

The Baltimore CitiStat Program: Performance and Accountability



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IBM Endowment for
**The Business
of Government**

MANAGING FOR RESULTS SERIES

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F O R E W O R D

May 2003

On behalf of the IBM Endowment for The Business of Government, we are pleased to present this report, “The Baltimore CitiStat Program: Performance and Accountability,” by Lenneal J. Henderson.

This report builds on the Endowment’s long-standing interest in the CompStat process pioneered by the New York City Police Department. In 2001, the Endowment published a report, “Using Performance Data for Accountability: The New York City Police Department’s CompStat Model of Police Management,” by Paul O’Connell, which examined the NYPD CompStat experience.

Based on the CompStat model, Baltimore Mayor Martin J. O’Malley instituted CitiStat shortly after taking office in late 1999. Mayor O’Malley had been impressed by the NYPD CompStat process and saw its potential use as a management tool to enhance performance and accountability for Baltimore City government. In a speech at the John F. Kennedy School of Government at Harvard University, Mayor O’Malley said, “In order to change the outcomes produced by government, you have to change what government does. CitiStat changes what government does, by measuring what it produces and creating a mechanism to make timely changes.... CitiStat is helping us replace a culture of delay and avoidance with a culture of accountability and results—monitored by technology—that is permeating every city agency. It puts information into the hands of many managers, rather than a few. And this shared knowledge allows government to change and adjust more quickly to better serve the public.”

In this report, Lenneal Henderson presents the history of CitiStat and how Mayor O’Malley implemented it within Baltimore City government. Professor Henderson presents case studies of how Baltimore’s Department of Housing and Community Development and Department of Health are using CitiStat to improve management and accountability within those two departments. The report contains recommendations on how the CitiStat process can be improved and simplified for broader public use.

We trust that this report will be informative and useful to other cities across the nation and to managers at all levels of government who aspire to track and improve the performance of their programs. Both the CompStat and CitiStat experience demonstrate that management systems can indeed be created and implemented to improve the performance of public programs.

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EXECUTIVE SUMMARY

Mayor Martin O'Malley established the Baltimore CitiStat months after taking office in December 1999. The program is designed to increase the performance of Baltimore City government by requiring agencies to generate data on key performance and human resource indicators every two weeks for review by the mayor's CitiStat staff. Through intensive meetings with the Office of the Mayor, agencies are asked to account for agency performance and are offered support to improve performance when necessary. Because the process encompasses federal and state-funded programs and policies managed by city agencies, CitiStat makes an important contribution to the achievement of the strategic goals and objectives of federal and state agencies by increasing accountability through city agencies. A unique feature of CitiStat is the combination of strict accountability for the management of employee absences, sick leave, accident leave, and workers' compensation, and the analysis of employee performance on key policy mandates of the agency.

This report examines CitiStat data for Fiscal Years 2001 and 2002, including biweekly (every two weeks) statistical reports, geographical pin mapping of agency activities and sites, and fiscal data. Annual fiscal and cumulative cost-savings data are generated for two fiscal years. These data reflect cost savings resulting from better management of human resources, termination of wasteful initiatives, revenue enhancements, and better use of information and communication technologies.

Two case studies of Baltimore City departments—Housing and Community Development, and Health—are provided to illustrate how CitiStat data are generated, displayed, interpreted, and used to accomplish better service delivery to citizens and more employee accountability. These cases also illustrate the impact of CitiStat not only on the city but also on those counties in the Baltimore metropolitan area that are served by Baltimore City and on the performance expectations of federal and state agencies funding Baltimore City initiatives.

The report concludes that CitiStat is a highly successful innovation in the management of city government, particularly as it integrates accountability for resources generated from federal, state, and local governments. City government in Baltimore has become increasingly customer-friendly as a result of the new 311 Call Manager program, the ability of city agencies to quickly and accurately share performance and policy data with citizens and citizen organizations, and the higher level of agency performance in delivering critical goods and services to citizens in the metropolitan area.

Among the recommendations offered in the report are the development of additional capacity-building training programs for agency managers and leaders to better generate and use CitiStat data and the preparation of summative CitiStat data reports for review and use by the citizens of Baltimore.

Introduction

The establishment of the CitiStat program by Baltimore Mayor Martin O'Malley represents a bold and unprecedented effort to raise the performance of Baltimore City agencies by establishing direct communication between the Office of the Mayor and key officials responsible for city policy goals and objectives. Given the many fiscal, socioeconomic, business, and administrative challenges facing the city—and given the city's role in a complex intergovernmental system consisting of the metropolitan region, the federal government, and the state—CitiStat is more than a municipal innovation; it is an intergovernmental innovation. By improving the quality and reliability of services provided by Baltimore City agencies, CitiStat also facilitates better goods and services to the 1.8 million citizens of the Baltimore region receiving water from the city and the thousands of citizens in Baltimore City and the region receiving federal and state-funded goods and services such as housing and health care.

The purpose of this study is to examine the objectives, process, and results of the Baltimore CitiStat program within this intergovernmental context. First, the nature of Baltimore as a dynamic intergovernmental city struggling to achieve policy results for its citizens is described. Then the objectives, establishment, and process of the CitiStat program are examined. This analysis focuses on two case studies of city agencies with significant intergovernmental roles: the Department of Housing and Community Development, and the Health Department. Both of these departments receive significant funding from federal and state agencies or provides goods or services with impacts on surrounding counties in the

Baltimore metropolitan area. The report concludes with a series of recommendations for enhancing and building on the CitiStat success story given the results achieved in the two departments as well as citywide.

Study Methods and Approach

Three methods were used to collect and analyze data for the study. First, CitiStat statistical data were collected for the city and for the two case agencies from the CitiStat Office and from the Baltimore City website. To corroborate and extend these data, interviews were conducted with the following individuals:

- Matt Gallagher, coordinator of CitiStat for Baltimore Mayor Martin O'Malley
- Nii Sowah, CitiStat coordinator for the Department of Housing and Community Development
- Arianne Spaccarelli, CitiStat coordinator for the Health Department
- Eric Brown, CitiStat coordinator for the Department of Public Works
- Deborah Moore Carter, deputy Labor commissioner, City of Baltimore

Confidential interviews were also conducted with 15 employees of the two city agencies studied to better understand how they contribute to the CitiStat process on a daily basis.

In addition, each CitiStat coordinator provided detailed data on agency human resource and program performance trends through December 2002. However, the analysis of CitiStat aggregate cost savings and fiscal benefits extended through the middle of FY 2003 was supplemented by data obtained from the city's FY 2002 and 2003 budgets. Combined with data on city fleet purchases and acquisitions, water sales, and other data obtained from several city and state agencies, data on CitiStat cost savings for the two case agencies were estimated from FY 2001 through mid FY 2003.

Criteria for the selection of the two cases for the study included:

- The intergovernmental scope of the agency's mission, goals, objectives, and funding as reflected in federal, state, and local funding support. The two case agencies receive federal or state support in addition to city appropriations.
- The extent to which the agencies serve not only Baltimore City citizens but also citizens in the surrounding counties. Social services and housing assistance are examples of agency operations and services that directly affect the quality of life for citizens in the Baltimore region.
- The availability of at least three supervisors or managers from both of the case agencies for interviews on their role in generating, managing, conveying, and discussing data for the biweekly CitiStat reports.

Acknowledgments

The author wishes to express endless gratitude to Mark Abramson of the IBM Endowment for The Business of Government for suggesting the CitiStat program as a study of interest to the IBM Endowment and for his patient and expert feedback; to the Office of Baltimore Mayor Martin O'Malley and Matt Gallagher, CitiStat coordinator in the Mayor's Office, for their generous, extensive, and illuminating insights about the establishment, management, and status of CitiStat; and to Nii Sowah of the Baltimore City Department of Housing and Community Development, Arianne Spaccarelli of the Baltimore City Department of Health, Eric Brown of the Baltimore City Department of Public Works, Pamela Bishop and Shawon Reed of the University of Baltimore, and, most of all, Joyce E. Henderson, in the development of this study.

CitiStat Context

Baltimore as an Intergovernmental City

What motivated Mayor O'Malley to establish CitiStat? What did he observe in the context of Baltimore's economic, social, and political conditions that stimulated his design of this strategy for pursuing higher levels of city performance? How were these observations related to the mayor's concept of what was necessary to address Baltimore's challenges? What is the content of the CitiStat strategy for making Baltimore City government more capable of addressing the city's many and often severe challenges?

First, it is important to understand Baltimore City as an intergovernmental city. Indeed, Article XI of the Constitution of the State of Maryland is devoted to the terms of election and the powers of the mayor and city council of the City of Baltimore.¹ It is rare for a state constitution to contain an entire provision for one of its municipalities. This is in deference to the disproportionate impact of Baltimore City on the politics and economic life of Maryland. Today, Baltimore City relies substantially on federal and state funds and support to address its needs. Indeed, many city agencies are simultaneously implementing federal, state, and municipal policy mandates. Often, these mandates are in conflict. Just as often, the performance requirements, reporting time frames, and expectations of each level of government vary.

Federal requirements derive from the application of the 1993 Government Performance and Results Act (GPRA) to federal funding in such areas as housing

and health care. In 1997, then Governor Parris Glendening established a statewide performance program known as Managing for Results (MFR).² This program covers counties and municipalities receiving state funds or otherwise interacting with state agencies. Both GPRA and MFR require federal and state agencies to develop and manage strategic plans as a condition for receiving funding. Strategic plans must include the specification of mission, vision, goals, objectives, and clear standards for measuring agency performance. Each year, state agencies must account for their performance on key policy goals and objectives. Local governments funded by the state must in turn account for their performance on the grants and aid they receive from various state agencies. Annual budget estimates and determinations are tied to metrics of performance as specified in the strategic plans.

In contrast to CitiStat's insistence on biweekly monitoring of agency performance, GPRA and MFR require annualized performance monitoring and assessment programs consistent with guidelines followed by the federal agencies that appropriate funding and the state and local recipients of those federal and state funds.

Second, since 1973, formerly municipal functions in Baltimore such as the airport, ports, mass transit, prisons, stadiums, community colleges, and the school system have been taken over by the State of Maryland. As the organization and structure of Baltimore City government indicates in Figure 1, these functions are subject not to municipal ordinance but to legislative actions of the Maryland General Assembly. Many of the city's thousands of

vacant houses are owned or controlled by the federal Department of Veterans Affairs (VA) or the Department of Housing and Urban Development (HUD) as VA or Federal Housing Administration (FHA) foreclosures through the Housing Authority of Baltimore City. Thus, a key feature of the Baltimore CitiStat Program is its *creative use of federal and state program and performance mandates in promoting accountability and efficiency at the local level*. This means that, although the city certainly complies with federal and state requirements to establish, maintain, analyze, and submit annual performance data and information to those federal and state agencies funding Baltimore City programs, Mayor O'Malley and his staff combine the annualized requirements with a biweekly process of agency consultation and accountability through CitiStat.

Baltimore's Demographic and Socioeconomic Context

In addition to its status as an intergovernmental city, Baltimore City is challenged by severe socioeconomic disparities, crime, declining economic investment, and fiscal strain. Performance accountability is essential in a city as challenged as Baltimore. In describing his own journey from city councilman to mayoral candidate to mayor, O'Malley noted "when I walked into this office, I inherited a 2-billion-dollar budget and 16,000 employees, all of whom had been wallowing in a culture of failure."³ In spite of its status as the largest city in one of the nation's wealthiest states (measured by per capita income), Baltimore had the worst crime rate and the highest population loss of just about any city in the country, said O'Malley. "The city's sorry performance was fueled in no small part by a fundamental lack of accountability and sense of mission when it came to what government was supposed to be accomplishing day in and day out," he said.

According to the 2000 Census, Baltimore City's population declined from 736,014 in 1990 to 651,154 in 2000. The 2001 estimate represents another decline to 635,210 (or a 2.4 percent reduction). In Maryland, 8.5 percent of the population lives in poverty. In Baltimore City, 22.9 percent are at or below the poverty line. The state median income is \$52,868; in Baltimore City, it is \$30,078. The median value of a home in Maryland is \$146,000;

in Baltimore City, it is \$69,100.⁴ Like many older Eastern central cities, significant corporate and middle-income flight from the city to suburban counties afflicts the economy and socioeconomic dynamics of Baltimore. The resulting disparities between the larger poor population and the smaller affluent population are wide and deep. In a predominantly African-American city, racial politics are often part of the dynamics of the Baltimore City economic and political landscape.⁵

Baltimore's Fiscal Context

Once the most populous and wealthy local government in the State of Maryland, Baltimore's loss of manufacturing, retail, and commercial activity places it behind Montgomery and Prince George's Counties in population, median household income, and business growth and development. Economic decline over the last three decades has eroded the tax base of the city and resulted in a property tax nearly twice the rate of any county in the Baltimore metropolitan area. Taxation and accountability for public expenditures has thus become one of a galaxy of policy issues challenging the Baltimore City government.

Appendix I indicates that, aside from federal and state funding, the City of Baltimore is substantially dependent upon city property and income tax revenues. The city is estimated to generate some \$184 million in income tax revenues in FY 2003. Indeed, the city, like most of Maryland's 23 counties, participates in a "piggyback tax" arrangement with the State of Maryland. The city can impose a piggyback income tax of up to 60 percent of the state income tax depending upon the taxpayer's tax bracket.⁶

In addition, although property tax revenues (Figure I.2 in Appendix I) have increased to an estimated \$506 million in FY 2002, once adjusted for increases in property taxes attributable to slight increases in real commercial and residential property tax appreciation, revenues are actually declining. From the Great Depression⁷ to World War II, from the Cold War to the Vietnam War, Baltimore enjoyed its status as a thriving industrial and manufacturing city. However, as Johns Hopkins University replaced Bethlehem Steel as the city's largest employer, Baltimore has made a critical

transition to a knowledge-based economy unable to absorb the increasing numbers of poor people in the city. Most recently, the city has worked hard to build on its success in remodeling the Inner Harbor and revitalizing a few neighborhoods. But the economic transition is arduous and complicated. These realities are reflected both in the struggles of the city to stimulate economic investment and in the wider post September 11, 2001, economic decline affecting the city, the state, and the nation.

Consequently, there is constant pressure on the City of Baltimore to carefully manage its fiscal resources and to extend the accountability of city agencies for the goods and services they are mandated to provide to Baltimore's citizens. Those pressures will continue to complicate and animate city politics, particularly mayoral elections.

The CitiStat Concept

Mayor Martin O'Malley initiated the CitiStat program on June 29, 2000, within months of becoming mayor of Baltimore, determined to immediately improve the performance and accountability of city agencies. He was concerned about the problems of developing timely and accurate information about city services, functions, and impacts; of immediately improving services to citizens; and of carefully using federal, state, and local resources provided to the city.

Basing it on the CompStat program pioneered in the New York City Police Department (NYPD) by Jack Maple,⁸ Mayor O'Malley called his program CitiStat. Using computer pin mapping, biweekly data collection and analysis, and accountability sessions, CompStat helped the NYPD to significantly reduce crime, restore public trust, and motivate police officers. Mayor O'Malley believed that this strategy could be used effectively by all city agencies serving Baltimore's citizens. Whether funds were appropriated by the city, granted by federal or state agencies, or contributed by corporate or foundation sources, O'Malley believed that the city had to be more accountable for both the use of the resources and the quality of the services they made possible.

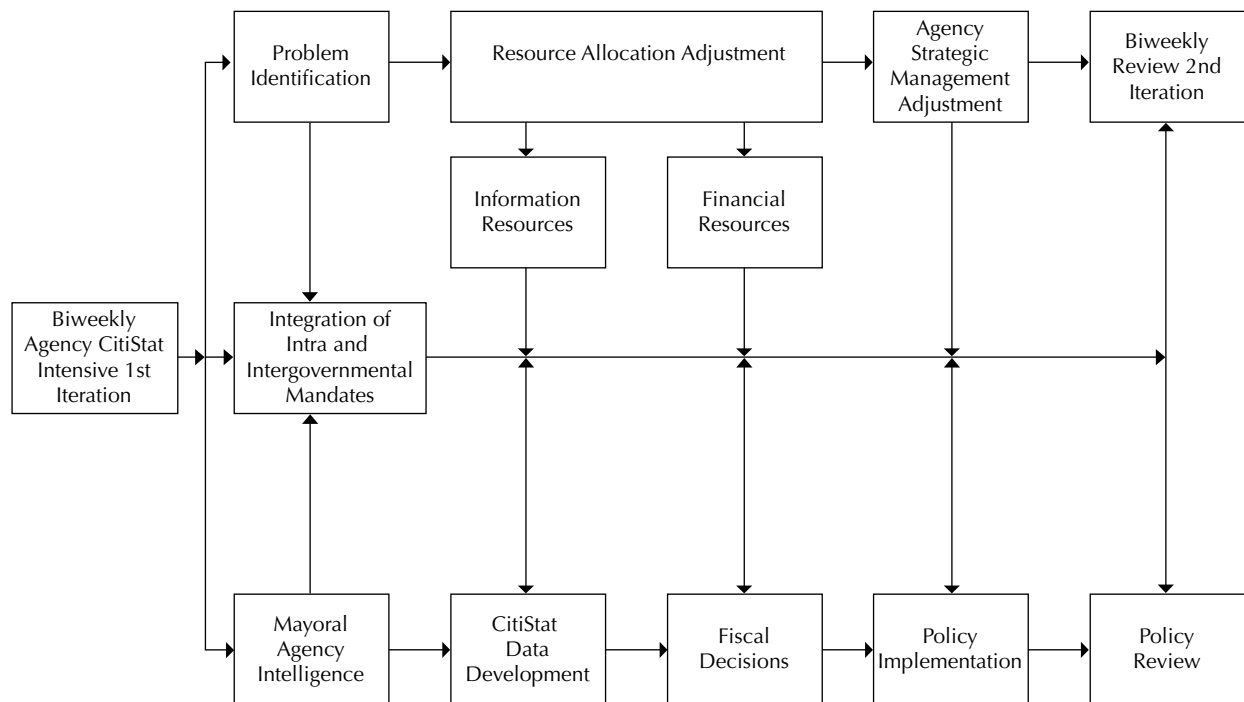
In his book entitled *Leadership*, Rudolph Giuliani indicated that CompStat not only enabled the city's police and corrections departments to better manage challenges but also, more importantly, built their capacity to *anticipate* these problems.⁹ Similarly, Mayor O'Malley sought to build the kind of information management and control system that

would enhance the capacity of city agencies to identify, respond to, and anticipate problems as they were emerging. Anticipation allows more effective management of resources because problems are treated well before they become intractable or overwhelming.

As Figure 1 indicates, the CitiStat concept uses biweekly meetings of agencies and the mayor's CitiStat staff to identify problems and progress in agency management of employees and policies, promote integration of intragovernmental and intergovernmental mandates, and generate intelligence for the mayor about agency operations, needs, and effectiveness. These biweekly data sessions result in joint mayoral and agency identification of human, financial, and information resource issues necessary to raise the level of an agency's performance. Once this operational intelligence is generated, it becomes the basis for immediate and longer-term adjustment of resources in each reporting unit of each agency. These adjustments influence the short- and longer-term strategic direction of the agency as it pursues its policy goals and objectives. The efficacy of these adjustments is reviewed in subsequent biweekly meetings and data analysis, and the cycle of biweekly reviews repeats itself in the next sequence.

Objectives of CitiStat

Given the concept of CitiStat, the objectives are to improve agency performance, increase agency accountability for both performance and resource use, and improve the quality and quantity of services provided to citizens. Agency performance

Figure 1: The CitiStat Concept

improves as the biweekly meetings between agency leaders and the Mayor's Office identify human, financial, administrative, or technological impediments to the ability of agencies to recognize problems, generate effective and efficient options for addressing these problems, and raising the quality and quantity of services needed by Baltimore's citizens.

Cost savings are realized as city agencies find more effective ways to save money through the reduction of unnecessary sick leave, overtime, and workers' compensation. Money saved by efficient human resource management is money invested in effective program delivery. The connection between better human resource management and better program delivery is evident in the increase of agency outputs as documented by CitiStat data. These data are essential to the mayor, the Board of Estimates (BOE),¹⁰ and the Baltimore City Council in the city's budget process. When the Board of Estimates holds hearings on the budget, CitiStat data are often introduced to support the appropriations recommended by the mayor for each agency. Adjustments in the level of budget inputs recommended for each agency are determined by the policy and

performance expectations of the agency throughout the fiscal year. Increases in agency outputs result in the achievement of policy outcomes pursued by both the mayor and city council.

The CitiStat Process

Agency or bureau heads attend mandatory CitiStat meetings every other week with the mayor, deputy mayors, and key cabinet members. Days before each meeting, the bureau or agency is required to submit data to the CitiStat team. The data covers a wide variety of information generated in a two-week period ranging from agency progress in achieving specific policy and program goals and objectives to efficiencies in managing human resource decisions such as overtime, workers' compensation, and employee absences. The Solid Waste Bureau, for example, submits data on everything from complaints about dirty alleys and missed trash pickup to the number of sick days taken in a particular division and the overtime rate. After data are received, the CitiStat team analyzes the numbers and prepares the presentation for the meeting with the mayor and his staff. Accurate and timely information is critical to the success of the CitiStat

Mayor Martin J. O'Malley on CitiStat

At Brown University, September 27, 2002

Some of you may have heard of the driving engine of our performance politics, our computerized government management tool, CitiStat. We took the idea from the New York police, who used computers to map crime and reduced murders from 2,000 a year to under 700. The police called it "putting the cops on the dots." In other words, placing officers where they are most needed.

Every two weeks, our department heads appear before what in essence is my command staff—my finance director, budget person, city solicitor, labor commissioner—and we ask questions about all the basic things people think their local government should be able to deliver.

While they're speaking, there are big graphs that are put up on two 6 x 10 screens telling the truth, telling us where the problems are.

Different departments come in and, just like police, we map areas where city services are needed, critical things like lead abatement issues. And we have various offshoots of CitiStat like KidStat, where we look at the lives of young kids at risk; HomelessStat, where we try to help people break the cycle of homelessness; DrugStat, which measures the effectiveness of the drug treatment programs, one against the other, retention rates, recidivism rates—how many people have homes? How many people have jobs after a certain period of time in the program?

Right before I took office, I was going through the transition period where I was meeting with some members who were the outgoing department heads. I was talking



to our outgoing Public Works director and having been told that we didn't have control of our fleet management, I said to him, "How many vehicles do we actually have in our fleet?" He said, "6,000 to 6,500." I said, "This isn't a game show, I'm seriously interested in how many we have." He said, "Every organization has its weak points, we just never really got around to count all the vehicles."

I will submit to you that there's not an industry that would last very long if they were cavalier about their resources. But, friends, that usually is the norm rather than the exception and we had a long way to go to effectively manage our resources. Today, our maxim is: "Things that get measured are things that get done."

And the nice thing about mapping all this and doing it in a public way is that the map doesn't know whether a neighborhood is black or white, rich or poor, Democrat or Republican. And a map doesn't know whether a judge lives there or a congressman lives there or a senator lives there. The map tells us where problems are, then we relentlessly attack those problems and we abate those problems and the tide rises for everybody.

We spent about \$20,000 building out this room with off-the-shelf software. For that \$20,000 investment, in our first year we saved \$13.6 million, and I tell you in our first year a lot of it was just getting going. You know that old Woody Allen adage—90 percent of life is just showing up—we'd stopped showing up.

We had a chronic absentee problem, which led to a chronic overtime problem. We saved \$6 million the first year just getting people back to work and reducing overtime. We've saved \$44 million over the last three years mostly by reducing overtime and absenteeism, finding efficiencies and developing new revenue streams.

At Harvard University, April 19, 2001

... because of CitiStat, we are moving closer, every day, to providing effective service. And longtime managers are finding out things about their agencies they never learned in decades of managing by "feel" instead of fact.

Before I go any further, let me make something clear: I'm not saying government is the same as business. It's not. However, I do believe it is unreasonable to expect anyone to effectively manage a large organization without having the information necessary to make informed decisions....

Citizens expected more—and the people I was able to recruit into government expected more, as well. Many longtime employees were certain we could do better. But

for the first months we were in office, on many fronts, progress seemed glacial, decisions took too long to be translated into action, and communication up and down the chain of command was minimal.

At the same time, we were watching our Police Department dramatically improve its performance using CompStat, the computer management tool created by Jack Maple. Instead of checking performance every few months, or scheduling an annual review meeting, the leaders of the Police Department were meeting every week. Crime-fighting strategies and resource deployment were being adjusted constantly, and follow-up was never allowed to slip more than a week.

We were seeing the results we wanted for our city. During the second half of last year, Baltimore led the nation in reducing murders. We finished the year with 262 murders—meaning that 43 fewer people lost their lives than during the year before. And this year, we already are 18 percent below last year's murder total.

After thinking through the possibilities with Mr. Maple, we decided to apply the same approach across city government. Since last summer, as we phased in all of our major city agencies, we have achieved very compelling results.

CitiStat is a critical component of our vision for Baltimore, in which city government should not try to be all things to all people, but, instead, should do a few things well, like fight crime and grime; provide opportunities for kids; and create an environment that welcomes private investment.

Our vision is one in which an effective, efficient government helps improve the quality of life in every neighborhood—which will allow our public and private institutions to move past mere maintenance into expansion and improvement.

To realize this vision, we are investing in the breakout strategy that will make it happen—premised on public safety, effective government, community partnerships and private investment.

CitiStat is central to making these investments produce results. Technology, transparency, and diffusion of decision-making responsibilities is allowing government to be faster, smarter, more accountable, and change tactics and strategies more quickly.

In order to change the outcomes produced by government, you have to change what government does. CitiStat changes what government does by measuring what it produces and creating a mechanism to make timely changes....



CitiStat is helping us replace a culture of delay and avoidance with a culture of accountability and results—monitored by technology—that is permeating every city agency. It puts information into the hands of many managers, rather than a few. And this shared knowledge allows government to change and adjust more quickly to better serve the public.

CitiStat is raising expectations in government and outside government. Residents are seeing improvements, and they can check CitiStat reports on our website, every week. Technology is making government more open, more transparent, and, therefore, more accessible and accountable.

And line managers in Baltimore have more interaction with top city officials—and more decision-making authority—than in any other city in America.

That is CitiStat. It is how we run city government in Baltimore. And I predict it is how many city governments will be managed within five years. With \$20,000, off-the-shelf software, and a few good people, you can revolutionize city government.

process. CitiStat’s operations team is responsible for ensuring the data are valid and reliable by critically examining the information, conducting field investigations, and pulling cases at random.

The operations team also analyzes all data received, compares it to the report for the previous period, and formulates questions designed to explain the data and to highlight problem areas. The technical team is responsible for preparing briefing books for the mayor and deputy mayors and for geocoding address data in order to plot it on the computer pin map. As this basic description of the objectives and the process of CitiStat indicate, four key tenets constitute the foundation of CitiStat:

- Accurate and timely intelligence
- Effective tactics and strategies
- Rapid deployment of resources
- Relentless follow-up and assessment¹¹

The Mayor’s Office of Information Technology (MOIT) is constantly online entering data as it is generated by city agencies and categorizing the data into performance-oriented decision options. As a result, staff can streamline agency workflow, share data among agencies and with the Mayor’s Office, and use data to establish, adjust, and recast agency performance targets and expectations. It’s clear that MOIT has assumed a central role in the CitiStat process as collector, organizer, analyst, and dispenser of agency performance data. As Bovens and Zouridis point out, information technology has made “street-level bureaucrats” “system-level bureaucrats.”¹²

Tables 1, 2, and 3 provide actual CitiStat reporting sheets generated by the Baltimore City Health Department. As with every Baltimore City agency, the first component (Table 1) describes the department’s expenditures for minority-owned (MBE) and women-owned enterprises (WBE). It is city policy to set aside a minimum of 30 percent of all city

Table 1: CitiStat—Baltimore City Department Of Health

MBE/WBE Expenditures										
Reporting Period: August 29, 2002 Through September 11, 2002						Year-To-Date (7-1-02-7-31-02)				
Expenditure Type	Expenditures	MBE	%	WBE	%	Expenditures	MBE	%	WBE	%
A&E	0	0	0.0%	0	0.0%	0	0	0.0%	0	0.0%
Construction	0	0	0.0%	0	0.0%	0	0	0.0%	0	0.0%
Direct P.O.s	\$351,417	3,830	1.1%	19,606	5.6%	351,417	3,830	1.1%	19,606	5.6%
Purchase Orders	\$246,727	3,174	1.3%	6,251	2.5%	246,727	3,174	1.3%	6,251	2.5%
Professional Services	\$16,294,523	0	0.0%	190,014	1.2%	\$16,294,523	0	0.0%	190,014	1.2%
Plus: BMS	\$992,045	\$153,569	15.5%	45,336	4.6%	\$992,045	153,569	15.5%	45,336	4.6%
Plus: BSCHS	\$464,950	\$42,217	9.1%	10,973	2.4%	\$464,950	42,217	9.1%	10,973	2.4%
Adjusted Totals	\$18,349,662	\$202,790	1.1%	272,181	1.5%	18,349,662	202,790	1.1%	272,180	1.5%
Plus: ABC Contract Before the BOE	\$1,043,453	\$1,043,453	100.0%		0.0%	1,043,453	1,043,453	100.0%		0.0%
Adjusted Totals	\$19,393,115	\$1,246,243	6.4%	272,181	1.4%	19,393,115	1,246,243	6.4%	272,180	1.4%

Source: Baltimore Department of Health, Office of the CitiStat Coordinator

A&E: Architectural and Engineering

P.O.= Purchase Orders

BMS=Baltimore Medical System, Inc.

BSCHS=Bon Secours Community Health Services, Inc.

ABC=Associated Black Charities

BOE= Board of Estimates, City of Baltimore

Table 2: CitiStat—Baltimore Department Of Health
Reporting Period: August 29, 2002 Through September 11, 2002

	Personnel Data								
	7/4-7/17	7/18-7/31	8/15-8/28	8/29-9/11	%Change	Average	Minimum	Maximum	Total
Overtime Hours	733.7	383.8	579.7	454.6	(21.6%)	498	245	734	14,932
Administrative Services	0.0	0.0	0.0	0		1	—	12	32
Maternal & Child	115.3	74.5	89.6	53.4	(40.4%)	60	7	128	1,785
Environ. Health	20.5	26.5	44.9	38.8	(13.6%)	9	—	114	272
E.H. Animal Control	292.7	168.8	239.0	241.0	0.8%	263	101	380	7,889
Health Prom. & Disease Prevention	35.2	29.0	69.2	43.8	(36.7)	19	—	69	584
Adult, School, Comm.	270.0	84.0	137.0	77.6	(43.4%)	146	59	346	4,370
Unscheduled Leave Days	73.3	97.9	77.4	66.7	(13.8%)	78	37	139	2,331
Administrative Services	5.0	3.5	4.0	4	—	3	—	11	92
Maternal & Child	15.0	24.7	17.8	6.7	(62.4%)	13	1	29	392
Environ. Health	26.3	31.3	25.6	29	13.3%	25	7	45	760
Health Prom. & Disease Prevention	8.0	17.5	4.0	8	100.0%	11	3	23	324
Adult, School, Comm.	19.0	20.9	26.0	19	(26.9%)	26	3	56	763
"A" Time (Days)	40.0	32.0	15.0	13.5	70.0%	35	—	73	1,062
Administrative Services	9.0	10.0	0.0	0	—	1	—	10	22
Maternal & Child	10.0	10.0	10.0	10		12		35	360
Environ. Health	3.0	0.0	0.0	0	—	2		14	52
Health Prom. & Disease Prevention	0.0	0.0	0.0	2	—	1	—	13	21
Adult, School, Comm.	18.0	12.0	5.0	13.5	170.0%	21	5	36	618
Light Duty (Days)	24.0	32.5	46.8	—	(100.0%)	33	9	58	948
Administrative Services	0.0	0.0	0.0	0	—	—	—	—	—
Maternal & Child	16.0	24.0	17.8	15.5	(12.9%)	17	3	39	506
Environ. Health	0.0	0.0	8.0	15	87.5%	4	—	15	131
Health Prom. & Disease Prevention	0.0	0.0	0.0	0	—	—	—	—	—
Adult, School, Comm.	8.0	8.5	21.0	9.5	(54.8%)	12	—	21	352

Source: Baltimore City Department of Health, Office of the CitiStat Coordinator

Table 3: CitiStat—Baltimore City Department of Health, Environmental Health Division
Reporting Period: August 29 Through September 11, 2002

	2 WEEK REPORTING PERIODS				% Change	Average	Year
	7/18–7/31	8/1–8/14	8/15–8/28	8/29–9/11			
# of Food Complaints Investigated	20	47	21	21	0.0%	26.6	0.0
# of Food Establishments Inspected	512	492	546	369	-32.4%	436.6	268.0
# of Plan Review Analysis	32	53	29	31	6.9%	29.5	9.0
# of Violations Issued	1,750	1,603	896	877	-2.1%	1,070.4	387.0
# of Violations Conferences	16	12	13	15	15.4%	13.3	0.0
# of Closures of Food Establishments	18	19	16	19	18.8%	17.8	5.0
# of Lead Investigations	18	17	19	13	31.6%	9.9	3.0
# of Active Lead Cases	29	20	18	22	22.2%	15.3	4.0
# of Animal Licenses Issued	238	178	113	206	82.3%	198.0	43.0
# of Animal Complaints Investigated	1,108	1,060	1,004	953	-5.1%	951.0	35.0
# of Animals Collected (Live)	451	450	380	328	-13.7%	325.1	124.0
# of Animal Carcasses Collected	64	222	64	33	-48.4%	50.5	16.0
# of Child Care Facility Inspections	11	21	25	15	-40.0%	33.0	4.0
# of Animals Vaccinated	32	67	0	97		43.2	0.0
# of Environmental Inspections	80	145	152	62	-59.2%	90.6	12.0
# of School Inspections	55	2	2	6	200.0%	13.2	0.0

contracts for minority-owned businesses and 5 percent for women-owned businesses.¹³ Table 1 provides data on performance in this category for the Health Department from July 1 through July 31, 2002, and, on the far right-hand side of the table, the cumulative performance for the fiscal year. However, since the Baltimore City fiscal year begins on July 1, there is only one month of data reflected in Table 1.

The second component (Table 2) provides personnel data for four two-week reporting periods beginning July 4 and concluding on September 11, 2002. The frequency distributions provide data on overtime hours, unscheduled leave, "A" time days,¹⁴ and light duty days for five administrative divisions of the Department of Health. To the right of the August 29–September 11 reporting period is a column reporting cumulative changes in the numbers beginning with the previous reporting period,

August 15–28, and the last reporting period. Numbers in parentheses represent negative numbers or reductions in the category. Numbers without parentheses represent positive numbers or increases in the category.

The percent change column is a key column for CitiStat managers. This column is a summarized report card of the division's performance on a key indicator in the reporting period as compared to the previous two weeks. Exchanges between the mayor's staff and agency representatives often focus on this column. Agency representatives explain why overtime has increased or decreased. The mayor's staff insists on clear explanations for failing to meet, or meeting, objectives for the given indicator. Agencies are asked to identify what they need and when they need it to either sustain good performance or improve on troublesome indicators.

To the right of the percent change column are the year-to-date columns. Taking overtime hours, for example, these columns indicate the average number of incurred overtime hours reflected in the four reporting periods, the minimum and maximum numbers of overtime hours incurred in these reporting periods, and the year-to-date aggregate overtime hours for each of the five reporting divisions.

The third reporting sheet (Table 3) describes activities of the Environmental Health Division of the Health Department for four reporting periods beginning July 18 and concluding on September 11, 2002. Investigation of food complaints and food establishments, issuance of health violations, lead poisoning investigations, collection of live animals, and other activities are substantive policy mandates assigned to this division. Notice the significant reductions in the number of food establishments inspected, the number of animal carcasses collected, and the number of environmental inspections between the August 15–28 and August 29–September 11 reporting periods. Notice also the increases in the number of active lead cases pursued by the division and the number of animal licenses issued.

CitiStat managers are able to follow these increases and decreases and discern their meaning and cause. They also are able to relate changes in one column of indicators to those in other columns. The impact of external developments such as macro-economic changes in the city and state, seasonal fluctuations in environmental health risk and incidence, or policy changes such as city restrictions on lead-based paint can also be associated with increases or decreases in key performance indicators.¹⁵ For example, the city's policy on the use of minority- and women-owned businesses is a policy response to the socioeconomic disparities of women and minorities in the Baltimore City economy and, therefore, to the city's economic development policy. As a policy imperative, it is prominently monitored in all CitiStat agency reports.

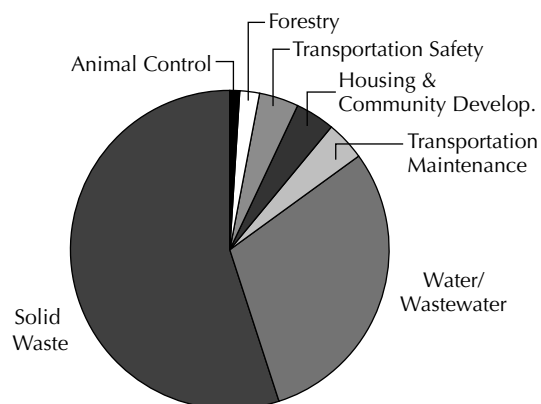
By juxtaposing personnel and policy performance data, CitiStat managers are quickly able to interrelate changes and trends in human resource management with performance on key policy goals and objectives. CitiStat and agency staff can determine whether a reduction in overtime hours will sacrifice the quality and quantity of health inspections or

whether there is a relationship between live animal collections and on-the-job injuries. The human resources/policy implementation connection is also associated with cost-savings opportunities. The better human resource variables are managed, the more likely a cost-effective policy implementation will occur.

Indeed, Mayor O'Malley indicates that one salient and immediate impact of CitiStat is a municipal cost savings of more than \$40 million through the middle of FY 2003, obtained largely through the reduction of excessive overtime, workers' compensation, and unchecked employee absences. When employees frequently failed to show up for work, others had to assume their work responsibilities. Substitute employees frequently "worked out of title" (working on tasks not officially included in the formal job description), and the city paid for the resulting inefficiencies and mistakes. The city was also exposed to litigation attributable to these mistakes. Typically, the low quality of city services caused significant and adverse inconvenience—even injury—to citizens, businesses, and other institutions in the city. CitiStat now monitors the number of employees on sick leave, disability leave, and absences to enhance the productivity and efficiency of the city workforce. The critical link between the behavior of city employees and the capacity of city government to provide quality goods and services is a key element in the CitiStat philosophy. Thus, human resource management and program implementation are strongly interrelated in the CitiStat process.

According to Mayor O'Malley, a crucial aspect of the CitiStat process is the collection and evaluation of the service request data generated at the city's new 311 "One Call Center."

O'Malley emphasizes that "it is important to me that all city agencies respond to citizen service requests in a timely and professional manner." (See Figure 2 for a breakdown of the types of service requests received.) Since its debut, enhancements in technology and customer service have enabled the Call Center to make significant improvements in how it serves the citizens of Baltimore. The Call Center has reduced the call abandonment rate to levels experienced in private business call centers. This means that the customer service agents are

Figure 2: Call Center Request Types

able to respond to calls more rapidly and fewer callers are hanging up before speaking to an actual person. This dramatic improvement is the result of a new Call Center manager who emphasizes courtesy and competence to the customer service agents.

The CitiStat Performance Process

Prior to the O'Malley administration, Mayor Kurt L. Schmoke initiated a Performance Objectives Program, known as the Millennium Efficiency Initiative, for key city agencies such as Finance, Housing, Public Works, and Parks and Recreation. The objectives were established in city agencies and forwarded to the Mayor's Office for adjustment and approval. The coordinating agency for this program was the Baltimore City Finance Department. However, the objectives were essential policy and program objectives; few focused on financial, personnel, or administrative improvements except through the efforts of the Baltimore City Civil Service Department. Moreover, accountability systems and controls were generally lax. Agency heads were largely entrusted with developing processes and procedures for the pursuit and achievement of the objectives. While some agency heads were vigorous and active in monitoring and tracking objectives, others were not. The Finance Department used quarterly and annual reports of agency progress toward accomplishing key policy goals and objectives in making its budget recommendations to the mayor and city council in the annual budget process.

However, CitiStat is designed to improve agency performance regardless of the source of city funding. As a city that receives substantial federal and state funding (see Appendix: Table I.1), Baltimore City has generally complied with the terms, conditions, and guidelines for federal and state funding. But few agencies systematically coordinated federal and state performance requirements with city program and agency objectives. This tended to compartmentalize policy implementation and management. It also compartmentalized the *review and measurement* of agency performance by level of government. The performance expectations of city, state, and federal funding sources ran on parallel rather than interrelated tracks. Indeed, in some agencies such as Housing and Public Works, clear tensions existed between city performance processes and those required by the federal and state government. Beryl Radin has perceptively identified six categories of intergovernmental performance relationships between the federal government and state and local governments: performance partnerships, incentives, negotiated performance measures, the incorporation of performance goals into legislation, the establishment of standards, and the use of waivers to allow states and localities more latitude and flexibility in pursuing their own performance standards.¹⁶ Even when performance goals were incorporated into federal statutes and reflected in the written guidelines provided to the city by federal funding agencies, there was little sense of effective synchronization between the performance objectives of the city and the federal government.

Similarly, given the substantial and diverse influence of the State of Maryland in the City of Baltimore and given the development of the state's Managing For Results program, state-funded programs in Baltimore were not always assessed in conjunction with city or federal performance criteria or expectations. The state is the direct provider of such services as mass transportation, stadium management, city ports, most of the correctional facilities operating in the city, the Baltimore City Community College, and, most recently, the Baltimore City Public Schools. However, the state provides housing and community development, health care, economic development, and other funding to the city. Both state and city agencies associated with this funding are accountable for their performance through the

annual MFR program. Indeed, MFR performance is now directly tied to the state annual budgeting process through the Maryland Department of Budget and Management (DBM). Consequently, state performance and city performance expectations often have run on parallel rather than single tracks.

However, the CitiStat program changed this performance paradigm. CitiStat is clearer about performance objectives and expectations by establishing a biweekly performance evaluation time frame. Although objectives and expectations are jointly determined by the agencies and the Office of the Mayor, they are vigorously enforced by the Mayor's Office. The mayor's CitiStat Office takes direct leadership in enforcing objectives and expectations through the biweekly monitoring of agency performance and requiring rigorous adherence to performance goals and objectives. Moreover, according to Matt Gallagher of the CitiStat Office, federal GPRA and state MFR requirements were not ignored even when federal funding was not involved. These requirements were enhanced by more regular and routine monitoring and tracking of agency behavior by the Mayor's Office. By using a biweekly tracking process to maintain alignment between performance goals and objectives, the city was better able not only to pursue its own municipal goals and objectives but also those established elsewhere in the intergovernmental process. Thus, federal, state, and municipal performance expectations were enhanced and supported by the CitiStat process.

A key part of the CitiStat concept is the connection it establishes between program performance and personnel and administrative performance. The use of sick leave, annual leave, workers' compensation, and overtime are closely monitored because the process presupposes their connection with agency program performance and service delivery. The underlying assumption is that effective and continuous monitoring of financial and human resource *inputs* will better assure a higher quality employee *output* that is more likely to achieve the policy and program *outcomes* associated with city policy goals and objectives.

A Summary of Key Elements

To reiterate, the essential features of the CitiStat process include the following:

1. *Data collection and analysis.* Key to the CitiStat model is the identification, collection, and analysis of agency performance and personnel data every two weeks. Operating on the principle that good information means good management, agencies are required to generate written reports for the Office of the Mayor indicating their progress with key goals, objectives, and mandates, and accounting for the use of personnel time, overtime, absences, and personnel actions during the period. Whether funded by the federal, state, or local government—or from corporate, foundation, or other sources—agencies are accountable for the management of all resources and of the city employees who convert these resources into services to citizens or the city. This information is compiled into briefing books for the mayor and serves as the central basis for the discussion of the quality of agency performance.
2. *The biweekly meeting.* Every two weeks, agencies are called into a meeting with the mayor's CitiStat Office. These meetings are held in a room equipped with advanced audio-visual technology. Agency heads and representatives brief the mayor on the status of their mandated goals and objectives and their use of personnel. The mayor and his staff ask pointed and searching questions to determine whether adequate progress has been made and to assess their performance in the reporting period. Agency representatives usually sit across from the staff. Large data reports, Geographic Information System (GIS)-generated maps, budgets, and other data are projected on a screen for all to see.
3. *Policy and administrative adjustments.* The emphasis of the biweekly meeting is on both sustaining good performance and addressing any identified performance issues and problems. All participants work to determine whether policy adjustments, strategic changes, performance measures, or resource decisions are required. Yet agencies are told that they will be expected to perform better in the next

reporting period. This process motivates agency managers and executives to scrutinize every detail of agency operations and to remain thoroughly aware of agency employee issues, organizational structure and function, progress, and resource needs.

Therefore, the central tenet of CitiStat is to break down government into numbers and watch for significant patterns in agency behavior and achievement. In one example, city officials discovered that some trash routes took a few hours to finish while others took so long that employees earned overtime. City trash routes were redesigned to redistribute work equally and save money.

CitiStat meetings convene every two weeks for each city department. Data from the Housing Authority of Baltimore City and from the Police, Fire, Public Works, and Recreation and Parks Departments are analyzed. (Soon information about the school system also will be scrutinized.) Mayor O'Malley, Chief of Staff Michael R. Enright, and department heads look over the statistics and call managers in front of them to answer for the numbers. The creation of CitiStat has prompted spin-offs that focus on specific areas, such as monitoring drug treatment centers, lead abatement, and juvenile agencies.

O'Malley acknowledged that initially several department managers were defensive or suspicious of the new process or concerned about the time required to compile and report the necessary data. When he questioned one woman in Public Works about why an assigned task had not been done, she bristled, saying she could not do her work because she was busy gathering statistics for the meeting. She was quickly admonished that gathering the data was intrinsic to her work because she would have increased accountability for high levels of performance on agency goals and objectives.

As mentioned earlier, CitiStat is based on CompStat, the brainchild of New York's former Deputy Police Commissioner Jack Maple. The program, which was widely credited with lowering New York's crime rate, mapped where crimes occurred, helping officials direct resources. O'Malley traced the genesis of this program to car rides through Baltimore neighborhoods with

Maple, whom he hired to draft Baltimore's crime plan. He said he played "Stump Mr. Maple," a game that challenged Maple to devise ways to quantify something as intangible as youth services.

CitiStat: Lessons of Performance, Accountability, and Change

(from CitiStat website: www.baltimorecity.gov/news/citistat)

CitiStat represents the extended application of the CompStat tenets of accurate and timely intelligence, rapid deployment of resources, effective tactics and strategies, and relentless follow-up to the delivery of the City of Baltimore's municipal services.

During the course of FY 2001, all of the City of Baltimore's major operating departments became participants in the CitiStat program. Regular participants include the Department of Public Works—which also includes the Bureaus of General Services, Solid Waste, Transportation, and Water and Wastewater—the Fire and Health Departments, the Department of Housing and Community Development, and the Department of Recreation and Parks. Toward the end of FY 2001, oversight of the Police Department's administrative functions was added to CitiStat's portfolio.

In addition to these bureau and departmental participants, CitiStat-type processes were created for a wide range of intergovernmental issues including the delivery of youth services (KidStat); the coordination of public housing, public safety, and public works initiatives (Eastern District Stat), and the planning of economic development and capital spending efforts (TechStat, Westside Stat, and CIPStat). As agency experience with CitiStat grew, so did its use.

By FY 2003, all city agencies participated in CitiStat, resulting in cumulative savings of more than \$40 million, as indicated in Figure 3. Appendix II provides these data in tabular form, indicating where CitiStat savings or benefits could not be estimated.

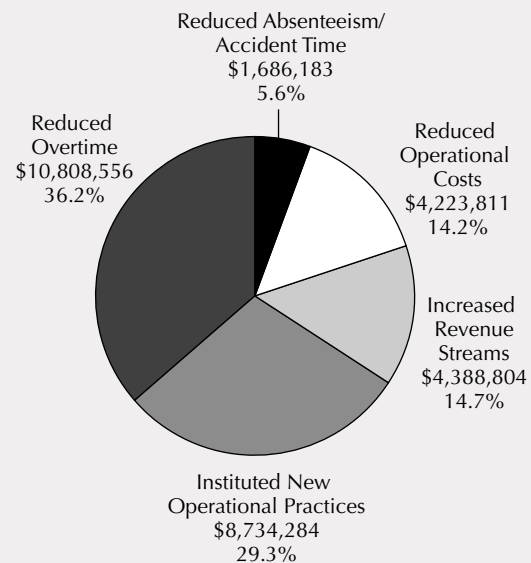
Because CitiStat participants are required to report financial and operational performance data on a biweekly basis, this information becomes the basis of each agency's CitiStat report. Accumulated over months, these reports become a barometer of agency performance in a fiscal year. And, the

multi-page data templates used every two weeks by city agencies are available to the public via the city's website (www.baltimorecity.gov/news/reports/) and are discussed at many community, business, civic, and professional meetings each month in the Baltimore area. Agencies have a regularly scheduled session to report on the progress of initiatives and to be questioned regarding agency performance, and the public is often invited to observe these exchanges in City Hall. Agencies know that these meetings may result in significant shifts in administrative methods and strategies and, if necessary, discipline. Consequently, they are meticulous about managing the resources of their departments to reduce exposure in the CitiStat meeting.

In existence now for more than three fiscal years, CitiStat has already produced a profound impact

Figure 3: FY03 Estimated Cost Impacts of CitiStat Initiatives

Total FY02 Impact—\$29,841,638



Total Estimated Impact FY 2001: \$13,215,410

FY 2002: \$29,841,638

Cumulative Savings: \$43,273,692

Source: Baltimore CitiStat

on the operation and management of Baltimore's municipal government by establishing an enhanced culture of accountability and by creating a framework within which the policy, operational, and financial impacts of critical decisions can be rapidly evaluated and, if necessary, quickly adjusted. CitiStat also serves as a mechanism to monitor the implementation of the administration's most important policy and administrative initiatives and to ensure the coordination of responsive government for all stakeholders, including the federal and state government.

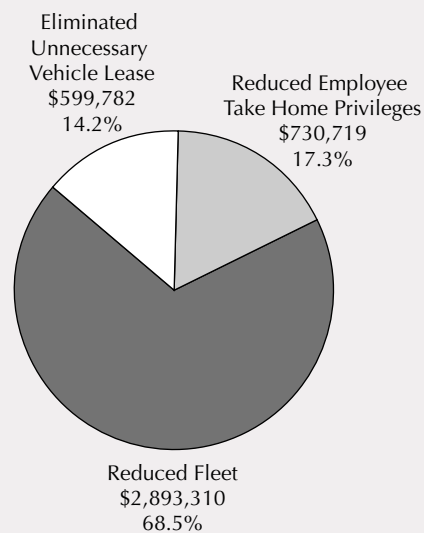
CitiStat has already generated substantial national attention from such sources as the *New York Times*, *Governing* magazine, *City Journal*, *The Ford Foundation Report*, *Municipal Maryland*, *New Democrats On-Line*, and Harvard University's John F. Kennedy School of Government. The impacts of the program on selected initiatives such as fleet reduction, disability reform, and crime reduction have been highlighted locally in the *Baltimore Sun*, the *Baltimore Business Journal*, the *Baltimore Daily Record*, and *Baltimore Magazine*. Key impacts of the program include:

Reduction and control of the city's use of overtime. Through CitiStat, managers and the municipal workforce have been reoriented to view overtime not as an entitlement, but as a management tool to be used with discretion to achieve well-defined goals. During FY 2001, all but one of CitiStat's regular participants (Health) reduced overtime expenditures in comparison to FY 2000 levels (excluding Police). In the case of the Health Department, but for the unanticipated West Nile crisis, it too would have reduced overtime in FY 2001. However, it did significantly reduce overtime expenditures in FY 2002. Although agencies, bureaus, and departments participated in CitiStat for less than a full fiscal year, approximately \$6 million in overtime savings was achieved in FY 2001. In the first full fiscal year of participation, in FY 2002, these agencies achieved another \$11 million in savings.

Increases in and better management of revenue streams. Learning to maintain or improve municipal services with existing or fewer resources, and amplifying existing or creating new non-tax revenue streams, are the city's only means of avoiding the wholesale elimination of services and/or massive increases in taxes. By targeting areas of waste,

Figure 4: FY02 Reduced Operational Costs

Total FY02 Impact—\$4,223,811



Total Impact: FY 2001: \$1,310,664
 FY 2002: \$4,223,811
 Cumulative Impact: \$5,968,975

Source: Total—Baltimore CitiStat; Distribution of Impacts Estimated by Consultant

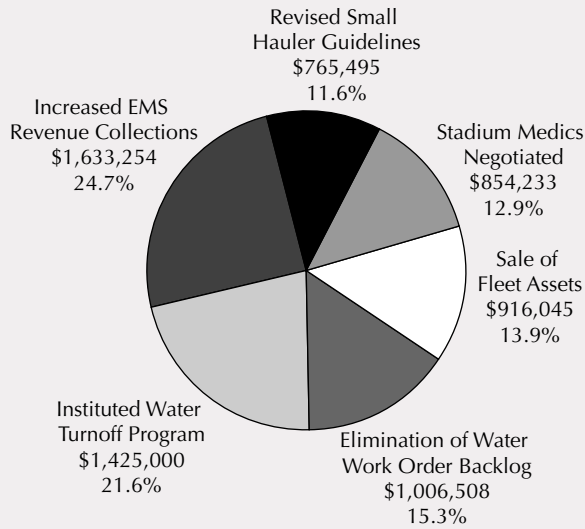
eliminating unnecessary subsidies, reengineering inefficient processes, increasing productivity and operational effectiveness, and establishing performance standards, the city is learning to do more with less and live within its means. All told, these efforts produced a \$4.3 million favorable impact in FY 2002 for a cumulative impact of \$8 million in two fiscal years. (See Figure 5.)

Reduced absenteeism and accident time utilization.

The availability of the municipal workforce is a critical component in the delivery of efficient and effective services. Staffing shortages, caused by either absenteeism or accident time, often necessitate temporary service reductions or overtime expenditures to cover vacant shifts. While the overtime savings that have accompanied reduced instances of absenteeism and accident leave usage are quantified in other places, the estimated \$1.2 million impact associated with these improvements represents a percentage of the value of reclaimed work time previously missed prior to reform in this area (see Figure 6). Aside from reduced overtime expense, the most tangible impact of the increased availability of the municipal workforce can be seen in the many service improvement initiatives undertaken.

Figure 5: FY02 Increased Revenue Streams

Total FY02 Impact—\$4,388,804

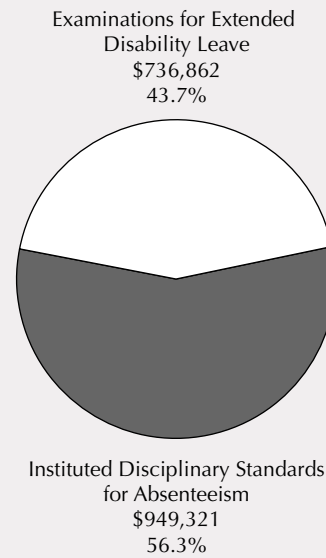


Total Impact: FY 2001: \$3,647,535
 FY 2002: \$4,388,804
 Cumulative Impact: \$8,039,339

Source: Total—Baltimore CitiStat; Distribution of Impacts Estimated by Consultant

Figure 6: FY02 Reduced Absenteeism and Accident Time Utilization

Total FY02 Impact—\$1,686,183



Total Impact: FY 2001: \$1,232,211
 FY 2003: \$1,683,183
 Cumulative Impact: \$2,918,394

Source: Total—Baltimore CitiStat; Distribution of Impacts Estimated by Consultant

Termination of costly initiatives that were inconsistent with mayoral priorities and reduced the city's potential liability costs through proactive risk assessment and management. Through its biweekly contact with agencies, bureaus, and departments, as well as through regular unannounced site visits, CitiStat identified a number of costly projects, planned expenses, and troublesome practices that necessitated intervention by the mayor and his staff. These actions helped the city avoid wasteful spending and reduce its exposure to potentially costly litigation or the personal injury of employees.

Increased public accountability and the availability of operational performance data. In keeping with the mayor's pledge to operate an open and transparent government, CitiStat has stimulated the accumulation of previously unavailable data regarding the operations of the municipal government. By making agencies' data submissions available to the public via the city's website, citizens are able to access the same information that the administration utilizes to prioritize spending and gauge performance. Additionally, weekly CitiStat stories in the city's e-mail newsletters *Neighborhood*

News Flash and *Taking Care of Business* acquaint the public with priority areas of focus for CitiStat.

Increased intergovernmental and intragovernmental cooperation and the establishment of new operational practices to improve the quality and effectiveness of city services. CitiStat meetings have become the staging areas for administrative initiatives transcending the traditional organizational boundaries of city agencies. For example, drug control initiatives involve not only the Baltimore City Police Department but also the Departments of Housing and Community Development, Parks and Recreation, and Health.

Initiatives can now be monitored and tracked throughout the city government, making CitiStat an effective intragovernmental as well as intergovernmental instrument. Moreover, corporate and other private investors in the city are more likely to invest significant dollars and expertise in city-managed initiatives if the city continues to demonstrate higher levels of accountability for public and private resources.

The CitiStat Experience of Two Baltimore City Agencies

Case Study 1: Department of Housing and Community Development

Given Baltimore's racial and ethnic diversity, combination of charming and aesthetically attractive neighborhoods, vibrant and appealing Inner Harbor, bustling central business district, and severe socioeconomic challenges, housing is a key variable in the city's current and future efforts to transform neighborhoods and their socioeconomic vitality. The mission of the Baltimore City Department of Housing and Community Development (HCD) is to ensure that all citizens of Baltimore City have access to adequate and affordable housing opportunities in safe, livable, and decent neighborhoods.

Mayor O'Malley and Housing Commissioner Paul Graziano have committed the city to an aggressive set of neighborhood development strategies including accelerated neighborhood development plans; better support to transitional neighborhoods (those in danger of socioeconomic decline); better use of Community Development Block Grants (CDBG) for supporting housing development; and consolidation of an array of available public and private financing tools. The aim is to balance maintaining the housing supply in multiple price ranges and addressing the serious housing problems of poor people in Baltimore City. These towering challenges require disciplined attention by employees of the department. Therefore, HCD interrelates human resource and policy management through CitiStat.

According to the Blue Ribbon Practices in Community Development, Baltimore has between 10,000 and 16,000 vacant row houses. The city demolished hundreds of units of high-rise public housing between 1997 and 2001 to construct lower density, mixed-rate housing in an effort to provide better and more affordable housing for its large lower-income population and to attract middle-income individuals and households to the city. The city has also attempted to use CDBG, Section 108, and Section 8 funds, along with state and private funds, to promote a comprehensive strategy to reduce a significant number of vacant housing units and to increase homeownership rates. In addition, the city received federal Hope VI funding to develop and expand mixed-rate housing. The new Pleasant View Homes and Lexington Terrace Homes have replaced crime-infested, aging high-rise public housing with mixed-rate, lower density units with better commercial, transportation, and security resources available to the owners and tenants. Construction of new homes at the site of the old Flag House and Murphy Homes housing projects will make low-density housing available to low- and moderate-income households to the immediate east and west of the central business district.

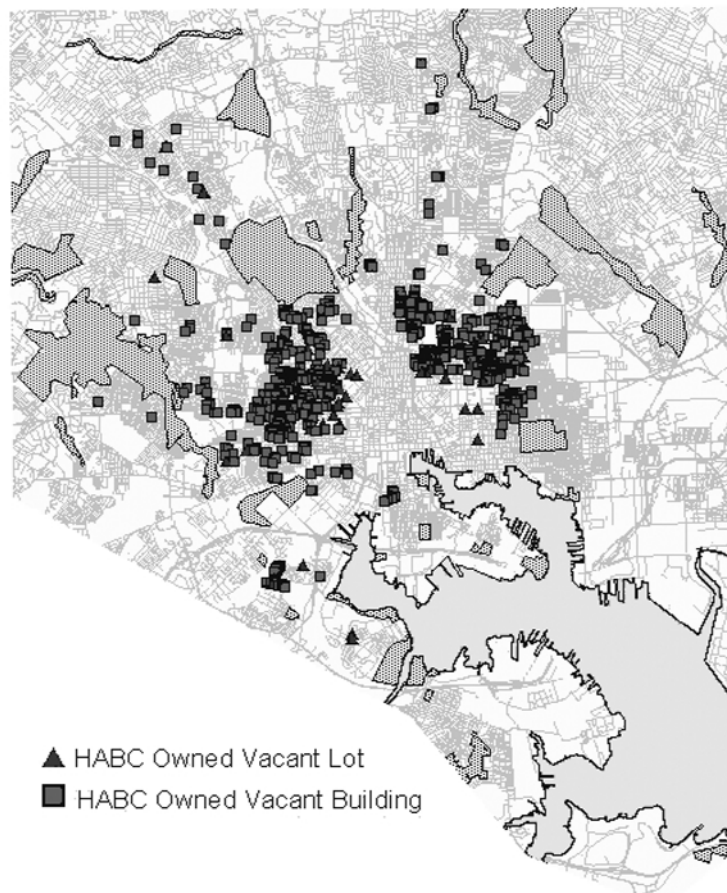
Given the twin challenges of supporting housing and neighborhood development that will improve Baltimore communities and providing and managing housing for a large poor and often racially segregated population, both the Baltimore City Department of Housing and Community Development and the Housing Authority have profound investments in the success of the CitiStat program. The Housing

Authority, part of HCD, is responsible for the city's public housing programs. Both HCD and the Housing Authority receive substantial federal and state funding. As indicated in CitiStat Map 1, the Housing Authority owns many vacant lots and buildings in the City of Baltimore. Advocacy organizations in the city have often pointed out the inconsistency of the lack of adequate public housing for many low-income citizens on the waiting list and the number of city-owned vacant buildings. Organizations like the Citizens Planning and Housing Association (CPHA) and Baltimore Neighborhoods, Incorporated, consistently argue that substantial progress in providing low-income housing and reducing racial segregation in housing could be made by addressing this gap. Both the Mayor's Office and the Housing Authority are working assiduously to address the economic, political, and legal impediments to expanding the housing supply. In addition to transportation and environmental management, they

recognize housing as one of the most critical regional issues facing the Baltimore metropolitan area.¹⁷

The city's Section 8 housing certificates are among the most visible examples of the use of CitiStat monitoring and policy adjustment. A Section 8 rental subsidy is a federal payment to a landlord on behalf of an individual tenant. In a Section 8 certificate tenancy, the household pays 30 percent of its income for rent. The federal government pays the difference between 30 percent of the household income and the established "fair market" rent of a unit. Certificates were phased out during the late 1990s in favor of rent vouchers, of which the City of Baltimore manages more than 15,000. In the August 9, 2002, report, for example, monthly data based on biweekly agency reports are indicated for the number of units regular and consent decree certificates, the number of units leased under the pro-

Map 1: Vacant Lots and Buildings Owned by The Housing Authority of Baltimore City (HABC)



gram, and the number of units available. (Consent decree certificates refer to Section 8 housing certificates issued by the Baltimore Housing Authority that Judge Garbis allowed to be used outside of Baltimore City as part of the federal district court case in *Carmen Thompson, et. al. v. the City of Baltimore, the Mayor and City Council of Baltimore, the Baltimore Housing Authority, and the U.S. Department of Housing and Urban Development.*)

Biweekly reports are aggregated into monthly reports for March, April, May, and June, and the percentage change in activity between March and June are indicated in a separate column. Not only do these data allow monthly tracking based on biweekly agency reports, but they also provide year-to-date averages, minimums, maximums, and totals for annualized program achievements required by both the federal GPRA and the state MFR performance reporting requirements.

It is important to emphasize the intergovernmental advantages of CitiStat’s approach to housing management (see Table 4). It’s clear that the data generated on a biweekly basis make possible both monthly and annual tracking, monitoring, and evaluation of agency performance for any initiative or program at any level of government. However, additional advantages include:

- More real-time assessment of needed program or administrative adjustments, modifications, or reallocation of financial or human resources.
- More point-of-use interrelationships of federal, state, and city program resources to achieve HCD’s and the Housing Authority’s strategic mission, goals, and objectives.
- More immediate data for use in litigation involving the city, particularly in public housing programs. For example, since 1994, the

Table 4: The Intergovernmental Benefits of CitiStat: Case Study of Baltimore City Department of Housing and Community Development

Level of Government	Strategic Mandate	Performance Period	Performance Coverage	Policy Outcome
Federal	Government Performance & Results Act, OMB Circular III	Annual Reporting of Performance for HUD-funded Programs and Initiatives	Performance on HUD-funded strategic program goals and objectives	Annual funding or program adjustment
State	Maryland Managing for Results	Annual reporting on city- and state-funded Housing and Community Development programs and initiatives	City performance on Maryland DHCD-funded strategic program goals and objectives	Annual funding or program adjustment by Maryland Dept. of Budget and Management in the Maryland General Assembly
City	CitiStat program	Biweekly	City, DHCD & HABC biweekly performance on mayoral performance goals and objectives	Biweekly, monthly adjustment or redirect of agency performance and human resources required
Intergovernmental	Integrated Federal, State, and City Strategic Mandate	Infusion of federal and state annual strategic planning elements into city goals and objectives	All federal, state, and locally funded housing programs and initiatives	Integrated intergovernmental performance accountability mechanism

city and the U.S. Department of Housing and Urban Development have been co-defendants in a Federal District Court lawsuit brought by the American Civil Liberties Union, alleging that they have perpetuated the concentration of race and poverty by the way in which they made public housing decisions over the last five decades. CitiStat now monitors the number of rent vouchers directed by U.S. District Court Judge Marvin Garbis in the first settled phase of the case and has detailed data available for the current second phase of the case.

- More capable and motivated agency leadership now able to envision agency performance on both a more comprehensive and more detailed basis within each month, as well as at the end of the strategic planning reporting year.

Case Study 2: Health Department

The mission of the Baltimore City Health Department is “to provide all Baltimoreans access to comprehensive, preventive quality health services and care, as well as to ensure a healthy environment.” Its primary policy goals include:

- To work in partnership with the community, elected officials, and providers to offer the best possible health services to all through preventive care, outreach, follow-up, referrals, and, ultimately, legislative changes.
- To ensure that quality health care is available for all residents of Baltimore City.
- To reduce the incidence of risk factors among adolescents that lead to unhealthy outcomes.
- To advocate for health, mental hygiene, environmental, and substance abuse services where they are needed.

The Health Department is among the lead agencies in the city’s public-safety coalition, particularly in preparing citizens in the event of a bioterrorist attack, reducing substance abuse, preventing HIV/AIDS, promoting environmental health, increasing cancer awareness, and reducing child and adolescent mortality and morbidity.

Two recent examples of the use of CitiStat processes to achieve the Health Department’s goals are efforts

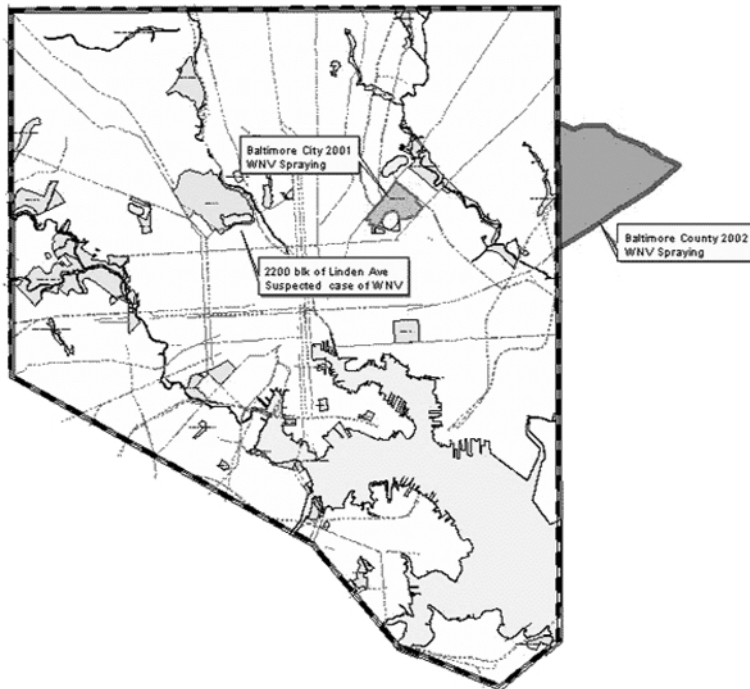
related to the prevention of West Nile Virus and the ongoing battle to reduce and prevent venereal disease. CitiStat Maps 2 and 3 illustrate the use of pinpoint maps to identify the Health Department’s activities in spraying to prevent West Nile Virus and in assessing the risks of syphilis. Such data are also reflected in the biweekly statistical tracking sheets and related to human resource patterns in the department. Both the maps and the tracking data enable CitiStat managers and the agency to:

- Geocode CitiStat data to show that the distribution of departmental activities across the city is visible.
- Facilitate the use of geographical information, such as the presence of marsh areas and brackish water, or prostitution and drug corridors, to cultivate effective prevention strategies and to assess the efficacy of those strategies.
- Monitor progress of agency actions in various seasons and over months and years.
- Adjust policies or administrative actions as suggested by the patterns evident in the data.

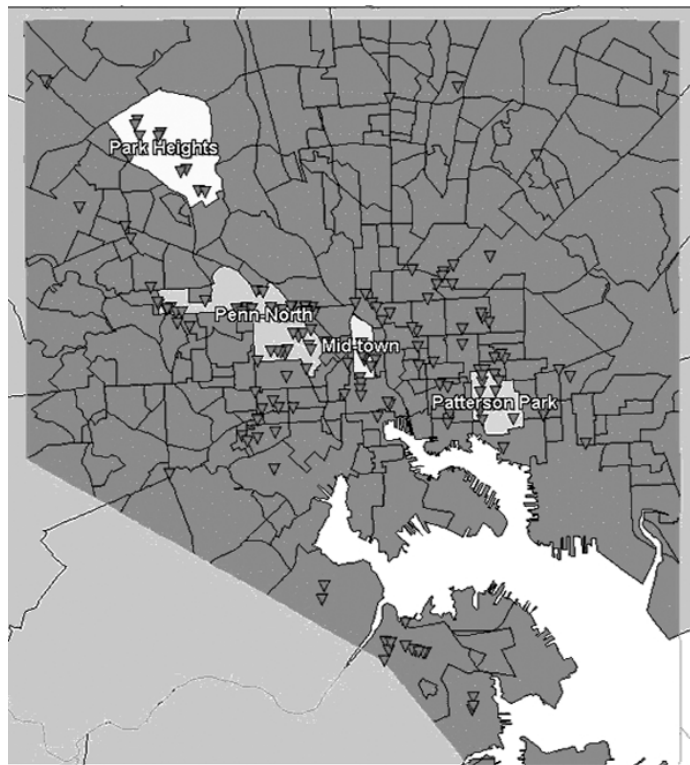
In addition to tracking agency behavior in data and pinpoint mapping, the Health Department indicates a 7 percent reduction in average overtime from September 2001 to September 2002. This does not account for the rapid reduction in overtime that occurred in the first year, where overtime in the Animal Control Bureau declined 10 percent—from an average of 315.8 hours per pay period during the first six months to 285.3 hours per pay period in the last.

Moreover, for the first time in five years, the Bureau of Food Control is in compliance with state mandates for the number and type of annual inspections of food facilities. This was a direct result of CitiStat and HealthStat scrutiny. In the LeadStat program, there was a 554 percent increase in the number of grants settled (i.e., committed funds) in the first two quarters of FY 2003 when contrasted with the first two quarters of FY 2002. There was also a tenfold increase in the number of properties abated in the same time period and a tenfold increase in the allocation of funds from \$192,064 in FY 2002 to \$2,158,271 in FY 2003.

Map 2: 2002 and 2003 West Nile Virus (WNV) Spraying Areas



Map 3: High-Risk Syphilis Assessments (All Forms through June 2002)



As a result of the influence of CitiStat, lead-testing results indicated a 25 percent decrease in the number of children with elevated blood lead levels (EBLs) greater than 10 micrograms/deciliter between FY 2000 and FY 2002, a 36 percent decrease in the number with EBLs greater than 15 micrograms/deciliter, and a 46 percent decrease in the number with EBLs greater than 20 micrograms/deciliter. These declines occurred as testing increased 17 percent.

DrugStat results included a 16 percent increase in the six-month retention rate at methadone programs from FY 2001 to FY 2002. This convinced both state legislators and the Baltimore City Council that the drug treatment program was well managed, attracting an additional \$25 million in state funding over the next four years. And, according to the Drug Abuse Warning Network, Baltimore City's demonstrated improvements in the quality and quantity of drug treatment contributed to the nation's largest two-year decline in drug-related emergency hospital visits in 2002.

Findings and Recommendations

CitiStat as a Strategic Planning Tool

CitiStat has clearly raised the level and proficiency of agency accountability to mayoral leadership for achieving policy goals and objectives. City agencies are rapidly institutionalizing processes for identifying, classifying, and recording and reporting data on their daily and weekly management of employee absenteeism, sick leave, overtime, workers' compensation, and linking this data to performance on key policy objectives in such areas as water and wastewater management, health care, and housing and community development. As a consequence, the Office of the Mayor has a keen and continuing awareness of city agency operations, issues, and progress. That awareness is clearly manifested in his mastery of many of the key challenges facing city agencies and, therefore, the citizens of Baltimore.

Both city agencies and the Mayor's Office can identify effective and ineffective management strategies through data collection and analysis. Because federal and state money comes to the city through municipal agencies, accountability for city-funded programs and programs funded by other levels of government is significantly improved. Indeed, the CitiStat Office reports that annual reporting of progress on those goals and objectives supported by federal and state funding is significantly improved by a biweekly examination of progress on all key agency goals and objectives.

Although developed in a strong mayor form of government, CitiStat is also a benefit to the Baltimore City Council. CitiStat data maintained by city agencies is available to members of the City Council for

use in their deliberations. Council committees with responsibility for legislative oversight of city agencies report that CitiStat data has become a key source of information for legislative consultation with the mayor and for the performance of legislative, fiscal, and oversight responsibilities.

One key issue is the extent to which the potential myopia of a biweekly accountability system can obstruct longer-range strategic planning in the city. How are the key strategic mandates reflected in agency mission, vision, and value statements, or in the specification of overall agency goals and objectives? How do agencies integrate programs with funding from federal, state, local, or private sources into effectively coordinated policy initiatives? The generation of biweekly data on the performance of city agencies clearly provides a significant and continuing database for assessing the effectiveness of agency performance. However, to avoid inadvertent micromanaging of agency operations, CitiStat staff is working assiduously to link these databases to the major strategic vision and initiatives of the mayor and the city.

Another key strategic issue is the impact of CitiStat on the vast and complex web of relationships and networks maintained by the city to implement policy objectives. In an era of "contracting out," the City of Baltimore maintains grant or contractual relationships with many vendors, nonprofit organizations, educational institutions, quasi-public agencies such as Empower Baltimore, Inc., and local and national foundations. The performance of these networks when contracting with the city is as essential as the performance of city agencies. Savas,

O'Toole, and Milward have extensively addressed the criticality of nongovernmental networks in the implementation of public policy.¹⁸ Indeed, Gawthrop and Frederickson maintain that these networks are essential to democratic governance,¹⁹ because they extend and deepen the participation of citizens in governance, public policy, and administration. A key challenge for CitiStat is to work with city agencies to more effectively orchestrate the activities of these networks with the city's policy and administrative goals and objectives.

CitiStat and Capacity Building of City Employees and Managers

CitiStat has clearly isolated several major challenges facing agencies such as the Department of Housing and Community Development, and the Health Department. These challenges reflect the complex and entangled economic, social, and intergovernmental challenges facing Baltimore City. One key outcome has been the reform of human resource policies such as leave, overtime, and workers' compensation. Another consequence has been the increasing use of several joint management and labor councils to identify strategies for improving employee productivity and the workplace environment. These councils were actually instituted under a grant from the Federal Mediation and Conciliation Service to Mayor Schmoke and the City Council in 1998, managed by the Baltimore Office of the Labor Commissioner and continued into the O'Malley administration. The councils have resulted in the discovery of innovative methods for saving money and improving the workplace, such as better work shoes for employees in the Department of Public Works, the extension of police presence in city-managed park and recreational facilities, and new software programs for the Department of Finance.

However, the patterns of concern evident across city agencies should also suggest opportunities for building the data development, fiscal, service delivery, and executive management *capacity* of city employees and agency leaders. Strategic planning, financial management, human resource management, and information technology and management are competencies integral to the success of CitiStat as a management tool.

Mayor O'Malley is attempting to extend these competencies through a leadership academy for key city executives. The academy cultivates the requisite skills for leading city agencies in a variety of administrative reforms, including CitiStat. However, the mayor's staff is now focused on building these capabilities in middle management and supervisor-level staff. Many of these employees are veteran managers with many years of experience and expertise. They are the air traffic controllers of significant administrative reform, with the ability to facilitate reforms or impede them.

CitiStat and the Use of Information Technology

A key outcome of the CitiStat process has been the establishment and cultivation of an effective information and communication network. As Mayor O'Malley argues, "\$20,000 of software can save millions of taxpayer dollars." CitiStat staff use computerized information networks to collect biweekly data from city agencies, to generate analyses of agency performance trends from those data, and to develop geographic information data to examine the distribution of city services, needs, and challenges.

These data are the essential intelligence used by the Mayor's Office to align agency performance with policy mandates. CitiStat and agency staff can quickly identify where bottlenecks in city service delivery are occurring, as well as how well an adjustment of a policy or administrative strategy or tactic works.

But, just as essential to citizen involvement in city government, CitiStat information technology is used to communicate essential information to citizens. The CitiStat website has become a locus of intelligence on agency mission and performance for many businesses, state and federal agencies, as well as civic, community, professional, and educational organizations. Moreover, the 311 Call Center has become an effective instrument of citizen access and a resource for improving services to citizens.²⁰ CitiStat has thus established the use of information technology as a *critical management and civic communication tool*.

Recommendations

Recommendation 1: Given the value and effectiveness of CitiStat as a biweekly management tool, strategic plans should be developed at the agency level to align city performance with the mayor's policy goals and objectives.

City agencies now post on the Baltimore City website their mission and goals statements. But some agencies are more detailed in displaying their visions, objectives, strategic action plans, and criteria for selecting and assessing performance indicators than others. These strategic plans should reflect the integration of city, state, and federal policy and program performance goals and expectations, and should be written clearly and succinctly to facilitate public discourse and policy deliberation at all levels of government. To facilitate the connection between biweekly CitiStat analyses and longer-range strategic processes, agencies should establish a *uniform baseline* of standard components such as mission statements, vision statements, goals, objectives, and major strategic initiatives. Beyond that baseline, agencies could develop and display whatever they consider essential public information. CitiStat reporting forms anticipate such a standardized process by reporting where most agencies are in the "year-to-date" column. Tying the year-to-date data to the strategic goals and objectives for the fiscal year is the next critical step.

Recommendation 2: City agency leaders and employees should be *trained* to raise their capacity not only to be responsive to CitiStat as a program and process but also to respond immediately and effectively to challenges identified by CitiStat's biweekly accountability system.

Vendors, nonprofit organizations, educational institutions, and others that are currently part of the city administrative web should also be better trained to generate, analyze, manage, and report CitiStat data. They should connect themselves more effectively to agency strategic missions, goals, and objectives.

Recommendation 3: CitiStat should be as effective in identifying best practices and innovations in city agency performance as human resource or service delivery challenges.

Best practices and innovations should be identified, cataloged, and disseminated among agency executives to enhance their positive impact on city administrative and fiscal performance. These practices should comprise a significant component of the curriculum for the both the mayor's leadership academy and the mayor's Fellowship Program.

Recommendation 4: CitiStat data should be better compiled and simplified for broader public use.

Citizen interaction with the Office of the Mayor and Baltimore City administrative agencies could be significantly enhanced by access to more simplified CitiStat performance data. Citizens now access and review CitiStat data on the CitiStat or Baltimore City web pages. However, several prominent civic and community organizations have suggested that:

- Biweekly data collected and summarized in monthly form would give citizens and the Baltimore City government a better common reference point for policy discourse, debate, and deliberation. Although many civic and community organizations now attempt to access CitiStat data for their advocacy agendas, they often complain that the data are too detailed and diffuse for effective public use.
- Monthly performance reports could be accompanied by brief agency narratives identifying current or proposed mayoral or agency initiatives to accelerate achievement of agency programs or policies. For example, public notices of recent actions taken by the Department of Public Works to curtail water use in a recent drought could be accompanied by monthly CitiStat performance data showing citizens the statistical impact agency actions are having on drought conditions. This level of information will facilitate more constructive citizen involvement in helping agencies reach their strategic targets.
- CitiStat data could be aggregated across agencies to better mark progress on major city or mayoral initiatives such as crime reduction, public safety and security, housing, or health care. This is particularly important when two or more city, state, or federal agencies provide funding or assume responsibility in one policy area such as public safety.

Appendix I: Additional Background on Baltimore City

Table I.1: 2002 and 2003 Budget Appropriations by Fund
(Board of Estimates Recommendations)

	Fiscal 2002 Amended Budget	Fiscal 2003 Budget	Dollar Change	Percent Change
Total Appropriations				
Local and State-shared Funds				
General	\$ 946,623,000	\$ 989,754,000	\$ 43,131,000	4.6%
Motor Vehicle	189,169,000	191,261,000	2,092,000	1.1%
Parking Management	8,800,000	9,045,000	245,000	2.8%
Convention Center Bond	4,635,734	4,637,000	1,266	N/A
Conduit Management	2,462,000	2,566,000	104,000	4.2%
Total	1,151,689,734	1,197,263,000	45,573,266	4.0%
Enterprise Funds				
Waste Water Utility	123,411,000	130,417,000	7,006,000	5.7%
Water Utility	85,533,000	91,980,000	6,447,000	7.5%
Parking Enterprise	21,040,000	20,910,000	(130,000)	(0.6)%
Loan and Guarantee Enterprise	3,983,000	3,751,000	(232,000)	(5.8)%
Total	233,967,000	247,058,000	13,091,000	5.6%
Grant Funds				
Federal	323,586,303	286,585,688	(37,000,615)	(11.4)%
State	161,411,011	130,241,071	(31,169,940)	(19.3)%
Special	31,569,630	36,447,162	4,877,532	15.5%
Total	516,566,944	453,273,921	(63,293,023)	(12.3)%
Loans and Bonds				
Revenue Bonds	76,464,000	111,938,000	35,474,000	46.4%
General Obligation Bonds	47,000,000	43,000,000	(4,000,000)	(8.5)%
Total	123,464,000	154,938,000	31,474,000	25.5%
Mayor & City Council Real Property	0	501,000	501,000	N/A
All Other	68,967,000	47,436,000	(21,531,000)	(31.2)%
Total-All Funds	\$2,094,654,678	\$2,100,469,921	\$5,815,243	0.3%

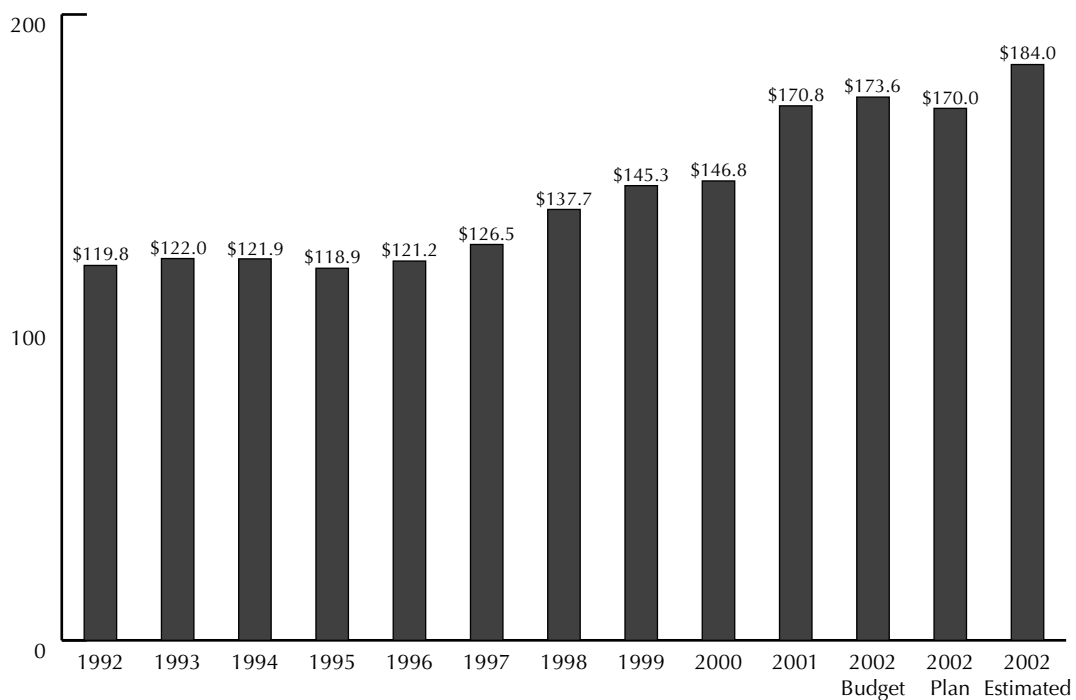
Source: City of Baltimore, Department of Finance

Table I.2: FY03 General Fund Revenue Forecast

Revenue Category	Fiscal 2002 Actual	Fiscal 2002 Amended Budget	Fiscal 2003 Estimated	Dollar Change	Percent Change
Taxes—Local	\$744,569,690	\$751,279,000	\$775,756,000	\$24,477,000	3.3%
Licenses and Permits	20,743,581	21,806,000	23,280,000	1,474,000	6.8%
Fines and Forfeits	1,030,415	2,356,000	2,355,000	(1,000)	(0.0)%
Use of Money and Property	35,524,704	32,015,000	26,793,000	(5,222,000)	(16.3)%
Federal Grants	67,660	60,000	75,000	15,000	25.0%
State Grants	79,512,102	84,406,000	96,985,000	12,579,000	14.9%
Private Grants	159,000	4,131,000	6,137,000	2,006,000	48.6%
Charges—Current Services	30,198,797	32,915,000	34,412,000	1,497,000	4.5%
Other	4,986,199	1,562,070	5,119,000	3,556,930	227.7%
Revenue Transfers	24,482,033	16,092,930	18,842,000	2,749,070	17.1%
Total General Fund Revenue	\$941,274,181	\$946,623,000	\$989,754,000	\$43,131,000	4.6%

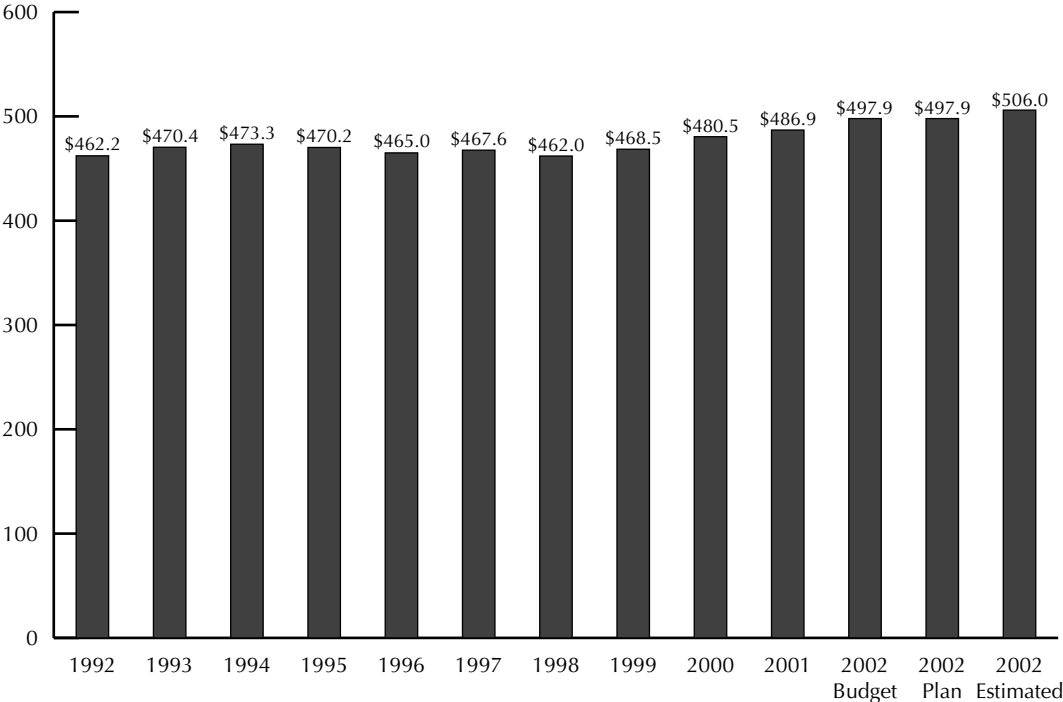
Source: Baltimore CitiStat

Figure I.1: Income Tax Revenues (\$ millions)



Source: City of Baltimore, Department of Finance

Figure I.2: Real and Personal Property Tax Revenues (\$ millions)



Source: City of Baltimore, Department of Finance

Appendix II: 2001 and 2002 CitiStat Benefits

Categories Of Financial Benefit	FY 2001 Results	FY 2002 Results	Cumulative Results
Reduced and controlled the city's use of overtime	\$ 5,779,144	\$10,808,556	\$16,587,700
Reduced operational costs	1,745,164	4,223,811	5,968,975
Increased revenue stream	3,650,535	4,388,804	8,039,339
Reduced absenteeism and accident time utilization	1,233,211	1,686,183	2,918,394
Terminated costly initiatives that were inconsistent with mayoral priorities	1,025,000	N/A in 2002	1,025,000
Reduced the city's potential liability costs through proactive risk assessment and management	Not estimated	Not estimated	Not estimated
Increased public accountability and the availability of operational performance data	Not estimated	Not estimated	Not estimated
Increased inter- and intragovernmental coordination	Not estimated	Not estimated	Not estimated
Instituted new operational practices to improve quality and effectiveness of city services	Not estimated	8,734,284	8,734,284
TOTAL	\$13,432,054	\$29,841,638	\$43,273,692

Source: CitiStat Office, Office of the Mayor, Baltimore

Endnotes

1. State of Maryland, *Maryland State Constitution*, cited in *The Maryland Manual On-Line: A Guide to Maryland Government*, January 31, 2002.
2. Office of the Governor, State of Maryland, *Managing for Results* (Baltimore, Maryland: The William Donald Schaefer Center for Public Policy, The University of Baltimore, 1998).
3. Baltimore CitiStat website:
<http://www.ci.baltimore.md.us/news/citistat/index.html>
4. U.S. Bureau of the Census, *Current Population Survey, 2000*.
5. Harold McDougall, *Black Baltimore: A Theory of Community*. Philadelphia: Temple University Press, 1994.
6. Baltimore Department of Finance, *Fiscal Year 2003 Budget*.
7. See Jo Ann Argersinger, *Towards A New Deal in Baltimore: People and Government in the Great Depression*. Chapel Hill, N.C.: The University of North Carolina Press, 1988.
8. Paul O'Connell, *Using Performance Data for Accountability: The New York City Police Department's CompStat Model of Police Management*. Arlington, VA.: IBM Endowment for The Business of Government, 2001.
9. Rudolph W. Giuliani, *Leadership*. New York: Hyperion Books, 2002, pp. 72-80.
10. The Board of Estimates in Baltimore City is responsible for reviewing and eventually approving the budget of the city. Its membership includes the president of the city council, the mayor, the city comptroller, the director of the Department of Public Works, and the city solicitor.
11. CitiStat website, op. cit., p. 3.
12. Mark Bovens and Stavros Zouridis, "From Street-Level to Systems-Level Bureaucracies: How Information and Communication Technology Is Transforming Administrative Discretion and Constitutional Control," *Public Administration Review*, Vol. 62, No. 2, pp. 174-184.
13. See Timothy Bates, "The Minority Enterprise Small Business Investment Company: Institutionalizing a Nonviable Minority Business Assistance Infrastructure," *Urban Affairs Review*, Vol. 32, No. 5, May 1997, pp. 683-703.
14. "A" time days are days employees are absent due to on-the-job injuries requiring workers' compensation.
15. See Richard A. Swanson, *Analysis for Improving Performance: Tools for Diagnosing Organizations and Documenting Workplace Expertise*. San Francisco: Berrett-Koehler Publishers, Inc., 1994.
16. Beryl Radin, "Intergovernmental Relations and the Federal Performance Movement," *Publius: The Journal of Federalism*, Vol. 30, Nos. 1-2, Winter/Spring 2000.
17. See H. George Frederickson, "The Repositioning of American Public Administration," John Gaus Lecture, American Political Science Association Annual Meeting, September 3, 1999, p. 3; and Louis C. Gawthrop, *Public Service and Democracy*. New York: Chatham House Publishers, 1998.
18. E.S. Savas, *Privatization and Public-Private Partnerships*. New York: Seven Bridges Press, 2000; and H. Brinton Milward and Keith G. Provan, "Principles for Controlling Agents: The Political Economy of Network Structure," *The Journal of Public Administration Research and Theory*, Vol. 8, 1998, pp. 203-221.
19. Frederickson, op. cit., pp. 5-6.
20. Bovens and Zouridis, op. cit., pp. 176-177.

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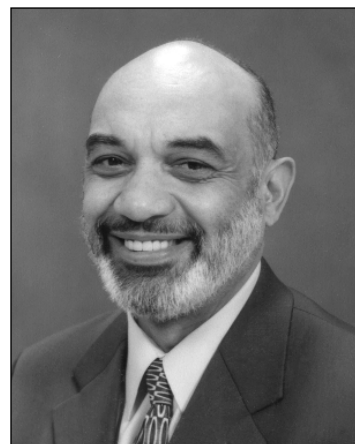
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