manager noted that staff has been reviewing practices in other jurisdictions to determine best practices.

### **Liquidity**

The business-type liquidity measure shows a declining trend but remains above the median (see figure 24). Liquidity measures access to resources to meet immediate needs. For this analysis, current liabilities include those long-term liabilities that are due within one year.

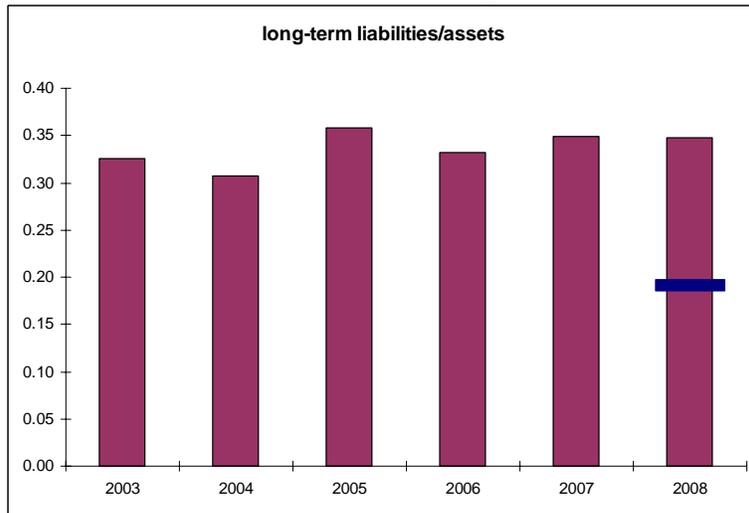
**Figure 24 Business-type activities: liquidity ratio**



**Long-term liabilities**

The business-type measure of long-term liabilities shows no clear trend and is above the median (see figure 25). The ratio addresses debt burden.

**Figure 25 Business-type activities: long-term liabilities ratio**



---

## Performance Audit: Financial Indicators

---

### Scope, methods and objectives

Analyzing financial ratios provides the City Commission and city management with an assessment of Lawrence's financial condition. The analysis is intended to encourage discussion of the city's financial condition and to:

- identify significant existing or emerging financial problems
- put the city's financial condition in context of the six year period of 2003-2008 and through comparisons to medians of cities similar to Lawrence

The City Auditor updated the analysis done in Performance Audit: Financial Indicators (August 2008). Last year's report compared Lawrence with medians based on 10 similar cities. This year's analysis was expanded by considering 15 similar cities. The auditor compiled information from Comprehensive Annual Financial Reports; evaluated ratios for Lawrence by looking at trends and comparing Lawrence to the medians; and discussed the analysis with city staff. Chaney, Mead and Scherman developed most of the indicators in this performance audit.<sup>3</sup>

The Planning and Development Services Department provided estimates for Lawrence population. Those estimates were used to calculate per capita debt, revenue, and expenditure trends. The trends were adjusted for inflation using *American City County Magazine's* municipal cost index and a base year of 2003.

The City Auditor conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require planning and performing the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the findings and conclusions based on the audit objectives. The City Auditor believes that the evidence

---

<sup>3</sup> Barbara A. Chaney, Dean Michael Mead, and Kenneth R. Scherman, "The New Governmental Financial Reporting Model: What it Means for Analyzing Government Financial Condition," *Journal of Government Financial Management*, Spring 2002.

obtained provides a reasonable basis for the findings and conclusions based on the audit objectives.

The City Auditor provided the City Manager with a draft of the report on July 6, 2009. Because the report includes no recommendations, a written response was not requested.

**Comparable cities**

To identify comparable cities, the City Auditor reviewed data from the U.S. Census Bureau American Community Survey for 2006. Data on 352 urban areas were used to identify those most similar to Lawrence on four measures:

- Population of the urban area
- Portion of residents under the age of 18
- Per capita income
- Median year of construction of housing

**Figure 26 cities similar to Lawrence**

Urbanized Area	Population urbanized area	Percent under the age of 18	Per capita income	Median year housing built
Lawrence, KS	84,899	18.1	21,026	1978
Norman, OK	86,535	17.8	22,234	1977
Missoula, MT	73,659	18.1	20,150	1976
Bellingham, WA	94,988	17.9	23,653	1978
Athens-Clarke County, GA	120,444	18.5	18,809	1979
St. Cloud, MN	96,630	20.0	21,735	1979
Champaign, IL	127,577	17.3	21,306	1975
Johnson City, TN	102,652	19.8	19,835	1974
Chico, CA	98,804	20.6	21,946	1978
Grand Junction, CO	103,932	20.6	21,666	1979
Charlottesville, VA	86,630	18.1	25,180	1977
Gainesville, FL	159,944	17.4	21,927	1982
Iowa City, IA	87,686	18.1	25,717	1977
Bloomington, IN	90,000	14.9	21,981	1976
Davis, CA	69,913	17.5	26,193	1978
Columbia, MO	104,334	20.7	23,040	1982

Source: U.S. Census Bureau, American Community Survey, 2006.

Urbanized Areas are central place(s) and adjacent territory with a general population density of at least 1,000 people per square mile of land area that together have a minimum population of at least 65,000 people.

The urbanized area of Leesburg-Eustis, Florida, fits the criteria used to identify places similar to Lawrence. However, because Leesburg and Eustis are two separate cities, with populations under 20,000, the

urbanized area was considered significantly different from Lawrence and excluded from the comparison and the table.

### **Key Terms**

City finances cover both governmental activities and business-type activities. **Governmental activities** include services like police and fire, public works, and administration. **Business-type activities** include services paid for largely by charges for service, such as trash collection and water and sewer utilities.

City **assets** are resources the city can use to provide services and operate the government. Among other things, assets include cash, investments, land, buildings, streets and water mains.

City **liabilities** are obligations the city has to turn over resources to other organizations or individuals. Liabilities include things like money the city has to pay to companies that provide services to the city and repayments for money the city borrowed.

Subtract liabilities from assets and the result is **net assets**. A portion of the city's assets may be used to meet ongoing obligations and this is referred to as **unrestricted net assets**.

The city collects taxes, such as sales taxes and property taxes, as **general revenues**. In addition to general revenues, **transfers** from other governmental activities can provide resources.

**Expenses** include costs incurred regardless of whether or not cash has actually changed hands. Expenses include depreciation of capital assets. These "accrual-basis" expenses provide a comprehensive measure of the cost of providing services.

### **Source of Financial Data**

Comprehensive annual financial reports from Lawrence and the similar cities provide the financial data used in this performance audit. Nearly all of the information comes from the government-wide financial statements. Those statements rely on "full accrual" accounting. That means that the financial statements include capital assets and long-term liabilities as well as current assets and liabilities. The government-wide financial statements report all revenues and costs of providing government services, not just those received or paid in the current year or soon after.

The City Auditor calculated ratios using the most recent available comprehensive annual financial report. Most of the annual reports from

other cities cover a 2008 fiscal year. However, in three of the other cities, the most recent annual report covered fiscal years that ended December 31, 2007.

The government-wide financial statements are a relatively new requirement. Lawrence first prepared government-wide financial statements for 2003.

---

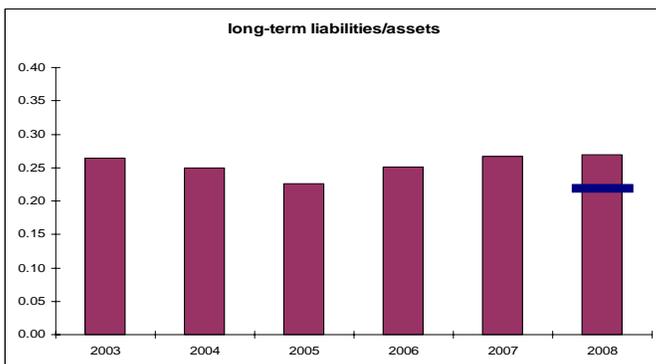
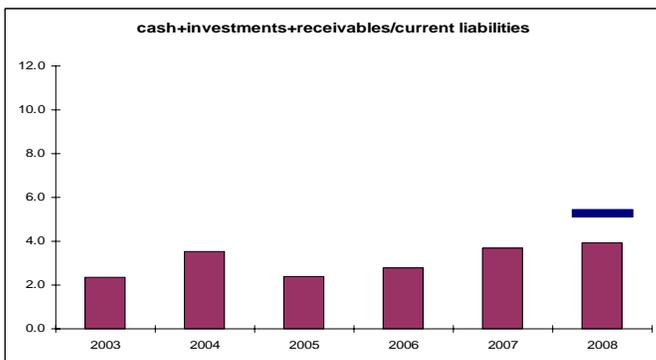
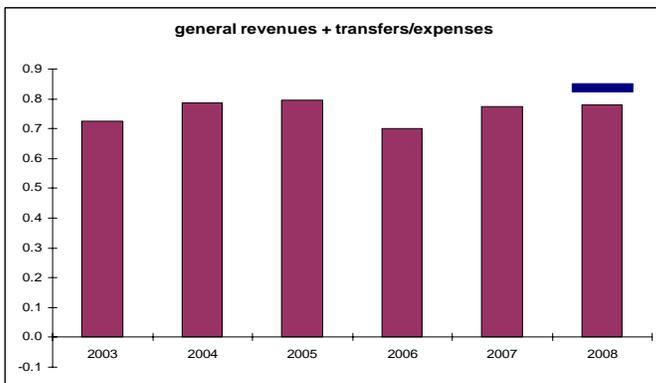
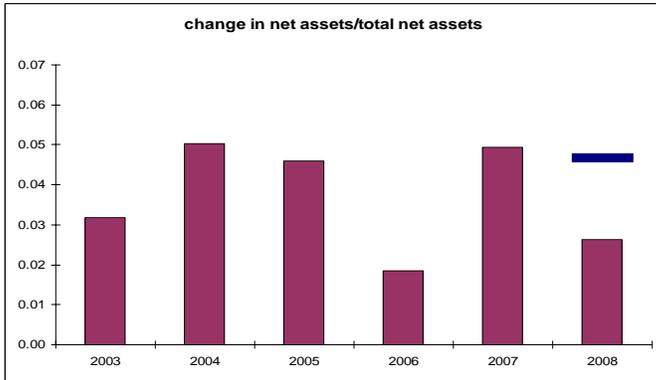
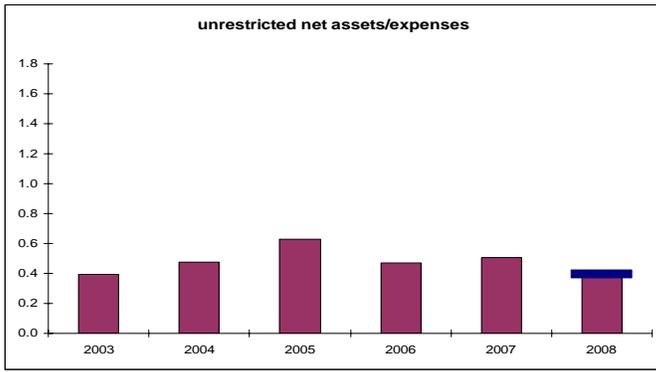
## **Performance Audit: Financial Indicators**

---

### **Appendix A: Graph Summary**

The appendix shows the common financial ratios for both governmental and business-type activities. The axes are adjusted so that the scale is common to the different activities.

## Governmental Activities



## Business-Type Activities

