The Civic Federation

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Indicators of Financial Condition:

A Comparison of the City of Chicago to 12 Other U.S. Cities

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The Civic Federation is an independent, non-partisan government research organization working to maximize the quality and cost-effectiveness of government services in the Chicago region and State of Illinois.

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EXECUTIVE SUMMARY

This report compares the relative fiscal performance of the City of Chicago to 12 other major U.S. cities using financial indicators compiled from audited financial statements from FY2007 through FY2011, the most recent years for which audited data were available for all of the cities when we compiled the report. In order to measure financial condition, it is important to assess the direction and magnitude of changing ratios over time.[1] The focus of the analysis is therefore on the City of Chicago's relative performance in four areas of financial condition: cash solvency, budgetary solvency, long-run solvency and service-level solvency relative to the other cities. For definitions of these and other financial terms used in this report, see the Glossary on page 45.

The report analyzes the five most recent audited financial statements of 13 major U.S. cities, most of which have also been the subject of analysis by the Pew Charitable Trusts' Philadelphia Research Initiative.[2] In addition to Chicago, the 12 other U.S. cities analyzed were Baltimore, Boston, Columbus, Detroit, Houston, Kansas City (MO), Los Angeles, New York, Philadelphia, Phoenix, Pittsburgh and Seattle. According to the Philadelphia Research Initiative, the group of cities combined the largest cities in the U.S., early industrial cities, geographically diverse cities and cities hit particularly hard by the recession.

The intention of this report is to add to a body of financial data on these cities that will examine their fiscal condition from many angles. The data in this report reflect a specific time frame that encompasses the Great Recession and its aftermath. As such, a majority of the cities experienced deteriorating financial condition during the five-year period. For an introduction to the economic conditions of the cities from 2007 to 2011, see page 17 and Appendix E on page 51.

It is also important to note that data in this report are compiled from each city's audited financial statements. These statements offer a comprehensive look at a government's obligations over the long-term, which is different from the government's budget. The budget is a short-term, cash-based document that reflects the government's policy decisions for the upcoming year. For in depth analysis of the City of Chicago's budgetary actions to address its financial challenges see the Civic Federation's website for annual analyses of the Chicago's proposed budgets.[3]

In order to provide a comparative analysis in the simplest and most consistent manner, this report examines the relative outcome of each indicator by ranking the 13 U.S. cities by largest five-year change in each ratio.[4] The table below shows each city's relative trend in financial condition based on all nine indicators. The City of Chicago ranked eleventh of the 13 cities with an average rank of 7.4. Columbus ranked first with an average rank of 5.1 and Detroit ranked thirteenth with an average rank of 11.2. It is important to note that the top eleven cities' average ranks were within a close range between 5.1 and 7.4. In other words, the cities' rankings varied significantly

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[1] Stephen J. Gauthier, *An Elected Official's Guide to the New Governmental Financial Reporting Model* (Chicago: Government Finance Officers Association, 2000).

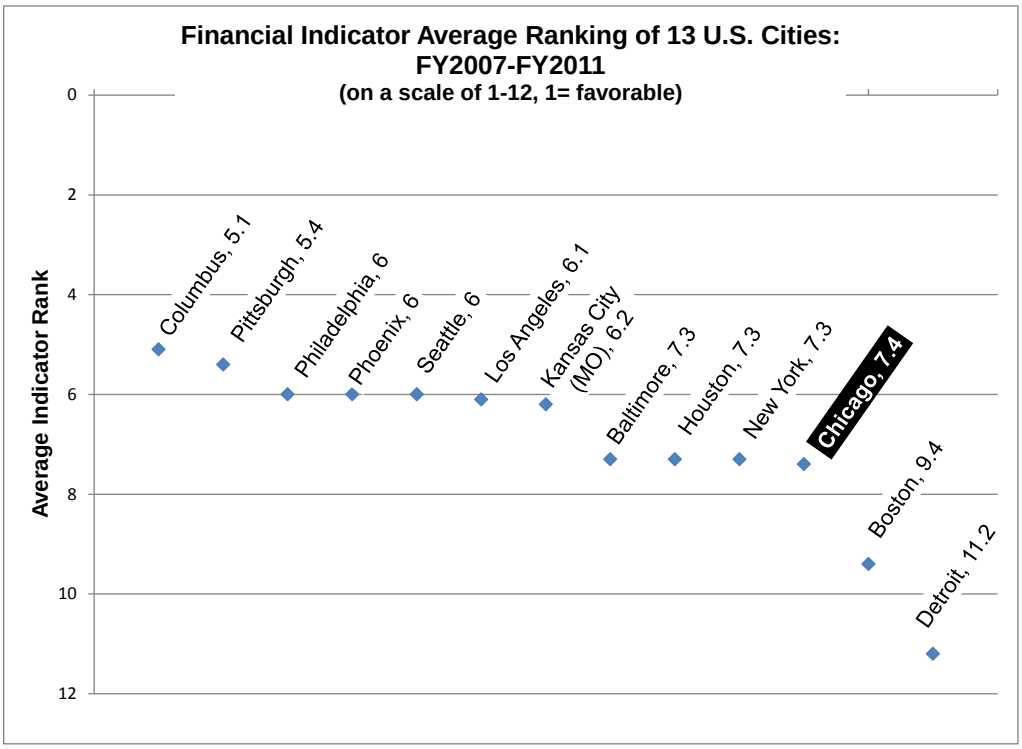
[2] Pew Charitable Trusts Philadelphia Research Initiative, "Tough Decisions and Limited Options: How Philadelphia and Other Cities are Balancing Budgets in a Time of Recession" (May 18, 2009). Due to a change in the fiscal year for the City of Atlanta in 2006 that led to inconsistent trend analyses, this report substitutes the City of Houston for Atlanta.

[3] See www.civicfed.org for annual analyses of the City's proposed budgets, as well as the Federation's *Recommendations for a Financially Sustainable City of Chicago*

with no city consistently out-performing the others. The exceptions are Boston and Detroit which had trends that were relatively poor more consistently. For example, Pittsburgh, which ranked second overall, ranked first with three financial indicators, but also ranked ninth, eleventh and twelfth with other financial indicators.

Financial Indicator Average Ranking of 13 U.S. Cities: FY2007-FY2011		
Rank	**City**	**Average Indicator Rank**
1	Columbus	5.1
2	Pittsburgh	5.4
3	Philadelphia	6.0
3	Phoenix	6.0
3	Seattle	6.0
6	Los Angeles	6.1
7	Kansas City (MO)	6.2
8	Baltimore	7.3
8	Houston	7.3
8	New York	7.3
11	**Chicago**	**7.4**
12	Boston	9.4
13	Detroit	11.2

The next exhibit further illustrates the rankings presented above in order to show the close proximity of rankings for the top eleven cities.



[4] A higher rank reflects improved performance for all indicators. For five indicators, the cities are ranked by largest positive change so that a high rank is considered improved performance. For four indicators, the cities are ranked by the largest negative change so that a high rank is considered improved performance. For more information, see the Rankings section of this report on page 8.

Based on six financial indicators, the City of Chicago ranked in the less favorable half of the 13 cities over the five-year period. Those six indicators are the continuing services ratio (8th), operating deficit ratio (9th), net worth ratio (8th), expenses per capita (10th), liabilities per capita (11th) and taxes and fees per capita (9th). Chicago performed in the more favorable half of the 13 cities based on three of the indicators: working capital ratio (5th), unreserved fund balance ratio (1st) and debt service expenditure ratio (6th). It is important to note that for all but one of the indicators, the debt service expenditure ratio, financial condition for a majority of the cities deteriorated over the five-year period. This is most likely due to the recession and its aftermath. However, despite an overall negative trend for all of the cities, Chicago's financial condition relative to the other cities was poor.

City of Chicago
Relative Financial Condition Trends: FY2007-FY2011

Indicator	Rank	Five-Year	Average
Working Capital to Expenses Ratio	5	(0.2)	(0.1)
Continuing Services Ratio	8	-20.2%	-5.1%
Unreserved Fund Balance Ratio*	1	9.3%	0.8%
Operating Deficit Ratio	9	-3.9%	-1.1%
Net Worth Ratio	8	-11.1%	-2.8%
Debt Service Expenditure Ratio	6	-1.9%	-0.3%
Expenses Per Capita	10	$ 232.68	$ 58.17
Liabilities Per Capita	11	$ 3,296.08	$ 824.02
Taxes and Fees Per Capita	9	$ 113.45	$ 28.36
Average Rank	**7.4**		

*The unreserved fund balance ratio trend reflects a four-year change because of a revision to GASB reporting standards for FY2011 statements. For more information see the Fund Balance Ratio section of this report.

Note: For all indicators, a higher rank is favorable.

Source: City of Chicago Comprehensive Annual Financial Reports, FY2007-FY2011.

The **working capital to expenses ratio** indicator is a measure of cash solvency, which demonstrates a government's ability to generate sufficient financial resources to pay its current liabilities. The working capital to expenses ratio compares net current government-wide assets to monthly expenses and approximates how many months the government is able to pay for operations. A higher ratio and an increasing trend are considered favorable. The City of Chicago's working capital to expenses ratio averaged 4.0 months and decreased by nearly 0.2 months over the five-year period, placing it fifth among the 13 cities. At its lowest point in FY2008, Chicago's government-wide working capital to expenses ratio dropped to 3.3 months. In other words, at any point during the fiscal year 2008, Chicago had enough working capital to fund approximately three months and one week of operations.

The three indicators of budgetary solvency demonstrate a government's financial ability to maintain current or desired service levels. The **continuing services ratio** examines unrestricted net assets as a percentage of governmental expenses. Over the five-year period, Chicago's continuing services ratio experienced a decline which placed it eighth of the 13 cities. Chicago had the third lowest average continuing services ratio over five years. More troubling was the steady downward trend over five years, which means that Chicago was accumulating liabilities without maintaining offsetting assets. The **fund balance ratio** compares unrestricted general

fund fund balance to general fund expenditures and reflects the government's budgetary savings. Although the City of Chicago's fund balance ratio experienced the largest growth of the 13 cities over the four-year period,[5] placing it first in rank, Chicago's actual ratio of unrestricted fund balance to operating expenditures is among the lowest and is a cause for concern.[6] The **operating deficit ratio** shows general fund operating surplus or deficit as a percentage of total operating expenses. The large size and consistent downward trend (9th among the 13 cities) of Chicago's operating deficit ratio is a cause for concern because it indicates that operating expenses consistently and significantly exceeded revenues. In addition, Chicago ran an operating deficit each of the past five fiscal years. These indicators reveal low levels of budgetary solvency, suggesting that Chicago was experiencing difficulty in maintaining current services with the existing revenue structure.

Indicators of long-run solvency assess the availability of future resources to pay for existing long-term obligations. The **net worth ratio** measures restricted and unrestricted net assets as a percentage of total assets. Chicago's net worth ratio has declined from a deficit of 4.5% in FY2007 to a deficit of 15.6% in FY2011, a downward trend that ranks it eighth of the 13 cities. The deficits in net worth indicate a lack of available restricted and unrestricted net assets for governmental activities and the steady decline suggests that Chicago has leveraged its assets. The **debt service expenditure ratio** measures the portion of governmental expenditures allocated to debt service. Chicago's debt service expenditure ratio trend placed it sixth of the 13 cities. Although the indicator generally decreased over the five-year period indicating better fiscal performance, it reveals that a high proportion of governmental expenditures are being allocated to debt service. Chicago's average debt service expenditure ratio over the five years was the fourth highest of the 13 cities.

Lastly, the report considers service-level solvency by using per capita indicators that reflect a government's ability to sustain existing services at levels required by citizens. All indicators are adjusted for inflation and reflect 2011 dollars. Chicago's five-year growth in real **expenses per capita** ($232.68 per person) and total real **liabilities per capita** ($3,296.08 per person) have given it a ranking of tenth place and eleventh place, respectively. High rates of expenses per capita and liabilities per capita suggest an expensive government and a lower ability to maintain those services long-term. From FY2007 to FY2011, Chicago's real **taxes and fees per capita** have grown by $113.45 per person, placing it in ninth place of the 13 cities. Chicago's growth in taxes and fees per capita reflect a moderate growth in tax burden on residents, relative to the other cities.

[5] Due to the implementation of GASB 54 in FY2011, a five-year trend analysis of fund balance ratio is not available so FY2007 to FY2010 is used for ranking. For more information about GASB 54, see the Fund Balance Ratio section on page 26 of this report.

[6] The City's unrestricted fund balance to operating expenditures ratio does not include approximately $500 million that the City holds in long-term reserves from asset leases. For more details on the fund balance ratio and the City's long-term reserves, see page 26.

The following table shows the performance of the City of Chicago using the six financial indicators and three per capita indicators.

City of Chicago Financial Indicators: FY2007-FY2011					
Indicator	**FY2007**	**FY2008**	**FY2009**	**FY2010**	**FY2011**
Working Capital Ratio	4.12	3.29	4.16	4.40	3.88
Continuing Services Ratio	-64.6%	-71.7%	-94.4%	-96.3%	-84.8%
Unreserved Fund Balance Ratio*	0.2%	0.0%	0.1%	2.7%	-
Unrestricted Fund Balance Ratio*	-	-	-	-	10.2%
Operating Deficit Ratio	-4.2%	-7.5%	-15.0%	-13.9%	-8.5%
Net Worth Ratio	-4.5%	-7.7%	-10.3%	-12.5%	-15.6%
Debt Service Expenditure Ratio	10.5%	15.1%	12.5%	11.9%	9.3%
Real Expenses Per Capita	$ 2,918	$ 2,823	$ 2,849	$ 3,170	$ 3,150
Real Liabilities Per Capita	$ 8,926	$ 9,028	$ 9,997	$ 11,637	$ 12,222
Real Taxes and Fees Per Capita	$ 1,842	$ 1,834	$ 1,780	$ 1,920	$ 1,955

*The unreserved fund balance ratio trend reflects a four-year change because of a change to GASB reporting standards for FY2011 statements. For more information see the Fund Balance Ratio section of this report.

Source: City of Chicago Comprehensive Annual Financial Reports, FY2007-FY2011.

During the five-year period, the City of Chicago's relative financial condition has worsened compared to most of the twelve other cities in all four areas of solvency. Chicago's ability to generate financial resources in the short-term has declined, indicating a weakened cash solvency. Its budgetary solvency is declining as well, with growing deficits in unrestricted net assets and in its Corporate Fund, which is its general operating fund. Also, although Chicago's fund balance levels have increased over the five-year period, they were well below the GFOA's recommended levels. The long-run solvency indicators expose significant challenges for the City to meet its existing long-term obligations. Despite the decline in the debt service expenditure ratio, the average over the five years for Chicago is among the highest of the 13 cities. For more information about the drivers of Chicago's weakened budgetary and long-run solvency, particularly Chicago's growing deficit of net assets, see Appendix B on page 48 of this report. Finally, with larger increases in real expenses and liabilities versus real taxes and fees, Chicago's service-level solvency indicators suggest that Chicago is experiencing a growing imbalance between the demands of its citizens and the means to fund them.

USER GUIDE

The following report presents nine indicators of financial health and compares the City of Chicago to twelve other United States cities. In order to measure financial condition, it is important to assess the direction and magnitude of changing ratios over time.[7] The focus of the analysis therefore is on the City of Chicago's relative financial performance from FY2007 to FY2011, the most recent years for which audited data were available for all of the cities when we compiled the report.

When possible, the report will include benchmarks for the financial indicators. However, it is important to note that due to the wide range of governmental operations and demographics for the selected cities, not all of the indicators have universally-accepted standards. Therefore, the analysis focuses on the trends over the five-year period and underlying reasons for significant fluctuations. An analysis of each city's individual performance was not made, but in addition to the City of Chicago, the analysis does include discussion of the highest and lowest ranked cities for each indicator.

Rankings

The data used in this report are obtained from the audited financial statements and can reflect vastly different areas of the government's finances. In order to provide a comparative analysis in the simplest and most consistent manner, this report ranks the 13 U.S. cities by largest five-year change. For all indicators, a higher rank is favorable. With five indicators, an increase in the ratio over time – or a positive trend – tends to show sound financial performance. For example, growth in the net worth ratio may reflect a government's increasing ability to pay off existing long-term liabilities. With the other four indicators, a decrease in the ratio over time – or a negative trend – tends to show sound financial performance. For example, a declining debt service expenditures ratio may reflect a government's waning need to allocate operating expenditures to debt service.

The indicator rankings create a caveat with the presentation of data: a high rank does not necessarily reflect sound fiscal condition. The reverse of this point is also true: It is important to remember a poor trend does not indicate poor financial condition. For example, the reader should examine the fund balance ratio – where a high rank is favorable but does not necessarily reflect sound fiscal condition – in the following way:

> *Chicago ranks high because from FY2007 to FY2010, the fund balance ratio increased by 0.6 percentage points, whereas most of the other 12 cities experienced a negative four-year change.[8] Although a positive trend is favorable, Chicago's low fund balance is a cause for concern. Meanwhile, despite a four-year decline in fund balance levels, Seattle,*

[7] Stephen J. Gauthier, *An Elected Official's Guide to the New Governmental Financial Reporting Model* (Chicago: Government Finance Officers Association, 2000).

[8] Due to the implementation of GASB 54 in FY2011, a five-year trend analysis of fund balance ratio is not available. For more information about GASB 54, see the Fund Balance Ratio section on page 26 of this report.

which is ranked 12th, has a healthy level of fund balance at 14.2% that nearly meets the GFOA recommended level.[9]

Additionally, what may indicate an improved trend on its face – for example, a declining debt service expenditures ratio – may also indicate a lack of investment in infrastructure, which could be costly in the long-term. All trends should be thoroughly examined and caution should be taken before reading too much into any one indicator.

Indicator Trends

Each indicator analysis includes a chart that ranks the 13 cities by largest five-year change. Also included in the chart is the average annual change for each city over the five years,[10] the average ratio for each city over the five years, the average ratio of all 13 cities for each year and the indicator trend. The indicator trend is identified as *increased*, *decreased* or *mixed*. The indicator trend is determined by the following method:

- *Increased*: When the ratio increased over three out of four years, or when the indicator increased over two years and decreased over two years and a five-year increase is of greater magnitude than the average annual change;
- *Decreased*: When the ratio decreased over three out of four years, or when the indicator increased over two years and decreased over two years and the five-year decrease is of greater magnitude than the average annual change; and
- *Mixed*: When the indicator increased over two years, decreased over two years and the five-year change is not of greater magnitude than the average annual change.

Limitations

Due to a number of factors, the analysis presented in this report has certain limitations. First, it is important to note that this report does not prescribe the way in which all governments ought to be examined to determine financial condition. There is a universe of hundreds of possible indicators of financial condition. The Civic Federation strove in this report to select useful, familiar financial indicators that make intuitive sense to present the City of Chicago's relative financial condition. Another analysis using different indicators could possibly come to a different conclusion.

The 13 cities selected in the analysis represent vastly different governments and demographics. As such, each city has unique governmental operations, social and demographic compositions and local and state laws, all of which could influence the indicators but are not accounted for in the analysis. In addition, cities may implement accounting changes for any given fiscal year. These changes can have a significant impact on how financial data is reported and, when examining financial indicators based on this data over time, can create a misleading trend.

[9] The Government Finance Officers' Association recommends an unrestricted operating fund balance of approximately 17% for general-purpose governments. For more information, see the Fund Balance Ratio section on page 26 of this report.

[10] Since year-to-year fluctuation is normal for many of these indicators and their individual components, the trends are presented as both an average annual change and a five-year change in order to give an idea of the level of year-to-year change and to avoid the distorted impression that a simple snapshot between two fiscal years could leave.

Additional limitations of this report are presented in Appendix D on page 50 of this report.

INTRODUCTION

The purpose of this report is to compare the fiscal health of 13 major U.S. cities using financial indicators compiled from audited financial statements. The focus is on how the City of Chicago ranks in comparison to the other cities.

Value of Financial Indicators

In assessing the financial health of local governments, much academic research has focused on developing measures of financial condition. Although there is no strict consensus on these measures, there is agreement that the financial condition of local governments is important to the effective, efficient and economical delivery of public services.[11] The Civic Federation draws from a number of studies where financial indicators were developed to create different measures of fiscal condition for states and local governments. This report uses those indicators to assess the relative fiscal condition of the City of Chicago and compare it to 12 other U.S. cities.

One commonly used study is Kenneth Brown's *The 10-Point Test of Financial Condition: Toward an Easy-to-Use Assessment Tool for Smaller Cities*. The article, published in 1993, was based on pre-GASB 34[12] data from 1989. Although the ten indices used were extremely useful for their simplicity and accessibility,[13] the data only provided a snapshot from one year and focused exclusively on governmental funds rather than the overall government, which can provide a more comprehensive and comparable look at government operations.

In October 2009, the Government Finance Review published *Revisiting Kenneth Brown's "10-Point Test"* which aimed to build on Brown's strengths by providing indicators of financial condition that could "help a jurisdiction develop a better understanding of its financial condition, identify hidden or emerging problems, present a picture of strengths and weaknesses, introduce long-term considerations and provide a starting point for cities to consider financial policies that pertain to their particular city government."[14] The report used audited financial data from 2003 to 2006 for municipalities throughout the country. Ten indicators provided measures of cash solvency, budgetary solvency and long-run solvency, including a general fund fund balance ratio and debt service ratio.[15] The article provided an overview of each of the indicators used and

[11] Xiaohu Wang, Lynda Dennis and Yuan Sen (Jeff) Tu, "Measuring Financial Condition: A Study of U.S. States," *Public Budgeting & Finance*, Summer 2007, p. 4.

[12] In 1999, the Governmental Accounting Standards Board (GASB) published its Statement 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*. Statement 34 requires governments to present information in the first two financial statement exhibits using full accrual accounting encompassing all funds, as in the private sector. For more information, see Significance of GASB Statement 34 on page 11 of this report.

[13] Brown provided 10 indices to evaluate municipal financial condition and to compare with national benchmarks based on population size. The data used for calculating ratios were available from audited financial reports.

[14] Craig S. Maher and Karl Nollenberger, "Revisiting Kenneth Brown's '10-Point Test,'" *Government Finance Review;* October 2009.

[15] For more information on indicators and measures of solvency, see the Data and Methodology section of this report or the Glossary on page 45.

presented the data in a way that allows municipalities to assess their financial condition relative to national samples (in quartiles) based on population and median scores over time.

A number of indicators used in this report are drawn from another frequently cited report "Measuring Financial Condition: A Study of U.S. States" by Xiaohu Wang et al. published in Public Budgeting and Finance in 2007. The study constructed 11 indicators from the government-wide Statement of Net Assets and Statement of Activities that assess four dimensions of financial solvency: cash, budget, long-run and service-level. The study tested the reliability and validity of the indicators as a good measure of financial condition. The results of the statistical analyses showed that the indicators are relatively reliable and valid in measuring financial condition and that government-wide information, as required by GASB 34, provides a useful reporting framework to evaluate the fiscal health of a government.[16]

In addition to the studies noted above, this report draws upon the research on local government financial condition by Woods Bowman, who has identified 100 unduplicated financial indicators.[17]

The indicators chosen for this report are relatively common and accessible in an attempt to present the data in a way that makes intuitive sense to a non-academic audience. This however, does not mean that the indicators not included here are not relevant to the discussion of financial condition.

Data and Methodology

The following sections describe the sources of the data used and how data are analyzed in this report.

Significance of GASB Statement 34

The report uses data from exhibits presented in the financial statements in each government's Comprehensive Annual Financial Report (CAFR). The financial statements are prepared using Generally Accepted Accounting Principles (GAAP) for governments, which are set by the Governmental Accounting Standards Board (GASB). In 1999 GASB published its Statement 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*. Statement 34 requires governments to present information in the first two financial statement exhibits using full accrual accounting encompassing all funds, as in the private sector. These first two exhibits are called the government-wide Statement of Net Assets and the Statement of Activities. Most of the information presented in the government-wide financial statements must be calculated the same way by each government, so they provide more comparable data than were available before Statement 34.[18] In addition, by requiring

[16] Xiaohu Wang, Lynda Dennis and Yuan Sen (Jeff) Tu, "Measuring Financial Condition: A Study of U.S. States," *Public Budgeting & Finance*, Summer 2007, p. 20.
[17] Woods Bowman, "Indicators of Financial Condition in Theory and Practice" (unpublished, DePaul University, 2011).
[18] For more information on Statement 34 see the summary of Statement 34 at http://www.gasb.org or Stephen J. Gauthier, *An Elected Official's Guide to the New Governmental Financial Reporting Model* (Chicago: Government Finance Officers Association, 2000).

government-wide financial statements as opposed to specific fund statements, which can vary significantly in type and number from government to government, financial data is more comprehensive and comparable. GASB required governments to implement the financial reporting changes between the fiscal years beginning 2001 and 2003, depending on the size of the government based on annual revenues.

Financial Statements

The government-wide financial statements report the activities of the primary government, which include governmental activities that are normally supported by taxes and intergovernmental revenues and business-type activities that are normally supported by user fees and charges for services. These statements use the full accrual basis of accounting[19] and have an "economic resources" measurement focus, meaning that they take into account *all* assets (including capital assets) and most liabilities, even long-term liabilities that will come due only in the future. Government-wide financial statements do not include fiduciary funds so actuarially accrued pension liabilities are not included. However, since the implementation of GASB Statement No. 27, governments report net pension obligations, which are the cumulative difference between annual pension costs and the employer's contributions to its plans. The long-term focus provides a backdrop against which to evaluate the government's fiscal health and the sustainability of its financial practices. It allows readers of financial statements to assess the impact of fiscal decisions that may create liabilities to be paid in the future.[20]

The government-wide financial statements used in this report include:

- *Statement of Net Assets*: reports all financial and capital resources by measuring assets less liabilities resulting from exchange and exchange-like transactions when the exchange took place; and
- *Statement of Activities*: reports the operations of the government by measuring the net (expense) revenue of its individual functions (such as general revenues, program fees, intergovernmental aid, etc.).[21]

In contrast to the "economic resources" measurement focus, the financial statements of the governmental funds use a "current financial resources" measurement focus. The goal of these financial statements is to report additional, more detailed information about the primary government. The current financial resources measurement focus shows near-term inflows and outflows using modified accrual accounting.[22] It does not include the value of capital assets or long-term liabilities due in future years. According to GASB, governmental fund assets are generally expected to be liquidated within a year and liabilities are expected to be satisfied with current resources.

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[19] The full accrual basis of accounting is a method that attempts to recognize revenues when they are earned and expenses when they are incurred, not when cash changes hands.

[20] For more on full accrual and accountability see GASB's "Interperiod Equity and What it Means to You" http://www.gasb.org/newsletter/inter-period_equity_june2009.html.

[21] Governmental Accounting Standards Series Statement No. 34 (June 1999) p. 14 and 17.

[22] The modified accrual basis of accounting recognizes revenues as those collected within the year or soon enough thereafter that can be used to finance current-year expenditures. Expenditures represent the use or expected use of current financial resources.

The governmental funds' financial statements used in this report include:

- *Balance Sheet*: reports information about the current assets, liabilities and fund balances for each major fund and aggregated nonmajor funds; and
- *Statement of Revenues, Expenditures and Changes in Fund Balances*: reports information about the inflows, outflows and balances of current financial resources of each major fund and aggregated nonmajor funds.[23]

All data are for the primary government only and do not include discretely-presented component units.[24] Government-wide data include tax-supported governmental functions and business-like activities such as city-owned utilities or airports. Population data are taken from population estimates by the United States Census Bureau for fiscal years 2007 through 2009 and 2011, and from the 2010 Census.

The following table illustrates the general structure of the audited financial statements contained in a government's Comprehensive Annual Financial Report:

Comprehensive Annual Financial Statements				
	Government-wide Statements	**Fund Statements**		
		Governmental Funds	**Proprietary Funds**	**Fiduciary Funds**
Financial Statement:	Statement of Net Assets	Balance Sheet	Statement of Fund Net Assets	Statement of Fiduciary Net Assets
	Statement of Activities	Statement of Revenues, Expenditures and Changes in Fund Balance	Statement of Revenues, Expenses and Changes in Fund Net Assets	Statement of Changes in Fiduciary Net Assets
Accounting Basis:	Full accrual	Modified accrual	Full accrual	Full accrual
Measurement Focus:	Economic resources	Financial resources	Economic resources	Economic resources

Source: City of Baltimore, FY2011 Comprehensive Annual Financial Report, p. 4 and Governmental Accounting Standards Board, Summary of Statement No. 34.

Fiscal Years

The addition of government-wide financial statements was one of the more significant changes brought about by Statement 34, and large U.S. cities have since published several years of CAFRs using Statement 34.[25] This report analyzes the five most recent CAFRs of 13 large U.S. cities, most of which have also been the subject of analysis by the Pew Charitable Trusts' Philadelphia Research Initiative.[26] In addition to Chicago, the 12 other U.S. cities analyzed were

[23] Governmental Accounting Standards Series Statement No. 34 (June 1999) p. 30 and 31.

[24] Note 1 in the "Notes to Financial Statements" included in each government's CAFRs describes the reporting entity and any discretely-presented component units. For the City of Chicago, the City's financial statements do not include related organizations for which no fiscal dependence exists. These related organizations are the Chicago Park District, Chicago Public Schools, Community College District No. 508, Chicago Housing Authority and the Chicago Transit Authority. The City's financial statements include the following entities as fiduciary trust funds: the Municipal Employees' Annuity and Benefit Fund of Chicago, the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, The Policemen's Annuity and Benefit Fund of Chicago and The Firemen's Annuity and Benefit Fund of Chicago.

[25] See GASB's "Statement 34, 10 years later" at http://www.gasb.org/newsletter/10th_anniversary_st34_june2009.html. Governments with annual revenues over $100 million were required to implement Statement 34 for the fiscal year beginning after June 15, 2001.

[26] Pew Charitable Trusts Philadelphia Research Initiative, "Tough Decisions and Limited Options: How Philadelphia and Other Cities are Balancing Budgets in a Time of Recession" (May 18, 2009) and "Layoffs, Furloughs and Union Concessions: The Prolonged and Painful Process of Balancing City Budgets" (September 22, 2009) http://www.pewtrusts.org/our_work_detail.aspx?id=953. Due to a change in the fiscal year for the City of

Columbus, Pittsburgh, Philadelphia, Phoenix, Seattle, Los Angeles, Kansas City (MO), Baltimore, Houston, New York, Boston and Detroit. According to the Philadelphia Research Initiative, the group of cities combined the largest cities in the U.S., early industrial cities, geographically diverse cities and cities hit particularly hard by the recession. The intention of this report is to add to a body of financial data on these cities that will examine their fiscal condition from many angles. For an introduction to the economic conditions of the cities from 2007 to 2011, see page 17 and Appendix E on page 51of this report.

The fiscal year 2007-2011 financial statements were used for all governments, since they were the most recent years for which audited data were available for all of the cities when we compiled the report. It should be noted that not every city uses the same fiscal year calendar. The fiscal years for each of the cities examined are below:

Fiscal Years of 13 U.S. Cities		
May 1 to April 30	**July 1 to June 30**	**January 1 to December 31**
Kansas City (MO)	Baltimore	Chicago
	Boston	Columbus
	Detroit	Pittsburgh
	Houston	Seattle
	Los Angeles	
	New York	
	Philadelphia	
	Phoenix	

Financial Indicators

This report measures financial condition using a number of conventional yardsticks, or financial indicators. Financial condition can be observed as a government's "ability to maintain existing service levels, withstand economic disruption and meet the demands of growth and decline."[27] To make some compensation for differences in size and scope of the different municipal governments, the indicators are expressed as ratios. For example, the continuing services ratio shows unrestricted net assets relative to expenses of the same government. A government with $200 million in unrestricted net assets and $400 million in expenses would have the same 0.5 ratio as a government with $500 million in unrestricted net assets and $1 billion in expenses.

For most indicators used in this report, there are no objective standards of what ratios are "good" or "bad" for any one year. However, analysis of trends can provide context as to whether a city's performance is improving or declining. The addition of other cities also provides a relative trend measure.

Atlanta in 2006 that led to inconsistent trend analyses, the Civic Federation substitutes the City of Houston for Atlanta.

[27] Craig S. Maher and Karl Nollenberger, "Revisiting Kenneth Brown's '10-Point Test,'" *Government Finance Review* (October 2009). There are many definitions of financial condition in the literature, but most focus on the ability to maintain service levels over time.

The indicators used in the report reflect four dimensions of solvency[28] associated with the concept of financial condition. Each dimension of solvency is explained below, along with the coordinating financial indicators and the formulas used to calculate each indicator. Descriptions of the financial indicators used in this report are also consolidated into Appendix C on page 49 of this report.

Cash solvency demonstrates a government's ability to generate sufficient financial resources to pay its current liabilities. The *working capital to expenses ratio* indicator, a measure of liquidity, compares net current government-wide assets to monthly expenses and assesses approximately how many months the government is able to pay for operations using its resources on hand. An increase in the working capital to expenses ratio over time may reflect increasing current net assets or decreasing annual expenses, both of which can generally be considered fiscally sound outcomes. As such, a higher ratio and an increasing trend are considered favorable.

1) *Working Capital to Expenses Ratio:*

$$\frac{\textit{Current Assets} - \textit{Current Liabilities}}{{}^{1}/_{12}\ \textit{Expenses}}$$

Source of Data: Government-Wide Statement of Net Assets

Budgetary solvency is related to a government's financial ability to maintain current or desired service levels within the budget period by sufficiently funding operating expenses. The *continuing services ratio* indicator examines unrestricted net assets as a percentage of expenses for all funds government-wide. This indicator measures the degree to which unrestricted net assets can support continuing government services. An increase in the continuing services ratio over time may reflect increasing unrestricted net assets or decreasing government-wide expenses, both of which can lead to more readily available resources for the government. Therefore, a higher ratio and an increasing trend are considered favorable.

2) *Continuing Services Ratio:*

$$\frac{\textit{Unrestricted Net Assets}}{\textit{Total Expenses}}$$

Sources of Data: Government-Wide Statement of Net Assets and Government-Wide Statement of Activities

The *fund balance ratio* compares unrestricted general fund fund balance to general fund expenditures, reflecting the operating savings that a government has accumulated relative to the government's operating expenditures for that fiscal year. The Government Finance Officers Association (GFOA) recommends that general-purpose governments maintain approximately 16.7% of their operating expenditures or revenues as fund balance. A government that meets the GFOA recommendation or has an increasing trend can be considered relatively fiscally sound with regard to fund balance levels. The fund balance ratio examines data reported with the modified accrual basis of accounting and could pose some comparability issues since it only examines the general fund, which can vary significantly between governments with regard to operational activities.

[28] Xiaohu Wang, Lynda Dennis and Yuan Sen (Jeff) Tu, "Measuring Financial Condition: A Study of U.S. States," *Public Budgeting & Finance,* Summer 2007.

3) *Fund Balance Ratio:*

$$\frac{\textit{Unrestricted General Fund Fund Balance}}{\textit{General Fund Expenditures}}$$

Sources of Data: Governmental Funds Balance Sheet and Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balance

The *operating deficit ratio* shows the general fund operating surplus or deficit as a percentage of total operating expenses on an actual basis. This indicator reflects the difference between revenues and expenditures in completed fiscal years. Generally, a larger ratio reflects excess operating revenues over expenditures. Therefore, a higher ratio and an increasing trend are considered favorable. The operating deficit ratio examines data reported with the modified accrual basis of accounting and thus could pose the same issues of comparability as the fund balance ratio.

4) *Operating Deficit Ratio:*

$$\frac{\textit{General Fund Surplus or Deficit}}{\textit{Net Operating Expenditures}}$$

Source of Data: Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balance

Long-run solvency assesses the availability of future resources to pay for existing long-term obligations. The *net worth ratio* measures restricted and unrestricted net assets as a percentage of total assets. It is a measure of the net worth of a government and signifies the government's ability to pay off existing long-term liabilities. A larger ratio indicates more accessible resources for the government and therefore, a higher ratio and an increasing trend are considered favorable.

5) *Net Worth Ratio:*

$$\frac{\textit{Restricted and Unrestricted Net Assets}}{\textit{Total Assets}}$$

Source of Data: Government-Wide Statement of Net Assets

The *debt service expenditure ratio* is the percentage of debt service expenditures out of total governmental fund expenditures. The indicator can be used to assess service flexibility by determining the amount of expenses committed to annual debt service. With a higher debt service expenditure ratio, a larger portion of expenditures is being allocated to paying for debt issued by the government rather than regular government services. As such, a lower ratio and decreasing trend are considered favorable. The debt expenditures ratio examines data reported with the modified accrual basis of accounting.

6) *Debt Service Expenditure Ratio:*

$$\frac{\textit{Debt Service Expenditure}}{\textit{Total Expenditures}}$$

Source of Data: Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balance

Lastly, by using per capita indicators, the report considers **service-level solvency** which reflects a government's ability to maintain services at the quality and level required to ensure the safety and welfare of citizens and to meet their expectations and desires. *Expenses per capita* divides

the total expenses of the primary government, which include governmental activities and business-type activities, by population. Higher expenses per capita reveal a more expensive government and lower solvency to sustain that expense level.[29] Therefore, a lower ratio and decreasing trend are considered favorable.

7) *Expenses per Capita:*

$$\frac{\textit{Total Primary Government Expenses}}{\textit{Population}}$$

Source of Data: Government-Wide Statement of Activities

Similarly, *liabilities per capita* divides the total liabilities of the primary government by population and represents the government's relative indebtedness with regard to future taxpayers. Liabilities, as reported in the government-wide Statement of Activities, do not include unfunded pension liabilities. Since high or increasing liabilities can be a cause for concern, a lower ratio and decreasing trend are considered favorable.

8) *Liabilities per Capita:*

$$\frac{\textit{Total Liabilities}}{\textit{Population}}$$

Source of Data: Government-Wide Statement of Activities

Taxes and fees per capita divides all taxes and charges for services for primary government activities by population. Higher taxes and fees per capita reflect a higher tax burden for residents and a lesser ability of the government to raise taxes or fees further to sustain current service levels. As such, a lower ratio and decreasing trend are considered favorable.

9) *Taxes and Fees per Capita:*

$$\frac{\textit{Total Primary Government Taxes and Charges for Services}}{\textit{Population}}$$

Source of Data: Government-Wide Statement of Activities

AN ECONOMIC SNAPSHOT

When analyzing the financial condition of the cities in this report, it is helpful to keep in mind the economic climate during the same period. Economic indicators offer a more comprehensive look at the cities' financial condition by providing the context needed to help explain systemic trends or to help explain individual components of indicators. To provide an economic snapshot of the City of Chicago, this section examines population, unemployment, inflation and gross domestic product (GDP) data. With three of the four indicators, Chicago performed in the less favorable half of the 13 cities.

It is important to remember that the following indicators of economic condition represent data from calendar years 2007 through 2011, whereas the financial indicators presented later in this report represent data from fiscal years 2007 through 2011. Nine of the 13 cities studied do not have calendar year fiscal years. For complete economic data, see Appendix E of this report on

[29] Xiaohu Wang, Lynda Dennis and Yuan Sen (Jeff) Tu, "Measuring Financial Condition: A Study of U.S. States," *Public Budgeting & Finance,* Summer 2007, p. 9.

page 5151 which ranks the 13 cities by largest nominal or percentage increase over five years, and presents the top five and bottom five cities. The appendix also includes a presentation of all economic indicators by city.

From 2007 to 2011 the City of Chicago experienced a significant drop in population, placing it in 11th place for percent growth in population among the 13 cities.[30] Chicago shrank by 4.4%, losing 125,388 residents. The city that grew by the largest percentage was Columbus at 6.8%, or 50,573 residents, while the city that declined the most was Detroit at -23.0%, or a loss of 210,649 residents.

During the same time period, Chicago's unemployment rate increased from 5.7% in 2007 to 11.3% in 2011.[31] The 5.6 percentage point increase places Chicago in 3rd place for growth in unemployment among the 13 cities. The unemployment rate grew the most in Los Angeles (8.0 percentage points) and grew the least in Pittsburgh (2.4 percentage points).

Between 2007 and 2011, the inflation rate in the City of Chicago fell from 3.3% to 2.7%.[32] The inflation rate increased the most in Kansas City (from 2.3% to 4.0%) and fell the most in Seattle (from 3.9% to 2.7%). In 2009 all 13 cities experienced disinflation from the previous year from between 2.9 percentage points (Detroit) to 5.0 percentage points (Chicago). Additionally, eight of the 13 cities experienced deflation in 2009.

[30] Population data come from the U.S. Department of Commerce, Bureau of the Census. Population estimates are annual estimates of resident population as of July 1st of each year for city areas only.

[31] Unemployment data for all cities except Pittsburgh comes from the U.S. Department of Labor, Bureau of Labor Statistics. Pittsburgh's unemployment data comes from its FY2011 Comprehensive Annual Financial Report, p. 126. Unemployment data represent the annual average unemployment rates for city areas only.

[32] Inflation data for all cities come from the U.S. Department of Labor, Bureau of Labor Statistics. The annual average consumer price indexes (CPI) is not seasonally adjusted, has a 1982-84 reference base and, for all cities except Columbus, represents the city's metropolitan statistical area (MSA). CPI data for Columbus represents the Midwest Urban region because an MSA is not available. Inflation data produced in this report reflect percent changes in CPI from the previous year.

Finally, Chicago's gross domestic product (GDP) grew by 4.9%, or $25.6 billion between 2007 and 2011, placing it in 10th place among the 13 cities.[33] Houston experienced the largest percent growth in GDP at 12.5%, or $46.5 billion. Detroit experienced the largest decline in GDP with a 2.6% decline, or a loss of $5.3 billion.

City of Chicago								
	2007	2008	2009	2010	2011	5-Year Change	% Change	Rank
Population	2,832,508	2,853,114	2,851,268	2,695,598	2,707,120	-125,388	-4.4%	Percent Growth in Population: 11th
Unemployment	5.7%	6.9%	10.9%	11.7%	11.3%	5.6%	98.2%	Growth in Unemployment Rate: 3rd
Inflation	3.3%	3.8%	-1.2%	1.4%	2.7%	-0.6%	-16.9%	Growth in Inflation: 10th
GDP (in $ billions)	$ 522.0	$ 525.9	$ 516.8	$ 532.3	$ 547.6	$ 25.6	4.9%	Percent Growth in GDP: 10th

Note: Population and unemployment rate data account for city areas only; inflation data account for metropolitan areas per the BLS; GDP data account for metropolitan statistical areas per the BEA. Unemployment rates are based on CPI data with base period 1982-84=100 and are not seasonally adjusted.

Source: United States Census Bureau; United States Department of Labor, Bureau of Labor Statistics; United States Department of Commerce, Bureau of Economic Analysis.

FINDINGS

The following sections provide descriptions and rankings for each financial indicator.

Cash Solvency

Cash solvency demonstrates a government's ability to generate sufficient financial resources to pay its current liabilities using its resources on hand. To measure cash solvency, this report examines the working capital to expenses ratio. Over the five-year period, the average annual change for all cities combined was -0.3. In other words, on average the cities lost 0.3 months of working capital per year while Chicago lost 0.1 months. Only three of the 13 cities experienced increases in the ratio while ten decreased. Though the downward trend signals an overall decline in operational liquidity, it does not necessarily mean that the cities are in poor financial condition.

Cash Solvency		
Ratio	Average Annual Change - All Cities	Average Annual Change - Chicago
Working Capital to Expenses	(0.3)	(0.1)

Source: Local Government Comprehensive Annual Financial Reports, FY2007-FY2011.

Working Capital to Expenses Ratio

Working capital is a measure of operational liquidity and assesses whether a government has the means available to cover its existing obligations in the short run. The ratio assesses government-wide assets, liabilities and expenses which are all reported using the full accrual method of accounting.

Working capital can be thought of as a budgetary buffer if there are fluctuations in cash flow. When divided by monthly expenses, the working capital to expenses ratio can approximate how many months the government is able to maintain normal operations with its current level of resources. An increase in the working capital to expenses ratio over time may reflect increasing

[33] GDP data come from the U.S. Department of Commerce, Bureau of Economic Analysis. GDP data for each city represents the city's metropolitan statistical area (MSA).

current net assets or decreasing annual expenses, both of which can generally be considered fiscally sound outcomes.[34]

The formula for the indicator is the following:

$$\frac{\textit{Current Assets} - \textit{Current Liabilities}}{{}^{1}/_{12}\ \textit{Expenses}}$$

Source: Government-Wide Statement of Net Assets and Statement of Activities

The working capital to expenses ratio formula uses the current assets of a municipality, including:

- *Cash and cash equivalents*: assets that are cash or can be converted into cash immediately, including petty cash, demand deposits and certificates of deposit;
- *Investments*: any investments that the government has made that will expire within one year, including stocks and bonds that can be liquidated quickly;
- *Receivables*: monetary obligations owed to the government including property taxes and interest on loans;
- *Internal balances*: monies due from the government (positive) or due to the government (negative); and
- *Inventories*: government-wide inventories.

Current liabilities are financial obligations that must be satisfied within one year. These may include items categorized as long-term liabilities due within one year, or the current portion of long-term liabilities.[35] The working capital to expenses ratio formula uses the following current liabilities of a municipality:

- *Payables*: monies owed to vendors for goods and services;
- *Short-Term Debt*: loans taken out in anticipation of revenues that are paid back within 12 months or fewer;
- *Accrued Interest*: includes interest due on deposits payable by the government in the next fiscal year; and
- *Accrued and Other Liabilities*: includes self insurance funds, unclaimed property and other unspecified liabilities.

The chart below compares the working capital to expenses ratio for 13 U.S. cities between FY2007 and FY2011. The City of Chicago's working capital to expenses ratio averaged 4.0

[34] Although the Government Finance Officers Association (GFOA) does not discuss working capital benchmarks for the primary government as an aggregate of governmental and proprietary activities, the GFOA does recommend appropriate levels of working capital in the enterprise or business-like funds. The GFOA recommends that a government's target for working capital be no less than 45 days worth of annual operating expenses, or approximately 1.5 months. See Government Finance Officers Association, "Appropriate Levels of Working Capital in Enterprise Funds," 2011.

[35] The current portion of long-term debt is the portion of a long-term obligation that will be settled during the next year by using current assets. Steven M. Bragg, *Interpretation and Application of Generally Accepted Accounting Principles* (New Jersey: Wiley, 2011), 39.

months and decreased by nearly 0.2 months over the five-year period. At its lowest point in FY2008, Chicago's government-wide working capital to expenses ratio dropped to 3.3 months. In other words, at any point during the fiscal year 2008, Chicago had enough working capital to fund approximately three months and one week of operations.

The working capital to expenses ratio reveals that only three of the 13 cities experienced increases in the ratio over the five-year period while ten decreased. Additionally, New York and Detroit experienced working capital deficits for at least two fiscal years. Chicago's five-year average working capital to expenses ratio of 4.0 months was above the five-year average for all cities of 3.4 months.

Working Capital to Expenses Ratio
Net Current Assets to Monthly Expenses: FY2007-FY2011

Rank		FY2007	FY2008	FY2009	FY2010	FY2011	Average	Five-Year Change	Average Annual Change	Indicator Trend
1	Baltimore*	2.5	3.1	2.3	1.4	3.2	2.5	0.7	0.1	Increased
2	Houston	5.5	5.6	4.6	4.9	5.7	5.2	0.3	0.1	Increased
3	Los Angeles	6.5	5.7	5.8	6.5	6.7	6.2	0.2	0.1	Increased
4	Seattle	3.1	2.4	2.3	2.2	3.0	2.6	(0.1)	(0.0)	Decreased
5	**Chicago**	**4.1**	**3.3**	**4.2**	**4.4**	**3.9**	**4.0**	**(0.2)**	**(0.1)**	**Decreased**
6	New York	0.2	0.3	(0.0)	(0.2)	(0.5)	(0.1)	(0.7)	(0.2)	Decreased
7	Columbus	6.8	4.3	4.2	5.5	6.0	5.4	(0.8)	(0.2)	Decreased
8	Philadelphia	2.5	1.8	1.5	1.0	1.4	1.6	(1.1)	(0.1)	Decreased
9	Pittsburgh	1.9	1.1	0.9	0.2	0.7	1.0	(1.2)	(0.3)	Decreased
10	Boston	4.7	4.1	4.1	3.6	3.4	4.0	(1.3)	(0.3)	Decreased
11	Phoenix	8.9	6.2	4.3	5.0	5.6	6.0	(3.3)	(0.8)	Decreased
12	Kansas City	4.7	4.9	4.0	4.1	1.0	3.7	(3.7)	(0.3)	Decreased
13	Detroit	6.4	4.8	2.7	(0.7)	(0.9)	2.5	(7.3)	(1.8)	Decreased
	Average	**4.5**	**3.7**	**3.1**	**2.9**	**3.0**	**3.4**	**(1.4)**	**(0.3)**	

Note: Minimal differences in averages may occur due to rounding. Cities are ranked in order of largest five-year change.

*Baltimore's current liabilities include estimated claims in progress, which represent estimates of personal injury, workers' compensation, unemployment and medical claims for the fiscal year. The FY2007 CAFR presents all estimated claims in progress as current liabilities. In FY2008-FY2011, the CAFR categorizes estimated claims in progress into current claims and claims due in more than one year. Claims due in more than one year are not included as current liabilities.

Source: Local government Comprehensive Annual Financial Reports, Statements of Net Assets and Statements of Activities, FY2007-FY2011.

To help explain some of the fluctuations in the working capital to expenses ratios above, the exhibit below shows each of the components of the ratio for Chicago and the highest and lowest ranked cities from FY2007 to FY2011. The dip in Chicago's ratio in FY2008 can be attributed to a $553.4 million, or 10.5%, decrease in unrestricted current assets from FY2007 to FY2008. This includes a decrease of nearly $200.0 million in cash and cash equivalents and a loss of $351.3 million in investments government-wide.[36] These losses are in part a result of debt financing used to support the capital improvement program in 2008.[37]

Baltimore's working capital to expenses ratio increased by 0.7 months from FY2007 to FY2011, ranking it first among the 13 cities. The ratio increased because while Baltimore's current assets grew by $70.3 million, its current liabilities decreased by $107.4 million, or 14.1%. Much of the overall decline in liabilities is due to falling accounts payable and accrued liabilities (down $71.6 million), unearned revenue (down $92.7 million) and compensated absences (down $25.0 million).[38] However it is important to note that between FY2007 and FY2011, estimated claims

[36] City of Chicago, Comprehensive Annual Financial Reports, FY2007 and FY2008, p. 29.
[37] City of Chicago, FY2008 Comprehensive Annual Financial Report, p. 16.
[38] City of Baltimore, Comprehensive Annual Financial Reports, Statements of Net Assets, FY2010 and FY2011.

in progress – which represent estimates of personal injury, workers' compensation, unemployment and medical claims – decreased by $98.9 million largely due to a difference in the way Baltimore reported the claims from FY2008 through FY2011.[39]

In the City of Detroit, the working capital to expenses ratio fell significantly from FY2007 to FY2011. In FY2010 the ratio dropped to a deficit of 0.7 months and fell further to a deficit of 0.9 months in FY2011. These deficits occurred because Detroit experienced significant declines in current assets and increases in current liabilities. Over the five-year period, current assets fell by $1.0 billion, or 40.7%, from $2.5 billion in FY2007 to $1.5 billion in FY2011. Much of this loss is attributable to a $101.1 million decrease in cash and cash equivalents and an $898.2 million decrease in investments. At the same time, current liabilities grew by $609.2 million, or 56.2%, from $1.1 billion to nearly $1.7 billion. Some of this increase in current liabilities is due to the inclusion of the present value of the city's interest rate swap liabilities.[40] Detroit attributes these trends to a weak economy and resulting high unemployment and depressed property values that have slowed revenue growth.[41]

Working Capital to Expenses Ratio Components: FY2007-FY2011 (in $ millions)

Rank		FY2007	FY2008	FY2009	FY2010	FY2011	Five-Year Change
1	**Baltimore**	2.5	3.1	2.3	1.4	3.2	0.7
	Current Assets	$ 1,189.3	$ 1,279.4	$ 1,110.2	$ 1,030.9	$ 1,259.5	$ 70.3
	Current Liabilities*	$ 760.2	$ 696.4	$ 671.7	$ 766.4	$ 652.8	$ (107.4)
	Monthly Expenses	$ 169.3	$ 190.2	$ 189.4	$ 189.0	$ 188.6	$ 19.3
5	**Chicago**	**4.1**	**3.3**	**4.2**	**4.4**	**3.9**	**(0.2)**
	Current Assets	$ 5,277.2	$ 4,723.8	$ 5,427.3	$ 5,835.4	$ 5,897.6	$ 620.4
	Current Liabilities	$ 2,619.8	$ 2,575.8	$ 2,724.9	$ 2,784.6	$ 3,137.4	$ 517.6
	Monthly Expenses	$ 645.0	$ 652.3	$ 650.0	$ 693.3	$ 710.7	$ 65.7
13	**Detroit**	6.4	4.8	2.7	(0.7)	(0.9)	(7.3)
	Current Assets	$ 2,508.5	$ 2,348.8	$ 1,880.3	$ 1,621.8	$ 1,488.0	$ (1,020.5)
	Current Liabilities	$ 1,083.4	$ 1,209.2	$ 1,234.6	$ 1,780.1	$ 1,692.6	$ 609.2
	Monthly Expenses	$ 224.0	$ 236.9	$ 242.4	$ 228.1	$ 229.7	$ 5.7

Note: Minimal differences may occur due to rounding. Cities are ranked in order of largest five-year change.

*Baltimore's current liabilities include estimated claims in progress, which represent estimates of personal injury, workers' compensation, unemployment and medical claims for the fiscal year. The FY2007 CAFR presents all estimated claims in progress as current liabilities. In FY2008-FY2011, the CAFR categorizes estimated claims in progress into current claims and claims due in more than one year. Claims due in more than one year are not included as current liabilities.

Source: Local government Comprehensive Annual Financial Reports, Statements of Net Assets and Statements of Activities, FY2007-FY2011.

[39] The FY2007 CAFR presents all estimated claims in progress as current liabilities. In FY2008-FY2011, the CAFR categorizes estimated claims in progress into current claims and claims due in more than one year. Claims due in more than one year are not included as current liabilities.

[40] In FY2010, Detroit implemented GASB Statement No. 53 which requires that derivative instruments be recorded on the Statement of Net Assets at present value. Detroit has entered into interest rate swap agreements to manage the variable interest rates risk for its pension obligation certificates. For more information, see the City of Detroit's FY2010 Comprehensive Annual Financial Report.

[41] City of Detroit, Comprehensive Annual Financial Reports, FY2007-FY2011.

Budgetary Solvency

Budgetary solvency is related to a government's financial ability to maintain current or desired service levels within the budget period by sufficiently funding operating expenses. To measure budgetary solvency, this report examines the continuing services ratio, the fund balance ratio and the operating deficit ratio. For all three ratios, at least nine of the 13 cities experienced downward trends over the five-year period, suggesting an overall decline in budgetary solvency not only in the general fund, but government-wide.

Budgetary Solvency		
Ratio	Average Annual Change - All Cities	Average Annual Change - Chicago
Continuing Services	-2.8%	-5.1%
Fund Balance	-1.9%	0.8%
Operating Deficit	0.6%	-1.1%

Source: Local Government Comprehensive Annual Financial Reports, FY2007-FY2011.

Continuing Services Ratio

The continuing services ratio examines both governmental funds and business-type enterprise funds, presenting a comprehensive look at the government's operations. The ratio assesses government-wide net assets and expenses, which are reported using the full accrual method of accounting.

Though the general fund is the government's main operating fund, a fiscally stressed general fund may appear to be healthy due to transfers or loans from other funds.[42] There could also be fiscal distress in a city's other significant funds. As such, it is useful to examine both the continuing services ratio, which includes a government-wide view and the general fund fund balance ratio, which only looks at the general fund and is introduced in the next section.

The continuing services ratio financial indicator examines unrestricted net assets for all funds as a percentage of expenses for all funds. This indicator measures the degree to which unrestricted net assets can support continuing government services.[43] The difference between a government's assets – the resources it can use to operate the government – and its liabilities – its obligations to turn over resources to other individuals and organizations – is called its net assets. Net assets are reported in three categories: invested in capital assets (net of related debt), restricted and unrestricted. The first category shows the value of capital assets minus the outstanding debt that was incurred to build the assets and accumulated depreciation. Restricted net assets are limited to a specific purpose, such as activities funded by grants from other governments or revenues set aside for payment of debt service. Unrestricted net assets are the net assets not included in the other two categories and can generally be used for any purpose. They are not necessarily cash assets and may in fact be a negative number, or deficit, because they include offsetting liabilities. For example, large debt obligations may contribute to an unrestricted net assets deficit even

[42] Tina Plerhoples and Eric Scorsone, *An Assessment of Michigan's Local Government Fiscal Indicator System*, Senate Fiscal Agency Issue Paper, September 2010.
[43] Judith A. Kamnikar, Edward G. Kamnikar, and Keren H. Deal, "Assessing a State's Financial Condition," *The Journal of Government Financial Management,* Fall 2006.

though those long-term liabilities are not all due in the current year. The formula for the continuing services ratio is the following:

$$\frac{\textit{Unrestricted Net Assets}}{\textit{Total Expenses}}$$

Source: Government-Wide Statement of Net Assets and Statement of Activities

A higher continuing services ratio, or an increasing trend, can be considered favorable. Having negative unrestricted net assets in one fiscal year does not mean that a government is insolvent or in financial crisis, but rather that it has accumulated long-term liabilities that are greater than the current value of its assets. Negative unrestricted net assets demonstrate the extent to which future taxing power has already been committed to payment of liabilities.[44] Multiple consecutive deficits are a cause for concern. This brings up the issue of intergenerational equity because liabilities have been incurred in providing services, but not enough assets have been set aside to cover them. In other words, future generations of taxpayers will need to pay for liabilities incurred in the past.

The chart below compares the continuing services ratio between FY2007 and FY2011. Over the five-year period, four of the 13 cities experienced increasing continuing services ratios. Nine cities, including Chicago, decreased.

Chicago experienced continuing services deficits in all five fiscal years, with the largest deficit of 96.3% in FY2010. This means that long-term commitments exceed available resources by the equivalent of nearly one year of expenditures. This is primarily driven by inadequate budgeting for long-term liabilities including cumulative pension funding shortfalls of $4.1 billion, as well as other post employment benefits, or retiree health insurance ($380.9 million),[45] and future liability claims driven from personnel, property, pollution and casualty claims ($656.0 million). Another factor is a deferred inflow[46] of $1.6 billion that is to be amortized into income over the life of Chicago's concession service agreements, which include transactions of its metered parking system, downtown parking garage system and Chicago Skyway.[47] The $1.6 billion unreserved, undesignated deficit, which is reported in the Service Concession Agreement Fund, represents the net resources of Chicago's concession and lease transactions and will be amortized and recognized as revenue as far into the future as the year 2105.[48]

New York City had the lowest continuing services ratio of the 13 cities; or a deficit of 151.0% in FY2011, which means its long-term commitments exceed its available resources by the equivalent of over a year and a half of expenditures. The City of Phoenix had a continuing services ratio of 62.0% in FY2011. Its available resources were in excess of its commitments,

[44] Stephen J. Gauthier, *An Elected Official's Guide to the New Governmental Financial Reporting Model* (Chicago: Government Finance Officers Association, 2000), p. 34.
[45] Pension and OPEB obligations are not unfunded liabilities or total pension liabilities, but instead represent the cumulative difference between the employer's annual required contributions (ARC) and actual contributions plus interest.
[46] Deferred inflows represent amounts to be recognized as revenue over the life of the related long-term lease and concession agreements.
[47] City of Chicago, FY2010 Comprehensive Annual Financial Report, pp. 19 and 91.
[48] City of Chicago, FY2010 Comprehensive Annual Financial Report, pp. 24 and 91.

which indicate it is better able to maintain services with its current revenue structure than those cities with negative ratios.

Pittsburgh had the second lowest five-year average continuing services ratio at -124.9%, but improved the most over the time period examined. The majority of the cities experienced decreasing ratios over five years consistent with the overall economic climate while Pittsburgh, Phoenix, Columbus and Los Angeles showed steady improvements.

Continuing Services Ratio
Ratio of Unrestricted Net Assets to Expenditures: FY2007-FY2011

Rank	City	FY2007	FY2008	FY2009	FY2010	FY2011	Average	Five-Year Change	Average Annual Change	Indicator Trend
1	Pittsburgh	-131.3%	-134.7%	-127.2%	-118.4%	-113.0%	-124.9%	18.3%	4.6%	Increased
2	Phoenix	45.6%	44.8%	61.4%	62.0%	62.0%	55.2%	16.4%	4.1%	Increased
3	Columbus	23.9%	18.0%	22.2%	36.6%	37.7%	27.7%	13.8%	3.4%	Increased
4	Los Angeles	10.4%	9.3%	8.4%	13.0%	13.1%	10.9%	2.7%	0.7%	Increased
5	Seattle	21.5%	13.8%	9.4%	6.6%	4.0%	11.1%	-17.5%	-4.4%	Decreased
6	New York	-133.1%	-138.7%	-146.0%	-142.2%	-151.0%	-142.2%	-17.9%	-4.5%	Decreased
7	Philadelphia	-15.0%	-19.1%	-29.7%	-32.2%	-33.8%	-25.9%	-18.8%	-4.7%	Decreased
8	**Chicago**	**-64.6%**	**-71.7%**	**-94.4%**	**-96.3%**	**-84.8%**	**-82.3%**	**-20.2%**	**-5.1%**	**Decreased**
9	Boston	21.3%	12.7%	6.3%	-3.7%	-3.9%	6.5%	-25.2%	-6.3%	Decreased
10	Houston	-24.2%	-29.9%	-39.8%	-48.9%	-52.5%	-39.1%	-28.3%	-7.1%	Decreased
11	Kansas City	40.3%	45.4%	16.9%	12.9%	10.7%	25.2%	-29.6%	-7.4%	Decreased
12	Baltimore	12.3%	-6.6%	-12.7%	-6.9%	-18.7%	-6.5%	-31.1%	0.0%	Decreased
13	Detroit	-15.9%	-17.6%	-31.6%	-58.9%	-57.7%	-36.3%	-41.8%	-10.5%	Decreased
	Average	**-16.0%**	**-21.1%**	**-27.5%**	**-29.0%**	**-29.8%**	**-24.7%**	**-13.8%**	**-2.8%**	

Note: Minimal differences in averages may occur due to rounding. Cities are ranked in order of largest five-year change.

Source: Local government Comprehensive Annual Financial Reports, Statements of Net Assets and Statements of Activities, FY2007-FY2011.

To further examine some of the fluctuations in the continuing services ratios above, the exhibit below shows each of the components of the ratio for Chicago and the highest and lowest ranked cities from FY2007 to FY2011. Chicago ranked eighth of the 13 cities with a steady downward trend over five years. Chicago's deficit of unrestricted net assets grew from $5.0 billion in FY2007 to $7.2 billion in FY2011. This means that it was accumulating liabilities without maintaining offsetting assets. At the same time, expenses of the primary government grew from $7.7 billion to $8.5 billion. This indicates that Chicago's fiscal structure and level of services may not be sustainable in the long-term. In comparison, although Pittsburgh also maintained significant continuing services deficits, its unrestricted net assets increased by $78.8 million while expenses grew by only $7.3 million over the five-year period. Detroit's unrestricted net assets declined $1.2 billion, or by 272.5%, while expenses grew by $69.0 million, or 2.6%.

Continuing Services Ratio Components: FY2007-FY2011 (in $ millions)

Rank		FY2007	FY2008	FY2009	FY2010	FY2011	Five-Year Change
1	**Pittsburgh**	-131.3%	-134.7%	-127.2%	-118.4%	-113.0%	18.3%
	Unrestricted Net Assets	$ (623.5)	$ (640.6)	$ (640.9)	$ (603.7)	$ (544.7)	$ 78.8
	Expenses	$ 474.7	$ 475.5	$ 503.7	$ 509.7	$ 482.0	$ 7.3
8	**Chicago**	**-64.6%**	**-71.7%**	**-94.4%**	**-96.3%**	**-84.8%**	**-20.2%**
	Unrestricted Net Assets	$ (4,997.1)	$ (5,610.3)	$ (7,359.3)	$ (8,014.4)	$ (7,232.7)	$ (2,235.6)
	Expenses	$ 7,740.2	$ 7,827.1	$ 7,799.8	$ 8,319.0	$ 8,528.3	$ 788.1
13	**Detroit**	-15.9%	-17.6%	-31.6%	-58.9%	-57.7%	-41.8%
	Unrestricted Net Assets	$ (426.9)	$ (501.3)	$ (920.2)	$ (1,612.6)	$ (1,590.4)	$ (1,163.6)
	Expenses	$ 2,688.0	$ 2,842.8	$ 2,908.7	$ 2,737.5	$ 2,757.0	$ 69.0

Note: Minimal differences may occur due to rounding. Cities are ranked in order of largest five-year change.

Source: Local government Comprehensive Annual Financial Reports, Statements of Net Assets and Statements of Activities, FY2007-FY2011.

Fund Balance Ratio

Fund balance is a term commonly used to describe the net assets of a governmental fund and is an important indicator of fiscal health. This section examines the unrestricted fund balance levels of the general fund – the government's main operating fund – which is reported using the modified accrual method of accounting. It is important to note that the services provided under the general fund can differ greatly between cities. For example, in New York City schools are funded from the General Fund whereas in Chicago they are funded in a legally separate unit of government. As such, it is useful to examine both the general fund singularly and the government as a whole.

The Government Finance Officers Association (GFOA) recommends that general-purpose governments maintain unrestricted fund balance in their general fund of no less than two months of regular general fund operating revenues or regular general fund operating expenditures, which is approximately 17%. The GFOA statement adds that each unit of government should adopt a formal policy that considers its own specific circumstances and that a smaller fund balance ratio may be appropriate for the largest governments.[49]

[49] Government Finance Officers Association, "Appropriate Level of Unrestricted Fund Balance in the General Fund," 2002 and 2009.

In order to address the sometimes inconsistent application of reporting standards for fund balance by governments, the Governmental Accounting Standards Board (GASB) issued GASB Statement No. 54: *Fund Balance Reporting and Governmental Fund Type Definitions* in February 2009. GASB Statement No. 54 shifts the focus of fund balance reporting from the availability of fund resources for budgeting purposes to the "extent to which the government is bound to honor constraints on the specific purposes for which amounts in the fund can be spent."[50] GASB required that governments implement the new reporting standards with their FY2011 financial statements. Due to the new classifications of fund balance per the GASB 54 implementation, a complete analysis of the fund balance ratio from FY2007 to FY2011 is not possible. The following section will compare fund balance ratios from FY2007-FY2010 and FY2011 separately.

The formula for the indicator is the following:

Prior to GASB 54 (FY2007-FY2010)

$$\frac{\textit{Unreserved General Fund fund balance}}{\textit{General Fund Expenditures}}$$

After GASB 54 (FY2011)

$$\frac{\textit{Unrestricted}^{51}\ \textit{General Fund fund balance}}{\textit{General Fund Expenditures}}$$

Sources: Governmental Funds Balance Sheet and Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balance

Previous Components of Fund Balance

Previously, the categories for fund balance focused on whether resources were available for appropriation by governments. A variety of external and internal constraints may prevent portions of the fund balance from being available for budgeting. The *unreserved* fund balance thus referred to resources that did not have any external legal restrictions or constraints. The unreserved fund balance was able to be further categorized as designated and undesignated. A *designation* was a limitation placed on the use of the fund balance by the government itself for planning purposes or to earmark funds.[52]

New Components of Fund Balance

GASB Statement No. 54 creates five components of fund balance, though not every government or governmental fund will report all components. The fund balance ratio examines *unrestricted* fund balance, which includes the *committed*, *assigned* and *unassigned* fund balance components. The five GASB components are described as the following:

[50] Stephen J. Gauthier, *Fund Balance: New and Improved* (Chicago: Government Finance Officers Association, 2009).
[51] Unrestricted fund balance includes assigned, unassigned and committed fund balance.
[52] Stephen J. Gauthier, *Fund Balance: New and Improved* (Chicago: Government Finance Officers Association, 2009).

- *Nonspendable fund balance* – resources that inherently cannot be spent such as pre-paid rent or the long-term portion of loans receivable. In addition, this category includes resources that cannot be spent because of legal or contractual provisions, such as the principal of an endowment.
- *Restricted fund balance* – net fund resources subject to legal restrictions that are externally enforceable, including restrictions imposed by constitution, creditors or laws and regulations of non-local governments.
- *Committed fund balance* – net fund resources with self-imposed limitations set at the highest level of decision-making which remain binding unless removed by the same action used to create the limitation.
- *Assigned fund balance* – the portion of fund balance reflecting the government's intended use of resources, with the intent established by government committees or officials in addition to the governing board. Appropriated fund balance, or the portion of existing fund balance used to fill the gap between appropriations and estimated revenues for the following year, would be categorized as assigned fund balance.
- *Unassigned fund balance* – in the general fund, the remaining surplus of net resources after funds have been identified in the four categories above.[53]

The following chart outlines the unreserved general fund balance level from FY2007 to FY2010 as a ratio of expenditures. It is important to be aware that the fund structure and use of the general fund can differ significantly among local units, impacting the fund balance ratios. For example, some governments transfer out significant amounts of general fund resources to subsidize other governmental funds, which would not be accounted for as expenditures. The mix of services provided under the general fund also differs greatly. For example, in New York City schools are funded from the General Fund whereas in Chicago they are funded in a legally separate unit of government.

Over the four-year period, only two cities – Chicago and Kansas City – experienced growth in fund balance levels. One city experienced mixed fluctuations and ten cities decreased. In FY2009 the average level of fund balance for all cities was 6.7%, the lowest over the four-year period. In all four years, the average fund balance level for all cities never met the range of the GFOA standard. There was a significant change over the four-year period with the average fund balance level for all cities declining from 13.4% in FY2007 to 7.5% in FY2010. Fund balance levels ranged from a negative balance of 28.7% in Detroit to a high of 35.2% in Boston. Although Chicago ranked first in growth of the fund balance ratio, it had the fifth lowest level in FY2010 at 2.7%. Detroit continued to have the lowest level in FY2010 with a fund balance deficit of 14.6%, while Boston had the highest level at 27.7%.

It is important to note that although trend analysis identifies Seattle and Phoenix as having the most significant negative trends in the fund balance ratio, they still exhibited sound financial condition by maintaining healthy levels of reserves. Seattle and Phoenix, which ranked twelfth and thirteenth respectively, maintained a relatively large amount of reserves in FY2007. During the economic recession, these cities drew down their reserves to maintain services. Seattle's

[53] Stephen J. Gauthier, *Fund Balance: New and Improved* (Chicago: Government Finance Officers Association, 2009).

reserves fell from a peak of 31.2% in FY2007 to a low of 14.2% in FY2010. Similarly, Phoenix's reserves fell from a peak of 37.2% in FY2007 to a low of 18.0% in FY2009, which is still above the GFOA's recommendation of 17%.[54]

While there was a clear downward trend in average fund balance for this group of cities in total, some cities experienced somewhat different patterns. For instance, the fund balance of Pittsburgh and Phoenix had significant fluctuations. Pittsburgh has experienced steady increases in General Fund expenditures, and it also transfers out resources to its debt service fund, which may have contributed to the large changes. In FY2010 while General Fund expenditures increased by $63.9 million, Pittsburgh transferred $84.9 million from its General Fund to its debt service fund, leaving approximately $42.6 million in unreserved fund balance. Kansas City and Columbus experienced slight improvements in fund balance between FY2009 and FY2010 after previous declines.[55] Detroit continued to have a deficit in FY2010, but the size of the deficit shrank considerably from the previous year.

Fund Balance Ratio
Unreserved General Fund Fund Balance as a Percent of General Fund Expenditures: FY2007-FY2010

Rank	City	FY2007	FY2008	FY2009	FY2010	Average	Four-Year Change	Average Annual Change	Indicator Trend
1	**Chicago**	**0.2%**	**0.0%**	**0.1%**	**2.7%**	**0.7%**	**0.6%**	**0.8%**	**Increased**
2	Kansas City	5.6%	8.6%	2.5%	5.9%	5.7%	0.1%	0.1%	Increased
3	New York	0.8%	0.8%	0.8%	0.8%	0.8%	0.0%	0.0%	Decreased*
4	Boston	33.5%	35.2%	35.2%	27.7%	32.9%	-0.6%	-1.9%	Mixed
5	Houston	16.9%	19.3%	16.3%	11.4%	16.0%	-0.9%	-1.8%	Decreased
6	Baltimore	4.8%	2.7%	2.8%	2.2%	3.2%	-1.7%	0.0%	Decreased
7	Los Angeles	10.9%	10.1%	7.4%	6.6%	8.7%	-2.1%	-1.4%	Decreased
8	Columbus**	15.4%	8.6%	8.7%	14.2%	11.7%	-3.7%	-0.4%	Decreased
9	Detroit	-12.2%	-18.6%	-28.7%	-14.6%	-18.5%	-6.3%	-0.8%	Decreased
10	Philadelphia	4.2%	-0.6%	-7.2%	-7.0%	-2.7%	-6.9%	-3.8%	Decreased
11	Pittsburgh	26.1%	13.9%	15.9%	10.3%	16.6%	-9.6%	-5.3%	Decreased
12	Seattle	31.2%	18.3%	14.6%	14.2%	19.6%	-11.6%	-5.7%	Decreased
13	Phoenix	37.2%	18.7%	18.0%	23.3%	24.3%	-12.9%	-4.6%	Decreased
	Average	**13.4%**	**9.0%**	**6.7%**	**7.5%**	**9.2%**	**-4.3%**	**-1.9%**	

Note: Minimal differences in averages may occur due to rounding. Cities are ranked in order of largest five-year change.

*The fund balance ratio for New York decreased from 0.8046% in FY2007 to 0.7509% in FY2010.

**Columbus implemented reporting changes to fund balance per GASB 54 in FY2009.

Source: Local government Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balances, Governmental Funds, FY2007-FY2010.

In FY2010 Chicago had only a nominal unreserved Corporate Fund fund balance equal to 2.7% of Corporate Fund expenditures. Not considered in this analysis are legally restricted reserves from the leases of the Skyway toll road and parking meters because they are not unreserved fund balance.[56] At the end of 2011, after depleting much of the parking meter reserves, the aggregate principal balance in the Skyway and parking meter asset lease reserve funds was approximately

[54] Government Finance Officers Association, "Appropriate Level of Unrestricted Fund Balance in the General Fund," 2002 and 2009.

[55] Columbus implemented a new fund balance reporting system starting in FY2009 consistent with GASB Statement No. 54. For FY2009 and FY2010, the ratio includes assigned and unassigned balances.

[56] In 2005 the City of Chicago leased the Skyway toll road to a private operator for 99 years for $1.83 billion. In 2009 the City leased its parking meters to a private operator for 75 years for $1.15 billion.

$624.0 million.[57] Chicago has since made efforts to replenish some of the parking meter reserves as part of its FY2012 and FY2013 budgets. Although rating agencies upgraded Chicago's general obligation bond ratings in response to the creation of the Skyway reserve,[58] the use of other lease reserves to maintain operating expenses over time has driven rating agencies to downgrade its bonds.[59] Since the long-term asset lease reserves are legally restricted, they are not considered unreserved or unrestricted fund balance.

Though Chicago's fund balance ratio increased over the four-year period, its low level during those years is an indicator of fiscal distress and must continue to be monitored. New York's fund balance level was just as low between FY2007 and FY2010 at 0.8% of expenditures, but it completely drew down its General Fund fund balance in FY2011.[60]

The following chart shows the FY2011 fund balance ratio for each of the cities ranked by largest ratio. Due to the new classifications of fund balance per the GASB 54 implementation, a complete analysis of the fund balance ratio from FY2007 to FY2011 is not possible. The FY2011 fund balance levels reflect unrestricted General Fund fund balance, which includes committed, assigned and unassigned General Fund fund balance.

Fund Balance Ratio
Unrestricted General Fund Fund Balance as a Percent of General Fund Expenditures: FY2011

Rank	City	FY2011
1	Phoenix	30.9%
2	Boston	26.5%
3	Seattle	18.7%
4	Columbus	17.4%
5	Pittsburgh	16.9%
6	Baltimore	15.4%
7	Los Angeles	12.6%
8	**Chicago**	**10.2%**
9	Houston	8.3%
10	Kansas City	8.0%
11	New York	0.0%
12	Philadelphia	-1.3%
13	Detroit	-15.9%
Average		**11.4%**

Note: Minimal differences in averages may occur due to rounding.

Source: Local government Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balances, Governmental Funds, FY2007-FY2011.

The next chart presents the fund balance components for the City of Chicago and the cities with the highest and lowest ranked levels of General Fund fund balance in FY2011. Although a five-

[57] City of Chicago, 2011 Annual Financial Analysis, pp. 36-40.
[58] Yvette Shields, "Skeptical Chicago Eyes P3s," *The Bond Buyer*, March 20, 2012.
[59] Yvette Shields, "Chicago's Mayor Takes Aim at Deficit," *The Bond Buyer*, October 12, 2011.
[60] City of New York, FY2011 Comprehensive Annual Financial Report, p. 71.

year trend analysis of the ratio itself is not possible due to the reclassification of fund balance components, the following chart shows both the General Fund *unreserved* and *unrestricted* fund balance levels, as well as General Fund expenditures for the fiscal years 2007 through 2011. Chicago's level of Corporate Fund expenditures has not fluctuated much over the five-year period, showing relative stability in its spending. In contrast, the City of Detroit has decreased government expenditures by $207.9 million and still had fund balance deficits in all five years. Phoenix on the other hand has maintained healthy levels of reserves, with its unreserved fund balance dropping to its lowest level at 18.0% in FY2009. Although analysts like credit rating agencies, which regularly monitor the size of governmental fund balances, prefer large reserves so that there is a degree of assurance that debt service payments will be made, a government consistently maintaining excessive reserves may raise concerns from taxpayers and citizens' groups about whether the government is taxing too much and hoarding the proceeds.

Fund Balance Ratio Components: FY2007-FY2011
(in $ millions)

FY2011 Rank		FY2007	FY2008	FY2009	FY2010	FY2011*	Five-Year Change
1	**Phoenix**	37.2%	18.7%	18.0%	23.3%	30.9%	-
	General Fund Unreserved Fund Balance	$ 362.9	$ 205.3	$ 190.3	$ 231.2	$ -	-
	General Fund Unrestricted Fund Balance	$ -	$ -	$ -	$ -	$ 291.0	-
	General Fund Expenditures	$ 976.4	$ 1,097.8	$ 1,056.9	$ 991.1	$ 943.1	$ (33.4)
8	**Chicago**	**0.2%**	**0.0%**	**0.1%**	**2.7%**	**10.2%**	**-**
	Corporate Fund Unreserved Fund Balance	$ 4.6	$ 0.2	$ 2.7	$ 81.2		-
	Corporate Fund Unrestricted Fund Balance	$ -	$ -	$ -	$ -	$ 311.5	-
	Corporate Fund Expenditures	$ 3,063.0	$ 3,107.3	$ 3,014.1	$ 3,033.9	$ 3,040.4	$ (22.6)
13	**Detroit**	-12.2%	-18.6%	-28.7%	-14.6%	-15.9%	-
	General Fund Unreserved Fund Balance	$ (155.6)	$ (219.2)	$ (331.9)	$ (155.7)	$ -	-
	General Fund Unrestricted Fund Balance	$ -	$ -	$ -	$ -	$ (169.7)	-
	General Fund Expenditures	$ 1,278.1	$ 1,181.4	$ 1,155.9	$ 1,068.9	$ 1,070.2	$ (207.9)

Note: Minimal differences may occur due to rounding.

*The components of the fund balance ratio changed in FY2011 due to a reporting change per GASB 54.

Source: Local government Comprehensive Annual Financial Reports, Statement of Revenues, Expenditures and Changes in Fund Balances, Governmental Funds, FY2007-FY2011.

Despite a general decline in fund balance levels between FY2007 and FY2011 among the 13 municipal governments, many governments maintained healthy levels of budgetary reserves. Many units came close to reaching the GFOA standard with GASB reclassifications in FY2011, with five cities exceeding 15.0% of fund balance and eight cities, including Chicago, exceeding a 10.0% fund balance ratio.

Operating Deficit Ratio

The operating deficit ratio shows the general fund operating surplus or deficit as a percentage of total operating expenditures on an actual basis and not a budgeted basis. A positive ratio occurs when an operating surplus exists, or when revenues exceed expenditures. A negative ratio occurs when an operating deficit exists, of when expenditures exceed revenues. The ratio examines the general fund revenues and expenditures, which are reported using the modified accrual method of accounting.

Governments and the media often report the projected deficit or budget shortfall for the upcoming fiscal year as they are developing a budget, but they do not report how much money has actually been received and spent. The projected deficit provides a framework for the

government to determine how much expenditures need to be reduced, revenues increased or reserves used in developing its budget. In contrast, the operating deficit ratio examined here is rarely widely reported. It reflects the difference between revenues and expenditures in completed fiscal years. The formula for the operating deficit ratio is the following:

$$\frac{\textit{General Fund Surplus or Deficit}}{\textit{Net Operating Expenditures}}$$

Sources: Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balance

A higher operating deficit ratio, or an increasing trend, can be considered favorable. A deficit in one year does not necessarily indicate financial difficulty. A government may have had an unusually large expenditure in the current year, but prudently planned for such an event by conserving resources in previous periods. Credit ratings agencies are generally concerned when there are two or more consecutive years of deficits, when the size of deficits is increasing or when there is an abnormally large deficit (5% to 10%).[61] In addition, the continuous recurrence of deficits may exhaust a government's reserves.

The chart below compares the general fund operating deficit ratio between FY2007 and FY2011. Over the five-year period, only four cities experienced increasing trends in the operating deficit ratio, meaning that surpluses grew, deficits shrank or deficits became surpluses. The other nine cities, including Chicago, experienced decreasing trends, meaning that deficits grew, surpluses shrank or surpluses became deficits. Two cities – Chicago and Philadelphia – experienced deficits in each of the five years.

In FY2011 the City of Chicago had an operating deficit of 8.5% of expenditures, a significant increase from its operating deficit of 4.2% in FY2007. The shift is largely due to a loss of $158.1 million in Corporate Fund revenues and an increase of $131.7 million in Corporate Fund expenditures over the five-year period.[62] Chicago's largest deficit during this time was in FY2009, of 15.0%. Much of the lost revenue that fiscal year occurred in elastic or economically sensitive revenues including sales, income and transaction taxes.[63]

The large size and consistent nature of Chicago's operating deficit ratio is a cause for concern because it indicates that operating expenses consistently and significantly exceeded revenues. In addition, Chicago ran an operating deficit ratio each of the past five fiscal years, a strong indication that it has a structural deficit. A structural deficit is a condition characterized by annual expenditure increases that consistently outpace recurring revenue increases over time. Philadelphia was the only other city in this study to run an operating deficit each of the five years.

During the five-year period, none of the 13 cities' deficit situations steadily improved, although Phoenix appears to have experienced a significant improvement in FY2011. However, the

[61] Craig S. Maher and Karl Nollenberger, "Revisiting Kenneth Brown's '10-Point Test'," *Government Finance Review*, October 2009.
[62] City of Chicago, Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balances for Governmental Funds, FY2007-FY2011.
[63] City of Chicago, FY2009 Comprehensive Annual Financial Reports, p. 19.

increase in General Fund excess revenues is due to an accounting change that does not reflect the aggregate deficiency of revenues for all of the governmental funds.[64] It is important to note that although trend analysis identifies Pittsburgh and Seattle as having the most significant negative trends in the operating deficit ratio, they still exhibited sound financial condition by running General Fund surpluses each year.

Operating Deficit Ratio
General Fund Surplus (Deficit) as a Percentage of Expenditures: FY2007-FY2011

Rank	City	FY2007	FY2008	FY2009	FY2010	FY2011	Average	Five-Year Change	Average Annual Change	Indicator Trend
1	Phoenix	-69.3%	-71.8%	-71.5%	-69.1%	7.0%	-55.0%	76.3%	19.1%	Increased
2	Kansas City	7.1%	12.8%	9.5%	9.8%	13.8%	10.6%	6.7%	1.7%	Increased
3	Columbus	2.8%	-3.2%	1.4%	9.7%	6.8%	3.5%	3.9%	1.0%	Increased
4	Los Angeles	3.6%	3.0%	1.9%	1.0%	6.8%	3.3%	3.2%	0.8%	Decreased
5	Philadelphia	-2.8%	-11.0%	-14.7%	-6.5%	-2.3%	-7.5%	0.4%	0.1%	Increased
6	Baltimore	8.3%	5.8%	5.1%	6.0%	7.0%	6.4%	-1.3%	-0.3%	Decreased
7	New York	10.6%	9.7%	3.4%	6.1%	8.4%	7.6%	-2.2%	-0.5%	Decreased
8	Detroit	16.4%	10.3%	9.7%	11.1%	14.0%	12.3%	-2.4%	-0.6%	Decreased
9	**Chicago**	**-4.2%**	**-7.5%**	**-15.0%**	**-13.9%**	**-8.5%**	**-9.8%**	**-4.4%**	**-1.1%**	**Decreased**
10	Houston	9.0%	10.3%	7.3%	1.7%	1.4%	6.0%	-7.6%	-1.9%	Decreased
11	Boston	2.3%	1.3%	-0.6%	-7.2%	-7.0%	-2.2%	-9.3%	-2.3%	Decreased
12	Pittsburgh	40.6%	34.9%	25.3%	5.3%	31.2%	27.5%	-9.5%	-2.4%	Decreased
13	Seattle	51.3%	27.9%	27.8%	29.3%	29.0%	33.1%	-22.2%	-5.6%	Decreased
	Average	**5.8%**	**1.7%**	**-0.8%**	**-1.3%**	**8.3%**	**2.8%**	**2.4%**	**0.6%**	

Note: Minimal differences in averages may occur due to rounding. Cities are ranked in order of largest five-year change.

Source: Local government Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balances, Governmental Funds, FY2007-FY2011.

[64] Per GASB 54, as of FY2011, the City of Phoenix no longer reports its Excise Tax Special Revenue Fund as a separate major governmental fund. Rather, it reports the balances and activities of the fund directly into the individual governmental funds used to expend those excise tax revenues. See City of Phoenix, FY2011 Comprehensive Annual Financial Report, p. 1.

To further examine the fluctuations in the operating deficit ratios above, the exhibit below shows each of the components of the ratio for Chicago and the highest and lowest ranked cities from FY2007 to FY2011. As noted above, the fluctuation in Phoenix's excess revenues in the General Fund is due to a reporting change in FY2011 and does not reflect the overall deficit of revenues for all of Phoenix's governmental funds. Although Seattle ranked 13th due to its significant decline in operating surplus, it maintained a healthy level of General Fund revenues over expenditures throughout the five-year period. Chicago's operating deficit ratio has declined over the five-year period, though it has improved since its lowest point in FY2009. Much of the increased deficit of Corporate Fund revenues is due to fewer economically sensitive revenues received in FY2009 and FY2010, reflecting the difficulty of maintaining a budget balance in those years.

Operating Deficit Ratio Components: FY2007-FY2011 (in $ millions)

Rank		FY2007	FY2008	FY2009	FY2010	FY2011	Five-Year Change
1	**Phoenix**	-69.3%	-71.8%	-71.5%	-69.1%	7.0%	76.3%
	General Fund Revenues Over (Under) Expenditures	$ (676.6)	$ (788.5)	$ (756.2)	$ (684.8)	$ 65.7	$ 742.3
	General Fund Expenditures	$ 976.4	$ 1,097.8	$ 1,056.9	$ 991.1	$ 943.1	$ (33.4)
5	**Chicago**	**-4.2%**	**-7.5%**	**-15.0%**	**-13.9%**	**-8.5%**	**-4.4%**
	Corporate Fund Revenues Over (Under) Expenditures	$ (127.6)	$ (231.5)	$ (452.5)	$ (423.1)	$ (259.3)	$ (131.7)
	Corporate Fund Expenditures	$ 3,063.0	$ 3,107.3	$ 3,014.1	$ 3,033.9	$ 3,040.4	$ (22.6)
13	**Seattle**	51.3%	27.9%	27.8%	29.3%	29.0%	-22.2%
	General Fund Revenues Over (Under) Expenditures	$ 325.0	$ 199.8	$ 204.8	$ 216.3	$ 225.1	$ (99.8)
	General Fund Expenditures	$ 633.8	$ 714.9	$ 737.6	$ 737.7	$ 775.2	$ 141.5

Note: Minimal differences may occur due to rounding. Cities are ranked in order of largest five-year change.

Source: Local government Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balances, Governmental Funds, FY2007-FY2011.

Long-Run Solvency

Long-run solvency assesses the availability of future resources to pay for existing long-term obligations. To measure long-run solvency, this report examines the net worth ratio and the debt service expenditure ratio. The indicators of long-run solvency returned mixed results: an overall declining trend in the net worth ratio suggests that fewer available resources became available over the five year period, while a slightly declining trend in the debt service expenditure ratio suggests that an increasingly smaller proportion of spending was allocated to debt services over the same period.

Long-Run Solvency

Ratio	Average Annual Change - All Cities	Average Annual Change - Chicago
Net Worth	-1.4%	-2.8%
Debt Service Expenditure	-0.2%	-0.3%

Source: Local Government Comprehensive Annual Financial Reports, FY2007-FY2011.

Net Worth Ratio

The difference between a government's assets, the resources it can use to operate the government, and its liabilities, its obligations to turn over resources to other individuals and organizations, is called its net assets. It is the broadest single number included in the financial statements. It is a measure of the net worth of a government and signifies the government's ability to pay off existing long-term liabilities.[65] The net worth ratio measures government-wide restricted and unrestricted net assets as a percentage of its total assets, which are reported using the full accrual method of accounting. A larger net worth ratio indicates a higher level of long-term solvency. The formula for the net worth ratio is the following:

$$\frac{\textit{Restricted and Unrestricted Net Assets}}{\textit{Total Assets}}$$

Source: Government-Wide Statement of Net Assets and Statement of Activities

Net assets "invested in capital" are excluded because governments cannot generally use these assets to pay off long-term obligations.[66] Restricted net assets are net assets with constraints placed on their use either by external groups (such as creditors, laws or regulations of other governments) or by enabling legislation. Unrestricted net assets are all other net assets: those without constraints or invested in capital assets.

[65] Stephen J. Gauthier, *An Elected Official's Guide to the New Governmental Financial Reporting Model* (Chicago: Government Finance Officers Association, 2000), p. 34.
[66] Xiaohu Wang, Lynda Dennis and Yuan Sen (Jeff) Tu, "Measuring Financial Condition: A Study of U.S. States," *Public Budgeting & Finance,* Summer 2007.

The net worth ratio varied considerably among the 13 cities, though the average of all the cities generally declined from FY2007 with a slight improvement in FY2011. In FY2011 Chicago had a net worth ratio of -15.6% meaning there were no available restricted and unrestricted net assets. In five years, Chicago's net worth decreased by 11.1 percentage points, due largely to a $3.6 billion decline in restricted and unrestricted net assets. Phoenix had a positive balance with restricted and unrestricted net assets representing 19.1% of total net assets, meaning that 19.1% of Phoenix assets are owned free and clear whereas Chicago has leveraged its assets.

Net Worth Ratio
Restricted and Unrestricted Net Assets to Total Assets: FY2007-FY2011

Rank	City	FY2007	FY2008	FY2009	FY2010	FY2011	Average	Five-Year Change	Average Annual Change	Indicator Trend
1	Pittsburgh	-151.8%	-144.1%	-151.5%	-164.4%	-135.9%	-149.5%	15.9%	4.0%	Increased
2	Phoenix	17.1%	14.4%	17.2%	18.6%	19.1%	17.3%	1.9%	0.5%	Increased
3	Los Angeles	14.3%	14.2%	14.9%	15.7%	14.8%	14.8%	0.5%	0.1%	Increased
4	Houston	-0.3%	-1.0%	-3.6%	-5.1%	0.0%	-2.0%	0.3%	0.1%	Mixed
5	Columbus	10.8%	8.5%	9.7%	9.9%	10.8%	9.9%	0.1%	0.0%	Increased
6	Seattle	9.4%	7.8%	6.1%	4.6%	6.1%	6.8%	-3.3%	-0.8%	Decreased
7	Kansas City	10.5%	10.8%	4.5%	3.9%	3.8%	6.7%	-6.8%	-1.7%	Decreased
8	**Chicago**	**-4.5%**	**-7.7%**	**-10.3%**	**-12.5%**	**-15.6%**	**-10.1%**	**-11.1%**	**-2.8%**	**Decreased**
9	Detroit	0.0%	-0.4%	-4.1%	-11.9%	-11.7%	-5.6%	-11.7%	-2.9%	Decreased
10	Baltimore	8.5%	1.2%	-0.2%	0.7%	-3.4%	1.4%	-11.8%	0.0%	Decreased
11	Philadelphia	3.8%	-0.2%	-5.6%	-11.1%	-9.9%	-4.6%	-13.7%	-3.4%	Decreased
12	New York	-120.1%	-125.2%	-128.1%	-135.7%	-138.0%	-129.4%	-17.9%	-4.5%	Decreased
13	Boston	29.1%	19.9%	13.0%	4.2%	2.2%	13.7%	-26.9%	-6.7%	Decreased
	Average	**-13.3%**	**-15.5%**	**-18.3%**	**-21.8%**	**-19.8%**	**-17.8%**	**-6.5%**	**-1.4%**	

Note: Minimal differences in averages may occur due to rounding. Cities are ranked in order of largest five-year change.
Source: Local government Comprehensive Annual Financial Reports, Statements of Net Assets, FY2007-FY2011.

To further examine the fluctuations in the net worth ratios above, the exhibit below shows each of the components of the ratio for Chicago and the highest and lowest ranked cities from FY2007 to FY2011.

From FY2007 to FY2011, Chicago's deficit of restricted and unrestricted net assets steadily grew, ultimately reflecting a decline of $3.6 billion over the five-year period despite an overall increase of $5.2 billion in assets. Pittsburgh's net worth ratio has fluctuated between -135.9% and -164.4%. Over the five-year period, liabilities have consistently exceeded assets at the close of each fiscal year. The deficits, which range from a low of $526.5 million in FY2011 to a peak of $619.9 million in FY2007, result primarily from outstanding general obligation bonds that were issued to finance projects that do not result in regular assets recorded in the financial statements. Such funding includes payments toward pensions, financing economic development efforts and infrastructure maintenance expenditures.[67] In contrast, despite a significant reduction of $740.3 million in restricted and unrestricted net assets, Boston maintained a positive net worth ratio each fiscal year.

[67] City of Pittsburgh, FY2010 Comprehensive Annual Financial Report, p. i.

Over time, consistent or increasing deficits of restricted and unrestricted net assets suggest lower long-run solvency. Chicago's trend, in particular, is a major concern as it indicates deterioration in the City's financial condition. Specifically, the City has growing long-term liabilities and is not generating adequate additional resources to meet those demands.

Net Worth Ratio Components: FY2007-FY2011 (in $ millions)							
Rank		FY2007	FY2008	FY2009	FY2010	FY2011	Five-Year Change
1	**Pittsburgh**	-151.8%	-144.1%	-151.5%	-164.4%	-135.9%	15.9%
	Restricted and Unrestricted Net Assets	$ (619.9)	$ (590.3)	$ (589.9)	$ (598.3)	$ (526.5)	$ 93.4
	Total Assets	$ 408.4	$ 409.7	$ 389.5	$ 364.0	$ 387.3	$ (21.1)
8	**Chicago**	**-4.5%**	**-7.7%**	**-10.3%**	**-12.5%**	**-15.6%**	**-11.1%**
	Restricted and Unrestricted Net Assets	$ (1,135.0)	$ (1,988.2)	$ (2,802.3)	$ (3,612.0)	$ (4,761.5)	$(3,626.5)
	Total Assets	$25,285.0	$25,865.2	$27,107.8	$28,964.6	$30,477.8	$ 5,192.8
13	**Boston**	29.1%	19.9%	13.0%	4.2%	2.2%	-26.9%
	Restricted and Unrestricted Net Assets	$ 803.4	$ 589.8	$ 395.7	$ 128.0	$ 63.0	$ (740.3)
	Total Assets	$ 2,762.8	$ 2,962.6	$ 3,035.4	$ 3,041.8	$ 2,923.2	$ 160.3

Note: Minimal differences may occur due to rounding. Cities are ranked in order of largest five-year change.

Source: Local government Comprehensive Annual Financial Reports, Statements of Net Assets, FY2007-FY2011.

Debt Service Expenditure Ratio

Many cities across the United States have a large and increasing direct debt load, which can be a major indicator of financial risk. Long-term debt consists of tax-supported debt components such as general obligation bonds and notes as well as bond premium and issuance costs. Credit rating agencies take into account a government's debt load when deciding that government's bond rating. They regard debt service that exceeds 20% of operating revenues as a potential problem; 10% and below is considered acceptable.[68]

The debt service expenditure ratio examines debt service expenditures in the governmental funds, which are reported using the modified accrual method of accounting. The formula for the debt service ratio is the following:

$$\frac{\textit{Debt Service Expenditure}}{\textit{Total Expenditures}}$$

Sources: Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balance

Debt service expenditures include principal retirement, interest and other fiscal charges made in the current fiscal year. The ratio of debt service expenditures as a percentage of total governmental fund expenditures can be used to assess service flexibility with the amount of expenses committed to annual debt service. As the ratio increases, service flexibility decreases because more operating resources are being committed to a required financial obligation. In other words, the more a government spends on financing its debt, the less it will have available to fund

[68] Craig S. Maher and Karl Nollenberger, "Revisiting Kenneth Brown's "10-Point Test," *Government Finance Review*, October 2009. See also Standard & Poor's, "U.S. State Ratings Methodology," January 3, 2011.

ongoing services. Therefore, a decreasing trend with the debt service expenditure ratio is favorable.

The chart below compares debt service expenditures between FY2007 and FY2011. In FY2011 the City of Chicago had a debt service expenditure ratio of 9.3%, which continues a steady decrease from its peak of 15.1% in FY2008. In FY2008 debt service expenditures increased by $393.1 million, or 61.4%, from the prior fiscal year, while total governmental expenditures increased by $740.9 million, or 12.1%. From FY2008 to FY2010, debt service expenditures decreased by $277.1 million while total expenditures decreased by $505.0 million.[69] Although Chicago's debt service expenditure ratio has declined in recent years, its five-year average of 11.9% is greater than the five-year average for all 13 cities at 9.7%. The relatively large size of the ratio is a cause for concern because it indicates that a large portion of Chicago's operating expenses are being designated for long-term obligations.

None of the 13 cities experienced a consistent decline in its debt service expenditure ratio, although many cities generally declined over the five-year period. Kansas City, which ranked last, experienced a steady increase in debt service expenditure until FY2011, when it dropped to 12.6% from its peak of 13.1% in FY2010.

[69] City of Chicago, FY2007 to FY2010 Comprehensive Annual Financial Report, Statement of Revenues, Expenditures, and Changes in Fund Balances, Governmental Funds.

Seattle experienced one of the largest declines between FY2008 and FY2010, with debt service expenditures dropping from its peak of 8.4% of total governmental expenditures to its low of 4.7%. Much of this decline can be attributed to a $55.4 million, or 44.9%, drop in debt service expenditures in FY2009 from the previous fiscal year, while total governmental expenditures increased by $50.7 million, or 3.4%.[70] The drop in debt service is due in part to advance refunding payments made to escrow in FY2007 and FY2008. In order to lower interest costs, Seattle refunded and defeased certain bonds by issuing new refunding bonds, the proceeds of which are placed in escrow.[71]

Debt Service Expenditure Ratio
Governmental Funds Debt Service to Expenditures: FY2007-FY2011

Rank		FY2007	FY2008	FY2009	FY2010	FY2011	Average	Five-Year Change	Average Annual Change	Indicator Trend
1	Phoenix	15.3%	7.9%	8.4%	9.8%	9.8%	10.3%	-5.5%	-1.4%	Decreased
2	Columbus	12.4%	10.9%	11.9%	11.2%	9.8%	11.2%	-2.6%	-0.7%	Decreased
3	Seattle	7.4%	8.4%	5.9%	4.7%	5.1%	6.3%	-2.4%	-0.6%	Decreased
4	New York	8.9%	7.2%	6.2%	6.5%	7.3%	7.2%	-1.7%	-0.4%	Decreased
5	Pittsburgh	20.6%	20.1%	18.7%	17.2%	19.1%	19.1%	-1.6%	-0.4%	Decreased
6	**Chicago**	**10.5%**	**15.1%**	**12.5%**	**11.9%**	**9.3%**	**11.9%**	**-1.2%**	**-0.3%**	**Decreased**
7	Baltimore	5.5%	5.1%	4.6%	5.2%	5.2%	5.1%	-0.3%	0.0%	Decreased
8	Philadelphia	3.6%	3.6%	3.3%	3.7%	3.5%	3.5%	-0.1%	0.0%	Decreased
9	Houston	12.8%	13.2%	20.1%	12.0%	13.0%	14.2%	0.2%	0.1%	Increased
10	Boston	4.4%	4.2%	4.3%	4.6%	4.6%	4.4%	0.2%	0.1%	Increased
11	Detroit	12.5%	13.3%	13.8%	10.6%	12.9%	12.6%	0.4%	0.1%	Increased
12	Los Angeles	8.0%	8.7%	9.5%	8.1%	8.4%	8.5%	0.4%	0.1%	Increased
13	Kansas City	8.7%	10.7%	11.5%	13.1%	12.6%	11.3%	3.9%	1.0%	Increased
	Average	**10.0%**	**9.9%**	**10.0%**	**9.1%**	**9.3%**	**9.7%**	**-0.8%**	**-0.2%**	

Note: Minimal differences in averages may occur due to rounding. Cities are ranked in order of largest five-year change.

Source: Local government Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balances, Governmental Funds, FY2007-FY2011.

To further examine the fluctuations in the debt service ratios above, the exhibit below shows each of the components of the ratio for Chicago and the highest and lowest ranked cities from FY2007 to FY2011. As the ratio increases – as either debt service expenditures increase or total governmental expenditures decrease – service flexibility decreases because more operating resources are being committed to a required financial obligation. Therefore, a decreasing trend with the debt service expenditure ratio is favorable.

[70] City of Seattle, FY2008 and FY2009 Comprehensive Annual Financial Report, Statement of Revenues, Expenditures, and Changes in Fund Balances, Governmental Funds.
[71] City of Seattle, FY2008 Comprehensive Annual Financial Report, pp. 99-100.

Phoenix's debt service ratio decreased 5.5 percentage points between FY2007 and FY2011. A closer examination of the components of the ratio show that while debt service expenditures decreased by $160.2 million, total governmental expenditures decreased by a more significant $258.8 million. In contrast, Kansas City's debt service expenditure ratio increased 3.9 percentage points because debt service expenditures increased by $29.4 million over the five-year period, while total governmental expenditures steadily declined by $148.4 million, inflating the debt service ratio. The City of Chicago's ratio has declined steadily, largely due to total governmental expenditures increasing by $523.1 million, while debt service expenditures decreased by a more modest $21.6 million.

Debt Service Ratio Components: FY2007-FY2011 (in $ millions)

Rank		FY2007	FY2008	FY2009	FY2010	FY2011	Five-Year Change
1	**Phoenix**	15.3%	7.9%	8.4%	9.8%	9.8%	-5.5%
	Debt Service Expenditures	$ 376	$ 206	$ 203	$ 229	$ 215	$ (160.2)
	Total Expenditures	$ 2,448	$ 2,599	$ 2,414	$ 2,333	$ 2,189	$ (258.8)
6	**Chicago**	**10.5%**	**15.1%**	**12.5%**	**11.9%**	**9.3%**	**-1.2%**
	Debt Service Expenditures	$ 640	$ 1,033	$ 786	$ 756	$ 618	$ (21.6)
	Total Expenditures	$ 6,099	$ 6,839	$ 6,269	$ 6,334	$ 6,622	$ 523.1
13	**Kansas City**	8.7%	10.7%	11.5%	13.1%	12.6%	3.9%
	Debt Service Expenditures	$ 108	$ 130	$ 130	$ 142	$ 137	$ 29.4
	Total Expenditures	$ 1,239	$ 1,213	$ 1,128	$ 1,085	$ 1,090	$ (148.4)

Note: Minimal differences may occur due to rounding. Cities are ranked in order of largest five-year change.

Source: Local government Comprehensive Annual Financial Reports, Statements of Revenues, Expenditures and Changes in Fund Balances, Governmental Funds, FY2007-FY2011.

Service-Level Solvency

Service-level solvency reflects a government's ability to maintain services at the quality and level required to ensure the safety and welfare of citizens and to meet their expectations and desires. Expenses per capita, liabilities per capita and taxes and fees per capita are measures of a government's service-level solvency. Generally, higher indicators reveal lower levels of solvency. Expenses and governmental liabilities per capita assess the cost of services. Taxes and fees per capita reflect the tax burden placed on residents. As such, declining trends are favorable for all these indicators. Although some cities experienced declines in the service-level indicators over the five-year period, the average annual change for all cities reveals systemic growth in expenses, liabilities and taxes and fees per capita.

Service-Level Solvency

Ratio	Average Annual Change - All Cities	Average Annual Change - Chicago
Real Expenses per Capita	$ 37.11	$ 58.17
Real Liabilities per Capita	$ 319.77	$ 824.02
Real Taxes and Fees per Capita	$ 9.10	$ 28.36

Source: Local Government Comprehensive Annual Financial Reports, FY2007-FY2011.

All of the data for the following indicators have been adjusted for inflation to reflect 2011 dollars. Financial data come from the government-wide Statement of Net Assets and Statement

of Activities, which use the full accrual method of accounting. Population data come from the United States Census Bureau's annual estimates as of July 1 for each year and the 2010 Census. During the five-year period, the City of Chicago's population declined by 125,388 residents.[72]

Expenses per Capita

Expenses per capita divides the total expenses of the primary government, which include governmental activities and business-type activities, by population. Higher expenses per capita generally reveal a more expensive government and lower solvency to sustain that expense level.[73] However, it is important to note that higher expenses do not necessarily translate to a higher burden on taxpayers since business-type activities include expenses funded by user fees. For example, expenses per capita in Chicago include expenses incurred by O'Hare and Midway Airports even though those activities are funded by airport fees and not property or consumer taxes.

The exhibit below ranks each of the 13 U.S. cities by their five-year average annual change and five-year change in expenses per capita. From FY2007 to FY2011, Chicago's real expenses grew by an average of $58.17 per person annually, the tenth highest average increase of the 13 cities. Over the five-year period, real expenses grew by $232.68 per person.

[72] See Appendix E on page 51 of this report for other cities' populations.
[73] Xiaohu Wang, Lynda Dennis and Yuan Sen (Jeff) Tu, "Measuring Financial Condition: A Study of U.S. States," *Public Budgeting & Finance,* Summer 2007, p. 9.

Real expenses for Chicago's primary government increased by $76.2 million from FY2007 to FY2011. Over the five-year period, budgeted appropriations for governmental activities have increased significantly, including for infrastructure services and transportation, public safety and the city's General Financing Requirements, which include pension contributions, long-term debt payments and other cross-department expenses.[74]

Real Expenses Per Capita (in 2011 dollars) Average Annual Change and Five-Year Change: 2007-2011					
Rank		**Average Annual**	**Rank**		**Five-Year**
1	Philadelphia	$ (106.54)	1	Philadelphia	$ (426.14)
2	Kansas City	$ (55.61)	2	Kansas City	$ (222.45)
3	Seattle	$ (38.87)	3	Seattle	$ (155.49)
4	Pittsburgh	$ (32.57)	4	Pittsburgh	$ (130.27)
5	Columbus	$ 14.97	5	Columbus	$ 59.89
6	Los Angeles	$ 32.28	6	Los Angeles	$ 129.14
7	Houston	$ 34.10	7	Houston	$ 136.41
8	Baltimore	$ 39.55	8	Baltimore	$ 158.20
9	Boston	$ 52.50	9	Boston	$ 210.00
10	**Chicago**	**$ 58.17**	**10**	**Chicago**	**$ 232.68**
11	Phoenix	$ 84.72	11	Phoenix	$ 338.89
12	New York	$ 199.44	12	New York	$ 797.77
13	Detroit	$ 200.24	13	Detroit	$ 800.96
Average		$ 37.11	**Average**		$ 148.43

Source: Local Government Comprehensive Annual Financial Reports, FY2007-FY2011.

Liabilities per Capita

Liabilities per capita divides the total liabilities of the primary government by population and represents the government's relative indebtedness with regard to future taxpayers. The exhibit below ranks each of the 13 U.S. cities by their five-year average annual change and five-year change in liabilities per capita. From FY2007 to FY2011, Chicago's real liabilities grew by an average of $824.02 per person annually, the eleventh highest average annual increase. Over the five-year period, liabilities grew by $3,296.08 per person.

[74] For more details on the City's appropriations trends from FY2007 to FY2011, see the Civic Federation's *City of Chicago FY2011 Proposed Budget: Analysis and Recommendations*, November 3, 2010.

Chicago's real liabilities grew by $7.8 billion from FY2007 to FY2011. Over the five-year period, real long-term debt (bonds, notes and certificates payable) rose by 13.4%, from $7.9 billion to nearly $9.0 billion. Of its long-term liabilities, the single largest percentage and dollar increase over the five-year period was for cumulative pension funding shortfalls, which increased by 112.0% or $2.8 billion after depreciation.[75] The steady increases in long-term obligations, particularly the large increase in pension funding shortfalls, are a cause for concern.

Real Liabilities Per Capita (in 2011 dollars)
Average Annual Change and Five-Year Change: 2007-2011

Rank		Average Annual	Rank		Five-Year
1	Pittsburgh	$ (187.14)	1	Pittsburgh	$ (748.54)
2	Philadelphia	$ (46.57)	2	Philadelphia	$ (186.29)
3	Kansas City	$ 16.78	3	Kansas City	$ 67.14
4	Baltimore	$ 79.81	4	Baltimore	$ 319.23
5	Columbus	$ 128.27	5	Columbus	$ 513.08
6	Phoenix	$ 220.33	6	Phoenix	$ 881.32
7	Seattle	$ 226.53	7	Seattle	$ 906.10
8	Boston	$ 262.28	8	Boston	$ 1,049.10
9	Houston	$ 282.04	9	Houston	$ 1,128.18
10	Los Angeles	$ 393.92	10	Los Angeles	$ 1,575.68
11	**Chicago**	**$ 824.02**	**11**	**Chicago**	**$ 3,296.08**
12	Detroit	$ 899.02	12	Detroit	$ 3,596.08
13	New York	$ 1,057.69	13	New York	$ 4,230.78
Average		$ 319.77	**Average**		$ 1,279.07

Source: Local Government Comprehensive Annual Financial Reports, FY2007-FY2011.

Taxes and Fees per Capita

Taxes and fees per capita divides all taxes and charges for services for primary government activities by population. Higher taxes and fees per capita reflect a higher tax burden for residents. The exhibit below ranks each of the 13 U.S. cities by their five-year average annual change and five-year change in real taxes and fees per capita. From FY2007 to FY2011, Chicago's taxes and fees grew by an average of $28.36 per person annually, the ninth highest average annual increase. Over the five-year period, taxes and fees grew by $113.45 per person.

[75] City of Chicago, Comprehensive Annual Financial Reports, FY2007-FY2011, Note 10 Long-Term Obligations. For budgetary trends, see also the Civic Federation's *City of Chicago FY2012 Proposed Budget: Analysis and Recommendations,* November 2, 2011. The cumulative pension funding shortfalls reported in the City's audited financial statements do not represent total unfunded pension liabilities. Reported net pension obligations are the cumulative difference between annual pension costs and the employer's contributions to its plans since 1998 when reporting standards were modified per GASB Statement No. 27.

The City of Chicago's real taxes and fees increased by $76.2 million, or 1.5%. Over the five-year period, real actual resources for Chicago have increased by $479.8 million, or 7.9%. This includes $195.0 million, or 28.5%, in increased property tax revenues and $146.8 million, or 26.3%, in sewer and water revenue.[76]

Real Taxes and Fees* Per Capita (in 2011 dollars) Average Annual Change and Five-Year Change: 2007-2011					
Rank		Average Annual	Rank		Five-Year
1	Seattle	$ (91.08)	1	Seattle	$ (364.32)
2	Philadelphia	$ (48.49)	2	Philadelphia	$ (193.94)
3	New York	$ (31.38)	3	New York	$ (125.51)
4	Kansas City	$ (21.41)	4	Kansas City	$ (85.63)
5	Pittsburgh	$ (15.88)	5	Pittsburgh	$ (63.51)
6	Los Angeles	$ 1.84	6	Los Angeles	$ 7.37
7	Phoenix	$ 16.94	7	Phoenix	$ 67.74
8	Columbus	$ 19.63	8	Columbus	$ 78.51
9	**Chicago**	**$ 28.36**	**9**	**Chicago**	**$ 113.45**
10	Houston	$ 30.50	10	Houston	$ 122.01
11	Boston	$ 51.39	11	Boston	$ 205.58
12	Baltimore	$ 88.57	12	Baltimore	$ 354.28
13	Detroit	$ 89.30	13	Detroit	$ 357.18
Average		$ 9.10	**Average**		$ 36.40

*Fees are "Charges for Services" shown for all primary government in the government-wide Statement of Activities.
Source: Local Government Comprehensive Annual Financial Reports, FY2007-FY2011.

While Chicago's expenses and liabilities per capita were increasing by an average of $58.17 and $824.02 annually, the City's primary sources of revenue per capita was increasing by significantly less at an average of $28.36 annually. This suggests that Chicago is experiencing a growing imbalance between the demands of its citizens, particularly with long-term liabilities, and the means to fund them.

[76] For more details on the City's budgetary trends in resources from FY2007 to FY2011, see the Civic Federation's *City of Chicago FY2011 Proposed Budget: Analysis and Recommendations*, November 3, 2010.

APPENDIX A: GLOSSARY[77]

Accrual Basis of Accounting (or Full Accrual): An accounting method that attempts to recognize revenues when they are earned and expenses when they are incurred, not when cash changes hands. The Governmental Accounting Standards Board (GASB) requires this accounting method for governments. Contrast this term to "modified accrual basis of accounting."

Accrued Interest: Interest due on deposits payable by the government in the next fiscal year.

Accrued and Other Liabilities: Self insurance funds, unclaimed property and other unspecified liabilities.

Assets: Resources a government owns or controls that can be used in the provision of services or the generation of other resources to support service provision.

Balance Sheet: The financial statement for the governmental funds that focuses on the balances of spendable resources available at the end of the fiscal year.

Budgetary Solvency: The ability to maintain current or desired service levels within the budget period by sufficiently funding operating expenses.

Cash and Cash Equivalents: Assets that are cash or can be converted into cash immediately, including petty cash, demand deposits and certificates of deposit.

Cash Solvency: The ability to generate sufficient financial resources to pay its current liabilities.

Comprehensive Annual Financial Report (CAFR): A set of government financial statements comprising the financial report of a state, municipal or other governmental entity that complies with the generally accepted accounting principles (GAAP) set by the Governmental Accounting Standards Board (GASB).

Corporate Fund: The City of Chicago's General Fund, or main operating fund.

Current Assets: Assets that are reasonably expected to be converted into cash within one year.

Current Liabilities: Obligations that are due within one year, including accounts payable, accrued liabilities and liabilities due to other units of government.

Debt Service Expenditure: The amount that a local government must pay each year for principal and interest on debt. Expenditures are made from the major governmental operating funds and the debt service fund and are recorded in accordance with prescribed accounting principles.

[77] All definitions are from various audited financial statements and Investopedia.

Deflation: Deflation occurs when the general price level of goods and services decline, shown by a negative inflation rate.

Disinflation: Disinflation occurs when the inflation rate, or the growth in the general price level of goods and services, slows.

Expenditures: Outflows of resources, under modified accrual, that occur when resources are consumed or goods and services are purchased and received.

Expenses: Outflows of resources, under full accrual, that occur when assets are consumed or costs are incurred.

Financial Solvency: The ability to finance expected services on a continuing basis with recurring resources.

Full Accrual Basis of Accounting: An accounting method that attempts to recognize revenues when they are earned and expenses when they are incurred, not when cash changes hands. The Governmental Accounting Standards Board (GASB) requires this accounting method for governments. Contrast this term to "modified accrual basis of accounting."

Fund: A grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. Governmental funds can be divided into three categories: governmental funds, proprietary funds and fiduciary funds.

Fund Balance: The difference between fund assets and fund liabilities accumulated over the life of the fund.

General Fund: A government's main operating fund. The City of Chicago's General Fund is called the Corporate Fund.

Generally Accepted Accounting Principles (GAAP): Uniform minimum standards and guidelines for financial accounting and reporting that serve to achieve some level of standardization.

Governmental Accounting Standards Board (GASB): A private non-profit body responsible for establishing and improving accounting and financial reporting standards for governmental units in the United States. Although they do not have the force of law, governments are required to follow GASB standards in order to obtain clean opinions from their auditors and failure to comply with GASB standards can adversely affect a state or local government's attempts to issue bonds.

Governmental Fund: A fund that accounts for the basic, typically tax-supported activities of a government; governmental fund types include general, special revenue, debt service, capital projects and permanent funds.

Internal balances: Monies due from (positive) or due to (negative) the government.

Inventories: Government-wide inventories that are included as current liabilities.

Investments: Any investments that the government has made that will expire within one year, including stocks and bonds that can be liquidated quickly.

Liabilities: Amounts a government owes to others.

Long-Run Solvency: The ability to pay for existing long-term obligations. Long-run solvency assesses the impact of existing long-term obligations on future resources.

Modified Accrual Basis of Accounting: A basis of accounting that recognizes revenues as those collected within the year or soon enough thereafter that can be used to finance current-year expenditures. Expenditures represent the use or expected use of current financial resources.

Net Pension Obligations: Net pension obligations as reported in the audited financial statements are the cumulative difference between annual pension costs and the employer's contributions to its plans since 1998 when reporting standards were modified per GASB Statement No. 27.

Payables: Monies owed to vendors for goods and services

Receivables: Monetary obligations owed to the government including property taxes and interest on loans.

Revenues: Inflows of resources that are measurable and collectible; under modified accrual, they are also available to finance current-period expenditures.

Service-Level Solvency: The ability to maintain services at the quality and level required to ensure the safety and welfare of citizens and to meet their expectations and desires.

Short-Term Debt: Loans taken out in anticipation of revenues that are paid back within 12 months or less.

Statement of Activities: The government-wide financial statement that presents information showing how the government's net assets changed during each fiscal year.

Statement of Net Assets: The government-wide financial statement that presents information on all of the government's assets, deferred outflows, liabilities and deferred inflows with the difference reported as net assets.

Statement of Revenues, Expenditures and Changes in Fund Balance: The financial statement for the governmental funds which focuses on near-term inflows and outflows of spendable resources.

APPENDIX B: CITY OF CHICAGO NET ASSETS

City of Chicago Net Assets: FY2007-FY2011 (in $ millions)							
	FY2007	FY2008	FY2009	FY2010	FY2011	$ Change	% Change
Total Assets	$ 25,285.0	$ 25,865.2	$ 27,107.8	$ 28,964.6	$ 30,477.8	$ 5,192.8	20.5%
Total Liabilities	$ 23,680.5	$ 25,035.1	$ 27,372.3	$ 30,535.3	$ 33,087.3	$ 9,406.8	39.7%
Net Investment in Capital	$ 2,739.5	$ 2,818.3	$ 2,537.8	$ 2,041.2	$ 2,151.9	$ (587.6)	-21.4%
Restricted Net Assets	$ 3,862.1	$ 3,622.0	$ 4,557.0	$ 4,402.4	$ 2,471.2	$ (1,390.9)	-36.0%
Unrestricted Net Assets	$ (4,997.1)	$ (5,610.3)	$ (7,359.3)	$ (8,014.4)	$ (7,232.7)	$ (2,235.6)	44.7%
Total Net Assets	$ 1,604.5	$ 830.1	$ (264.5)	$ (1,570.8)	$ (2,609.6)	$ (4,214.0)	-262.6%

Source: City of Chicago Comprehensive Annual Financial Reports, FY2007-FY2011

Over the past five years, Chicago's net assets have plummeted by 262.6%, due in part to an $8.9 billion increase in its long-term (non-current) liabilities.[78] The City's total net assets have fallen from a surplus of $1.6 billion in FY2007 to a deficit of $2.6 billion in FY2011. Unrestricted net assets – net assets that are not invested in capital assets or restricted for specific use – reached a deficit of $7.2 billion in FY2011. It is important to note that the City's long-term obligations include debt issued for capital projects on behalf of Chicago Public Schools and the Chicago Park District, which may not be reported as net assets invested in capital since those capital assets are owned by the separate units of government. The significant decline in net assets is driven by a $9.4 billion, or 39.7% increase in total liabilities over the five-year period.

[78] The cumulative pension funding shortfalls reported in the City's audited financial statements do not represent total unfunded pension liabilities. Reported net pension obligations are the cumulative difference between annual pension costs and the employer's contributions to its plans since 1998 when reporting standards were modified per GASB Statement No. 27.

APPENDIX C: SUMMARY OF FINANCIAL INDICATORS

Summary of Financial Indicators			
Financial Indicator	**Formula**	**Source**	**Method of Accounting**
Cash Solvency: The ability to generate sufficient financial resources to pay current liabilities.			
Working Capital to Expenses Ratio	$\frac{\text{Current Assets - Current Liabilities}}{{}^{1}/_{12}\text{ Expenses}}$	Statement of Net Assets	Full Accrual
Budgetary Solvency: The ability to maintain current or desired service levels within the budget period by sufficiently funding operating expenses			
Continuing Services Ratio	$\frac{\text{Unrestricted Net Assets}}{\text{Total Expenses}}$	Statement of Net Assets Statement of Activities	Full Accrual Full Accrual
Fund Balance Ratio	$\frac{\text{Unrestricted General Fund Fund Balance}}{\text{General Fund Expenditures}}$	Balance Sheet Statement of Revenues, Expenditures and Changes in Fund Balance	Modified Accrual Modified Accrual
Operating Deficit Ratio	$\frac{\text{General Fund Surplus or Deficit}}{\text{Net Operating Expenditures}}$	Statement of Revenues, Expenditures and Changes in Fund Balance	Modified Accrual
Long-Run Solvency: The availability of future resources to pay for existing long-term obligations.			
Net Worth Ratio	$\frac{\text{Restricted and Unrestricted Net Assets}}{\text{Total Assets}}$	Statement of Net Assets	Full Accrual
Debt Expenditure Ratio	$\frac{\text{Debt Service Expenditure}}{\text{Total Expenditures}}$	Statement of Revenues, Expenditures and Changes in Fund Balance	Modified Accrual
Service-Level Solvency: The ability to maintain services at the quality and level required to ensure the safety and welfare of citizens and to meet their expectations and desires.			
Expenses per Capita	$\frac{\text{Total Primary Government Expenses}}{\text{Population}}$	Statement of Activities	Full Accrual
Governmental Liabilities per Capita	$\frac{\text{Total Liabilities}}{\text{Population}}$	Statement of Net Assets	Full Accrual
Taxes and Fees per Capita	$\frac{\text{Total Primary Government Taxes and Charges for Services}}{\text{Population}}$	Statement of Activities	Full Accrual

APPENDIX D: LIMITATIONS OF FINANCIAL INDICATOR ANALYSIS

Due to a number of factors, the analysis presented in this report has certain limitations including the following:

- This report does not prescribe the way in which all governments ought to be examined to determine financial condition. There is a universe of hundreds of possible indicators of financial condition. The Civic Federation strove in this report to select useful, familiar financial indicators that make intuitive sense to present the City of Chicago's relative financial condition to a non-academic audience;
- The 13 cities selected in the analysis represent vastly different governments and demographics. Each city has unique governmental operations, social and demographic compositions and local and state laws, all of which could influence the indicators but are not accounted for in the analysis;
- Primary government operations for each of the cities can include vastly different services. For example, the New York City public school system is a branch of the municipal government, whereas Chicago's public school system is a separate district governed by the Board of Education. In FY2011 over 31.5% of New York's General Fund expenditures were allocated to education.[79] The City of Chicago, however, does not fund public education with its General Fund since public education is funded through Chicago Public Schools (CPS);[80]
- In addition to varying services, the report does not examine differences in the responsibilities of each government or compare capital condition;
- Although all cities are for the same time period (2007-2011 fiscal years) and include the economic recession and aftermath, regional differences can affect the indicators and are not accounted for in the analysis;
- Cities may implement accounting changes for any given fiscal year. These changes can have a significant impact on how financial data is reported and, when examining financial indicators over time, can create a misleading trend;
- The report uses pre-GASB 68 audited financial statements and therefore do not include a consistently applied measurement of unfunded actuarial accrued pension liabilities;[81] and
- An indicator that appears to have a negative trend may reflect a planned service choice by a government. For example, a city may have increasing debt service expenditures as a result of a major capital or infrastructure project. Conversely, a government with falling debt service expenditures could be neglecting its capital condition.

[79] City of New York, FY2011 Comprehensive Annual Financial Report, p. 46.

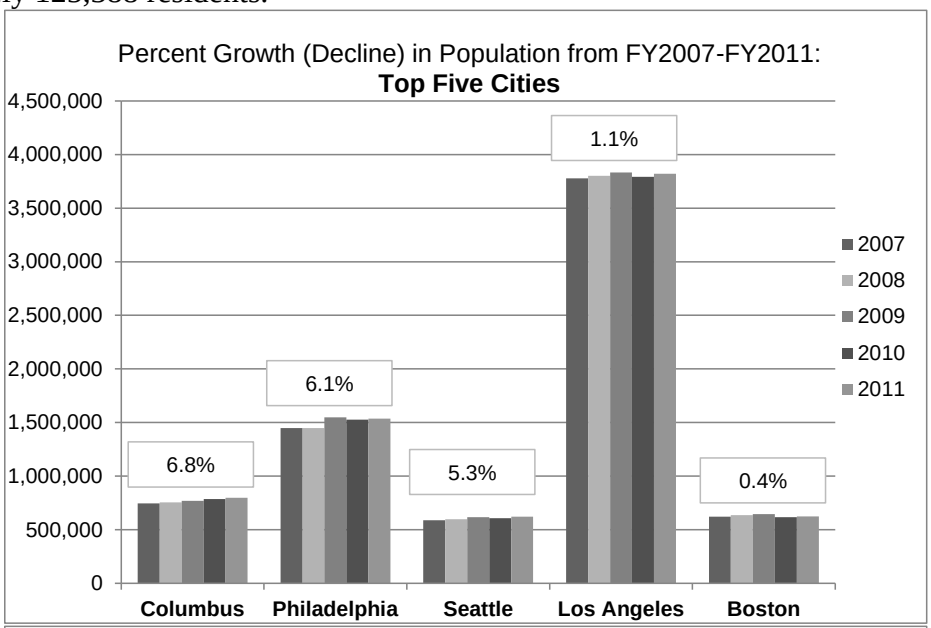
[80] Although the City of Chicago does not fund public education directly, it does make pension contributions on behalf of non-teacher CPS employees, has issued debt on behalf of CPS and has funded school construction through tax increment financing.

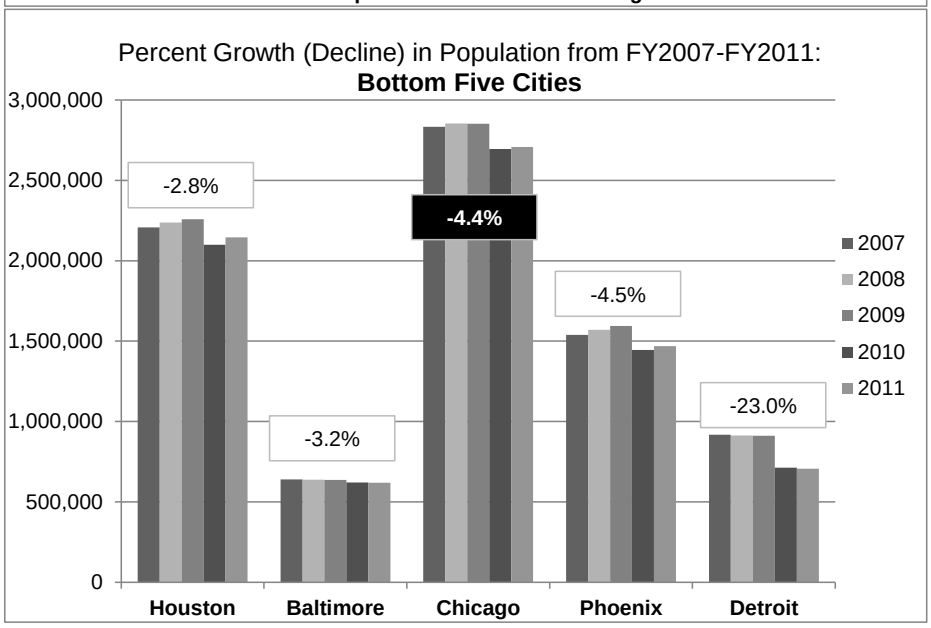
[81] GASB Statement 68 requires governments providing defined benefit pensions to recognize their long-term obligation for pension benefits as a liability on the balance sheet and to more comprehensively measure the annual costs of pension benefits. The provisions of Statement 68 are effective after June 15, 2014.

APPENDIX E: ECONOMIC DATA FOR THE 13 U.S. CITIES ANALYZED

Population Change[82]

From 2007 to 2011, Columbus experienced the largest percent growth in population of the 13 cities at 6.8%, reflecting an increase of 50,573 residents. Detroit experienced the largest population decline both by percent and number, losing 210,649 residents, or 23.0% of its 2007 population. Of the 13 cities, Chicago ranked eleventh with a 4.4% loss in population, or approximately 125,388 residents.

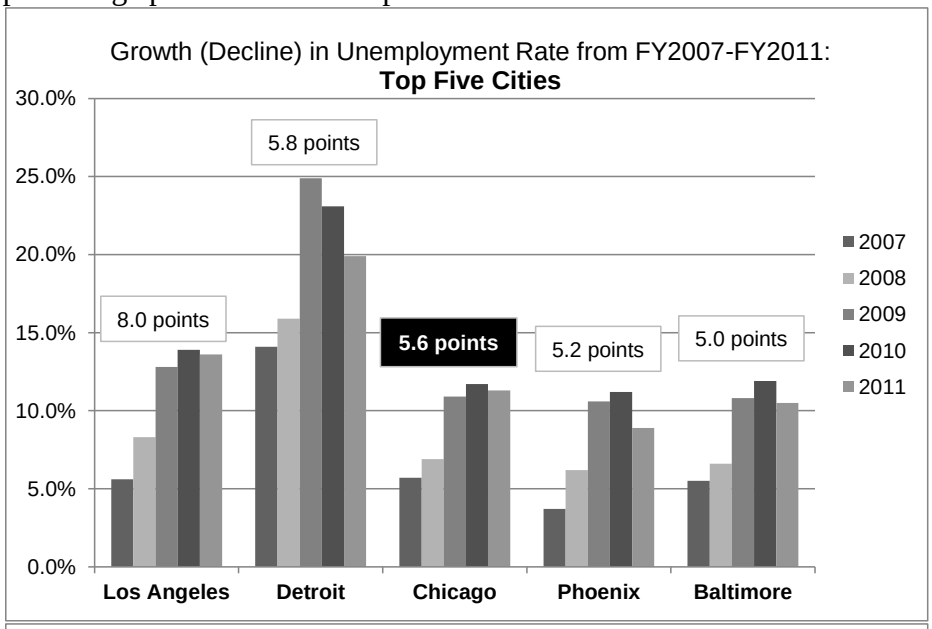


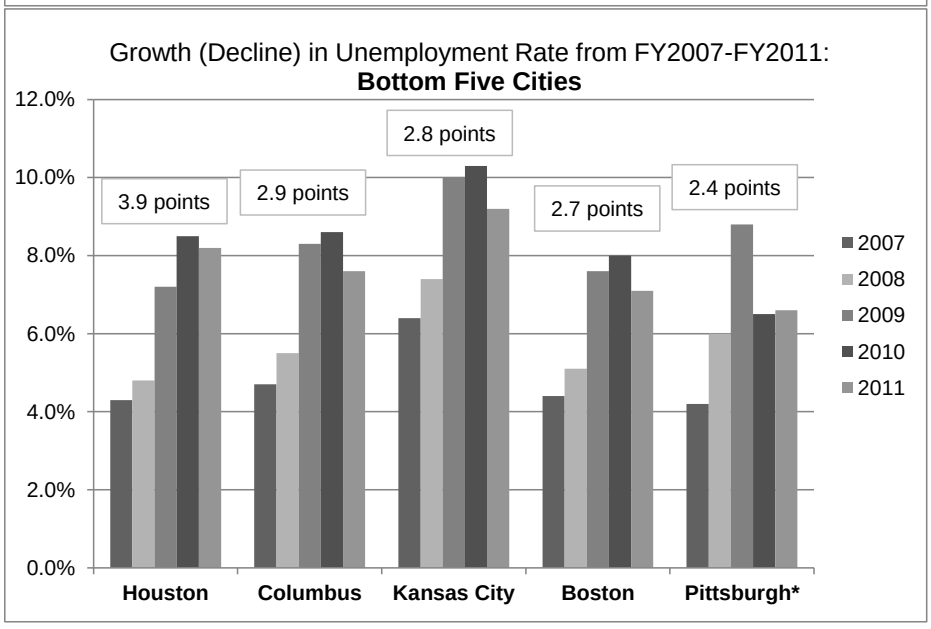


[82] Population data come from the U.S. Department of Commerce, Bureau of the Census. Population estimates are annual estimates of resident population as of July 1st of each year for city areas only.

Growth in Unemployment[83]

From 2007 to 2011, Los Angeles experienced the largest increase in unemployment, with its unemployment rate growing by 8.0 percentage points from 5.6% in 2007 to 13.6% in 2011. Pittsburgh experienced the smallest increase in unemployment, growing 2.4 percentage points from 4.2% in 2007 to 6.6% in 2011. Of the 13 cities, Chicago ranked third with its unemployment rate growing 5.6 percentage points from 5.7% in 2007 to 11.3% in 2011. For each of the cities, the unemployment rate grew by more in 2009 than any other year. Additionally, the unemployment rate declined in all cities in 2011 except for Pittsburgh where it grew by 0.1 percentage point and Philadelphia where it remained flat.

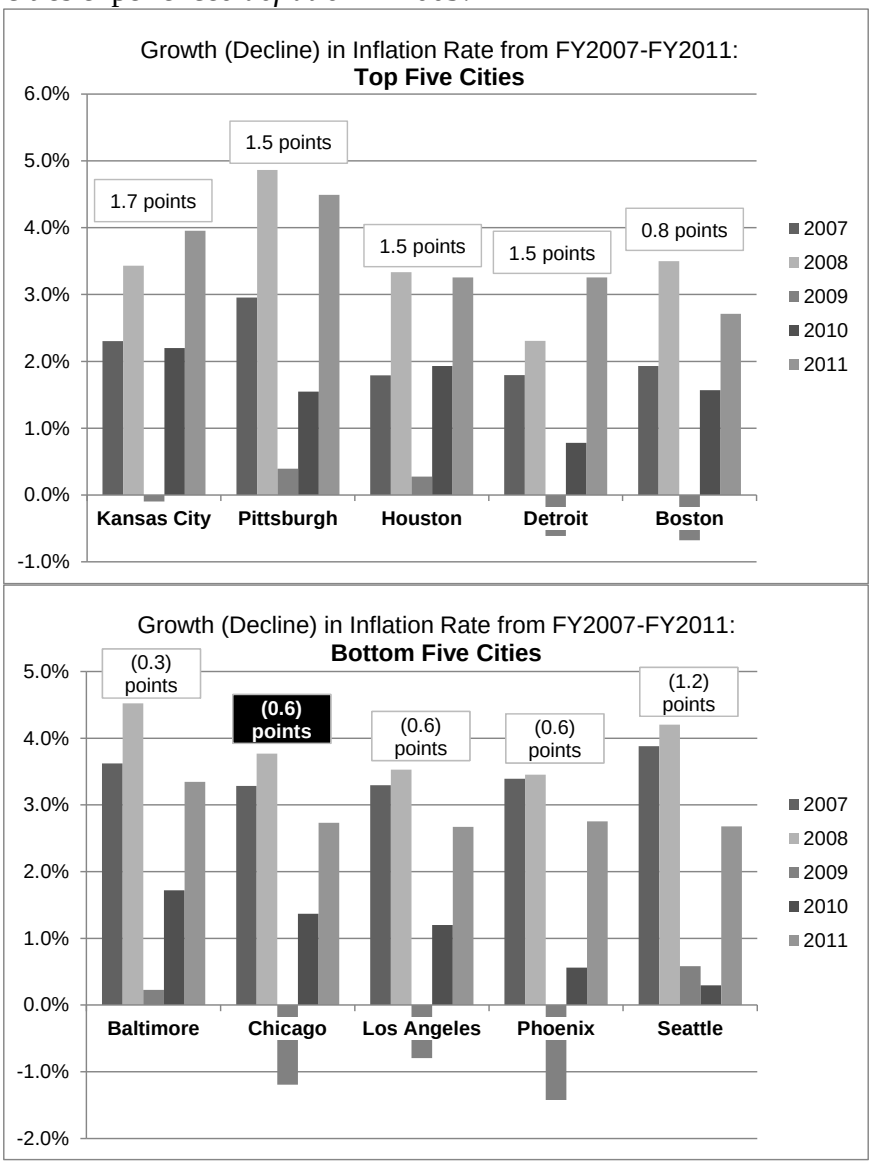




[83] Unemployment data for all cities except Pittsburgh comes from the U.S. Department of Labor, Bureau of Labor Statistics. Pittsburgh's unemployment data comes from its FY2011 Comprehensive Annual Financial Report, p. 126. Unemployment data represent the annual average unemployment rates for city areas only.

Growth in Inflation[84]

From 2007 to 2011, the inflation rate in Kansas City rate increased by 1.7 percentage points, the largest increase among the 13 cities, from 2.3% in 2007 to 4.0% in 2011. Seattle's inflation rate decreased the most, falling by 1.2 percentage points from 3.9% in 2007 to 2.7% in 2011. Of the 13 cities, Chicago ranked tenth with its inflation rate decreasing 0.6 percentage points from 3.3% in 2007 to 2.7% in 2011. In 2009 all 13 cities experienced *disinflation* from the previous year from between 2.9 percentage points (Detroit) to 5.0 percentage points (Chicago).[85] Additionally, eight of the 13 cities experienced *deflation* in 2009.[86]



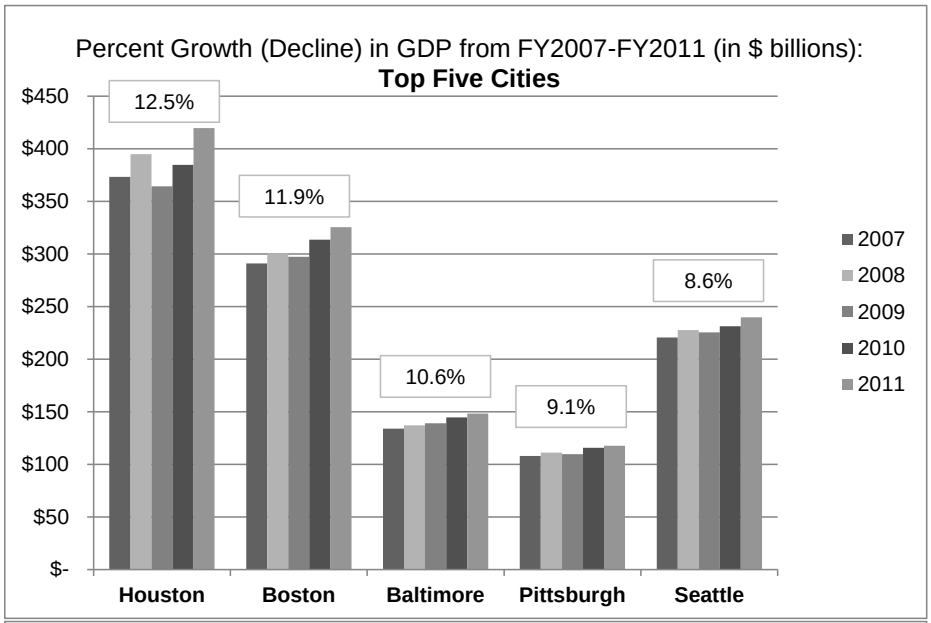
[84] Inflation data for all cities come from the U.S. Department of Labor, Bureau of Labor Statistics. The annual average consumer price index (CPI) is not seasonally adjusted, has a 1982-84 reference base and, for all cities except Columbus, represents the city's metropolitan statistical area (MSA). CPI data for Columbus represents the Midwest Urban region because an MSA is not available. Inflation data produced in this report reflect percent changes in CPI from the previous year.

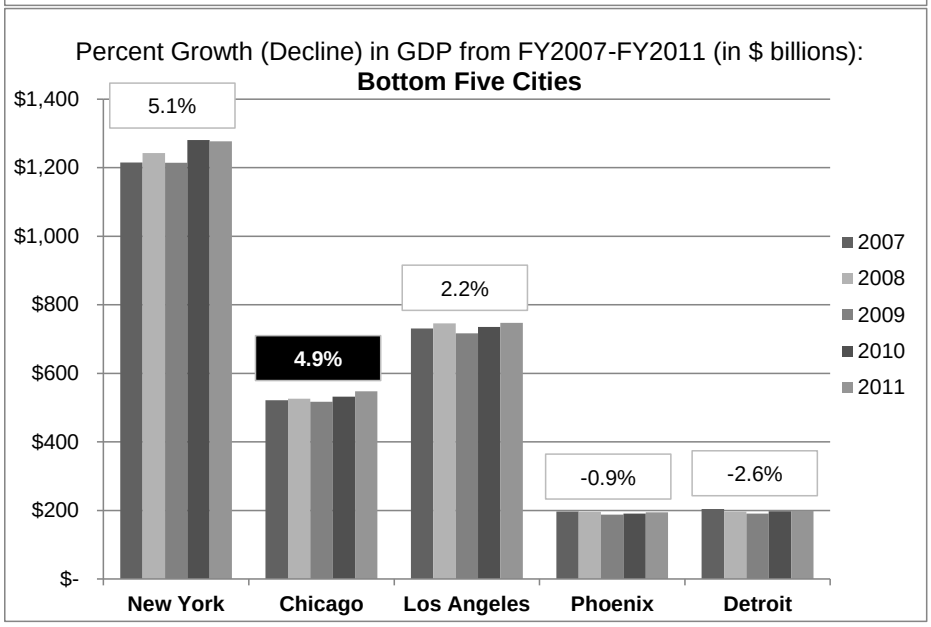
[85] Disinflation occurs when the inflation rate, or the growth in the general price level of goods and services, slows.

[86] Deflation occurs when the general price level of goods and services decline, shown by a negative inflation rate.

Gross Domestic Product (GDP)[87]

From 2007 to 2011, Houston experienced the largest percent growth in GDP at 12.5%. Detroit's GDP declined the most both by percent and dollar amount, falling $5.3 billion, or 2.6%, from $204.7 billion in 2007 to $199.4 billion in 2011. Of the 13 cities, Chicago ranked tenth with 4.9% growth in GDP. Chicago's GDP increased $25.6 billion from $522.0 billion in 2007 to $547.6 billion in 2011.





[87] GDP data come from the U.S. Department of Commerce, Bureau of Economic Analysis. GDP data for each city represents the city's metropolitan statistical area (MSA).

Complete data on the four economic indicators for each of the 13 cities follows:

Baltimore							
	2007	2008	2009	2010	2011	5-Yr Change	% Change
Population	640,150	638,091	637,418	620,961	619,493	-20,657	-3.2%
Unemployment	5.5%	6.6%	10.8%	11.9%	10.5%	5.0%	90.9%
Inflation	3.6%	4.5%	0.2%	1.7%	3.3%	-0.3%	-7.6%
GDP (in $ billions)	$ 134.1	$ 137.2	$ 139.1	$ 144.8	$ 148.3	$ 14.2	10.6%
Boston							
	2007	2008	2009	2010	2011	5-Yr Change	% Change
Population	622,748	636,748	645,169	617,594	625,087	2,339	0.4%
Unemployment	4.4%	5.1%	7.6%	8.0%	7.1%	2.7%	61.4%
Inflation	3.6%	4.5%	0.2%	1.7%	3.3%	-0.3%	-7.6%
GDP (in $ billions)	$ 291.0	$ 300.7	$ 297.2	$ 313.7	$ 325.6	$ 34.6	11.9%
Chicago							
	2007	2008	2009	2010	2011	5-Yr Change	% Change
Population	2,832,508	2,853,114	2,851,268	2,695,598	2,707,120	-125,388	-4.4%
Unemployment	5.7%	6.9%	10.9%	11.7%	11.3%	5.6%	98.2%
Inflation	1.9%	3.5%	-0.7%	1.6%	2.7%	0.8%	40.3%
GDP (in $ billions)	$ 522.0	$ 525.9	$ 516.8	$ 532.3	$ 547.6	$ 25.6	4.9%
Columbus							
	2007	2008	2009	2010	2011	5-Yr Change	% Change
Population	746,861	754,885	769,332	787,033	797,434	50,573	6.8%
Unemployment	4.7%	5.5%	8.3%	8.6%	7.6%	2.9%	61.7%
Inflation*	3.3%	3.8%	-1.2%	1.4%	2.7%	-0.6%	-16.9%
GDP (in $ billions)	$ 89.1	$ 89.8	$ 90.3	$ 93.4	$ 94.0	$ 4.9	5.5%
Detroit							
	2007	2008	2009	2010	2011	5-Yr Change	% Change
Population	917,234	912,632	910,921	713,777	706,585	-210,649	-23.0%
Unemployment	14.1%	15.9%	24.9%	23.1%	19.9%	5.8%	41.1%
Inflation	2.7%	3.7%	-0.6%	2.0%	3.2%	0.6%	21.3%
GDP (in $ billions)	$ 204.7	$ 197.2	$ 190.8	$ 197.8	$ 199.4	$ (5.3)	-2.6%
Houston							
	2007	2008	2009	2010	2011	5-Yr Change	% Change
Population	2,206,573	2,238,183	2,257,926	2,099,451	2,145,146	-61,427	-2.8%
Unemployment	4.3%	4.8%	7.2%	8.5%	8.2%	3.9%	90.7%
Inflation	1.8%	2.3%	-0.6%	0.8%	3.3%	1.5%	81.3%
GDP (in $ billions)	$ 373.2	$ 394.8	$ 364.2	$ 384.6	$ 419.7	$ 46.5	12.5%
Kansas City							
	2007	2008	2009	2010	2011	5-Yr Change	% Change
Population	475,830	480,129	482,299	459,787	463,202	-12,628	-2.7%
Unemployment	4.3%	4.8%	7.2%	8.5%	8.2%	3.9%	90.7%
Inflation	1.8%	2.3%	-0.6%	0.8%	3.3%	1.5%	81.3%
GDP (in $ billions)	$ 101.2	$ 104.3	$ 103.5	$ 106.0	$ 108.1	$ 7.0	6.9%

Los Angeles							
	2007	**2008**	**2009**	**2010**	**2011**	**5-Yr Change**	**% Change**
Population	3,778,658	3,801,576	3,831,868	3,792,621	3,819,702	41,044	1.1%
Unemployment	5.6%	8.3%	12.8%	13.9%	13.6%	8.0%	142.9%
Inflation	3.3%	3.5%	-0.8%	1.2%	2.7%	-0.6%	-19.0%
GDP (in $ billions)	$ 731.3	$ 745.7	$ 717.2	$ 735.7	$ 747.3	$ 16.0	2.2%
New York City							
	2007	**2008**	**2009**	**2010**	**2011**	**5-Yr Change**	**% Change**
Population	8,310,212	8,346,794	8,391,881	8,175,133	8,244,910	-65,302	-0.8%
Unemployment	4.9%	5.5%	9.2%	9.5%	9.0%	4.1%	83.7%
Inflation	2.8%	3.9%	0.4%	1.7%	2.8%	0.0%	0.6%
GDP (in $ billions)	$ 1,215.2	$ 1,242.8	$ 1,214.2	$ 1,280.5	$ 1,277.2	$ 62.1	5.1%
Philadelphia							
	2007	**2008**	**2009**	**2010**	**2011**	**5-Yr Change**	**% Change**
Population	1,448,631	1,447,395	1,547,297	1,526,006	1,536,471	87,840	6.1%
Unemployment	6.0%	7.1%	9.6%	10.8%	10.8%	4.8%	80.0%
Inflation	2.2%	3.4%	-0.4%	2.0%	2.7%	0.5%	22.3%
GDP (in $ billions)	$ 325.9	$ 333.0	$ 335.6	$ 346.9	$ 353.3	$ 27.5	8.4%
Phoenix							
	2007	**2008**	**2009**	**2010**	**2011**	**5-Yr Change**	**% Change**
Population	1,538,431	1,569,917	1,593,659	1,445,632	1,469,471	-68,960	-4.5%
Unemployment	3.7%	6.2%	10.6%	11.2%	8.9%	5.2%	140.5%
Inflation	3.4%	3.5%	-1.4%	0.6%	2.8%	-0.6%	-18.8%
GDP (in $ billions)	$ 196.6	$ 196.3	$ 188.2	$ 190.6	$ 194.8	$ (1.8)	-0.9%
Pittsburgh							
	2007	**2008**	**2009**	**2010**	**2011**	**5-Yr Change**	**% Change**
Population	312,322	312,119	311,647	305,704	307,484	-4,838	-1.5%
Unemployment**	4.2%	6.0%	8.8%	6.5%	6.6%	2.4%	57.1%
Inflation	3.0%	4.9%	0.4%	1.5%	4.5%	1.5%	52.0%
GDP (in $ billions)	$ 108.0	$ 111.2	$ 109.8	$ 115.8	$ 117.8	$ 9.8	9.1%
Seattle							
	2007	**2008**	**2009**	**2010**	**2011**	**5-Yr Change**	**% Change**
Population	589,304	598,541	617,334	608,660	620,778	31,474	5.3%
Unemployment	3.5%	4.2%	8.0%	8.4%	7.5%	4.0%	114.3%
Inflation	3.9%	4.2%	0.6%	0.3%	2.7%	-1.2%	-31.0%
GDP (in $ billions)	$ 220.7	$ 227.8	$ 225.4	$ 231.2	$ 239.7	$ 19.0	8.6%

*Midwest urban data used for Columbus CPI, since Columbus Metropolitan Statistical Area is not available.

**Source: City of Pittsburgh, Comprehensive Annual Financial Report FY2007-FY2011.

Note: Population and unemployment rate data account for city areas only; inflation data account for metropolitan areas per the BLS; GDP data account for metropolitan statistical areas per the BEA. Unemployment rates are based on CPI data with base period 1982-84=100 and are not seasonally adjusted. Source: United States Census Bureau; United States Department of Labor, Bureau of Labor Statistics; United States Department of Commerce, Bureau of Economic Analysis.