City of Philadelphia
Municipal Retirement System

Actuarial Valuation
as of July 1, 2011

Produced by Cheiron

March 2012

CHEIRON Classic Values, Innovative Advice

Table of Contents

Letter of Transmittal i

Section I – Board Summary 1

Section II – Assets 19

Section III – Liabilities 27

Section IV – Contributions and Minimum Municipal Obligation 32

Section V – Accounting Statement Information 48

Appendix A – Membership Information 54

Appendix B – Supporting Tables for City's Funding Policy 74

Appendix C – Summary of Actuarial Assumptions and Methods 82

Appendix D – Summary of Plan Provisions 91

Appendix E – Glossary of Terms 113

LETTER OF TRANSMITTAL

March 21, 2012

City of Philadelphia Municipal Retirement System
Two Penn Center Plaza – 16th Floor
Philadelphia, PA 19102-1721

Dear Board Members:

At your request, we have performed the July 1, 2011 actuarial valuation of the City of Philadelphia Municipal Retirement System.

In preparing our report, we relied without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. The results of this report are only applicable to the System's contribution for Fiscal Year Ending 2013, and rely on future plan experience conforming to the underlying assumptions. To the extent that actual plan experience deviates from the underlying assumptions, the future results will vary accordingly.

We hereby certify that, to the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries we meet the Qualification Standards, as defined by the American Academy of Actuaries, to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This actuarial valuation report was prepared solely for the System for the purposes described herein, except that the plan auditor may rely on this report solely for the purpose of completing an audit related to the matters herein. This actuarial valuation report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Finally, in preparation of this report we have accepted the assumptions and methodologies as adopted by the Board of Pensions and Retirement for the City of Philadelphia Municipal Retirement System.

Sincerely,
Cheiron

Kenneth A. Kent, FSA, FCA, EA, MAAA
Principal Consulting Actuary

Karen Zangara, FSA, EA, MAAA
Consulting Actuary

1750 Tysons Boulevard, Suite 1100, McLean, VA 22101 Tel: 703.893.1456 Fax: 703.893.2006 www.cheiron.us

SECTION I
BOARD SUMMARY

The primary purpose of the actuarial valuation and this report is to disclose the following as of the valuation date:

- The financial condition of the City of Philadelphia Municipal Retirement System,
- Past trends and expected future trends in the Retirement System's financial condition,
- The City's required contribution for Fiscal Year End (FYE) 2013,
- The Retirement Board's Funding Policy recommended City contribution, and
- Information required by the Governmental Accounting Standards Board (GASB).

In this Section, we present a summary of the principal valuation results. This includes the basis upon which the July 1, 2011 valuation was completed and an examination of the current financial condition of the System. In addition, we present a review of the key historical trends followed by the System's projected financial outlook.

We note here that GASB has issued exposure drafts that would change the reporting requirements effective for large, single-employer plans for periods beginning after June 15, 2012. If GASB issues final statements with the same effective date, the information in this report that would traditionally be used for financial reporting purposes for the fiscal year ending June 30, 2013 will need to be revised to comply with the new requirements. These changes would not affect the contribution rates in this report.

SECTION I
BOARD SUMMARY

A. Valuation Basis

The June 30, 2011 valuation results are based on the same methods used in the June 30, 2010 valuation as outlined in the report reflecting the amendments made under Act 44 to the Act 205 funding requirements through the addition of Chapter 10. This report was prepared using census data and financial information as of July 1, 2011 and does not reflect any subsequent changes in the membership or the assets.

The valuation results reflect the Board's decision to decrease the interest rate from 8.15% to 8.10% as of July 1, 2011. We have also updated the following two assumptions to reflect demographic experience and administrative practices followed by the City:

- Active Police participants in Plan 87 are assumed to elect Option 4 as the default form of payment upon service retirement

- Benefit payments to all in-pay participants are made at the end of the month

A plan change is reflected in this year's report which provides for Fire participants hired after October 15, 2010 to elect to participate in Plan '10 or Plan 87 with a higher member contribution rate. All participants opted to participate in Plan 87 with the increased employee contributions of 6%.

Below we highlight significant outcomes of this valuation. Table I-1 summarizes these results:

- ***Unfunded Actuarial Liability (UAL)****:* The UAL is the excess of the System's actuarial liability (AL) over the actuarial value of assets (AVA). The UAL decreased from $4.936 billion as of July 1, 2010 to **$4.768 billion as of July 1, 2011** reflecting the net of asset gains from July 1, 2010 through June 30, 2011, liability gains from the change in timing of retiree payments offset by the increase in the accrued liability (AL) due to the 5 basis point decrease in the interest rate.

- ***Funding Ratio****:* This is the ratio of the System's AVA to AL. The funding ratio increased from 47.0% as of July 1, 2010 to **49.7% as of July 1, 2011** mainly due to the asset gains.

- ***Minimum Municipal Obligation (MMO) excluding deferred contribution interest****:* The MMO is the required minimum amount the City must contribute under Pennsylvania State law **before application of amendments** specific to the System as they relate to the deferred contribution provisions of the law. The interest and repayment of the deferred contribution amounts of $150 million and $80 million for FYE 2010 and FYE 2011, respectively, have been reflected as a separate line item for the MMO exhibit provided in Table I – 5. The MMO decreased from $507.0 million for FYE 2012 to **$492.0 million for FYE 2013** before accounting for the interest and repayment of the deferred contributions.

- ***Minimum Municipal Obligation (MMO) including deferred contribution interest and repayment:*** The **MMO for FYE 2012 is $534.0 million** after reflecting the interest on the

deferred contributions **and for FYE 2013 is $616.5 million** after reflecting both interest and repayment of $105.5 million of deferred contributions. The MMO for FYE 2012 includes an interest payment of $27.0 million which is based upon $7.4 million interest deferred from FYE 2011 and $19.6 million interest on the total deferred amounts. The MMO for FYE 2013 includes $19.0 million in interest payments plus the $105.5 million in principal repayment of deferred contributions. Under Section 1002 (D) and (G) of the Act 205 Code, interest for deferred contributions are to be added to the MMO, and if the interest payment is deferred, then these amounts should be added to the next year's MMO amount with interest. Section 1002 (E) of the Act 205 Code requires a minimum principal repayment of $90 million on or before June 30, 2013.

- ***Annual Act 205 Reporting:*** Under Section 1002 of Act 205, the City is required to provide annual reports to the Pennsylvania Employee Retirement Commission (PERC). Therefore the MMO determination reflects annually determined experience gains and losses as opposed to biennially.

- ***Contribution under the City's Funding Policy****:* The beginning-of-year contribution under the City's Funding Policy increased from $682.7 million for FYE 2012[1] based upon actual FYE 2012 payroll to an estimated **$696.3 million for FYE 2013**.

Table I-1 summaries the comparative UAL and fiscal year funding amounts discussed above.

Table I-1
Key Results
($ thousands)

Valuation Date	7/1/2011	7/1/2010
Unfunded Actuarial Liability	$ 4,768,359	$ 4,936,172
Funding Ratio	49.7%	47.0%
Fiscal Year Ending in Year	**2013**	**2012**
Minimum Municipal Obligation*	$ 616,478	$ 534,039
City's Funding Policy Contribution**	$ 696,264	$ 682,701

* Includes interest on the FYE 2010 and FYE 2011 deferred contributions and the $105.5 million deferred contribution repayment for 2013

[1]**The City's funding contribution for FYE 2012 was updated based upon the actual payroll of $1,371.3 million (provided as pay rates in the data) as of July 1, 2011, used to estimate the beginning of year FYE 2012 payroll. In the July 1, 2010 actuarial valuation report, the estimated FYE 2012 payroll was $1,470.9 million based upon July 1, 2010 pay rates and increased based upon the payroll assumption.

B. Current Financial Condition

On the following pages, we summarize the key results of the July 1, 2011 valuation and how they compare to the results from the July 1, 2010 valuation.

1. City Membership:

As shown in Table I-2 below, total membership in the Retirement System decreased by 1.7% from 2010 to 2011

Table I-2
Membership Total

	July 1, 2011	July 1, 2010	% Change
Actives	26,671	27,928	-4.5%
Terminated Vesteds	1,324	1,599	-17.2%
Disabled	4,235	4,280	-1.1%
Retirees	21,134	21,064	0.3%
Beneficiaries	8,273	8,558	-3.3%
DROP	2,712	2,018	34.4%
Total City Members	64,349	65,447	-1.7%
Annual Salaries	$ 1,371,273,920	$ 1,421,150,868	-3.5%
Average Salary per Active Member	$ 51,414	$ 50,886	1.0%
Annual Retirement Allowances	$ 627,116,620	$ 615,241,359	1.9%
Average Retirement Allowance	$ 18,641	$ 18,148	2.7%

The active participant population decreased 4.5% during the 2010 – 2011 plan year. More than half of them became members of the DROP resulting in a total increase in DROP participants of about 34.4%. The average salary per active member increased by only 1.0% during the plan year, which is below the assumed salary scale. The combined result of lower active membership and salary growth produced a decrease in the total payroll growth which was lower than expected at a decrease of 3.5% versus the expected 3.5% increase, payroll growth assumption.

Annual retirement allowances continued to increase by 1.9% this year.

SECTION I
BOARD SUMMARY

2. City Assets and Liabilities:

Table I-3 presents a comparison between the July 1, 2011 and July 1, 2010 System assets, liabilities, UAL, and funding ratios. The Funding Ratio increased from 47.0% as of July 1, 2010 to **49.7%** as of July 1, 2011 due to the higher than expected asset returns and some gains in liabilities as a result of various sources.

The July 1, 2010 market value of assets (MVA) includes the $150 million deferred contribution from FYE 2010, whereas the July 1, 2011 MVA includes the total deferral amount of $230 million.

Table I-3
Assets and Liabilities
($ thousands)

	July 1, 2011	July 1, 2010	% Change
Actuarial Liabilities by Membership:			
Actives	$ 2,881,397	$ 3,019,883	-4.6%
Terminated Vesteds	120,270	147,730	-18.6%
Disabled	688,621	680,163	1.2%
Retirees	4,071,325	4,034,768	0.9%
Beneficiaries	501,392	514,053	-2.5%
DROP	1,218,351	911,939	33.6%
Non-Vested Refunds	6,122	8,511	-28.1%
Total Actuarial Liability	$ 9,487,478	$ 9,317,047	1.8%
Market Value of Assets (net of PAF)*	$ 4,259,229	$ 3,650,729	16.7%
Actuarial Value of Assets (net of PAF)*	4,719,119	4,380,875	7.7%
Unfunded Actuarial Liability	$ 4,768,359	$ 4,936,172	-3.4%
Funding Ratio	49.7%	47.0%	2.7%

* The PAF is available for distribution under title §22-311 of the Philadelphia Code. In general, the PAF provides for enhanced benefit distribution to retirees and beneficiaries through the use of excess earnings. For more details on the PAF, see Section II – E.

The market asset value (net of the Pension Adjustment Fund (PAF)) average return was 19.4% compared to the 8.15% assumption for the previous year. For the actuarial value of assets, the experience gains and losses are smoothed over future years, which yielded a rate of return of 9.9%.

SECTION I
BOARD SUMMARY

3. Components of UAL Change between July 1, 2010 and July 1, 2011:

The Retirement System's unfunded actuarial liability decreased by $167.8 million, from $4,936.2 million as of July 1, 2010 to $4,768.4 million as of July 1, 2011. Table I-4 below presents the specific components of this change in the UAL.

The System experienced an $84.4 million investment gain based upon the actuarial value of assets and a $54.3 million liability gain. There was also a $42.3 million liability increase due to the assumption change of decreasing the interest rate from 8.15% to 8.10%. Actual FYE 2011 contributions created an $11.3 million loss when compared to the MMO expected because of lower contributions as a function of lower payroll. This is combined with a $33.7 million gain due to the one year deferral of gains and losses under the MMO contribution method for a total increase in the UAL for contributions.

Table I-4
Change in Unfunded Actuarial Liability
($ millions)

Experience			
1.	UAL change due to investment (gain)/loss	$	(84.4)
2.	UAL change due to overall liability (gain)/loss		(54.3)
Contributions			
3.	UAL change to difference in benefit accruals, MMO contributions, and timing		11.3
4.	UAL change due to one-year delay in MMO contributions		(33.7)
Assumption Change			
5.	UAL change due to assumption change		42.3
Total			
6.	Total net overall change: sum 1 through 5	$	(118.8)
7.	Expected change in UAL		(49.0)
8.	Net increase/(decrease) in UAL: 6 + 7	$	(167.8)

The $54.3 million liability gain is attributable to the following:

- $5.1 million demographic loss due to increased DROP participants, offset in part by the lower than expected payroll.
- $59.3 million gain due to existing retirees changes in the assumptions for timing of pension payments and the form of payment elected for Plan 87 retirees based upon administrative practices.

SECTION I
BOARD SUMMARY

4. Contributions:

Table I-5 below summarizes the alternative City contribution amounts. The contribution under the **City's Funding Policy** for FYE 2012 was originally estimated to be $690.0 million based upon estimated FYE 2012 payroll. Using updated payroll, the FYE 2012 contribution is $682.7 million. For Fiscal Year 2013, the funding policy contributions decreased by 0.73% of payroll, from 49.79% to 49.06%. In dollar terms, the contributions under the City's Funding Policy increased from $682.7 million to $696.3 million, a $13.6 million increase. The FYE 2013 contributions under the City's Funding Policy will be updated next year when the actual payroll is available. All contributions for the City's Funding Policy are provided as of the beginning of the year.

The **Minimum Municipal Obligation** for FYE 2013 measured as of the beginning of the year increased by 0.20% of payroll, from 34.47% to 34.67% before consideration of deferred contribution interest and principal payments. This increase as a percent of pay is more a function of the decrease in payroll because in dollar terms, the required beginning of year contribution decreased from $507.0 million to $492.0 million, a $15.0 million decrease. The MMO including interest and repayment of deferred contributions increased from $534.0 million to $616.5 million, reflecting the first of the two year period that principal is due to be paid on the deferred contribution amount.

In Section IV of this report, we provide more detail on the development of these contributions.

SECTION I
BOARD SUMMARY

Table I-5
Contributions
($ thousands)

Fiscal Year Ending in Year:	2013	% of Pay	2012	% of Pay
City's Funding Policy[1]				
Estimated FY Payroll	$ 1,419,269		$ 1,371,274 [2]	
Normal Cost (with Expenses)	$ 134,810	9.50%	$ 129,227	9.42%
Employee Contributions	(47,784)	3.37%	(46,848)	3.42%
City Normal Cost	87,026	6.13%	82,380	6.01%
Amortization Payment	609,237	42.93%	600,321	43.78%
City's Funding Policy	$ 696,264	49.06%	$ 682,701	49.79%
Minimum Municipal Obligation[3]				
Estimated FY Payroll	$ 1,419,269		$ 1,470,891	
Normal Cost (with Expenses)	$ 134,810	9.50%	$ 139,947	9.51%
Employee Contributions	(47,784)	3.37%	(50,251)	3.42%
City Normal Cost	87,026	6.13%	89,696	6.10%
Amortization Payment	404,964	28.53%	417,325	28.37%
Minimum Municipal Obligation before Adjustment	$ 491,990	34.67%	$ 507,021	34.47%
Deferred Contribution Interest (*Estimated*/Actual)[4]	*$ 18,975*		$ 27,018	
Deferred Contribution Principal Repayment[5]	105,513		N/A	
Total Deferred Contribution Repayments	$ 124,488		$ 27,018	
Minimum Municipal Obligation plus Interest & Repayment for Deferrals	$ 616,478	43.44%	$ 534,039	36.31%

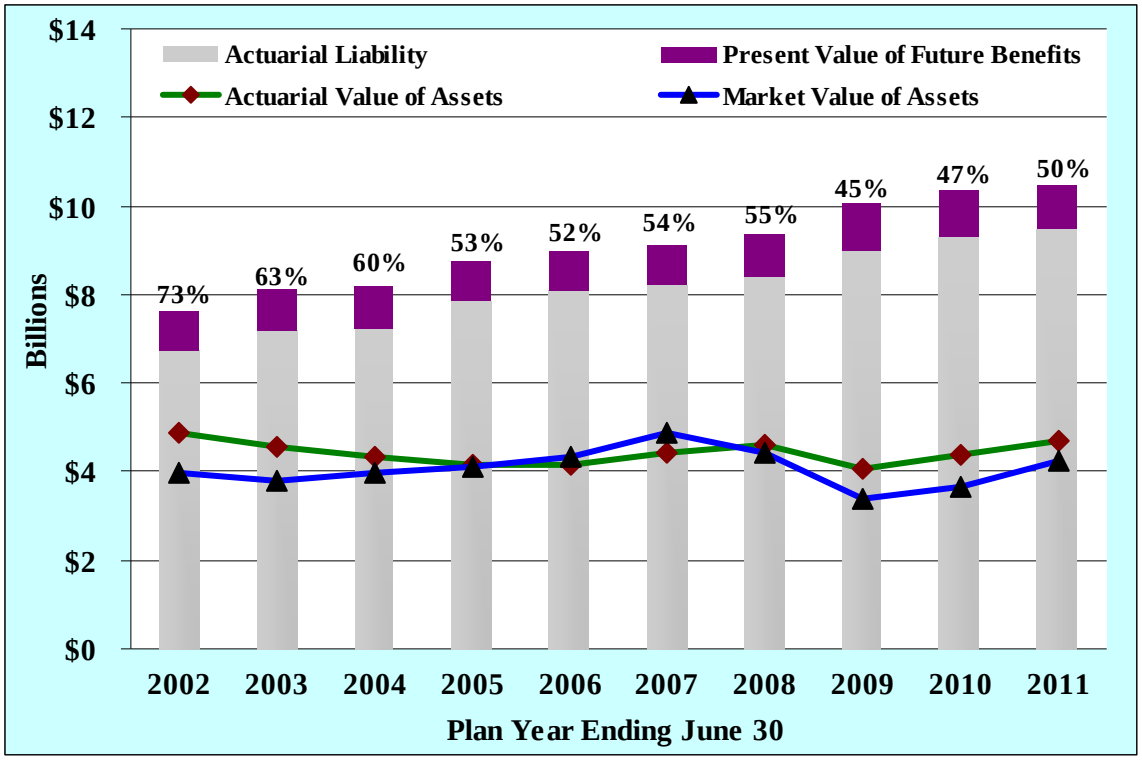
[1] Assuming beginning-of-year payment.
[2] FYE 2012 payroll for the City's Funding Policy is based upon the July 1, 2011 pay rates and will be finalized when the FYE 2012 payroll is available. All other payroll is estimated based upon the prior year's data used for the actuarial valuation.
[3] The MMO does not include Quasi-Agency contributions.
[4] Interest for a full year is due on the deferred contributions outstanding for any portion of a fiscal year. This amount will need to be determined and adjusted at FYE 2013.
[5] The initial repayment of deferred contributions must be made by FYE 2013.

C. Historical Trends

Although most of the attention given to the valuation reflects the most recently computed unfunded actuarial liability, funding ratio, and contribution amounts, it is important to remember that each valuation is merely a snapshot of the long-term progress of a pension fund. It is equally important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

In the chart below, we present the historical trends for the market and actuarial value of assets compared to the actuarial liabilities and present value of future benefits; we also show the progress of the Retirement System's funding ratios (provided above each bar) since 2002.

City of Philadelphia Assets* and Liabilities – 2002 to 2011



* Market value of assets includes the PAF, which is not available for funding purposes.

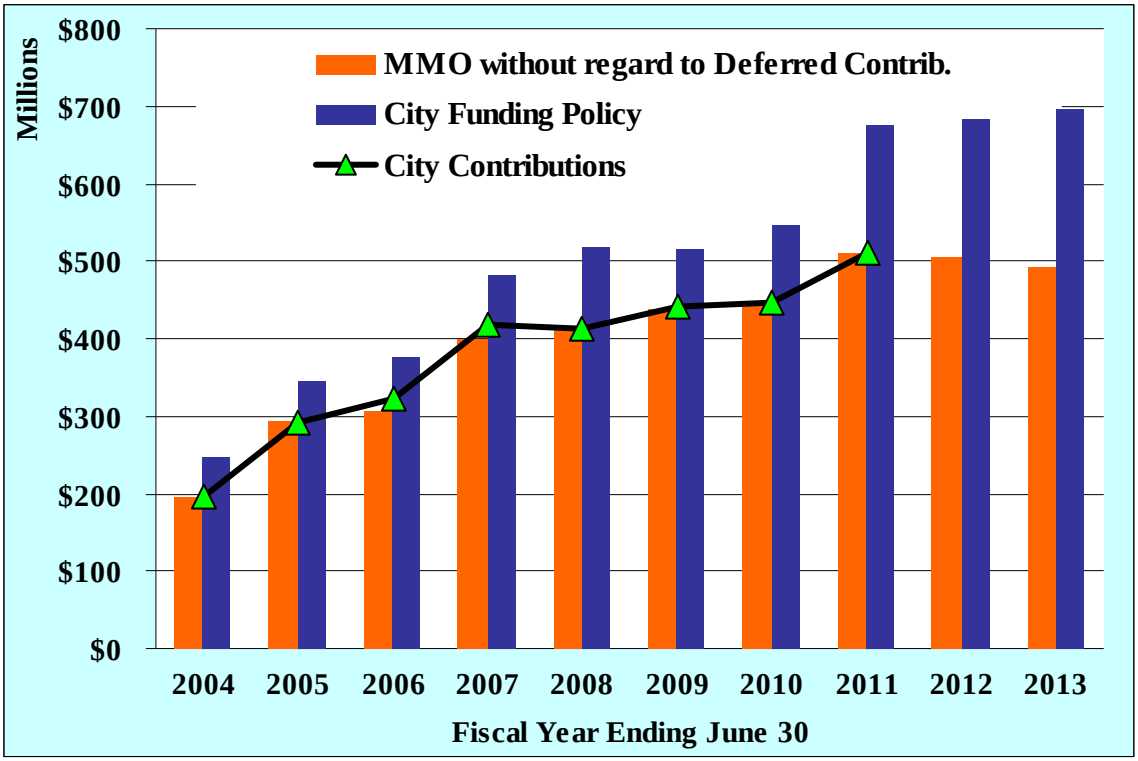
The System's funding ratio has declined significantly since 2002. In 2009, the funding ratio declined by 10% due to the investment losses during the year and the change in the actuarial liability interest rate assumption. In 2010 and 2011, the funding ratio increased by 2% and 3% due to strong investment returns, which was partially offset by the increased actuarial liability due to the assumption changes.

This historic trend emphasizing the relatively low funded status highlights the potential risk of insolvency, if contributions coupled with more stable and favorable investment returns relative to the long-term assumption are not realized in the near future.

SECTION I
BOARD SUMMARY

In this next chart we present historical trends for the Minimum Municipal Obligation (MMO), the contribution under the City's Funding Policy, and the actual contribution made for fiscal years since 2004. Because there is a two-year lag in the determination of the City Funding Policy and MMO requirements, we show the contributions to date and the estimated amounts for fiscal years 2012 and 2013. The FYE 2010 and 2011 City contributions include the $150 million and $80 million deferred contributions for each year. The deferred contributions are subsequently treated as if they are short-term investments and therefore not reflected in the FYE 2012 and 2013 MMO amounts due.

City of Philadelphia Contributions for Fiscal Years 2004-2013

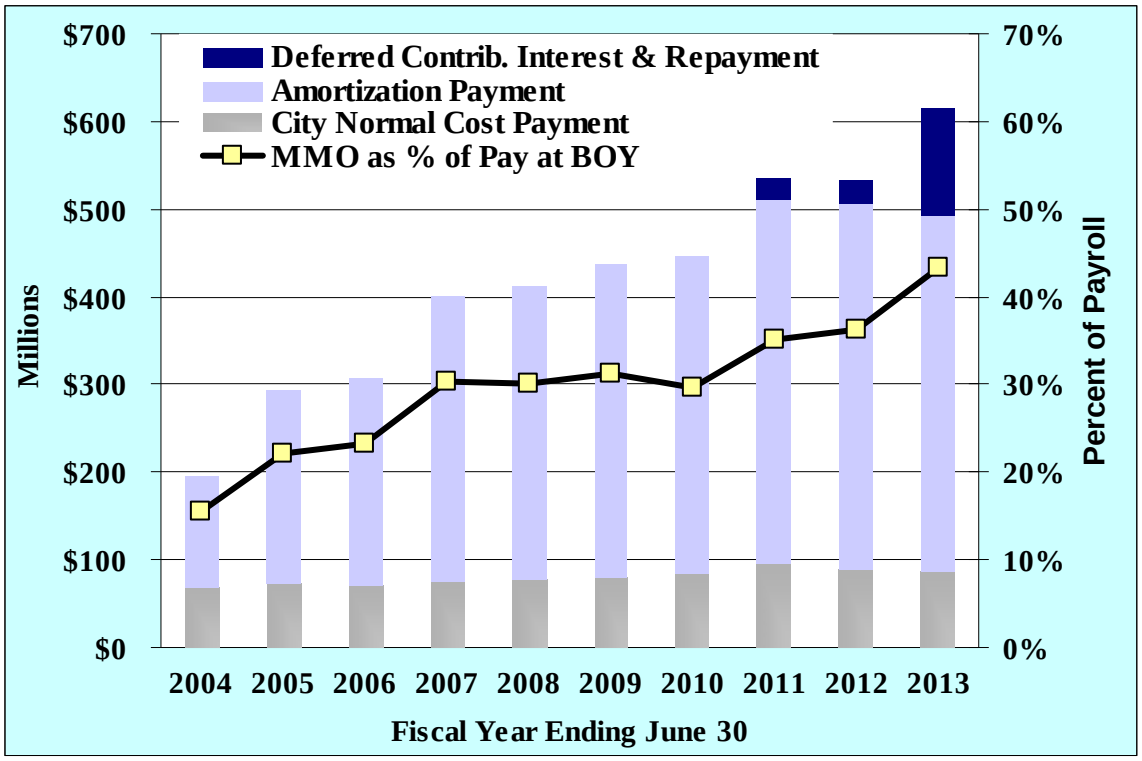


The key trend illustrated in this chart is the rapid escalation in all three measures starting in FYE 2004 due in part to investment losses and the City's funding decision. Since 2004 the City began to make contributions based on the MMO rather than the Funding Policy which has resulted in the Funding Policy amounts increasing more rapidly than the MMO. This is especially evident for FYE 2011 contributions, where the City's Funding Policy contributions increased about $130 million. In addition, the MMO and City's Funding Policy amounts for FYE 2011 increased significantly mainly due to the investment losses.

SECTION I
BOARD SUMMARY

The chart below shows historical amortization payments, City normal cost payments, and the deferred contribution interest and principal repayment. Also shown is the beginning-of-year MMO (normal cost plus amortization payments only) as a percentage of payroll based on the values in the legend on the right versus the line graph. For example in 2013 the City cost is expected to be about 35% of payroll. Note that this cost as a percentage of payroll is prior to the additional amounts payable by the City due to interest and repayment of deferred contributions from 2010 and 2011.

MMO Contributions by Source for Fiscal Years 2004-2013



The chart illustrates that the City normal cost payment has remained relatively level over the period shown. The amortization payment to pay off the unfunded actuarial liability has increased from just under $130 million for FYE 2004 to just over $400 million for FYE 2013. In 2005, the amortized payment increased by $90 million, mainly due to investment losses and changes in assumptions including the interest rate. In 2011, the amortized payment increased by $50 million due to investment losses and the decrease in the interest rate assumption, which were then mitigated by the 30 year fresh start of the unfunded liability.

The total City cost (normal cost plus amortization payments) as a percentage of payroll (as shown by the line and on the right hand axis) increased rapidly from about 16% in 2004 to about 30% in 2007, remained steady for 4 years and has since increased 5% to about 35% in FYE 2013. The interest and principal repayment for FYE 2013 is about 9% of payroll, which would increase the contribution amount for this year to 43%, if this is included.

D. Projected Financial Trends

Our analysis of the City of Philadelphia Municipal Retirement System's projected financial trends is an important part of this valuation. In this section, we present our assessment of the implications of the July 1, 2011 valuation results on the future outlook in terms of benefit security (assets over liabilities) and the City's expected cost progression.

In the charts that follow, we project the Retirement System's assets and liabilities, and the City's contributions as a percent of payroll. Unless otherwise noted we assume the MMO contributions are made each year. Our illustrations assume the provisions of Act 205 as amended by Act 44 remain in force during the projection period without consideration of the sunset provisions.

The projections are provided on two different asset return assumption bases:

1) Assuming 8.10% returns each and every year, and

2) Assuming returns shown in the table below. These are rates of return which vary each year, but over the projection period equal on average the assumed 8.10% return. We do this because the City's return will never be level from year to year and the System must anticipate the implications of asset return volatility to the funded status and contribution requirements.

Fiscal Year Beginning	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Return	1.0%	7.5%	11.5%	9.0%	13.5%	10.5%	7.5%	5.5%	3.8%	-4.5%
Fiscal Year Beginning	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Return	-0.5%	3.5%	6.5%	7.5%	11.5%	15.5%	19.5%	15.5%	11.0%	6.7%

In reviewing each of these projections, it is the future trends, not necessarily the actual values that are important to consider in your deliberation of the risks of the System and the potential volatility of future funding ratios and City contribution levels.

SECTION I
BOARD SUMMARY

Projection Set 1: Assets and Liabilities

The two charts below show asset measures (green and blue lines) compared to liabilities (grey and pink bars). At the top of each chart is the progression of the System's funding ratio which compares the actuarial value of assets (green lines) to the actuarial liability (grey bars). The projections demonstrate a number of issues. Funding at the MMO level will result in a very slow improvement of funding after the full impact of the 2008/2009 investment losses are fully realized. This is a reflection of the ten year smoothing of the investment losses and the negative cash flow of the System where benefit payments and expenses exceed expected contributions. The alternative return expectations reveal insight from these two charts as to how varying investment returns impact the System's funding ratio. In both projections, the 10 year asset smoothing method has significant influence on the smoothing of assets against market value volatility.

Chart 1: Projection of Assets and Liabilities, 8.10% return each year and City makes contributions based on MMO

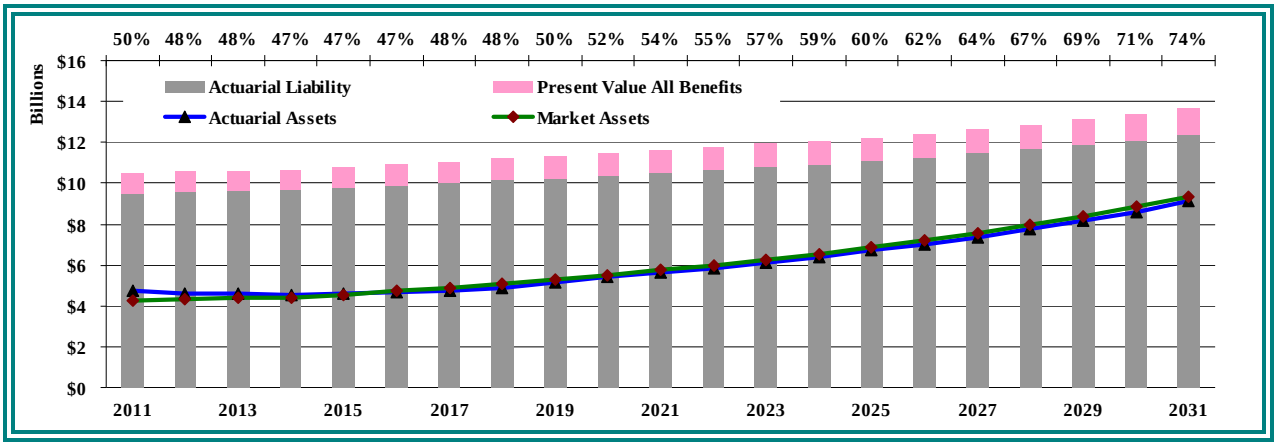
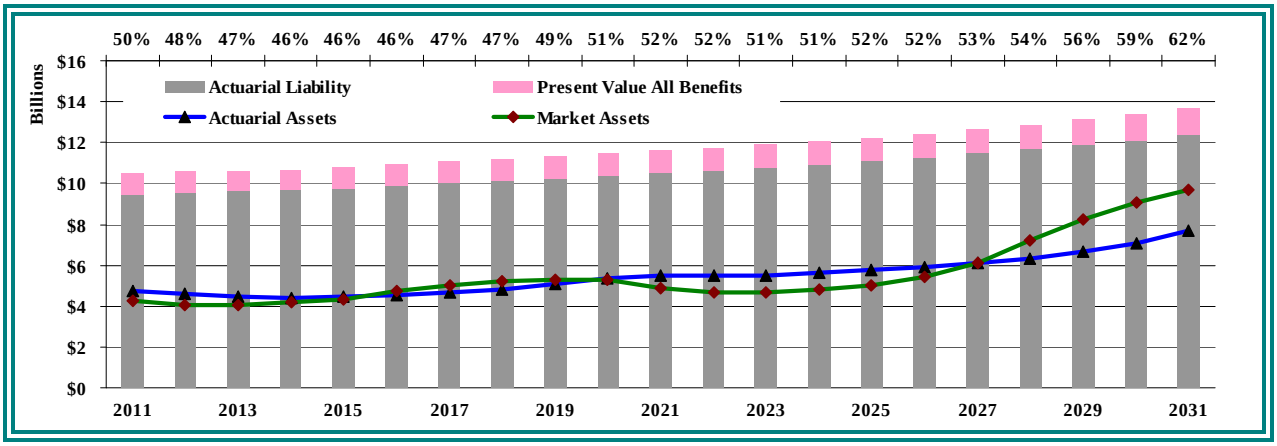


Chart 2: Projection of Assets and Liabilities, varying returns averaging 8.10% and City makes contributions based on MMO



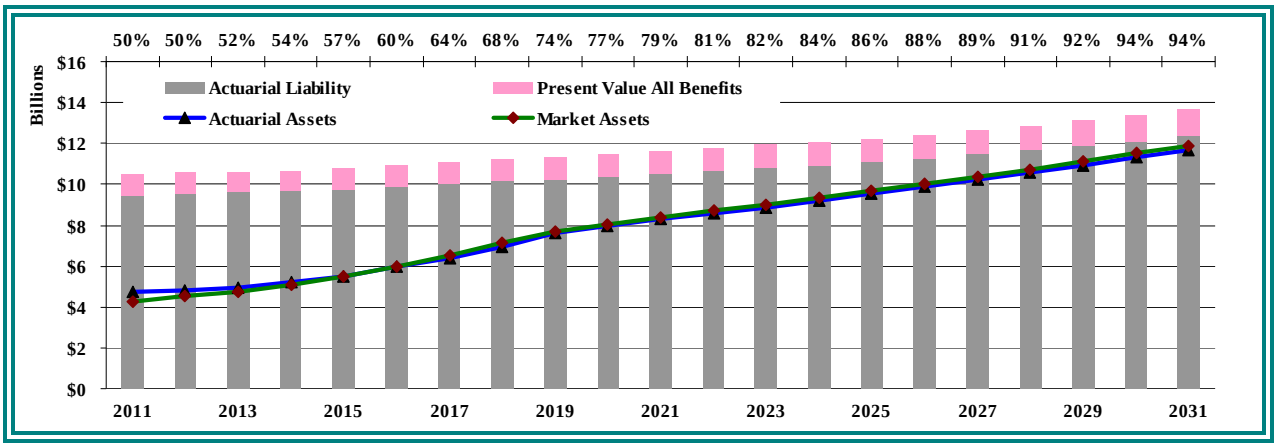
** Market value of assets includes the PAF, which is not available for funding purposes.*

SECTION I
BOARD SUMMARY

Chart 2 demonstrates that if the fund can achieve a long-term return rate of 8.10%, the funding ratio can be adversely impacted by volatile returns year by year. This component of funding risk is driven by negative cash flows (where benefit payments and expenses are greater than contributions). When a mature fund pays out more than it receives in a year and returns are below the assumption, the assets that get paid out are no longer in the fund during subsequent years of market recovery.

It is also important to consider the fact that as long as the System is significantly underfunded, the financial burden on the City will remain relatively high, and the only reason both of these projections show gradual improvement is because the contributions will be adjusted to cover any cost volatility.

Chart 3: Projection of Assets and Liabilities, 8.10% return each year, and the City makes contributions based on the City's Funding Policy



In the above scenario where the City's Funding Policy is contributed every year, the System reaches a funded ratio of 94% at the end of the projection period. Also, for the entire period the funding ratio is higher than the ratio achieved each year if the MMO contributions are made, because of the higher assumed contributions.

SECTION I
BOARD SUMMARY

Chart 4: Projection of Assets and Liabilities, if the City makes contributions based on the Funding Policy, varying returns averaging 8.10%

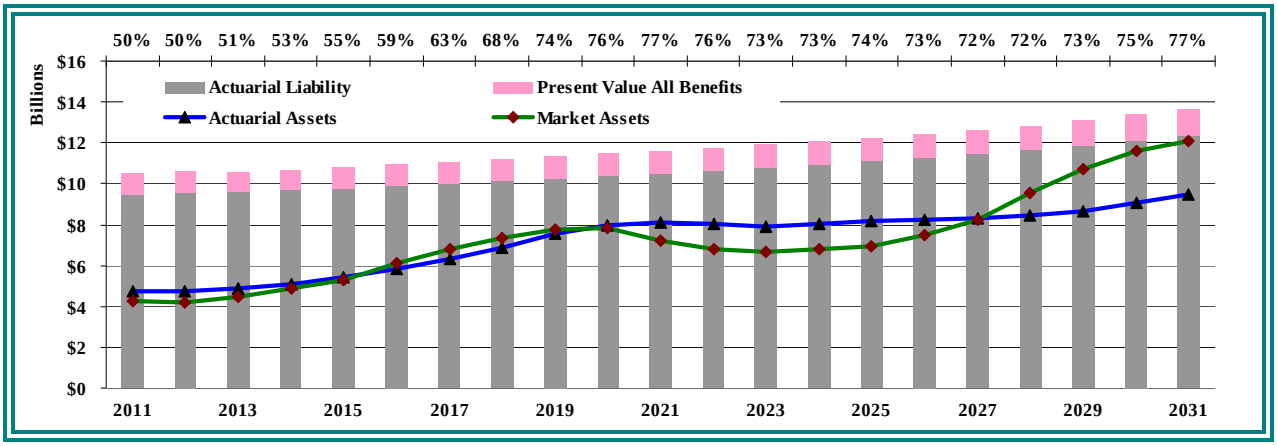


Chart 4 demonstrates that even if the return is achieved on average, because of negative cash flows the funded ratio could be materially less than long-term expectations might imply.

Projection Set 2: Projected City Contribution Rate

The chart below shows that the City's composite contribution rate under the MMO which increases slowly until 2015, after which the MMO decreases slightly until 2024 when the contribution rate drops to less than 30% of payroll. The unfunded actuarial liability is not paid off during this projection period; thus the projected contributions never revert to the normal cost rate. The decrease in 2019 for the City's Funding Policy rate is due to the payment in full of the initial unfunded liability. This projection assumes all actuarial assumptions are met, including the 8.10% anticipated investment return assumption, and the MMO contributions are made each year.

Chart 5: Projection of City Contributions, 8.10% return each year

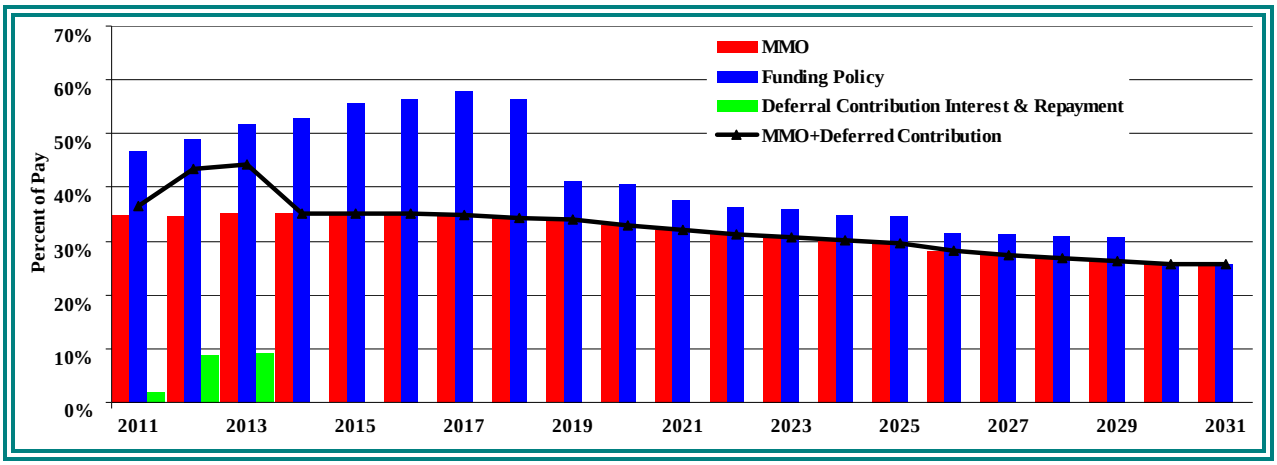
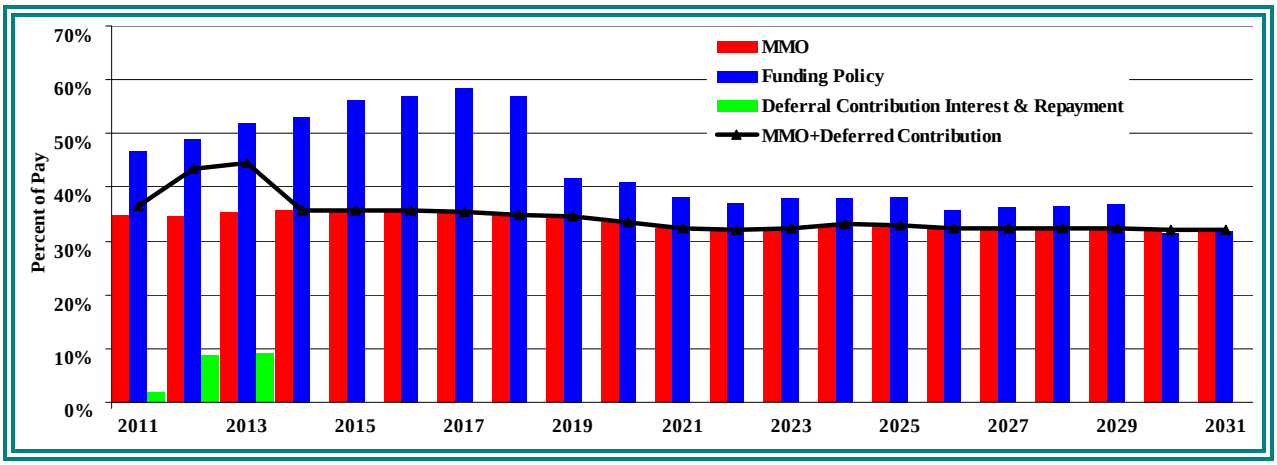


Chart 6: Projection of City Contributions, varying returns averaging 8.10%



As shown above, varying returns have an impact on the computed City contribution rate, especially in the later projection years. However the volatility is mitigated for two reasons, the

SECTION I
BOARD SUMMARY

10-year smoothing of assets and 20-year amortization of experience gains and losses. This illustrates that the future contributions should be anticipated to be higher to adjust for the market volatility. Thus, the market volatility can prolong the period of paying down the unfunded when coupled with the impact of negative cash flows in down markets.

Chart 7: Projection of City Contributions, 8.10% return each year, and the City makes contributions based on the City's Funding Policy

This chart shows the expected future contribution if the City's Funding Policy contributions are made each year. Since larger contributions are assumed to be made each year up front, projected contributions are expected to steadily decline when compared to Chart 5.

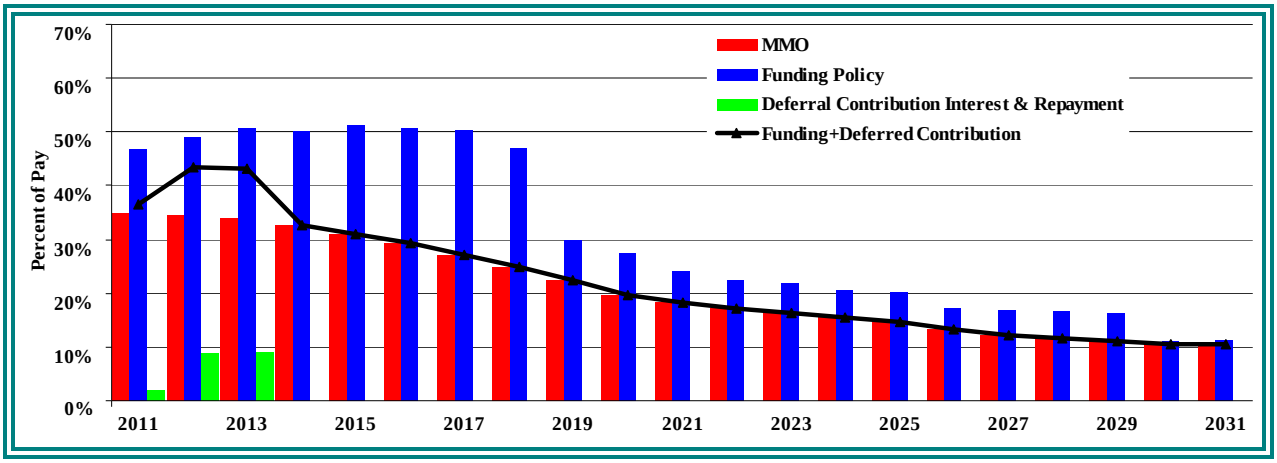
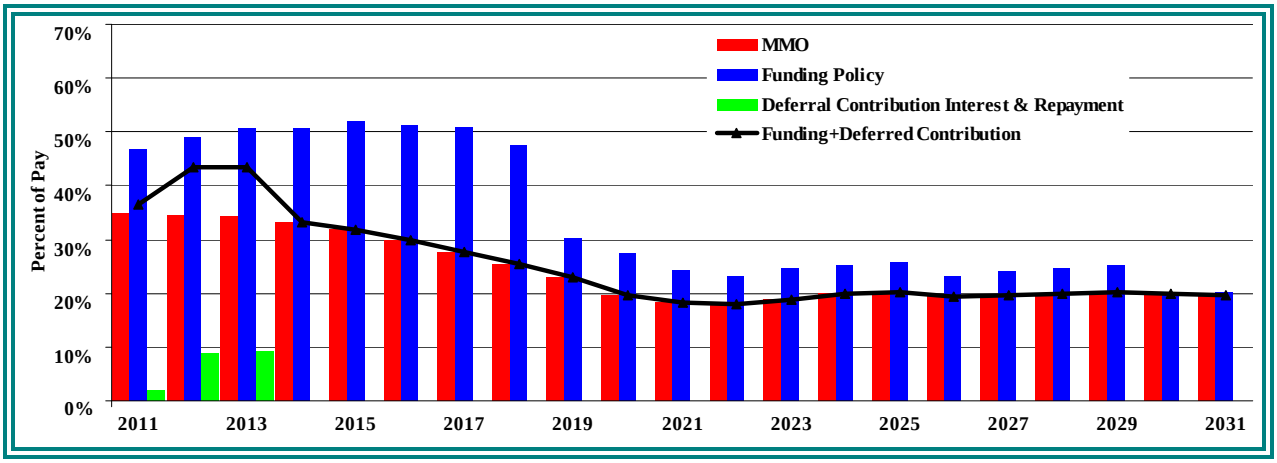


Chart 8: Projection of City Contributions, varying returns averaging 8.10% and the City makes contributions based on the City's Funding Policy

Chart 8 is similar to Chart 7, illustrating again the smoothing expectation on a City Funding Policy level when the annual return rates vary from year to year.



SECTION I
BOARD SUMMARY

We note that when the System becomes 70% funded or greater, the unfunded liability may be amortized on a rolling 10-year basis. We have not shown the implications of this alternative funding method provided for in Act 205 because of the potential length of the projected period it will take before the System reaches this level of funding.

The Retirement System uses and discloses two different asset measurements which are presented in this Section of the report: market value and actuarial value of assets. The market value represents the value of the assets if they were liquidated on the valuation date and, unless explicitly stated otherwise, this value includes the Pension Adjustment Fund (PAF) which is not available for funding purposes. The actuarial value of assets is a value that smoothes annual investment returns over ten years beginning in 2008 (five years before 2008) to reduce annual investment volatility and is used in determining contribution levels. By definition, the actuarial value of assets does not include the PAF.

On the following pages we present detailed information on System assets:

- Disclosure of assets at July 1, 2010 and July 1, 2011,
- Statement of cash flows during the year,
- Development of the actuarial value of assets,
- Apportionment of assets between plans for valuation purposes,
- Development of the Pension Adjustment Fund as of July 1, 2011, and
- Disclosure of investment performance for the year.

SECTION II
ASSETS

A. Disclosure

The market value of assets represents a "snap-shot" value as of the last day of the fiscal year that provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the value of the investments. Because these fluctuations would cause volatility in employer contributions, an actuarial value of assets is developed. Table II-1 below presents the market value by asset class as of July 1, 2010 and July 1, 2011. Table II-2 presents the System's net cash flows for the plan year beginning July 1, 2010 and ending June 30, 2011. Table II-3 presents Fiscal 2011 City contributions.

Table II-1
Statement of Assets at Market Value[1]

	7/1/2011	7/1/2010
Assets		
Cash	$ 17,756,299	$ 23,275,349
Investments	4,039,290,380	3,448,631,883
Securities Lending	485,348,281	440,491,098
Accounts Receivable	4,429,754	4,333,706
Due from Brokers	620,344,768	866,954,693
Interest and Dividends Receivable	14,434,813	10,432,515
Due from Other Governmental Units	3,612,705	4,777,219
Total Assets	$ 5,185,217,000	$ 4,798,896,464
Liabilities		
Vouchers Payable	$ 106,766	$ 36,496
Accounts Payable	3,625,838	3,300,856
Salaries and Wages Payable	189,208	158,279
Due on Securities Lending	485,348,281	440,491,098
Due to Brokers	660,238,187	844,725,570
Accrued Expenses	1,158,489	1,733,961
Deferred Revenue	2,047,238	2,070,409
Monies Held in Escrow	11,038	365,483
Allowance for Unrealized Loss	1,895,088	3,899,319
Other Liabilities	380,970	512,871
Total Liabilities	$ 1,155,001,103	$ 1,297,294,343
Net Assets	**$ 4,030,215,897**	**$ 3,501,602,121**
Deferred Contributions for each FYE	230,000,001	150,000,001
Net Assets with Deferred Contributions	**$ 4,260,215,898**	**$ 3,651,602,122**

[1] Includes the PAF which is not available for funding purposes.

SECTION II
ASSETS

B. System Cash Flows for the Year July 1, 2010 through July 1, 2011

Table II-2
Changes in Market Values[1]

Value of Assets – July 1, 2010		**$ 3,651,602,122**
Additions		
Contributions:		
Employer Contributions[2]	$ 550,154,837	
Employee Contributions	$ 52,705,556	
Total Contributions		$ 602,860,393
Investment Income:		
Gain/(Loss) from Sale of Investments	$ 635,569,433	
Interest and Dividends	$ 79,544,476	
Total Investment Income	$ 715,113,909	
Investment Activity Expenses:		
Investment Expenses	$ (15,266,001)	
Total Investment Activity Expenses	$ (15,266,001)	
Securities Lending Activities:		
Securities Lending Income	$ 2,219,697	
Securities Lending Expenses	$ (2,605,260)	
Net Income from Securities Lending Activities	$ (385,563)	
Miscellaneous Operating Revenues	$ 1,377,256	
Net Investment Income		$ 700,839,601
Total Additions		$ 1,303,699,994
Deductions		
Administrative Expenses	$ (8,052,734)	
Withdrawal Refunds	$ (5,124,739)	
Benefit Payments	$ (681,857,898)	
PAF Distributions	$ (50,847)	
Total Deductions		$ (695,086,218)
Total		
Net Increase (Decrease)		$ 608,613,776
Value of Assets – July 1, 2011		**$ 4,260,215,898**

[1] Includes the PAF which is not available for funding purposes and beginning and end of year assets reflect $150 and $80 million deferred contribution for FYE 2010 and FYE 2011, respectively.
[2] Includes $80 million deferred contribution for FYE 2011.

SECTION II
ASSETS

Table II-3

City Contributions for the Plan Year Ending June 30, 2011

Cash Received during Fiscal Year 2011	$	455,945,000
Quasi-Agencies		
Cash Received		15,374,351
Accrued as of June 30, 2011		(1,164,514)
Total	**$**	**470,154,837**
Deferred Contributions for FYE 2011		80,000,000
Total Contributions Reflected for the Actuarial Valuation	**$**	**550,154,837**

SECTION II
ASSETS

C. Actuarial Value of Assets

To determine on-going funding requirements, most pension funds utilize an actuarial value of assets that differs from the market value of assets. The actuarial value of assets represents an asset value based on averaging or smoothing year-to-year market value returns for purposes of reducing contribution volatility. Beginning with investment losses as of Fiscal Year End 2009, gains and losses are prospectively distributed in equal amounts over a ten-year period.

Table II-4

Development of Actuarial Value of Assets as of July 1, 2011

1. Market Value of Assets as of July 1, 2011	$	4,260,215,898
2. Pension Adjustment Fund (PAF) as of July 1, 2011 Before Additional Transfers	$	986,676
3. Market Value of Assets Net of Original PAF*	$	4,259,229,222

4. Deferred Asset Gains/(Losses)

Plan Year	Investment Gains / (Losses)	Percent Recognized	Percent Deferred		Amount Deferred
2006	$ 380,531,307	100%	0%	$	-
2007	(642,637,544)	80%	20%		(128,527,509)
2008	(1,235,073,412)	30%	70%		(864,551,388)
2009	200,524,637	20%	80%		160,419,709
2010	414,187,915	10%	90%		372,769,124
Total				$	(459,890,064)

5. Preliminary Actuarial Value as of July 1, 2011 (5 = 3 - 4)	$	4,719,119,286
6. Corridor for Actuarial Value		
a. 80% of Market Value Net of PAF	$	3,407,383,378
b. 120% of Market Value Net of PAF		5,111,075,067
7. Additional PAF Transfer as of July 1, 2011	$	-
8. Actuarial Value of Assets Net of Final PAF as of July 1, 2011	$	4,719,119,286
8 = max((min of 5 or 6b) and 6a), minus 7		
As a percent of Market Value Net of Final PAF		110.8%
9. Market Value of Assets Net of Final PAF	$	4,259,229,222

* Market value of assets net of original PAF before the determination of the final PAF amount. See Section II – E for more details on the development of the total PAF and the additional PAF transfer, if applicable.

SECTION II
ASSETS

D. Allocation of Actuarial Value of Assets

The asset allocation reflects the actual cash flows for each plan and proportional allocation of investment earnings.

Table II-5

Allocation of Assets for Valuation Purposes Between Plans as of July 1, 2011
($ thousands)

	1967 Plan			1987 Plan				
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
1. Actuarial Value of Assets as of July 1, 2010	$ 1,818,274	$ 766,961	$ 330,636	$ 674,540	$ 12,449	$ 616,204	$ 161,810	$ 4,380,875
2. Transactions During Plan Year July 1, 2010 to June 30, 2011								
a. Contributions								
City and Commonwealth[1]	$ 236,820	$ 137,880	$ 51,208	$ 52,082	$ 792	$ 43,523	$ 13,640	$ 535,945
Employees	8,815	4,093	1,532	15,094	167	17,892	5,113	52,706
Quasi-Public Agencies	14,210	-	-	-	-	-	-	14,210
b. Benefit Payments	(374,270)	(196,527)	(81,193)	(16,199)	(1,135)	(9,755)	(2,779)	(681,858)
c. Withdrawals	(776)	(732)	(232)	(1,672)	-	(1,460)	(252)	(5,125)
d. Administrative Expenses	(3,168)	(1,303)	(456)	(2,144)	(5)	(759)	(218)	(8,053)
e. Net Transactions	$ (118,369)	$ (56,589)	$ (29,141)	$ 47,161	$ (181)	$ 49,441	$ 15,504	$ (92,175)
3. Total Fund Balance Prior to Allocation of Investment Income [1. + 2e.]	$ 1,699,905	$ 710,372	$ 301,495	$ 721,701	$ 12,268	$ 665,645	$ 177,314	$ 4,288,700
4. Investment Income During Plan Year July 1, 2010 to June 30, 2011	$ 170,604	$ 71,294	$ 30,258	$ 72,431	$ 1,231	$ 66,805	$ 17,795	$ 430,418
5. Preliminary Actuarial Value of Assets as of July 1, 2011 [3. + 4.]	$ 1,870,510	$ 781,665	$ 331,753	$ 794,132	$ 13,499	$ 732,450	$ 195,110	$ 4,719,119
6. Final Actuarial Value of Assets With Corridor as of July 1, 2011	$ 1,870,510	$ 781,665	$ 331,753	$ 794,132	$ 13,499	$ 732,450	$ 195,110	$ 4,719,119

[1] Reflects $80 million deferred contribution from FYE 2011.
Note: Numbers may not add due to rounding.

SECTION II
ASSETS

E. Development of the Pension Adjustment Fund as of July 1, 2011

The table below provides the funds available for distribution consideration under title §22-311 of the Philadelphia Code. In general, the Pension Adjustment Fund (PAF) provides for additional benefit distributions to retirees and beneficiaries through the use of excess earnings. This may include a lump-sum bonus payment, monthly pension increases, ad-hoc cost of living adjustments, or other increase determined by the Board. The adjusted market value of assets reflects a five-year smoothing of asset gains and losses, as described in the Philadelphia Code.

Table II-6

Development of the Pension Adjustment Fund as of July 1, 2011

1.	PAF on July 1, 2010	$	872,624
2.	PAF Distribution		(50,847)
3.	Market Value Asset Return Through June 30, 2011 *		19.44%
4.	PAF on July 1, 2011 Before Additional Transfers** =(1) x [1 + (3)] + (2)	$	986,676
5.	Adjusted Market Value of Assets Through June 30, 2011	$	4,430,120,982
6.	Adjusted Market Value of Assets Return Through June 30, 2011 ***		2.52%
7.	Return in Excess of Investment Assumption Plus 1.0%, Limited to 5.0% =(6) - [8.15% + 1.00%]		0.00%
8.	Additional Transfer as of July 1, 2011 =50% of (7) x (5)	$	-
9.	Total PAF as of July 1, 2011 = (4) + (8)	$	986,676

* Market Value Asset Return including the PAF.
** Calculations are based upon the unrounded percents for items (3) and (7).
*** Asset return based upon the Adjusted Market Value of Assets using a 5-year smoothing of the gains/losses as outlined in Title 22-311.

SECTION II
ASSETS

F. Investment Performance

The market value of assets internal rate of return was 19.4% for the year ending June 30, 2011. This is compared to an assumed return of 8.15%. This return produced an overall investment gain of $414.2 million for the year ending June 30, 2011.

On an actuarial value of assets basis (net of PAF), the return for FYE 2011 was 9.9%.

Table II-7

Annual Rates of Return

Year Ending June 30,	Market Value	Actuarial Value *	Total Return Standard & Poor's 500 Index	Barclays Aggregate Bond Index**
1995	11.7%	7.8%	26.1%	12.8%
1996	15.1%	10.1%	26.0%	4.7%
1997	18.3%	12.2%	34.6%	8.2%
1998	14.3%	13.1%	30.2%	10.5%
1999	10.0%	13.1%	22.7%	3.1%
2000	9.6%	11.1%	7.3%	4.6%
2001	-6.0%	8.3%	-14.8%	11.2%
2002	-5.8%	3.4%	-18.0%	8.6%
2003	1.8%	-2.2%	0.3%	10.4%
2004	16.6%	4.6%	19.1%	0.3%
2005	9.9%	1.8%	6.3%	6.8%
2006	11.3%	6.1%	8.6%	-0.8%
2007	17.0%	10.7%	20.6%	6.1%
2008	-4.5%	10.1%	-13.1%	7.1%
2009	-19.9%	-9.3%	-26.2%	6.0%
2010	13.8%	12.9%	14.4%	9.2%
2011	19.4%	9.9%	28.1%	3.6%

* Net of PAF
** Formerly Lehman Brothers Aggregate Bond Index

SECTION II
ASSETS

G. Asset Gain/(Loss)

There was a $414.2 million investment gain on market value of assets when compared to the expected as of July 1, 2011. Table II-8 reconciles the 2011 asset gain (expected versus actual) for the market value of assets both net of the PAF and in total. This investment gain is smoothed over a ten-year period to determine the actuarial value of assets (see Table II – 4). Also provided below is a reconciliation of the PAF. There was no PAF transfer amount as of July 1, 2011.

Table II-8

Calculation of Asset Gain/(Loss)

	Market Value (Net of PAF)	PAF	Total Market Value
1. Market Value of Assets as of July 1, 2010	$ 3,650,729,498	$ 872,624	$ 3,651,602,122
2. Transactions During Plan Year July 1, 2010 to June 30, 2011			
a. Contributions			
City and Commonwealth	$ 455,945,000	$ -	$ 455,945,000
Deferred Contributions	80,000,000		80,000,000
Employees	52,705,556	-	52,705,556
Quasi-Public Agencies	14,209,837	-	14,209,837
b. Benefit Payments	(681,857,898)	(50,847) [1]	(681,908,745)
c. Withdrawals	(5,124,739)	-	(5,124,739)
d. Administrative Expenses	(8,052,734)	-	(8,052,734)
e. Net Transactions	$ (92,174,978)	$ (50,847)	$ (92,225,825)
3. Expected Investment Income From July 1, 2010 to June 30, 2011	$ 286,482,064	$ 164,899 [2]	$ 286,646,963
4. PAF transfer at July 1, 2011	$ -	$ -	$ -
5. Expected Market Value of Assets as of July 1, 2011 [1. + 2.e. + 3. + 4]	$ 3,845,036,584	$ 986,676	$ 3,846,023,260
6. Market Value of Assets as of July 1, 2011	$ 4,259,229,222	$ 986,676	$ 4,260,215,898
7. Investment Gain/(Loss) [6. - 5.]	$ 414,192,638	$ -	$ 414,192,638

[1] This is the amount of distributions made out of the Pensions Adjustment Fund during the Plan Year.
[2] The PAF is credited with investment income at the market rate of return earned by plan assets.

SECTION III
LIABILITIES

In this section, we present detailed information on liabilities for the City of Philadelphia Municipal Retirement System, including:

- Disclosure of liabilities at July 1, 2010 and July 1, 2011,
- Statement of changes in these liabilities and the unfunded liabilities during the year,
- Development of the normal cost rates by plan, and
- The reconciliation of the changes in the unfunded liability by plan as well as the expected unfunded liability as of July 1, 2012.

Disclosure

Two types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- **Present Value of all Future Benefits:** Used for measuring all future obligations, this represents the amount of money needed today to fully pay off all benefits both earned as of the valuation date and those to be earned in the future by current Plan participants, under the current Plan provisions and assumptions.
- **Actuarial Liability:** Used for determining employer contributions and GASB accounting disclosures. This liability is calculated by subtracting the present value of future member contributions and future employer normal cost contributions as determined under the Entry Age Normal Cost (EAN) actuarial funding method from the present value of all future benefits.

SECTION III
LIABILITIES

Table III-1 shows the present value of future benefits, actuarial liability, and unfunded actuarial liability as of July 1, 2011, and July 1, 2010, for the Retirement System.

Table III-1
Disclosure of Liabilities
($ thousands)

	July 1, 2011	July 1, 2010
Present Value of Future Benefits		
Actives	$ 3,873,826	$ 4,047,763
Terminated Vesteds	120,270	147,730
Disabled	688,621	680,163
Retirees	4,071,325	4,034,768
Beneficiaries	501,392	514,053
DROP Account plus Deferred Annuities	1,218,351	911,939
Non-Vested Refunds	6,122	8,511
Total City PVFB	$ 10,479,907	$ 10,344,927
Market Value of Assets	(4,260,216)	(3,651,602)
Present Value Future Member Contrib.	(346,062)	(363,820)
City's Unfunded Future Obligation	$ 5,873,629	$ 6,329,505
Actuarial Liability		
Actives	$ 2,881,397	$ 3,019,883
Terminated Vesteds	120,270	147,730
Disabled	688,621	680,163
Retirees	4,071,325	4,034,768
Beneficiaries	501,392	514,053
DROP	1,218,351	911,939
Non-Vested Refunds	6,122	8,511
Total City AL	$ 9,487,478	$ 9,317,047
Actuarial Value of Assets	(4,719,119)	(4,380,875)
Unfunded Actuarial Liability	$ 4,768,359	$ 4,936,172

SECTION III
LIABILITIES

Table III-2 shows the present value of future benefits, actuarial liability, and unfunded actuarial liability for each Plan in the Retirement System.

Table III-2
Liabilities Detail as of July 1, 2011
($ thousands)

	1967 Plan			1987 Plan				
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
Present Value of Future Benefits								
Actives	$ 973,758	$ 316,872	$ 96,882	$ 1,029,834	$ 10,778	$ 1,136,900	$ 308,804	$ 3,873,826
Terminated Vesteds	70,427	147	-	35,940	-	11,231	2,525	120,270
Disabled	237,401	235,277	58,986	37,480	-	100,173	19,304	688,621
Retirees	2,190,692	1,238,492	520,093	87,122	6,002	20,604	8,320	4,071,325
Beneficiaries	284,151	138,667	54,413	11,968	448	7,738	4,006	501,392
DROP	667,240	270,774	179,312	54,754	6,760	25,282	14,229	1,218,351
Non-Vested Refunds	1,808	161	50	3,451	9	525	119	6,122
Total PVFB	$ 4,425,477	$ 2,200,390	$ 909,736	$ 1,260,549	$ 23,997	$ 1,302,452	$ 357,307	$10,479,907
Actuarial Liability								
Actives	$ 881,994	$ 278,103	$ 85,864	$ 743,584	$ 9,630	$ 700,225	$ 181,996	$ 2,881,397
Terminated Vesteds	70,427	147	-	35,940	-	11,231	2,525	120,270
Disabled	237,401	235,277	58,986	37,480	-	100,173	19,304	688,621
Retirees	2,190,692	1,238,492	520,093	87,122	6,002	20,604	8,320	4,071,325
Beneficiaries	284,151	138,667	54,413	11,968	448	7,738	4,006	501,392
DROP	667,240	270,774	179,312	54,754	6,760	25,282	14,229	1,218,351
Non-Vested Refunds	1,808	161	50	3,451	9	525	119	6,122
Total AL	$ 4,333,713	$ 2,161,621	$ 898,718	$ 974,299	$ 22,849	$ 865,778	$ 230,499	$ 9,487,478
Actuarial Value of Assets	(1,870,510)	(781,665)	(331,753)	(794,132)	(13,499)	(732,450)	(195,110)	(4,719,119)
Unfunded Actuarial Liability	$ 2,463,203	$ 1,379,956	$ 566,965	$ 180,167	$ 9,349	$ 133,327	$ 35,389	$ 4,768,359
Funding %	43.2%	36.2%	36.9%	81.5%	59.1%	84.6%	84.6%	49.7%

Note: Numbers may not add due to rounding.

SECTION III
LIABILITIES

Table III-3 shows the derivation of the City normal cost as a percent of pay for each Plan in the System.

Table III-3
Derivation of the Normal Cost as of July 1, 2011
($ thousands)

	1967 Plan			1987 Plan				
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
Retirement	$ 10,455	$ 5,608	$ 1,709	$ 21,736	$ 111	$ 32,464	$ 9,753	$ 81,838
Death	518	239	74	1,641	12	1,510	465	4,460
Disability	1,532	730	206	4,853	19	4,704	1,364	13,408
Termination	4,138	744	215	13,013	107	2,965	752	21,935
Administrative Expenses	3,327	1,388	478	2,364	5	811	239	8,611
Total Normal Cost	$ 19,970	$ 8,708	$ 2,683	$ 43,608	$ 255	$ 42,454	$ 12,574	$ 130,251
Expected Employee Contributions	$ 7,008	$ 2,933	$ 888	$ 13,096	$ 157	$ 17,164	$ 4,921	$ 46,167
City Normal Cost	$ 12,961	$ 5,775	$ 1,795	$ 30,511	$ 98	$ 25,290	$ 7,652	$ 84,082
Current Annual Payroll	$ 186,893	$ 48,879	$ 14,794	$ 678,570	$ 2,156	$ 341,723	$ 98,258	$ 1,371,274
City Normal Cost as % of Pay, Beginning of Year Payment	6.935%	11.815%	12.132%	4.496%	4.532%	7.401%	7.788%	6.132%
City Normal Cost as % of Pay, End of Year Payment	7.497%	12.772%	13.115%	4.861%	4.899%	8.000%	8.419%	6.628%

Note: Numbers may not add due to rounding.

SECTION III
LIABILITIES

Table III-4 shows changes in the unfunded actuarial liability from July 1, 2010 to July 1, 2011 due to actuarial experience and the interest rate assumption change; there were no plan changes. It also shows the development of the expected unfunded actuarial liability from July 1, 2011 to July 1, 2012 based upon the City's Funding Policy, which is used to develop the end of year amortization amounts for the City's Funding Policy in Table IV – 10 and in Appendix D. The actuarial experience of each of the plans is calculated based on the plans' actual asset and liability values compared to the expected values.

Table III-4
Expected Unfunded Actuarial Liability for the Plan Year Ending June 30, 2012
($ thousands)

	1967 Plan			1987 Plan				
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation*	$ 2,438,906	$ 1,333,160	$ 560,338	$ 197,107	$ 10,226	$ 123,001	$ 41,907	$ 4,704,645
2. Changes in UAL due to								
a. Actuarial Experience	$ 7,696	$ 38,737	$ 3,427	$ (23,689)	$ (957)	$ 4,297	$ (8,068)	$ 21,442
b. Assumption Changes	16,602	8,059	3,201	6,748	81	6,030	1,550	42,271
c. Active Plan Changes	-	-	-	-	-	-	-	-
d. Inactive Plan Changes	-	-	-	-	-	-	-	-
e. Subtotal	$ 24,298	$ 46,795	$ 6,628	$ (16,940)	$ (876)	$ 10,327	$ (6,518)	$ 63,714
3. Actual UAL as of July 1, 2011 [1. + 2e.]	$ 2,463,204	$ 1,379,956	$ 566,966	$ 180,167	$ 9,350	$ 133,327	$ 35,389	$ 4,768,359
4. Expected Changes in UAL from July 1, 2011 to July 1, 2012 due to								
a. Interest on Changes in UAL	$ 1,968	$ 3,790	$ 537	$ (1,372)	$ (71)	$ 836	$ (528)	$ 5,161
b. FY 2012 Amortization Contribution	(139,220)	(90,060)	(31,478)	(4,269)	(219)	(860)	(454)	(266,559)
c. Subtotal	$ (137,252)	$ (86,269)	$ (30,941)	$ (5,641)	$ (290)	$ (24)	$ (982)	$ (261,398)
5. Expected UAL as of July 1, 2012 [3. + 4c.]	$ 2,325,952	$ 1,293,687	$ 536,025	$ 174,526	$ 9,060	$ 133,303	$ 34,407	$ 4,506,961

* Expected UAL is based upon the City's funding policy
Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contribution is needed based upon the funding methods either required by law or adopted by the plan sponsor. For an actuarial funding method to be effective it should result in a pattern of contributions that is both stable, predictable and systematically fund the plan obligations.

The actuarial funding method used to determine the normal cost and the unfunded actuarial liability is the Entry Age Normal (EAN) cost method. The normal cost is based upon the normal cost rate determined by taking the value, as of entry age into the plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of each member's expected future salary producing a normal cost rate that should remain relatively constant over a participant's career. The normal cost rate is multiplied by current salary to determine each member's normal cost. Finally, the normal cost is reduced by the member contribution to produce the employer normal cost. The unfunded actuarial liability is the difference between the EAN actuarial liability and the actuarial value of assets.

Within this section of the report, two contribution amounts are determined based upon two different sets of rules for determining the way the unfunded actuarial liability is funded.

The first method is defined in accordance with Act 205 and defines the Minimum Municipal Obligation (MMO), which is the City's minimum required contribution under Pennsylvania state law. The second method is in accordance with the City's Funding Policy which predates the Act 205 rules and calls for contributions that are greater than the MMO until the initial unfunded liability determined in 1984 is fully funded. Under both funding methods there are two components: the normal cost and the amortized unfunded actuarial liability. The amortized unfunded actuarial liability is the amount of the unfunded actuarial liability that is paid each year based upon the amortization periods. The amortization periods are different under the MMO and the City's Funding Policy, which is outlined in more detail in Appendix B, Section B.

Due to the contributions deferral in FYE 2010 and FYE 2011, there is an additional part to the MMO to include interest on the deferred contributions for each year of deferral and repayment of these contributions beginning in FYE 2013. This interest payment can be deferred as well and become part of the following year's MMO as we understand the provisions of Section 10 of Act 205. For FYE 2012, this report reflects interest on the total deferred contributions of $230 million plus interest and repayment of the $7.5 million in interest deferred from FYE 2011. For FYE 2013, this report reflects interest of $19.0 million on the deferred contributions and $105.5 million repayment of the deferred contributions based on our understanding of the City's intended schedule for payment schedule, which is a total of $124.5 million.

As of July 1, 2010, gains and losses are recognized annually to determine the amortization base used to calculate the MMO, as opposed to biennially. This change is implemented in accordance with section 1002 of Act 205.

In addition, the MMO, excluding the Pension Obligation Bond (POB) is also provided in this section, as required for reporting purposes under ACT 205.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

In Table IV-1 we provide the employee contribution rates as a percent of pay effective for the plan year starting July 1, 2012. Table IV-2 shows the quasi-agency funding rates as a percent of payroll.

Table IV-1
Employee Contribution Rates
for the Plan Year Beginning July 1, 2012

	Municipal[1]	Elected	Police	Fire
Plan 67	3.75%	N/A	6.00%	6.00%
Plan 87[2]	1.93%	7.30%	5.02%	5.01%

[1] For the Municipal 1967 plan, employee contributions are 6% for pay in excess of the social security wage base.
[2] Police '87 and Fire '87 contribution rates reflects the new rate of 6% for new hires after January 1, 2010 and October 15, 2010, respectively, who opted to stay in Plan '87.

This table isolates the City Funding Policy requirements for the Quasi Agencies that participate in the System based upon rates used to determine the 1967 Municipal cost.

Table IV-2
Quasi Agency Funding Rate as a Percent of Payroll

Valuation Date	July 1, 2011	July 1, 2010
Fiscal Year Ending in Year	2013	2012
1. Normal Cost Rate	7.497%	7.273%
2. Amortization Rate under the City's Funding Policy	182.424%	146.440%
3. Total Year-End Rate [1. + 2.]	189.921%	153.714%
4. Quarterly adjustment factor	0.97098	0.97081
5. Total, adjusted for Quarterly Payments [3. x 4.]	184.410%	149.227%

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-3 shows the development of the FYE 2013 Minimum Municipal Obligation (MMO) for each division. Table IV-4 on the following page shows a schedule of amortization payments toward the MMO.

Table IV-3
Development of the Minimum Municipal Obligation for Fiscal Year End 2013
($ thousands)

	Non-Uniformed	Police	Fire	Total
Estimated FY 2012-2013 Payroll	$ 897,986	$ 404,274	$ 117,009	$ 1,419,269
Normal Cost %	6.701%	12.535%	12.861%	8.871%
Normal Cost	$ 60,171	$ 50,677	$ 15,048	$ 125,897
Amortization Payment	225,048	128,340	51,575	404,964
Administrative Expenses	5,895	2,275	742	8,913
Subtotal	$ 291,114	$ 181,292	$ 67,365	$ 539,774
Expected Employee Contributions	(20,971)	(20,800)	(6,012)	(47,784)
Minimum Municipal Obligation	$ 270,144	$ 160,493	$ 61,353	$ 491,990
Deferred Contribution Interest	9,069	7,638	2,268	18,975
Deferred Principal Repayment	50,428	42,472	12,612	105,513
Total Minimum Municipal Obligation	$ 329,641	$ 210,603	$ 76,233	$ 616,478

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-4
Unfunded Liability Payments toward the MMO for Fiscal Year 2013
($ thousands)

Type of Base	Municipal			Police			Fire			Total		
	7/1/2011 Balance	Years Left	FY 2013 Payment	7/1/2011 Balance	Years Left	FY 2013 Payment	7/1/2011 Balance	Years Left	FY 2013 Payment	7/1/2011 Balance	Years Left	FY 2013 Payment
Fresh Start Base												
est. July 1, 2009	$ 2,720,655	28	$ 229,818	$ 1,531,415	28	$ 129,361	$ 593,452	28	$ 50,130	$ 4,845,522	28	$ 409,309
Gain/Loss Base												
est. July 1, 2010	$ (58,931)	19	$ (5,717)	$ (42,021)	19	$ (4,077)	$ (3,145)	19	$ (305)	$ (104,097)	19	$ (10,100)
Assumption Change												
est. July 1, 2010	$ 82,441	14	$ 9,304	$ 33,079	14	$ 3,734	$ 30,188	14	$ 3,407	$ 145,708	14	$ 16,445
Gain/Loss												
est. July 1, 2011	$ (114,875)	20	$ (10,904)	$ (23,278)	20	$ (2,210)	$ (22,891)	20	$ (2,173)	$ (161,044)	20	$ (15,287)
Assumption Change												
est. July 1, 2010	$ 23,432	15	$ 2,548	$ 14,089	15	$ 1,532	$ 4,751	15	$ 517	$ 42,271	15	$ 4,596
Total	**$ 2,652,721**		**$ 225,048**	**$ 1,513,283**		**$ 128,340**	**$ 602,355**		**$ 51,575**	**$ 4,768,360**		**$ 404,964**

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-5 (a) – (d) provides more detail by plan on the expected and actual unfunded actuarial liability and the new amortization bases established as of July 1, 2011 for the MMO.

Table IV-5a
Development of the Fiscal Year 2013 Amortization Payment under MMO
Municipal and Elect
($ thousands)

	7/1/2011 Outstanding Balance	Remaining Years	FY 2013 Payment
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation	$ 2,744,165		$ 233,404
2. Changes in UAL due to			
a. Actuarial Experience	$ (114,875)	20	$ (10,904)
b. Assumption Changes	23,432	15	2,548
c. Active Plan Changes	-	0	-
d. Inactive Plan Changes	-	0	-
e. Subtotal	$ (91,444)		$ (8,356)
3. Total [1c. + 2e.]	$ 2,652,721		$ 225,048

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-5b
Development of the Fiscal Year 2013 Amortization Payment under MMO
Police
($ thousands)

	7/1/2011 Outstanding Balance	Remaining Years	FY 2013 Payment
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation	$ 1,522,472		$ 129,018
2. Changes in UAL due to			
a. Actuarial Experience	$ (23,278)	20	$ (2,210)
b. Assumption Changes	14,089	15	1,532
c. Active Plan Changes	-	0	-
d. Inactive Plan Changes	-	0	-
e. Subtotal	$ (9,189)		$ (678)
3. Total [1c. + 2e.]	$ 1,513,283		$ 128,340

Table IV-5c
Development of the Fiscal Year 2013 Amortization Payment under MMO
Fire
($ thousands)

	7/1/2011 Outstanding Balance	Remaining Years	FY 2013 Payment
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation	$ 620,495		$ 53,232
2. Changes in UAL due to			
a. Actuarial Experience	$ (22,891)	20	$ (2,173)
b. Assumption Changes	4,751	15	517
c. Active Plan Changes	-	0	-
d. Inactive Plan Changes	-	0	-
e. Subtotal	$ (18,140)		$ (1,656)
3. Total [1c. + 2e.]	$ 602,355		$ 51,576

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-5d
Development of the Fiscal Year 2013 Amortization Payment under MMO
Total
($ thousands)

	7/1/2011 Outstanding Balance	Remaining Years	FY 2013 Payment
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation	$ 4,887,132		$ 415,654
2. Changes in UAL due to			
a. Actuarial Experience	$ (161,044)	20	$ (15,287)
b. Assumption Changes	42,271	15	4,596
c. Active Plan Changes	-	0	-
d. Inactive Plan Changes	-	0	-
e. Subtotal	$ (118,773)		$ (10,690)
3. Total [1c. + 2e.]	$ 4,768,359		$ 404,964

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

The tables on the following pages support Exhibit I of the Act 205 filings.

- Table IV-6 is a summary of assets, liabilities, and amortization contributions under the assumption that the Pension Obligation Bond (POB) was never contributed.
- Table IV-7 is a schedule of modified amortization payments under the assumption that the proceeds from the POB were never contributed.
- Table IV-8a, IV-8b, and IV-8c are debt service schedules for the POB, allocated for the Municipal, Police, and Fire divisions.
- Tables IV-9a and IV-9b are statements of receipts and disbursements for each division excluding and including bond issue assets, respectively, excluding the PAF.

Table IV-6
Summary of Modified Actuarial Data
($ thousands)

	Municipal	Police	Fire	Total
Actuarial Liability	$ 5,330,862	$ 3,027,399	$ 1,129,218	$ 9,487,478
Market Value of Assets (less POB)	$ 2,098,343	$ 1,263,381	$ 353,275	$ 3,714,999
Actuarial Value of Assets (less POB)	$ 2,176,673	$ 1,297,727	$ 372,531	$ 3,846,931
Unfunded Actuarial Liability (AL - AVA)	$ 3,154,189	$ 1,729,672	$ 756,687	$ 5,640,548
Amortization Contributions				
Total Amortization Amount	$ 267,754	$ 146,836	$ 64,787	$ 479,377
Remaining Years	28	28	27	27

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-7
Modified Unfunded Liability Payments toward the MMO for Fiscal Year 2013
($ thousands)

Type of Base	Municipal 7/1/2011 Balance	Municipal Remaining Years	Municipal FY 2013 Payment	Police 7/1/2011 Balance	Police Remaining Years	Police FY 2013 Payment	Fire 7/1/2011 Balance	Fire Remaining Years	Fire FY 2013 Payment	Total 7/1/2011 Balance	Total Remaining Years
Fresh Start UAL Base est. July 1, 2009	$ 3,190,386	28	$ 269,497	$ 1,728,074	28	$ 145,973	$ 732,088	28	$ 61,841	$ 5,650,548	28
July 1, 2010 Charges											
Experience (Gain)/Loss	$ (52,194)	19	$ (5,064)	$ (36,511)	19	$ (3,542)	$ 1,792	19	$ 174	$ (86,913)	19
Assumption Change	82,441	14	9,304	33,079	14	3,733	30,188	14	3,407	145,708	14
July 1, 2011 Charges											
Experience (Gain)/Loss	$ (89,876)	20	$ (8,531)	$ (9,060)	20	$ (860)	$ (12,133)	20	$ (1,152)	$ (111,068)	20
Assumption Change	$ 23,432	15	$ 2,548	$ 14,089	15	$ 1,532	$ 4,751	15	$ 517	$ 42,271	15
Total	$ 3,154,189		$ 267,754	$ 1,729,671		$ 146,836	$ 756,687		$ 64,787	$ 5,640,546	

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-8a
TOTAL DEBT SERVICE REQUIREMENTS: MUNICIPAL

Plan Year	Required Principal Payment	Required Interest Payment	Premium or Discount Amortized	Principal Balance at Valuation Date
1999	$ -	$ 7,041,525.30	$ -	$ 727,185,593.15
2000	9,917,857.50	29,825,175.27	-	717,267,735.65
2001	4,567,730.63	29,324,323.46	-	712,700,005.02
2002	-	29,087,715.02	-	712,700,005.02
2003	6,422,403.75	29,087,715.02	-	706,277,601.27
2004	8,884,981.88	28,728,336.25	-	697,392,619.39
2005	15,161,038.13	28,250,550.75	-	682,231,581.26
2006	18,743,737.50	27,403,048.72	-	663,487,843.76
2007	22,526,257.50	26,345,901.92	-	640,961,586.26
2008	26,486,083.13	25,064,157.87	-	614,475,503.13
2009	30,870,879.38	23,543,856.70	-	583,604,623.75
2010	40,000,711.88	21,756,432.78	-	543,603,911.87
2011	45,151,018.13	19,420,391.21	-	498,452,893.74
2012	22,154,721.72	45,234,066.39	-	476,298,172.02
2013	21,786,233.75	48,416,929.37	-	454,511,938.27
2014	20,545,516.84	50,378,126.28	-	433,966,421.43
2015	20,088,811.07	53,652,021.42	-	413,877,610.36
2016	19,364,886.72	56,464,212.02	-	394,512,723.64
2017	18,085,471.62	57,743,627.12	-	376,427,252.02
2018	16,915,332.51	58,913,766.23	-	359,511,919.51
2019	15,787,131.76	60,041,966.99	-	343,724,787.75
2020	14,758,165.41	61,070,933.33	-	328,966,622.34
2021	13,823,708.03	62,005,390.71	-	315,142,914.31
2022	12,919,375.38	62,909,723.36	-	302,223,538.93
2023	12,071,748.11	63,757,350.63	-	290,151,790.82
2024	11,250,110.80	64,578,987.94	-	278,901,680.02
2025	10,560,195.36	65,268,903.38	-	268,341,484.66
2026	17,271,090.90	58,558,007.84	-	251,070,393.76
2027	60,297,984.38	16,196,263.75	-	190,772,409.38
2028	64,125,534.38	12,367,341.75	-	126,646,875.00
2029	126,646,875.00	4,147,685.16	-	-

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-8b
TOTAL DEBT SERVICE REQUIREMENTS: POLICE

Plan Year	Required Principal Payment	Required Interest Payment	Premium or Discount Amortized	Principal Balance at Valuation Date
1999	$ -	$ 3,848,228.76	$ -	$ 397,410,560.15
2000	5,420,158.68	16,299,607.13	-	391,990,401.47
2001	2,496,287.61	16,025,889.30	-	389,494,113.86
2002	-	15,896,581.60	-	389,494,113.86
2003	3,509,875.74	15,896,581.60	-	385,984,238.12
2004	4,855,686.99	15,705,644.36	-	381,128,551.13
2005	8,285,583.09	15,439,067.14	-	372,842,968.04
2006	10,243,546.20	14,975,903.05	-	362,599,421.84
2007	12,310,712.28	14,398,167.04	-	350,288,709.56
2008	14,474,776.77	13,697,687.51	-	335,813,932.79
2009	16,871,089.83	12,866,835.33	-	318,942,842.96
2010	21,860,588.91	11,889,999.22	-	297,082,254.05
2011	24,675,257.01	10,613,340.83	-	272,406,997.04
2012	12,107,666.12	24,720,643.30	-	260,299,330.92
2013	11,906,285.60	26,460,093.82	-	248,393,045.32
2014	11,228,227.61	27,531,897.73	-	237,164,817.71
2015	10,978,635.63	29,321,097.79	-	226,186,182.08
2016	10,583,007.35	30,857,974.00	-	215,603,174.73
2017	9,883,800.61	31,557,180.75	-	205,719,374.12
2018	9,244,313.74	32,196,667.62	-	196,475,060.38
2019	8,627,746.39	32,813,234.97	-	187,847,313.99
2020	8,065,411.14	33,375,570.22	-	179,781,902.85
2021	7,554,725.51	33,886,255.84	-	172,227,177.34
2022	7,060,503.20	34,380,478.16	-	165,166,674.14
2023	6,597,270.66	34,843,710.70	-	158,569,403.48
2024	6,148,241.77	35,292,739.59	-	152,421,161.71
2025	5,771,199.53	35,669,781.82	-	146,649,962.18
2026	9,438,737.48	32,002,243.88	-	137,211,224.70
2027	32,953,149.75	8,851,339.07	-	104,258,074.95
2028	35,044,924.95	6,758,814.06	-	69,213,150.00
2029	69,213,150.00	2,266,730.66	-	-

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-8c
TOTAL DEBT SERVICE REQUIREMENTS: FIRE

Plan Year	Required Principal Payment	Required Interest Payment	Premium or Discount Amortized	Principal Balance at Valuation Date
1999	$ -	$ 1,620,185.70	$ -	$ 167,318,251.01
2000	2,282,001.44	6,862,479.41	-	165,036,249.57
2001	1,050,989.88	6,747,238.34	-	163,985,259.69
2002	-	6,692,797.06	-	163,985,259.69
2003	1,477,731.92	6,692,797.06	-	162,507,527.77
2004	2,044,346.92	6,612,408.45	-	160,463,180.85
2005	3,488,405.72	6,500,173.80	-	156,974,775.13
2006	4,312,749.60	6,305,171.92	-	152,662,025.53
2007	5,183,070.24	6,061,932.84	-	147,478,955.29
2008	6,094,187.16	5,767,016.15	-	141,384,768.13
2009	7,103,085.64	5,417,209.80	-	134,281,682.49
2010	9,203,770.28	5,005,941.15	-	125,077,912.21
2011	10,388,805.08	4,468,440.96	-	114,689,107.13
2012	5,097,583.51	10,407,913.67	-	109,591,523.62
2013	5,012,798.05	11,140,259.13	-	104,578,725.57
2014	4,727,321.30	11,591,511.24	-	99,851,404.27
2015	4,622,237.80	12,344,802.31	-	95,229,166.47
2016	4,455,669.93	12,991,859.70	-	90,773,496.54
2017	4,161,289.10	13,286,240.52	-	86,612,207.44
2018	3,892,051.60	13,555,478.02	-	82,720,155.84
2019	3,632,463.70	13,815,065.92	-	79,087,692.14
2020	3,395,708.67	14,051,820.95	-	75,691,983.47
2021	3,180,699.22	14,266,830.40	-	72,511,284.25
2022	2,972,621.18	14,474,908.45	-	69,538,663.07
2023	2,777,590.48	14,669,939.14	-	66,761,072.59
2024	2,588,539.82	14,858,989.80	-	64,172,532.77
2025	2,429,797.06	15,017,732.56	-	61,742,735.71
2026	3,973,908.11	13,473,621.52	-	57,768,827.60
2027	13,873,973.00	3,726,600.95	-	43,894,854.60
2028	14,754,654.60	2,845,603.67	-	29,140,200.00
2029	29,140,200.00	954,341.55	-	-

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV- 9a provides the receipts and disbursements of assets *excluding* the Bond issue assets and excluding the PAF.

Table IV-9a
Receipts and Disbursements Excluding Bond Issue Assets

	Municipal	Police	Fire	Total
Assets as of July 1, 2010	$ 1,787,844,911	$ 1,049,910,179	$ 301,685,089	$ 3,139,440,179
Receipts				
Employer Contributions	$ 282,296,412	$ 161,550,709	$ 59,226,094	$ 503,073,216
Employee Contributions	24,075,533	21,985,167	6,644,856	52,705,556
State Aid	33,416,436	20,924,851	7,480,162	61,821,449
Supplemental State Assistance	-	-	-	-
Investment Income (includes investment expenses)	370,078,758	219,546,244	63,368,685	652,993,686
Other Receipts	-	-	-	-
Total Receipts	$ 709,867,139	$ 424,006,972	$ 136,719,797	$ 1,270,593,907
Disbursements				
Benefit Payments	$ 391,604,115	$ 206,281,728	$ 83,972,054	$ 681,857,897
Refund of Contributions	2,448,306	2,192,827	483,605	5,124,738
Administrative Expenses	5,316,525	2,061,939	674,271	8,052,734
PAF Transfer at Year End	-	-	-	-
Other Disbursements	-	-	-	-
Total Disbursements	$ 399,368,946	$ 210,536,494	$ 85,129,930	$ 695,035,369
Assets as of July 1, 2011	$ 2,098,343,104	$ 1,263,380,657	$ 353,274,956	$ 3,714,998,717

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV- 9b provides the market value of assets *including* the Bond issue assets and excluding the PAF.

Table IV-9b
Receipts and Disbursements Including Bond Issue Assets

	Municipal	Police	Fire	Total
Assets as of July 1, 2010	$ 2,093,483,569	$ 1,150,277,097	$ 406,968,832	$ 3,650,729,497
Receipts				
Employer Contributions	$ 270,488,519	$ 160,477,710	$ 57,367,159	$ 488,333,388
Employee Contributions	24,075,533	21,985,167	6,644,856	52,705,556
State Aid	33,416,436	20,924,851	7,480,162	61,821,449
Supplemental State Assistance	-	-	-	-
Investment Income (includes investment expenses)	398,266,577	224,996,195	77,411,930	700,674,702
Other Receipts	-	-	-	-
Total Receipts	$ 726,247,065	$ 428,383,923	$ 148,904,107	$ 1,303,535,095
Disbursements				
Benefit Payments	$ 391,604,115	$ 206,281,728	$ 83,972,054	$ 681,857,897
Refund of Contributions	2,448,306	2,192,827	483,605	5,124,738
Administrative Expenses	5,316,525	2,061,939	674,271	8,052,734
PAF Transfer at Year End	-	-	-	-
Other Disbursements	-	-	-	-
Total Disbursements	$ 399,368,946	$ 210,536,494	$ 85,129,930	$ 695,035,369
Assets as of July 1, 2011	$ 2,420,361,688	$ 1,368,124,526	$ 470,743,010	$ 4,259,229,224

Note: Numbers may not add due to rounding.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

The Table IV – 10 and Table IV – 11 provide information on the City's Funding Policy for FYE 2012 and FYE 2013. The differences between the MMO and the City's Funding Policy are:

- The City's Funding Policy amortizes the initial July 1, 1985 unfunded actuarial liability over 34 years. Chapter 10 under Act 44 allowed for the amortization of the entire unfunded actuarial liability as of July 1, 2009 to be "fresh started" over a 30-year period for MMO purposes.

- The normal cost portion of the City's Funding Policy payment is based on actual fiscal year payroll, whereas the MMO is based on the prior year's estimated payroll for that year.

- Interest does not accumulate on the MMO, as long as the payment is made by the end of the fiscal year.

- Both the City's Funding Policy and the MMO utilize valuation results developed in the previous year (e.g., the July 1, 2011 valuation report will determine FYE 2012 contribution amounts). However, no interest is added to the MMO for this delay.

- The MMO reflects amortization of prior years' City contributions above past MMOs as actuarial gains.

Starting with FYE 2007-2008, the MMO recognized actuarial gains and losses every other year, in order to coincide with the filing of the Act 205 forms. Beginning for FYE 2012, gains and losses are recognized annually. The City's Funding Policy recognizes actuarial gains and losses on an annual basis.

Table IV – 10 develops the amortized amounts for the current year under the City's Funding Policy. For additional details on the amortized amounts by plan, refer to Appendix B. Table IV – 11 provides the estimated FYE 2013 and updated FYE 2012 contribution amount under the City's Funding Policy. The estimated FYE 2013 contribution will be updated in next year's actuarial valuation report based upon the July 1, 2012 payroll.

SECTION IV
CONTRIBUTIONS AND MINIMUM MUNICIPAL OBLIGATION

Table IV-10
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
Total
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation Remaining	$ 4,704,645	$ 4,438,086		$ 602,068	$ 650,836
2. Changes in UAL due to					
a. Actuarial Experience	$ 21,442	$ 23,179	20	$ 2,200	$ 2,379
b. Assumption Changes	42,271	45,695	15	4,969	5,371
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ 63,713	$ 68,874		$ 7,169	$ 7,750
3. Total [1c. + 2e.]	$ 4,768,358	$ 4,506,960		$ 609,237	$ 658,586

Table IV-11
City's Funding Policy Contributions*

Fiscal Year	2013	% of Pay	2012	% of Pay
Estimated FY Payroll	$ 1,419,269		$ 1,371,274	**
Normal Cost (with Expenses)	$ 134,810	9.50%	$ 129,228	9.42%
Employee Contributions	(47,784)	3.37%	(46,848)	3.42%
City Normal Cost	$ 87,026	6.13%	$ 82,380	6.01%
Amortization Payment	609,237	42.93%	600,321	43.78%
City's Funding Policy	$ 696,264	49.06%	$ 682,701	49.79%

* Assuming beginning-of-year payment.
** FYE 2012 payroll for the City's Funding Policy is the final payroll for the year. All other payroll is estimated based upon the prior year's data used for the actuarial valuation.

SECTION V
ACCOUNTING STATEMENT INFORMATION

The Governmental Accounting Standards Board's Statement No. 25 (GASB 25) is effective for plan years beginning after June 15, 1996, and supersedes Statement No. 5. GASB No. 25 establishes standards for disclosure of pension information by public employee retirement systems and governmental employers in notes to financial statements and supplementary information. The disclosure presents the actuarial liability computed for funding purposes to the actuarial value of assets to determine a funding ratio (i.e., the EAN liability). The actuarial liability is determined assuming that participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 8.25% per annum for Fiscal Year 2011. For Fiscal Year 2012, the assumed interest rate will change to 8.15% based upon July 1, 2010 liabilities valued at this interest rate. For Fiscal Year 2013 the assumed interest rate will change to 8.10% based upon July 1, 2011 liabilities valued at this interest rate. GASB Statement No. 25 requires the actuarial liability be compared with the actuarial value of assets for funding purposes. The relevant amounts as of July 1, 2010 and July 1, 2011 are presented in Table V-1 and Table V-2.

GASB 25 also requires for the disclosure of two financial statements and two schedules of historical information:

- Statement of Plan Net Assets – includes information about System assets and liabilities at the valuation date. This statement can be found at the beginning of the Assets section of this report, in Table II-1. The City's deferred contributions are included in these amounts based on the requirement set out in Section 10 of Act 205.

- Statement of Changes in Plan Net Assets – shows receipts and disbursements from the Fund for the most recent plan year. This statement can also be found in the Assets section of this report, in Table II-2. The City's deferred contributions are included in these amounts based on the requirement set out in Section 10 of Act 205.

- Schedule of Funding Progress – discloses current and historical information about the funded status of the plan. This schedule can be found in Tables V-1 and V-3. Consistent with the exclusion of the deferred contribution amounts in the Schedule of Employer Contribution amounts, we have adjusted the Actuarial Value of Assets for the net amounts of the deferred contributions of $150 million and $230 million of the July 1, 2010 and 2011 values respectively.

- Schedule of Employer Contributions – discloses historical information about the Annual Required Contribution (ARC) and the actual contributions made by the employer. This schedule can be found in Table V-4. These contributions do not include the deferred contributions of $150 million for FYE 2010 and $80 million for FYE 2011.

GASB Statement No. 27 requires that financial statements must include additional disclosures for pension expenditures/expenses. It is effective for the period beginning after June 15, 1997. Table V-5 summarizes the results of this valuation according to our interpretation of GASB 27.

SECTION V
ACCOUNTING STATEMENT INFORMATION

The interpretation of the statements is subject to your auditor's review. The required disclosures are:

- Annual Required Contribution (ARC) – this is the expected contribution required based on statement-specific valuation methods and assumptions, with the unfunded liability amortized over an initial period not to exceed 40 years and thereafter 30 years, either as a level-dollar amount or as a level percentage of pay, and with amortization of contributions less than or in excess of the required amount. Historically, the ARC has been shown as the contribution required under the City's Funding Policy.

- Equivalent Single Amortization Period – this is the number of years incorporated in a weighted average amortization factor for all amortization components combined. The weighted average amortization factor is equal to the total unfunded actuarial liability divided by the sum of the amortization provisions for each of the separately amortized components. This weighted average produces 11.3 years where the amortized components are based upon the Funding policy.

- Net Pension Obligation (NPO) – the accumulated value of contribution deficiencies (or excesses) over required contributions from July 1, 1987 to July 1, 2011 between the annual pension cost and the employer's contribution.

- Annual Pension Cost – is equal to the ARC plus one year's interest on NPO and ARC adjustment.

Table V-1
Funding Status Under GASB Statement No. 25
($ thousands)

		July 1, 2011	July 1, 2010	% Change
1.	Actuarial Liabilities			
	a. Members Currently Receiving Payments	$ 6,479,690	$ 6,140,923	5.5%
	b. Vested Terminated and Inactive Members	126,392	156,241	-19.1%
	c. Active Members	2,881,397	3,019,882	-4.6%
	d. Total Actuarial Liability	$ 9,487,478	$ 9,317,046	1.8%
2.	Actuarial Value of Assets*	$ 4,489,119	$ 4,230,875	6.1%
3.	Unfunded Actuarial Liability	$ 4,998,359	$ 5,086,171	-1.7%
4.	Ratio of Actuarial Value of Assets to Actuarial Liability (2)/(1)(d)	47.3%	45.4%	1.9%

* Actuarial Value of Assets have been adjusted to net out the outstanding deferred contribution amounts of $150 million as of July 1, 2010 and $230 million as of July 1, 2011.
Note: Numbers may not add due to rounding.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-2
Statement of Changes in Liabilities - GASB No. 25 Basis
($ thousands)

Actuarial Liability as of July 1, 2010	**$**	**9,317,046**
Increase (Decrease) During Year Attributable to:		
Passage of Time		731,345
Benefits Paid		(686,983)
Assumption Change		42,271
Plan Amendment		-
Benefits Accrued, Other Gains/Losses		83,799
Net Increase (Decrease)	$	170,432
Actuarial Liability as of July 1, 2011	**$**	**9,487,478**

Table V-3
Schedule of Funding Progress
($ millions)

Actuarial Valuation Date *	Actuarial Value of Assets (a)	Actuarial Liability (b)	Unfunded Actuarial Liability (UAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAL as a % of Covered Payroll [(b-a)/c]
7/1/1992	$ 1,981.8	$ 4,425.5	$ 2,443.7	44.8%	$ 993.3	246.0%
7/1/1993	2,113.9	4,502.1	2,388.2	47.0%	975.0	244.9%
7/1/1994	2,225.2	4,662.6	2,437.4	47.7%	974.3	250.2%
7/1/1995	2,312.1	4,850.8	2,538.7	47.7%	1,006.4	252.3%
7/1/1996	2,457.2	5,098.1	2,640.9	48.2%	1,068.3	247.2%
7/1/1997	2,660.9	5,318.1	2,657.2	50.0%	1,067.7	248.9%
7/1/1998	2,921.3	5,586.1	2,664.8	52.3%	1,128.2	236.2%
7/1/1999	4,496.8	5,862.1	1,365.3	76.7%	1,178.6	115.8%
7/1/2000	4,765.0	6,193.4	1,428.4	76.9%	1,142.8	125.0%
7/1/2001	4,943.4	6,379.8	1,436.4	77.5%	1,180.4	121.7%
7/1/2002	4,891.3	6,727.2	1,835.9	72.7%	1,207.3	152.1%
7/1/2003	4,548.1	7,188.3	2,640.2	63.3%	1,269.3	208.0%
7/1/2004	4,333.1	7,247.7	2,914.6	59.8%	1,266.0	230.2%
7/1/2005	4,159.5	7,851.5	3,692.0	53.0%	1,270.7	290.5%
7/1/2006	4,168.5	8,083.7	3,915.2	51.6%	1,319.4	296.7%
7/1/2007	4,421.7	8,197.2	3,775.5	53.9%	1,351.8	279.3%
7/1/2008	4,623.6	8,402.2	3,778.7	55.0%	1,456.5	259.4%
7/1/2009	4,042.1	8,975.0	4,932.9	45.0%	1,463.3	337.1%
7/1/2010	4,230.9	9,317.0	5,086.2	45.4%	1,421.2	357.9%
7/1/2011	4,489.1	9,487.5	4,998.4	47.3%	1,371.3	364.5%

* The actuarial valuation reports need to be referenced in comparison of these values to ascertain when and if the values reflect assumption, benefit or method changes.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-4
Schedule of Employer Contributions
($ millions)

Fiscal Year Ended June 30	Annual Required Contribution (ARC)	Percentage of ARC Contributed
1993	$ 209.4	100.0%
1994	223.8	104.5%
1995	212.8	100.0%
1996	222.5	100.0%
1997	237.0	100.0%
1998	252.1	100.0%
1999	256.7	586.9%*
2000	168.9	108.9%
2001	167.6	100.0%
2002	178.2	100.0%
2003	195.5	91.9%
2004	253.8	79.9%
2005	358.1	83.6%
2006	395.0	84.0%
2007	527.9	81.9%
2008	536.9	79.5%
2009	539.5	84.4%
2010	581.1	53.8%**
2011	715.5	65.7%**

* Due to the Pension Obligation Bond worth $1,250,000,000 deposited on February 2, 1999.

** Reflects the actual contributions contributed for FYE 2010 and FYE 2011 which does not include the deferred contributions.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-5
Calculation of Annual Pension Cost
($ thousands)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
ARC	$ 223,750	$ 212,838	$ 222,482	$ 237,016	$ 252,080	$ 256,704	$ 168,928	$ 167,616	$ 178,239
Interest on NPO	-	(900)	(869)	(840)	(811)	(783)	(113,257)	(110,748)	(106,975)
Adjustment to ARC	-	1,241	1,198	1,158	1,118	1,080	156,130	152,672	147,470
Annual Pension Cost	$ 223,750	$ 213,179	$ 222,811	$ 237,334	$ 252,387	$ 257,001	$ 211,801	$ 209,540	$ 218,734
Contributions	233,750	212,838	222,482	237,016	252,080	1,506,704	183,928	167,616	178,239
Increase in NPO	$ (10,000)	$ 341	$ 329	$ 318	$ 307	$ (1,249,703)	$ 27,873	$ 41,924	$ 40,495
NPO at BOY	-	(10,000)	(9,659)	(9,330)	(9,012)	(8,705)	(1,258,408)	(1,230,535)	(1,188,611)
NPO at EOY	$ (10,000)	$ (9,659)	$ (9,330)	$ (9,012)	$ (8,705)	$ (1,258,408)	$ (1,230,535)	$ (1,188,611)	$ (1,148,116)
Interest Rate	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
15-Year Amortization Factor (EOY)	8.06	8.06	8.06	8.06	8.06	8.06	8.06	8.06	8.06

Note: ($9,012,000) was the NPO at transition date.

SECTION V
ACCOUNTING STATEMENT INFORMATION

Table V-5
Calculation of Annual Pension Cost (continued)
($ thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011
ARC	$ 195,514	$ 253,844	$ 358,141	$ 394,950	$527,925	$ 536,874	$ 539,464	$ 581,123	$ 715,544
Interest on NPO	(103,330)	(98,392)	(90,448)	(82,068)	(71,541)	(60,685)	(48,957)	(39,899)	(14,155)
Adjustment to ARC	142,446	135,638	124,687	113,135	99,953	84,785	68,399	55,744	20,353
Annual Pension Cost	$ 234,630	$ 291,090	$ 392,380	$ 426,017	$ 556,337	$ 560,974	$ 558,906	$ 596,968	$ 721,742
Contributions	179,757	202,827	299,266	331,765	432,267	426,934	455,389	312,556	470,155
Increase in NPO	$ 54,873	$ 88,263	$ 93,114	$ 94,252	$ 124,069	$ 134,040	$ 103,517	$ 284,412	$ 251,587
NPO at BOY	(1,148,116)	(1,093,243)	(1,004,980)	(911,866)	(817,614)	(693,545)	(559,505)	(455,987)	(171,575)
NPO at EOY	$(1,093,243)	$(1,004,980)	$ (911,866)	$ (817,614)	$ (693,545)	$ (559,505)	$ (455,987)	$ (171,575)	$ 80,012
Interest Rate	9.00%	9.00%	9.00%	9.00%	8.75%	8.75%	8.75%	8.75%	8.25%
15-Year Amortization Factor (EOY)	8.06	8.06	8.06	8.06	8.18	8.18	8.18	8.18	8.43

APPENDIX A
MEMBERSHIP INFORMATION

The data for this valuation was provided by the Board of Pensions as of July 1, 2011. Cheiron did not audit any of the data; however, it was reviewed to ensure that it complies with generally accepted actuarial standards. The following is a list of data charts contained in this section:

- A-1: Active Member Data by Plan
- A-2: Non-Active Member Data, Counts, by Plan
- A-3: Non-Active Member Data, Total Annual Benefits, by Plan
- A-4: Non-Active Member Data, Average Annual Benefits, by Plan
- A-5 through A-20: Age/Service Distribution for Active Participants, Counts and Average Salary for all Plans
- A-21: Reconciliation of Plan Membership
- A-22 through A-26: Age and Benefit Distributions for Non-Active Member Data

APPENDIX A
MEMBERSHIP INFORMATION

Table A-1
Active Member Data

	July 1, 2011	July 1, 2010	% Change		July 1, 2011	July 1, 2010	% Change
Total City				**1987 Municipal**			
Count	26,671	27,928	-4.5%	Count	15,341	15,326	0.1%
Average Age	44.0	43.9	0.3%	Average Age	43.9	43.5	0.8%
Average Service	12.6	12.5	0.7%	Average Service	9.1	8.6	6.1%
Average Salary	$ 51,414	$ 50,886	1.0%	Average Salary	$ 44,232	$ 43,847	0.9%
Total Annual Salary	$ 1,371,273,920	$ 1,421,150,868	-3.5%	Total Annual Salary	$ 678,569,594	$ 671,999,670	1.0%
1967 Municipal				**1987 Elected**			
Count	3,410	4,214	-19.1%	Count	17	17	0.0%
Average Age	52.1	52.2	-0.1%	Average Age	57.8	56.8	1.8%
Average Service	25.2	24.7	1.9%	Average Service	22.1	21.1	4.7%
Average Salary	$ 54,807	$ 54,708	0.2%	Average Salary	$ 126,833	$ 126,490	0.3%
Total Annual Salary	$ 186,893,289	$ 230,539,884	-18.9%	Total Annual Salary	$ 2,156,159	$ 2,150,337	0.3%
1967 Police				**1987 Police**			
Count	686	891	-23.0%	Count	5,417	5,586	-3.0%
Average Age	52.4	52.3	0.3%	Average Age	39.2	38.3	2.2%
Average Service	27.0	26.9	0.6%	Average Service	12.6	11.7	7.9%
Average Salary	$ 71,253	$ 69,578	2.4%	Average Salary	$ 63,083	$ 60,249	4.7%
Total Annual Salary	$ 48,879,479	$ 61,994,308	-21.2%	Total Annual Salary	$ 341,723,114	$ 336,550,819	1.5%
1967 Fire				**1987 Fire**			
Count	214	290	-26.2%	Count	1,586	1,604	-1.1%
Average Age	53.6	53.3	0.5%	Average Age	39.8	39.2	1.6%
Average Service	27.6	27.2	1.5%	Average Service	11.3	10.6	6.7%
Average Salary	$ 69,132	$ 68,805	0.5%	Average Salary	$ 61,953	$ 61,074	1.4%
Total Annual Salary	$ 14,794,202	$ 19,953,494	-25.9%	Total Annual Salary	$ 98,258,083	$ 97,962,356	0.3%

APPENDIX A
MEMBERSHIP INFORMATION

Table A-2
Non-Active Member Data
Count

	July 1, 2011	July 1, 2010	% Change		July 1, 2011	July 1, 2010	% Change
Total City				**1987 Municipal Plan**			
Retired	21,134	21,064	0.3%	Retired	906	760	19.2%
Disabled	4,235	4,280	-1.1%	Disabled	231	183	26.2%
Beneficiary	8,273	8,558	-3.3%	Beneficiary	169	140	20.7%
In Pay Status Total	33,642	33,902	-0.8%	In Pay Status Total	1,306	1,083	20.6%
DROP	2,712	2,018	34.4%	DROP	355	227	56.4%
Deferred Vested	1,324	1,599	-17.2%	Deferred Vested	665	788	-15.6%
1967 Municipal Plan				**1987 Elected Plan**			
Retired	12,580	12,613	-0.3%	Retired	12	12	0.0%
Disabled	1,725	1,784	-3.3%	Disabled	-	-	0.0%
Beneficiary	5,116	5,323	-3.9%	Beneficiary	3	3	0.0%
In Pay Status Total	19,421	19,720	-1.5%	In Pay Status Total	15	15	0.0%
DROP	1,507	1,180	27.7%	DROP	7	8	-12.5%
Deferred Vested	520	631	-17.6%	Deferred Vested	-	-	
1967 Police Plan				**1987 Police Plan**			
Retired	5,519	5,561	-0.8%	Retired	109	85	28.2%
Disabled	1,604	1,660	-3.4%	Disabled	257	223	15.2%
Beneficiary	2,119	2,184	-3.0%	Beneficiary	77	82	-6.1%
In Pay Status Total	9,242	9,405	-1.7%	In Pay Status Total	443	390	13.6%
DROP	441	293	50.5%	DROP	85	46	84.8%
Deferred Vested	1	4	-75.0%	Deferred Vested	114	143	-20.3%
1967 Fire Plan				**1987 Fire Plan**			
Retired	1,961	1,995	-1.7%	Retired	47	38	23.7%
Disabled	369	389	-5.1%	Disabled	49	41	19.5%
Beneficiary	755	796	-5.2%	Beneficiary	34	30	13.3%
In Pay Status Total	3,085	3,180	-3.0%	In Pay Status Total	130	109	19.3%
DROP	272	236	15.3%	DROP	45	28	60.7%
Deferred Vested	-	4	-100.0%	Deferred Vested	24	29	-17.2%

APPENDIX A
MEMBERSHIP INFORMATION

Table A-3
Non-Active Member Data
Total Annual Benefit

	July 1, 2011	July 1, 2010	% Change		July 1, 2011	July 1, 2010	% Change
Total City				**1987 Municipal Plan**			
Retired	$ 483,213,479	$ 471,915,618	2.4%	Retired	$ 10,235,569	$ 8,348,525	22.6%
Disabled	79,305,585	77,910,564	1.8%	Disabled	3,934,176	3,023,013	30.1%
Beneficiary	64,597,556	65,415,177	-1.2%	Beneficiary	1,167,477	942,683	23.8%
In Pay Status Total	627,116,620	615,241,359	1.9%	In Pay Status Total	15,337,222	12,314,221	24.5%
DROP (pension)	102,685,511	75,645,974	35.7%	DROP (pension)	5,325,850	3,220,970	65.3%
DROP (account balance)	172,441,210	137,855,170	25.1%	DROP (account balance)	7,459,402	4,815,374	54.9%
Deferred Vested	19,765,248	23,934,436	-17.4%	Deferred Vested	8,579,661	9,528,661	-10.0%
1967 Municipal Plan				**1987 Elected Plan**			
Retired	$ 269,505,443	$ 262,617,624	2.6%	Retired	$ 708,711	$ 630,007	12.5%
Disabled	29,476,026	29,727,304	-0.8%	Disabled	-	-	0.0%
Beneficiary	37,164,997	37,684,170	-1.4%	Beneficiary	68,613	68,613	0.0%
In Pay Status Total	336,146,466	330,029,098	1.9%	In Pay Status Total	777,324	698,620	11.3%
DROP (pension)	56,165,972	42,997,293	30.6%	DROP (pension)	613,809	715,386	-14.2%
DROP (account balance)	96,170,966	82,162,349	17.0%	DROP (account balance)	2,254,009	1,894,435	19.0%
Deferred Vested	9,060,074	11,312,196	-19.9%	Deferred Vested	-	-	0.0%
1967 Police Plan				**1987 Police Plan**			
Retired	$ 140,502,048	$ 139,181,415	0.9%	Retired	$ 1,891,735	$ 1,371,929	37.9%
Disabled	28,205,304	28,916,457	-2.5%	Disabled	8,748,318	7,268,526	20.4%
Beneficiary	18,041,932	18,381,339	-1.8%	Beneficiary	696,139	715,504	-2.7%
In Pay Status Total	186,749,284	186,479,211	0.1%	In Pay Status Total	11,336,192	9,355,959	21.2%
DROP (pension)	22,623,837	14,344,780	57.7%	DROP (pension)	2,192,916	1,073,274	104.3%
DROP (account balance)	32,571,109	24,295,689	34.1%	DROP (account balance)	2,436,839	1,234,685	97.4%
Deferred Vested	13,436	152,819	-91.2%	Deferred Vested	1,771,940	2,313,345	-23.4%
1967 Fire Plan				**1987 Fire Plan**			
Retired	$ 59,607,946	$ 59,166,155	0.7%	Retired	$ 762,027	$ 599,963	27.0%
Disabled	7,249,188	7,604,743	-4.7%	Disabled	1,692,573	1,370,521	23.5%
Beneficiary	7,099,055	7,332,201	-3.2%	Beneficiary	359,343	290,667	23.6%
In Pay Status Total	73,956,189	74,103,099	-0.2%	In Pay Status Total	2,813,943	2,261,151	24.4%
DROP (pension)	14,577,884	12,630,219	15.4%	DROP (pension)	1,185,243	664,052	78.5%
DROP (account balance)	29,823,455	22,548,459	32.3%	DROP (account balance)	1,725,431	904,178	90.8%
Deferred Vested	-	181,532	-100.0%	Deferred Vested	340,137	445,883	-23.7%

APPENDIX A
MEMBERSHIP INFORMATION

Table A-4
Non-Active Member Data
Average Annual Benefit

	July 1, 2011	July 1, 2010	% Change		July 1, 2011	July 1, 2010	% Change
Total City				**1987 Municipal Plan**			
Retired	$ 22,864	$ 22,404	2.1%	Retired	$ 11,298	$ 10,985	2.8%
Disabled	18,726	18,203	2.9%	Disabled	17,031	16,519	3.1%
Beneficiary	7,808	7,644	2.2%	Beneficiary	6,908	6,733	2.6%
In Pay Status Total	18,641	18,148	2.7%	In Pay Status Total	11,744	11,370	3.3%
DROP (pension)	37,863	37,486	1.0%	DROP (pension)	15,002	14,189	5.7%
DROP (account balance)	63,585	68,313	-6.9%	DROP (account balance)	21,012	21,213	-0.9%
Deferred Vested	14,928	14,968	-0.3%	Deferred Vested	12,902	12,092	6.7%
1967 Municipal Plan				**1987 Elected Plan**			
Retired	$ 21,423	$ 20,821	2.9%	Retired	$ 59,059	$ 52,501	12.5%
Disabled	17,088	16,663	2.5%	Disabled	-	-	0.0%
Beneficiary	7,264	7,079	2.6%	Beneficiary	22,871	22,871	0.0%
In Pay Status Total	17,308	16,736	3.4%	In Pay Status Total	51,822	46,575	11.3%
DROP (pension)	37,270	36,438	2.3%	DROP (pension)	87,687	89,423	-1.9%
DROP (account balance)	63,816	69,629	-8.3%	DROP (account balance)	322,001	236,804	36.0%
Deferred Vested	17,423	17,927	-2.8%	Deferred Vested	-	-	0.0%
1967 Police Plan				**1987 Police Plan**			
Retired	$ 25,458	$ 25,028	1.7%	Retired	$ 17,355	$ 16,140	7.5%
Disabled	17,584	17,420	0.9%	Disabled	34,040	32,594	4.4%
Beneficiary	8,514	8,416	1.2%	Beneficiary	9,041	8,726	3.6%
In Pay Status Total	20,207	19,828	1.9%	In Pay Status Total	25,590	23,990	6.7%
DROP (pension)	51,301	48,958	4.8%	DROP (pension)	25,799	23,332	10.6%
DROP (account balance)	73,857	82,920	-10.9%	DROP (account balance)	28,669	26,841	6.8%
Deferred Vested	13,436	38,205	-64.8%	Deferred Vested	15,543	16,177	-3.9%
1967 Fire Plan				**1987 Fire Plan**			
Retired	$ 30,397	$ 29,657	2.5%	Retired	$ 16,213	$ 15,789	2.7%
Disabled	19,645	19,549	0.5%	Disabled	34,542	33,427	3.3%
Beneficiary	9,403	9,211	2.1%	Beneficiary	10,569	9,689	9.1%
In Pay Status Total	23,973	23,303	2.9%	In Pay Status Total	21,646	20,745	4.3%
DROP (pension)	53,595	53,518	0.1%	DROP (pension)	26,339	23,716	11.1%
DROP (account balance)	109,645	95,544	14.8%	DROP (account balance)	38,343	32,292	18.7%
Deferred Vested	-	45,383	-100.0%	Deferred Vested	14,172	15,375	-7.8%

APPENDIX A
MEMBERSHIP INFORMATION

Table A-5
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Total City

COUNTS BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	112	407	40	0	0	0	0	0	559
25 to 29	211	1,423	615	43	0	0	0	0	2,292
30 to 34	115	990	1,313	536	33	0	0	0	2,987
35 to 39	73	622	957	1,152	452	22	0	1	3,279
40 to 44	68	498	756	1,182	1,156	521	8	2	4,191
45 to 49	61	382	656	829	979	1,170	237	27	4,341
50 to 54	50	344	539	689	695	1,120	795	337	4,569
55 to 59	26	287	450	575	402	467	301	343	2,851
60 to 64	19	161	280	251	135	77	63	105	1,091
65 & up	6	101	146	103	51	41	20	43	511
Total	741	5,215	5,752	5,360	3,903	3,418	1,424	858	26,671

Table A-6
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Total City

AVERAGE SALARY BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	$ 31,202	$ 37,874	$ 32,573	$ -	$ -	$ -	$ -	$ -	$ 36,158
25 to 29	39,017	46,400	47,873	46,594	-	-	-	-	46,119
30 to 34	37,918	47,907	52,782	55,512	49,082	-	-	-	51,043
35 to 39	38,781	47,453	53,083	56,912	58,956	51,832	-	62,292	53,846
40 to 44	36,123	42,705	50,709	55,252	61,089	61,692	47,320	49,209	55,024
45 to 49	37,555	38,578	45,867	50,076	57,992	59,814	61,697	60,740	53,363
50 to 54	42,682	37,912	42,418	48,256	53,048	56,087	63,278	61,529	52,969
55 to 59	30,719	40,033	43,277	45,309	51,127	53,320	64,181	64,785	50,792
60 to 64	54,781	35,101	38,915	42,324	48,739	47,035	61,468	60,320	44,564
65 & up	45,517	23,518	35,385	35,293	47,501	40,769	43,712	51,584	36,470
Total	$ 37,669	$ 43,518	$ 48,274	$ 51,810	$ 56,901	$ 57,424	$ 62,761	$ 62,132	$ 51,414

APPENDIX A
MEMBERSHIP INFORMATION

Table A-7
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Municipal (Plan 67)

COUNTS BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0
25 to 29	1	0	0	0	0	0	0	0	1
30 to 34	1	0	0	0	0	0	0	0	1
35 to 39	0	0	0	0	8	3	0	0	11
40 to 44	0	0	0	2	50	127	1	1	181
45 to 49	1	0	1	1	88	505	161	21	778
50 to 54	0	0	2	2	92	646	543	255	1,540
55 to 59	0	0	2	3	46	250	178	189	668
60 to 64	0	0	1	0	12	50	41	50	154
65 & up	0	0	0	0	9	26	17	24	76
Total	3	0	6	8	305	1,607	941	540	3,410

Table A-8
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Municipal (Plan 67)

AVERAGE SALARY BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
25 to 29	48,110	-	-	-	-	-	-	-	48,110
30 to 34	26,042	-	-	-	-	-	-	-	26,042
35 to 39	-	-	-	-	46,829	42,732	-	-	45,712
40 to 44	-	-	-	45,480	54,615	53,321	39,828	38,786	53,437
45 to 49	69,066	-	34,337	40,482	50,308	52,500	58,429	58,653	53,628
50 to 54	-	-	71,000	38,423	47,874	51,277	60,080	59,249	55,506
55 to 59	-	-	65,615	44,362	47,582	48,649	62,636	61,253	55,900
60 to 64	-	-	69,465	-	54,844	46,528	63,423	60,739	56,437
65 & up	-	-	-	-	57,055	39,962	43,800	46,351	44,862
Total	$ 47,739	$ -	$ 62,839	$ 42,672	$ 50,155	$ 51,067	$ 60,111	$ 59,454	$ 54,807

APPENDIX A
MEMBERSHIP INFORMATION

Table A-9
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Police (Plan 67)

COUNTS BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	7	15	2	0	24
45 to 49	0	0	1	0	3	89	47	3	143
50 to 54	0	0	0	0	0	96	149	61	306
55 to 59	0	0	0	0	0	33	67	84	184
60 to 64	0	0	0	0	1	3	9	16	29
65 & up	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	11	236	274	164	686

Table A-10
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Police (Plan 67)

AVERAGE SALARY BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
25 to 29	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	63,609	66,906	63,014	-	65,620
45 to 49	-	-	61,871	-	62,713	71,367	74,500	74,096	72,206
50 to 54	-	-	-	-	-	67,271	72,104	74,704	71,106
55 to 59	-	-	-	-	-	66,936	70,265	74,998	71,829
60 to 64	-	-	-	-	68,984	63,014	68,824	70,430	69,115
65 & up	-	-	-	-	-	-	-	-	-
Total	$ -	$ -	$ 61,871	$ -	$ 63,853	$ 68,691	$ 71,891	$ 74,426	$ 71,253

APPENDIX A
MEMBERSHIP INFORMATION

Table A-11
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Fire (Plan 67)

COUNTS BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	2	0	0	2
45 to 49	0	0	0	0	0	23	7	0	30
50 to 54	0	0	0	0	0	25	71	2	98
55 to 59	0	0	0	0	1	5	33	26	65
60 to 64	0	0	0	0	0	1	4	12	17
65 & up	0	0	0	0	0	0	0	2	2
Total	0	0	0	0	1	56	115	42	214

Table A-12
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Fire (Plan 67)

AVERAGE SALARY BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
25 to 29	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	-	65,402	-	-	65,402
45 to 49	-	-	-	-	-	66,752	73,997	-	68,442
50 to 54	-	-	-	-	-	63,528	69,550	77,214	68,170
55 to 59	-	-	-	-	60,834	62,834	65,477	74,250	68,711
60 to 64	-	-	-	-	-	67,235	69,461	76,576	74,352
65 & up	-	-	-	-	-	-	-	99,621	99,621
Total	$ -	$ -	$ -	$ -	$ 60,834	$ 64,923	$ 68,649	$ 76,263	$ 69,132

APPENDIX A
MEMBERSHIP INFORMATION

Table A-13
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Municipal (Plan 87)

COUNTS BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	109	276	36	0	0	0	0	0	421
25 to 29	199	864	401	30	0	0	0	0	1,494
30 to 34	110	669	806	270	28	0	0	0	1,883
35 to 39	73	442	618	558	172	14	0	0	1,877
40 to 44	67	421	536	718	419	93	5	1	2,260
45 to 49	59	376	586	635	432	146	18	2	2,254
50 to 54	50	343	514	599	429	122	26	16	2,099
55 to 59	26	287	435	539	297	108	23	40	1,755
60 to 64	19	161	278	240	115	23	9	26	871
65 & up	6	101	145	102	41	15	3	14	427
Total	718	3,940	4,355	3,691	1,933	521	84	99	15,341

Table A-14
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Municipal (Plan 87)

AVERAGE SALARY BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	$ 30,914	$ 29,941	$ 30,109	$ -	$ -	$ -	$ -	$ -	$ 30,207
25 to 29	38,827	39,154	40,814	41,544	-	-	-	-	39,604
30 to 34	37,891	43,277	47,027	47,686	46,678	-	-	-	45,250
35 to 39	38,781	43,326	48,330	49,793	50,100	50,300	-	-	47,392
40 to 44	36,040	39,938	46,211	50,065	53,972	51,962	42,540	59,632	47,639
45 to 49	36,952	38,111	43,984	46,127	52,432	56,354	49,100	61,302	45,900
50 to 54	42,682	37,678	41,461	46,135	49,064	52,419	55,972	45,559	44,608
55 to 59	30,719	40,033	42,485	44,192	48,964	51,597	56,555	49,793	44,442
60 to 64	54,781	35,101	38,722	41,432	47,031	45,175	41,653	43,343	40,586
65 & up	45,517	23,518	35,202	35,028	43,685	42,168	43,214	38,862	33,777
Total	$ 37,516	$ 39,030	$ 43,955	$ 46,631	$ 50,688	$ 52,598	$ 51,870	$ 46,201	$ 44,232

APPENDIX A
MEMBERSHIP INFORMATION

Table A-15
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Elected (Plan 87)

COUNTS BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	1	1	0	0	2
45 to 49	0	1	0	1	0	0	0	0	2
50 to 54	0	1	0	0	2	0	1	0	4
55 to 59	0	0	1	0	0	0	0	3	4
60 to 64	0	0	0	0	0	0	0	1	1
65 & up	0	0	0	0	1	0	0	3	4
Total	0	2	1	1	4	1	1	7	17

Table A-16
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Elected (Plan 87)

AVERAGE SALARY BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
25 to 29	-	-	-	-	-	-	-	-	-
30 to 34	-	-	-	-	-	-	-	-	-
35 to 39	-	-	-	-	-	-	-	-	-
40 to 44	-	-	-	-	163,602	117,991	-	-	140,797
45 to 49	-	117,991	-	117,991	-	-	-	-	117,991
50 to 54	-	117,991	-	-	117,991	-	198,658	-	138,158
55 to 59	-	-	121,559	-	-	-	-	119,997	120,388
60 to 64	-	-	-	-	-	-	-	124,010	124,010
65 & up	-	-	-	-	117,991	-	-	120,800	120,098
Total	$ -	$ 117,991	$ 121,559	$ 117,991	$ 129,394	$ 117,991	$ 198,658	$ 120,915	$ 126,833

APPENDIX A
MEMBERSHIP INFORMATION

Table A-17
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Police (Plan 87)

COUNTS BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	0	121	3	0	0	0	0	0	124
25 to 29	0	456	158	9	0	0	0	0	623
30 to 34	0	247	356	247	3	0	0	0	853
35 to 39	0	144	213	488	242	3	0	1	1,091
40 to 44	0	57	128	337	549	274	0	0	1,345
45 to 49	0	2	38	133	306	369	2	1	851
50 to 54	0	0	13	69	109	180	4	2	377
55 to 59	0	0	8	27	43	58	0	1	137
60 to 64	0	0	1	8	5	0	0	0	14
65 & up	0	0	1	1	0	0	0	0	2
Total	0	1,027	919	1,319	1,257	884	6	5	5,417

Table A-18
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Police (Plan 87)

AVERAGE SALARY BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	$ -	$ 54,419	$ 53,879	$ -	$ -	$ -	$ -	$ -	$ 54,406
25 to 29	-	57,870	61,667	58,349	-	-	-	-	58,840
30 to 34	-	57,865	62,406	63,534	64,228	-	-	-	61,424
35 to 39	-	57,600	62,215	63,536	65,280	62,713	-	62,292	62,878
40 to 44	-	58,440	62,208	63,121	65,793	68,343	-	-	64,990
45 to 49	-	60,566	62,693	62,998	64,550	67,084	65,999	63,374	65,316
50 to 54	-	-	61,871	62,939	64,594	66,256	71,464	62,713	65,054
55 to 59	-	-	61,871	63,382	64,642	64,795	-	62,292	64,280
60 to 64	-	-	61,871	62,292	62,629	-	-	-	62,382
65 & up	-	-	61,871	62,292	-	-	-	-	62,082
Total	$ -	$ 57,461	$ 62,178	$ 63,297	$ 65,232	$ 67,141	$ 69,642	$ 62,677	$ 63,083

APPENDIX A
MEMBERSHIP INFORMATION

Table A-19
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Fire (Plan 87)

COUNTS BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	3	10	1	0	0	0	0	0	14
25 to 29	11	103	56	4	0	0	0	0	174
30 to 34	4	74	151	19	2	0	0	0	250
35 to 39	0	36	126	106	30	2	0	0	300
40 to 44	1	20	92	125	130	9	0	0	377
45 to 49	1	3	30	59	150	38	2	0	283
50 to 54	0	0	10	19	63	51	1	1	145
55 to 59	0	0	4	6	15	13	0	0	38
60 to 64	0	0	0	3	2	0	0	0	5
65 & up	0	0	0	0	0	0	0	0	0
Total	20	246	470	341	392	113	3	1	1,586

Table A-20
Distribution of Active Participants (Excludes DROP Participants) as of July 1, 2011 -- Fire (Plan 87)

AVERAGE SALARY BY AGE/SERVICE

	Service								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	$ 41,637	$ 56,631	$ 57,348	$ -	$ -	$ -	$ -	$ -	$ 53,469
25 to 29	41,637	56,398	59,503	58,017	-	-	-	-	56,501
30 to 34	41,637	56,526	60,815	62,437	60,025	-	-	-	59,355
35 to 39	-	57,545	60,958	63,886	61,956	59,881	-	-	61,676
40 to 44	41,637	56,093	60,918	63,982	65,728	62,128	-	-	63,314
45 to 49	41,637	56,010	61,203	62,456	65,043	68,432	89,869	-	64,548
50 to 54	-	-	60,625	62,840	65,699	65,203	61,123	61,123	64,737
55 to 59	-	-	61,415	64,861	65,455	68,021	-	-	65,814
60 to 64	-	-	-	60,429	65,455	-	-	-	62,439
65 & up	-	-	-	-	-	-	-	-	-
Total	$ 41,637	$ 56,584	$ 60,736	$ 63,453	$ 65,132	$ 66,274	$ 80,287	$ 61,123	$ 61,953

APPENDIX A
MEMBERSHIP INFORMATION

Table A-21
Reconciliation of Plan Membership

	1967 Plan			Plan 87				
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total City
Active								
Active July 1, 2010	**4,214**	**891**	**290**	**15,326**	**17**	**5,586**	**1,604**	**27,928**
New Entrants and Rehires	19	26	1	1,256	0	47	32	1,381
Refunded Contributions	-3	0	0	-269	0	-26	-3	-301
Terminated Vested	-17	0	0	-58	0	-12	-2	-89
Became Disabled	-21	0	0	-27	0	-26	-6	-80
Retired	-80	-15	-3	-80	0	-17	-5	-200
Entered DROP	-625	-211	-72	-185	0	-49	-21	-1,163
Net Other Terminations	-77	-5	-2	-622	0	-86	-13	-805
Active July 1, 2011	**3,410**	**686**	**214**	**15,341**	**17**	**5,417**	**1,586**	**26,671**
Retired								
Retired July 1, 2010	**12,613**	**5,561**	**1,995**	**760**	**12**	**85**	**38**	**21,064**
New Retirees	489	85	39	175	1	30	11	830
Net Other Terminations	-522	-127	-73	-29	-1	-6	-2	-760
Retired July 1, 2011	**12,580**	**5,519**	**1,961**	**906**	**12**	**109**	**47**	**21,134**
Beneficiary								
Beneficiary July 1, 2010	**5,323**	**2,184**	**796**	**140**	**3**	**82**	**30**	**8,558**
New Beneficiaries	76	19	8	30	0	1	6	140
Net Other Terminations	-283	-84	-49	-1	0	-6	-2	-425
Beneficiary July 1, 2011	**5,116**	**2,119**	**755**	**169**	**3**	**77**	**34**	**8,273**

APPENDIX A
MEMBERSHIP INFORMATION

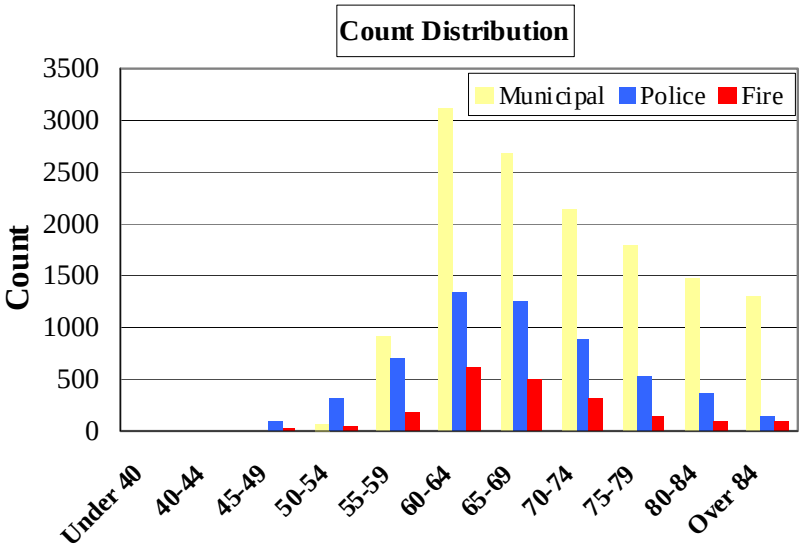
Table A-21
Reconciliation of Plan Membership (continued)

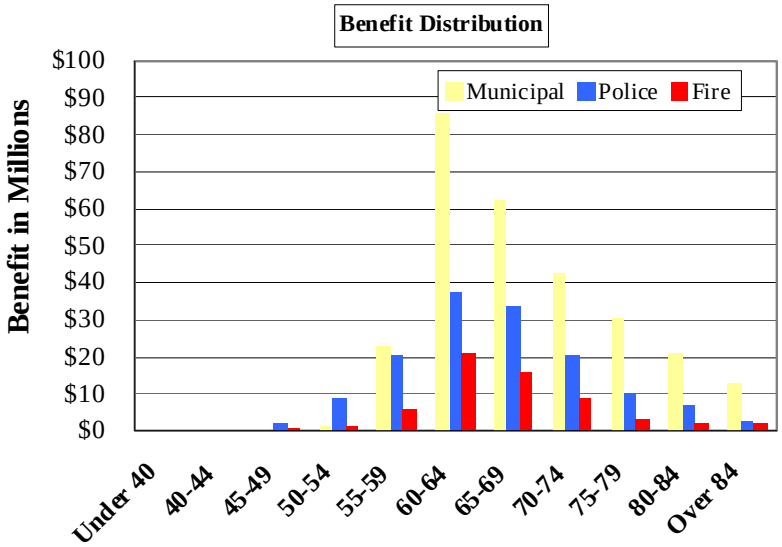
	1967 Plan			Plan 87				
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total City
Disabled								
Disabled July 1, 2010	**1,784**	**1,660**	**389**	**183**	**0**	**223**	**41**	**4,280**
New Disabilities	39	7	0	54	0	39	8	147
Net Other Terminations	-98	-63	-20	-6	0	-5	0	-192
Disabled July 1, 2011	**1,725**	**1,604**	**369**	**231**	**0**	**257**	**49**	**4,235**
Terminated Vested								
Terminated Vested July 1, 2010	**631**	**4**	**4**	**788**	**0**	**143**	**29**	**1,599**
New Vested Terminations	40	0	0	98	0	13	4	155
Net Other Terminations	-154	-3	-4	-221	0	-42	-9	-433
Terminated Vested July 1, 2011	**517**	**1**	**0**	**665**	**0**	**114**	**24**	**1,321**
DROP								
DROP July 1, 2010	**1,180**	**293**	**236**	**227**	**8**	**46**	**28**	**2,018**
New DROP Participants	629	214	73	185	0	48	21	1,170
Net Other Terminations	-302	-66	-37	-57	-1	-9	-4	-476
DROP July 1, 2011	**1,507**	**441**	**272**	**355**	**7**	**85**	**45**	**2,712**

APPENDIX A
MEMBERSHIP INFORMATION

Table A-22
Age Distribution of Retired Members as of July 1, 2011

	Municipal		Police		Fire	
Age	Count	Annual Pensions	Count	Annual Pensions	Count	Annual Pensions
Under 40	0	$ 0	0	$ 0	0	$ 0
40-44	0	0	8	116,255	0	0
45-49	0	0	87	2,187,370	23	454,102
50-54	70	1,357,711	324	9,156,389	55	1,392,098
55-59	912	23,213,815	707	20,296,893	179	5,763,301
60-64	3,108	85,857,711	1,334	37,523,163	610	21,290,253
65-69	2,690	62,518,533	1,260	33,475,181	504	15,813,473
70-74	2,140	42,843,640	886	20,095,053	311	8,995,242
75-79	1,800	30,692,563	528	10,221,062	142	3,318,072
80-84	1,472	21,091,021	358	6,881,321	85	1,684,977
Over 84	1,306	12,874,729	136	2,441,096	99	1,658,455
Total	13,498	280,449,723	5,628	142,393,783	2,008	60,369,973

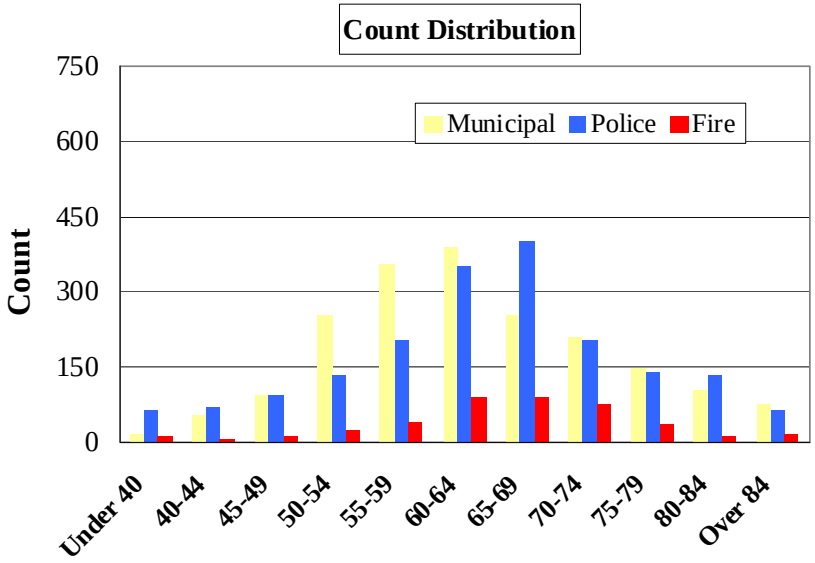


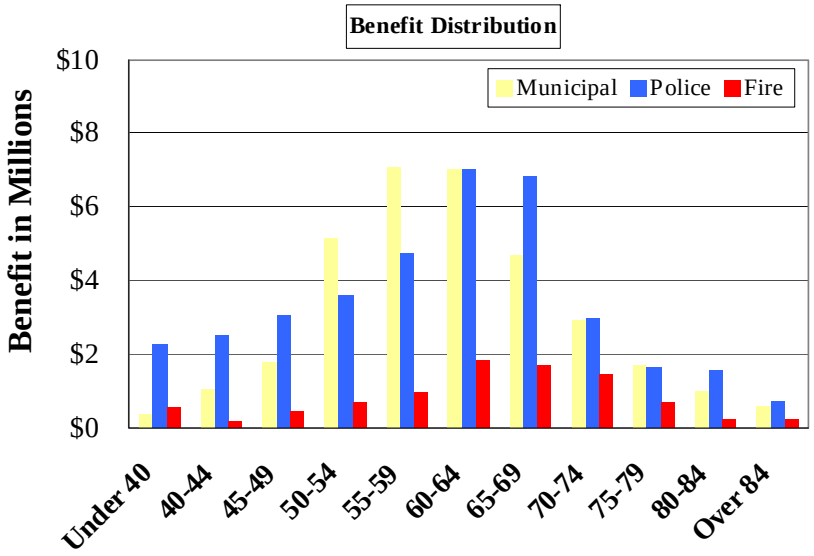


APPENDIX A
MEMBERSHIP INFORMATION

Table A-23
Age Distribution of Disabled Members as of July 1, 2011

	Municipal		Police		Fire	
Age	Count	Annual Pensions	Count	Annual Pensions	Count	Annual Pensions
Under 40	17	$ 382,746	62	$ 2,276,074	13	$ 548,743
40-44	52	1,054,472	71	2,489,602	7	198,694
45-49	95	1,771,336	95	3,055,509	14	448,470
50-54	256	5,163,427	134	3,592,218	22	682,346
55-59	355	7,077,867	205	4,746,429	39	945,210
60-64	390	7,035,111	351	7,023,919	90	1,833,543
65-69	256	4,708,462	402	6,842,321	91	1,672,531
70-74	209	2,935,093	205	2,964,049	78	1,458,828
75-79	147	1,709,766	140	1,666,043	35	705,500
80-84	102	995,605	134	1,559,392	13	228,391
Over 84	77	576,317	62	738,066	16	219,505
Total	1,956	33,410,202	1,861	36,953,622	418	8,941,761

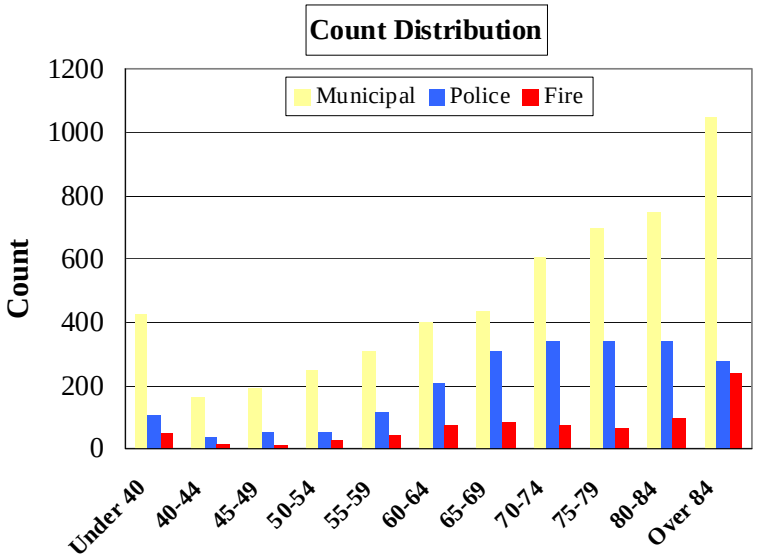


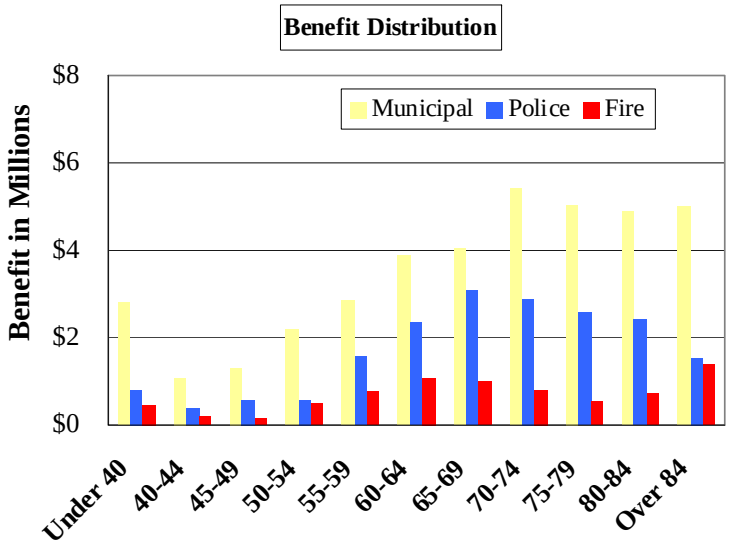


APPENDIX A
MEMBERSHIP INFORMATION

Table A-24
Age Distribution of Beneficiaries as of July 1, 2011

	Municipal		Police		Fire	
Age	Count	Annual Pensions	Count	Annual Pensions	Count	Annual Pensions
Under 40	427	$ 2,794,192	110	$ 812,011	50	$ 450,576
40-44	166	1,061,232	39	369,589	16	176,662
45-49	194	1,280,405	52	588,476	12	144,344
50-54	251	2,205,054	56	573,328	30	504,758
55-59	310	2,842,168	119	1,552,492	45	740,678
60-64	401	3,888,520	211	2,345,603	75	1,057,754
65-69	437	4,028,929	308	3,090,144	84	984,252
70-74	609	5,404,848	342	2,880,678	76	810,382
75-79	695	5,035,473	341	2,570,888	65	516,542
80-84	750	4,882,936	339	2,417,730	97	708,526
Over 84	1,048	4,977,330	279	1,537,132	239	1,363,924
Total	5,288	38,401,087	2,196	18,738,071	789	7,458,398

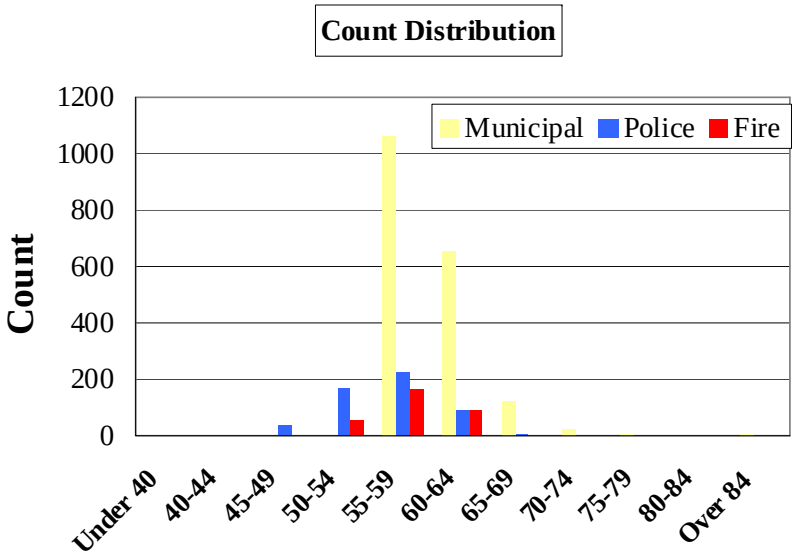


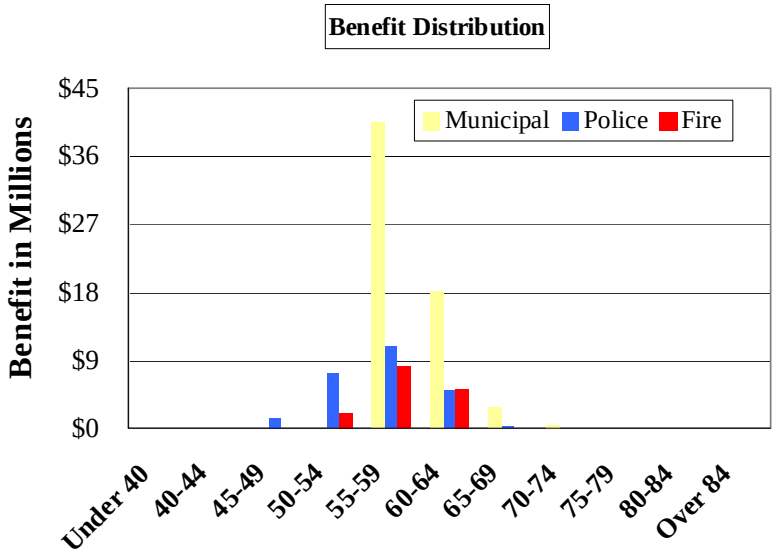


APPENDIX A
MEMBERSHIP INFORMATION

Table A-25
Age Distribution of DROP Participants as of July 1, 2011

	Municipal		Police		Fire	
Age	Count	Annual Pensions	Count	Annual Pensions	Count	Annual Pensions
Under 40	0	$ 0	0	$ 0	0	$ 0
40-44	0	0	0	0	0	0
45-49	0	0	36	1,493,507	1	50,004
50-54	0	0	171	7,175,221	56	2,136,367
55-59	1,058	40,389,050	222	10,853,479	163	8,156,340
60-64	655	18,145,525	92	5,028,781	94	5,251,582
65-69	121	2,700,103	4	206,665	2	149,610
70-74	24	586,928	1	59,100	1	19,224
75-79	6	82,631	0	0	0	0
80-84	1	133,702	0	0	0	0
Over 84	4	67,692	0	0	0	0
Total	1,869	62,105,631	526	24,816,753	317	15,763,127

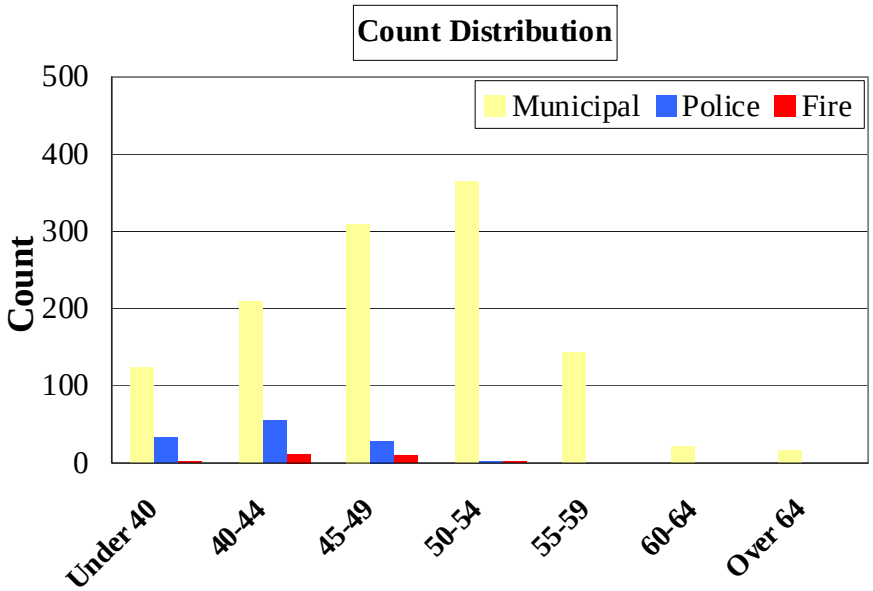


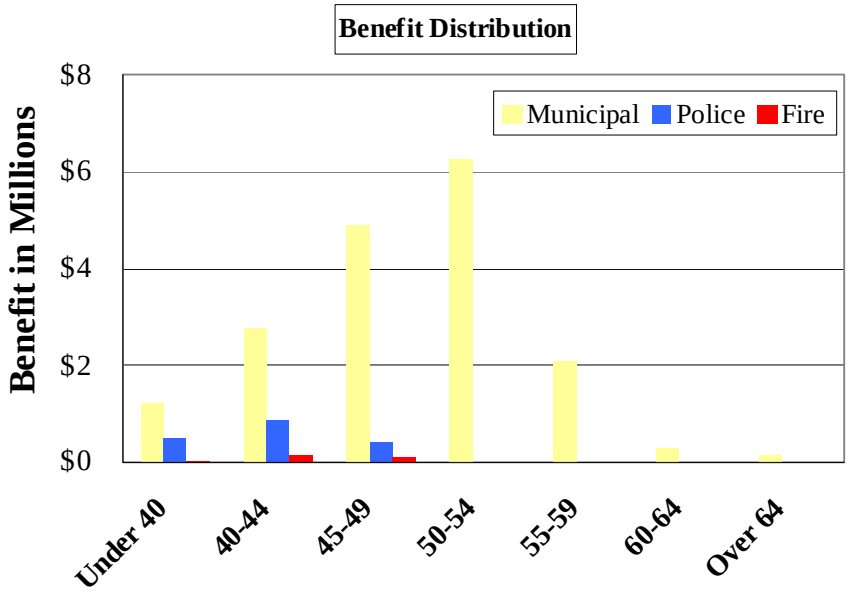


APPENDIX A
MEMBERSHIP INFORMATION

Table A-26
Age Distribution of Terminated Vested Members as of July 1, 2011

	Municipal		Police		Fire	
Age	Count	Annual Pensions	Count	Annual Pensions	Count	Annual Pensions
Under 40	124	$ 1,202,790	33	$ 491,022	3	$ 44,021
40-44	209	2,779,557	54	857,433	11	160,648
45-49	309	4,880,081	27	423,485	9	124,781
50-54	364	6,237,346	1	13,436	1	10,687
55-59	142	2,069,769	0	0	0	0
60-64	20	300,205	0	0	0	0
Over 64	17	169,987	0	0	0	0
Total	1,185	17,639,735	115	1,785,376	24	340,137





APPENDIX B
SUPPORTING TABLES FOR CITY'S FUNDING POLICY

Appendix B provides supporting information on the amortization payments under the City's Funding Policy by each plan.

Table B-1a
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
1967 Plan - Municipal
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation					
a. Remaining	$ 2,438,906	$ 2,299,686		$ 312,650	$ 337,975
2. Changes in UAL due to					
a. Actuarial Experience	$ 7,696	$ 8,320	20	$ 790	$ 854
b. Assumption Changes	16,602	17,947	15	1,951	2,110
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ 24,298	$ 26,267		$ 2,741	$ 2,963
3. Total [1c. + 2e.]	$ 2,463,204	$ 2,325,953		$ 315,391	$ 340,938

APPENDIX B
SUPPORTING TABLES FOR CITY'S FUNDING POLICY

Table B-1b
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
1967 Plan - Police
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation					
a. Remaining	$ 1,333,160	$ 1,243,101		$ 184,109	$ 199,022
2. Changes in UAL due to					
a. Actuarial Experience	$ 38,737	$ 41,874	20	$ 3,975	$ 4,297
b. Assumption Changes	8,059	8,711	15	947	1,024
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ 46,795	$ 50,586		$ 4,922	$ 5,321
3. Total [1c. + 2e.]	$ 1,379,956	$ 1,293,687		$ 189,031	$ 204,343

APPENDIX B
SUPPORTING TABLES FOR CITY'S FUNDING POLICY

Table B-1c
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
1967 Plan - Fire
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation					
a. Remaining	$ 560,337	$ 528,859		$ 71,796	$ 77,612
2. Changes in UAL due to					
a. Actuarial Experience	$ 3,427	$ 3,705	20	$ 352	$ 380
b. Assumption Changes	3,201	3,460	15	376	407
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ 6,628	$ 7,165		$ 728	$ 787
3. Total [1c. + 2e.]	$ 566,966	$ 536,025		$ 72,524	$ 78,399

APPENDIX B
SUPPORTING TABLES FOR CITY'S FUNDING POLICY

Table B-1d
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
Plan 87 - Municipal
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation					
a. Remaining	$ 197,108	$ 192,839		$ 18,766	$ 20,286
2. Changes in UAL due to					
a. Actuarial Experience	$ (23,689)	$ (25,608)	20	$ (2,431)	$ (2,628)
b. Assumption Changes	6,748	7,295	15	793	857
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ (16,940)	$ (18,313)		$ (1,638)	$ (1,770)
3. Total [1c. + 2e.]	$ 180,167	$ 174,526		$ 17,128	$ 18,516

APPENDIX B
SUPPORTING TABLES FOR CITY'S FUNDING POLICY

Table B-1e
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
Plan 87 - Elected
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation					
a. Remaining	$ 10,226	$ 10,007		$ 1,011	$ 1,093
2. Changes in UAL due to					
a. Actuarial Experience	$ (957)	$ (1,035)	20	$ (98)	$ (106)
b. Assumption Changes	81	88	15	10	10
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ (876)	$ (947)		$ (89)	$ (96)
3. Total [1c. + 2e.]	$ 9,350	$ 9,060		$ 922	$ 997

APPENDIX B
SUPPORTING TABLES FOR CITY'S FUNDING POLICY

Table B-1f
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
Plan 87 - Police
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation					
a. Remaining	$ 123,000	$ 122,140		$ 10,115	$ 10,934
2. Changes in UAL due to					
a. Actuarial Experience	$ 4,297	$ 4,645	20	$ 441	$ 477
b. Assumption Changes	6,030	6,518	15	709	766
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ 10,327	$ 11,163		$ 1,150	$ 1,243
3. Total [1c. + 2e.]	$ 133,327	$ 133,304		$ 11,264	$ 12,177

APPENDIX B
SUPPORTING TABLES FOR CITY'S FUNDING POLICY

Table B-1g
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
Plan 87 - Fire
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation					
a. Remaining	$ 41,907	$ 41,453		$ 3,621	$ 3,915
2. Changes in UAL due to					
a. Actuarial Experience	$ (8,068)	$ (8,722)	20	$ (828)	$ (895)
b. Assumption Changes	1,550	1,676	15	182	197
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ (6,518)	$ (7,046)		$ (646)	$ (698)
3. Total [1c. + 2e.]	$ 35,389	$ 34,407		$ 2,975	$ 3,217

APPENDIX B
SUPPORTING TABLES FOR CITY'S FUNDING POLICY

Table B-1h
Development of the Fiscal Year 2013 Amortization Payment under the City's Funding Policy
Total - All Divisions
($ thousands)

	7/1/2011 Outstanding Balance	7/1/2012 Expected Balance	Remaining Years	FY 2013 Payment Beginning-of-Year	FY 2013 Payment End-of-Year
1. Expected Unfunded Actuarial Liability (UAL) as of July 1, 2011 Based on July 1, 2010 Valuation					
a. Remaining	$ 4,704,645	$ 4,438,086		$ 602,068	$ 650,836
2. Changes in UAL due to					
a. Actuarial Experience	$ 21,443	$ 23,180	20	$ 2,200	$ 2,379
b. Assumption Changes	42,271	45,695	15	4,969	5,371
c. Active Plan Changes	-	-	10	-	-
d. Inactive Plan Changes	-	-	1	-	-
e. Subtotal	$ 63,714	$ 68,875		$ 7,169	$ 7,750
3. Total [1c. + 2e.]	$ 4,768,359	$ 4,506,961		$ 609,237	$ 658,586

APPENDIX C
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Data Assumptions and Practices

In preparing our data, we relied, without audit, on information supplied by the City of Philadelphia Municipal Retirement System staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. Our methodology for obtaining the data used for the valuation is based upon the following assumptions and practices:

- We exclude raw active records with dates of hire after the valuation date.

- We include terminated vested records in the valuation data, regardless of whether they have enough service for vesting.

- We delete terminated vested and retired records with values of zero in the benefit field.

- If a participant is found in multiple data files (e.g., both the active and retired data files), based on a match of both employee number and Social Security Number, we first attempt to identify the record with the most recent status change, and keep only that record. If it is not apparent which record is the most recent, we keep the record that generates the highest liability in our valuation system.

- If a participant is found multiple times in the same data file, based on a match of both employee number and Social Security Number, we keep the record that generates the highest liability in our valuation system.

- Valuation pay reflects a load of 4% of pay for Police (stress pay) and Firefighters (premium pay).

- The date of retirement for a terminated vested participant was set to the valuation date, if the given date was earlier.

- If the payment form field for pensioners is missing, we assume that 1967 Plan members receive a 50% J&S annuity with a return of contributions in excess of payments received upon death of the member, and we assume that Plan 87 members receive a life annuity, also with a return of contributions. However, if the pensioner is a beneficiary or survivor, we assume that they receive a life annuity only.

- For pensioners under the form of payment 50% J&S annuity with return of contributions, 60% are assumed to be married based upon data provided by the City. All other forms of payments are explicitly valued.

- Records with missing dates of birth have their data filled in based on the average for their plan.

APPENDIX C
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

- We assumed that all changes in participant data from last year to this year were valid unless indicated otherwise by System staff.

- DROP participants are assumed to begin payments immediately.

- Service-connected disability benefits are increased by 2.9%.

- For Municipal Plan 1967 participants, pay was assumed to be below the Social Security Taxable Wage Base for purposes of determining the aggregate member contribution amount.

- We assumed that any participant who was active last year, missing this year, and fully vested became terminated vested with total credited service equal to credited service from last year plus one and final pay equal to pay from last year increased by the salary scale assumption.

- We assumed that any participant who was active last year, missing this year, and not fully vested became a terminated non-vested participant.

- We assumed that any participant who was inactive last year and missing from this year without a clear reason is now deceased.

APPENDIX C
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Investment Return Assumption

8.10% compounded annually, net of expenses.

2. Salary Increase Rate

Age	All Divisions
<20	21.00%
20-24	12.50%
25-29	7.75%
30-34	5.50%
35-39	4.75%
40-44	4.50%
45-49	3.75%
50-54	3.75%
55-59	3.75%
60-64	3.75%
65+	3.75%

3. Total Annual Payroll Growth

3.5% per year.

4. Administrative Expenses

Annual expected expenses included in this report are $8,611,200, and assumed to increase by 3.5% per year.

APPENDIX C
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

5. Rates of Termination

	1967 Plan			Plan 87	
	Municipal		Uniformed	Municipal and Elected Officials	Uniformed
Age	Male	Female	Unisex	Unisex	Unisex
20	0.100000	0.105319	0.030000	0.260000	0.030000
25	0.086000	0.096000	0.037800	0.150000	0.037800
30	0.072000	0.071562	0.029900	0.105000	0.029900
35	0.045000	0.056170	0.025200	0.090000	0.025200
40	0.035000	0.039379	0.015400	0.090000	0.015400
45	0.030000	0.035597	0.010000	0.075000	0.010000
50	0.020000	0.022400	0.001600	0.065000	0.001600
55	0.000000	0.000000	0.001600	0.050000	0.001600

We assume that a vested employee who terminates will elect a pension deferred to service retirement age as long as their age plus years of service at termination are greater than or equal to 55 (45 for police and fire employees in the 1967 Plan). Otherwise we assume they elect a refund of member contributions.

6. Rates of Disability

	Municipal and Elected Officials		Uniformed
Age	**Male**	**Female**	**Unisex**
20	0.000025	0.000043	0.000795
25	0.000070	0.000061	0.000870
30	0.000557	0.000263	0.001668
35	0.001514	0.000620	0.002918
40	0.001800	0.001314	0.003184
45	0.003840	0.002359	0.003334
50	0.007600	0.004285	0.002654
55	0.008680	0.007088	0.000000

For municipal and elected members, we assume that 70% of all disabilities are ordinary and 30% are service-connected. For police and fire members, we assume that 50% are ordinary and 50% are service-connected.

APPENDIX C
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

7. Rates of Pre-Retirement Mortality (RP 2000 with 5 year set back for Municipal females, 3 year set forward for Police and Fire females, no adjustment for males)

The mortality tables used in this item 7 as well as items 8 and 9 describing the mortality assumptions for post-retirement and post-disability mortality respectively, do not reflect projected improvements in life expectancy. Experience studies are performed every four years as required by State law which require regular and detailed experience and analysis of the mortality trends such that improvements are addressed incrementally with assumption changes as a result of these studies. This mandatory process allows for periodic recognition of mortality improvements which are sufficient in addressing the potential trend.

	Municipal and Elected Officials		Uniformed	
Age	**Male**	**Female**	**Male**	**Female**
20	0.000345	0.000170	0.000345	0.000197
25	0.000376	0.000191	0.000376	0.000235
30	0.000444	0.000207	0.000444	0.000394
35	0.000773	0.000264	0.000773	0.000598
40	0.001079	0.000475	0.001079	0.000937
45	0.001508	0.000706	0.001508	0.001434
50	0.002138	0.001124	0.002138	0.002207
55	0.003624	0.001676	0.003624	0.003923
60	0.006747	0.002717	0.006747	0.007648
65	0.012737	0.005055	0.012737	0.013445

* For municipal and elected members, we assume that 98.5% of all deaths are ordinary, with 1.5% service-connected. For police and fire members, 92% are assumed to be ordinary and 8% service-connected.

8. Rates of Post-Retirement Mortality

For Police and Fire, we assume that mortality for healthy inactive lives will follow RP 2000 with a one year set forward for males and a two year set forward for females. For Municipal and Elected officials, we assume that mortality for healthy inactive lives will follow RP 2000 with a two year set forward for both males and females.

9. Rates of Post-Disability Mortality

For Police and Fire, we assume that mortality for disabled retirees follows RP 2000 Healthy mortality with a 30% upwards adjustment. For Municipal and Elected officials, we assume that mortality for disabled retirees follows RP 2000 Disabled mortality with a 5% downward adjustment.

APPENDIX C
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Rates of Retirement

Rates of Service Retirement - 1967 Plan

Age	Municipal	Uniformed
45-54	-	0.07
55	0.40	0.20
56	0.21	0.20
57-59	0.16	0.20
60	0.20	0.20
61	0.20	0.25
62	0.35	0.25
63-69	0.20	0.25
70 and up	1.00	1.00

Rates of Service Retirement - Plan 87

	Municipal and Elected Officials		Uniformed	
Age	First Year Eligible	Subsequent Years	First Year Eligible	Subsequent Years
40-51	-	-	0.200	0.075
52	0.450	0.060	0.200	0.090
53	0.420	0.060	0.200	0.100
54	0.390	0.060	0.200	0.120
55	0.360	0.060	0.200	0.140
56	0.330	0.060	0.200	0.165
57	0.300	0.060	0.200	0.175
58	0.300	0.060	0.200	0.175
59	0.300	0.080	0.200	0.180
60	0.300	0.100	0.200	0.180
61	0.350	0.150	0.200	0.195
62	0.430	0.300	0.200	0.245
63	0.500	0.187	0.200	0.215
64	0.500	0.199	0.200	0.210
65	0.600	0.309	0.200	1.000
66	0.600	0.232	-	-
67	0.600	0.214	-	-
68	0.600	0.214	-	-
69	0.600	0.238	-	-
70	0.600	1.000	-	-

APPENDIX C
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

10. Family Composition Assumptions

70% of active members and 60% of non-active members are assumed to be married for retirees with the 50% J&S with return on contribution form of payment only. Male spouses are assumed to be four years older than female spouses.

11. Changes Since Last Valuation

- The interest rate assumption was decreased from 8.15% to 8.10%
- The following two assumptions were changed to reflect actual administrative practices:
  - Active Police participants in Plan 87 are assumed to elect Option 4 as the default form of payment upon service retirement, and
  - Benefit payments to all in-pay participants are made at the end of the month.

B. Actuarial Methods

1. Actuarial Funding Method

The Entry Age Normal actuarial funding method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets.

2. Funding Methods

City's Funding Policy:
The initial July 1, 1985 UAL is amortized over 34 years ending June 30, 2019, with payments increasing at 3.5% per year, the assumed payroll growth. Other changes in the actuarial liability are amortized in level-dollar payments as follows:

- Actuarial gains and losses – 20 years beginning July 1, 2009. Prior to July 1, 2009, gains and losses were amortized over 15 years
- Assumption changes – 15 years beginning July 1, 2010. Prior to July 1, 2010, assumption changes were amortized over 20 years
- Plan changes for active members – 10 years
- Plan changes for inactive members – 1 years
- Plan changes mandated by the State – 20 years

MMO:
For the purposes of the MMO under Act 205 reflecting the fresh start amortization schedule, the July 1, 2009 UAL was "fresh started" to be amortized over 30 years ending June 30, 2039. This is a level dollar amortization of the UAL. All future amortization periods will follow the City's Funding Policy as outlined above. The future MMO will include the interest payments or repayment amounts of any deferred contribution amounts.

3. Asset Valuation Method

The actuarial value of assets (AVA) is determined using an adjusted market value. Under this method, a preliminary AVA is determined as the market value of assets on the valuation date, minus the existing balance of the Pension Adjustment Fund (PAF) rolled forward at the current year's market rate of return, minus a decreasing fraction (4/5, 3/5, 2/5, 1/5) of the investment gain or loss in each of the preceding four years for gains and losses prior to July 1, 2009. Beginning July 1, 2009, investment gains and losses are recognized over a ten year period prospectively, creating the decreasing faction to be (9/10, 8/10, 7/10, etc). The gain or loss for a given year is the difference between the actual investment return (on a market-to-market basis) and the assumed investment return based on the market value of assets at the beginning of the year and actual cash flow. The AVA is adjusted, if necessary, to remain between 80% and 120% of the market value net of the PAF. The final AVA is determined by subtracting the additional transfer amount (if any) to the PAF. The additional transfer amount to the PAF remains to be calculated based on the five-year method.

APPENDIX C
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

4. Changes Since Last Valuation

None.

APPENDIX D
SUMMARY OF PLAN PROVISIONS – 1967 PLAN

This summary of plan provisions provides an overview of the major provisions of the pension plans used in the actuarial valuation. It is not intended to replace the more precise language of the retirement code, and if there is any difference between the description of the plans herein and the actual text of the retirement code, the retirement code will govern.

1. Participation

Municipal (Plan J):
Full-time employees participate on their date of employment. Temporary employees participate after completing six months employment. Participation is limited to employees hired before January 8, 1987. District Council 47 (Local 2186 or 2187) and 33 members hired between January 8, 1987 and October 1, 1992 were switched from Plan 87 to 1967 Plan effective on their hire dates, provided such employees contributed the difference between what they paid to the Plan and the amount they would have paid under Plan J.

Uniformed (Plans D and X):
Same as municipal.

2. Credited Service

Municipal (Plan J):
Credited service means the period of employment with the City during which the employee makes contributions to the Retirement System. Certain leaves of absence may also be credited.

Uniformed (Plans D and X):
Same as municipal.

3. Total Compensation

Municipal (Plan J):
Total compensation means the base rate of pay, longevity payments, and overtime received during a 12-month period.

Uniformed (Plans D and X):
Total compensation means the base rate of pay, longevity payments, and stress or premium pay (up to 4% of base pay) received during a 12-month period.

4. Final Compensation

Municipal (Plan J):
Final compensation means whichever is greater: annual base rate of pay at the time of termination or the total compensation received during the 12 months immediately preceding

termination, including supplementary compensation received under Civil Service Regulation No. 32.

Uniformed (Plans D and X):
Same as municipal.

5. Average Final Compensation

Municipal (Plan J):
Average final compensation means the arithmetic average of the total compensation received during the three calendar or anniversary years that produce the highest average.

Uniformed (Plans D and X):
Average final compensation means the highest of:

- The total compensation received during the 12-month period; or
- The annual base rate of pay, excluding longevity payments, calculated from the final pay period; or
- The arithmetic average of the total compensation received during five calendar years of employment.

6. Employee Contributions

Municipal (Plan J):
Each employee who participates in the Social Security System contributes 3 3/4% of total compensation up to the taxable wage base ($106,800 in 2009, 2010, and 2011) and 6% of total compensation above the taxable wage base to the Retirement System.

Each employee who does not participate in the Social Security System contributes 6% of his total compensation to the Retirement System.

Uniformed (Plans D and X):
6% of total compensation to the Retirement System.

7. Service Retirement

<u>Eligibility</u>

Municipal (Plan J):
Each municipal employee is eligible to retire and receive a service pension at age 55 with one year of service.

Uniformed (Plans D and X):
Each uniformed employee is eligible to retire and receive a service pension at age 45.

Benefit Amount

Municipal (Plan J):
The service pension equals 2 1/2% of the employee's average final compensation multiplied by credited service to a maximum of 20 years plus 2% of the employee's average final compensation multiplied by credited service above 20, to a maximum of 80% of the employee's average final compensation.

Uniformed (Plans D and X):
The service pension equals 2 1/2% of the employee's average final compensation multiplied by credited service, subject to a maximum of 100% of average final compensation.

8. Early Retirement

Eligibility

Municipal (Plan J):
Each municipal employee is eligible to retire and receive a reduced service pension at age 52 if he has 10 or more years of credited service.

Uniformed (Plans D and X):
Each uniformed employee is eligible to retire and receive a reduced service pension at age 40 if he or she has 10 or more years of credited service.

Benefit Amount

Municipal (Plan J):
The annual amount is calculated the same as service retirement, reduced by 1/2 of 1% for each month the employee is younger than minimum retirement age.

Uniformed (Plans D and X):
Same as municipal.

9. Deferred Vested Retirement

Eligibility

Municipal (Plan J):
A terminating employee who has completed 10 or more years of credited service is eligible for a deferred vested retirement benefit.

Uniformed (Plans D and X):
Same as municipal.

Benefit Amount

Municipal (Plan J):
The annual deferred vested benefit is determined the same as service pensions, using average final compensation and credited service at termination. This benefit begins at service retirement date. If the member dies before the deferred vested benefit begins, an ordinary death benefit is payable (see Ordinary Death below). As an alternative before benefits begin, a plan member who is terminating employment may ask to have employee contributions returned (without interest) instead of receiving the deferred vested benefit.

Uniformed (Plans D and X):
Same as municipal.

10. Withdrawal Benefit

Municipal (Plan J):
Each employee terminating who has completed less than 10 years of credited service will receive a withdrawal benefit equal to his or her employee contributions (without interest).

Uniformed (Plans D and X):
Same as municipal.

11. Service-Connected Death

Eligibility

Municipal (Plan J):
The beneficiary of each active employee who dies solely from the performance of duties of the employee's position with the City is eligible for an immediate death benefit.

Uniformed (Plans D and X):
Same as municipal.

Benefit Amount

Municipal (Plan J):
The death benefit equals total employee contributions paid to the Retirement System, plus a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the Worker's Compensation Act.

This benefit is payable to the spouse until his or her death. Dependent children are entitled to an additional yearly payment of 10% of final compensation for each dependent child (up to two children) until the child reaches age 18. If there is no spouse, or if the spouse dies or remarries, each dependent child (up to three children) is entitled to receive a yearly payment of 25% of final compensation until the child reaches age 18.

If there are no spouse or dependent children, each dependent parent is entitled to receive a yearly payment of 15% of final compensation for life.

Uniformed (Plans D and X):
Same as municipal.

12. Ordinary Death

Eligibility

Municipal (Plan J):
The beneficiary of an active employee (or a terminated vested employee who did not withdraw employee contributions) who dies after completing 10 years of credited service or reaches age 55 is eligible for an immediate death benefit equal to a yearly pension or a lump sum payment. The beneficiary of an active employee who dies before completing 10 years of credited service and reaches age 55 is eligible for a lump sum payment.

The beneficiary may be any relative by blood or marriage.

Uniformed (Plans D and X):
The beneficiary of any employee who dies while actively employed (or a terminated vested employee who did not withdraw employee contributions) is eligible for a death benefit equal to a yearly pension or a lump sum payment.

The beneficiary may be any relative by blood or marriage.

Annual Pension

Municipal (Plan J):
The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received if eligible to retire on the day before he died and had elected Option 2, joint and 100% contingent annuitant (see Survivor Benefits below).

Uniformed (Plans D and X):
The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received (based on a minimum of 10 years of service) had the person been eligible to retire on the day before dying and had elected Option 2, joint and 100% contingent annuitant (see Survivor Benefits below).

Lump Sum Payment

Municipal (Plan J):
The lump sum payment is equal to 10% of the deceased employee's average final compensation multiplied by years of credited service to a maximum of 10, plus the deceased employee's contributions to the Retirement System, minus the total amount of the deceased employee's City-paid life insurance.

Uniformed (Plans D and X):
Same as municipal.

13. Service-Connected Disability

Eligibility

Municipal (Plan J):
An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated (unable to perform duties) solely as the result of accident or injury during the performance of duties is eligible for an immediate service-connected disability pension.

Uniformed (Plans D and X):
Same as municipal.

Benefit Amount

Municipal (Plan J):
The service-connected disability benefit is equal to the employee's Retirement System contributions, plus a yearly benefit of 70% of the employee's final compensation, reduced by any disability benefits payable under the Worker's Compensation Act. If he or she withdraws contributions, the benefit is payable for his or her lifetime only.

If the employee leaves employee contributions with the Retirement System, he or she may choose a survivor benefit option (see Survivor Benefit below) and the beneficiary will continue receiving benefit payments after his or her death.

Uniformed (Plans D and X):
Same as municipal.

APPENDIX D
SUMMARY OF PLAN PROVISIONS – 1967 PLAN

14. Service-Connected Disability Periodic Adjustment

Eligibility

Municipal (Plan J):
An employee who is receiving a service-connected disability benefit who is totally disabled and does not collect Social Security disability insurance benefits is eligible for a periodic adjustment.

Uniformed (Plans D and X):
Same as municipal, but only applies to police employees.

Benefit Amount

Municipal (Plan J):
The disabled employee's pension will be increased in the eighth year after separation by the percentage raise given in the previous year to active employees in his or her job class. The adjustment will continue each year thereafter until the employee's 65th birthday.

Uniformed (Plans D and X):
Same as municipal.

15. Ordinary Disability

Eligibility

Municipal (Plan J):
An active employee found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit after completing 10 years of credited service.

Uniformed (Plans D and X):
Same as municipal, except that fire employees only need five years of credited service and police employees have no service requirement if the disability is permanent and total. Police employees with permanent and partial disability need 10 years of credited service.

Benefit Amount

Municipal (Plan J):
The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement. If the employee is eligible for, or receiving workers' compensation, no benefit is payable. Such employee may apply for benefits at retirement age.

Uniformed (Plans D and X):
Same as municipal, except police employees that have no service requirement are credited with a minimum of 10 years of credited service. Same as municipal.

16. Survivor Benefit

Municipal (Plan J):
Service pensions, deferred vested benefits, service-connected disability benefits (if employee contributions are left on deposit), and ordinary disability benefits are payable under four optional forms. Options 1, 2, and 3 provide benefits actuarially equivalent to a lifetime only pension while Option 4 has no reduction.

Option 1 – A benefit is payable to the employee with the provision that upon death, the beneficiary will receive a lump sum equal to the excess, if any, of the employee's contributions over the sum of the payments received.

Option 2 – A reduced benefit payable to the employee with the provision that 100% of the reduced benefit will be paid to the designated beneficiary for life after the death of the employee.

Option 3 – Same as Option 2 except only 50% of the reduced benefit is continued to the designated beneficiary.

Option 4 – Upon the employee's death, 50% of the benefit will continue to be paid to the surviving spouse for life, provided the employee and spouse were married for two years before retirement and at death. If there is no eligible spouse at the time the employee dies, or the spouse dies before the full amount of the contributions have been returned, 50% of the benefit is continued to dependent children until age 18, or if no dependent children, payments are given to dependent parents for the remainder of their lives. In addition, Option 4 provides for a guaranteed return of employee contributions as described in Option 1 above.

Option 5 – Provides for a partial lump sum of between 6 and 36 monthly payments payable under Options 1, 2, 3 or 4. The remaining monthly benefit is reduced so that the partial lump sum plus the reduced benefit is actuarially equivalent to the original benefit.

Uniformed (Plans D and X):
Same as municipal.

17. Minimum Pension

Municipal (Plan J):
The monthly minimum pension to a pensioner is equal to $25 multiplied by the number of the pensioner's completed years of credited service, to a 10 year maximum.

Uniformed (Plans D and X):
The monthly minimum pension to pensioners is $500. The monthly minimum pension to all other pensioners is $440 providing such pension will increase to $500 at the time the pensioner reaches age 60.

18. Waiver of Benefit

Municipal (Plan J):
Any employee at service retirement age with less than three but more than one year of credited service, may waive the right to receive a monthly benefit and in lieu thereof, receive a lump sum payment of twice his or her employee contributions without interest.

Uniformed (Plans D and X):
Same as municipal.

19. Service-Connected Health Care Benefit

Municipal (Plan J):
Not applicable.

Uniformed (Plans D and X):
If a uniformed employee dies during the performance of duties, a service-connected health care benefit may be payable to the surviving spouse and dependent children. Regular payments will be made of the appropriate cost of maintaining medical, dental, optical, and prescription drug benefits that were in force at the time of the employee's death. Payments to the spouse cease upon remarriage and to dependent children at age 18 (age 22 if full-time student) or, if dependent due to physical or mental infirmity, the duration of the infirmity. The health care benefits are not paid from the pension trust assets.

20. Deferred Retirement Option Plan (DROP)

Municipal (Plan J):
Employees that have ten years of service and have reached two years past the minimum retirement age may elect to participate in the DROP. During this time, their accrued benefit will go into a DROP account and will earn interest at a specified rate (4.5% as of July 1, 2007). The benefit is calculated as of the date they entered the DROP. At the end of the DROP, the employees' accrued monthly benefit will commence, plus they will receive the accumulated amount of the accrued benefit paid to the DROP, as well as the interest earned on such benefit.

Uniformed (Plans D and X):
Same as municipal except that employees are eligible as soon as they have ten years service and have reached minimum retirement age.

APPENDIX D
SUMMARY OF PLAN PROVISIONS – 1987 PLAN

1. Participation

Municipal:
Full-time employees participate on their date of employment. Temporary employees participate after completing six months of employment. Participation is limited to employees hired on or after January 8, 1987. Any member of the 1967 Plan may irrevocably elect to participate in Plan 87.

Uniformed (Plans A and B):
Same as municipal except for Police employees hired after January 1, 2010 must make an election to participate in Plan B.

Elected:
Any City employee on or after January 8, 1987, in any general, municipal, or special election, participates in this Plan.

2. Credited Service

Municipal:
Credited service means the period of employment with the City during which the employee makes contributions to the Retirement System. Certain leaves of absence may also be credited.

Uniformed (Plans A and B):
Same as municipal.

Elected:
Same as municipal.

3. Total Compensation

Municipal:
Total compensation means the base rate of pay, overtime, and longevity payments received during a 12-month period.

Uniformed (Plans A and B):
Total compensation means the base rate of pay, longevity payments, and stress or premium pay (up to 4% of base pay) received during a 12-month period.

Elected:
Total compensation means the base rate of pay and longevity payments received during a 12-month period.

APPENDIX D
SUMMARY OF PLAN PROVISIONS – 1987 PLAN

4. Final Compensation

Municipal:
Final compensation means whichever is greater: annual base rate of pay at the time of termination or the total compensation received during the 12 months immediately preceding termination, including supplementary compensation received under Civil Service Regulation No. 32.

Uniformed (Plans A and B):
Same as municipal.

Elected:
Same as municipal.

5. Average Final Compensation

Municipal:
Average final compensation means the arithmetic average of the total compensation received during the three calendar or anniversary years producing the highest average.

Uniformed (Plans A and B):
Average final compensation means the arithmetic average of the total compensation received during the two calendar or anniversary years producing the highest average.

Elected:
Same as municipal.

6. Employee Contributions

Municipal:
Total employee contributions equal 30% of the gross normal cost for all members in the municipal division. Exempt and non-represented employees hired after January 13, 1999 (and current employees as of January 13, 1999 that elect to do so) will contribute an additional amount to become vested in five years.

Uniformed (Plans A and B):
Total employee contributions equal 5% of total compensation, but not less than 30% or greater than 50% of gross normal cost for members in the uniformed division. Police Employees hired after January 1, 2010 and Fire Fighters hired after October 15, 2010 who elect to participate in the 1987 Plan will contribute 6% of total compensation. Exempt and non-represented employees hired after January 13, 1999 (and current employees as of January 13, 1999 that elect to do so) will contribute an additional amount to become vested in five years.

Elected:
Total employee contributions equal 30% of the gross normal cost for all members in the elected division calculated under the municipal plan plus 100% of the gross normal cost that

exceeds the cost for the municipal plan. Employees hired after January 13, 1999 (and current employees as of January 13, 1999 that elect to do so) will contribute an additional amount to become vested in the lesser of two full terms or eight years.

7. Service Retirement

Eligibility

Municipal:
Each municipal employee is eligible to retire and receive a service pension at age 60 if he or she has 10 or more years of credited service or, if the employee made additional contributions to become vested in five years, five years of credited service.

Uniformed (Plans A and B):
Each uniformed employee is eligible to retire and receive a service pension upon reaching age 50 and 10 or more years of credited service, or, if the employee made additional contributions to become vested in five years, five years of credited service.

Elected:
Each elected official is eligible to retire and receive a service pension at age 55 if he or she has 10 or more years of credited service, or, if the employee made additional contributions to become vested in the lesser or two full terms or eight years, the lesser of two full terms or eight years of credited service.

Benefit Amount

Municipal:
The service pension equals 2.2% of the employee's average final compensation multiplied by years of credited service to a maximum of 10 years, plus 2% of the employee's average final compensation multiplied by years of service over 10, subject to a maximum of 100% of average final compensation.

Uniformed (Plans A and B):
The service pension equals 2.2% of the employee's average final compensation multiplied by years of credited service to a maximum of 20 years, plus 2% of the employee's average final compensation multiplied by years of credited service over 20, subject to a maximum of 100% of average final compensation.

Elected:
The service pension equals 3.5% of the employee's average final compensation multiplied by years of credited service, subject to a maximum of 100% of average final compensation.

APPENDIX D
SUMMARY OF PLAN PROVISIONS – 1987 PLAN

8. Early Retirement

Eligibility

Municipal:
Each municipal employee is eligible to retire and receive a reduced service pension at age 52 if he has 10 or more years of credited service. As an alternative, a member is eligible if he or she has at least 33 years of credited service, regardless of age.

Uniformed (Plans A and B):
Each uniformed employee is eligible to retire and receive a reduced service pension at age 40 if he or she has 10 or more years of credited service. Alternatively, a member is eligible if he has at least 25 years of credited service, regardless of age.

Benefit Amount

Municipal:
The annual amount is calculated the same as service retirement, reduced by 1/2 of 1% for each month the employee is younger than minimum retirement age. Benefits are not reduced if the employee has 33 or more years of credited service.

Uniformed (Plans A and B):
The annual amount is calculated the same as service retirement, reduced by 1/2 of 1% for each month the employee is younger than minimum retirement age. Benefits are not reduced if the employee has 25 or more years of credited service.

Elected:
The annual amount is calculated the same as service retirement, reduced by 1/2 of 1% for each month the employee is younger than minimum retirement age.

9. Deferred Vested Retirement

Eligibility

Municipal:
An employee who terminates employment after completing 10 or more years of credited service or, if the employee made additional contributions to become vested in five years, five years of credited service, is eligible for a deferred vested retirement if his or her contributions have not been withdrawn.

Uniformed (Plans A and B):
Same as municipal.

Elected:
A person terminating employment and who has completed 10 or more years of credited service, or, if the employee made additional contributions to become vested in the lesser of

two full terms or eight years, two full terms or eight years of credited service is eligible for a deferred vested retirement benefit provided he or she has not withdrawn contributions.

Benefit

Municipal:
The annual deferred vested benefit is determined the same as service pensions, based on average final compensation and credited service at termination. This benefit begins at the service retirement date. If a member dies before the deferred vested benefit begins, an ordinary death benefit is payable (see Ordinary Death below). As an alternative, the person terminating employment may request at any time before benefits begin a return of employee contributions (without interest) instead of the deferred vested benefit.

Uniformed (Plans A and B):
Same as municipal.

Elected:
Same as municipal.

10. Withdrawal Benefit

Eligibility

Municipal:
Each terminating employee who has completed fewer than 10 years of credited service (or, if the employee made additional contributions to become vested in five years, fewer than five years of credited service) will receive a withdrawal benefit equal to employee contributions (without interest).

Uniformed (Plans A and B):
Same as municipal.

Elected:
Each terminating employee who completed fewer than 10 years of credited service will receive a withdrawal benefit equal to employee contributions (without interest).

11. Service Connected Death

Eligibility

Municipal:
The beneficiary of each active employee who dies solely from the performance of duties of the employee's position with the City is eligible for an immediate death benefit.

Uniformed (Plans A and B):
Same as municipal.

Elected:
Same as municipal.

Benefit Amount

Municipal:
The death benefit equals the sum of the total employee contributions paid to the Retirement System (without interest), plus a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the Workers' Compensation Act. This benefit is payable to the spouse until his or her death or remarriage, whichever occurs first. Dependent children are entitled to an additional 10% of final compensation yearly payment for each dependent child (up to two children) until the child reaches 18. This total benefit shall not exceed 80% of final compensation.

If there is no spouse, or if the spouse dies or remarries, each dependent child (up to three children) is eligible for a yearly payment of 25% of final compensation until the child reaches age 18. If there is no spouse or dependent children, each dependent parent is entitled to a 15% of final compensation yearly payment for life.

Uniformed (Plans A and B):
Same as municipal.

Elected:
Same as municipal.

12. Ordinary Death

Eligibility

Municipal:
The beneficiary of an active employee (or a terminated vested employee who did not withdraw his employee contributions) who dies after completing 10 years of credited service (or five years of credited service if additional contributions were made) or who has reached age 60 is eligible for an immediate death benefit equal to an annual pension or a lump sum payment, whichever the beneficiary chooses.

The beneficiary of an active employee who dies before completing 10 years of credited service (or five years of credited service if additional contributions were made) or reaching age 60 is eligible for a lump sum payment.

The beneficiary may be any relative by blood or marriage.

APPENDIX D
SUMMARY OF PLAN PROVISIONS – 1987 PLAN

Uniformed (Plans A and B):
The beneficiary of any employee who dies while actively employed (or a terminated vested employee who did not withdraw employee contributions) is eligible for a death benefit equal to an annual pension or a lump sum payment, whichever the beneficiary chooses.

The beneficiary may be any relative by blood or marriage.

Elected:
The beneficiary of an active employee (or a terminated vested employee who did not withdraw contributions) who dies after completing 10 years of credited service or reaching age 55 is eligible for an immediate death benefit equal to an annual pension or a lump sum payment, whichever the beneficiary chooses.

The beneficiary of an active employee who dies before completing 10 years of credited service or reaching age 55 is eligible for a lump sum payment.

The beneficiary may be any relative by blood or marriage.

Annual Pension

Municipal:
The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received had he or she been eligible to retire on the day before death and had elected Option 2, joint and 100% contingent annuitant (see Survivor Benefits below).

Uniformed (Plans A and B):
The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received (based on a minimum of 10 years of service) had he been eligible to retire on the day before death and had elected Option 2, joint and 100% contingent annuitant (see Survivor Benefits below).

Elected:
Same as municipal.

Lump Sum Payment

Municipal:
The lump sum payment is equal to the deceased employee's average final compensation multiplied by years of credited service (not to exceed the service in the denominator) and divided by the number of years of credited service needed to become vested, plus the deceased employee's contribution to the Retirement System (without interest) minus the total amount of the deceased employee's life insurance which was paid by the City.

Uniformed (Plans A and B):
Same as municipal.

Elected:
Same as municipal.

13. Service-Connected Disability

Eligibility

Municipal:
An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated from any further performance of duties due solely to the result of the performance of duties is eligible for an immediate service-connected disability pension. The application for benefit must be made within one year after termination of employment.

Uniformed (Plans A and B):
Same as municipal.

Elected:
An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated from any further performance of duties due solely to the result of the performance of duties is eligible for an immediate service-connected disability pension.

Benefit Amount

Municipal:
The service-connected disability benefit is equal to the employee's contributions to the Retirement System, plus a yearly benefit of 70% of the employee's final compensation, reduced by any disability benefits payable under the Worker's Compensation Act.

If he or she withdraws contributions, the benefit is payable for his or her lifetime only.

If the employee leaves employee contributions with the Retirement System, he or she may choose a survivor benefit option (see Survivor benefit below) and the beneficiary will continue receiving benefit payments after his or her death.

Uniformed (Plans A and B)
Same as municipal.

Elected:
Same as municipal.

APPENDIX D
SUMMARY OF PLAN PROVISIONS – 1987 PLAN

14. Service-Connected Disability Periodic Adjustment

Eligibility

Municipal:
An employee who is receiving a service-connected disability benefit who is totally disabled and does not collect Social Security disability insurance benefits is eligible for a periodic adjustment.

Uniformed (Plans A and B):
Same as municipal, but only applies to police employees.

Elected:
Same as municipal.

Benefit Amount

Municipal:
The disabled employee's pension will be increased in the eighth year after separation by the percentage raise given in the previous year to active employees in his or her job class. The adjustment will continue each year until the employee's 65th birthday.

Uniformed (Plans A and B):
Same as municipal.

Elected:
Same as municipal.

15. Ordinary Disability

Eligibility

Municipal:
An active employee found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he or she has at least 10 years of credited service (or five years of credited service, if additional contributions were made). The application for benefits must be made within one year after termination.

Uniformed (Plans A and B):
Same as municipal, except that fire employees only need five years of credited service and police employees have no service requirement if the disability is permanent and total. Police employees with permanent and partial disability need 10 years of credited service (or five years of credited service, if additional contributions were made).

Elected:
An active employee found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he or she has completed at least 10 years of credited service, or eight years if additional contributions were made.

Benefit Amount

Municipal:
The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.

If the employee is eligible for or receiving workers compensation, no benefit is payable. Such employee may apply for benefits at retirement age.

Uniformed (Plans A and B):
Same as municipal, except each eligible employee is automatically credited with a minimum of 10 years of service to calculate the annual benefit.

Elected:
The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.

16. Survivor Benefits

Eligibility

Municipal:
Service pensions, deferred vested benefits, service-connected disability benefits, and ordinary disability benefits are payable under three optional forms. Options 2 and 3 provide benefits actuarially equivalent to a lifetime only pension while Option 1 has no reduction.

Option 1 - A benefit is payable to the employee providing on his death, the beneficiary will receive a lump sum equal to the excess, if any, of the employee's contributions over the sum of the payments received.

Option 2 - A reduced benefit payable to the employee with the provision that 100% of the reduced benefit will continue to be paid to the designated beneficiary for life after the death of the employee.

Option 3 - The same as Option 2 except only 50% of the reduced benefit is continued to the designated beneficiary.

Uniformed (Plans A and B):
Same as municipal, except that fire employees may also elect Option 4:

Option 4 - Upon the employee's death, 50% of the benefit will continue to be paid to the surviving spouse for life, provided the employee and spouse were married for two years before retirement and at death. If there is no eligible spouse at the time the employee dies, or the spouse dies before the full amount of the contributions have been returned, 50% of the benefit is continued to dependent children until age 18, or if no dependent children, payments are given to dependent parents for the remainder of their lives. In addition, Option 4 provides for a guaranteed return of employee contributions as described in Option 1 above.

Option 5 – Provides for a partial lump sum of between 6 and 36 monthly payments payable under Options 1, 2, 3 or 4. The remaining monthly benefit is reduced so that the partial lump sum plus the reduced benefit is actuarially equivalent to the original benefit.

Elected:
Same as municipal.

17. Service-Connected Health Care Benefit

Eligibility

Municipal:
Not applicable.

Uniformed (Plans A and B):
In the event of the death of a uniformed employee during the performance of his or her duties, a service-connected health care benefit may be payable to the surviving spouse and dependent children. Regular payments will be made of the appropriate cost of maintaining medical, dental, optical and pharmaceutical prescription benefits in force at the time of the employee's death. Payments to the spouse cease upon remarriage and to dependent children at age 18 (age 22 if a full-time student) or, if dependent due to physical or mental infirmity, the duration of the infirmity. The health care benefits are not paid from the pension trust assets.

Elected:
Not applicable.

18. Deferred Retirement Option Plan (DROP)

Eligibility
Municipal:
Employees that have 10 years of service and have reached two years after the minimum retirement age may elect to participate in the DROP. During this time, their accrued benefit will go into a DROP account and will earn interest at a specified rate (4.5% as of July 1, 2009). The benefit is calculated as of the date they entered the DROP. At the end of the DROP, the employees' accrued monthly benefit will commence, plus they will receive the

accumulated amount of the accrued benefit paid to the DROP, as well as the interest earned on such benefit.

Uniformed (Plans A and B):
Same as municipal except that employees are eligible as soon as they have ten years service and have reached minimum retirement age.

Elected:
Same as municipal.

APPENDIX D
SUMMARY OF PLAN PROVISIONS – PLAN 10

Police employees hired on or after January 1, 2010, or Fire employees hired on or after October 15, 2010, will be placed in a new retirement program adopted by the City (Plan ’10). New employees will have the option to participate in a defined benefit plan with a different benefit calculation formula and eligibility and vesting rules, and a defined contribution plan with eligibility for City matching contributions, or enter Plan 87 but with increased employee contributions. The employee contribution rate would be 6.0% instead of 5.0%.

Existing Plan A and Plan B participants had the option, for a period of ninety (90) days, to make an irrevocable election to enter the new pension plan. Employees who elected do so will have their benefits in the existing pension plan frozen, and their future earnings and service will count only toward benefits under the new pension plan.

APPENDIX E
GLOSSARY OF TERMS

1. Actuarial Liability

The Actuarial Liability is the difference between the present value of all future system benefits and the present value of total future normal costs. This is also referred to by some actuaries as the "accrued liability" or "actuarial liability."

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement rate or rates of investment income and salary increases. Actuarial assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

3. Accrued Service

Service credited under the System which was rendered before the date of the actuarial valuation.

4. Actuarial Equivalent

A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

5. Actuarial Funding Method

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of a retirement system benefit between future normal cost and actuarial accrued liability. Sometimes this is referred to as the "actuarial funding method."

6. Actuarial Gain (Loss)

The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

7. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

APPENDIX E
GLOSSARY OF TERMS

8. Adjusted Market Value of Assets

An asset value reflecting a five-year smoothing of asset gains and losses, as described in the Philadelphia Municipal Code Title 22-311.

9. Amortization

This term represents the paying off an interest-discounted amount with periodic payments of interest and principal—as opposed to paying off with a lump sum payment.

10. Annual Required Contribution (ARC) under GASB 25

The Governmental Accounting Standards Board (GASB) Statement No. 25 defines the Plan Sponsor's "Annual Required Contribution" (ARC) that must be disclosed annually and is defined in accordance with the City's Funding Policy.

11. Normal Cost

The actuarial present value of retirement system benefits allocated to the current year by the actuarial funding method.

12. Unfunded Actuarial Liability (UAL)

The difference between actuarial liability and valuation assets. This is sometimes referred to as "unfunded actuarial accrued liability."

Most retirement systems have unfunded actuarial liabilities. They typically arise each time new benefits are added and each time experience gains/losses are realized.

The existence of unfunded actuarial accrued liability is not in itself an indicator of poor funding. Also, unfunded actuarial liabilities do not represent a debt that is payable today. What is important is the ability of the plan sponsor to contribute the annual amortized cost to fund down the unfunded actuarial liability and the trend in unfunded actuarial liability amount.