City of Baltimore

Fire and Police Employees' Retirement System Financial Evaluation



June 7, 2010

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EXECUTIVE SUMMARY



Given fast-rising pension contribution requirements during a period of severe City budget strain, Public Financial Management, Inc. (PFM) was engaged in April 2010 to assist the City of Baltimore and its Fire and Police Employees' Retirement System (FPERS) with evaluating what changes, if any, are reasonable and necessary to safeguard the public welfare and the long-term sustainability of the system. The following highlights key findings from the overall review:

- Public employers nationally are experiencing a retiree benefit funding crisis, driven by increasing
 life expectancy, a growing number of retirees as the "baby boomers" end their working careers,
 generous benefits, and asset erosion following recent market downturns. At the end of FY2008,
 even before taking into account the full effects of recent investment losses, state retirement
 systems alone were estimated to face a \$1 trillion funding shortfall.
- In Baltimore, as in other older cities with declining populations and workforces, benefit funding challenges are compounded by an increasing number of retirees relative to the active employees (and tax base) still contributing into the system. As of June 30, 2009, FPERS had 4,690 active members and 5,929 recipients of benefits a ratio of 0.79 to 1.0 that contrasts sharply with the median among public pension systems nationally of 2.02 active members for every 1 annuitant.
- In FY2009, FPERS payments for retirement and deferred retirement option plan (DROP) benefits of \$184.2 million were more than double the combined contribution into the system by active members and the City. To make up this difference, FPERS relies largely on investment earnings on its assets. In FY2009, the system's managed investment total rate of return was a negative 21.9%, and overall plan net assets fell by \$457.4 million.
- Taking a longer term view, FPERS actuarial accrued liability has grown from \$1.1 billion in FY1990 to nearly \$3.1 billion as of June 30, 2009, and the unfunded component of this liability in actuarial terms has grown from under \$100 million in FY2005 to nearly half a billion dollars in FY2009.
- Actuarially, asset smoothing practices that recognize market losses over a five-year period, as
 well as the continued amortization of negative balances from two expired funds within the system,
 result in "paper" funded ratios that do not yet fully reflect the true FPERS funding pressures.
 Using actual market value of system assets as a measure of resources available to meet
 projected liabilities, FPERS' funded ratio fell from 74.2% in FY2008 to 58.2% as of June 30, 2009.
- As a result of these trends, the City's actuarially required contribution to FPERS has grown from 19.8% of covered payroll in FY2005 to 30.5% for FY2010 – and would rise to 58.85% in FY2011 using the actuarial assumptions recommended by the plan actuary and trustees if no benefit adjustments are adopted.
- In dollars, the required employer contribution to FPERS grew from \$48.3 million in FY2005 to \$81.9 million in FY2010 (excluding supplemental payments made to reduce certain liabilities). Of this amount, the City pays more than 99%, with the State of Maryland covering less than 1% for a small group of state employees at the BWI airport dating back to past City operation of this facility. With no corrective action, under the recommended actuarial assumptions, the total FPERS employer contribution requirement would rise to \$166 million in FY2011.
- For FY2011, the City's Budget allocates \$101 million to the FPERS annual required contribution (All Funds), plus another additional \$5.7 million to pay down unfunded liabilities, assuming that benefit adjustments will be adopted to reduce the employer contribution. If no benefit changes are made, a more than \$64 million hole will open in the FY2011 proposed Board of Estimates Budget, of which \$61.9 million would be within the combined General and Motor Vehicle Funds.
- Following two years of revenue decline, the City's FY2011 Budget has no capacity to absorb this additional cost without severe, adverse impacts:
 - Even without this additional \$61.9 million in FPERS costs, the proposed Board of Estimates Budget already included the elimination of nearly 1,000 positions (600 of which are currently filled), a second year of employee furloughs, a reduction in transportation and crossing guard subsidies to the Baltimore City Public Schools, rotating closures of seven fire



- companies, elimination of police aviation, marine, and mounted units, closing of 29 of the City's 55 recreation centers, elimination of bulk trash pickup, and reduced building maintenance, park maintenance, street paving, and vacant property boarding and cleaning.
- Further revenue increases are constrained by the City's relatively weak tax base, which generates only 52% of the statewide average from equivalent tax rates, and Baltimore's already high tax burdens. Looking at the City's largest revenue source of property taxes, the City's current rate is more than twice the statewide average. Overall, the City's "tax effort" a measure of how much a government is drawing on its local tax base has been found to be the highest in the state by a considerable margin.
- On the expenditure side of the Budget, the City has limited control over large, and fast growing cost centers. For example:
 - The majority of the City's contributions to the Baltimore City Public Schools (BCPS) are subject to State maintenance of effort (MOE) requirements;
 - Existing debt service is effectively fixed, and new capital investment is critical for maintaining basic infrastructure;
 - Retiree medical costs are rising separate and apart from any spending for current services; and,
 - Pension contribution requirements are increasing even faster.
- As of FY2011 (Proposed), the four cost centers listed above are projected to have grown by an aggregate 20.7% from FY2008, while City revenues are projected to have fallen 5.5% across this same period. As a result, these areas of the Budget will have increased from less than one-third to over 40% of total spending in just three years – squeezing out other services, which are slated to be cut by more than 16%.
- Further, among the municipal services experiencing significant reductions including police and fire protection, road and other infrastructure maintenance, and recreation and library programs certain components of total cost (e.g., utilities from \$27.5 million to \$31.9 million, and active employee health premiums) have also been growing faster than City revenues. As a result of such rising unit costs, even deeper cuts in core operations and current services are required to achieve the net savings needed.
- To put the scale of the potential FPERS budget gap in perspective, \$61.9 million is greater than the \$59.4 million FY2011 General Fund and Motor Vehicle Fund budgets for the Sheriff's Office, Baltimore Parks and Recreation Department, and City Libraries combined.
- At the time this report was being drafted, Baltimore City Council was considering modest
 adjustments and/or additions to existing revenue streams for the FY2011 Budget to mitigate the
 most severe service cuts proposed. Given that a competitive tax structure and the preservation
 of core municipal services at an acceptable level are both critical for retaining a locality's
 economy, tax base, and community vitality, such tradeoffs may be necessary in difficult times.
- At the same time, however, such increased tax burdens carry their own adverse consequences for Baltimore's economic competitiveness, and are particularly corrosive if not linked directly to compensating service benefits for taxpayers. While some additional revenues may be generated at the margins through such actions, no large-scale sources have been identified that would resolve the City's fiscal difficulties just as no remaining cuts are available to close a nearly \$62 million gap without damage to the public welfare.
- As part of this evaluation, PFM has worked with the City Finance Department to develop multiyear budget projections under varying pension funding scenarios:
 - If no action is taken, under the actuarial assumptions recommended by the plan actuary and FPERS trustees, the \$61.9 million FY2011 gap relative to the proposed FY2011 Budget will grow to \$126.6 million by FY2015, the cumulative 5-year gap would total \$455.2 million, and the cumulative 10-year gap would reach nearly \$1.3 billion.



- In contrast, under a proposed City Council ordinance to adjust FPERS benefits for improved plan sustainability, Baltimore's Budget would be projected to remain in balance for FY2011 and FY2012, enabling further supplemental investments into FPERS to pay down unfunded liabilities. Nonetheless, by FY2013, continued growth in required contributions, in conjunction with overall budget trends, would still be projected to result in an \$8.2 million gap that would rise to \$44.0 million by FY2015.
- Accordingly, the proposed City Council ordinance does not advance more benefit adjustments than necessary to address the current funding crisis. In fact, the bill by itself is not projected to fully resolve the FPERS funding deficit within even a five-year timeframe. The City Council approach does, however, reduce the scale of the remaining problem to a more manageable level from a \$455.2 million five-year problem to a \$67.4 million five-year problem, and from \$1.3 billion to \$514.7 million over ten-years. In addition, the proposed City approach provides a 2-3-year window within which Baltimore can develop additional approaches such as a restructured plan for future hires that can improve FPERS affordability and sustainability going forward.
- Alternative approaches, such as benefit adjustments limited to restructuring the FPERS "variable benefit" only, were considered, but did not provide the same 2-3 year window of time for the City to develop plans for further, necessary action, and left the remaining deficit at a far greater level. Based on actuarial and budget projections, replacing the variable benefit without additional measures would result in a deficit of more than \$8 million as soon as FY2012 and a 5-year gap over \$100 million above that under the proposed City Council ordinance.
- The full package of benefit adjustments included in the proposed Council ordinance would maintain Baltimore police and firefighter pensions well within the mainstream for public safety employees regionally and beyond, and other police and firefighters in some comparable communities already receive similar or less generous benefits.
 - Replacing the "variable benefit" with a regular COLA would be more consistent with the common practices among other public employers nationally and regionally. At the same time, this approach would provide retirees with more predictable post-retirement increases better aligned with expected cost-of-living growth, and would enable establishment of an enhanced minimum benefit for long-term retirees.
 - Modifying age and years of service requirements to earn full benefits would be consistent with national and local trends. According to the National Conference of State Legislatures (NCSL), ten states increased the age and/or service eligibility requirements for a normal service retirement between 2005 and 2009. Among surrounding local governments, Baltimore County recently increased police officer retirement eligibility requirements from 20 years of service at any age to 25 years of service, or age 60 with a minimum of 10 years of service, and increased the requirements for firefighter retirements to even higher levels.
 - Increased employee contributions would also be consistent with broader trends, and foster more realistic labor-management partnership, as employee awareness regarding costs is increased. Overall, from 2005-2009, the NCSL reported that 12 state governments increased employee contributions, while regional governments including Baltimore County, Anne Arundel County, and Prince George's County have also increased public safety employee pension contributions in recent years.
 - Extending the period of time used for calculating average final compensation in the pension benefit formula (from 18 months to three years), would also be consistent with recent trends and existing practice elsewhere. As of July 1, 2010, Anne Arundel County, Howard County, Montgomery County, and Washington, DC pension calculations are among regional governments that base public safety pensions on 36-month calculations.

In sum, given Baltimore's General Fund and Motor Vehicle Fund deficits and constraints, a further \$61.9 million cost increase is untenable, and corrective action is necessary. Within the context of the City's particular funding crisis, the adjustments proposed for FPERS – all consistent with mainstream practices and trends – represent a reasonable approach toward improving the system's long-term sustainability.



PROJECT BACKGROUND and APPROACH

PFM

Project Background and Approach

Public Financial Management, Inc. (PFM) has been engaged to assist the City of Baltimore and its Fire and Police Employees' Retirement System (FPERS) in determining what changes to the pension system, if any, are reasonable and necessary to avoid severe, adverse impacts on the public welfare. This evaluation has been initiated within the context of rapidly escalating costs for the retirement system, and the most difficult fiscal environment for the City in recent memory.

To provide this evaluative support, PFM has reviewed extensive documentation regarding the City's fiscal context, current FPERS retiree benefits structure and funding considerations, and the recent experience of other public employers nationally and across the region. Such documentation includes, but is not limited to:

- National studies and information resources regarding public sector retirement benefits trends and
 funding challenges, such as The Pew Center on the States February 2010 report, "The trillion dollar
 gap; Underfunded state retirement systems and the roads to reform," the U.S. Government
 Accountability Office (GAO) July 2008 report, "State and Local Government Pension Plans; Current
 Structure and Funded Status," and the National Association of State Retirement Administrators
 October 2009, "Public Fund Survey Summary of Findings for FY 2008;"
- FPERS Comprehensive Annual Financial Report for June 30, 2009 and selected prior years,
 FPERS Actuarial Valuations for June 30, 2009 and selected prior years, and various actuarial analyses developed by Mercer and Aon Consulting regarding proposed plan modifications;
- The Report of the Greater Baltimore Committee Task Force on Sustainable Funding of Baltimore City's Fire and Police Pension System;
- City of Baltimore budget and financial data, including the Comprehensive Annual Financial Report for June 30, 2009, Fiscal 2011 Preliminary Budget Plan, Fiscal 2010 Summary of the Adopted Budget, and related budget and financial data provided by the City Department of Finance;
- Benefit program summaries from other national and regional public employers, with a particular focus on public safety employers in the immediate area and larger, urban centers along the east coast; and,
- City of Baltimore and comparative economic and demographic data from the State of Maryland, Department of Legislative Services 2010 "Overview of Maryland Local Governments, Finances and Demographic Information," as well as the U.S. Census Bureau and other federal data sources.

To supplement this review of documents and data, PFM team members also met with and interviewed senior management and/or analysts from the City of Baltimore Finance Department and FPERS, to seek clarification and verification of our analysis as it developed.

As part of our overall analysis, PFM also developed multi-year budget projections in conjunction with the City's Finance Department for Baltimore's primary operating funds – the General Fund and Motor Vehicle Funds – on both a five-year and ten-year basis. These projections have provided further context for evaluating the longer-term affordability and sustainability of the City's current retiree benefits structure.

Finally, we have evaluated a set of recommendations for FPERS benefit adjustments which, if acted upon, will improve the affordability and sustainability of the system, while seeking to minimize changes to the existing benefits provided to current FPERS members.

As with any such review, individual components of our analysis are reliant on the validity, accuracy, and comprehensiveness of the information supplied to us, and projections of future events and outcomes are inherently uncertain and subject to change. Accordingly, we have worked actively to develop a reliable basis and multiple sources for the major conclusions presented herein.



RETIREE BENEFIT FUNDING CRISIS



Retiree Benefit Funding Crisis

The City of Baltimore, MD faces a severe and growing retiree benefit funding and sustainability crisis associated with its Fire and Police Employees' Retirement System (FPERS). This challenge is not unique to the City, but rather is part of a broader retiree benefits funding crisis now facing the public sector nationally. At the same time, the actions required to address Baltimore's particular funding difficulties are shaped by the City's specific set of fiscal and economic constraints, history and experience of growth in long-term retiree benefit liabilities, and the existing benefits structure in relation to national and regional labor markets and trends.

Governmental Pension Funding Pressures

In February 2010, The Pew Center on the States released a study estimating a total retirement program (pension and OPEB) funding shortfall across state plans nationally to have been approximately \$1 trillion at the end of FY2008, even before taking into account the full effects of the recent market downturn¹ — and some other estimates are even higher.² The Pew study further estimated 135% growth in the aggregate 50-state annual required contribution for pension obligations from just 2000 to 2008 – from \$27 billion to \$64 billion in just eight years – and most public employers are expected to face further, large increases going forward.

With regard to other post-employment benefit (OPEB) liabilities primarily associated with retiree medical coverage, the shortfall is even greater in percentage terms – estimated by Pew to add a further \$43 billion to state annual required contributions for 2008. According to the Pew study, only two states had more than 50% of the assets needed to cover liabilities for OPEB costs, and only four states met actuarial required contributions for OPEB costs.

A similar story emerges in a recent study by the Center for State and Local Government Excellence.³ The study estimated that only 36% of all public pensions were funded at a level of 80% or greater as of 2009, and projected that the average state and local government pension funded ratio will likely decline to approximately 72% by 2013 and could drop even lower.

Further, current estimates of liabilities and funded ratios are typically based on allowable actuarial assumptions that involve a level of risk. For example, many pension plans continue to assume that plan assets will grow at 8.0% or more over long periods of time, and FPERS currently assumes 8.25% growth. Conversely, some market experts have recently presented scenarios that indicate the potential for long-term, future market returns to trend closer to 6.0%. This perspective of reduced earnings expectations stems from a variety of factors, including growing sovereign indebtedness in America and around the world, as well as higher taxes limiting opportunities for higher returns on capital investment. Should these lower returns come to pass, current pension and OPEB funding challenges will be exacerbated.

With long-term threats to sustainability in mind, the Governmental Accounting Standards Board (GASB) is also now exploring modifications to public pension liabilities reporting requirements, and is expected to issue recommendations in June 2010. Potential GASB recommendations under discussion include requirements that governments:

- Report the entire amount of any unfunded pension obligation on their balance sheets, which will raise future liabilities;
- Use a municipal-bond like discount rate for unfunded liabilities, which will raise future liabilities;
- Limit the use of generous amortization schedules for benefit increases, which would also increase annual budget impacts.

¹ The Trillion Dollar Gap: Underfunded state retirement systems and the roads to reform, Pew Center on the States, February 2010. The report is based on valuations as of June 30, 2008, prior to the beginning of market recovery, and reflecting asset "smoothing" methodologies that recognize market losses over a multi-year period.

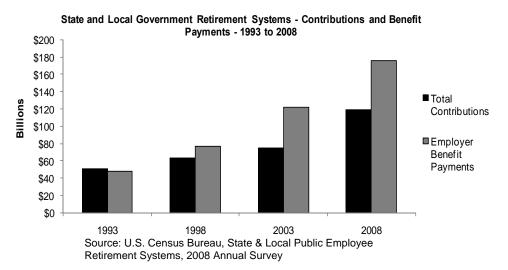
² Byrnes, N, & Preston, D. (2010, February 18). Pension gap of \$1 trillion is 'daunting' bill to U.S. states. *Bloomberg Businessweek*, Retrieved from http://www.businessweek.com/news/2010-02-18/pension-gap-of-1-trillion-is-daunting-bill-to-u-s-states.html ³ Issue Brief: The Funding of State and Local Pensions: 2009-2013, Center for State & Local Government Excellence, April 2010.

⁴ For example, Bill Gross from PIMCo and Bob Doll of BlackRock.



Again, however, even under current, less conservative actuarial and accounting practices, many governments nationally are already facing severe and growing retiree benefit funding challenges. Across the public sector, multiple factors are driving this growth in liabilities.

Demographics: Retirement of the "baby boomer" generation combined with increasing life expectancy is requiring more years of benefit payments to more retirees. From 1970 to 2006, U.S. life expectancy at birth increased by nearly seven years, and life expectancy at age 65 increased by more than three years (to 83.5 years).⁵ From 1993 to 2008, overall participation in state and local retirement systems increased by almost 44%. 6 As greater numbers of individuals participate in systems, total payments to retirees are also growing dramatically. With retirees living longer and increasing in number as the baby boomers leave the workforce, benefit payments by state and local retirement systems increased 263% from 1993 to 2008, while combined employer and employee contributions to replenish these systems increased by only 133%.



- **Healthcare inflation**: Many public employers also provide substantial retiree medical coverage. Compounding the challenges of simply covering more retirees for more post-employment years, the healthcare inflation associated with these benefits has dramatically outpaced general growth of the economy and public sector revenues. Overall, the cost of health insurance premiums nationally increased 131.0% from 1999 to 2009, while consumer prices rose only 28.3% across that same period. For many governments, such cost growth has been particularly acute for those younger retirees who are not yet Medicare-eligible (at which point the federal government subsidizes the cost of healthcare coverage), but who are old enough to generate significantly higher medical costs on average than the typical active employee. This dynamic is often greatest for local governments with large cohorts of public safety employees, who are generally retirement-eligible at relatively young ages.
- Market losses: During the 1990's, growth in the economy and in market performance yielded continually positive investment returns. The S&P 500 index surged 18.2% annualized in the 1990's, helping many pension funds to experience cyclically high funded ratios, and even surpluses. On the heels of the "good life" pension systems experienced in the 1990's, however, came the lost decade of 2000 through 2009. While the decade began with a growing market fueled by irrational exuberance toward technology stocks, a bear market took hold from 2000 through 2002 in the wake of the burst of the internet bubble. Although the market rebounded somewhat through the middle of the decade, the sub-prime mortgage and credit crisis caused a financial meltdown and the longest recession in the Post World War II era beginning in late 2007. Pension systems that were on the road to recovery from the 2000-2002 bear market were hit by

⁵ Source: Centers for Disease Control and Prevention, Health, United States (2009).

⁶ Source: US Census Bureau State & Local Public Retirement Systems (1993-2008)





the second worst market decline since the 1929 crash. As a result of the two bear markets, the 2000's were the worst decade in market history. The S&P Index lost 0.9% annualized for the entire ten year period, severely eroding pension fund assets.

• Unfunded benefit improvements: During the "bubble" period around 1998-2000, many retirement plan sponsors and participants nationally, then seeing pension funding levels that appeared high due to cyclical market performance, chose to enhance benefit levels and/or decrease pension contributions. Unsustainable and unfunded benefits increases often were awarded retroactively, resulting in chronic unfunded liabilities. This commonplace pension policy error resulted in hundreds of millions of dollars of avoidable (but now present) costs. At the same time, some actuaries increased plans' interest rate assumptions during this period – thereby reducing paper liabilities in the short-term, but increasing risk over the long-term. Although long-term investment performance over a period of thirty years is generally consistent with the actuarial assumptions for most plans, the experience of the past several years has heightened sensitivity to market risks and dependencies – and most analysts see little or no cause for optimism that future market performance will exceed current assumptions by a sufficient margin to eliminate today's unfunded liabilities.

As a result of these and other factors, retiree benefits occupy a position in the forefront of local and state budgets. In a 2009 National League of Cities survey of 379 cities across the United States, 75% of municipal finance officers cited pension costs as having a negative impact on their city's overall budget, and 77% reported this impact to have worsened since 2008. As jurisdictions continue to struggle with the lingering impact of recession-driven revenue declines and tepid recovery, pension and OPEB costs are now rising to unaffordable levels. These occurrences are not isolated, and, absent corrective action, will continue in the years ahead.

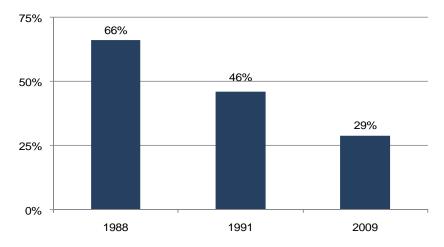
Private Sector Experience

Across the state and local government sector as of 2008, 88% of full-time workers participated in a traditional, defined benefit pension. In contrast, the percentage of private sector workers participating in traditional pension plans has fallen precipitously over the past quarter century. As recently as 1986, 76% of full-time U.S private industry workers participated in defined benefit pensions. By 2008, the total had declined to just 24%, with a majority of private industry workers instead participating in a defined contribution plan such as a 401(k).

Similarly, while a majority of state and local governments provide post-employment medical coverage, most private sector employers eliminated or reduced retiree medical benefits in the wake of rising healthcare inflation and corporate accounting changes introduced in 1990 (FAS 106). From 1988 to 1991, the percentage of large firms offering retiree benefits dropped from 66% to 46%. By 2009, only 29% of large firms still offered retiree health benefits – and among those that do, employee cost-sharing, use of caps, and other cost containment features have also typically increased.



% Large Firms (200+ Workers) Offering Retiree Health Benefits



Source: Kaiser Foundation and Health Research & Educational Health Benefits 2009 Annual Survey

This growing disconnect between typical public sector retirement benefits and the structures in place in the broader labor market impacts governmental employers across several dimensions. Not only is the competitive landscape now very different as governments seek to recruit and retain personnel within the general labor market, but the prevalence of defined contribution structures outside of government is also associated with an increasingly mobile workforce, many of whom may value portability of retirement benefits over the stability of defined benefit structures.

State and Local Fiscal Pressures

In April 2009, Moody's Investors Service for the first time assigned a negative outlook to the overall U.S. local government sector, and reaffirmed this assessment in February 2010. Absent corrective action, the current fiscal path is untenable for many states and local governments as operating budgets encounter flat or declining resources and rapidly growing demands.

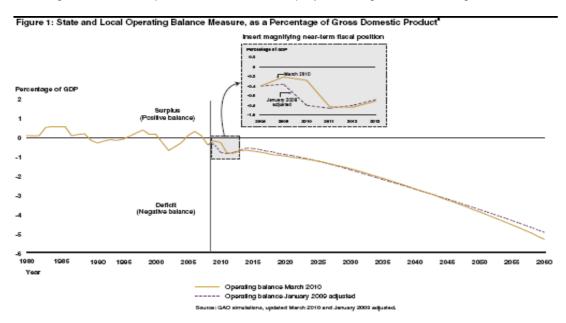
Overall, aggregate state and local tax revenues fell 5.7% from 2008 to 2009 in the wake of the recession that began in December 2007. Further, even if recent signs in early 2010 of national economic recovery are sustained, local government revenues are expected to lag – as property tax receipts are based on assessments from earlier periods, and as income-based taxes are dampened by slow employment growth post-recession. Just to maintain the current unemployment rate while accommodating new entrants to the labor force, the U.S. economy must generate approximately 120,000 net new jobs monthly on average. To reduce the unemployment rate by 1 percentage point, jobs will need to grow by 300,000 per month for a year, and to return to pre-recession levels of 5-6% unemployment nationally, job production would need to continue at an average rate of at least 300,000 monthly for about four years.

As a result of such revenue lag factors, following the last two recessions, recent analysis by the National League of Cities, ⁷ indicates that the low point in City revenues occurred approximately two years after the trough in the overall economy. As of the most recent April 2010 meeting of the Business Cycle Dating Committee of the National Bureau of Economic Research, no trough has yet been determined for the recession that began in December 2007. Although some economic indicators had turned upward, the Committee decided that the determination of the trough date would be premature, and that the risk of a "double dip" recession remains present. Even if the recession is ultimately determined to have ended during the second half of 2009, recent experience indicates that City revenues nationally will not see meaningful recovery until late in calendar 2011 (Baltimore FY2012), and will not regain pre-recession-levels for many years thereafter.

⁷ Brookings Metropolitan Policy Program and National League of Cities, "Fiscal Challenges Facing Cities: Implications for Recovery" (November 2009).



Further, these adverse and lingering recession impacts are over and above a preexisting structural fiscal challenge for state and local governments. According to simulation models developed by the US Governmental Accountability Office (GAO), absent policy changes, the overall state and local sector fiscal status is projected to experience steady fiscal decline through 2060. Fundamentally, these projections reflect revenue streams that barely keep pace with (and, again, typically lag) general economic performance, and that will not keep pace with healthcare and retirement expenditures representing a large share of governmental expenditures and that are projected to grow at much higher rates.



Despite a slight uptick in the GAO's March 2010 estimate of state and local government operating balances derived largely from the short-term influx of American Recovery and Reinvestment Act (ARRA) funds in the current fiscal year, longer-term forecasts are bleak unless corrective action is taken.

Consistent with these GAO findings, in a recent International City-County Management Association (ICMA) survey responded to by 2,214 cities and counties nationwide, nearly two-thirds of respondents reported that changes implemented to address the recent fiscal crisis "represent a new way of doing business and will continue beyond the current crisis." In essence, the recession has surfaced underlying and structural economic realities for governments that have created a "new normal" moving forward.

Further, many older urban centers, such as Baltimore, are encountering more difficult fiscal challenges than those of their neighboring suburban and exurban counties. With specific regard to retiree benefit funding, mature cities (particularly those that have experienced population decline), often have a much higher ratio of retirees to active employees. At the same time, greater legacy workforce costs in central cities must often compete for dollars with the need to support older infrastructure and relatively high service demands associated with regional amenities and higher concentrations of poverty – and must do so while drawing from weaker tax bases than faster growing suburbs and exurbs.

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⁸ U.S. Government Accountability Office, Report to Congress GAO-10-358, "State and Local Government Fiscal Pressures: March 2010 Update" (March 2010).



Retiree Benefit Funding Crisis

Absent benefit restructuring, governments will be left with draconian options in order to address growing retiree liabilities. To pay for retiree medical benefits, school districts will be forced to lay off active teachers and increase classroom sizes. To pay for pensions and OPEB, cities will have to shutter libraries, close recreation facilities, and reduce public safety protection. Even after recovery from the great recession, the "new normal" level of economic activity and governmental revenues across the country will often be insufficient to defray the escalating costs of public employees' retirement benefits.

"The old joke is that General Motors is just a health insurance company that makes cars on the side," San Luis Obispo County Supervisor Adam Hill said during a pension presentation at a recent board meeting.

- "My concern is that the county government is becoming a pension provider that provides government services on the side."
- "Pension promises threaten California cities, counties," Sacramento Bee, April 11, 2010. (emphasis added)



FPERS Overview



City of Baltimore police and firefighters receive pension benefits through the Fire and Police Employees' Retirement System (FPERS), one of three City retirement systems, while retiree medical other postemployment benefits (OPEB) are delivered directly by the City. As a result of factors including demographic trends and investment losses, liabilities for FPERS benefits have grown from \$2.6 billion in 2005 to nearly \$3.1 billion as of 2009, part of Citywide pension liability growth from \$4.0 billion to \$4.8 billion across this same period. Also as of 2009, citywide OPEB liabilities have reached nearly \$2.5 billion – resulting in total City retirement liabilities of \$7.3 billion, of which approximately \$3.2 billion is actuarially unfunded as of June 30, 2009.

In turn, required employer contributions from the City's General Fund and Motor Vehicle Fund have grown from \$59.5 million in FY2005 to \$114.2 million in FY2010 for all retirement plans – and from \$46.8 to \$86.6 million across this period for FPERS alone. At the same time, the City spent \$113.3 million for OPEB payments from the two Funds in FY2010 – such that total retiree expenditures grew to \$227.5 million representing 14.8% of the combined General Fund and Motor Vehicle Fund budget, up from 4.6% of combined Funds in 2005.

With an increasing number of plan beneficiaries and severe investment losses in recent years, such retirement contributions are continuing to consume an increasing share of overall City resources. Assuming no changes in benefit levels (and an actuarial assumption of 5.0% for post-retirement investment earnings as recommended by the plan actuary and trustees), the FPERS October 2009 Actuarial Valuation projects that the City's required payment will more than double from \$81.9 million in FY2010 (excluding any optional, supplemental contributions) to \$164.9 million in FY2011 – an increase of \$83 million (101.4%) during a period of weak revenue growth.

Pension Benefits Overview

Baltimore's Fire and Police Employees' Retirement System (FPERS) established in 1962 by City ordinance, is a traditional defined benefit plan covering all uniformed officers of the Baltimore City Fire and Police Departments. A brief overview of the chief FPERS retirement provisions is provided below.

Fire & Police Employees' Retirement System Overview					
Basic Plan Formula	2.5% of Average Final Compensation (AFC) multiplied by years of service (YOS) up to 20 years, plus 2% of AFC multiplied by YOS in excess of 20 years				
Maximum Service Counted	No maximum				
Averaging Period for calculating AFC	Highest 18 consecutive months				
When full benefits paid (Age/Service)	After 20 years of service at any age, or at age 50 with at least 10 years of service ¹⁰				
Post-Retirement Benefit Increases	After 2 years of payment, increase when fund return exceeds 7.5%				
Employee Contribution	6.0% of biweekly pay				

Post-retirement benefit adjustments provided under the System's plan are dependent upon investment performance. When investment performance exceeds 7.5% as calculated at the end of each fiscal year, uncapped "variable benefit" increases are provided, without a City guarantee.

A Deferred Retirement Option Plan (DROP) is available to members of the Plan with twenty (20) or more years of service. Under DROP, eligible members may suspend their earning of service credit for up to three years, and have three years of retirement earnings (based on DROP entry date) placed in an

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⁹ A small number of State employees at BWI airport also participate in the plan, dating back to former City operation of this facility.
¹⁰ Employees who were FPERS members prior to July 1, 2003 are not required to have a minimum of ten years of service for normal retirement.



account earning 5.5% interest¹¹ and paid out as a lump sum or an additional annuity at the option of the retiree.

FPERS also provides coverage for line-of-duty disability benefits immediately upon an employee's entry to the Plan. After five years of qualified service, an employee is eligible for non-duty-related disability benefits. Death benefits for line-of-duty deaths are also provided upon entry to the Plan, with non-duty-death related benefits conferred after the completion of one year of eligible service.

FPERS Actuarial Assumptions

FPERS uses an actuarial cost method known as projected unit credit, which projects pension costs from a given date to an assumed date of retirement or other separation from service. The System's chosen amortization method is the level dollar, open method. This method divides the amortized payments into equal amounts to be funded over a given number of years. A portion of the payment is principal and a portion of the payment is interest (similar to that of a residential mortgage payment).

The current value of FPERS assets is determined using the market value adjusted for investment surpluses and deficits relative to investment assumptions. In an attempt to limit the impact of market fluctuations, the System phases-in surplus and deficit amounts over a five-year period at 20% each year. Such "smoothing" spreads the market gains or losses over a longer duration of time to achieve a steadier rate of contribution, which may, in times of significant investment change, result in actuarial valuations of system assets at significant variance from current market valuations.

The System's current actuarially assumed investment return rate is 8.25% for an employee's preretirement period and 6.8% for an individual's post-retirement period. For post-retirement investments, the plan actuary and trustees have recommended shifting to a 5.0% earnings assumption if the variable benefit structure is maintained, based on the actuary's analysis of the impact of current variable benefits structure on net return. This change would require City legislative action.

Under modifications to the plan proposed under City Council ordinance, all assets of the plan would be combined and managed consistently following elimination of the current variable benefit post-retirement increase structure, with an 8.0% overall investment return assumption. FPERS' actuarially assumed projected salary increases are between 4.0% and 8.0% and include inflation at a rate of 3.0%.

	FPERS	FPERS Proposed	Public Fund Survey National Median
Investment return	8.25% pre-retirement, 6.8% post-retirement (5.0% post-retirement adopted by trustees, pending City approval)	8.0%	8.0%
Smoothing period	5 years	5 years	5 years
Inflation assumption	3.0%	3.0%	3.5%

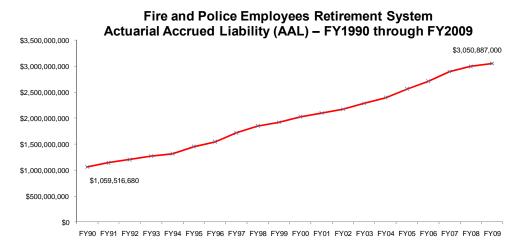
FPERS Liabilities

Given pressures on FPERS including a growing number of retirees, increasing average life spans for those retired, and higher final compensation levels for newer retirees, the System's Actuarial Accrued Liability (AAL) continues to grow. The AAL represents the present value of future pension plan benefits attributable to service rendered as of the date of Plan valuation. This liability does not include future benefits not yet earned, which are expected to be funded by future Normal Costs or employee contributions. Effectively, AAL is the actuarial estimate of what the City already owes to its retirees and current plan participants, even if the City were to shut down on the date of valuation.

¹¹ Members who became eligible for DROP prior to January 1, 2010 earn interest at a rate of 8.25%.



As seen in the following graph, the FPERS AAL has almost tripled since FY1990 from \$1.1 billion to \$3.1 billion.



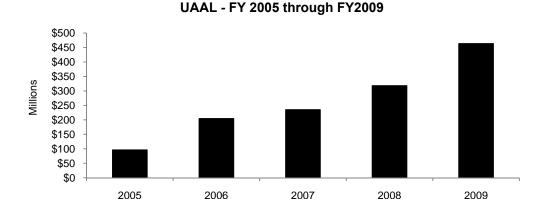
Source: Fire and Police Employee Retirement Systems CAFRs (1990-2009)

To address this growing liability, the System relies both on increased contributions and on investment gains from assets held. In FY2009, however, the total net market value of the Plan's assets decreased by over \$457 million as the capital markets turned sharply downward. At the conclusion of FY2009, FPERS held net assets valued at just under \$1.7 billion, down from over \$2.3 billion at the end of FY2007.

As a result, the FPERS Unfunded Actuarial Accrued Liability (UAAL) increased dramatically in 2009, after having already trended upward over much of the past decade, and is projected to continue to rise as actuarial smoothing fully recognizes asset losses. The UAAL represents the shortfall in the System's assets available to cover its liabilities, calculated using actuarial assumptions regarding future growth in both assets and liabilities.

At the conclusion of FY2009, the FPERS unfunded liability or UAAL was \$463.7 million – a nearly half a billion dollar shortfall in a system with under \$100 million in unfunded liability four years earlier.

Fire and Police Employees' Retirement System



Source: FY2009 Fire & Police Employees' Retirement System CAFR

Another perspective on this growing pension shortfall is the FPERS funded ratio. A pension system funded ratio represents the percentage of the total liability (AAL) projected to be covered by current assets. Within this analytical framework, a retirement system with a 100% funded ratio would have no actuarial unfunded liability – and, as of the June 30, 2000 valuation, the FPERS funded ratio had reached



102.4%. By June 30, 2009, however, the FPERS funded ratio had dropped to 84.8% on a (smoothed) actuarial basis – falling for each of the past five years.

Further, this 84.8% actuarial funded ratio significantly understates the actual condition of FPERS for two primary reasons:

- First, the FPERS actuarial valuation of assets used within this calculation is based on an assetsmoothing approach that recognizes market losses and gains over a five-year rolling average. While this is a common actuarial approach for minimizing funding volatility, it results in delayed recognition of severe market investment losses such as the negative 21.9% total rate of return on the FPERS managed investment portfolio in FY2009, such that only one-fifth of these losses are yet reflected in the actuarial value of assets.
- Second, FPERS continues to carry aggregate negative balances from three, now expired funds within the system - the Employer Reserve Fund (ERF), Benefit Improvement Fund (BIF), and Minimum Stabilization Fund (MSF). At the time these funds closed in 2005, their combined accumulated net deficit was \$412.8 million. In turn, this deficit is being amortized over a ten-year period, such that a significant negative balance remains to be reflected in the actuarial valuation of assets - \$198.9 million as of June 30, 2009.

Under these actuarial practices, the actuarial FPERS funded ratio dropped only modestly from FY2008 to FY2009, declining from 89.4% to the 84.8% level. Using actual market assets, however, the FPERS funded ratio fell more sharply, and to a level reflecting far greater distress - from 74.2% to 58.2% as of June 30, 2009.

Demographic Pressures

As of June 30, 2009, FPERS had significantly fewer active employees contributing into its pension plans (4,690) than recipients of benefits (5,929) – a ratio of 0.79 to 1.0. In contrast, the median among public pension systems nationally is to have 2.02 active members for every 1 annuitant¹².

Baltimore FPERS	2005	2006	2007	2008	2009	Increase / (Decrease) 2005-2009
Active Participants	4,690	4,627	4,578	4,615	4,690	0
Retirees	5,578	5,716	5,828	5,881	5,929	351
Ratio of Actives to Annuitant	0.84	0.81	0.79	0.78	0.79	

FY1998 was the last year when FPERS' total active to recipient ratio was greater than 1.0 (indicating more active employees than retirees and beneficiaries). Since FY 1998, the ratio has stayed below 1.0, with continued decline to the FY2009 level of 0.79. With the tipping point reached in FY1998, there is also now a significant imbalance between contributions into the system and withdrawals from it. As shown in the table below, combined employer and employee contributions to the pension fund are now well below the payments to retirees and beneficiaries. While such a relationship is not unusual for a mature system, this dynamic heightens exposure to market risk when the investments relied upon to make up the difference underperform the plan's actuarial assumptions.

¹²Public Fund Survey of Findings FY08 (October 2009).



Baltimore FPERS (in thousands)	2005	2006	2007	2008	2009
Contributions from Active Members	\$15,360	\$15,158	\$15,439	\$16,547	\$17,661
Employer Contributions ¹³	\$48,667	\$49,662	\$60,129	\$72,688	\$69,513
Payments for Retirement Benefits and DROP	\$158,824	\$161,899	\$169,312	\$180,302	\$184,178

The above trends highlight the challenges for older cities in addressing rising pension and OPEB costs, as legacy costs are generally greater than many neighboring jurisdictions. The age of a jurisdiction has a dramatic impact on the liability structure and year-to-year costs of a retirement system. As an example, a new community will have no retirees and no pension payments for some years to come, thus the employer and the employee base is providing funding for only its own liability. A city like Baltimore, dating back centuries, will often have more retirees than employees. As a result, the employer and the current employees are not only providing funding for their own retirement, but must also cover any unfunded liabilities attributable to past workers already retired.

FPERS Employer Contribution Requirements

Each year, FPERS actuaries calculate the total amount required to be contributed into the System to provide for plan stability. From a budgeting perspective, there is effectively a two-year lag in these payments relative to the year of valuation. For example, the actuarial analysis for FPERS as of June 30, 2009 was completed in October 2009 – which is actually FY2010, on a City fiscal year basis (July 1 to June 30). In turn, because the Budget for that fiscal year had already been adopted by October, the FPERS valuation as of June 30, 2009 will not be used for determining the City's employer contribution until FY2011, which begins July 1, 2010.

In broad terms, total contribution requirements are driven largely by two separate components – Normal Cost and Amortization of Unfunded Actuarial Liability – and the City contributes an amount sufficient to cover both of these components net of employee contributions:

- Normal cost the amount actuarially determined as necessary to be set aside to fund the future benefits being earned in that current period;
- Amortization of Unfunded Actuarial Liability the amount required to pay down the liability for benefits in past periods for which there are insufficient assets set aside (e.g., because of investment losses); in FPERS, such unfunded liabilities are amortized over 20 years.

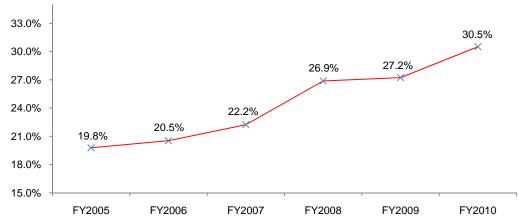
As of the end of FY2009, normal costs remained generally consistent with the levels at the start of the decade. Because of the growth in the unfunded liability, however, the City's contribution requirement for the Amortization of Unfunded Actuarial Liability increased from 3.2% in FY2005 to 11.25% of payroll for FY2010. Accordingly, overall City actuarially required contributions as reported in the FPERS annual Actuarial Valuation Reports¹⁴ have grown from 19.8% of payroll in FY2005 to 30.5% of payroll by FY2010.

 ¹³ Employer contributions are primarily made by the City of Baltimore, with the State of Maryland contributing for the remaining, small cohort of former State employees covered by the system. In FY2009, for example, the City contributed \$68,928,188 of the total \$69,513,236 employer payment, while the State contributed just \$585,048.
 14 In some of these years, the City made additional contributions above the FPERS actuarial annual required contribution (ARC) in

¹⁴ In some of these years, the City made additional contributions above the FPERS actuarial annual required contribution (ARC) in order to accelerate pay-down of certain unfunded liabilities. In addition, final payroll numbers vary somewhat from assumptions at the time the Actuarial Valuation Reports are prepared. Accordingly, final employer contributions as a percentage of covered payroll as reported in the FPERS Comprehensive Annual Financial Reports (CAFRs) may not always match the Actuarial Valuation Report figures precisely. In the chart shown, Actuarial Valuation Report percentages are used rather than CAFR figures as an indication of trends in required funding pressures without supplemental employer contributions.



City Actuarially Required Contributions to FPERS Based on Actuarial Valuation Reports (% of Covered Payroll) FY05 through FY10



Source: Fire and Police Employees' Retirement Systems AVRs (2003-2009)

In dollars, the City's required contribution to FPERS – \$48.3 million in 2005 – grew to \$81.9 million in FY2010 (excluding optional, supplemental payments).

Further, as the underlying FPERS liability continues to grow, City retirement contributions are projected to skyrocket if no corrective action is taken. According to recent estimates by Aon Consulting, using the actuarial assumption of 5.0% for post-retirement investment earnings recommended by the plan actuary and trustees, the FPERS employer¹⁵ payment without any supplemental contributions would rise to \$166 million in FY2011. On a percentage of payroll basis with similar assumptions, the FPERS October 2009 Actuarial Valuation Report estimates that the City's contribution in FY2011 would be <u>58.85%</u>.

Over the next five years thereafter, Aon projects that the City's FPERS contribution would continue to increase rapidly as FY2008 and FY2009 market losses and the remaining negative ERF and BIF balances are recognized. By FY2016, Aon estimates a total FPERS employer contribution of \$227 million.

The following chart developed by Aon presents the projected employer contributions to FPERS based on the following four (4) scenarios:

- No benefit changes, and continued use of an 8.25% long-term investment return assumption, and use of the 5.0% post-retirement investment return assumption as recommended by the plan actuary and trustees;
- No benefit changes, and continued use of an 8.25% long-term investment return assumption, and a 6.8% post-retirement investment return assumption;
- Replacement of the variable benefit by a fixed COLA structure, with use of an 8.0% investment return assumption for all plan assets and no other benefit changes;
- Adoption of multiple benefit adjustments (replacement of the variable benefit by a fixed COLA structure with enhanced minimum benefits for long-time retirees, modified age and service eligibility requirements, 36-month calculation of average final compensation, phased-in increases to employee contributions), commitment to a minimum payment consistent with the Board of

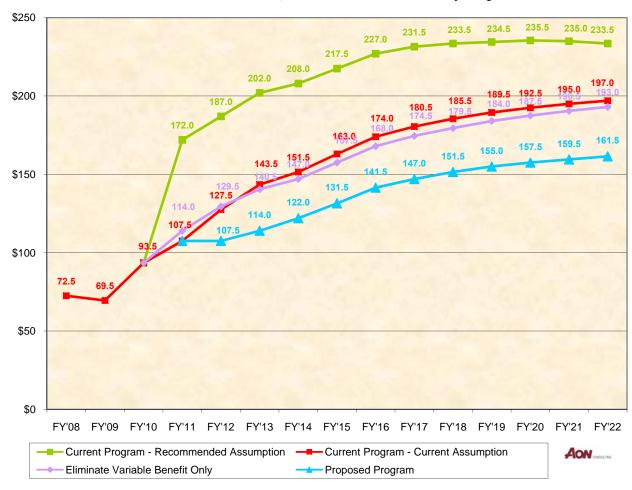
¹⁵ Aon's projected employer contributions are calculated for the entire system, inclusive of State contributions. In FY2011, the City All Funds share of the total \$101.8 million contribution included in Board of Estimates Budget was 99.2% (95.9% from the combined General and Motor Vehicle Funds). The State share was 0.8%.



Estimates proposed FY2011 Budget, and use of an 8.0% investment return assumption for all plan assets.

In all scenarios, the City also continues to make supplemental contributions to pay down the aggregate liabilities from the BIF, ERF, and MSF.

BC FPERS Projected Employer Contributions (\$ millions) Assumes that actuarially required contribution is made each year plus an additional \$5.7 million until the BIF, ERF & MSF balance has been fully recognized



As summarized in the following table, maintaining the current program with the trustees' recommended actuarial assumptions creates an immediate \$64.5 million increase in the employer contribution relative to the Board of Estimates FY2011 Budget level. Over multi-year horizons, all three options other than the proposed, new program are projected to generate significant incremental costs – ranging from \$106 million to \$404 million more than the proposed program over five years – and from \$247 million to \$813.5 million higher over ten years.

¹⁶ Impact on the combined General Fund and Motor Vehicle Fund referenced elsewhere in this report will be lower, as a small percentage of FPERS contributions are made by other grant supported Funds and the State of Maryland.



	FY'11	FY'12	FY'13	FY'14	FY'15	FY2011- 2015 (5 Yr) Cumulative	FY2011- 2020 (10 Yr) Cumulative
Current Program - Recommended Assumption	172.0	187.0	202.0	208.0	217.5	986.5	2,148.5
Current Program - Current Assumption	107.5	127.5	143.5	151.5	163.0	693.0	1,615.0
Eliminate Variable Benefit Only	114.0	129.5	140.5	147.0	157.5	688.5	1,582.0
Proposed Program	107.5	107.5	114.0	122.0	131.5	582.5	1,335.0
Cost Difference from Proposed Program							
Current Program - Recommended Assumption	-64.5	-79.5	-88.0	-86.0	-86.0	-404.0	-813.5
Current Program - Current Assumption	0.0	-20.0	-29.5	-29.5	-31.5	-110.5	-280.0
Eliminate Variable Benefit Only	-6.5	-22.0	-26.5	-25.0	-26.0	-106.0	-247.0



AFFORDABILITY AND SUSTAINABILITY



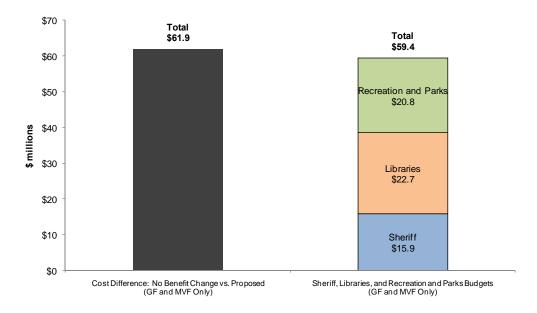
Affordability and Sustainability

While the City's FPERS contributions have increased steadily in recent years, FY2010 combined revenue in the General Fund and Motor Vehicle Fund is forecast to fall \$90.9 from FY2010 budgeted levels and \$106.9 million from actual FY2009 receipts. Because of this revenue downturn and associated budgetary pressures, the City has been required both to draw down on its reserves and to cut many core areas of City spending – including the implementation of employee furloughs, rotating fire company closures, deferred infrastructure maintenance, and the closing of recreation centers.

Looking to FY2011, the City has budgeted a further FPERS contribution increase to \$103.4 million across the two funds (\$106.7 million All Funds), while revenues are only expected to grow by 2.6% over projected FY2010 year-end results. Overall, the FY2011 Budget proposed by the Board of Estimates includes even deeper service cuts than imposed in FY2010, including the elimination of nearly 1,000 positions (requiring both general government and public safety layoffs), further public safety service reductions, and the closure of a majority of City recreation centers. Because of the severe impact of these proposed cuts on the public welfare, City Council is now considering revenue options for FY2011 that would partially mitigate the need for such cuts, but that would also add to Baltimore's high tax burden and competitiveness difficulties during a period of high unemployment and economic weakness.

Further, the City's budgeted FPERS contribution for FY2011 – while significantly higher than in any prior year – already assumes some adjustments to underlying benefits. Absent any corrective action, the City's FPERS payment is projected to rise to \$165.2 million in FY2011 (General and Motor Vehicle Fund only) – opening up an additional \$61.9 million budget hole beyond the difficult cuts highlighted above. To put the scale of this budget gap in perspective, \$61.9 million is greater than the \$59.4 million FY2011 General Fund and Motor Vehicle Fund budgets¹⁸ for the Sheriff's Office, City Libraries, and Parks and Recreation Department *combined*.

Incremental Cost of the City FPRS Contribution If No Corrective Action vs. Cost of Sheriff's Office, City Libraries, and the Recreation and Parks Department (FY2011 General and Motor Vehicle Fund Budget)



¹⁷ City of Baltimore Department of Finance, Projections as of March 31, 2010.

¹⁸ Departmental budgets as shown do not include allocation for certain centrally budgeted costs, including pension contributions.

Affordability and Sustainability

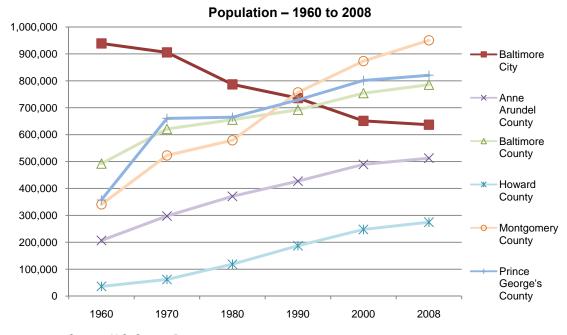
In this section of the report, the constraints on the City's capacity to afford this potential \$61.9 million shortfall are evaluated, looking both at major revenues and expenditures. In addition, five-year and ten-year budget forecasts have been developed to help assess the City's longer-term ability to afford and sustain growing pension contributions going forward.

City Competitiveness

Budget balancing options can sometimes be constrained by mandates to provide certain services, and by legal caps and limitations on revenue rate increases. At the same time, in practical application, budgets can also be delimited by the realities of what fiscal options are tenable. A community simply cannot remain viable if its core municipal services and quality of life erode too severely, nor if tax rates become so high as to cannibalize its underlying tax and economic base. Each of these negative paths holds the potential to drive out those businesses and residents with the ability to leave, and to discourage new investment by those who would otherwise add to the community and its vitality.

Like many older, urban hubs, the City of Baltimore already faces difficult challenges to remain economically competitive. While the City has many positive amenities and strengths upon which to build, Baltimore's economic trends and current conditions provide a context for municipal budget-makers that severely limits flexibility to simply tax or cut the City's way out of any current financial problems.

From 1960 to 2008, the City lost an estimated 300,000 residents (32.2%). Over the same period, five of the larger neighboring counties (Baltimore, Anne Arundel, Howard, Prince George's, and Montgomery) grew by an average of 133.3%.



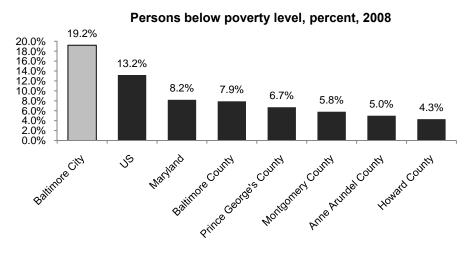
Source: U.S. Census Bureau

Such population trends are an indicator of the competitiveness of a community, and the direction of its underlying economic resources from which to draw. In the wake of these historical trends, the City now has greater rates of poverty, less wealth, and higher crime than other larger, Maryland counties. In turn, the City has both higher demands for service and a smaller per-capita tax base. To generate enough revenue to meet those demands, the City must tax its residents



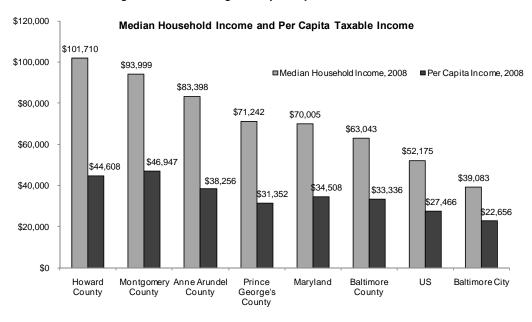
and businesses at higher rates than the other counties, further deteriorating its competitive position.

As of 2008, 19.2% of the City's residents were at or below the poverty level, well above the rest of the State and the United State as a whole – and more than double the rate for any of the other large, Maryland counties.



Source: U.S. Census Bureau

Similarly, Baltimore median household and per capita income levels are low in comparison to state and national averages, and other large, Maryland jurisdictions.



Source: U.S Census Bureau

As a positive note, the City's rate of population decline appears to have slowed over much of the most recent decade – but at negative 2.2% from 2000-2008, Baltimore was still the only large regional government among those listed above that did not experience growth. Further, these most recent 2008 population estimates do not yet reflect the ongoing impacts of the recession that began in December 2007, and the economic change taking place in its aftermath. Given that



Affordability and Sustainability

Baltimore's tax structure and service mix was in a weaker position than its neighbors at the start of the downturn, the City's resources with which to weather the storm are much more limited. From a financial perspective, these underlying community dynamics – declining population, low wealth, and a high rate of poverty (along with other economic challenges, including aging urban infrastructure) - combine to leave the City of Baltimore with a limited ability to generate increased revenue, and greater demands for service and capital investment.

Revenues

Combined General Fund and Motor Vehicle Fund revenue grew each year from FY2003 through FY2008 before decreasing by approximately \$124 million from FY2008 to FY2010. In FY2010 alone, the severity of the economic downturn and related cuts in State Highway User Revenue are projected to result in a \$90.9 million overall revenue decline from the original FY2010 Budget. In FY2011, total combined revenue is projected to fall 3.4% from the FY2010 Budget, increasing only 2.6% from projected FY2010 actual results.

\$1,800 \$1,571.4 \$1,554.4 \$1,527.0 \$1,600 \$1,485,4 \$1,482.3 \$1,447.4 \$245.8 \$231.1 \$1,328.2 \$248.3 \$152.8 \$1,400 \$148.4 \$241.6 \$222.2 \$1,200 Revenue (\$ millions) \$1,000 ■ Motor Vehicle Fund \$800 ■ General Fund \$1,278.7 **\$1,325.6 \$1,323.3 \$1,299.0** \$1,240.7 \$600 \$1,106.0 \$400 \$200 \$0

General Fund and Motor Vehicle Fund Revenue – FY2005 through FY2011 Budget

More than three-quarters of total the City revenues (FY2010 Projected Actual) derive from the property tax, income tax, and state aid and highway user revenue.

FY2008

FY2009

FY2010P

FY2011B

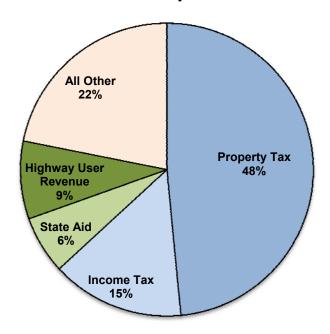
FY2005

FY2006

FY2007



Combined General Fund and Motor Vehicle Fund Revenue Sources FY2010 Projected



Among these major sources, as further detailed for each in the section to follow, opportunities for significant growth are limited.

- Property taxes, the City's largest source of revenues, have yet to see the impact of the
 housing market decline, as the State's triennial assessment process creates a lag
 between changes in real estate values and impact on the Budget. Market declines will
 begin to incrementally affect property tax revenues starting in FY2011, and will dampen
 growth in this key revenue source for many years thereafter.
- Income tax revenues declined in FY2009 and are projected to fall further in FY2010, for a
 total decrease of \$49.7 million from FY2008 levels. Even if economic recovery from the
 recent recession is sustained, high unemployment is projected to continue for years to
 come, and to moderate income tax receipts.
- State Highway User Revenue has fallen even more precipitously, dropping from a peak
 of \$227.3 million in FY2007 to a projected \$127.8 million in FY2010, while other state aid
 fell from \$99.8 million to a projected \$95.1 million across this same period. With
 continued State fiscal difficulties, as well as longer-term trends of declining auto sales
 and fuel consumption (which drive much of the base for highway user revenues), future
 growth is projected to be limited.

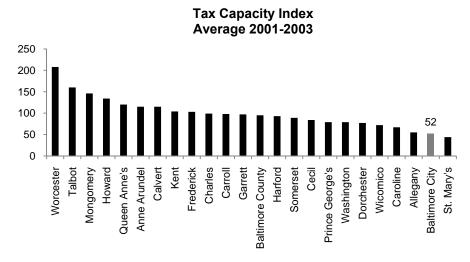
More generally, opportunities to increase revenue are further constrained by the City of Baltimore's low tax capacity and existing, high level of tax effort.

Tax capacity is the potential to raise revenue from a particular group; essentially, the taxpayers' ability to pay. The State of Maryland ranks each county based on its ability to generate revenue – its tax capacity – using a score of 100 as the statewide index. Tax capacity is calculated by determining the per capita yield of eight different taxes if the tax rate of each were equal to the statewide average. Beach "hypothetical yield" is combined into an aggregate per capita yield

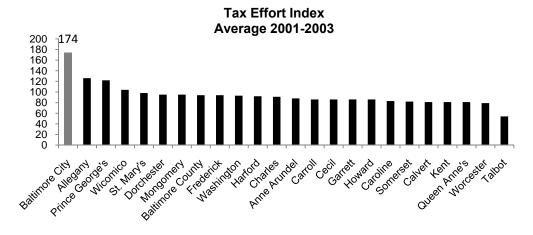
¹⁹ Taxes included in the calculation are: property; income; utilities sales; hotel/motel sales; transfer; recordation; admissions; and sewer, waste, and water fees.



which is then compared with the aggregate state per capita yield. A score over 100 indicates that the county has a higher tax capacity than the State average, and a score under 100 means that the tax capacity is lower than the State average. Baltimore's tax capacity score of 52 indicates that if the City's aggregate tax rates were equal to the State average, the combined yields of the eight taxes would reach barely half of the Maryland average.²⁰



A second key measure reported by the State is tax effort, which calculates the extent to which the local tax base is actually burdened. A jurisdiction with a high tax effort tends to maximize the extent to which it obtains tax revenue from a sometimes limited tax base, while a jurisdiction with a low tax effort taxes its base more lightly. Again, the State evaluates each county using a scale with 100 as the statewide average tax effort. The tax effort calculation compares actual tax yields to the hypothetical yields generated when calculating tax capacity. A tax effort index score of over 100 means that the County (or Baltimore City) has to levy higher-than-average tax rates to generate the statewide average yield. As of the most recent period for which State data is available, the City's Tax Effort Index was 174 – far greater than that of any county in Maryland.

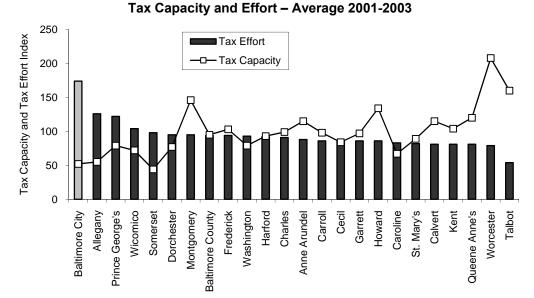


Viewed in tandem, the City of Baltimore is exacting the greatest tax effort from one of the weakest tax bases in the state.

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²⁰ State of Maryland, Department of Legislative Services, Overview of Maryland Local Governments (2009). Data cited from 2001-2003.





Source: Maryland Department of Legislative Services Overview of Local Governments 2009

In any local government, revenue potential is limited by the mobility of residents and firms. In communities with comparatively high tax rates, academic research has strongly indicated that tax increases will not only reduce the number of local jobs and erode the tax base, but also that cities can reach the peak of their revenue hills such that further rate increases will generate little or even no incremental revenues.²¹ Given Baltimore's relative tax capacity and effort position within its region, such equilibrium effects of taxation are real and limiting concerns.

The following sections address specific constraints on each of the largest City revenue sources in further detail.

Property Tax

The City's largest source of revenue is the property tax. In FY2011, property tax revenue is projected to total \$765.7 million, or 57.5% of the City's total General Fund revenue, and 48% of combined General Fund and Motor Vehicle Fund receipts. Property tax revenue is one of Baltimore's only major sources of revenue experiencing continued positive growth. From FY2010 to FY2011, growth is projected to be 6.4%, even though underlying real estate values have declined.

The primary reason for this counterintuitive result is that Maryland's triennial assessment period delays the impact of both property value decline and recovery on property tax receipts. Under this system, the City is divided into three assessment groups and property in each group is assessed every three years (one group per year). If a property's value is determined to have increased over the three-year period since the prior assessment, the increase in value is "phased in" in equal annual increments.

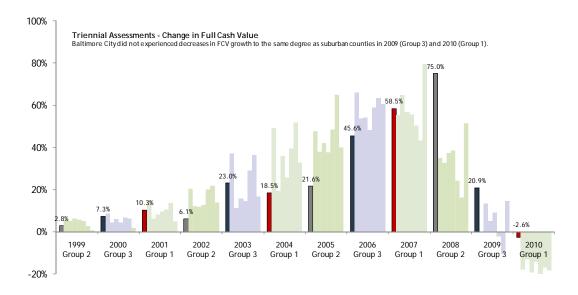
²¹ See, for example, Andrew Haughwot, Robert Inman, Steven Craig, and Thomas Luce, "Local Revenue Hills: Evidence from Four U.S. Cities", Penn Institute for Economic Research Working paper 03-012, Department of Economics, University of Pennsylvania (March 2003).



Assessment Groups - Assessment Ye	ars and Years of Impact
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Assessment Group	Last Assessment	Last Assessment Growth	Next Assessment	Impact:
Group 1	2010	-2.6% from 2007 to 2010	2013	FY2011-FY2013
Group 2	2008	75.0% from 2005 to 2008	2011	FY2012-FY2014
Group 3	2009	20.9% from 2006 to 2009	2012	FY2013-FY2015

Assessment Group 1, reassessed in 2010, is the first group in recent years to experience negative growth – falling 2.6%. This decrease will begin to impact revenue in FY11, but the City's other two assessment groups will continue to "phase in" growth from the last reassessment until they are reassessed again in 2011 and 2012. As Groups 2 and 3 are next assessed, however, future growth in net property tax revenue is expected to slow to rates of 4.0% in FY2012 and 2.0% in FY2013.



Along with the lag effects of the triennial assessment system, property tax revenues are also impacted by the Homestead Tax Credit. Under this program, annual property tax increases for individual residential property owners are capped at 4% per year. City policymakers have viewed the Homestead Tax Credit program as an important protection for homeowners to maintain the affordability of their properties, avoid foreclosure, and remain in their communities. Because annual growth in assessed value during much of the past decade outpaced this residential homestead cap, there is still a gap for many homeowners between taxable assessed value and full assessed value (even with subsequent market decline). As a result, the City will be somewhat buffered from the collapse of the real estate market, as tax bills are still "catching up" to underlying values.

Longer-term, however, the downturn in the underlying property tax base – as reflected in the home sales price trends in the following chart – will limit revenue growth for years to come. As of the most recent available April 2010 data for Baltimore median homes sales, prices were down 15% from April 2007 and down 25% from the July 2008 market peak. While such monthly data is subject to sample size and seasonal fluctuations, the overall trend reflects significant decline.

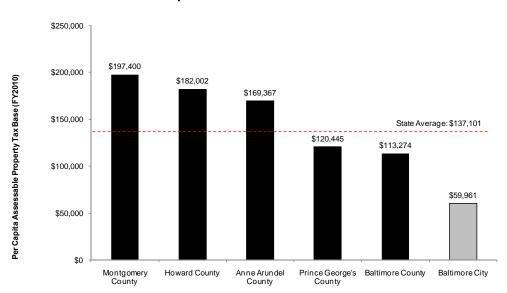




Source: Metropolitan Regional Information Systems

Also constraining the opportunity for Baltimore to increase property tax receipts, the City already has a very low assessable base in conjunction with property tax rates already well above regional norms. As a result, any further property tax rate increases would erode the City's competitiveness as a location for investment, while yielding less revenue than comparable rate increases elsewhere.

As of FY2010, the City's per capita assessable base was approximately \$60,000, less than half of the statewide average.



Per Capita Assessable Base - FY2010

Source: Maryland Department of Legislative Services, Overview of Maryland Local Governments, 2009



With such a comparatively weak tax base, the City must impose a property tax rate now more than twice the statewide county average to yield comparable per capita revenues.

Property Tax Rates - FY2010

Per \$100 in Assessed Value \$2.500 \$2 268 \$2.000 Property Tax Rates - FY2010 (\$ per \$100 of Taxable Assessed Value) \$1.500 Average (not including Baltimore City) \$0.940 \$1.000 \$0.500 \$0.000 Prince George's Kent Cecil Wicomico Queen Anne's Harford Charles Washington Somerset Dorchester Anne Arundel Caroline St. Mary's Worcester Baltimore County Frederick Garrett Allegany Mongomery Calvert Baltimore City Howard

Source: Maryland Department of Legislative Services Overview of Local Governments 2009

Even when local municipal property tax rates are included, the City's property tax rate is significantly higher than the five neighboring suburban counties viewed in conjunction with their largest municipalities. At the same time, the City's net revenue yield for each one cent per \$100 in assessed value (after credits, abatements, and adjustments for collection rates) is approximately one-fifth that of Montgomery County, and even below that of Howard County, with a population less than half the size of the City's.

County and Municipal Property Tax Rates, Countywide Per Capita Assessable Base, and Countywide Gross One-Cent Yield - FY 2010

Baltimore City and the Largest Municipality in Each Suburban Maryland Counties

County	Real Property Tax Rate	Per Capita Property Tax Assessable Base	FY2010 Countywide Gross One-Cent Yield
Baltimore City	2.268	\$59,961	\$3,615,200
Baltimore County	1.100	\$113,274	\$8,588,900
Montgomery County (Rockville)	1.118	\$197,400	\$18,356,300
Prince George's County (Bowie)	1.552	\$120,445	\$9,582,800
Anne Arundel County (Annapolis)	1.053	\$169,367	\$8,410,000
Howard County	1.150	\$182,002	\$4,852,900

Source: Maryland Department of Legislative Services, Overview of Local Government, 2010

In sum, while property taxes provide a measure of stability within Baltimore's current and projected budgets, revenue growth is forecast to slow going forward – and there is no viable

opportunity to increase this largest City revenue source to a degree sufficient to keep pace with or fund projected FPERS increases.

Income Tax

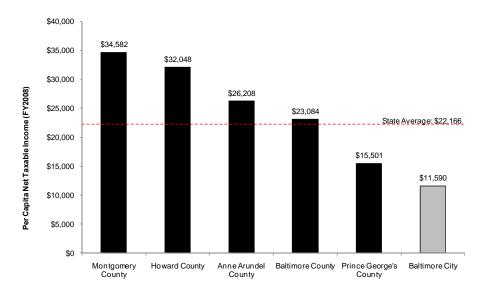
The income tax is the City's second-largest source of revenue, totaling a projected \$237.3 million in FY2011, or 15% of combined General Fund and Motor Vehicle Fund receipts. While annual growth was positive from FY2005 to FY2008, reaching a peak of \$267.6 million, income tax revenue has decreased since. In evaluating recent income tax trends, it is important to account for a State overpayment of \$14.6 million in FY2009 due to tax law changes, subsequently adjusted downward in FY2010, as shown in the chart below.

Income Tax Revenue FY2008 – FY2010 Projected Adjusted for FY2009 Overpayment

	FY2008	FY2009	FY2010P
Income Tax Collected	\$267.6	\$262.9	\$217.9
Overpayment Adjustment		-\$14.6	\$14.6
Income Tax, Net of FY2009 Overpayment Distribution	\$267.6	\$248.3	\$232.5
Change Over Prior Year (Adjusted Basis)	9.8%	-7.2%	-6.4%

Much as with property taxes, the City's income tax capacity is constrained by a comparatively weak base. According to the most recent available State data, Baltimore's per capita net taxable income of \$11,590 was barely half the statewide average.

Per Capita Net Taxable Income - TY2009



Source: Maryland Department of Legislative Services, Overview of Maryland Local Governments, 2009

For FY2011, income tax revenue is projected to grow 2.1%, assuming that the economy begins to experience growth at a modest pace. Even if recent signs of national economic recovery are sustained, however, income tax growth will be dampened by continued high unemployment as new job creation typically lags the end of a recession.



State Highway User Revenue (Motor Vehicle Fund) and State Aid (General Fund)

Within the Motor Vehicle Fund, the City's share of State Highway User Revenue fell 40.4% from FY2008 to FY2010 – from \$214.4 million to a projected \$127.8 million.

\$250 \$227.3 \$223.2 State Highway User Revenue (\$ millions) \$214.4 \$200.6 \$200 \$188.7 \$150 \$127.8 \$124.8 \$100 \$50 \$0 FY2007 FY2005 FY2006 FY2008 FY2009 FY2010P FY2011B

State Highway User Revenue - FY2005 through FY2011 (projected)

State Highway User Revenue is generated from a variety of State-determined motor vehicle-related revenue sources, including fuel taxes, vehicle registration fees, and a portion of vehicle titling taxes, as well as a portion of State corporate income tax revenue. The State dedicates these funds to the Gasoline and Motor Vehicle Revenue Account, and prior to FY2009, 30% of the State's receipts were distributed to the Counties and Baltimore City. The City received 11.5% of the total, and the remaining 18.5% was distributed to counties and municipalities by formula.

Due to State budget deficits, in FY2010 the State began to transfer a portion of Highway User Revenue to the State General Fund, and the total local share (to counties, municipalities, and Baltimore City) was reduced from 28.5% to 11.5%. The City's share was reduced from to 11.5% of total Highway User Revenue to 8.6%. For FY2011, the City's share is further reduced to 7.9%, and is reduced indefinitely thereafter to 7.5% pending further legislation.

In addition to the impact of the formula changes, the economic downturn on auto sales and usage, and longer-term trends toward use of more fuel-efficient (and alternative fuel) vehicles have also eroded this revenue source. Given ongoing and structural State of Maryland fiscal difficulties, as well as the potential for further decreases in fuel consumption, limited growth is projected for State Highway User Revenue going forward.

In the General Fund, the primary source of State Aid is the Income Tax Disparity Grant at a projected \$79.1 million in FY2011. Other significant assistance includes State Aid for Local Health Operations (\$6.7 million in FY2011) and State Aid for Library Services (\$6.5 million in FY2011). From FY2008 to FY2010 (projected), net State Aid was reduced by \$4.7 million, largely as a result of a \$5.9 million reduction in State support for local health operations in FY2010. Further net reductions of 2.9% are anticipated in FY2011. Longer-term, no significant increases in general State Aid are assumed.

Other Revenues

The City's remaining revenue sources are projected to generate less than one-quarter of total General Fund and Motor Vehicle Fund revenues in FY2011. The following are among the larger other sources:

- Recordation and Transfer taxes are imposed with the transfer of real property.²² At the peak of the real estate market bubble, these combined taxes reached \$116.7 million in FY2006 and \$105.4 million in FY2007. With lower prices and sales activity since that time, however, combined receipts have declined steadily to a projected total of just \$43.9 million for FY2010. While some growth is currently projected after FY2011, assuming a moderate economic recovery, a return to the "bubble" peak levels of the prior decade is not anticipated.
- Energy taxes are imposed on consumption of electricity, natural gas, fuel oil, liquid petroleum gas, and steam. Baltimore City ordinance ties City energy tax rates to the annual percent change in the Baltimore-Washington Consumer Price Index (CPI). Since FY2006, revenue has been relatively flat, ranging from \$28.6 million in FY2007 to \$30.4 million in FY2009. Energy Tax revenue is projected to decrease slightly to \$30.1 million in FY2010, before increasing by 2.4% in FY2011.
- Net Parking Revenue consists of several sources, including the Parking Tax, parking
 fines and penalties, garage income, and parking meter revenue. However, these sources
 are received in the Parking Enterprise and Parking Management Funds, and net revenue
 (after fund expenditures, including debt service) is transferred to the General Fund. In
 FY2008, Net Parking Revenue was \$30.7 million, but has since declined due to a
 combination of the economic downturn and increased debt service costs. Projected
 revenue in FY2011 is \$20.1 million.

Among these other revenue sources, the majority – such as real estate recordation and transfer taxes, energy taxes, and net parking revenue – are also dependent on the comparatively low capacity of the City's economic base. At the same time, any rate increases across these other sources would add to Baltimore's comparatively high tax burdens, risking further erosion of the base with potential adverse impact across multiple City revenue streams.

At the time this report is being drafted, Baltimore City Council is considering modest adjustments and/or additions to existing revenue streams for FY2011 to mitigate the most severe service cuts proposed. Given that sustaining core municipal services at an acceptable level is also critical for retaining a locality's economic and tax base (as well as for more qualitative community vitality), such tradeoffs may be necessary in difficult times. At the same time, however, such increased tax burdens carry their own adverse consequences for economic competitiveness, and are particularly corrosive if not linked directly to compensating service benefits for taxpayers. While some additional revenues may be generated at the margins though such actions, no large-scale sources have been identified that would resolve the City's fiscal difficulties.

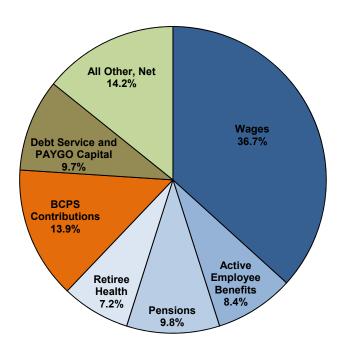
Expenditures

In the face of revenue decline since FY2008 and projections for limited revenue growth going forward, Baltimore's expenditure demands are pressured by a large percentage of fixed costs and key cost centers with high rates of growth. The following chart illustrates key areas of City spending in the Board of Estimates proposed FY2011 Budget for the General Fund and Motor Vehicle Fund combined²³:

²² Maryland General Assembly, Maryland Local Government Legislative Handbook Series, Volume VI, 2006, pp. 127, 130.
²³ Reflects the FY2011 Budget submitted by the Board of Estimates, including assumed adjustments to FPERS benefits (without which, pension costs would be far greater). Final Adopted Budget may vary based on City Council action.



Combined General Fund and Motor Vehicle Fund Revenue Sources FY2011 Board of Estimates Proposed Budget



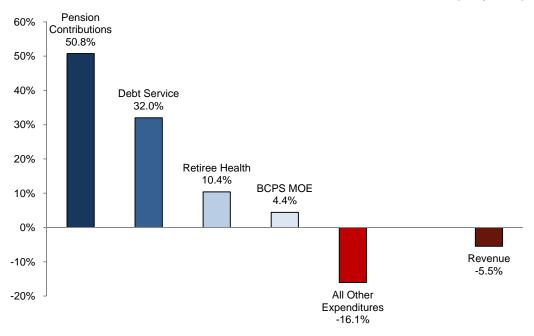
Among these key spending categories:

- The majority of the City's contributions to the Baltimore City Public Schools (BCPS) are subject to State maintenance of effort (MOE) requirements;
- Existing debt service is effectively fixed, and new capital investment is critical for maintaining basic infrastructure;
- Retiree medical costs are rising separate and apart from any spending for current services; and,
- Pension contribution requirements are rising even faster.

As of FY2011 (Proposed), as shown in the following chart, City revenues are projected to be 5.5% lower than in the peak year of FY2008. In contrast, combined BCPS maintenance of effort contributions, debt service, retiree medical spending, and pension contributions grew by an aggregate 20.7% from FY2008 to FY2011 – increasing from less than one-third to over 40% of total spending in just three years.







To make room for these selected cost centers during this period of revenue decline, all other spending was decreased by a total of \$170.3 million from FY2008 to FY2011 – 16.1%– and, in FY2010, the City is projected to deplete its reserves by as much as \$63 million.

	FY2008	FY2011P	△ FY2008 to FY2011P
BCPS MOE	\$191.1	\$199.5	\$8.4
Debt Service	\$108.1	\$142.8	\$34.6
Pension Contributions	\$96.6	\$145.6	\$49.0
Retiree Health*	\$97.2	\$107.3	\$10.1
All Other Expenditures	\$1060.5	\$890.2	(\$170.3)

^{*} In FY2011, the City began to classify contributions for BCPS retiree health as Contributions to City Schools. The Retiree Health figure above includes City contributions for BCPS retiree health in both FY2008 and FY2011.

Within this "All Other" category experiencing significant reductions, the City must fund core operations and current services – including police and fire protection, road and non-debt funded infrastructure maintenance, and recreation and library programs. Further, within this "All Other" category, certain components of total cost have also been growing faster than City revenues (e.g., utilities from \$27.5 million to \$31.9 million, and active employee health premiums on a per employee basis). As a result of such rising unit costs, even deeper cuts in service levels are required to achieve the net savings needed for budget balance.

The following sections address each of the major cost centers noted above in further detail.

Payments to Baltimore City Public Schools

The FY2011 Proposed Budget includes approximately \$238.1 million in contributions, to the Baltimore City Public Schools (BCPS). The largest component of BCPS costs is the City's Maintenance of Effort (MOE) payment, which is required by State law to equal no less than the per-pupil amount from the previous fiscal year multiplied by the District's enrollment for the current fiscal year. This MOE payment is budgeted at \$199.5 million for FY2011, and retiree

health costs of \$31.4 million represent the next largest share of the remaining \$38.5 million in City contributions.

Because per-student MOE funding amounts remain flat, total enrollment largely drives the City's MOE cost. BCPS enrollment declined each year from 113,428 in AY1995 to 81,284 in AY2008 before reversing trend and increasing slightly over the last two academic years.²⁴ Enrollment is projected to be 83,625 in AY2011 and 84,354 in AY2012, adding to budgetary pressures.²⁵

As part of overall budget cost containment, the FY2011 Proposed Budget eliminates a \$3.7 million subsidy for BCPS transportation, and reduces the City's share of school crossing guards by \$2.6 million.

\$250 Total Total \$207.8 Total \$207.9 Total \$208.1 Total Total \$207.4 Total \$210.0 \$208.3 \$207.6 \$207.6 \$206.7 \$10.7 \$13.0 \$200 \$17.0 ■ Other \$150 ■BCPS \$100 \$199.4 \$199.5 \$196.2 \$195.3 \$193.8 MOF \$193.8 \$191.7 \$192.3 \$191 \$50 \$0 FY2003 FY2004 FY2005 FY2006 FY2007 FY2008 FY2010B FY2011B

City Contributions to Baltimore City Public Schools (\$ millions)

Note: Does not include contributions for BCPS Retiree Health

Debt Service and the Capital Plan

The FY2011 Recommended Budget includes \$142.8 million in debt service costs and an additional \$2.0 million in pay-as-you-go (PAYGO) capital spending.

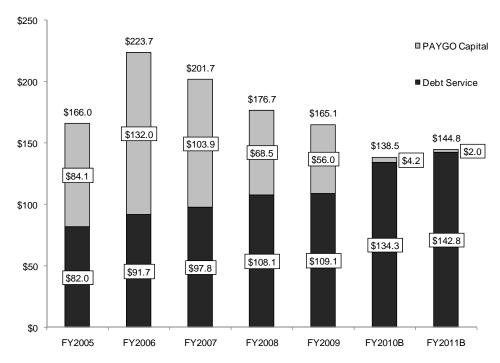
Combined debt service and PAYGO spending declined 12.8% from \$166.0 million in FY2005, and 35.3% from peak spending of \$223.7 million in FY2006, due primarily to large-scale cuts in State Highway Use Revenue. Within these totals, debt service costs increased by 74.2% from FY2005 through the FY2011 Board of Estimates Recommended Budget, however, the \$2.0 million budgeted for PAYGO capital spending in FY2011 is the lowest it has been in many years.

²⁵ FY2011 BCPS Adopted Budget, p. 3

²⁴ Maryland State Department of Education, 2009 Maryland Report Card

PAYGO capital spending has been as high as \$132.0 million (FY2006), and averaged \$88.9 million from FY2005 through FY2009 before being cut to \$4.2 million in FY2010 due to State and City revenue decline.

Debt Service and PAYGO Capital Expenditures (\$ millions) General Fund and Motor Vehicle Fund FY2005-FY2011 (Budget)



Prospectively, multi-year projections assume \$90 million in new debt annually in FY2012 and FY2013 and \$85 million each year thereafter, with gradually increasing amounts in PAYGO capital investment funded partially by projected debt service savings. At current levels, PAYGO capital amounts are insufficient to maintain the City's aging infrastructure adequately. A 2008 report for the City's Transportation Department noted that 43.3% of the City's road network was categorized as "substandard," and that the City would need to significantly increase spending to improve conditions to an 80% "Acceptable" rating.

To begin to fund needed road improvements, PAYGO capital spending is assumed to gradually increase from \$3.0 million in FY2012 to \$25.0 million in FY2020 – still well below the recent (FY2005-FY2009) historical average. This increase would be mitigated somewhat by cumulative savings of \$15.7 million in debt service expenditures over the same period. According to the same report, road conditions deteriorate rapidly after "substandard" levels, in some cases (depending on asphalt type, usage, and whether the road was reconstructed or resurfaced) reaching a "zero" rating on the Pavement Condition Index within 10-15 years.

Retiree Health Benefits and Employer Pension Contributions

Gross (All Funds) retiree health benefit costs for City employees are projected to be \$93.0 million in FY2011. In addition, the City will contribute an estimated \$31.4 million toward BCPS retiree benefits. Total gross contribution costs of \$124.4 million, budgeted centrally, are offset by \$17.1 million in transfers from other Funds for a total net cost to the City projected to be \$107.3 million. Further, the FY2011 Proposed Budget includes the implementation of a new 10% retiree



prescription drug cost-share, without which the City's costs would be estimated to be \$6.1 million higher.

From FY2005 through the FY2011 Board of Estimates' Recommended Budget, net retiree health benefit costs have increased by 49.3% from \$71.9 million to \$107.3 million, significantly outpacing growth in revenue over the same period. With a growing number of retirees and continued high rates of healthcare inflation, these costs are projected to continue to pressure the operating budget going forward.

In addition, the City is underfunded on an actuarial basis for Other Post-Employment Benefits (OPEB) generally. To address this liability, the City has established a trust fund, and has begun to make partial payments beyond the current pay-as-you-go contributions cited above. Longerterm, however, the City will be required to further increase these payments significantly and/or to restructure benefits to reduce the liability.

Also from FY2005 to the FY2011 Recommended Budget for the combined General Fund and Motor Vehicle Funds, total City pension contributions have increased by \$85.7 million, or 143.0%. Within these totals, FY2011 proposed FPERS contributions are assumed to be \$103.4 million (slightly below the All Funds level of \$106.7 million due to minor contributions from grant-supported Funds), and would be dramatically higher at \$165.2 million if no benefit adjustments are made.

Basic Services

Of the \$890.2 million in remaining FY2011 budgeted costs (less pension contributions, retiree health, debt service, and the BCPS Maintenance of Effort), approximately 75% is dedicated to employee wages and non-retirement benefits. Of the balance, much is also associated with direct support for service delivery – including such cost centers as utilities, fleet, materials, supplies, and equipment.

Viewing this \$890.2 million from a functional perspective, more than half of this spending is dedicated to the Police and Fire Departments, and the great majority is associated with core, municipal and community services such as public works, health programs, recreation centers, and libraries. The following ten largest Departments (in terms of combined FY2011 General and Motor Vehicle Fund budgets) are budgeted to receive 83.3% of this \$890.2 million.



FY2011 Board of Estimates Recommended Budget
Expenditures Less Pensions, Retiree Benefits, BCPS MOE, and Debt Service
Ten Largest Departments

	FY11 GF and MVF	
Department	Budget	% of Total
Police	\$311.1	35.0%
Fire	\$139.8	15.7%
Transportation	\$84.0	9.4%
Public Works	\$67.6	7.6%
Housing and Comm. Dev.	\$27.6	3.1%
State's Attorney	\$25.7	2.9%
Health	\$24.1	2.7%
Library	\$22.7	2.5%
Recreation and Parks	\$20.8	2.3%
General Services	\$18.0	2.0%
Total Top Ten	\$741.6	83.3%
All Other	\$148.6	16.7%
Total	\$890.2	100.0%

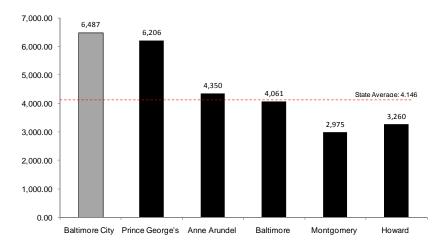
As costs for retirement benefits, debt service, and BCPS Maintenance of Effort have consumed a greater share of available revenues – and as unit costs for service delivery, such as health benefits expenditures per have employee have also increased – many of these departments are experiencing significant cuts. Looking at budgeted position levels from FY2005 through FY2011 (proposed):

- The Fire Department will see a 5.4% reduction in headcount;
- The Police Department will have a 6.8% reduction;
- Transportation will be cut by 10.2%;
- The Public Works Department will see a 32.1% reduction; and,
- Recreation and Parks will have a 41.9% cut.

With specific regard to public safety impacts, service demands constrain the City's ability to cut further without severe impact on public welfare. Baltimore's crime rate (crimes per 100,000 residents) as of 2008 was 56.5% above the statewide average.



2008 Crime Rate (per 100,000 residents)



Source: Maryland Department of Legislative Services Overview of Local Governments 2010

Along with capital investment as previously outlined, aging City infrastructure also pressures the operating budget for basic maintenance and repair of facilities and public works. Already, investment in such maintenance has been increasingly deferred, risking both more costly long-term replacement expenses and disruption from infrastructure failure. Regarding other community services, cuts have already been severe, with negative impacts on quality of life, neighborhood viability, and economic competitiveness.

The following budget actions have already been taken in FY2010:

- Maintaining the City's general hiring freeze, in effect since FY2008;
- Implementing employee furloughs from five to ten days depending on employee compensation;
- Elimination of 523 positions;
- Deferral of \$2.3 million in pay-as-you-go capital expenditures
- Implementing four rotating fire company closures;
- Reducing hours at certain libraries;
- Closing five recreation centers and transferring two more to Baltimore City Public Schools, shortening hours at other centers;
- Shifting to once-weekly trash and recycling pick-up (1+1); and,
- \$1.25 million reduction in Art and Culture programs.

Even with these measures, however, the City plans to use as much as \$63 million in reserves, including as much as \$50 million in Budget Stabilization Reserve funds. Along with revenue declines, major snowstorms during FY2010 created extraordinary expenditure demands that added to Baltimore's longer-term pressures. Going forward, the Budget Stabilization Reserve cannot be used to plan a budget, and all reserves are non-recurring, so cannot be used to fund ongoing expenditures on a sustainable basis.

Looking to FY2011, a current services Budget without further corrective action was estimated by the City to have a deficit of \$121.4 million, even with the FPERS contribution limited to \$106.7

PFM

Affordability and Sustainability

million. To correct the widening fiscal gap and balance the FY2011 budget, the Board of Estimates proposed budget included a number of savings initiatives, including:

- Elimination of nearly 1,000 positions, 600 of which are currently filled and approximately 350 of which would come from the Police and Fire Departments;
- Continued employee furloughs;
- Increased employee share of prescription drug costs (10%);
- Step and longevity freezes and suspension of sick leave conversion;
- A \$6.3 million reduction in transportation and crossing guard subsidies to Baltimore City Public Schools;
- Rotating closures of an additional three fire companies for a total of seven;
- Elimination of police aviation, marine, and mounted units;
- Closing 29 of the City's 55 recreation centers;
- Elimination of bulk trash pickup;
- \$2.0 million reduction in City building maintenance and custodial services;
- \$3.1 million reduction in park maintenance and horticulture;
- Reduction in street paving miles from 200 to 135; and,
- Reduction in vacant property boarding and cleaning.

As an alternative, to only partially mitigate the severity of the proposed service cuts, the Mayor has proposed addressing approximately 40% of the projected gap with new revenue. No budget revisions have yet been adopted as of the time this report was prepared, but many of the proposals would add to the City's already non-competitive tax rates, further weakening the City's already challenged tax base. The consideration of such adverse and difficult choices evidences the challenges for City Council of finding a workable balance between untenable further cuts in non-fixed services and further, corrosive increases to Baltimore's tax burden.

Multi-Year Projections

The following charts present five-year and ten-year projections of the City's budget under several scenarios:

- "Baseline" FY2011 Board of Estimates Budget (assuming that any new revenues approved by City Council would be used to mitigate the severity of service cuts), grown by factors summarized in Appendix A, adjusted to reflect full FPERS contribution requirements with a 5.0% post-retirement investment earnings assumption, and no benefit changes.
- "Baseline" FY2011 Board of Estimates Budget, adjusted to reflect full FPERS
 contribution requirements with a 6.8% post-retirement investment earnings assumption,
 and no benefit changes.
- 3. "Baseline" FY2011 Board of Estimates Budget, adjusted to reflect full FPERS contribution requirements with a 5.0% post-retirement investment earnings assumption, and pension benefit adjustment limited to elimination of the variable benefit only.
- 4. "Baseline" FY2011 Board of Estimates Budget, adjusted to reflect full FPERS contribution requirements with a 5.0% post-retirement investment earnings assumption, and full Council package of proposed pension benefit adjustments adopted (with any available funds above ARC up to proposed FY2011 budget level applied to reduce the BIF and ERF liabilities).



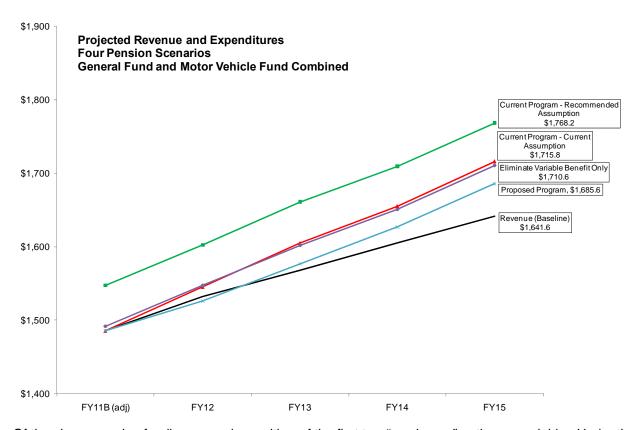
Projections are intended to be realistic – neither best case nor worst case. Given the uncertainty of future occurrences, the actual result will always vary, but the projections within this report are intended to provide an overall picture under reasonable assumptions. Major identified risks include the following:

- **Economic Risk.** The projections assume moderate economic recovery. If a recovery does not occur, and/or if the economy were to decline again in the earlier years of the projections, almost all major revenues would likely be impacted negatively.
- Teacher Pensions. State legislation has been proposed to shift responsibility for a
 portion of teacher pension contributions from the State to the Counties and Baltimore
 City. If this legislative measure is revisited and adopted, the City would bear the
 additional immediate cost as well as the potentially large growth in contributions.
- **Highway User Revenue.** State Highway User Revenue allocation is likely to be revisited in the State legislature, and the City's allocation could again be reduced.
- Healthcare Costs. In recent years, the City's healthcare inflation costs have been below national trends, and growth rates used in projections are slightly lower than those seen nationally. This trend could change, and healthcare costs for active employees and retirees could grow faster than projected.
- Collective Bargaining Agreements. Over the ten year period shown in the projections, union contracts will be negotiated and awarded, and wage increases and other costs impacted by collective bargaining could be higher than those assumed in the projections.
- **BCPS Enrollment.** To the extent enrollment in Baltimore City Public Schools increases by more than one percent each year, the City's MOE payment is likely to be higher than projected, assuming no legislative changes.
- **Inflation.** There is a risk that general cost inflation will be higher than projected over the long term.

Budget Results - Four Scenarios

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Scenario	FY2011	FY2012	FY2013	FY2014	FY2015	5-Year	10-Year
No Change – 5.0% Assumption	(\$61.9)	(\$70.0)	(\$92.7)	(\$104.0)	(\$126.6)	(\$455.2)	(\$1,295.5)
No Change – 6.8% Assumption	\$0.0	(\$12.9)	(\$36.5)	(\$49.8)	(\$74.2)	(\$173.4)	(\$783.2)
Eliminate Variable Benefit Only	(\$6.2)	(\$14.8)	(\$33.7)	(\$45.4)	(\$69.0)	(\$169.1)	(\$751.6)
Proposed Program	\$0.0	\$6.3	(\$8.2)	(\$21.5)	(\$44.0)	(\$67.4)	(\$514.7)





Of the above pension funding scenarios, neither of the first two "no change" options are viable. Under the actuarial assumptions recommended by the plan actuary and FPERS trustees, no adjustment to benefits would result in a \$61.9 million budget deficit in FY2011, growing to \$126.6 million by FY2015. On a cumulative basis, the 5-year gap would total \$455.2 million, and the 10-year gap would reach nearly \$1.3 billion. Using the existing actuarial assumptions with no benefit change, the City would still see budget gaps open by FY2012 and reach 5-year and 10-year totals of \$173.4 and \$783.2 million respectively. More importantly, however, by continuing to rely on actuarial assumptions contrary to the recommendations of the plan actuary and trustees, the City would be taking on imprudent risk regarding FPERS' long-term sustainability.

In contrast, under the proposed ordinance, required contributions would be projected to remain within the \$103.4 million FY2011 budgeted level for two full years, during which time the City would be able to make supplemental investments into FPERS to accelerate pay down of unfunded liabilities, and the scale of the longer-term funding deficit would be reduced dramatically. While this set of adjustments is not projected by itself to fully resolve the FPERS funding deficit within even a five-year timeframe, the approach would reduce the scale of the remaining problem to a more manageable level – from a \$455.2 million five-year problem to a \$67.4 million five-year problem, and from \$1.3 billion to \$514.7 million over ten-years. In addition, the proposed City approach provides a 2-3-year window within which Baltimore can develop additional approaches – such as a restructured plan for future hires – that can further improve FPERS affordability and sustainability going forward.

Alternative approaches, such as benefit adjustments limited to restructuring the FPERS "variable benefit" approach to post-retirement benefit increases, were considered, but did not provide the same 2-3 year window of time for the City to develop plans for further, necessary action, and left the remaining deficit at a far greater level. Based on actuarial and budget projections, replacing just the variable benefit without additional measures would result in a deficit of more than \$6 million in FY2011, and would be projected to result in a 5-year gap more than \$101 million above that under the proposed City Council ordinance.



BENEFIT ADJUSTMENTS





Recognizing the growing challenges facing FPERS, City stakeholders in 2009 requested that an independent task force of civic leaders be convened to evaluate key factors associated with the system's sustainability. The resulting *Task Force on Sustainable Funding of Baltimore City's Fire and Police Pension System* was organized under the framework of the Greater Baltimore Committee (GBC), a regional, membership organization of more than 500 businesses, nonprofit organizations, and educational and civic institutions active since 1955. The report of the GBC Task Force, issued in early 2010, evaluated considerations including plan management, retirement system governance, and future benefit structure.

Among the recommendations of the Task Force, potential changes to the FPERS benefit structure would have the most direct and quantifiable impact on the City budget pressures caused by system funding requirements. In this regard, six (6) areas were identified for recommended adjustments:

- Replace the current "variable benefit" for retired members of the plan with an annual increase based upon a cost-of-living adjustment with an annual cap;
- Increase employee contributions supporting the F&P system;
- Lengthen the age and service requirements for determining eligibility for pension benefits;
- Revise the calculation method for average final compensation (AFC) by increasing the service period used in the calculation;
- Terminate the provisions of the Deferred Retirement Option Plan (DROP2) for those members who have not yet achieved 15 years of service; and,
- Consider a Defined Contribution Plan for future hires.

The first four (4) of these recommended modifications are addressed in proposed legislation introduced in Baltimore City Council for implementation in FY2011, and all are consistent with areas of focus in other systems nationally and regionally facing similar strain. The following section of this report considers the reasonableness of each of these approaches in turn.

As part of this assessment, comparisons are made to various large public employers nationally, a grouping of urban eastern public safety employers (Boston, Newark, New York City, Philadelphia, and Washington, DC), and other large, Maryland public safety employers (Anne Arundel County, Baltimore County, Howard County, Montgomery County, and Prince George's County). To view these comparisons in context, however, it is important to note that each of these public employers must balance its own, unique economic, fiscal, and policy factors in determining its compensation structure. Further, many of these jurisdictions – including all of the other Maryland governments – have significantly stronger tax bases with which to address overall service demands that are often less challenging than those faced by the City of Baltimore.

In addition, a "snapshot" comparison of benefit structures will not fully capture the direction of change, as many of these other public employers are now addressing (or soon will be) retiree benefit sustainability concerns that parallel Baltimore's crisis – but may not yet be as severe, and may not yet have resulted in the level of benefit adjustment that will ultimately be required for each of these employers going forward. In particular, the other large Maryland governments all have stronger local economies upon which to draw for near-term funding demands, and have had different growth patterns and histories such that the ratio of retirees to active employees among these organizations generally creates less immediate funding pressure. In contrast to these employers, the City of Baltimore is at the front edge of the wave, facing its funding crisis ahead of others, but the difficulties are mounting for almost all.

Accordingly, the comparisons presented herein are not intended to demonstrate that the City of Baltimore today provides benefits that are necessarily significantly more generous than these other public employers, nor that proposed changes to the City's structure will better align with the average or median across this group. While many public employers are now taking action to moderate retirement benefits to address affordability and sustainability pressures, traditional defined benefit pension options remain common for public safety workers both locally and nationally. That said, the comparisons to follow will document that the changes proposed for FPERS will result in Baltimore's firefighter and police officer





pension benefits remaining well within the mainstream among public safety employees regionally and beyond, and that other police and firefighters in some comparable communities already receive similar or less generous benefits. In turn, such findings indicate that that the adjustments proposed for FPERS represent a reasonable approach within the context of Baltimore's particular funding crisis.

Following this review of adjustments proposed for FY2011, the report also outlines considerations for future hires, inclusive of the defined contribution approach cited by the GBC Task Force – as well as other longer-term approaches.

Proposed FY2011 Adjustments

Replace the Variable Benefit

FPERS currently provides a post-retirement "variable benefit" increase to retirees when investment returns exceed 7.5% in a given year. Retirees do not share in any annual plan losses.

This variable benefit structure erodes the sustainability of FPERS. By definition, any benefit that carves off a percentage of "excess" earnings above the assumed investment rate of return in a given year reduces the probability of meeting the investment return rate over time, unless the returns below the assumed return rate in a given year are also "shared" in the same percentage as a benefit decrease.

Further, because this variable benefit is based on a year-by-year calculation, the current asymmetric structure allows for short-term windfalls to member benefits with no real connection to inflation when investment returns are high, while providing for a taxpayer based guarantee if investment returns are low or negative.

The illogic of this structure can be seen in the wake of recent market downturns. In FY2009, FPERS experienced a managed investment total rate of return of negative 21.9% (which, in conjunction with FY2008 losses, led overall net assets to fall from \$2.34 billion at the end of FY2007 to \$1.69 billion as of June 30, 2009). Now, a partial market rebound in FY2010 could trigger variable benefit payouts at a rate well above consumer price growth based on "excess investment earnings" – even though the underfunded system overall will not have come close to regaining its losses of the two prior years.

The GBC Task Force recommended replacing the FPERS variable benefit structure with annual increases based on a cost-of-living adjustment, potentially linked to the annual increase for social security, subject to a cap of 3% or lower. Consistent with this recommendation, FPERS modifications included in the proposed Council ordinance would replace the variable benefit with a fixed annual cost-of-living adjustment (COLA), beginning in January 2012. This COLA would be applicable only to retirees age 55 and older, and be set at 1% for retirees age 55-64, and at 2% for retirees age 65 and older. In addition, a minimum benefit of \$24,000 would be established for pre-DROP retirees with 20 or more years of service, and a \$12,000 minimum benefit would be established for their beneficiaries.

As noted by the GBC Task Force, this type of approach would provide greater budget predictability, reduce the volatility of increases for retirees, and conserve a greater portion of pension assets in years of high earnings growth to help ensure longer-term system sustainability.

Providing any form of COLA will, by definition, increase the overall liability of the plan and increase the investment return risks already inherent in the plan. As a result, some public systems have recently acted to limit post-retirement benefit increases. In 2009, for example, the State of Georgia prohibited future post-retirement increases for public employees hired after July 1, 2009.

As noted in the following regional and large urban police examples, where post-retirement benefit increases are provided, capped COLAs, often based on changes in consumer prices, are common. Further, in many cases based on the consumer price index (CPI), such adjustments rely on multiyear measurements of the CPI to smooth out spikes (positive or negative) in providing the COLA.



- Anne Arundel County police and firefighter retirees receive COLAs based on 60% of CPI to a maximum of 2.5%;
- As of July 1, 2010, retired Baltimore County police and firefighters will receive a CPI-based COLA capped at 3%, and subject to sufficient accumulations in a designated fund; for police officers and firefighters hired after 7/1/07, 25 years of service is also required for COLA eligibility;
- Howard County police and firefighters receive a CPI-based COLA capped at 2%;
- Montgomery County, MD police and firefighter retirees hired on or after July 1, 1978 receive COLA adjustments linked to the CPI for the Washington Metro Area;
- City of Boston, MA police and firefighter COLAs are subject to an annual vote of the Retirement Board, and are based on CPI capped at 3% and applied to the first \$12,000 of benefits;
- City of Newark, NJ police and firefighter retirees receive COLAs based on 60% of CPI;
- Washington, DC police and firefighter retirees receive COLAs based on average CPI growth over the prior two years capped at 3%
- New York City police receive a COLA linked to 50% of CPI growth, subject to caps; and,
- City of Philadelphia and Pittsburgh, PA police and firefighters do not have guaranteed COLAs.

In contrast, not only are benefit adjustment structures linked to "excess investment earnings" comparatively uncommon, but some of the relatively few other systems that do feature similar such benefits use stronger controls than FPERS to prevent erosion of overall fund stability. For example, the State of South Dakota requires its pension fund to achieve a 125% funded ratio before supplemental benefits can be placed into a revocable defined contribution trust. If the system's funded ratio later declines to an unsatisfactory level, such benefits can be returned.

In another example, the Pew Center on the States details major benefit changes made by the State of Oregon in 2003 in response to significant pension funding erosion driven by a prior system that siphoned off "excess" returns²⁶. Under Oregon's former money match system – now eliminated – the State guaranteed an 8% investment return on supplemental employee retirement contributions and paid employees the returns above 8% in a given year. As a result, no earnings from good years were available to offset bad years when the State still guaranteed the 8% return, such that overall resources were drained. As Pew noted, "some systems have run into trouble because their retirement systems were designed to credit employees with additional retirement earnings when times were good, but didn't take away any money when times were bad." This is not a sustainable approach.

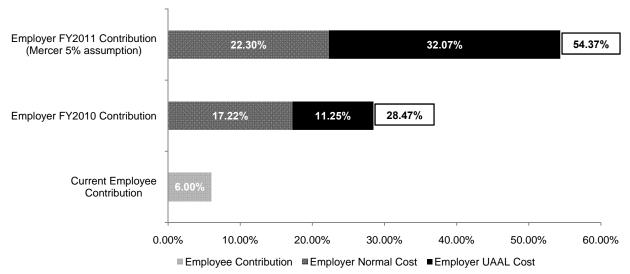
Increase Employee Contributions

FPERS currently requires employee contributions of 6% of salary by active employees. In FY2009, such employee contributions totaling \$17.7 million represented well below one-quarter of the total, combined employer and plan member contributions received by the system. Going forward, if no corrective action is taken – and assuming adoption of the more prudent 5.0% actuarial assumption recommended by the FPERS actuary for post-retirement investment returns – the overall required contribution would nearly double to \$166 million, while the employee share would not substantially change. The following chart, based on the FPERS Actuarial Valuation Report as of June 30, 2009 (subject to change prior to actual payment, and excluding the impact of supplemental employer payments), illustrates the scale of relative contributions.

²⁶ Pew Center on the States, The trillion dollar gap (February 2010), pp.28-29.



Estimated FPERS Required Contributions as Percent of Covered Salary



Sources: Fire and Police Employees' Retirement System 2008, 2009 AVRs.

Both nationally and regionally, public employee contributions in many jurisdictions are increasing to help address retiree benefit affordability and sustainability concerns. From an affordability perspective, such changes can have an immediate and material budget impact. From a sustainability perspective, greater employee cost-sharing also fosters more realistic partnership in establishing benefit levels, as employee awareness regarding costs is increased. Examples of recent changes include the following:

- Overall, from 2005-2009, the National Conference of State Legislatures reported that 12 state governments increased employee contributions for retirement benefits.²⁷
- Among these changes, as of July 2009, the State of Nebraska increased the employee contribution for members of the State Patrol from 13% to 15%. As of July 2010, the rate will permanently increase to 16%.²⁸ (Source: NCSL State Pension and Retirement Legislation 2009).
- As of May 2010, another 7 states have enacted higher employee pension contribution requirements, including an increase from 8% to 10.25% in Colorado and from 7.25% to 9% in Mississippi.²⁹
- The City of Philadelphia, PA police pension contributions will increase by 1% effective July 1, 2010:
- Effective July 1, 2010, Baltimore County reached agreement with police and fire unions to increase the employee contribution from 7% to 8.5% for employees hired since July 1, 2007;
- Also effective July 1, 2010, Anne Arundel County police and firefighter employee pension contributions will increase from 5% to 7.25%;
- Since July 2008, firefighters hired in Prince George's County contribute 8% of pay, twice the 4% rate for firefighters hired prior to that date.

Proposed FPERS modifications would increase the Baltimore employee contribution from the current 6% to 7% as of July 1, 2010, 8% as of July 1, 2011, 9% as of July 1, 2012, and 10% as of July 1, 2013.

²⁷ National Conference of State Legislatures, Major Changes in State Public Retirement Plan Provisions, 2005- 2009 (March 15, 2010)

^{2010). &}lt;sup>28</sup> National Conference of State Legislatures, State Pension and Retirement Legislation 2009.

²⁹ National Conference of State Legislatures, Pension and Retirement Plan Enactments in 2010 State Legislatures (revisions for posting week of May17-21, 2010).



For a balanced partnership, an optimal plan design would feature approximately 50-50 employer-employee cost-sharing for normal actuarial costs. This approach not only mitigates benefit funding pressures, but also better aligns employer and employee interests. According to the FPERS October 2009 Actuarial Valuation Report, the City's normal cost for the FY2011 contribution would be 17.91% of covered payroll based on the City Code and 22.30% under the plan actuary's recommended 5.0% assumption for post-retirement investment earnings – estimated to moderate somewhat if all of the provisions of the City Council Bill are adopted. In contrast, the current FPERS 6% employee contribution represents a low relative share of normal cost.

In turn, shifting to 10% over time would achieve a more balanced cost-sharing structure. In fact, one factor in the FY2011 reduction in the City's normal cost as estimated by the actuary is the increase to a 7% employee contribution effective at the start of FY2011. Further incremental increases, however, would not be reflected in the actuary's estimates until those future years. Accordingly, not only would these additional incremental adjustments, by definition, increase the employee's share of the funding, but they would also help to further reduce the City's normal costs and move even closer to optimal balance.

While pension plan structures vary in multiple respects across public employers, shifting to a 10% contribution rate would not place Baltimore's police and firefighters outside the mainstream among public safety workers. Nationally, the most recent Public Fund Survey of Findings for FY2008, which includes data on public retirement systems covering 13.5 million active members and 6.65 million annuitants – approximately 85% of the entire state and local government retirement system community – found the median employee contribution rate in systems covering non-Social Security-eligible workers to be 8.0% of pay³⁰. As the national median, this means that half of all systems surveyed already have employee contributions at or above 8.0% – and there are many examples nationally of police and firefighters with employee pension contributions at or above 10.0% (e.g., 10% for Fairfax County, VA police, 10% for City of Cleveland police, 13% for City of Austin, TX police). Additionally, as of July 1, 2010, the following regional and east coast public safety employers are among those with higher employee contributions than Baltimore:

- Howard County police officers contribute 11.6% of pay;
- Boston police and firefighters contribute 11%³¹;
- Newark, NJ police and firefighters contribute 8.5%;
- Washington, DC police and firefighters hired since 1996 contribute 8% of pay (previously 7%).

As previously noted, the trend where plans are being modified is to further increase these requirements.

Age and Service Requirements

FPERS participants are now eligible for retirement at the earlier of 20 years of service³² at any age or age 50 with 10 years of service. As a result, many public safety employees begin to receive a full pension while still in their 40's. In fact, as of the FPERS June 30, 2009 Actuarial Valuation Report, 246 retired police officers and firefighters already receiving pension benefits were still below the age of 50.

As of 2004, the average American at age 45 is expected to live another 35 years (past the age of 80), over five years longer than was the case as of 1969-71³³. Given such demographic changes as well as overall pension funding challenges, many public employers – again, both nationally and regionally, are extending the eligibility requirements for normal service retirements. Examples of changes include the following:

³⁰ National Association of State Retirement Administrators, Public Fund Survey of Findings for FY2008 (October 2009).

³¹ Boston public safety workers hired since July 1, 1996 contribute 9% + an additional 2% if total pay exceeds \$30,000. Those hired between January 1, 1984 and June 30, 1996 contribute 8% + an additional 2% if total pay exceeds \$30,000 (10% total).

³² Of the 20 years of required service, at least 10 years must be as a participant in FPERS for those members hired after July 1, 2003.

³³ Centers for Disease Control and Prevention, National Vital Statistics Report, Volume 56, Number 9 (December 28, 2007)



- According to a National Conference of State Legislatures report for the 2005-2009,³⁴ ten states increased the age and/or service eligibility requirements for a normal service retirement during that period.
- In 2010, Illinois passed a measure requiring state and municipal civilian workers hired after Jan. 1, 2011 to work until age 67 to receive full retirement benefits; up from the current age of 62;
- In 2009, New York State and Local employees' minimum retirement age for most civilian workers was increased from 55 to 62;³⁵
- Effective July 1, 2007, Baltimore County increased police officer retirement eligibility requirements from 20 years of service at any age to 25 years of service, or age 60 with a minimum of 10 years of service; and,
- Similarly, also on July 1, 2007, Baltimore County firefighter eligibility increased from 25 years of service at any age, age 50 with 20 years of service, or age 60 with 5 years of service, to 30 years of service at any age, or age 60 with a minimum of 10 years of service.

FPERS modifications included in a proposed City ordinance would increase the normal retirement eligibility to the earlier of 25 years of completed service or age 55 and 15 years of service (from the current age 50 with 10 years of service or 20 years of service at any age), grandfathering current employees who already meet the existing eligibility requirements and those with at least 15 years of service. These proposed eligibility requirements are somewhat below the "Rule of 75" recommended for consideration by the GBC Task Force Report, which would require that combined age and years of service total at least 75.

In addition to pension savings, extended service requirements for normal retirement would reduce retiree medical costs, as fewer years of post-employment coverage are provided. While individuals would continue to be covered as active employees, the City would not also be bearing the cost of coverage for a replacement hire (assuming consistent overall headcount).

Again, while pension plan structures vary in multiple respects across public employers, this proposed modification to normal retirement eligibility requirements would not place Baltimore's police and firefighters in an outlier position³⁶. As of July 1, 2010, the following regional and east coast public safety employers³⁷ are among those with comparable or higher employee age/service requirements:

- As noted above, Baltimore County police must have 25 years of service, or be age 60 with a
 minimum of ten (10 years) of service, and Baltimore County firefighters must have completed 30
 years of service at any age, or age be 60 with a minimum of 10 years of service, if hired since
 July 1, 2007;
- Montgomery County police officers are eligible at 25 years of service regardless of age, or age 55 with 15 years of service;
- Washington, DC police and firefighters must have a minimum of 25 years of service;
- City of Boston police and firefighters must be age 55 with 20 years of service; and,
- City of Newark, NJ police and firefighters must be age 55 or have over 20 years of service.

Nationally, there are multiple other examples of police and firefighters with more extensive eligibility requirements. For example, San Jose, CA police and firefighters must attain age 50 with 25 years of

³⁴ National Conference of State Legislatures, Major Changes in State Public Retirement Plan Provisions, 2005- 2009 (March 15, 2010)

³⁵ State of New York, Press Release, Governor Paterson Signs Tier V Pension reform Into Law, Enacting Most Significant Pension Reform in 25 Years (December 10, 2009)

³⁶ Given the physical demands of public safety jobs, normal retirement ages are typically lower than for general government employees. Accordingly, a comparison to the City's other pension plans is not included above for these provisions.

³⁷ A summary of eastern urban and large Maryland pension plan features, inclusive of systems with lower employee contribution requirements, may be found in Appendix 1.



service, age 55 with 20 years of service, 30 years of service regardless of age, or age 70 regardless of service to reach normal retirement eligibility. Further, as previously noted, the trend where plans are being modified is to increase these requirements.

Average Final Compensation

FPERS currently calculates the average final compensation (AFC) used within the pension benefit formula based on the average of the highest 18 consecutive months of earnable compensation. As noted by the GBC Task Force, "by increasing the number of months used in calculating final average compensation, the plan will achieve a more equitable retirement benefit among all beneficiaries while better aligning retirement benefits with earnings during an employee's period of service." 38

Examples of other systems that have extended such calculation periods as part of recent pension reforms include the following:

- According to a National Conference of State Legislatures report for the 2005-2009 period,³⁹ the State of Louisiana increased the average final compensation calculation for teachers from 3 years to 5 years (2005), the calculation period for Kansas Public Employees increased from 4 years to 5 years (2007), the North Dakota Teachers system increased the calculation period from 3 years to 5 years (2007), and the Rhode Island Public Employees adjusted from the 3 highest consecutive years to the 5 highest consecutive years (2009);
- In the State of Illinois, legislation passed in 2010 excludes income over the Social Security Wage Base in final retirement benefit calculation for state workers, and calculate the average final benefit over the highest consecutive 8 years out of the last 10 years with a maximum benefit amount of 60 % of highest salary;
- In 2010, New Jersey required that new public safety employees' average annual compensation will be calculated as the average of the highest 3 years as opposed to final year of service, building on 2007-2008 modifications that limited the calculation of final average salary to the salary on which Social Security tax is levied; and,
- In the City of Philadelphia, modifications under a 2010 police pension plan option awarded pursuant to interest arbitration for police officers uses a calculation period of 5 years, rather than the 2-year period under the older plan.

FPERS modifications included in the 2010 proposed ordinance would increase the AFC calculation period to the average of 36 months of earnable compensation for those members with less than 15 years of service.

While pension plan structures vary in multiple respects across public employers, shifting to a 36 month calculation period would not place Baltimore's police and firefighters in an outlier position. As of July 1, 2010, the following regional and east urban public safety employers are among those with comparable or higher calculation periods:

- Anne Arundel County police and firefighter pension calculations are based on the high 3 years among the final 5 years of service;
- Howard County police and firefighter pension calculations are based on the highest consecutive 36 months;
- Montgomery County police and firefighter pension calculations are based on the highest consecutive 36 months (integrated plan);
- City of Boston, MA police and firefighter pension calculations are based on the highest three years;

³⁸ Greater Baltimore Committee, Task Force on Sustainable Funding of Baltimore City's Fire and Police Pension System.

³⁹ National Conference of State Legislatures, Major Changes in State Public Retirement Plan Provisions, 2005- 2009 (March 15, 2010).



- City of Newark, NJ pension calculations are based on the highest three years for police and firefighters hired after May 2010 (previously one year);
- City of Pittsburgh, PA pension calculations are based on three years for police hired since 1991 and for all firefighters; and,
- Washington DC pension calculations are based on the highest 36 consecutive months for police and firefighters hired after 1996.

Nationally, there are multiple other examples of police and firefighters with longer AFC calculation periods. For example, City of Chicago police pension calculations are based on a member's highest sum of 48 consecutive months over the previous 10 years prior to retirement. Further, as previously noted, the trend where plans are being modified is to increase these requirements.

<u>Deferred Retirement Option Plan (DROP)</u>

FPERS currently permits members with 20 or more years of service the opportunity to suspend their earning of service credit for up to three years prior to retirement, and to have three years of retirement earnings placed in a DROP 2 account earning 5.5% interest and paid out as a lump sum or as an additional annuity at the option of the retiree.

In an advisory approved by its Executive Board, the Government Finance Officers Association (GFOA) cautions that "a significant concern about the use of DROP plans is that costs have been substantially higher than anticipated in some jurisdictions." GFOA further recommends that governments should not guarantee an investment return.

In the proposed Council ordinance, DROP eligibility is aligned with the new years of service requirement for a normal retirement, such that 25 or more years of service will be required for future DROP participation for those members with less than 15 years of service as of June 30, 2010.

Future Hires

The City Council ordinance proposes hearings to explore the feasibility of establishing a new, sustainable benefit structure for future hires. Currently, FPERS provides a traditional defined benefit (DB) pension. Looking forward, the GBC Task Force recommended consideration of conversion to a defined contribution (DC) plan for future fire and police officers – taking into account impacts on cost, recruitment and retention, and overall competitiveness.

At this juncture, most large state and local governments continue to provide DB pensions. Across the state and local sector overall as of 2008, 92% of full-time workers had access to a DB pension, and 88% participated. Among state governments, 45 of 50 had traditional DB programs as their primary plans as of 2007⁴². Michigan and Alaska had DC plans as primary, Oregon and Indiana offered hybrid plans with both DB and DC components, and Nebraska had a cash balance plan. Among large urban police and fire departments, traditional DB plans remain the norm.

With growing funding challenges due to demographic pressures and investment declines, however, there is also increasing interest among public employers in exploring DC and/or hybrid models. In the private sector, DC plans have already become the norm – as participation in traditional DB plans as of 2008 has fallen to 24% among full-time workers in private industry, down from 76% in 1986.⁴³ Further, as outlined below, the U.S. government has used a hybrid approach for federal employees since 1987.

⁴⁰ GFOA Advisory, Deferred Retirement Option Plans (DROPs), approved by the GFOA Executive Board, June 24, 2005.

⁴¹ U.S. Bureau of Labor Statistics, Compensation and Working Conditions Online, The Structure of State and Local Government Retirement Benefits, 2008 (February 25, 2009).

⁴² United States General Accountability Office, State and Local Government Pension Plans, Current Structure and Funded Status, July 10, 2008.

⁴³ U.S. Bureau of Labor Statistics, Compensation and Working Conditions Online, The Structure of State and Local Government Retirement Benefits, 2008 (February 25, 2009).



Examples of public sector models for DC and hybrid approaches, as well as recent changes to move toward such approaches, include the following:

- Since January 1, 1987, the U.S. government program for federal retirees has used a hybrid model, with benefits under the Federal Employees Retirement System (FERS) accruing from three sources:
 - A Basic Benefit Plan, under a traditional DB structure with an employee contribution. For eligible Firefighters and Law Enforcement Officers, Capitol Police, and Supreme Court Police, this provides 1.7% of the highest average 3 consecutive years salary multiplied by years of service up to 20, plus 1% of highest average 3 consecutive years, multiplied by years of service in excess of 20;
 - A Thrift Savings Plan, using a DC approach. Employer agencies deposit an amount equal to 1% of an employee's earned pay in the worker's Thrift Savings Account, and the employee may make additional tax-deferred contributions matched by the employee's agency dollar for dollar on the first 3%, and \$0.50 for every dollar for next 2%; and,
 - Participation in Social Security.

Through payroll deductions, employees contribute to the Basic Benefit Plan and Social Security. Each pay period, employer agencies deposit an amount equal to 1% of an employee's earned pay during that period in the employee's Thrift Savings Account. The employee may make tax-deferred contributions to the Thrift Savings Account that will be matched by the employee's agency; dollar for dollar on the first 3 %, \$0.50 for every dollar for next 2%. If an employee separates from services, two of the three parts of FERS are portable (Social Security and Thrift Savings Plan).

- Washington State civilian employees hired since March 1, 2002 choose between a defined benefit (DB) plan or a hybrid DB and deferred compensation (DC) plan. The hybrid plan is comprised of employer contributions that finance the DB portion of the plan and employee contributions that finance the DC portion of the plan. The DB plan offers an allowance (2% * years of service), while the hybrid plan offers a reduced DB (1% * years of service) plus the value of DC benefits.
- Georgia enacted a hybrid plan for state workers hired after January 1, 2009, which combines a
 DB plan with a reduced pension multiplier (1% * years of service, down from 2% previously) with
 a DC component featuring a dollar-for-dollar employer match for the first 1% of pay contributed by
 the employee and a 50% match for up to another 4% of pay contributed.
- A 2010 arbitration award covering City of Philadelphia police officers establishes a new hybrid
 retirement plan, featuring a 50% City match in a DC plan up to 1.5% of pay, coupled with a
 reduced DB multiplier for the first 20 years of service (1.75% * Average Final Compensation *
 years of service, in comparison to 2.2 * Average Final Compensation * years under the older
 plan). New hires have the option to elect between this new hybrid plan or the prior DB plan with a
 higher employee contribution.
- Washington, DC civilians hired since 1987 participate in a DC plan as their primary retirement program, with a 5.0% of pay employer contribution (5.5% for Corrections Officers).
- Montgomery County, MD civilians hired since 1994 also participate in a DC plan as their primary retirement program, with a 6.0% of pay employer contribution.

In general, a DC or hybrid approach changes the risk dynamic for retirement programs, such that employees share more directly in the market risks (and rewards) associated with retirement investments. In addition, DC components can provide greater benefit portability, and may be structured to encourage higher levels of personal retirement savings (i.e., with an employer match). In a hybrid model, such as the Federal Employee Retirement System, such characteristics can be mixed with a moderate DB component to address retiree concerns regarding benefit stability and sufficiency.





While the GBC recommended that a DC approach be explored for future Baltimore police and firefighters, no specific modifications were cited for immediate implementation. Consistent with this approach, the proposed FPERS ordinance would call for hearings to further evaluate and develop future approaches.

As a framework for such a future plan, a more specific model might be structured as a two-option retirement plan providing the choice between either a traditional baseline pension benefit or an alternative hybrid DB plus DC feature. New employees would make an irrevocable election at the time of hire, and share in the costs of either plan. In addition, with the hybrid plan, employees would also share in the investment risks and opportunities.

- Among the two options, the baseline pension plan might provide for a normal retirement age of 57 with a minimum of ten years of vesting service, and allow for earlier retirement at age 55 with sufficient service under the Rule of 80 (e.g., 25 years of service at age 55). Earlier retirement at age 50 could also be allowed, with an actuarial reduction. Under the baseline pension plan, the multiplier would be 2.3% times years of service, with a maximum benefit of 70% of final average compensation. Employees would share equally in the plan's costs, contributing 10% of their salary in their first year of service, and one-half of the actuarially determined normal cost thereafter. Employees would vest in 10 years and receive a refund of their contributions if they terminate earlier.
- The optional hybrid plan would provide a 50%-50% DB and DC benefit. The employer would provide a traditional pension under the same structure as outlined above, except for a multiplier of 1.25% with no maximum. Employees would then make mandatory contributions to a 401a DC plan that would allow for self-directed investments like a 457 deferred compensation plan, and would become fully vested in the DC plan immediately. The employee contribution rate into the DC plan would be either 10% or a higher rate to be determined through collective bargaining. Under this structure, the employer-provided DB benefit component would represent more than half of the normal pension benefit in the baseline pension option outlined above requiring a somewhat higher employer normal cost contribution, as well. This greater investment by the City would be offset by reduced employer exposure to market risk, and would provide an incentive for greater employee participation in the hybrid plan.

Both plans would enable employees to replace approximately 70% of their pre-retirement income after 30 years of service, which could then be supplemented with a retirement medical benefit and income from personal voluntary savings through a 457 deferred compensation plan (and/or retirement benefits and savings from second careers following City employment). To achieve 85% income replacement, supplemental personal savings under a deferred compensation plan would need to be sustained at a rate of approximately 5% of pay. Overall, this structure would provide a retirement benefit that would meet accepted standards of sufficiency, while sharing both cost and investment risks so that the plan would assure both sustainability and affordability for all parties.

In conjunction with the above options, retiree medical benefits might be structured to provide for a post-Medicare supplemental medical benefit and a comparable level of defined OPEB benefits to retirees aged 57 or greater. Employees would accrue 4% of this benefit for each year of service and vest in 10 years. Employees would share in the funding of this benefit with a contribution of one-half of normal cost. In addition, all new employees could be given the option to join a defined contribution retirement health savings plan that allows them to contribute pre-tax dollars for a retirement medical benefit for themselves and their dependents, and receive an employer matching contribution of 33%.

The model framework outlined above is summarized in the following table.





Plan Feature	"Clean Start" Design
Basic pension benefit Optional; employees can also make irrevocable choice for the hybrid option below	 Provide a reasonable baseline defined-benefit pension outside Social Security: Multiplier of 2.3% with maximum pension of 70% of final comp (takes 30½ years to achieve) Age and service: Age 57 with 10 yrs minimum vesting, or Rule of 80 with age 55 Full actuarial reduction for earlier retirements on or after age 50, or employee may receive deferred retirement at age 62 or an earlier qualifying age & service level Employee contributions set at 50% of normal cost, starting at 10% of pay in first year and one-half of normal cost thereafter. Normal cost includes post-retirement benefit increase calculation. Participant interest credited at 3% (or 5-year Treasury note yield if higher throughout corresponding calendar year, to nearest ½ - percentage point, maximum 6%) No DROP (or "DC-DROP" only, using employee contributions to fund individual self-directed DROP account) Post-retirement benefit increase set at 1% annually for retirees below age 65; 2% for retirees age 65 or older
Hybrid "50-50%" DB-DC plan Optional; employees can also make irrevocable choice for the traditional option above	 Defined benefit of 1.25%, non-contributory (entirely employer-funded) No maximum DB benefit Same DROP and post-retirement benefit increase provisions as full DB plan Employees fund a (401a money purchase) DC benefit with a uniform minimum contribution rate of 10% and a higher optional rate to be determined by bargaining. Subject to IRS approval, new employees may irrevocably select the lower rate or the higher "optional" rate. Employees' DC contributions are immediately vested.
OPEB (retiree medical)	 Employee-only defined benefit Basic benefit is a Medicare supplement Minimum age 57 Pre-Medicare benefit capped at the level of the Medicare supplement's cost with CPI escalator Employees pay ½ of normal actuarial cost Each year of service acquires 4% of full benefit; 10 year vesting Dependent and survivor benefits, and additional employee benefits, may be provided through an employee-funded OPEB DC plan with a 33% employer match. Must be collectively bargained with uniform rates for all participants; employee may irrevocably elect out of this option when hired if tax law allows.



CONCLUSION





Given Baltimore's current and projected overall City budget deficit and constraints, a further FY2011 cost increase of \$61.9 million in the combined General and Motor Vehicle Funds – with a widening gap in future years – would be untenable. Timely corrective action to address the FPERS pension funding crisis is necessary to avoid severe, adverse impacts on the public welfare.

Within this context, the benefit adjustments proposed for FPERS – all resulting in a new benefit structure consistent with mainstream practices and trends, and with modest impact on current system members – represent a reasonable approach toward improving the system's long-term sustainability.

While adoption of the proposed ordinance to implement these adjustments is not projected to fully resolve FPERS funding challenges, it will reduce the magnitude of the problem to a more manageable scale, and provide the City of Baltimore with a 2-3 year window to develop plans for additional actions to ensure long-term affordability and continuation of a public safety retirement benefits program that meets City policy goals.



APPENDICES



Total GF and MVF	\$1,216.9	\$1,257.1	\$1,328.2	\$1,482.3	\$1,527.0	\$1,571.4	\$1,554.4	\$1,538.3	\$1,447.4	\$1,485.4
Total Motor Vehicle Fund	\$200.5	\$191.3	\$222.2	\$241.6	\$248.3	\$245.8	\$231.1	\$190.9	\$148.4	\$152.8
Transfer from (to) Other Funds	\$12.7	\$4.0	\$9.9	-\$1.4	\$0.0	-\$1.4	\$0.0	\$0.0	\$0.0	\$0.0
Transfer from (to) GF	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$11.5	\$0.0	\$0.0	\$0.0	\$8.9
Construction Reserve	\$0.0	\$0.0	\$0.0	\$2.6	\$3.7	\$3.7	\$25.0	\$0.0	\$1.5	\$0.0
Other Revenue	-\$1.0	-\$0.9	-\$1.0	\$0.6	-\$1.1	-\$1.1	-\$1.1	-\$1.0	-\$1.0	-\$1.0
Charges for Service	\$4.5	\$5.3	\$5.9	\$7.0	\$8.0	\$7.5	\$7.7	\$8.3	\$7.9	\$5.9
Use of Money and Property	\$1.5	\$0.5	\$0.6	\$2.8	\$4.7	\$4.2	\$1.8	\$1.0	\$0.5	\$0.7
Fines and Forfeitures	\$8.5	\$11.1	\$5.3	\$6.0	\$4.9	\$6.1	\$8.0	\$15.1	\$11.1	\$12.6
Licenses and Permits	\$0.5	\$1.3	\$0.8	\$0.8	\$0.8	\$0.9	\$1.0	\$1.1	\$0.7	\$0.9
State Highway User Revenue	\$173.8	\$170.0	\$200.6	\$223.2	\$227.3	\$214.4	\$188.7	\$166.4	\$127.8	\$124.8
Motor Vehicle Fund	•		•	•		•	•	•		•
Total General Fund	\$1,016.4	\$1,065.8	\$1,106.0	\$1,240.7	\$1,278.7	\$1,325.6	\$1,323.3	\$1,347.5	\$1,299.0	\$1,332.7
All Other	\$130.3	\$154.4	\$100.9	\$140.3	\$130.8	\$139.4	\$123.9	\$119.5	\$123.6	\$100.0
Net Parking Revenue	\$27.0	\$26.8	\$30.9	\$29.9	\$26.6	\$30.7	\$25.6	\$27.6	\$26.2	\$20.7
Investment Earnings	\$3.5	\$1.4	\$4.0	\$10.7	\$16.2	\$13.5	\$5.3	\$3.2	\$1.5	\$1.6
Energy Tax	\$15.2	\$14.3	\$23.9	\$29.6	\$28.6	\$29.1	\$30.4	\$31.8	\$30.1	\$30.8
Telecommunication Tax	\$12.4	\$13.0	\$25.4	\$29.1	\$29.9	\$29.4	\$29.1	\$29.2	\$27.1	\$28.0
State Aid	\$97.7	\$95.4	\$91.1	\$90.3	\$97.0	\$99.8	\$98.0	\$98.7	\$95.1	\$92.4
Hotel Tax	\$12.6	\$12.2	\$13.6	\$16.9	\$15.9	\$17.2	\$16.2	\$15.3	\$13.6	\$15.0
Transfer Tax	\$26.0	\$31.2	\$46.4	\$61.1	\$52.7	\$36.5	\$23.4	\$24.2	\$24.3	\$23.2
Recordation Tax	\$13.9	\$18.0	\$36.6	\$55.6	\$52.7	\$39.2	\$22.8	\$22.6	\$19.6	\$18.6
Income Tax	\$175.6	\$182.5	\$199.6	\$225.2	\$243.6	\$267.6	\$262.9	\$251.7	\$217.9	\$237.3
Property Tax	\$502.2	\$516.6	\$533.6	\$552.0	\$584.7	\$623.1	\$685.7	\$723.6	\$720.0	\$765.7
General Fund										
	Actual	Budget	Projected	Budget						
Ф	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010B	FY2010P	FY2011E
FY2003 through FY2011 (Budget) \$\text{millions}\$,									



FY2011 (Budget) through FY2020 (Projected) Revenue										
\$ millions										
•	FY2011B	FY2012P	FY2013P	FY2014P	FY2015P	FY2016P	FY2017P	FY2018P	FY2019P	FY2020P
	Budget	Projected								
General Fund		-	-	-	-	-	-	-	-	-
Property Tax	\$765.7	\$796.5	\$812.5	\$830.3	\$850.7	\$876.2	\$906.8	\$943.1	\$980.8	\$1,020.1
Income Tax	\$237.3	\$244.3	\$251.6	\$259.1	\$266.9	\$274.9	\$283.2	\$291.7	\$300.4	\$309.4
Recordation Tax	\$18.6	\$19.4	\$19.9	\$20.3	\$20.7	\$21.1	\$21.5	\$21.9	\$22.4	\$22.8
Transfer Tax	\$23.2	\$24.1	\$25.0	\$26.0	\$27.1	\$28.2	\$29.3	\$30.5	\$31.7	\$32.9
Hotel Tax	\$15.0	\$16.4	\$17.9	\$18.4	\$18.8	\$19.3	\$19.8	\$20.3	\$20.8	\$21.3
State Aid	\$92.4	\$92.4	\$92.4	\$92.4	\$92.4	\$92.4	\$92.4	\$92.4	\$92.4	\$92.4
Telecommunication Tax	\$28.0	\$28.0	\$28.0	\$28.0	\$28.0	\$28.0	\$28.0	\$28.0	\$28.0	\$28.0
Energy Tax	\$30.8	\$31.7	\$32.6	\$33.6	\$34.6	\$35.6	\$36.7	\$37.8	\$38.9	\$40.1
Investment Earnings	\$1.6	\$1.6	\$1.7	\$1.7	\$1.7	\$1.8	\$1.8	\$1.8	\$1.9	\$1.9
Net Parking Revenue	\$20.1	\$21.2	\$22.3	\$23.3	\$24.4	\$25.3	\$26.4	\$27.4	\$28.5	\$29.6
All Other	\$100.0	\$108.8	\$108.8	\$108.8	\$108.8	\$108.8	\$108.8	\$108.8	\$108.8	\$108.8
Total General Fund	\$1,332.7	\$1,384.3	\$1,412.7	\$1,441.9	\$1,474.0	\$1,511.6	\$1,554.6	\$1,603.7	\$1,654.6	\$1,707.4
	•	-	-			•	-	•	-	•
Motor Vehicle Fund										
State Highway User Revenue	\$124.8	\$124.8	\$132.3	\$140.2	\$144.4	\$148.8	\$153.2	\$157.8	\$162.6	\$167.4
Licenses and Permits	\$0.9	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1
Fines and Forfeitures	\$12.6	\$15.8	\$15.8	\$15.8	\$15.8	\$15.8	\$15.8	\$15.8	\$15.8	\$15.8
Use of Money and Property	\$0.7	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0
Charges for Service	\$5.9	\$6.3	\$6.3	\$6.3	\$6.3	\$6.3	\$6.3	\$6.3	\$6.3	\$6.3
Other Revenue	-\$1.0	-\$1.0	-\$1.0	-\$1.0	-\$1.0	-\$1.0	-\$1.0	-\$1.0	-\$1.0	-\$1.0
Construction Reserve	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Transfer from (to) GF	\$8.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Transfer from (to) Other Funds	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Motor Vehicle Fund	\$152.8	\$147.9	\$155.4	\$163.4	\$167.6	\$171.9	\$176.4	\$181.0	\$185.7	\$190.6
		-	-		-		-		-	
Total GF and MVF	\$1,485.4	\$1,532.3	\$1,568.2	\$1,605.3	\$1,641.6	\$1,683.5	\$1,731.0	\$1,784.7	\$1,840.3	\$1,898.0



FY2012 (Projected) through FY2020 (Projected) Revenue Growth Assumptions

\$ millions									
	FY2012P	FY2013P	FY2014P	FY2015P	FY2016P	FY2017P	FY2018P	FY2019P	FY2020P
	Projected								
General Fund									
Property Tax	4.0%	2.0%	2.2%	2.5%	3.0%	3.5%	4.0%	4.0%	4.0%
Income Tax	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Recordation Tax	4.1%	2.4%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Transfer Tax	4.0%	3.8%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Hotel Tax	9.5%	9.1%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
State Aid	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Telecommunication Tax	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Energy Tax	2.8%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Investment Earnings	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Net Parking Revenue	5.5%	5.5%	4.5%	4.4%	4.0%	4.0%	4.0%	4.0%	4.0%
All Other	8.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total General Fund	3.9%	2.1%	2.1%	2.2%	2.5%	2.8%	3.2%	3.2%	3.2%
Motor Vehicle Fund									
State Highway User Revenue	0.0%	6.0%	6.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Licenses and Permits	22.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fines and Forfeitures	25.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Use of Money and Property	34.4%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Charges for Service	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Revenue	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Construction Reserve	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transfer from (to) GF	-100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Transfer from (to) Other Funds	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Motor Vehicle Fund	-3.2%	5.1%	5.1%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%
Total GF and MVF	3.2%	2.3%	2.4%	2.3%	2.6%	2.8%	3.1%	3.1%	3.1%



Projected Expenditure Detail

	FY2011B	FY2012P	FY2013P	FY2014P	FY2015P	FY2016P	FY2017P	FY2018P	FY2019P	FY2020P
GENERAL FUND	Budget (adj. pensions)	Projected								
Salaries	\$494.5	\$503.7	\$518.8	\$534.4	\$550.4	\$566.9	\$584.0	\$601.5	\$619.5	\$638.1
Benefits										•
Pension Contributions										
FPRS	\$162.5	\$176.6	\$190.6	\$196.2	\$205.2	\$214.2	\$218.4	\$220.3	\$221.2	\$222.2
ERS	\$32.2	\$35.1	\$38.5	\$40.8	\$43.2	\$44.4	\$45.8	\$46.5	\$47.3	\$47.8
EOS	\$1.0	\$0.9	\$0.9	\$0.9	\$1.0	\$1.0	\$1.0	\$0.9	\$0.9	\$0.9
Total Pension Contribution	\$195.7	\$211.7	\$229.1	\$237.0	\$248.3	\$258.6	\$264.2	\$266.8	\$268.5	\$269.9
Health Insurance										
Medical	\$67.7	\$73.5	\$79.7	\$86.5	\$93.9	\$101.9	\$110.5	\$119.9	\$130.1	\$141.2
Prescription Drug	\$12.7	\$13.8	\$15.0	\$16.3	\$17.6	\$19.1	\$20.8	\$22.5	\$24.4	\$26.5
Dental	\$1.8	\$1.9	\$2.0	\$2.1	\$2.2	\$2.2	\$2.3	\$2.4	\$2.5	\$2.6
Vision	\$1.1	\$1.2	\$1.2	\$1.3	\$1.3	\$1.3	\$1.4	\$1.4	\$1.5	\$1.5
Total Health Insurance	\$83.5	\$90.4	\$97.9	\$106.1	\$115.0	\$124.6	\$135.0	\$146.3	\$158.5	\$171.8
All Other	\$26.1	\$26.5	\$27.3	\$28.2	\$29.0	\$29.9	\$30.8	\$31.7	\$32.6	\$33.6
Total Benefits	\$305.2	\$328.7	\$354.4	\$371.3	\$392.3	\$413.0	\$429.9	\$444.8	\$459.7	\$475.4
Contractual										
Retiree Rx	\$40.8	\$37.2	\$39.6	\$42.1	\$44.9	\$47.8	\$50.9	\$54.2	\$57.7	\$61.5
Retiree Medical	\$44.2	\$47.0	\$50.1	\$53.4	\$56.8	\$60.5	\$64.5	\$68.6	\$73.1	\$77.9
Gas/Electric/Steam	\$18.6	\$19.7	\$20.9	\$22.1	\$23.4	\$24.8	\$26.3	\$27.9	\$29.6	\$31.4
Water	\$3.2	\$3.5	\$3.8	\$4.2	\$4.6	\$4.7	\$4.9	\$5.0	\$5.1	\$5.3
Other Contractual	\$120.7	\$124.4	\$128.1	\$131.9	\$135.9	\$140.0	\$144.2	\$148.5	\$152.9	\$157.5
Total Contractual	\$227.5	\$231.8	\$242.5	\$253.7	\$265.6	\$277.8	\$290.7	\$304.3	\$318.5	\$333.6
Supplies, Materials and Equipment	\$28.8	\$29.7	\$30.6	\$31.5	\$32.4	\$33.4	\$34.4	\$35.4	\$36.5	\$37.6
Grants, Subsidies and Contributions	\$72.6	\$76.0	\$76.0	\$76.0	\$76.0	\$76.0	\$76.0	\$76.0	\$76.0	\$76.0
Contribution to City Schools										
BCPS Local Share	\$199.5	\$201.5	\$203.5	\$205.6	\$207.6	\$209.7	\$211.8	\$213.9	\$216.1	\$218.2
BCPS City Services Transfer	\$4.3	\$4.5	\$4.6	\$4.7	\$4.9	\$5.0	\$5.2	\$5.3	\$5.5	\$5.7
BCPS Severance Pay-Outs	\$2.8	\$2.8	\$2.8	\$2.8	\$2.8	\$2.8	\$2.8	\$2.8	\$2.8	\$2.8
Total Contribution to City Schools	\$238.1	\$242.2	\$246.6	\$251.1	\$255.7	\$260.6	\$265.6	\$270.9	\$276.3	\$282.0
Debt Service										<u>.</u>
General Obligation P&I	\$80.3	\$84.9	\$76.4	\$69.4	\$67.2	\$72.0	\$75.9	\$74.0	\$80.4	\$88.1
Conditional Purchase Agreement	\$30.9	\$31.3	\$32.9	\$28.0	\$25.8	\$25.1	\$17.9	\$12.9	\$8.6	\$6.8
Other	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1	\$15.1
Total Debt Service	\$126.2	\$131.3	\$124.4	\$112.4	\$108.1	\$112.1	\$108.9	\$101.9	\$104.1	\$110.0
PAYGO Capital	\$2.0	\$3.0	\$4.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0
Interfund Transfers	-\$101.4	-\$102.5	-\$103.7	-\$105.0	-\$106.3	-\$107.8	-\$109.3	-\$110.9	-\$112.6	-\$114.5
Total General Fund	\$1,393.5	\$1,443.9	\$1,493.5	\$1,530.4	\$1,579.3	\$1,637.2	\$1,685.2	\$1,728.8	\$1,783.0	\$1,843.2



Projected Expenditure Detail

	FY2011B	FY2012P	FY2013P	FY2014P	FY2015P	FY2016P	FY2017P	FY2018P	FY2019P	FY2020P
MOTOR VEHICLE FUND	Budget (adj. pensions)	Projected								
Salaries	\$51.0	\$52.1	\$53.7	\$55.3	\$56.9	\$58.6	\$60.4	\$62.2	\$64.1	\$66.0
Benefits										
Pension Contributions										
FPRS	\$1.7	\$1.7	\$1.8	\$1.9	\$2.1	\$2.2	\$2.3	\$2.4	\$2.5	\$2.5
ERS	\$9.1	\$10.0	\$10.9	\$11.6	\$12.2	\$12.6	\$13.0	\$13.2	\$13.4	\$13.6
EORS	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Pension Contribution	\$10.8	\$11.7	\$12.7	\$13.5	\$14.3	\$14.9	\$15.3	\$15.6	\$15.9	\$16.1
Health Insurance										
Medical	\$9.1	\$9.9	\$10.7	\$11.7	\$12.7	\$13.7	\$14.9	\$16.2	\$17.5	\$19.0
Prescription Drug	\$1.8	\$1.9	\$2.1	\$2.2	\$2.4	\$2.6	\$2.9	\$3.1	\$3.4	\$3.6
Dental	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.4
Vision	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2
Total Health Insurance	\$11.3	\$12.2	\$13.2	\$14.3	\$15.5	\$16.8	\$18.3	\$19.8	\$21.4	\$23.2
All Other	\$3.4	\$3.5	\$3.6	\$3.7	\$3.8	\$4.0	\$4.1	\$4.2	\$4.3	\$4.5
Total Benefits	\$25.5	\$27.4	\$29.6	\$31.6	\$33.7	\$35.7	\$37.6	\$39.6	\$41.6	\$43.7
Contractual										
Gas/Electric/Steam	\$10.0	\$10.6	\$11.3	\$11.9	\$12.7	\$13.4	\$14.2	\$15.1	\$16.0	\$16.9
Water	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
Other Contractual	\$34.9	\$35.9	\$37.0	\$38.1	\$39.2	\$40.4	\$41.6	\$42.9	\$44.2	\$45.5
Total Contractual	\$45.0	\$46.6	\$48.3	\$50.1	\$52.0	\$53.9	\$56.0	\$58.1	\$60.3	\$62.5
Supplies, Materials and Equipment	\$8.1	\$8.3	\$8.5	\$8.8	\$9.1	\$9.3	\$9.6	\$9.9	\$10.2	\$10.5
Grants, Subsidies and Contributions	\$6.0	\$6.2	\$6.2	\$6.2	\$6.2	\$6.2	\$6.2	\$6.2	\$6.2	\$6.2
Contribution to City Schools	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Debt Service										
Transp. Revenue Bond P&I	\$11.5	\$11.6	\$11.7	\$14.0	\$15.5	\$17.0	\$18.4	\$19.8	\$21.3	\$19.8
Other P&I	\$4.8	\$3.4	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9
All Other	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2
Total Debt Service	\$16.5	\$15.2	\$12.8	\$15.1	\$16.6	\$18.0	\$19.5	\$20.9	\$22.4	\$20.9
PAYGO Capital	\$0.0	\$0.0	\$5.0	\$8.0	\$10.0	\$12.0	\$15.0	\$18.0	\$20.0	\$20.0
Interfund Transfers	\$0.8	\$1.3	\$1.8	\$2.4	\$3.1	\$3.7	\$4.5	\$5.2	\$6.0	\$6.9
Total Motor Vehicle Fund	\$152.8	\$157.1	\$166.0	\$177.5	\$187.5	\$197.5	\$208.7	\$220.1	\$230.8	\$236.8
	•	•	,	,	•	,	,	,	,	
Total: GF and MVF (Proposed)	\$1,485.4	\$1,526.0	\$1,576.4	\$1,626.8	\$1,685.7	\$1,754.0	\$1,814.2	\$1,871.5	\$1,938.8	\$2,006.4
Other Scenarios: Total GF and MVF										
Current Prog., Rec. Assumption	\$1,547.3	\$1,602.3	\$1,660.9	\$1,709.3	\$1,768.2	\$1,836.1	\$1,895.3	\$1,950.2	\$2,015.1	\$2,081.2
Current Prog., Current Assumption	\$1,485.4	\$1,545.2	\$1,604.7	\$1,655.0	\$1,715.8	\$1,785.2	\$1,846.3	\$1,904.1	\$1,971.8	\$2,039.9
Eliminate Variable Rate Only	\$1,491.6	\$1,547.1	\$1,601.8	\$1,650.7	\$1,710.6	\$1,779.4	\$1,840.6	\$1,898.4	\$1,966.6	\$2,035.1
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		Proje	cted Growth	Rates - FY20	Projected Growth Rates - FY2012 through FY2020									
	FY2012P	FY2013P	FY2014P	FY2015P	FY2016P	FY2017P	FY2018P	FY2019P	FY2020P					
GENERAL FUND	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected					
Salaries	1.86%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%					
Benefits														
Pension Contributions														
FPRS	8.71%	7.88%	2.97%	4.57%	4.37%	1.98%	0.86%	0.43%	0.43%					
ERS	8.99%	9.74%	5.88%	5.80%	3.00%	3.00%	1.64%	1.62%	1.04%					
EOS	-5.12%	-4.58%	9.41%	9.03%	-3.29%	-3.70%	-2.37%	-2.67%	-1.42%					
Total Pension Contribution	8.22%	8.19%	3.46%	4.78%	4.13%	2.16%	1.00%	0.64%	0.53%					
Health Insurance														
Medical	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%					
Prescription Drug	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%					
Dental	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%					
Vision	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%					
Total Health Insurance	8.33%	8.33%	8.34%	8.35%	8.35%	8.36%	8.37%	8.37%	8.38%					
All Other	1.86%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%					
Total Benefits	7.71%	7.81%	4.77%	5.66%	5.28%	4.09%	3.45%	3.35%	3.41%					
Contractual														
Retiree Rx	-8.91%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%					
Retiree Medical	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%					
Gas/Electric/Steam	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%					
Water	9.00%	9.00%	9.00%	9.00%	3.00%	3.00%	3.00%	3.00%	3.00%					
Other Contractual	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%					
Total Contractual	1.87%	4.62%	4.65%	4.68%	4.61%	4.63%	4.66%	4.69%	4.72%					
Supplies, Materials and Equipment	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%					
Grants, Subsidies and Contributions	4.69%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
Contribution to City Schools														
BCPS Local Share	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%					
BCPS City Services Transfer	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%					
BCPS Severance Pay-Outs	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
Total Contribution to City Schools	1.75%	1.78%	1.82%	1.86%	1.90%	1.94%	1.98%	2.02%	2.06%					
Debt Service														
General Obligation P&I	5.80%	-10.02%	-9.19%	-3.21%	7.18%	5.42%	-2.51%	8.71%	9.51%					
Conditional Purchase Agreement	1.43%	5.09%	-15.08%	-7.59%	-2.95%	-28.56%	-28.28%	-33.20%	-20.70%					
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
Total Debt Service	4.04%	-5.27%	-9.63%	-3.87%	3.76%	-2.91%	-6.40%	2.14%	5.64%					
PAYGO Capital	50.00%	33.33%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
Interfund Transfers	1.10%	1.15%	1.21%	1.28%	1.34%	1.41%	1.48%	1.56%	1.63%					
Total General Fund	3.62%	3.44%	2.47%	3.19%	3.67%	2.93%	2.59%	3.13%	3.37%					



Projected Growth Rates - FY2012 through FY2020

	Projected Growth Rates - F12012 through F12020									
	FY2012P	FY2013P	FY2014P	FY2015P	FY2016P	FY2017P	FY2018P	FY2019P	FY2020P	
MOTOR VEHICLE FUND	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	
Salaries	2.24%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
Benefits										
Pension Contributions										
FPRS	8.71%	7.88%	2.97%	4.57%	4.37%	1.98%	0.86%	0.43%	0.43%	
ERS	9.41%	9.74%	5.88%	5.80%	3.00%	3.00%	1.64%	1.62%	1.04%	
EORS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total Pension Contribution	9.25%	9.32%	5.22%	5.53%	3.30%	2.77%	1.47%	1.36%	0.91%	
Health Insurance										
Medical	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	
Prescription Drug	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	
Dental	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
Vision	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
Total Health Insurance	8.32%	8.33%	8.34%	8.35%	8.35%	8.36%	8.37%	8.37%	8.38%	
All Other	2.24%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
Total Benefits	7.95%	8.12%	6.29%	6.47%	5.51%	5.34%	4.86%	4.92%	4.85%	
Contractual										
Gas/Electric/Steam	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	
Water	9.00%	9.00%	9.00%	9.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
Other Contractual	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
Total Contractual	3.68%	3.70%	3.71%	3.73%	3.73%	3.75%	3.76%	3.78%	3.80%	
Supplies, Materials and Equipment	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	
Grants, Subsidies and Contributions	3.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Contribution to City Schools	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Debt Service		•	•	•					•	
Transp. Revenue Bond P&I	0.71%	0.86%	19.74%	10.62%	9.24%	8.48%	7.87%	7.44%	-6.92%	
Other P&I	-28.97%	-73.74%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
All Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total Debt Service	-7.97%	-15.96%	18.08%	9.86%	8.64%	7.98%	7.43%	7.06%	-6.59%	
PAYGO Capital	0.00%	0.00%	60.00%	25.00%	20.00%	25.00%	20.00%	11.11%	0.00%	
Interfund Transfers	68.14%	43.16%	32.11%	25.88%	21.90%	19.13%	17.10%	15.55%	14.34%	
Total Motor Vehicle Fund	2.96%	5.68%	6.88%	5.62%	5.27%	5.63%	5.38%	4.81%	2.58%	
	,	,	,	,						
Total: GF and MVF	3.55%	3.66%	2.92%	3.45%	3.84%	3.23%	2.90%	3.33%	3.28%	



Regional Public Safety - Funding

Employer	Source(s)	Employee Contribution	Employer Total Contribution as % of Covered Salary (FY2009)	Employer Normal Costs as % of Covered Salary (FY2009)	Actuarial Method	Actuarial Funded Ratio
City of Baltimore (FPERS)	2009 BFPERS CAFR and 2008 Valuation Report	6%	Joint: 27.24% (note: covers Fire and Police ONLY)	Joint: 16.52% (note: covers Fire and Police ONLY)	Projected Unit Credit	84.8% as of end of FY2009 (with 6.8% post-retirement earnings assumption)
Anne Arundel County*	AA Fire Retirement Pension Plan (Title 4), Current IAFF Local 1563 Contract, 2010 AA Fire System Valuation Report, 2010 AA Police System Valuation Report	7.25% (as of 7/1/10)	Joint: 27.44% (note: covers Fire and Police ONLY) Fire: 25.89% Police: 29.24% as of Dec. 31, 2009	Joint: 22.94% (note: covers Fire and Police ONLY) Fire: 23.04% Police: 22.83%	Projected Unit Credit	Fire: 89.5% Police: 88.0% As of Jan. 1, 2009
Baltimore County** Fire	Current IAFF Local 1311 Contract, 2009 BC Pension Trust Fund CAFR, 2007 BC Pension Valuation Report	Hired prior to 7/1/07: 6.46%-8.5% (Actuarially calculated based upon employee age at enrollment and classification), Hired after 7/1/07 contribute 7%.	9.82% (note: covers all county employees)	11.13%	Projected Unit Credit	80.7% as of end of FY2009
Baltimore County** Police	2009 BC Pension Trust Fund CAFR, 2007 BC Pension Valuation Report	Hired prior to 7/1/07: 5.51%-8.72% (Actuarially calculated based upon employee age at enrollment and classification), Hired after 7/1/07 contribute 7%.	9.82% (note: covers all county employees)	11.34%	Projected Unit Credit	80.7% as of end of FY2009
Howard County	Howard County Code, Current IAFF Local 2000 and HCPOA Lodge 21 Contracts, HCPFR 2009 Financial Statements, HC 2009 CAFR, HCPFR 2008 and 2009 Valuation Reports	Fire: 7.70% Police: 11.60%	Joint: 26.99% (note: covers Fire and Police ONLY)	Joint: 26.0% (note: covers Fire and Police ONLY)	Projected Unit Credit	78.6% as of end of FY2009
Montgomery County*** Fire	Current IAFF Local 1664 Contract; MC 2009 CAFR, MCERS 2009 CAFR, MC Fire Pension Plan Summary, 2009 ERS AVR, MC County Code	Members contribute 5.5% up to maximum Social Security Wage Base; above SSWB, members contribute 9.25%	28.1% (Non-Public Safety Employees) 37.7% (Public Safety Employees)	19.10%	Projected Unit Credit	78.4% as of end of FY2009



Regional Public Safety - Funding

Employer	Source(s)	Employee Contribution	Employer Total Contribution as % of Covered Salary (FY2009)	Employer Normal Costs as % of Covered Salary (FY2009)	Actuarial Method	Actuarial Funded Ratio
Montgomery County*** Police	Current FOP Local 35 Contract, MC Police Pension Plan Summary, MC 2009 CAFR, MCERS 2009 CAFR, MC 2009 ERS AVR, MC County Code	Members contribute 4.75% up to maximum Social Security Wage Base; above SSWB, members contribute 8.5%.	28.1% (Non-Public Safety Employees) 37.7% (Public Safety Employees)	19.92%	Projected Unit Credit	78.4% as of end of FY2009
Prince George's County Fire	Local 1619 Contract (expired June 30, 2009); PG 2009 CAFR	Hired prior to 7/1/08: 4% Hired after 7/1/08: 8%	Joint: 40.61% (note: covers Fire and Police ONLY)		Entry Age	62.01% as of July 1, 2008
Prince George's County Police	FOP Lodge 89 Contract (expired June 30, 2009), IAFF PG 2009 CAFR	Hired prior to 7/1/95: 5.5% Hired after 7/1/08: 8% in first 5 YOS, 7% in 5-10 YOS, and 5.5% in all subsequent YOS	Joint: 40.61% (note: covers Fire and Police ONLY)		Entry Age	67.63% as of July 1, 2008

^{*} Anne Arundel Employee Contribution for both fire and police (excluding sergeants) will increase from 5.0% to 7.25% as of 7/1/10.

^{**} As of July 1, 2010, contributions of Baltimore County Police and Fire members hired after 7/1/07 will increase by 1.5% in FY11 to 8.5%.

*** Montgomery County information is reflective of the County's Integrated Retirement Plan. Montgomery County employees hired on or after 7/1/1978 are members of the Integrated Plan. The County also operates a Non-integrated plan for members hired previous to 7/1/1978 who did not elect to become part of the Integrated Plan.



Regional Public Safety - Benefit Characteristics

Employer	Source(s)	Basic Plan Formula	Maximum Service Counted	Averaging Period	Eligibility	COLA
City of Baltimore (FPERS)	2009 BFPERS CAFR and 2008 Valuation Report	2.5% of AFC multiplied by YOS up to 20 years, plus 2% of AFC multiplied by YOS in excess of 20 years.	No maximum	Highest 18 consecutive months	Hired before 7/1/03: Age 50 or 20 YOS Hired after 7/1/03: Age 50 with 10 YOS or 20 YOS	Variable: After 2 years of payment, COLA increase when fund return exceeds 7.5%
Anne Arundel County	AA Fire Retirement Pension Plan (Title 4), Current IAFF Local 1563 Contract, 2010 AA Fire System Valuation Report, 2010 AA Police System Valuation Report	2.5% of final average basic pay up to 20 YOS; plus 2% of final average basic pay multiplied by YOS in excess of 20 years to max. of 70%	Effectively 30 years	High 3 of last 5 years	20 YOS or Age 50 with 5 YOS	Pre-2/1/97: 100% CPI (max 4%) Post 2/1/97: 60% CPI to maximum of 2.5%
Baltimore County Fire*	Current IAFF Local 1311 Contract, 2009 BC Pension Trust Fund CAFR, 2007 BC Pension Valuation Report	2.5% of AFC multiplied by YOS up to 20 years, plus 2% of AFC multiplied by YOS in excess of 20, plus 3% of AFC multiplied by YOS in excess of 30 (note: 3% only applies to YOS accrued after 7/1/07)	100% AFC	Highest 12 consecutive months	Hired prior to 7/1/07: 25 YOS regardless of age, or Age 50 with 20 YOS, or Age 60 with 5 YOS Hired after 7/1/07: 30 YOS or Age 60 with 10 YOS	100% of Change in CPI (not to exceed 4%) provided sufficient investment income in excess of valuation requirements has accumulated in the Post-Retirement Increase Fund Balance Account.
Baltimore County Police*	Current FOP Lodge 4 Contract, 2010, BC Pension Trust Fund CAFR, 2007 BC Valuation Report	Hired Prior to 7/1/07: 2.5% of AFC multiplied by YOS up to 20 years, plus 2% of AFC multiplied by YOS in excess of 20 years, plus 3% of AFC multiplied by YOS over 25 years (note: the 3% rate does not apply to YOS earned prior to 7/1/07). Hired After 7/1/07: 60% of AFC with 25 or more YOS; 2% of AFC, multiplied by YOS if retiring at age 60 with at least 10 YOS; both groups eligible to add 3% of AFC, multiplied by YOS over 25 years to final calculation.	100% AFC	Highest 12 consecutive months	Hired Prior to 7/1/07: 20 YOS or Age 55 Hired after 7/1/07: 25 YOS or Age 60 with 10 YOS	100% of Change in CPI (not to exceed 4%) provided sufficient investment income in excess of valuation requirements has accumulated in the Post-Retirement Increase Fund Balance Account.
Howard County Fire	Howard County Code, Current IAFF Local 2000, HCPFR 2009 Financial Statements, HC 2009 CAFR, HCPFR 2008 and 2009 Valuation Reports	2.5% of AFC multiplied by YOS up to 20, 2% of AFC multiplied by YOS in excess of 20 (not to exceed 10) making 70% of AFC after 30 YOS)	Effectively 30 years (capped at 70% of AFC)	Highest 36 consecutive months	Age 62 with 5 YOS, or 20 YOS regardless of age	100% of CPI up to 2%



Regional Public Safety - Benefit Characteristics

Employer	Source(s)	Basic Plan Formula	Maximum Service Counted	Averaging Period	Eligibility	COLA
Howard County Police	Howard County Code, HCPOA Lodge 21 Contracts, HCPFR 2009 Financial Statements, HC 2009 CAFR, HCPFR 2009 Valuation Report	2.5% of AFC multiplied by YOS up to 20, increases by 3,4,5,6, and 7% respectively over next 5 YOS making benefit 75% of AFC after 25 YOS. Benefit continues to increase 1% per year until a maximum of 80% AFC after 30 YOS.	Effectively 30 years (capped at 80% of AFC)	Highest 36 consecutive months	Age 62 with 5 YOS, or 20 YOS regardless of age	100% of CPI up to 2%
Montgomery County Fire**	Current IAFF Local 1664 Contract; MC 2009 CAFR, MCERS 2009 CAFR, 2009 ERS AVR,MC County Code	Before Soc. Sec. Normal Retirement Age: 2.5% of Average Final Earnings (AFE) multiplied by YOS up to 20 years, plus 2% of AFE multiplied by YOS over 20 years up to 31 years (21-31), plus 2% of AFE multiplied by sick leave credits for accredited service in excess of 20 years (up to 2 years). After Soc. Sec. Normal Retirement Age: 1.71875% of AFC up to Social Security Covered Comp Level (SSCCL) multiplied by YOS up to 20 years, plus 1.3750 of AFE up to SSCCL multiplied by YOS over 20 years up to 31 years (maximum 6 years), plus 1.3750% of AFE up to SSCCL multiplied by sick leave credits for accredited service in excess of 20 years (up to 2 years),	31 years	Highest 36 consecutive months	Age 55 and 15 YOS, or 20 YOS regardless of age	CPI (up to 3%) plus 60% of CPI over 3%; NTE 7.5% total (maximum does not apply to retirees over age 65).
Montgomery County Police**	Current FOP Local 35 Contract, MC Police Pension Plan Summary, MC 2009 CAFR, MC ERS 2009 CAFR, 2009 ERS AVR,MC County Code	Before Social Security Normal Retirement Age: 2.4% of Average Final Earnings (AFE) multiplied by YOS up to 36 years, including sick leave credits. After Social Security Normal Retirement Age: 1.65% of AFE up to the SSCCL multiplied by YOS up to 36 years plus sick leave credits (up to 2 years), plus 2.4% of AFE above SSCCL multiplied by YOS up to 36 years plus sick leave credits (up to 2 years).	36 years	Highest 36 consecutive months	Age 55 with 15 YOS, or 25 YOS regardless of age	CPI (up to 3%) plus 60% of CPI over 3%; NTE 7.5% total (maximum does not apply to retirees over age 65).
Prince George's County Fire	IAFF Local 1619 Contract (expired June 30, 2009), PG 2009 CAFR	3% of AAC multiplied by YOS up to 20 years, plus 2.5% of AAC multiplied by YOS in excess of 20 years, but not more than 10 years (maximum 85% AAC).	30 years	Highest two years	Age 55 or 20 YOS	Each retiree receives same dollar amount of actuarially calculated benefit, if post-retirement increase funds exist, of minimum \$35/month to maximum of \$150/month.



Regional Public Safety - Benefit Characteristics

Employer	Source(s)	Basic Plan Formula	Maximum Service Counted	Averaging Period	Eligibility	COLA
Prince George's County Police	FOP Lodge 89 Contract (expired June 30, 2009), PG 2009 CAFR	3% of AAC multiplied by YOS up to 20 years, plus 2.5% of AAC multiplied by YOS in excess of 20 years, but not more than 10 years (maximum 85% AAC).	30 years	Highest two years	Age 55 or 20 YOS	Each retiree receives same dollar amount of actuarially calculated benefit, if post-retirement increase funds exist, of minimum \$35/month to maximum of \$135/month.

^{*}Effective July 1, 2010, for new retirees hired prior to 7/1/07, COLAs eliminated with fewer than 20 YOS and new retirees are COLA eligible after 5 years of retirement. Also as of July 1, 2010 employees retiring after 7/1/07, Retirement COLAs eliminated with less than 20 YOS and employees hired after 7/1/07 are not eligible for COLA benefits with fewer than 25 YOS. Effective July 1, 2010 for all retirees, maximum COLA is capped at 3%.

** Montgomery County information is reflective of the County's Integrated Retirement Plan. Montgomery County employees hired on or after 7/1/1978 are members of the Integrated Plan. The County also operates a Non-integrated plan for members hired previous to 7/1/1978 who did not elect to become part of the Integrated Plan.



Northeast Urban Public Safety - Funding

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Employer	Source(s)	Employee Contribution	Employer Total Contribution as Percent of Covered Salary	Employer Normal Costs as Percent of Covered Salary	Actuarial Method	Actuarial Funded Ratio
City of Baltimore (FPERS)	2009 BFPERS CAFR and 2008 Valuation Report	6%	Joint: 27.24% (note: covers Fire and Police ONLY)	Joint: 16.52% (note: covers Fire and Police ONLY)	Projected Unit Credit	84.8% as of end of FY2009
Boston, MA	Boston Retirement Board Guide to Retirement Benefits, Policies, and Procedures, 2008 Valuation of State- Boston Retirement System	Hired prior to 1/1/75: 5% Hired between 1/1/75 to 12/31/78: 7% Hired between 1/1/79 to 12/31/83: 7% + 2% Hired between 1/1/84 to 6/30/96: 8% + 2% Hired 7/1/96 to present: 9% + 2% All members who entered (or re-entered the system after taking a refund) on or after 1/1/79 and who earn \$30,000.00 or more per annum are subject to the additional 2% withholding	All employees: 18.40% as of Jan. 1, 2008		Entry age	67.6% as of Jan. 1, 2008
Newark, NJ*	2010 PFRS Handbook	8.5% (including longevity and holiday pay)	Joint: 25.117% (note: covers Fire and Police ONLY)	Joint: 14.142% (note: covers Fire and Police ONLY)	Projected Unit Credit	72.85% as of June 30, 2009 Newark Participates in State-wide system; funded ratio represents PFRS Local participants
New York, NY Fire	NYC 2009 CAFR	4.75% to 7.85% based upon age at membership Note city pays portion (5%) under Increased Take Home-Pay Agreement			Frozen Liability with One-Year- Lag Methodology	55.1% as of June 30, 2007
New York, NY Police	2008 Police Pension Fund CAFR, Police Pension Fund IHTP Memo, NYC 2009 CAFR	4.3% to 8.65% based upon age at membership Note city pays portion (5%) under Increased Take Home-Pay Agreement			Frozen Liability with One-Year- Lag Methodology	68.9% as of June 30, 2007
Philadelphia, PA Fire	Philadelphia Municipal Retirement System 2009, Valuation Report, Philadelphia Municipal Retirement System 2007 Valuation Report	Hired prior to 7/1/88: 6% Hired on or after 7/1/88: 5% (fluctuates so as to cover at least 30% and not more than 50% of normal cost)	Joint: 38.37% Fire: 41.79%	12.177%	Entry age	45.0% as of end of FY2009



Northeast Urban Public Safety - Funding

Employer	Source(s)	Employee Contribution	Employer Total Contribution as Percent of Covered Salary	Employer Normal Costs as Percent of Covered Salary	Actuarial Method	Actuarial Funded Ratio
Philadelphia, PA Police**	2009 FOP Act 111 Interest Arbitration Award, 2009 FOP Act 111 Supplemental Interest Arbitration Award, Philadelphia Municipal Retirement System 2009, Valuation Report, Philadelphia Municipal Retirement System 2007 Valuation Report	Hired prior to 7/1/88: 6% Hired on or after 7/1/88: 5% with fluctuates so as to cover at least 30% and not more than 50% of normal cost. Hired on or after 1/01/10: If electing DB/DC hybrid Plan 09): 5.5%, no contribution after 20 YOS; If electing to participate in DB-only plan: 6%	Joint: 38.37% Police: 37.30%	11.697%	Entry age	45.0% as of end of FY2009
Pittsburgh, PA Fire	Pittsburgh 2009 CAFR, 2009 Fire - Act 205 Valuation Report Filing, Pittsburgh Firemen's Pension Booklet	6.0% (6.5% if electing surviving spouse benefit)	Joint: 22.37% Fire: 21.71%	8.951% Most recent Actuarial Valuation Report as of Jan. 1, 2005	Entry age	35.41% As of Jan. 1, 2009
Pittsburgh, PA Police	Pittsburgh 2009 CAFR, 2009 Police - Act 205 Valuation Report Filing	6% (6.5% if electing surviving spouse benefit)	Joint: 22.37% Police: 22.86%	11.390% Most recent Actuarial Valuation Report as of Jan. 1, 2005	Entry age	27.22% As of Jan. 1, 2009
Washington, DC	Washington, DC Retirement Board 2009 CAFR, Washington, DC Retirement Board 2007 CAFR, DC Police & Fire Retirement Pension Plan Summary, and Contract ending FOP MPD Committee	Hired prior to Nov. 10, 1996: 7% Hired after Nov. 10, 1996: 8%	Joint: 24.3% Fire: 25.52% Police: 23.82%	Joint: 25.7% Fire: 26.6% Police: 25.3%	Entry age	99.8% as of October 1, 2008

^{*} New members of New Jersey Police and Firefighters Retirement System will have final average compensation calculated as an average of 3 highest years of service (up from final salary).

** As of July 1, 2010, new police members will contribute an additional 1% (up to 6% from 5%) of salaries to pension fund; additionally, a voluntary,

^{**} As of July 1, 2010, new police members will contribute an additional 1% (up to 6% from 5%) of salaries to pension fund; additionally, a voluntary, reduced defined benefit and defined contribution plan was created (called Plan 09. New employees (1/1/10 and after) may elect to participate in regular pension plan and have an employee contribution of 6%. If an employee elects to participate in Plan 09 (hybrid plan), the decision is irrevocable. The Defined Benefit portion of Plan 09 mandates participants contribute 5.5% of compensation. Employee retirement benefits are calculated at 1.75% of AFC multiplied by YOS up to 20 years at which point contribution and credited service ceases. AFC is calculated over an employee's highest 5 YOS, Under the terms of the Defined Contribution portion of Plan 09, the City matches 50% of the employee's yearly contributions to the 457 Plan, not to exceed 1.5% of the employee's annual compensation.



Northeast Urban Public Safety - Benefit Characteristics

Employer	Source(s)	Basic Plan Formula	Maximum Service Counted	Averaging Period	Full Benefits Paid at:	COLA
City of Baltimore (FPERS)	2009 BFPERS CAFR and 2008 Valuation Report	2.5% of AFC multiplied by YOS up to 20 years, plus 2% of AFC multiplied by YOS in excess of 20 years.	No maximum	Highest 18 consecutive months	Hired before 7/1/03: Age 50 or 20 YOS Hired after 7/1/03: Age 50 with 10 YOS or 20 YOS	Variable: After 2 years of payment, COLA increase when fund return exceeds 7.5%
Boston, MA	Boston Retirement Board Guide to Retirement Benefits, Policies, and Procedures, 2008 Valuation of State-Boston Retirement System	Age based rate of consecutive highest 3-year average compensation multiplied by YOS (Age 55 and over = 2.5%; ages below 55 lose .1% for each year of age subtracted to 1.5% at age 45; .4% at age 44; .3% at age 43; .2% at age 42; .1% at age 41.)	80% of Final Average Compensati on	Highest consecutive 3-year average	Age 55 with 10 YOS or 20 YOS regardless of age	Not automatic, yearly vote by Retirement Board; if granted, COLA will be: 3% or CPI (whichever is lower) applied only to first \$12,000 of retirement allowance
Newark, NJ	2010 PFRS Handbook	If YOS is 20 or less: 2% of Final Compensation multiplied by YOS; If YOS is greater than or equal to 20 but less than 25: 50% of final compensation; If YOS is 25 or greater, regardless of age, Special Retirement eligibility equal to 65% of Final Compensation plus 1% for each YOS over 25, not to exceed total of 30 YOS. I Compensation (Note: Enhanced maximum benefit allowing 70% AFC Special Retirement was eliminated in 2010). If YOS is 30 or greater: 2% of final compensation multiplied by YOS up to 30 years, plus 1% of final compensation for YOS in excess of 30 years; If age 65 (mandatory retirement) with 20 or more YOS, 50% final compensation, plus 3% of final compensation, plus 3% of final compensation for each YOS over 20 (maximum 5 years)	70% of average compensati on	Hired prior to 5/21/2010: Base compensation in 12 months immediately preceding retirement Hired on or after 5/21/2010: Average of 3 highest years of service	Age 55 w/ no minimum YOS, or 20- 24 YOS at any age (if enrolled in PFRS on 1/1/2000)	60% of difference between percentage change of average CPI for calendar year in which retiree retired and the average CPO for 12 month period ending August 31 immediately preceding year in which adjustment is payable



		50% of final salary after 20				
New York, NY Fire	NYC 2009 CAFR, NYC Administrative Code, NYC Fire Department Pension Fund Summary Description Manual	YOS or 25 YOS (as elected), plus 1.67% of total earnings after 20 YOS, plus other credited service benefits if applicable Other credited service benefits equal to specified percentage (currently approx. 1.25%) of annual earnings of last 5 YOS multiplied by years and days of other credited service.	35 YOS	12 months prior to retirement or three-year average	20 YOS or 25 YOS (as elected)	50% of increase in CPI-U based on year ending March 31 (rounded to next highest .1%); COLA shall not be less than 1% nor greater than 3% of the first \$18,000 of the sum of the max. pension allowance and prior COLA
New York, NY Police	2008 Police Pension Fund CAFR, Police Pension Fund IHTP Memo, NYC 2009 CAFR, NYC Administrative Code	50% of final salary after 20 YOS or 25 YOS (as elected), plus 1.67% of average salary after 20 or 25 YOS (as elected), plus additional credited service benefits Additional credited service benefits equal to specified percentage (currently approx. 1.67%) of average salary multiplied by YOS over 20 or 25 year minimum (as elected), but not beyond total of 30 years	30 YOS	12 months prior to retirement or three-year average	20 YOS or 25 YOS (as elected)	50% of increase in CPI-U based on year ending March 31 (rounded to next highest .1%); COLA shall not be less than 1% nor greater than 3% of the first \$18,000 of the sum of the max. pension allowance and prior COLA
Philadelphia, PA Fire	Philadelphia Municipal Retirement System 2009, Valuation Report, Philadelphia Municipal Retirement System 2007 Valuation Report	Hired prior to 7/1/88: 2.5% FC multiplied by YOS Hired on or after 7/1/88: 2.2.% AFC multiplied by YOS (up to 20), plus 2% of AFC multiplied by YOS (over 20)	40 YOS (100% of FAS)	Hired prior to 7/1/88: higher of total compensation for last full YOS or rate of pay at separation Hired on or after 7/1/88: average of 2 highest annual compensations for 2 calendar years or 2 anniversary years	Age 50 with 20 YOS	None guaranteed; any excess earnings credited to Pension Adjustment Fund. COLA distributions then decided by Board [pending confirmation]
Philadelphia, PA Police*	2009 FOP Act 111 Interest Arbitration Award, 2009 FOP Act 111 Supplemental Interest Arbitration Award, Philadelphia Municipal Retirement System 2009, Valuation Report, Philadelphia Municipal Retirement System 2007 Valuation Report	Hired prior to 7/1/88: 2.5% FC multiplied by YOS Hired on or after 7/1/88: 2.2.% AFC multiplied by YOS (up to 20), plus 2% of AFC multiplied by YOS (over 20) Hired on or after 1/1/10: If elect hybrid DB/DC Plan 09: DB: 1.75% of AFC multiplied by YOS up to 20 years DC: Lump sum or rollover; City matches 50% of employee voluntary contributions to 457 Plan in each Fiscal Year (not to exceed 1.5% of annual compensation). If elect DB only: 2.2% AFC multiplied by YOS up to 20 years, plus 2% AFC multiplied by YOS over 20 years.	Hired prior to 1/1/10; 40 YOS (100% of FAS) Hired on or after 1/1/10; If elect hybrid DB/DC Plan 09; 20 YOS If elect DB only: 40 YOS	Hired prior to 7/1/88: higher of total compensation for last full YOS or rate of pay at separation Hired on or after 7/1/88: average of 2 highest annual compensations for 2 calendar years or 2 anniversary years Hired on or after 1/1/10: If elect hybrid DB/DC Plan 09: average of 5 highest annual compensations for 5 calendar or 5 calendar or 5 anniversary years. If elect DB plan only: average of 2 highest annual compensations for 2 calendar years or 2 anniversary years.	Age 50 with 20 YOS	None guaranteed; any excess earnings credited to Pension Adjustment Fund. COLA distributions then decided by Board [pending confirmation]



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Pittsburgh, PA Fire	Pittsburgh 2009 CAFR, 2009 Fire - Act 205 Valuation Report Filing, Pittsburgh Firemen's Pension Booklet	50% of average compensation, plus \$20 per month for each YOS in excess of 20 years (excluding YOS after age 65).	YOS at age 65	Average over 36 months prior to retirement	Hired prior to 1/1/76: 20 YOS with no age requirement Hired on or after 1/1/76: Age 50 with 20 YOS	None
Pittsburgh, PA Police	Pittsburgh 2009 CAFR, 2009 Police - Act 205 Valuation Report Filing	50% of average compensation, plus \$20 per month for each YOS between 20 and 25 years and \$25 per month for each year in excess of 25 years.	No maximum	Hired Prior to 1/1/1992: Average over 12-month period prior to retirement or severance Hired after 12/31/91: Average over 36 months prior to severance or retirement	Age 50 and 20 YOS	None
Washington, DC Tier 1 (Hired before 2/15/1980) Tier 2 (Hired 2/15/1980 to 11/09/1996) Tier 3 (Hired on or after 11/10/1996)	Washington, DC Retirement Board 2009 CAFR, Washington, DC Retirement Board 2007 CAFR, DC Police & Fire Retirement Pension Plan Summary	Tier 1: 2.5% of average base pay multiplied by YOS up to 20 years, plus 3% average base pay multiplied by YOS in excess of 20 years, plus 2.5% average base pay multiplied by other credible YOS (if applicable). Tier 2: 2.5% of average base pay, multiplied by YOS up to 25 years, plus 3% average base pay multiplied by YOS in excess of 25, plus 2.5% average base pay multiplied by other credible YOS (if applicable). Tier 3: 2.5% of average base pay, multiplied by total credible YOS Note 1: Longevity pay included for Firefighters; included for police with over 25 YOS Note 2: At least 5 consecutive YOS for OPEB	All Tiers: Mandatory Retirement @ Age 60; maximum benefit of 80% of FAS, plus sick leave credits (if applicable)	Tier 1: Highest average of any 12 consecutive months Tiers 2 & 3: Highest average of any 36 consecutive months	Tier 1: 20 YOS (mandatory retirement @ Age 60) Tier 2: Age 50 with 25 YOS or age 55 with 5 YOS (mandatory retirement @ Age 60) Tier 3: 25 YOS or age 55 with 5 YOS (mandatory retirement @ Age 60)	Tier 1: Receive same rate of pay increase as FTEs in same title as retiree was upon retirement (i.e. if Detective Sgt. title when retired and active Det. Sgts. receive 4% increase in current year, retiree receives 4% increase). Tier 2: Percent change between CPI in December of previous year and Dec of two years prior (i.e. If calculating 2006 COLA: Dec. 2005 CPI minus Dec. 2004 CPI, divided by Dec. 2004 CPI. Tier 3: Difference between CPI in December of previous year and Dec of two years prior (i.e. If calculating 2006 COLA: Dec. 2004 CPI.

^{*} For Philadelphia police, an optional "hybrid" reduced defined benefit and defined contribution plan (Plan 09) has been established via interest arbitration. New employees (1/1/10 and after) may elect to participate in traditional pension plan and have an employee contribution of 6%. If an employee elects to participate in Plan 09 (hybrid plan), the decision is irrevocable. The Defined Benefit portion of Plan 09 mandates participants contribute 5.5% of compensation. Employee retirement benefits are calculated at 1.75% of AFC multiplied by YOS up to 20 years at which point contribution and credited service ceases. AFC is calculated over an employee's highest 5 YOS, Under the terms of the Defined Contribution portion of Plan 09, the City matches 50% of the employee's yearly contributions to the 457 Plan, not to exceed 1.5% of the employee's annual compensation.