City of Boca Raton Police Officers and Firefighters' Retirement System

Pension Sustainability Report

December 2013

INTRODUCTION

The City of Boca Raton provides a defined benefit pension plan for its police officers and firefighters and the pension trust is administered by an independent board of trustees. The board of trustees engages an actuary to prepare a valuation report to determine the actuarially determined contribution. Under Florida Statutes the City is required to make the actuarially determined contribution to the pension plan.

The City also receives State of Florida Premium Tax Revenues (PTR) under Florida Statutes 175 and 185; it requires that certain minimum pension benefits be established for police officers and firefighters. Any growth in premium tax revenues must first be used to meet the established minimum benefits and then must be used to provide extra benefits.

The City Council, as part of its annual goal setting, established Pensions: Long-Term Sustainability as a top priority. The City Council recognized the need to establish a strategy to fund the pension plan on a long-term sustainable basis. The City Council directed staff to engage an outside actuary to review the 2012 valuation report, benefit structure and funding levels for the pension plan and to prepare a special study on pension reform to achieve long-term sustainability.

Actuarial Concepts, Inc. has prepared a special study on pension reform and contained within are various alternatives for pension reform along with projections of estimates of future City contributions if such reform is enacted. This Special Study is found in Section 1 of this document.

Section 2 provides pension reform options along with recent pension reform by the State and other cities. Sections 3 and 4 provide comparisons of Minimum Benefits under Florida Statutes 175 and 185 to the Florida Retirement System (FRS) and to the City of Boca Raton, respectively.

The Graphs in Section 5 provide a snapshot of historical City contributions and the Unfunded Actuarial Accrued Liability (UAAL), which is the difference between the actuarial value of the assets of the pension plan and the actuarial present value of the plan's pension obligations (accrued liability). There are also various historical graphs on various factors.

Section 6 provides a glossary of terms and Section 7 is a copy of the 2012 Actuarial Valuation Report prepared by John Lessl of AON Hewitt, the pension plan actuary.

The pension ordinances adopted by the City for the police officer and firefighter pension plan is contained within Section 8.

Section 9 contains *Pension Funding: A Guide for Elected Officials* and Section 10 provides the Government Finance Officers Association (GFOA) Best Practices:

- *Designing and Implementing Sustainable Pension Benefit Tiers*
- *Guidelines for Funding Defined Benefit Pensions*
- *Reviewing, Understanding and Using the Actuarial Valuation Report and Its Role in Plan Funding*
- *Sustainable Funding Practices of Defined Benefit Plans*

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CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

PENSION REFORM SPECIAL STUDIES

DECEMBER 2013

Actuarial Concepts

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Management Advisors

Benefits Specialists

December 3, 2013

City of Boca Raton
201 West Palmetto Park Road
Boca Raton, Florida 33432

CITY OF BOCA RATON POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM PENSION REFORM SPECIAL STUDIES

This report presents the results of the pension reform special studies for the City of Boca Raton. Actuarial Concepts was retained by the City to perform the studies and prepare this report.

Although the projections of estimated City future contributions were made using appropriate actuarial techniques, the accuracy of the projections is subject to many variables, and the estimates may differ notably from the future reality, especially for those estimates further in the future. However, the differences between current and proposed should be somewhat less variable and thus more likely to be representative of the future differences.

The information and recommendations contained in this report should be considered as a whole and use of portions of the report out of context cannot be used without specific written advance approval from Actuarial Concepts. The use of the study results for financial or administrative purposes other than those outlined in the report is not recommended without an advance review by Actuarial Concepts of the appropriateness of such application.

Members of our staff are available to discuss this report and related issues.

Very truly yours,

ACTUARIAL CONCEPTS

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CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM
PENSION REFORM SPECIAL STUDIES

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INTRODUCTION

Actuarially Sound Funding

The Florida Constitution (Section 14) as well as Florida Statutes (Chapter 112) require the actuarially sound funding of pensions since January 1, 1977. Thus, the plan's current funding policy is already based on an actuarially determined contribution. The implication of an actuarially determined contribution is that, if the plan is funded as required and the actuarial assumptions are realized, all promised benefits will be fully funded. Actuarial valuations by design determine contribution requirements as a level percentage of present and future payroll. Current actuarial reports present summary information on when the plan will be fully funded, as required under current Florida Statute report guidelines.

However, actuarially sound funding does not limit the financial risk associated with promised benefits. The risk of costs greater than expected, usually resulting from actuarial assumptions not being met, makes it difficult to manage sustainable cost levels as well as cost volatility. This report addresses these financial risk elements.

Basis of Special Studies

Estimated liabilities with respect to the various reform alternatives and the estimated contributions required to fund alternatives have been estimated as of October 1, 2012, based upon:

1. the provisions of the current plan in effect as of October 1, 2012, as summarized in Appendix A;
2. the actuarial assumptions and actuarial cost method used by the plan actuaries in effect as of October 1, 2012, as summarized in Appendix B;
3. the active member data and plan assets as of September 30, 2012, provided by the City; and

4. the inactive member valuation results and plan assets as of September 30, 2012, from the 2012 actuarial valuation report.

Since Actuarial Concepts is not responsible for preparing the official 2012 actuarial valuation report, the Study presents an independent actuarial analysis of the proposed changes to the current plan applicable to current active members. Current members in DROP and retired members are not impacted, as the recommended reforms are not applicable to them. Actuarial assumptions used for this analysis are comparable and, in most cases, identical to those used by the Plan actuary in order to achieve consistency of results. However, the results are not intended to match or necessarily be consistent with the official actuarial valuation report.

Study Presentation

The projections of estimated contributions for the current and proposed reformed plan alternatives are based on current pensionable payroll, so the various comparisons will be consistent with the way current plan percentages are determined. Future pensionable payroll was estimated by applying the payroll growth percentage of 4.5% used for the current plan to current pensionable payroll.

Composite contribution percentages were developed for the reformed plan alternative by combining the estimated contribution percentage and contribution dollars of current members with the estimated contribution percentage and contribution dollars of future members. Eventually (30+ years from now) the estimated composite contribution percentage and contribution dollars would be the same as the estimated new plan contribution percentage and contribution dollars for future members.

Actual Costs

It should be noted that the actual costs of a retirement plan or any plan changes cannot be determined until its future unfolds. No one can precisely predict the return earnings on fund assets, member termination rates, future salary levels, mortality experience, etc. Estimates based on experience with similar groups, along with the judgment of the actuary and the City, can provide a reasonable approximation of this actual cost. While these projections of estimated contributions are believed to be reasonable, it should be recognized and noted that future year estimates are subject to more volatility than near term estimates.

SECTION 1
EXECUTIVE SUMMARY

Objective

Develop a structure of pension benefits that is affordable and sustainable over the long-term. A key element is the management of financial risk associated with the pension plan, especially the risk of significantly higher contributions than expected and the volatility of contributions.

City financial risk can be reduced by transferring the risk to current members, sharing the risk with members and/or limiting the risk through flexible benefit promises.

Recommended Pension Benefit Structure

A reduction in several benefit provisions applicable to future service of active members (members currently in DROP and retired are also excluded) combined with a flexible benefit structure would lower the permanent cost of the plan as well as provide significant City contribution stability. This approach has the advantage of providing "full" targeted benefits if investment returns and other plan experience were as anticipated, while not promising full benefits in advance if it turns out plan experience is adverse. The recommended reforms are:

- Remove pay elements that can be varied; eliminate overtime counted for pensions for future service for Police Officers (currently up to 300 hours is included).
- Lengthen averaging period of pensionable pay to 5 years (currently 2 years).
- Limit maximum initial pension at retirement to $100,000 (currently unlimited).
- Limit maximum multiplier to 81% (currently 87.5% for Police; 100% for Fire).
- Reduce multiplier to 3% for future service (currently 3.5% for Police; 3.4% for Fire).

- Lower guaranteed retiree COLA to 1.5% annual increase for future benefit accruals (currently 3% at age 52 for Fire; Police 2%).
- Delay retiree COLA start date to 7 years.
- Modify DROP benefit to permit longer funding period by replacing DROP with Backdrop.
- Establish maximum target City contribution expressed as a percentage of payroll. City contribution target is net of (after) member contributions and premium tax refunds (PTRs) received per Florida Statute Chapters 175 and 185.
- Member contributions increased or decreased if City contributions go over a maximum or under a minimum targeted amount.
- Retiree COLA in addition to the 1.5% guaranteed COLA up to an additional 1.5% applicable to future service, variable depending on whether the COLA can be fully advance funded* within the maximum City targeted contribution amount.

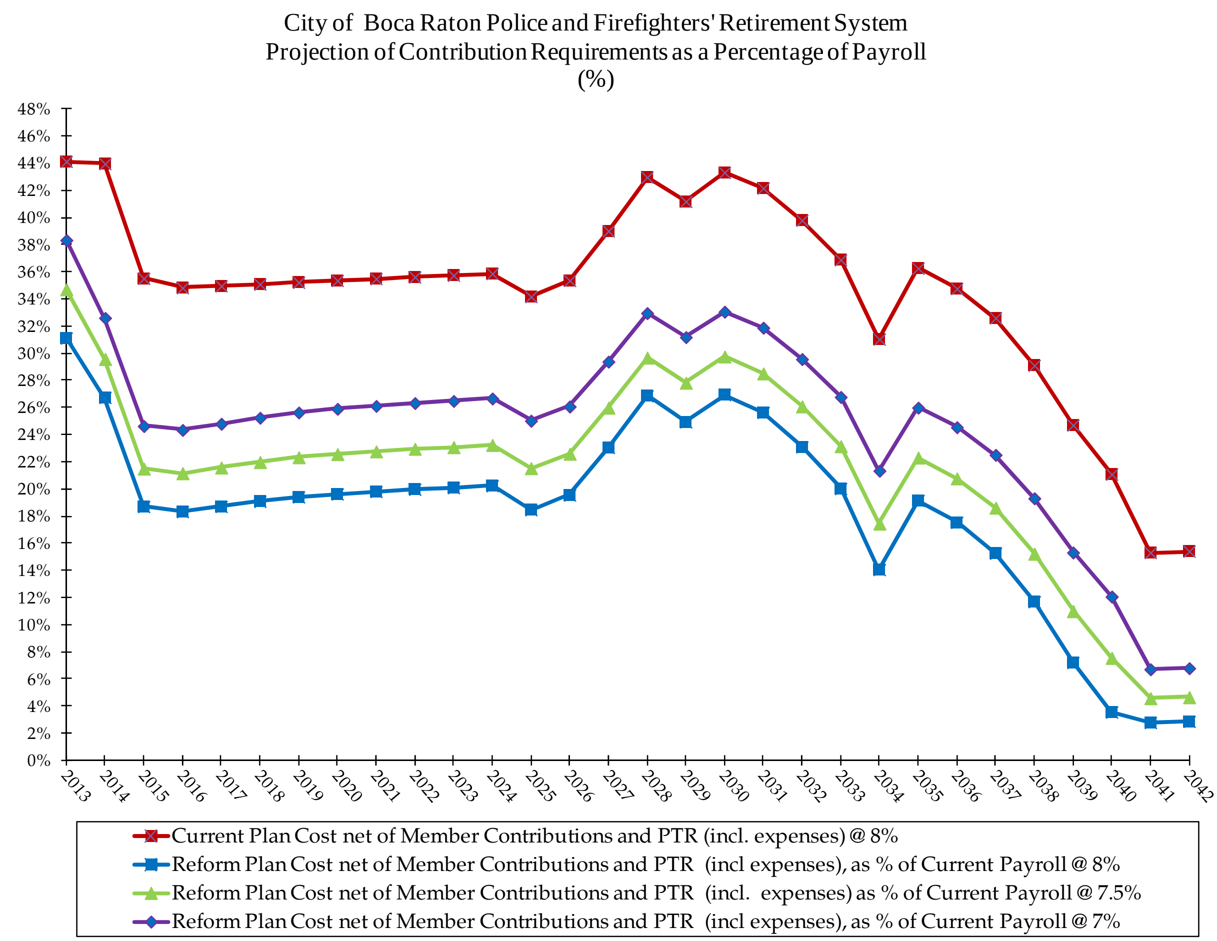
* Fully advance funded means that the valuation results are based on the premise that the assumed level of retiree COLA adjustments would be applicable, and that the City contribution percentage based on those results is less than the maximum City targeted contribution amount.

The recommended benefit structure is intended to be taken as a package to accomplish the stated objective, and is not intended as a "shopping list" of changes. All the recommendations, if implemented, would still result in the plan continuing to comply with all the minimum benefit provisions of Chapters 175 and 185, Florida Statutes.

Also, it is important to note that the recommended elements of change are not independent; that modification of any element affects the effect of the other element. It is the combined interactive effect on estimated future contributions that the projections present.

The major challenge to plan reform to control City pension costs is attributable to the increase in unfunded liability associated with current retirees. Retiree liabilities previously had been fully funded as of retirement, assuming that plan assets associated with retiree liabilities continued to earn the assumed investment return (retiree liabilities are discounted at the assumed rate to coordinate with the timing of future retiree payments), and lived as long as the assumed longevity table predicted. But the shortfalls in assumed returns, combined with retirees living longer than expected resulted in new Unfunded Actuarial Accrued Liabilities (UAALs) associated with the retiree obligations. And all retiree benefits are guaranteed; the City cannot reduce those benefits to remain fully funded for retirees. And those new liabilities need to be paid through City costs that are normally assigned to current members, thus needing to lower current and future benefit promises to stay within City contribution targets.

Several sets of projections of the estimated current and proposed reformed plan contributions were developed. In addition to projecting the estimated City costs using the current valuation rate of 8%, two alternative lower assumed investment rates were used to demonstrate the difference in estimated City contributions if plan returns were less than assumed over the long term. Two composite charts presenting the results of these projections follows. The first chart projects the estimated City contribution requirements as a percentage of payroll; the second chart projects the estimated City contribution requirements as a dollar amount. Estimated City contributions are net of member contributions and premium tax refunds (labeled PTRs in the legend below the chart). The backup data to the summary charts is contained in Appendix C.



These projections demonstrate that the reformed plan is expected to reduce current City contribution requirements even if the actual long-term rate of return is less than the current rate of assumed return by up to one percentage point less. It would appear that actual returns would have to average less than 6.5% over the long term before City contributions under reform would not see a reduction over current levels. Of course, if actual returns were at those lower levels, the current plan cost would also be significantly greater than the top line (red) in the chart estimates.

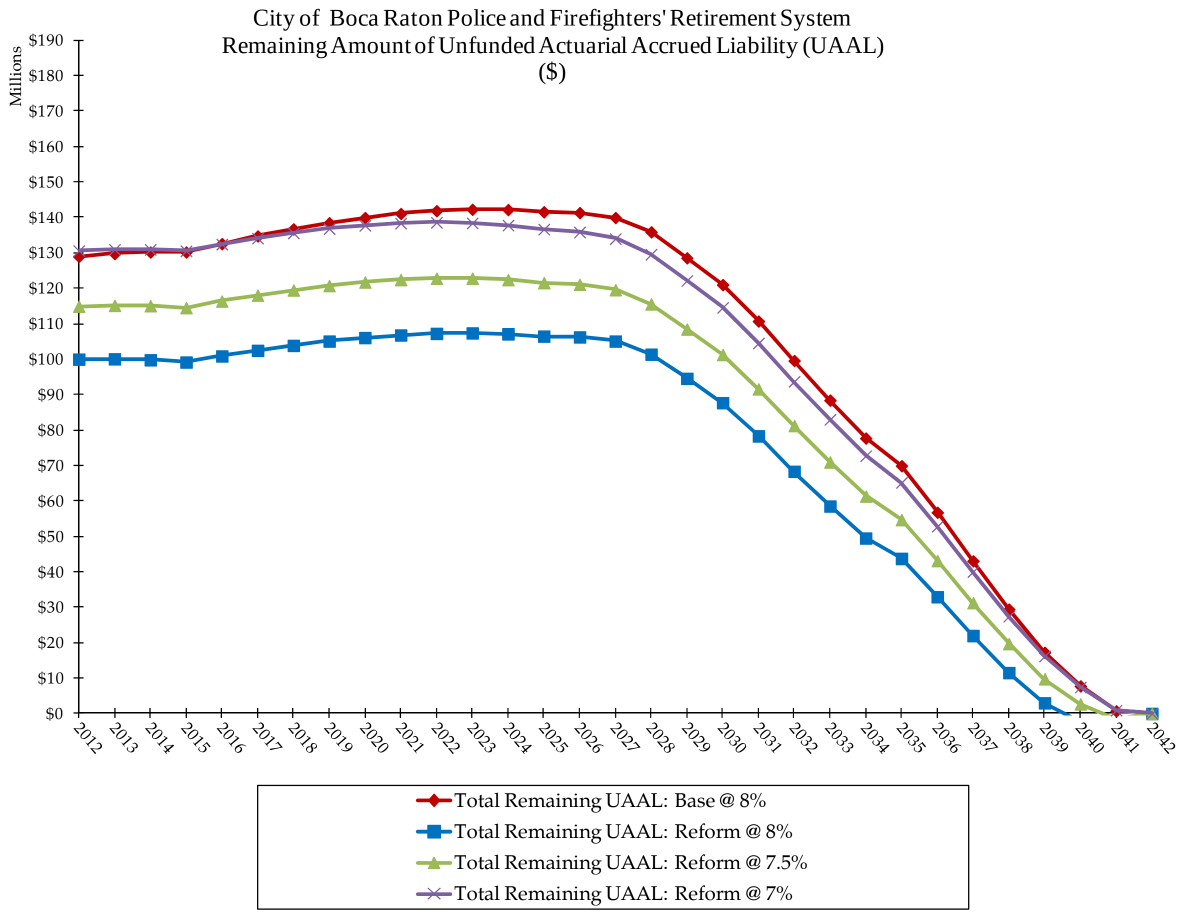
To obtain an estimate of the contribution effect of the reform, the top line (red) and the bottom line (blue) of the chart can be compared. Pages 4-1, 4-7 and 4-13 present the estimated reform effect as a percentage of payroll separately for each of the three alternative assumed rates of return, and pages 4-4, 4-10 and 4-16 present the same comparisons as a dollar amount. The backup to the projection charts are after each chart.

The initial drop in the projected future levels is due to an unfunded "mortgage" (one of the UAAL components) being fully paid off. The later jumps in the projected future levels are due to prior "gain mortgages" being fully recognized (no more contribution credit). The later drops in projected levels occur due to more UAAL "loss mortgages" (or previously granted benefit liability increases) being fully paid off.

At the end of the projection period the estimated UAAL levels shown are based on the estimated future normal costs of the plan, with all current UAAL "mortgages" being fully paid off.

See Section 6, Other Considerations, for a discussion of how the "backloading" of the UAAL payments might be addressed.

A projection of the estimated growth in Unfunded Actuarial Accrued Liability (UAAL), based on the current plan at 8% investment return compared to the reform plan at the three alternative assumed rates of investment return (8%, 7.5%, 7%), follows below. Backup data for the chart is in Appendix C.



The above chart presents projections of the estimated Unfunded Actuarial Accrued Liabilities (UAALs) of the plan for the current plan and its current assumed rate of return of 8%, along with similar projections of the UAAL for the reformed plan using the three alternative assumed rates of return (8%, 7.5%, 7%). The chart demonstrates that the UAAL would not be initially reduced if 7% were assumed to be actually earned over the long term, and thus the initial UAAL, after reform, could actually increase from current assumed levels if actuarial returns were less than 7%. Of course, if actual

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returns were at those lower levels, the current plan would also cost significantly more than the top line (red) in the chart estimates.

To obtain an estimate of the UAAL effect of the reform, the top line and the bottom line can be compared. Pages 5-2, 5-5 and 5-8 present the estimated reform effect as a dollar amount for each of the three alternative assumed rates of return. The backup to the projection charts are after each chart in Section 5.

Note UAAL levels increase for a period of years before starting to decrease after 13 years or so. The reason why this increase occurs is because the "mortgage method" is based on "negative amortizations" (initial payments less than the interest charges). Even though the UAAL is eventually repaid, this back loaded repayment plan delays repayment over more than one generation of taxpayers.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Conclusion

Significant reforms are necessary to achieve and sustain lower levels of City contribution requirements within City targeted contribution objectives. Increased City cost stability can be addressed through variable member contributions and variable pension benefits dependent on the ability to prefund the desired benefit level, as well as through revisions to the UAAL amortization method currently in use.

SECTION 2
ALTERNATIVES CONSIDERED

Defined Contribution Plan

Converting the current defined benefit plan to a defined contribution plan would address the current financial risk of the plan. The City would only be obligated for agreed upon City and member contributions and would have no further financial risk. In effect, financial risk would be transferred to plan members. There would be no sharing of risk, either with the City or other plan members. The two major elements of risk that would be absorbed by individual plan members are:

1. The risk of investment return on individual account balances. If investment returns are less than expected, account balances will be inadequate relative to retirement expectations. On the other hand, if returns are greater than expected, retirement funds would be greater than planned for.

2. The risk of survival. The major risk of an account balance benefit for plan members is the risk of living longer than average, thus running out of money before the end of a member's life. On the other hand, if one dies early then the beneficiary would receive the residual pension benefit.

We do not recommend adoption of a defined contribution plan to control the pension plan financial risk of the City. We do not believe a transfer of risk to members is an appropriate way to manage pension costs. The City is significantly better equipped to assist the members in sharing the financial risks among themselves, as well as with the City. It is one of the benefits that the City can provide for its members to assist in the management of this risk. Also, It is unlikely that a defined contribution plan would be accepted by Police Officer and Firefighter members, as there are virtually no defined contribution plans in the State of Florida for Police Officers and Firefighters.

Hybrid Plan (part defined benefit, part defined contribution)

A plan that is part defined benefit and part defined contribution, referred to here as a "hybrid plan," would reduce the financial risk by eliminating the City's financial risk for the defined contribution portion. The financial risk associated with the defined contribution portion would be transferred to the plan members. The hybrid approach would reduce overall City risk, but would not address the financial risk of the defined benefit portion. This approach has merit providing a defined benefit anchor (guaranteed benefit) that the City is responsible for along with a defined contribution portion that the City and members contribute to but that the members are responsible for. However, we believe there is a more effective way of addressing financial risk, and we have outlined that approach below.

Reformed Defined Benefit Plan (lower guaranteed benefits)

One of the usual ways to address financial risks is to lower guaranteed benefit levels. In effect a lower level of benefits lowers expected future contribution requirements but still has the financial risk associated with those requirements. It would also lower the "worst case" higher contribution levels of the current plan. This approach is necessary to reduce expected plan costs, but is not sufficient to address the financial risk volatility. Another element is needed in order to have relatively stable City contribution requirements as well as affordable levels of City contributions.

Reformed Defined Benefit Plan (lower flexible benefits and variable member contributions)

A reformed defined benefit plan including the elements of lower flexible benefits and variable member contributions addresses both the cost level issue as well as contribution stability issues. The details of how this approach would work is outlined in later sections of this report. It is our belief that this reform approach would permit the City to have a structure of pension benefits that is affordable and sustainable over the long term. It has elements of risk sharing via benefit variability for current plan members as well as intergenerational pooling of risk for current and future members taken as a group.

SECTION 3
ELEMENTS OF REFORM

The recommended benefit structure is intended to be taken as a package to accomplish the stated objective, and is not intended as a "shopping list" of changes. Also, it is important to note that the recommended elements of change are not independent; that modification of any element affects the reform value of the other element. It is the combined interactive effect on estimated future contributions that the projections illustrate. The recommended structure would apply both to current and future members.

Minimize Individual Choice Affecting Benefit Levels

- Remove pay elements that can be varied; eliminate overtime counted for pensions for future service for Police Officers.

  Since most actuarial valuations use current overtime to project the cost of including overtime, any increased overtime near retirement results in actuarial losses and increased unfunded liabilities not planned for. It is not the members fault that rules exist that permit "spiking" of pensionable pay; members are just maximizing their pensions based on the rules that exist. It is better to have plan rules that treat every member the same; removing overtime eliminates the "spiking" potential and bring members on a level playing field. Note that Firefighter members participating in the plan already exclude overtime from pensionable pay. The reason why overtime has been included for Police Officers is because, until recently, overtime up to 300 hours was required to be included per Florida Statutes, and that requirement has been removed. Overtime already earned in the past would still be counted and be included if within the pay-averaging period. So the phase out of overtime would be over a period of years. The Florida Retirement System currently does include overtime up to 300 hours per year.

- Lengthen averaging period of pensionable pay to 5 years.

  Lengthening the averaging period dampens the effect of increases to any pay element close to retirement, and lessens the potential for unfunded earned benefits. For example, if a member is promoted in the last year or two before retirement, this increase is not expected actuarially and thus increases the unfunded liabilities and their related contribution requirements. It is not uncommon for senior employees to get promoted toward the end of their careers. Since benefit funding was based on earnings before the promotion, and members did not pay member contributions on this increase previously, actuarial losses usually result. Lengthening the averaging period does not eliminate this potential occurrence, but it does dampen its effect. The reform would be implemented over a 3 year phase-in period. The Florida Retirement System currently uses 5 years as the averaging period.

Limit Automatic Escalations in Initial Retirement Benefit Levels and Make subject to Future Negotiations for Increases

- Limit maximum initial annual pension at retirement to a fixed dollar amount of $100,000.

  Limiting the maximum initial annual pension to a fixed dollar amount of $100,000 at retirement currently affects only a few current members, but would have significant impact on projected liabilities. This is an important element in cost control; rather than having large pensions increasing automatically, future increases in the initial limit at retirement would have to be negotiated by the unions and the City, thus requiring increases in the maximum benefit to be identified and an actuarial statement of impact prepared before any increase would apply. Any member currently at or above this $100,000 limit would keep the current higher earned limit. The Florida Retirement System currently does not have a maximum dollar pension amount.

Note that the benefit payable, if limited at retirement, does not restrict future retiree COLA increases to the initial benefit. So if the $100,000 limit applies at retirement, then all applicable future retiree COLA increases would apply to the $100,000 limit maximum multiplier to 81%.

Limiting the multiplier to 81% is more of an employment and "reasonable but not excessive" benefit item than just pension contribution control. Members who stay longer earn pay at a higher rate than members who would replace them if they were to leave after earning a "full" pension. While what is a "full pension" is debatable, it is better to consider future increases in the target percentage when considering alternatives (like increasing the funded amount of retiree COLA) and what might be more important to increase. Where the City contribution money is spent is an important element of managing the cost of pensions. Any members who have already earned multipliers greater than 81% would keep the higher percentage. The Florida Retirement System currently has a 100% limit. In addition, the not in line of duty multiplier would be changed to be the same as the regular pension multiplier, recommended at 3% as discussed below.

Reduce Higher Cost Elements to Lower Expected Costs

- Reduce multiplier to 3% for future service.

  A 3% multiplier is the prevalent multiplier used throughout the State, and the Florida Retirement System Special Risk benefits are also based on a 3% multiplier. A higher multiplier for service earned prior to the date of reform would continue to apply; the 3% multiplier would apply for future service only.

- Lower guaranteed retiree COLA to a 1.5% annual increase for future benefit accruals.

One of the more significant costs of pensions is related to guaranteeing cost-of-living adjustments (COLA) to retiree benefits. Lowering the guaranteed retiree COLA would notably reduce future projected liabilities and related City costs. The 1.5% guaranteed annual increase for future retirees would apply only to future benefit accruals of current active members. The current retiree increase percentage would continue to apply to benefits based on service earned to date of reform. Current retirees and current DROP members' future COLA increases would not be affected by this revision. The Florida Retirement System has suspended COLA accruals for future service earned after July 1, 2011.

- Delay retiree COLA start date to 7 years.

  Delaying the COLA start date further reduces the costs associated with retiree COLA benefits. This revision would not apply to current DROP members or current retirees.

<u>Convert DROP to BackDROP</u>

- Convert DROP to BackDROP to permit longer funding period.

  Under a BackDROP provision, instead of electing the option at the beginning of the period, the election to participate would be at the end of employment, and would "look back" to the earlier eligibility date where DROP would have been elected. The lump sum benefit would be similar as for the current DROP, and the length of DROP would be the same. However, there would not be a self-directed option, as there is no ability to retroactively elect individual investment accounts. The basic annuity to be accumulated would be the same, the accrued benefit determined as of the elected date. Members would have the flexibility to choose any "look back" date they wished, based on knowledge of the past, and also could choose not to elect an annuity accumulation option at all. Members would continue to contribute until a BackDROP date is chosen.

Although the benefits and related plan liabilities remain essentially the same, funding would now extend to the BackDROP date, permitting a longer period to spread out normal cost payments and thus a lower cost per year. This funding difference results from the State funding policy of requiring funding not to extend beyond the beginning of DROP; since BackDROP is elected as of the end of employment, funding can be extended up to 5 more years.

Add Variable Member Contribution and Benefit Provisions

- Member contributions would be increased or decreased if City contributions are over a maximum or under a minimum targeted amount. Contribution increases would be coordinated with flexible COLA benefits; if any COLA over the 1.5% guaranteed COLA can no longer be advance funded, then member contributions would be increased (reduction of advance funding down to the guaranteed COLA would occur first).

  The current member contributions of 10.2% could be increased up to 16% (the maximum member contribution) in the event the City maximum targeted percentage amount would otherwise be exceeded. Any contribution requirements in excess of the targeted City and maximum member contribution percentages would be the responsibility of the City. In the event that City contributions, after the full additional retiree COLA is advance funded, are less than 10.2%, then member contributions would be reduced from the current 10.2%. The reduction below the City 10.2% contribution would be split 50/50, with half the percentage used to reduce member contributions and half used to reduce City contributions.

  The target maximum City contribution percentage is 18%, approximately the average City contribution rate over the past 25 years or so. Since the estimated City rate for the first two years (through 9/30/2014) may be in excess of 18%, special City contribution targets in excess of 18% could be established during the initial 2 year period.

- Additional Retiree COLA increased or decreased based on City contribution requirements.

  If retiree COLA in addition to the 1.5% guaranteed retiree COLA for future service can be advance funded*, and City contribution requirements can stay below the targeted percentage amount, then up to an additional 1.5% retiree COLA benefits can be credited over the 1.5% guaranteed COLA. The additional COLA benefit must be fully advance funded as of the retirement date to then be applicable. But the additional COLA payment is not guaranteed. If full advance funding cannot be attained in any later year, then the additional COLA for future increases would be cut back to the level that can be fully funded (but not less than 1.5% guaranteed COLA). Any COLA that was previously granted would continue to be paid (no reductions from the then current amount being paid). For example, if for future members in the year of initial COLA adjustment the full initial additional COLA can be fully advanced funded, then an initial annual benefit of $60, 000 would increase by 3% (1.5% guaranteed COLA and 1.5% additional COLA), resulting in an increased benefit of $61,800. Then if in year two of COLA adjustment, only 1% additional COLA can be advanced funded, the $61,800 benefit would keep the prior additional COLA and receive a year two COLA of 2.5% (1.5% guaranteed COLA plus the 1% additional COLA) for an increased benefit of $63,345. However, advance funding of the retiree additional COLA would occur before any advance funding for then active members, so retiree advance funding of the COLA would take priority.

* Fully advance funded means that the valuation results are based on the premise that the assumed level of retiree COLA adjustments would be applicable, and that the City contribution percentage based on those results is less than the maximum City targeted contribution amount.

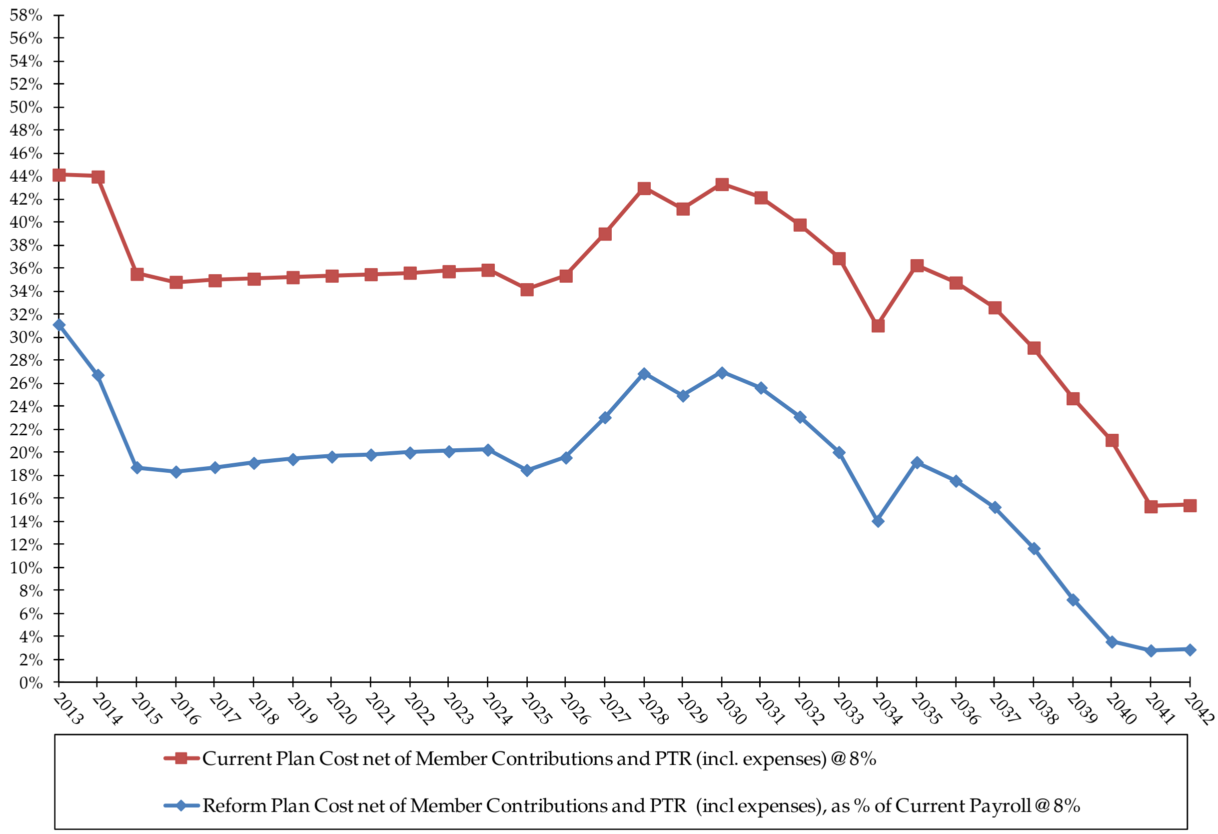
<u>Consider benefit multiplier for future service modified to a lower guaranteed amount and an additional amount based on City contribution requirements (not included in current reform elements)</u>.

- If the City desires additional protection against costs greater than the maximum City targeted contribution amount, then more benefits would need to be split into a guaranteed portion and a contingent portion based on advance funding. The multiplier would be another benefit that lends itself to this treatment. Since the State minimum multiplier under Florida Statute 175 and 185 is 2%, the guaranteed multiplier for future service would be 2%, with an additional 1% payable only if fully advanced funded (or a lesser additional amount equal to that which can be advance funded). The provision would operate the same way as the Additional retiree COLA described above. However, this provision has not been included in the recommended reforms; it is to provide an additional option if additional cost protection is needed, or as an alternative to increased member contributions if the City target contribution percentage of 18% would otherwise be exceeded.

SECTION 4
PROJECTIONS OF ESTIMATED
FUTURE CITY CONTRIBUTION REQUIREMENTS

Projections of the estimated contribution requirements at several assumed discount rates (8%, 7.5%, 7%) are displayed on the following pages. The 8% basis is presented below and the alternative discount rates are presented on pages 4-7 and 4-13.

City of Boca Raton Police and Firefighters' Retirement System
Projection of Contrribution Amounts as a Percentage of Payroll (at 8%)
(%)



These projections demonstrate that the reformed plan is expected to reduce current City percentage contribution requirements if the assumed long term rate of return were 8%. The current 44% of pay requirement would be immediately reduced to about 31% of pay, and the 13% point difference is expected to expand to about 16% less over the next several years and continue at that differential, plus or minus a few percentage points.

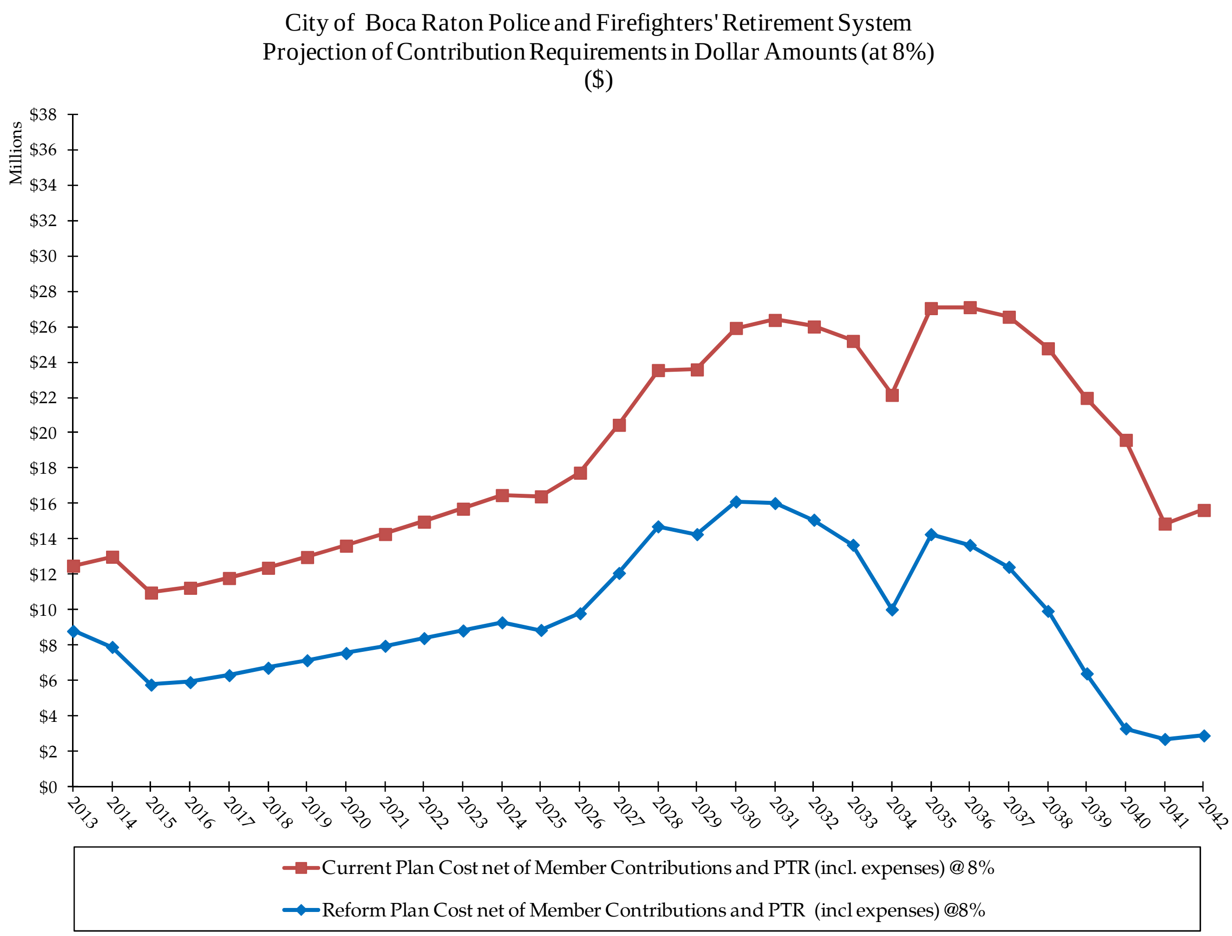
The initial drop in the projected future City percentage contributions is due to an unfunded "mortgage" (one of the UAAL components related to Firefighters) with only two remaining years of payments before being fully paid off (balance as of 10/1/2012 was $2.286 million). The later rises in the projected future percentage contributions are due to prior "gain mortgages" being fully recognized (no more contribution credit). The later drops in projected City contribution percentages occur due to more UAAL "mortgages" being fully paid off.

At the end of the projection period the estimated City percentage contributions shown are based on the estimated future normal costs of the plan, with all current UAAL "mortgages" being fully paid off.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 4-1

Year	Current Plan Cost net of Member Contributions and PTR (incl. expenses) @ 8%	Reform Plan Cost net of Member Contributions and PTR (incl expenses) @8%
2013	44.12%	31.12%
2014	43.96%	26.74%
2015	35.51%	18.70%
2016	34.81%	18.33%
2017	34.95%	18.71%
2018	35.09%	19.09%
2019	35.22%	19.41%
2020	35.35%	19.63%
2021	35.48%	19.81%
2022	35.61%	19.98%
2023	35.74%	20.10%
2024	35.86%	20.23%
2025	34.17%	18.47%
2026	35.36%	19.55%
2027	39.00%	23.05%
2028	42.96%	26.86%
2029	41.18%	24.93%
2030	43.31%	26.94%
2031	42.16%	25.63%
2032	39.79%	23.10%
2033	36.87%	20.03%
2034	31.03%	14.05%
2035	36.26%	19.15%
2036	34.76%	17.54%
2037	32.60%	15.26%
2038	29.10%	11.69%
2039	24.70%	7.22%
2040	21.09%	3.56%
2041	15.31%	2.80%
2042	15.41%	2.87%



These projections demonstrate that the reformed plan is expected to reduce current City dollar contribution requirements if the assumed long term rate of return were 8%. The current $12 million requirement would be immediately reduced to about $9 million, and the $3 million difference is expected to expand to about $5 million less over the next several years and continue to expand the difference thereafter as pay increases.

The initial drop in the projected future City dollar contributions is due to an unfunded "mortgage" (one of the UAAL components related to Firefighters) with only two remaining years of payments before being fully paid off (balance as of 10/1/2012 was $2.286 million). The later rises in the projected future dollar contributions are due to two reasons: (1) The funding method in use by all plans in the State of Florida develops dollar contributions as a level percentage of current and future payroll; as future payroll increases, contributions will increase in dollar amount even if all assumptions are realized. (2) Prior "gain mortgages" being fully recognized (no more contribution credit). That occurs where the lines in the chart increase their slope. The later drops in projected dollar contributions occur due to more UAAL "mortgages" being fully paid off.

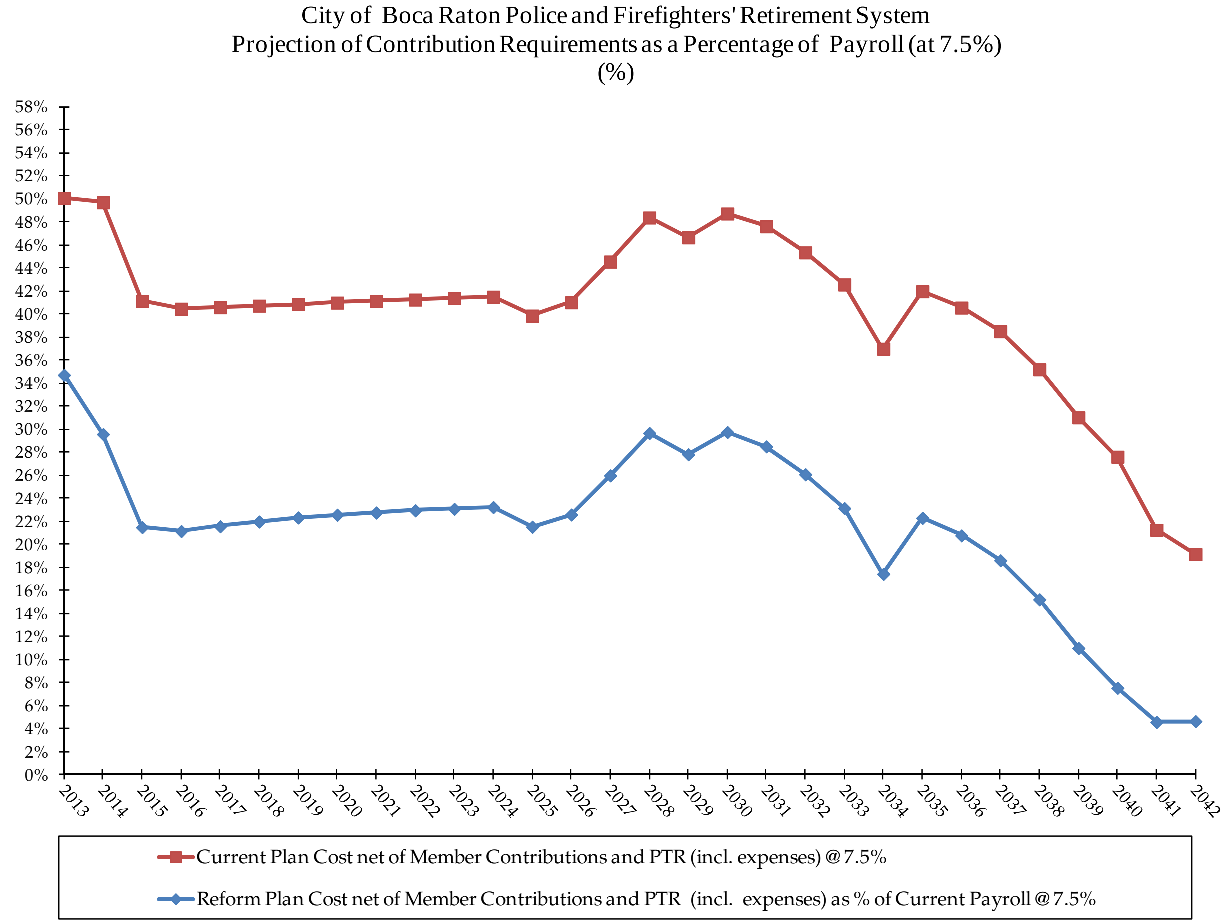
At the end of the projection period the estimated levels shown are based on the estimated future normal costs of the plan, with all current UAAL "loss mortgages" being fully paid off. Note the dollar contribution amounts are still expected to decrease due to the operation of the funding method described above.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 4-4

Year	Current Plan Cost net of Member Contributions and PTR (incl. expenses) @ 8%	Reform Plan Cost net of Member Contributions and PTR (incl expenses) @8%
2013	$12,499,246	$8,814,749
2014	13,012,274	7,914,510
2015	10,984,998	5,785,316
2016	11,254,104	5,924,217
2017	11,806,978	6,320,660
2018	12,386,124	6,737,539
2019	12,992,767	7,161,595
2020	13,628,187	7,567,649
2021	14,293,724	7,979,640
2022	14,990,777	8,411,202
2023	15,720,813	8,840,241
2024	16,485,365	9,302,080
2025	16,413,687	8,871,423
2026	17,750,611	9,813,647
2027	20,462,021	12,092,239
2028	23,551,904	14,723,358
2029	23,589,892	14,284,046
2030	25,928,856	16,126,265
2031	26,375,070	16,036,502
2032	26,012,676	15,099,101
2033	25,192,164	13,683,474
2034	22,150,626	10,033,362
2035	27,048,911	14,285,634
2036	27,098,165	13,673,362
2037	26,556,122	12,435,374
2038	24,776,280	9,948,557
2039	21,975,946	6,420,279
2040	19,604,940	3,313,012
2041	14,878,362	2,716,616
2042	15,645,122	2,915,825

The 7.5% projection chart is presented below



These projections demonstrate that the reformed plan is expected to reduce current City percentage contribution requirements if the assumed long term rate of return were 7.5%. The current pro-forma 50% of pay requirement would be immediately reduced to about 35% of pay, and the 15% point difference is expected to expand to about 19% less over the next several years and continue at that differential, plus or minus a few percentage points.

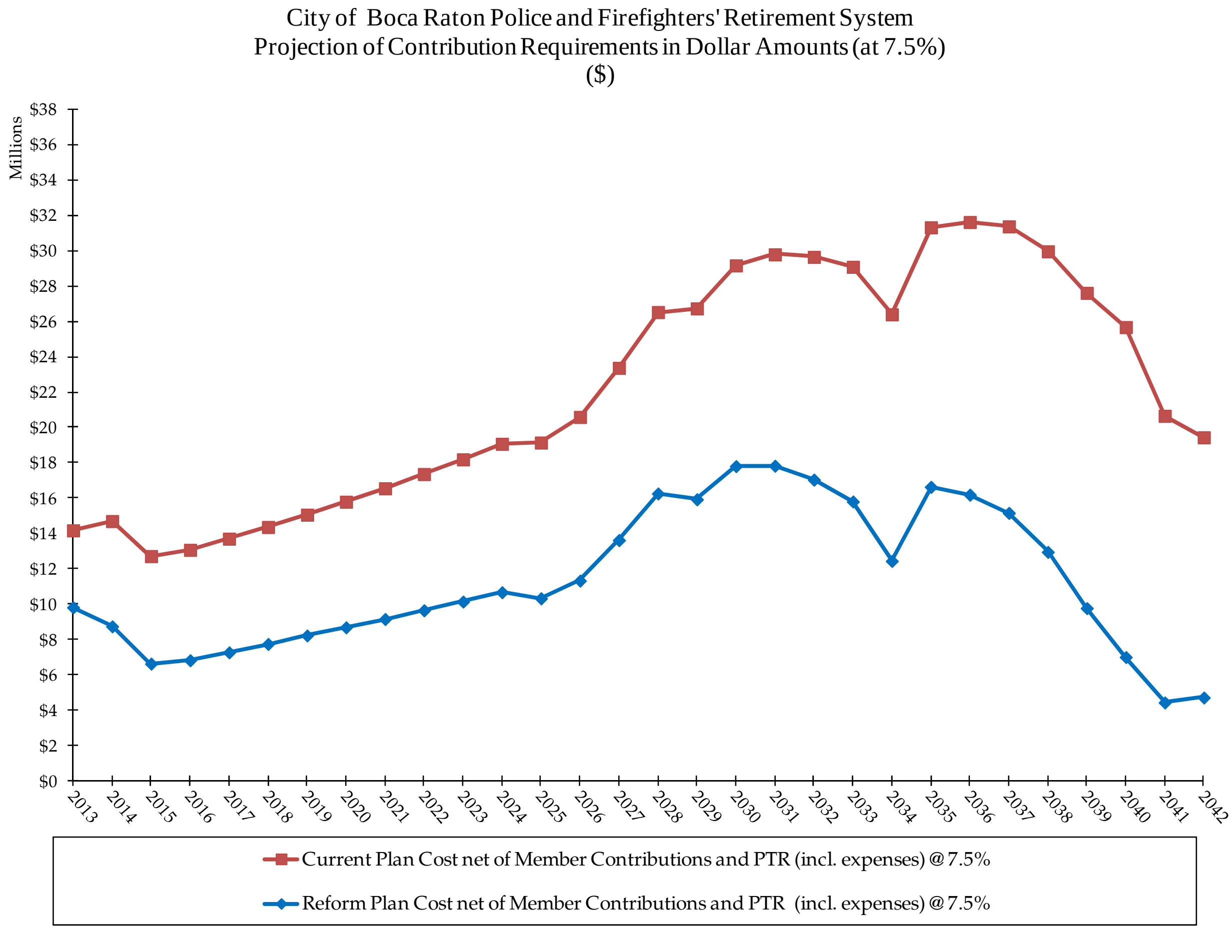
The initial drop in the projected future City percentage contributions is due to an unfunded "mortgage" (one of the UAAL components related to Firefighters) with only two remaining years of payments before being fully paid off (balance as of 10/1/2012 was $2.286 million). The later rises in the projected future percentage contributions are due to prior "gain mortgages" being fully recognized (no more contribution credit). The later drops in projected City contribution percentages occur due to more UAAL "mortgages" being fully paid off.

At the end of the projection period the estimated percentage contributions shown are based on the estimated future normal costs of the plan, with all current UAAL "mortgages" being fully paid off.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 4-7

Year	Current Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7.5%	Reform Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7.5%
2013	50.08%	34.71%
2014	49.69%	29.58%
2015	41.14%	21.49%
2016	40.45%	21.16%
2017	40.59%	21.58%
2018	40.72%	21.98%
2019	40.86%	22.34%
2020	40.99%	22.57%
2021	41.12%	22.77%
2022	41.25%	22.96%
2023	41.37%	23.08%
2024	41.50%	23.24%
2025	39.86%	21.53%
2026	41.02%	22.59%
2027	44.55%	25.99%
2028	48.38%	29.67%
2029	46.66%	27.82%
2030	48.72%	29.76%
2031	47.62%	28.51%
2032	45.35%	26.08%
2033	42.56%	23.15%
2034	36.98%	17.44%
2035	41.97%	22.31%
2036	40.55%	20.78%
2037	38.50%	18.62%
2038	35.19%	15.23%
2039	31.03%	11.00%
2040	27.62%	7.55%
2041	21.26%	4.58%
2042	19.15%	4.66%



These projections demonstrate that the reformed plan is expected to reduce current City dollar contribution requirements if the assumed long term rate of return were 7.5%. The current pro-forma $14 million requirement would be immediately reduced to about $10 million, and the $4 million difference is expected to expand to about $6 million less over the next several years and continue to expand the difference thereafter as pay increases.

The initial drop in the projected future City dollar contributions is due to an unfunded "mortgage" (one of the UAAL components related to Firefighters) with only two remaining years of payments before being fully paid off (balance as of 10/1/2012 was $2.286 million). The later rises in the projected future dollar contributions are due to two reasons: (1) The funding method in use by all plans in the State of Florida develops dollar contributions as a level percentage of payroll; as future payroll increases, contributions will increase in dollar amount even if all assumptions are realized. (2) Prior "gain mortgages" being fully recognized (no more contribution credit). That occurs where the lines in the chart increase their slope. The later drops in projected dollar contributions occur due to more UAAL "mortgages" being fully paid off.

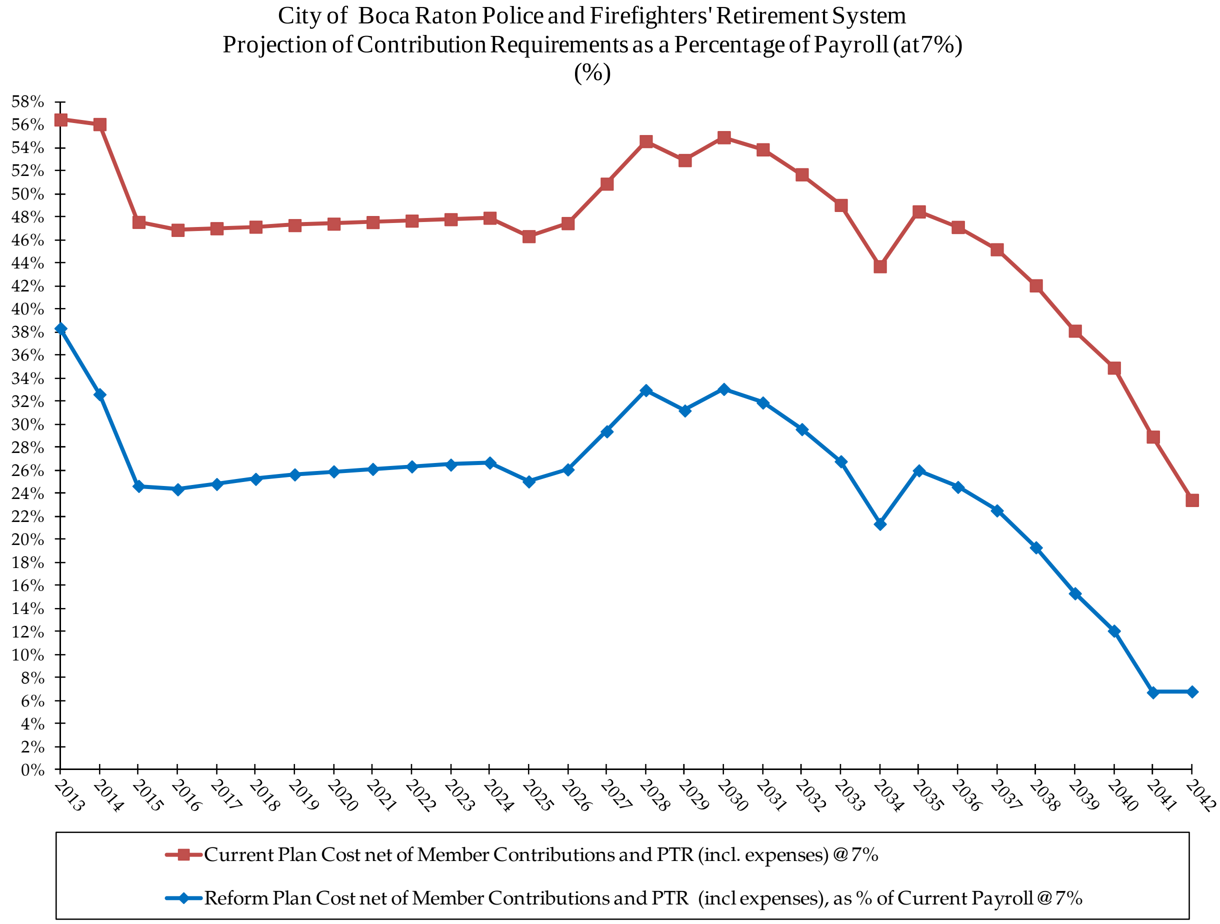
At the end of the projection period the estimated levels shown are based on the estimated future normal costs of the plan, with all current UAAL "mortgages" being fully paid off. Note the dollar contribution amounts are still expected to decrease due to the operation of the funding method described above.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 4-10

Year	Current Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7.5%	Reform Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7.5%
2013	$14,187,307	$9,831,565
2014	14,709,086	8,755,432
2015	12,727,301	6,649,358
2016	13,076,705	6,840,445
2017	13,711,596	7,288,723
2018	14,376,450	7,760,020
2019	15,072,658	8,239,907
2020	15,801,673	8,701,657
2021	16,565,016	9,171,203
2022	17,364,278	9,663,653
2023	18,201,122	10,155,053
2024	19,077,287	10,683,567
2025	19,146,637	10,344,131
2026	20,590,464	11,341,581
2027	23,370,786	13,634,071
2028	26,520,598	16,267,348
2029	26,730,893	15,939,469
2030	29,165,951	17,814,087
2031	29,788,863	17,835,143
2032	29,646,616	17,049,650
2033	29,078,015	15,814,390
2034	26,400,668	12,453,167
2035	31,313,449	16,641,651
2036	31,614,491	16,198,812
2037	31,367,205	15,169,707
2038	29,960,714	12,965,682
2039	27,605,323	9,787,275
2040	25,675,572	7,020,922
2041	20,658,647	4,453,804
2042	19,446,313	4,732,006

The 7% projection chart is presented below



These projections demonstrate that the reformed plan is expected to reduce current City percentage contribution requirements if the assumed long term rate of return were 7%. The current pro-forma 56% of pay requirement would be immediately reduced to about 38% of pay, and the 18% point difference is expected to expand to about 21% less over the next several years and continue at that differential, plus or minus a few percentage points.

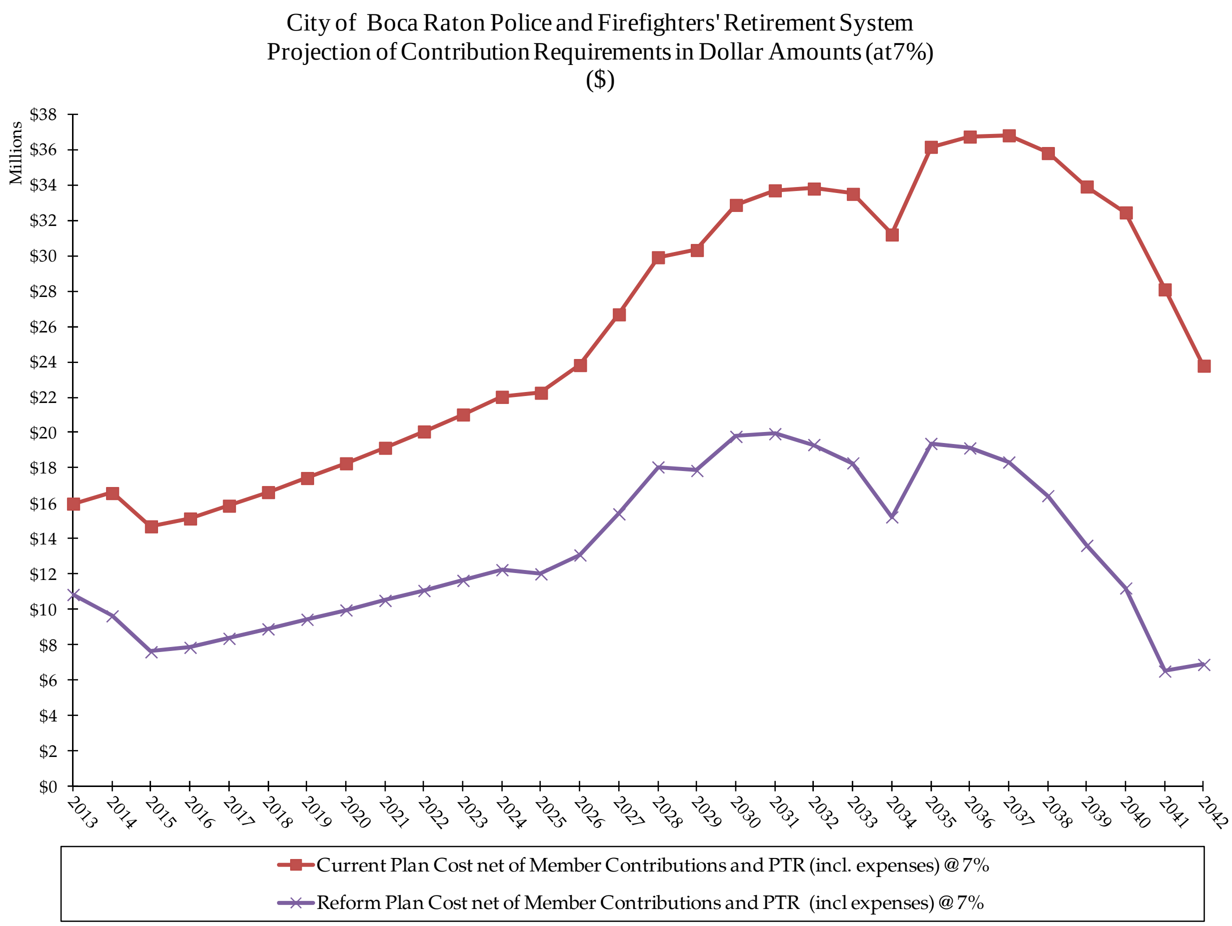
The initial drop in the projected future City percentage contributions is due to an unfunded "mortgage" (one of the UAAL components related to Firefighters) with only two remaining years of payments before being fully paid off (balance as of 10/1/2012 was $2.286 million). The later rises in the projected future percentage contributions are due to prior "gain mortgages" being fully recognized (no more contribution credit). The later drops in projected City contribution percentages occur due to more UAAL "mortgages" being fully paid off.

At the end of the projection period the estimated percentage contributions shown are based on the estimated future normal costs of the plan, with all current UAAL "mortgages" being fully paid off.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 4-13

Year	Current Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7.5%	Reform Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7.5%
2013	56.44%	38.33%
2014	56.04%	32.60%
2015	47.56%	24.64%
2016	46.87%	24.35%
2017	47.00%	24.80%
2018	47.14%	25.25%
2019	47.27%	25.64%
2020	47.40%	25.90%
2021	47.53%	26.12%
2022	47.66%	26.33%
2023	47.79%	26.48%
2024	47.91%	26.66%
2025	46.32%	25.03%
2026	47.45%	26.07%
2027	50.87%	29.38%
2028	54.57%	32.95%
2029	52.92%	31.19%
2030	54.91%	33.06%
2031	53.85%	31.88%
2032	51.68%	29.56%
2033	49.03%	26.78%
2034	43.70%	21.34%
2035	48.46%	25.99%
2036	47.12%	24.55%
2037	45.18%	22.51%
2038	42.05%	19.31%
2039	38.11%	15.32%
2040	34.90%	12.07%
2041	28.92%	6.72%
2042	23.42%	6.80%



These projections demonstrate that the reformed plan is expected to reduce current City dollar contribution requirements if the assumed long term rate of return were 7%. The current pro-forma $16 million requirement would be immediately reduced to about $11 million, and the $5 million difference is expected to expand to about $7 million less over the next several years and continue to expand the difference thereafter as pay increases.

The initial drop in the projected future City dollar contributions is due to an unfunded "mortgage" (one of the UAAL components related to Firefighters) with only two remaining years of payments before being fully paid off (balance as of 10/1/2012 was $2.286 million).

The later rises in the projected future dollar contributions are due to two reasons: (1) The funding method in use by all plans in the State of Florida develops dollar contributions as a level percentage of payroll; as future payroll increases, contributions will increase in dollar amount even if all assumptions are realized. (2) Prior "gain mortgages" being fully recognized (no more contribution credit). That occurs where the lines in the chart increase their slope. The later drops in projected dollar contributions occur due to more UAAL "mortgages" being fully paid off.

At the end of the projection period the estimated levels shown are based on the estimated future normal costs of the plan, with all current UAAL "mortgages" being fully paid off. Note the dollar contribution amounts are still expected to decrease due to the operation of the funding method described above.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 4-16

Year	Current Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7%	Reform Plan Cost net of Member Contributions and PTR (incl expenses) @ 7%
2013	$15,987,665	$10,857,851
2014	16,590,460	9,650,504
2015	14,711,670	7,621,032
2016	15,150,370	7,870,343
2017	15,878,576	8,378,531
2018	16,640,944	8,912,787
2019	17,439,055	9,457,350
2020	18,274,558	9,984,053
2021	19,149,181	10,521,015
2022	20,064,730	11,085,140
2023	21,023,094	11,650,392
2024	22,026,247	12,258,016
2025	22,252,370	12,022,537
2026	23,820,105	13,090,131
2027	26,687,794	15,413,038
2028	29,917,086	18,066,102
2029	30,318,253	17,865,815
2030	32,870,338	19,791,114
2031	33,690,364	19,941,770
2032	33,788,834	19,328,046
2033	33,493,102	18,292,985
2034	31,199,483	15,238,115
2035	36,155,609	19,390,171
2036	36,732,972	19,138,829
2037	36,805,231	18,341,128
2038	35,796,214	16,440,286
2039	33,909,379	13,630,733
2040	32,446,050	11,223,980
2041	28,095,125	6,530,049
2042	23,782,554	6,903,866

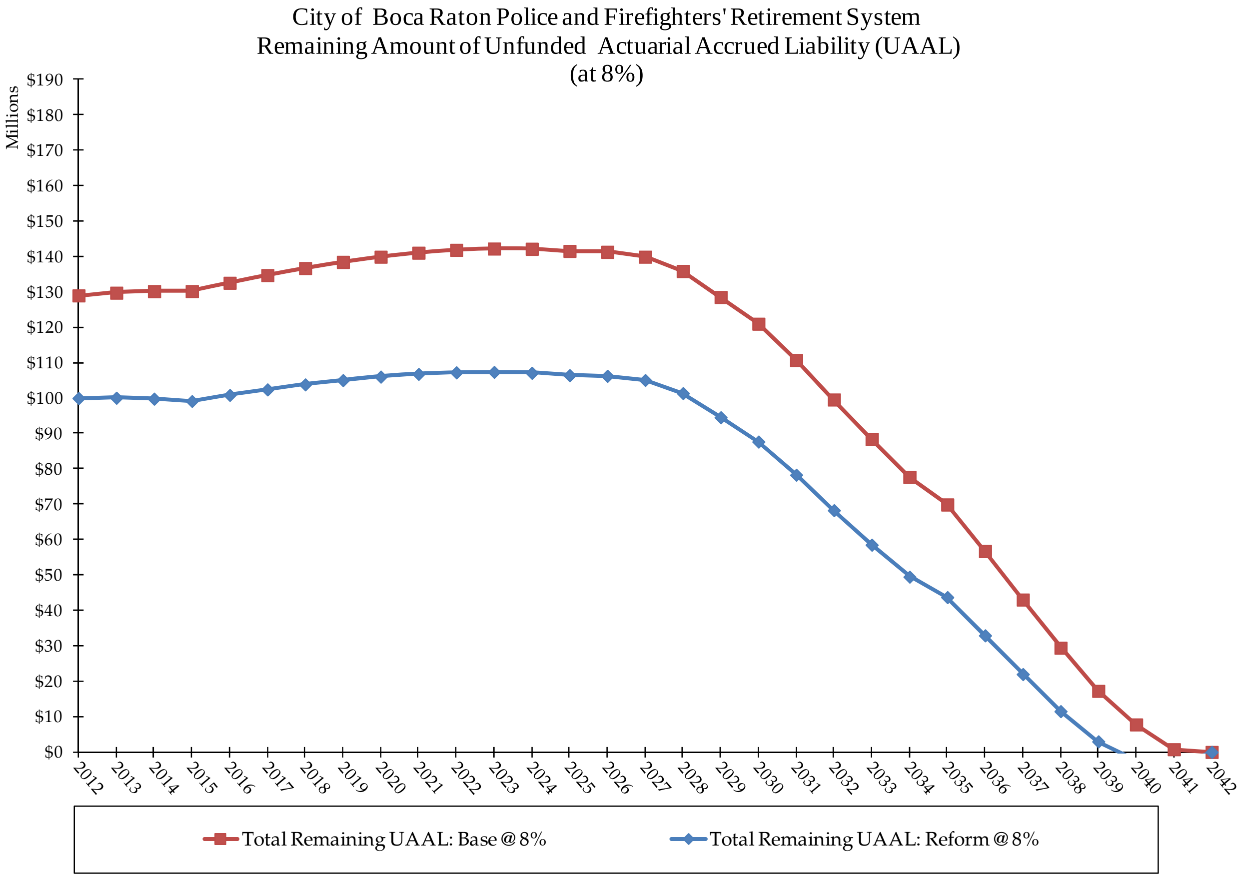
SECTION 5
PROJECTIONS OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAALs)

Basis of Projections

The projection of UAALs was based on the Plan's amortization methods that calculate amortization amounts as a level percentage of expected future payroll, assuming that payroll increases at 4.5% per year. The projection also assumes that all assumptions are realized in the future (no future actuarial gains or losses), and therefore no future additional UAAL components. The reason why the UAALs increase before they are reduced (meaning the UAALs are then starting to be paid off) is that initially, longer term UAAL bases do not even have full interest credited at the valuation rate on the UAAL balance. The amount of unpaid interest is added to the then outstanding UAAL balance. For example, if 8% were charged as interest, and only 5% were actually paid by the amortization method, the additional 3% would be added to the UAAL balance. This initial "not full payment of interest" is the result of the application of the 4.5% payroll increase methodology used by the plan. Eventually, the growth of future payroll is sufficient to have the dollar amount be enough to pay both interest as well as reduce the UAAL balance.

The current total UAAL at an 8% discount basis is about $130 million The individual components for the current Plan UAAL components at 8% interest are presented in Appendix C. There are currently 36 separate UAAL components with differing remaining amortization periods. The reform UAAL projections at the three different assumed returns include the reduction in UAAL due to the reform, as well as the change in the unfunded due to the change in assumed interest rate.

The 8% UAAL projection chart is presented below. Backup to the chart entries follows the commentary.



The above chart presents projections of the estimated unfunded AAL (UAALs) for the current plan and for the reformed plan at the current assumed rate of return of 8%.

The projections of UAAL for the current plan at 8% assumed investment return starts out at about $130 million, increases to about $142 million in 2025, then finally starts to decrease as amortization payments finally exceed the interest charges. The UAAL is fully paid off after 30 years.

To obtain an estimate of the UAAL effect of the reform, the top line (red) and the bottom line (blue) can be compared. The reformed plan immediately lowers the UAAL by about $30 million, and differential expands thereafter to about a $35 million differential by 2025.

The backup to the projection chart follows below.

Note UAAL levels increase for a period of years before starting to decrease after 13 years or so. The reason why this increase occurs is because the "mortgage method" is based on initial payments less than the interest charges. This type of mortgage is often referred to as a deferred interest or graduated payment mortgage. Even though the UAAL is eventually repaid, this back loaded repayment plan delays repayment over more than one generation of tax payers.

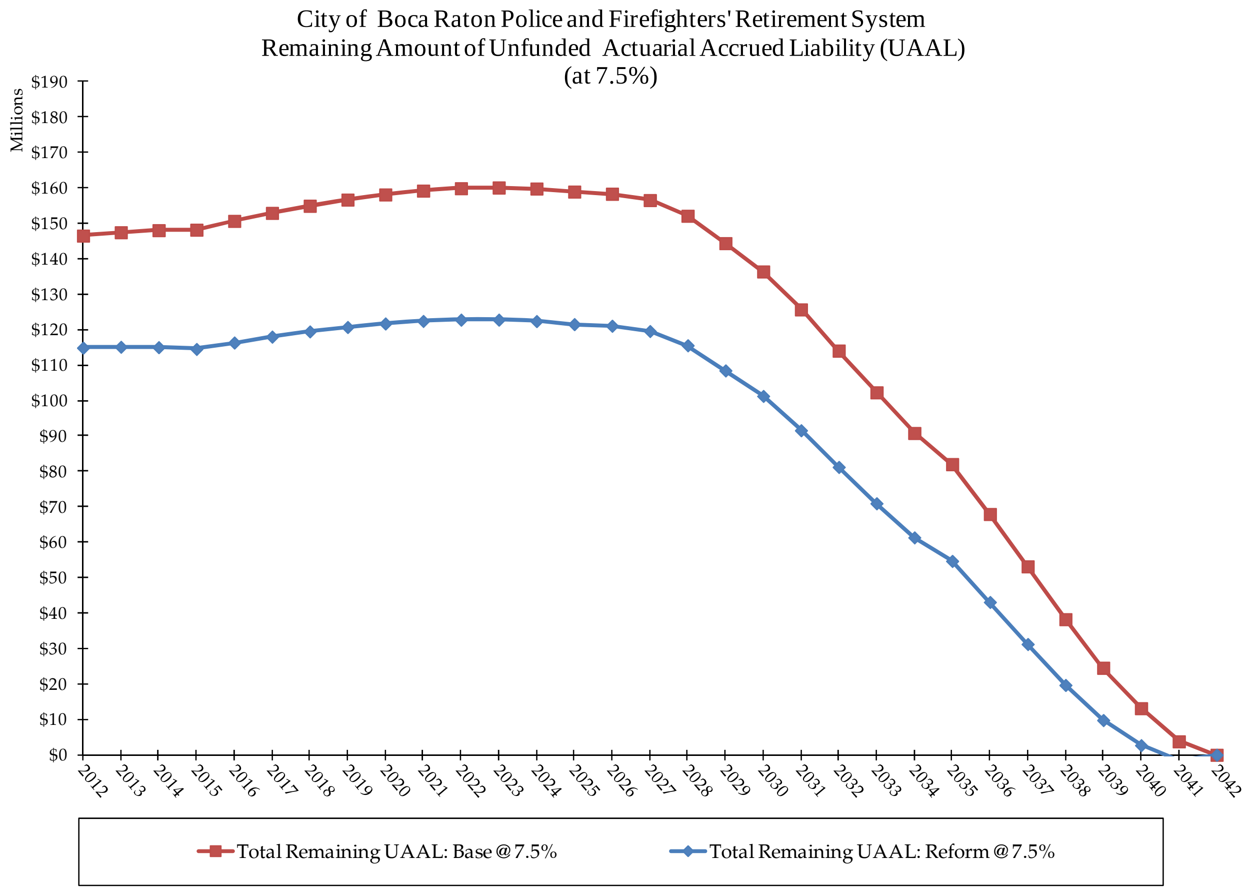
Section 6, Other Considerations, for a discussion of how the volatility of the UAAL mortgage payments might be addressed.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 5-2

Year	Total Remaining UAAL: Base @ 8%	Total Remaining UAAL: Reform @ 8%
2013	$129,010,166	$100,007,040
2014	129,797,756	100,091,311
2015	130,219,359	99,826,090
2016	130,226,390	99,167,388
2017	132,583,297	100,884,762
2018	134,766,003	102,459,805
2019	136,744,248	103,868,543
2020	138,484,615	105,084,518
2021	139,950,249	106,078,563
2022	141,100,543	106,818,560
2023	141,890,803	107,269,173
2024	142,271,883	107,391,567
2025	142,189,791	107,143,090
2026	141,585,259	106,476,945
2027	141,334,775	106,283,314
2028	139,962,934	105,101,822
2029	135,913,919	101,393,135
2030	128,583,255	94,570,840
2031	121,021,276	87,705,051
2032	110,746,074	78,335,508
2033	99,604,313	68,332,551
2034	88,421,314	58,547,386
2035	77,711,209	49,522,421
2036	69,933,017	43,747,558
2037	56,777,340	32,947,106
2038	43,073,862	21,987,523
2039	29,444,663	11,530,997
2040	17,260,673	2,992,173
2041	7,769,348	(2,333,851)
2042	754,651	(4,611,218)

The 7.5% UAAL projection chart is presented below. Backup to the chart entries follows the commentary.



The above chart presents projections of the estimated unfunded AAL (UAALs) of the plan for the current plan and its current assumed rate of return of 7.5%.

The projections of UAAL for the current plan at 7.5% assumed investment return starts out at about $146 million, increases to about $160 million in 2025, then finally starts to decrease as amortization payments finally exceed the interest charges. The UAAL is fully paid off after 30 years.

To obtain an estimate of the UAAL effect of the reform, the top line (red) and the bottom line (blue) can be compared. The reformed plan immediately lowers the UAAL by about $32 million, and differential expands thereafter to about a $38 million differential by 2025.

The backup to the projection chart follows below.

Note UAAL levels increase for a period of years before starting to decrease after 13 years or so. The reason why this increase occurs is because the "mortgage method" is based on initial payments less than the interest charges. This type of mortgage is often referred to as a deferred interest or graduated payment mortgage. Even though the UAAL is eventually repaid, this back loaded repayment plan delays repayment over more than one generation of tax payers.

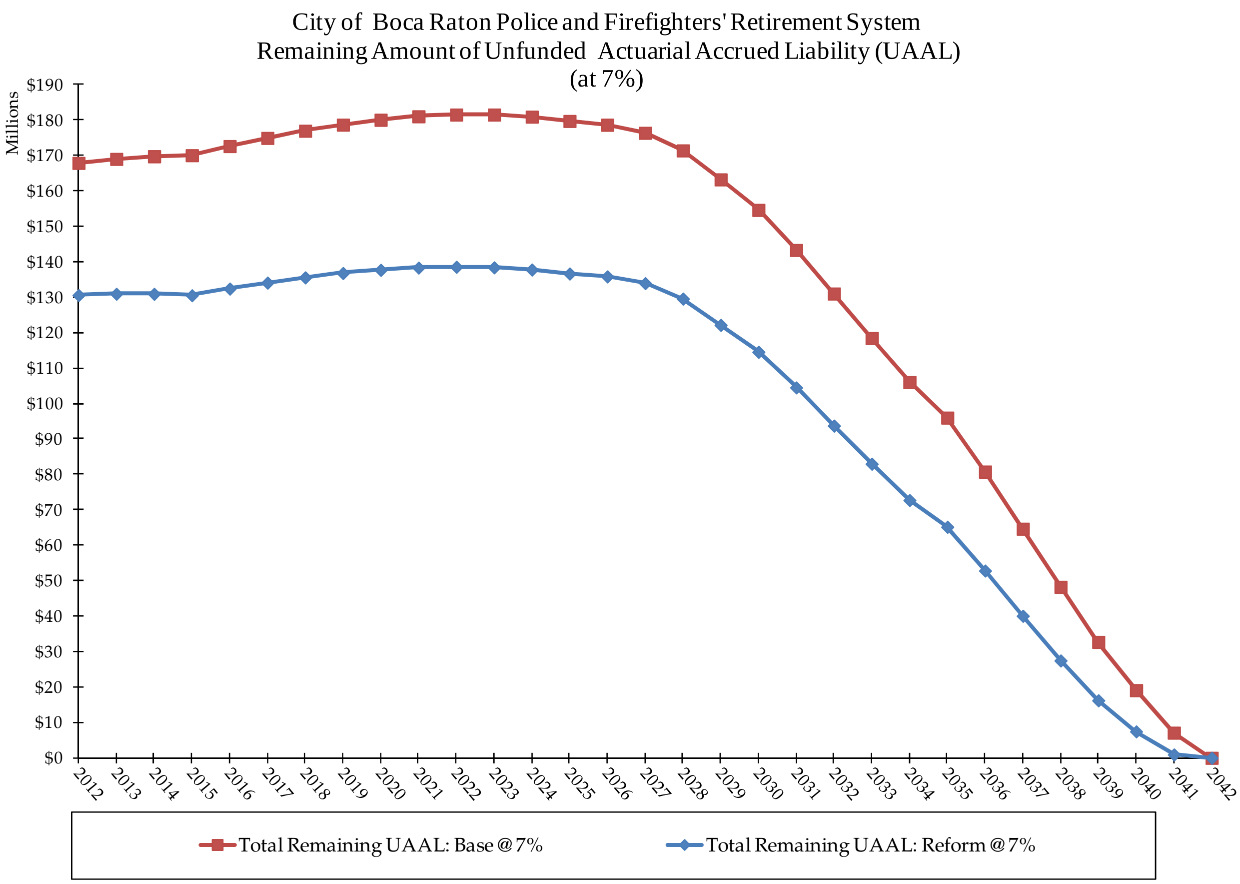
See Section 6, Other Considerations, for a discussion of how the volatility of the UAAL mortgage payments might be addressed.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 5-5

Year	Total Remaining UAAL: Base @ 7.5%	Total Remaining UAAL: Reform @ 7.5%
2013	$146,539,069	$114,921,429
2014	147,499,993	115,168,701
2015	148,081,658	115,057,786
2016	148,235,311	114,544,867
2017	150,699,649	116,374,099
2018	152,959,412	118,036,250
2019	154,981,737	119,505,097
2020	156,730,502	120,751,833
2021	158,166,055	121,744,847
2022	159,244,909	122,449,486
2023	159,919,416	122,827,793
2024	160,137,412	122,838,230
2025	159,841,839	122,435,375
2026	158,970,334	121,569,599
2027	158,367,999	121,099,927
2028	156,595,077	119,601,816
2029	152,145,703	115,586,009
2030	144,443,519	108,494,272
2031	136,433,687	101,291,530
2032	125,721,624	91,604,737
2033	114,081,927	81,231,947
2034	102,295,939	70,980,039
2035	90,840,001	61,353,139
2036	82,039,392	54,706,744
2037	67,949,847	43,129,437
2038	53,173,716	31,259,261
2039	38,283,912	19,707,895
2040	24,555,813	9,792,807
2041	13,135,633	2,705,894
2042	3,776,982	(1,749,672)

The 7.0% UAAL projection chart is presented below. Backup to the chart entries follows the commentary.



The above chart presents projections of the estimated unfunded AAL (UAALs) of the plan for the current plan and its current assumed rate of return of 7%.

The projections of UAAL for the current plan at 7% assumed investment return starts out at about $170 million, increases to about $180 million in 2025, then finally starts to decrease as amortization payments finally exceed the interest charges. The UAAL is fully paid off after 30 years.

To obtain an estimate of the UAAL effect of the reform, the top line (red) and the bottom line (blue) can be compared. The reformed plan immediately lowers the UAAL by about $40 million, and differential expands thereafter to about a $43 million differential by 2025.

The backup to the projection chart follows below.

Note UAAL levels increase for a period of years before starting to decrease after 13 years or so. The reason why this increase occurs is because the "mortgage method" is based on initial payments less than the interest charges. This type of mortgage is often referred to as a deferred interest or graduated payment mortgage. Even though the UAAL is eventually repaid, this back loaded repayment plan delays repayment over more than one generation of tax payers.

See Section 6, Other Considerations, for a discussion of how the volatility of the UAAL mortgage payments might be addressed.

See Section 6, Other Considerations, for a discussion of how the "back loading" of the UAAL mortgage payments might be addressed.

Backup to Projection Chart on Page 5-8

Year	Total Remaining UAAL: Base @ 7%	Total Remaining UAAL: Reform @ 7%
2013	$167,927,781	$130,622,121
2014	169,067,490	130,986,384
2015	169,809,292	130,981,077
2016	170,103,838	130,562,553
2017	172,663,692	132,449,641
2018	174,982,102	134,142,472
2019	177,023,238	135,612,763
2020	178,747,911	136,829,588
2021	180,113,298	137,759,167
2022	181,072,650	138,364,636
2023	181,574,969	138,605,792
2024	181,564,676	138,438,832
2025	180,981,239	137,816,063
2026	179,758,778	136,685,594
2027	178,711,035	135,876,393
2028	176,433,018	134,000,030
2029	171,467,311	129,617,097
2030	163,264,100	122,197,342
2031	154,664,210	114,602,835
2032	143,357,905	104,546,891
2033	131,048,016	93,757,349
2034	118,472,093	82,998,866
2035	106,069,041	72,739,727
2036	96,033,495	65,206,384
2037	80,777,372	52,845,204
2038	64,679,800	40,072,600
2039	48,265,429	27,453,553
2040	32,716,729	16,214,153
2041	19,082,298	7,450,150
2042	7,087,758	938,119

OTHER CONSIDERATIONS

- Volatility of contributions due to the multitude of UAAL components with differing remaining amortization periods.

  The "saw tooth" nature of the projections of estimated costs in later years starting after 2024 is caused by the combination of the many UAAL "mortgages" that are being amortized. When experience gain credits are complete, the contributions "jump up"; when the loss debits are complete, the contributions "jump down". The resulting volatility of contributions can be lessened by adopting a methodology to smooth these fluctuations. One example of this would be to offset gain UAALs with loss UAALs.

- Intergenerational issues with the use of the payroll growth assumption and length of funding.

  The implication of the use of a 4.5% payroll growth assumption has been discussed earlier in Section 5. Also, the use of the State maximum funding period of 30 years (shorter periods can be chosen) spreads UAAL repayments over more than one generation even if no future payroll growth is assumed (no assumed payroll growth results in "level dollar" amortization payments). **The combination of a 4.5% payroll growth assumption and a 30 year amortization period results in the increase of each initial UAAL base in the early years, a subsequent reduction in each UAAL to its original amount in the middle years, and virtually all of the initial UAAL principal reduction occurring in the last 9 years of the 30 year period**. So a future generation is responsible for any UAAL principle repayment created today.

  The City can address this issue by considering some or all of the following adjustments to the amortization methodology:

1. Lower the assumed payroll growth rate assumption. If negative amortization is to be avoided, then an assumed payroll rate should be no more than that would result in at least full interest paid toward each UAAL mortgage. That assumption would be around 2% assumed future payroll growth rate.
2. Shorten the current 30 year amortization period for new UAAL mortgages, and lower current ones that have more than 20 or 25 years remaining. Although the period chosen would depend on the acceptability of City contribution levels, the objective would be to have at least one half of the mortgage principal repayment occur in the first 15 or 20 years (whatever is viewed as a generation of taxpayers). Although there would be remaining UAAL principal to be repaid by a future generation, the amount would be significantly reduced.
3. Consider shorter periods of amortization for retiree UAALs. Even though retirees' benefit promises do not change, adverse experience can increase UAALs attributable to retirees. Investment returns on assets "assigned" to retirees less than assumed or retirees living longer than assumed create experience losses that add to the UAAL. Since all these additional UAALs are not created by current members, faster repayment of these additional amounts to keep all repayments within the current generation of taxpayers seems prudent. Thus, a shorter amortization period of 15 to 20 years with no assumed payroll growth should be considered.
4. Since these UAAL amortization methodologies result in greater payments than otherwise are currently applicable, there is an effect on the current City contribution target. Although the contribution target includes UAAL mortgage repayments based on the current methodology, it may not initially allow sufficient recognition of these suggested changes. So repayment priorities would be needed to decide which of the above can be accomplished within the target contribution objective.

- <u>Effect of current percent funded status in addressing long term sustainability.</u>

  Every actuarial valuation is based on the principle of "actuarial balance"; that is, the valuation estimates expected future plan liabilities and establishes contribution requirements so as to discharge those expected liabilities that, if paid and all the assumptions are realized, the plan will have sufficient assets to meet all the promised benefit of the plan in the future for all current members and current retirees.

  Thus, the current funded status is of little value in judging long term sustainability. As long as the required contributions are paid the plan will meet its obligations and be sustainable over the long term.

  The nature of the payment requirements of the plan allows focus on the long term, not current status. Since retiree payments are made monthly over an expected period of 20 to 30 years, not all at once, and benefit promises for active members are deferred even longer (the combination of remaining active employment period and the retiree payment period), plan assets do not need to be available "up front". So there is an extended period for funding of the cash flow needs of the plan. The focus instead should be on the management of the contribution requirement over time.

- <u>Assumptions and methods – expected versus more conservative.</u>

  Adoption of actuarial assumptions that are somewhat more conservative than the expected would lessen the impact of future adverse experience. However, there is an opportunity cost for this approach, as City contributions would initially be greater than if the current assumptions were used. If the assumptions were realized, then the City contributions would be less in the future than otherwise, receiving a credit for the favorable experience.

It is important to understand the implications of use of expected assumptions; expected means half the time experience would be more favorable, the other half the experience would be less favorable than assumed. So half the time, an increased UAAL would result, with additional mortgage amortizations required (and the other half a decreased UAAL would result with an UAAL credit). This is what creates volatility on City funding requirements, the actual experience different than that assumed. So if it is more important to have less exposure to contributions greater than expected, assumptions should be chosen a little to the conservative side of the expected assumption. So the City could pay a little more than otherwise and hedge against losses measured against expected experience.

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM
PENSION REFORM SPECIAL STUDIES

APPENDIX A

PLAN PROVISIONS SUMMARY

SUMMARY OF PLAN PROVISIONS THAT AFFECT THE VALUATION

Definitions

1.	Eligibility Requirements:	Employment by the City as a sworn Police Officer or Firefighter upon satisfactory physical and attainment of age 18. All Members are presumed to execute the waiver related to claims concerning State monies and are therefore eligible for the modified benefits under the Code of Ordinances, as reflected below.
2.	Continuous Service:	Uninterrupted service (except for leave and military service) as a qualifying employee, measured in years and completed months, excluding service for which Member contributions were refunded and not repaid within 6 months of rehire.
3.	Earnings – Firefighters:	Fixed remuneration, including basic wages, regular longevity, EMT, paramedic, fire inspection, hazardous materials, assignment, acting in a higher capacity, standby, pickup contributions, and IRC Section 457 deferred compensation, but excluding overtime, holiday, state incentive, bonuses, Time Pool pay, accumulated sick time and annual leave, and any other payments.
4.	Earnings – Police Officers:	Total cash remuneration, including regular longevity, assignment, crash-free bonus, pickup contributions, and Section 457 deferred compensation, and including up to 300 hours of overtime compensation per 12-month period (with a limited lookback provision), but excluding other bonuses, accumulated sick time and annual leave, and any other payments.
5.	Average Monthly Earnings:	Average Monthly Earnings (AME) during the highest 2 years preceding the date on which the Member retires or terminates.

6.	Normal Retirement Eligibility:	Attainment of age 55 and 10 years of Continuous Service, or completion of 20 years of Continuous Service.
7.	Normal Retirement Benefit – Firefighters:	3.4% times AME times years of Continuous Service, subject to a maximum of 100% of AME.
8.	Normal Retirement Benefit – Police Officers:	3.5% times AME times years of Continuous Service, subject to a maximum of the greater of 87.5% of AME or 2% of AME times years of Continuous Service.
9.	Normal Retirement Form of Benefit for this and other Retirement and Termination Benefit:	Regular Pension – 10-year certain and life monthly payments. Supplemental – Life monthly payments. Actuarially equivalent optional forms may be elected for one or both benefits, and need not be the same. Actuarial equivalence is based on mortality in accordance with GAM-1983 Male mortality table for Members and GAM-1983 Female mortality table for joint annuitants, and 7.5% interest.
10.	Regular Early Retirement:	Eligibility – Age 50 with 10 years of Continuous Service. Benefit – Computed as for Normal Retirement based upon Continuous Service and AME as of Early Retirement Date, but reduced by 0.25% for each month Early Retirement precedes Normal Retirement.
11.	Disability Retirement:	Eligibility Service Incurred – Total and permanently disabled in the line of duty, meaning incapacity to perform regular duty as Firefighter or Police Officer.

Eligibility Non-service Incurred – Total and permanently disabled not in the line of duty, meaning incapacity to perform regular duty as Firefighter or Police Officer, and completion of at least 10 years of Continuous Service.

Benefit Service Incurred – 75% of AME as of the date of disability, or the accrued benefit if greater. May be offset by other disability benefits.

Benefit Non-service Incurred – 3.25% of AME per year of Continuous Service or the accrued benefit, minimum of 25% of AME (per State requirements) on the date of disability.

12. Pre-Retirement Death Benefit: Eligibility Service Incurred – Death in the line of duty.

Eligibility Non-service Incurred – Death other than in the line of duty after 5 years of Continuous Service. (If less than 5 years, only a $5,000 lump sum is payable; if less than 1 year, only a $2,500 lump sum.)

Benefit Service Incurred – If the designated beneficiary is the spouse, the greater of A or B, plus C, plus D, below; otherwise B, plus C, plus D, below:

A. To spouse, 75% of AME payable for life, beginning immediately.
B. If the Member had at least 10 years of Continuous Service, the accrued benefit, payable for 10 years certain only, beginning when the Member would have reached Early or Normal Retirement Age.
C. Minor children receive 7.5% of AME until death, marriage or attainment of age 18 (if full time student, attainment of age 22). Total monthly benefit under A and C not to exceed 90% of AME. Upon death of the surviving spouse, the allowance shall be

increased to 15% for each child, subject to a maximum combined total of the greater of 50% AME or the accrued benefit.

D. A lump sum of $5,000.

Benefit Non-service Incurred – If the designated beneficiary is the spouse, the greater of A or B, plus C, plus D, below; otherwise B, plus C, plus D, below:

A. To spouse, 65% of accrued benefit, with a minimum of 20% of AME payable for life, beginning immediately.
B. If the Member had at least 10 years of Continuous Service, the accrued benefit, payable for 10 years certain only, beginning when the Member would have reached Early or Normal Retirement Age (i.e., same as Service Incurred).
C. Minor children receive 7.5% of AME until death, marriage or attainment of age 18 (if full time student, attainment of age 22). Total monthly benefit under A and C not to exceed the greater of 50% of AME or the accrued benefit. Upon death of the surviving spouse, the allowance shall be increased to 15% for each child, subject to a maximum combined total of the greater of 50% of AME or the accrued benefit.
D. A lump sum of $5,000 (i.e., same as Service Incurred).

HEART Act – In accordance with the HEART Act, a Member who dies while performing qualified military service shall be treated for purposes of survivor benefits as if he or she resumed employment and then terminated on account of death. The Member's survivor(s) shall be eligible for any additional benefits attributable to such "reemployment," other than benefit accruals related to the qualified military service. (The liability or the additional benefits attributable to the deemed reemployment is relatively small and has a small probability of occurrence; therefore it is not anticipated or funded in advance.)

13. Employee Contributions:

Firefighters – 10.2% of annual earnings (9.2% prior to October 26, 2010).

Police Officers – 10.2% of annual earnings (9.2% prior to October 26, 2010).

(3% interest is paid on refunds of Member contributions. Each Member is guaranteed benefit payments at least equal to his Member contributions plus 3% interest.)

14. Termination Benefit:

If termination occurs after the completion of 10 years of Continuous Service, the full accrued retirement benefit is payable at Normal Retirement Date, or, at the Member's option, a refund of accumulated contributions is made. For purposes of determining the Normal Retirement Date, Continuous Service includes the period of time after termination. If termination occurs prior to completion of 10 years of Continuous Service, a refund of accumulated contributions is made.

15. DROP Plan:

A Deferred Retirement Option Plan (DROP) is available to Members who are eligible for Normal Retirement, with a maximum DROP participation of 5 years. DROP accounts are credited with the same overall rate of return on pension fund investments, or DROP Members may elect a self-directed account option. No Disability or Pre-Retirement Death Benefits are provided while a Member is in DROP.

16. Cost-of-Living Adjustments:

Provided to retired, disabled, and terminated Members (after their pensions commence), and to DROP Members, and to all their survivors and beneficiaries, but not those receiving Pre-Retirement Death Benefits and not with respect to the Supplement. Other COLAs applied in the past, but for current active Members the following apply:

Firefighters – Retirements and terminations on or after December 9, 2008, receive a 3% annual COLA, with the first increase:

- With 22 years of service, the later of 1 year after retirement and age 52
- With 21 but less than 22 years of service, the later of 2 years after retirement and age 52
- With 20 but less than 21 years of service, the later of 3 years after retirement and age 52

Police Officers – Retirements and terminations on or after October 1, 2001, receive a 2% annual COLA commencing 1 year after retirement, or in the case of Disability, 1 year after eligibility for Normal Retirement.

17. Supplement: Each Member who retires from the City receives a supplement of $10.50 ($10.00 for retirements prior to October 26, 2010, but after July 19, 1999) per month per completed year of Continuous Service (including DROP service).

18. Past Service: Members may purchase up to 5 years of past service for prior military, police or firefighter service for the full actuarial cost, in accordance with the provisions of the Code of Ordinances.

19. Transfers: Employees who transfer from the General Employees' Pension Plan to this Plan:
    1. Have their Member and City contributions transferred to this Plan (considered in total to be the Entry Age Actuarial Accrued Liability and Normal Cost through the effective date of the employee's transfer), and
    2. Have their accrued benefits provided by this Plan, based on their respective multipliers and Continuous Service under each plan and on their AME under this Plan, subject to a

maximum of 75% of AME for Police Officers and 100% of AME for Firefighters.

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM
PENSION REFORM SPECIAL STUDIES

APPENDIX B

ACTUARIAL ASSUMPTIONS AND COST METHOD SUMMARY

ACTUARIAL ASSUMPTIONS AND ACTUARIAL COST METHOD SUMMARY

Actuarial Assumptions

1. Mortality: Healthy Mortality is based on the RP-2000 (Retirement Plans-2000) Tables projected according to the year of valuation. The RP-2000 Tables are sex-distinct. The tables for annuitants, i.e., Members already in pay status, are projected 7 years beyond the valuation date. The tables for nonannuitants are projected 15 years beyond the valuation date. [ProVal name: IRS 2008+ Static (Dynamic)]

2. Disabled Mortality: Disabled Mortality is based on the 1994 Group Annuity Mortality Table (with no projected mortality improvements) set forward 5 years.

3. Investment Return: 8.0%, compounded annually, net of investment related expenses, and are split equally between Police and Firefighters.

4. Allowances for Expenses or Contingencies: Estimated expenses are assumed to equal actual expenses for the prior year, net of investment related expenses.

5. Actuarial Value of Assets: The Actuarial Value of Assets is determined using a 4-year smoothing method, with an 80%/115% corridor. Each year the prior year's Actuarial Value is increased by the non-investment net cash flow and by the net investment income excluding the net appreciation in the fair value of investments. This net appreciation is only recognized over a 4-year period, i.e., the amount from the previous sentence is further increased by only 25% of the appreciation for each of the last four years. This preliminary Actuarial Value is further constrained to be within a corridor of 80% to 115% of fair market value. A characteristic of this asset valuation method is that, over time, it is

more likely to produce an actuarial value of assets that is less than the market value of assets, and hence it is considered a conservative smoothing method. The Actuarial Value of Assets was reset to the Market Value of Assets as of September 30, 2005.

6. Marital Assumptions: 80% of active members are assumed to be married. Female spouses are assumed to be 3 years younger than male spouses. No remarriage is assumed for surviving spouses of deceased Members.

7. Payroll Growth Projection: 4.5% per annum.

8. State Contributions: It is assumed that State tax revenue paid to the Plan for the upcoming year will be 5% greater than the actual revenue for the prior year.

9. Assumed Rate of Salary Increase: Sample ultimate rates are as follows:

Age	Salary Increase	Age	Salary Increase
20	7.5%	40	4.7%
25	7.5%	45	4.7%
30	7.1%	50	4.7%
35	5.6%	55	4.6%

Annualized compensation is provided by the client for new hires. A reduction of 1% per year in the rate of salary increases for Firefighters for 3 years beginning October 1, 2008, is now expired.

10. Assumed Rates of Employment Termination and Disability:

Annual Rate of Employment Termination

Age	Years of Service	Police Rates of Withdrawal	Firefighters Rates of Withdrawal
All	0	13.0%	10.0%
	1	13.0%	10.0%
	2	10.0%	1.0%
	3	10.0%	1.0%
	4	10.0%	1.0%
20	5 and over	3.0%	1.0%
25		3.0%	1.0%
30		3.0%	1.0%
35		3.0%	1.0%
40		3.0%	1.0%
45		3.0%	1.0%
50		3.0%	1.0%

Annual Rate of Disability

Age	Disability
20	0.030%
25	0.045%
30	0.045%
35	0.071%
40	0.105%
45	0.143%
50	0.180%
55	0.240%

100% of pre-retirement deaths and disabilities are assumed to be Service Incurred.

11. Assumed Rate of Retirement:

Years of Service	Firefighters Under Age 50	Firefighters Above Age 49	Police
20	20%	20%	20%*
21	15%	25%	30%
22	3%	5%	33%
23	3%	5%	67%
24 - 29	10%	15%	100%
30 - 32	40%	40%	100%
33+	100%	100%	100%

*10% under age 50

After age 70 rates for both Police and Firefighters are 100% regardless of service.

12. Assumed Rates Used for Backdrop Provision:

	Years of Service				
Age	20	21-23	24	25-26	27+
40	10%	5%	10%	50%	100%
45	10%	5%	10%	50%	100%
50	20%	10%	20%	50%	100%
55	20%	10%	20%	50%	100%
60+	100%	100%	100%	100%	100%

Actuarial Funding Method – Normal Retirement, Termination, Disability and Death Benefits

Entry Age Actuarial Cost Method. Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his age at hire to his assumed retirement age to fund his estimated benefits, assuming the current Plan has always been in effect. The normal cost for the Plan is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the Plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the actuarial value of assets of the Plan.

Unfunded actuarial accrued liability bases are funded as a level percentage of increasing payroll, assuming payroll increases at 4.5% per year.

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM
PENSION REFORM SPECIAL STUDIES

APPENDIX C

BACKUP DATA TO CHARTS IN EXECUTIVE SUMMARY

Projection of Contribution Requirements as a Percentage of Payroll

Year	Current Plan Cost net of Member Contributions and PTR (incl. expenses) @ 8%	Reform Plan Cost net of Member Contributions and PTR (incl expenses) @8%	Reform Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7.5%	Reform Plan Cost net of Member Contributions and PTR (incl expenses) @ 7%
2013	44.12%	31.12%	34.71%	38.33%
2014	43.96%	26.74%	29.58%	32.60%
2015	35.51%	18.70%	21.49%	24.64%
2016	34.81%	18.33%	21.16%	24.35%
2017	34.95%	18.71%	21.58%	24.80%
2018	35.09%	19.09%	21.98%	25.25%
2019	35.22%	19.41%	22.34%	25.64%
2020	35.35%	19.63%	22.57%	25.90%
2021	35.48%	19.81%	22.77%	26.12%
2022	35.61%	19.98%	22.96%	26.33%
2023	35.74%	20.10%	23.08%	26.48%
2024	35.86%	20.23%	23.24%	26.66%
2025	34.17%	18.47%	21.53%	25.03%
2026	35.36%	19.55%	22.59%	26.07%
2027	39.00%	23.05%	25.99%	29.38%
2028	42.96%	26.86%	29.67%	32.95%
2029	41.18%	24.93%	27.82%	31.19%
2030	43.31%	26.94%	29.76%	33.06%
2031	42.16%	25.63%	28.51%	31.88%
2032	39.79%	23.10%	26.08%	29.56%
2033	36.87%	20.03%	23.15%	26.78%
2034	31.03%	14.05%	17.44%	21.34%
2035	36.26%	19.15%	22.31%	25.99%
2036	34.76%	17.54%	20.78%	24.55%
2037	32.60%	15.26%	18.62%	22.51%
2038	29.10%	11.69%	15.23%	19.31%
2039	24.70%	7.22%	11.00%	15.32%
2040	21.09%	3.56%	7.55%	12.07%
2041	15.31%	2.80%	4.58%	6.72%
2042	15.41%	2.87%	4.66%	6.80%

Projection of Contribution Requirements as a Dollar Amount

Year	Current Plan Cost net of Member Contributions and PTR (incl. expenses) @ 8%	Reform Plan Cost net of Member Contributions and PTR (incl expenses) @8%	Reform Plan Cost net of Member Contributions and PTR (incl. expenses) @ 7.5%	Reform Plan Cost net of Member Contributions and PTR (incl expenses) @ 7%
2013	$12,499,246	$8,814,749	$9,831,565	$10,857,851
2014	13,012,274	7,914,510	8,755,432	9,650,504
2015	10,984,998	5,785,316	6,649,358	7,621,032
2016	11,254,104	5,924,217	6,840,445	7,870,343
2017	11,806,978	6,320,660	7,288,723	8,378,531
2018	12,386,124	6,737,539	7,760,020	8,912,787
2019	12,992,767	7,161,595	8,239,907	9,457,350
2020	13,628,187	7,567,649	8,701,657	9,984,053
2021	14,293,724	7,979,640	9,171,203	10,521,015
2022	14,990,777	8,411,202	9,663,653	11,085,140
2023	15,720,813	8,840,241	10,155,053	11,650,392
2024	16,485,365	9,302,080	10,683,567	12,258,016
2025	16,413,687	8,871,423	10,344,131	12,022,537
2026	17,750,611	9,813,647	11,341,581	13,090,131
2027	20,462,021	12,092,239	13,634,071	15,413,038
2028	23,551,904	14,723,358	16,267,348	18,066,102
2029	23,589,892	14,284,046	15,939,469	17,865,815
2030	25,928,856	16,126,265	17,814,087	19,791,114
2031	26,375,070	16,036,502	17,835,143	19,941,770
2032	26,012,676	15,099,101	17,049,650	19,328,046
2033	25,192,164	13,683,474	15,814,390	18,292,985
2034	22,150,626	10,033,362	12,453,167	15,238,115
2035	27,048,911	14,285,634	16,641,651	19,390,171
2036	27,098,165	13,673,362	16,198,812	19,138,829
2037	26,556,122	12,435,374	15,169,707	18,341,128
2038	24,776,280	9,948,557	12,965,682	16,440,286
2039	21,975,946	6,420,279	9,787,275	13,630,733
2040	19,604,940	3,313,012	7,020,922	11,223,980
2041	14,878,362	2,716,616	4,453,804	6,530,049
2042	15,645,122	2,915,825	4,732,006	6,903,866

Remaining Amount of Unfunded Actuarial Accrued Liability (UAAL)

Year	Total Remaining UAAL: Base @ 8%	Total Remaining UAAL: Reform @ 8%	Total Remaining UAAL: Reform @ 7.5%	Total Remaining UAAL: Reform @ 7%
2013	$129,010,166	$100,007,040	$114,921,429	$130,622,121
2014	129,797,756	100,091,311	115,168,701	130,986,384
2015	130,219,359	99,826,090	115,057,786	130,981,077
2016	130,226,390	99,167,388	114,544,867	130,562,553
2017	132,583,297	100,884,762	116,374,099	132,449,641
2018	134,766,003	102,459,805	118,036,250	134,142,472
2019	136,744,248	103,868,543	119,505,097	135,612,763
2020	138,484,615	105,084,518	120,751,833	136,829,588
2021	139,950,249	106,078,563	121,744,847	137,759,167
2022	141,100,543	106,818,560	122,449,486	138,364,636
2023	141,890,803	107,269,173	122,827,793	138,605,792
2024	142,271,883	107,391,567	122,838,230	138,438,832
2025	142,189,791	107,143,090	122,435,375	137,816,063
2026	141,585,259	106,476,945	121,569,599	136,685,594
2027	141,334,775	106,283,314	121,099,927	135,876,393
2028	139,962,934	105,101,822	119,601,816	134,000,030
2029	135,913,919	101,393,135	115,586,009	129,617,097
2030	128,583,255	94,570,840	108,494,272	122,197,342
2031	121,021,276	87,705,051	101,291,530	114,602,835
2032	110,746,074	78,335,508	91,604,737	104,546,891
2033	99,604,313	68,332,551	81,231,947	93,757,349
2034	88,421,314	58,547,386	70,980,039	82,998,866
2035	77,711,209	49,522,421	61,353,139	72,739,727
2036	69,933,017	43,747,558	54,706,744	65,206,384
2037	56,777,340	32,947,106	43,129,437	52,845,204
2038	43,073,862	21,987,523	31,259,261	40,072,600
2039	29,444,663	11,530,997	19,707,895	27,453,553
2040	17,260,673	2,992,173	9,792,807	16,214,153
2041	7,769,348	-2,333,851	2,705,894	7,450,150
2042	754,651	-4,611,218	-1,749,672	938,119

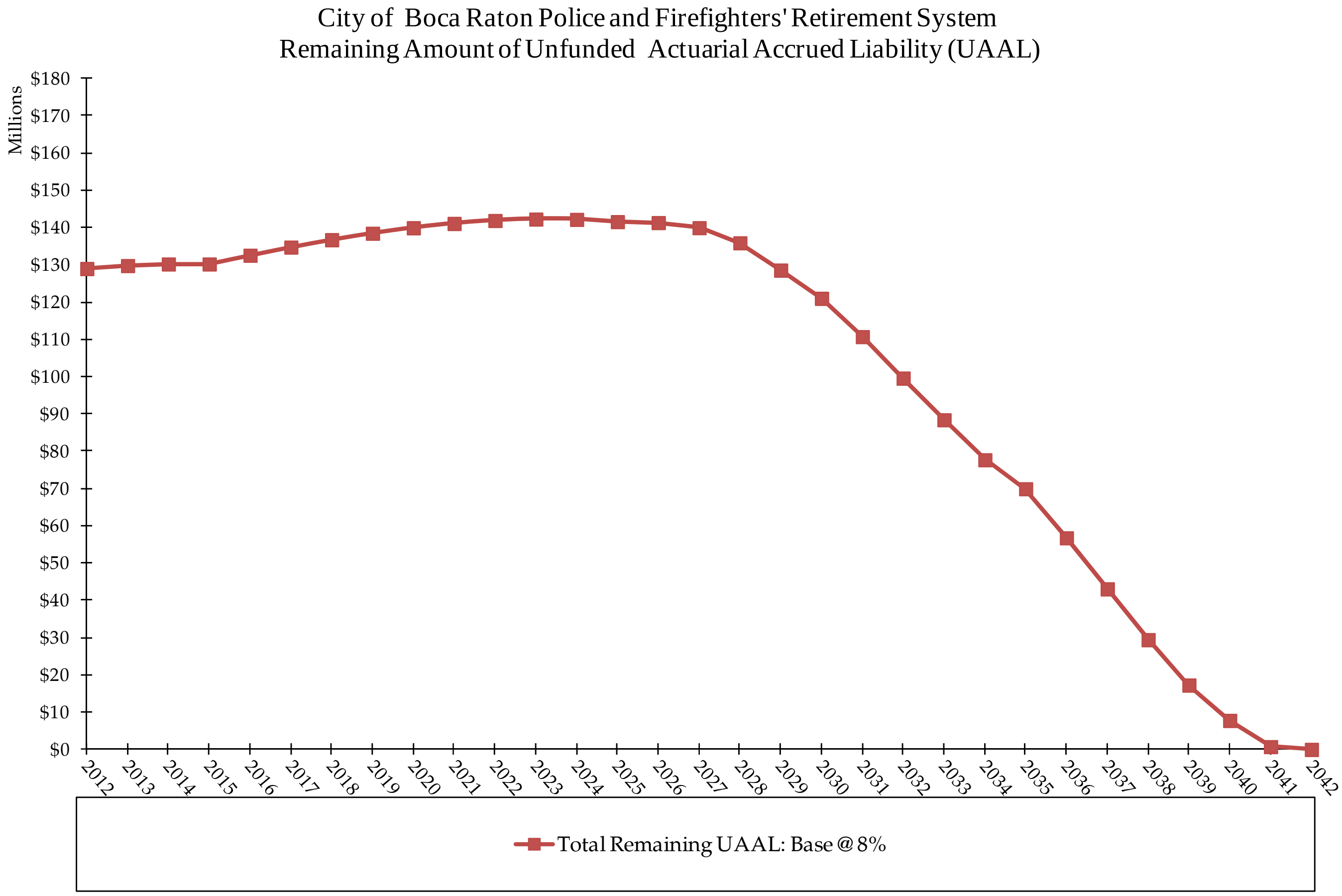
CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM
PENSION REFORM SPECIAL STUDIES

APPENDIX D

UAAL CHARTS

Actuarial Concepts

UAAL CHARTS


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded Actuarial Accrued Liability (UAAL)
Millions
$180
$170
$160
$150
$140
$130
$120
$110
$100
$90
$80
$70
$60
$50
$40
$30
$20
$10
$0
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
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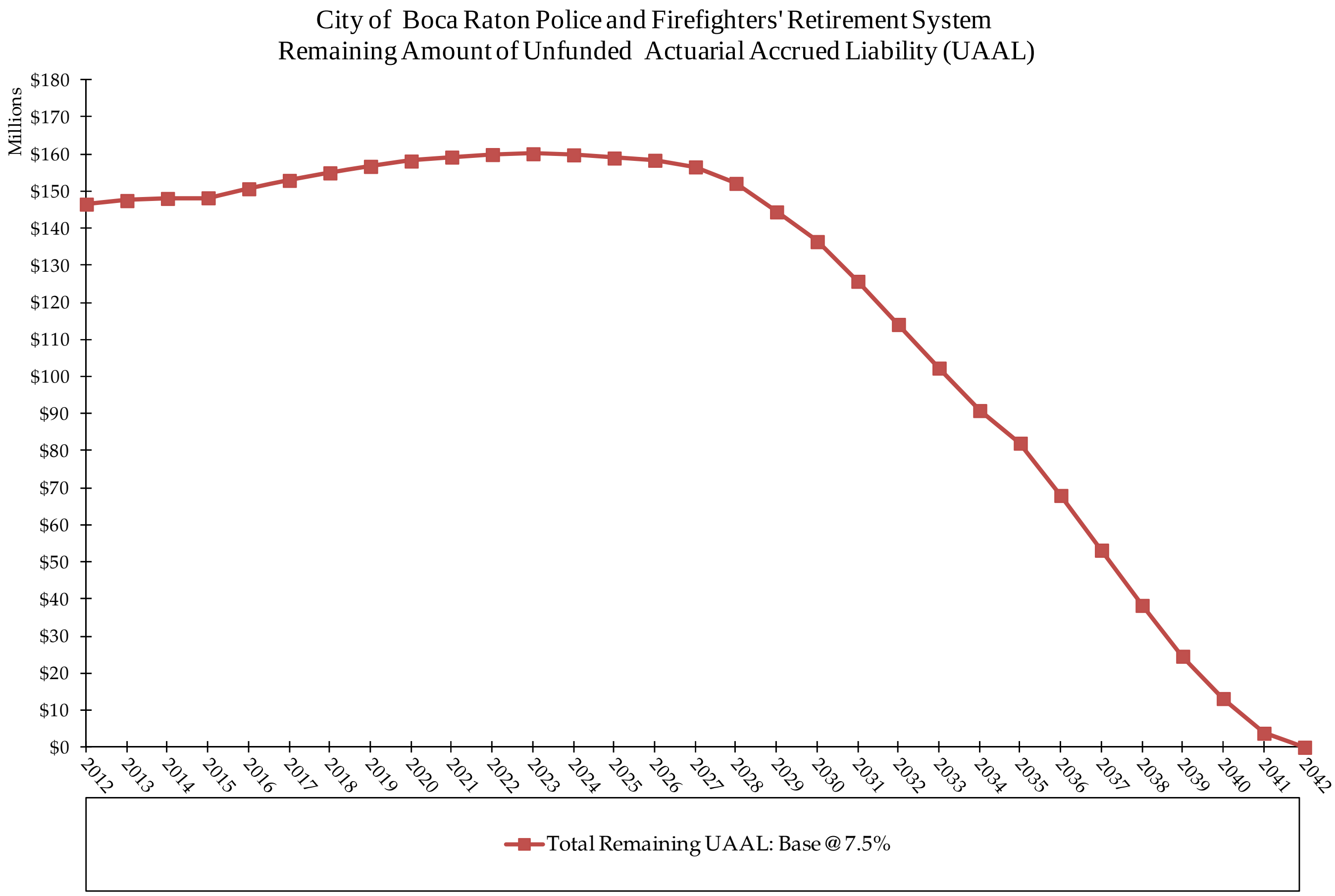
Total Remaining UAAL: Base @ 8%


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded Actuarial Accrued Liability (UAAL)
Millions
$180
$170
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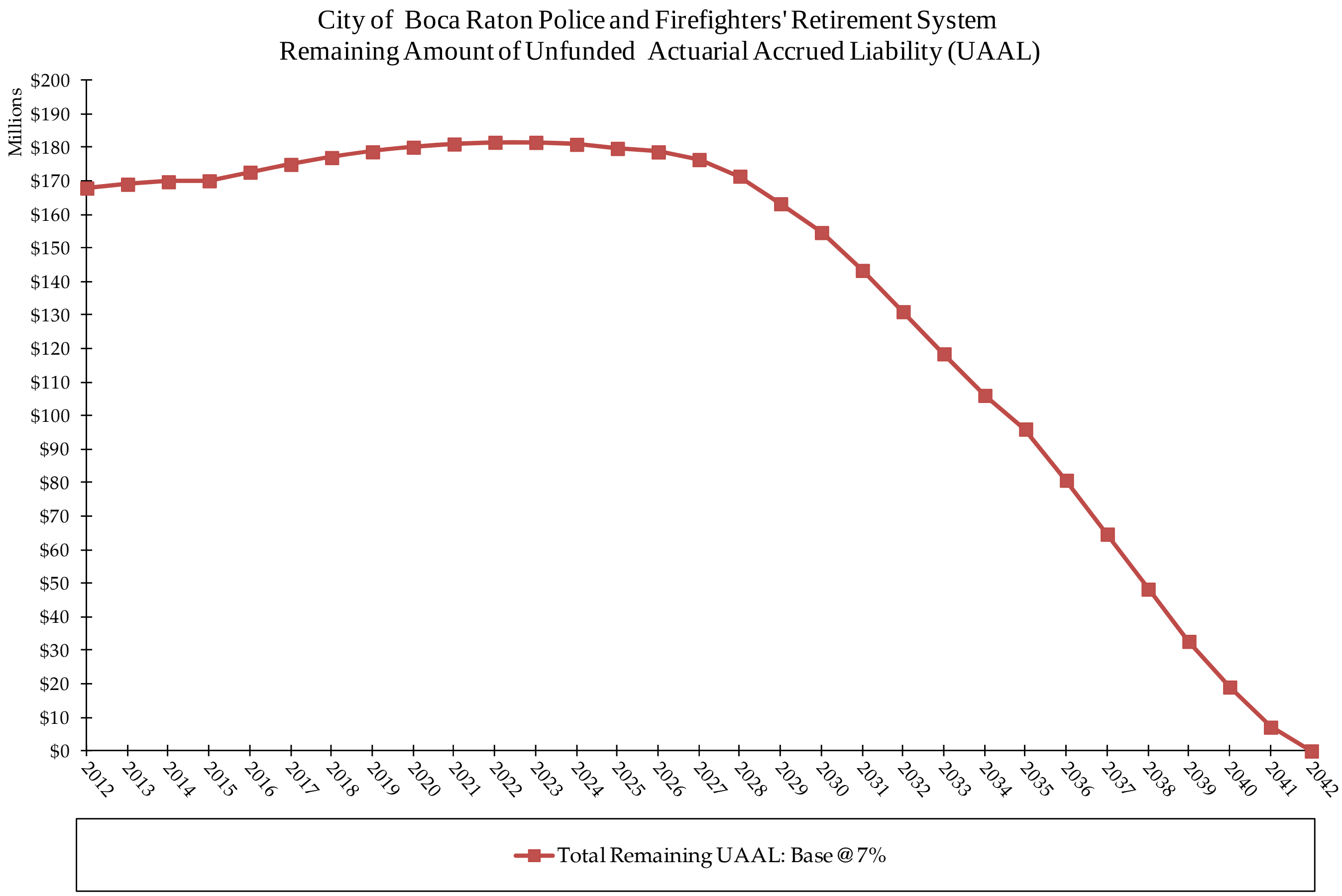
Total Remaining UAAL: Base @7.5%


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded Actuarial Accrued Liability (UAAL)
Millions
$200
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$180
$170
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$150
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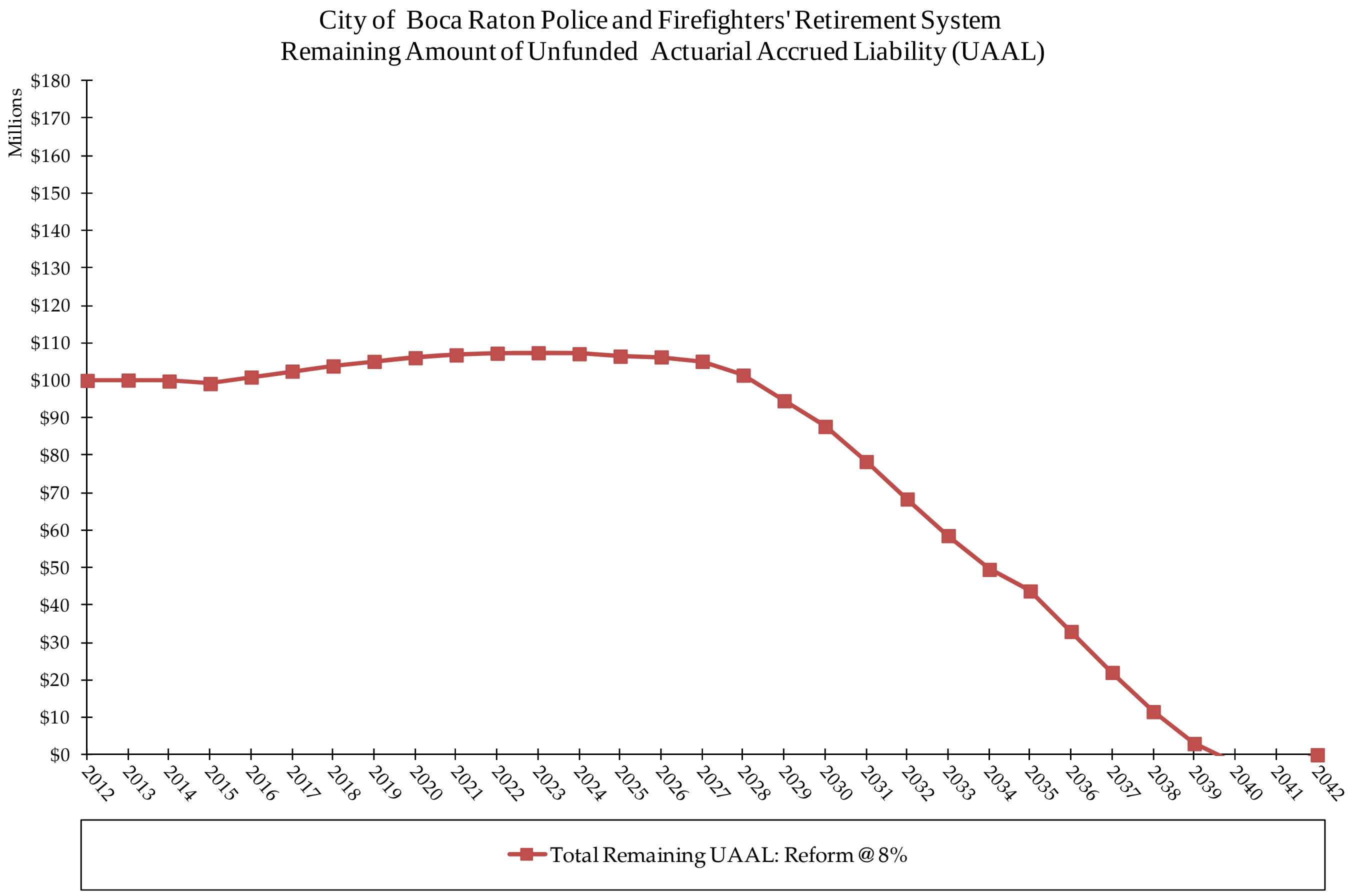
Total Remaining UAAL: Base @ 7%


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded Actuarial Accrued Liability (UAAL)
Millions
$180
$170
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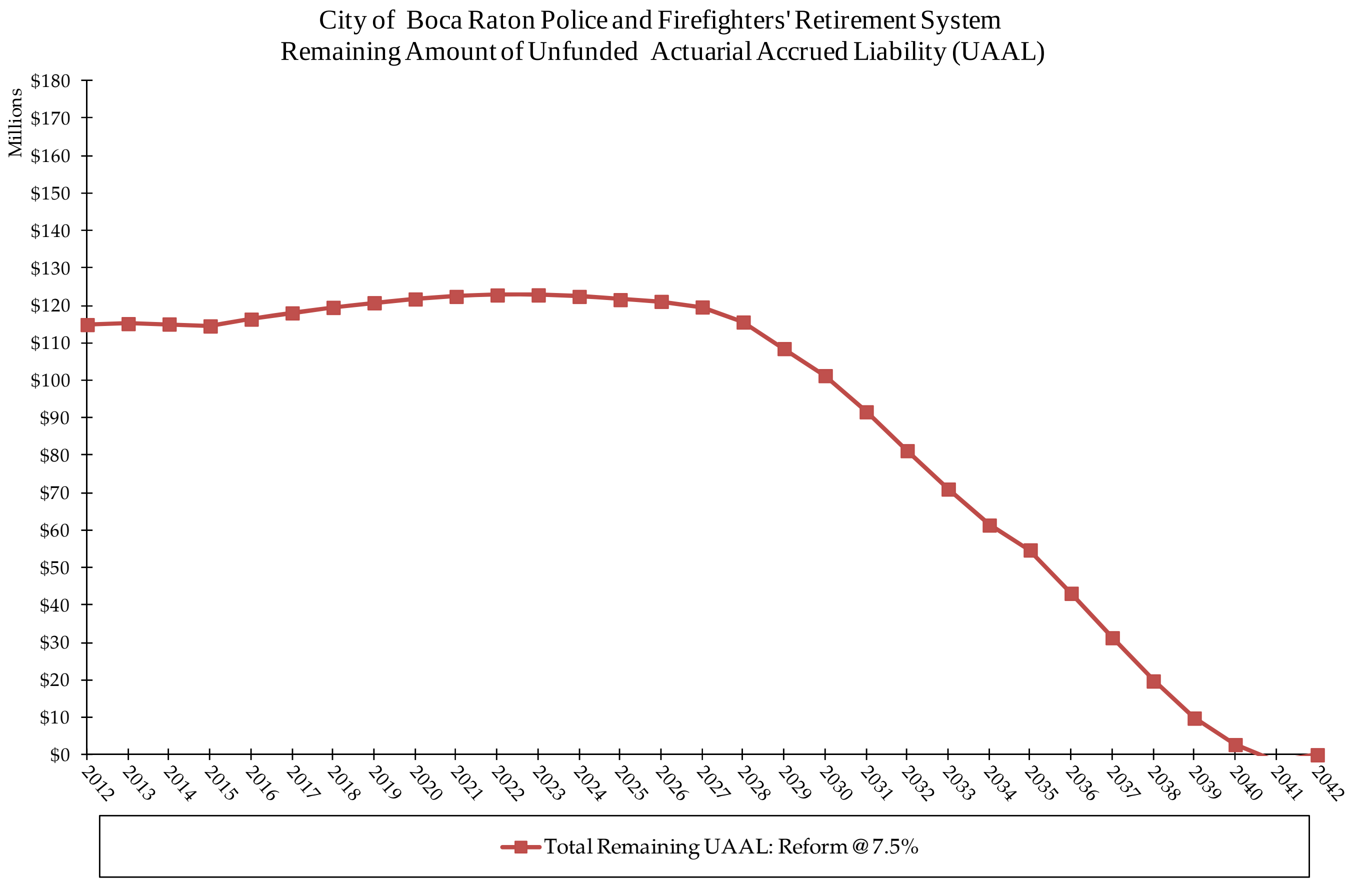
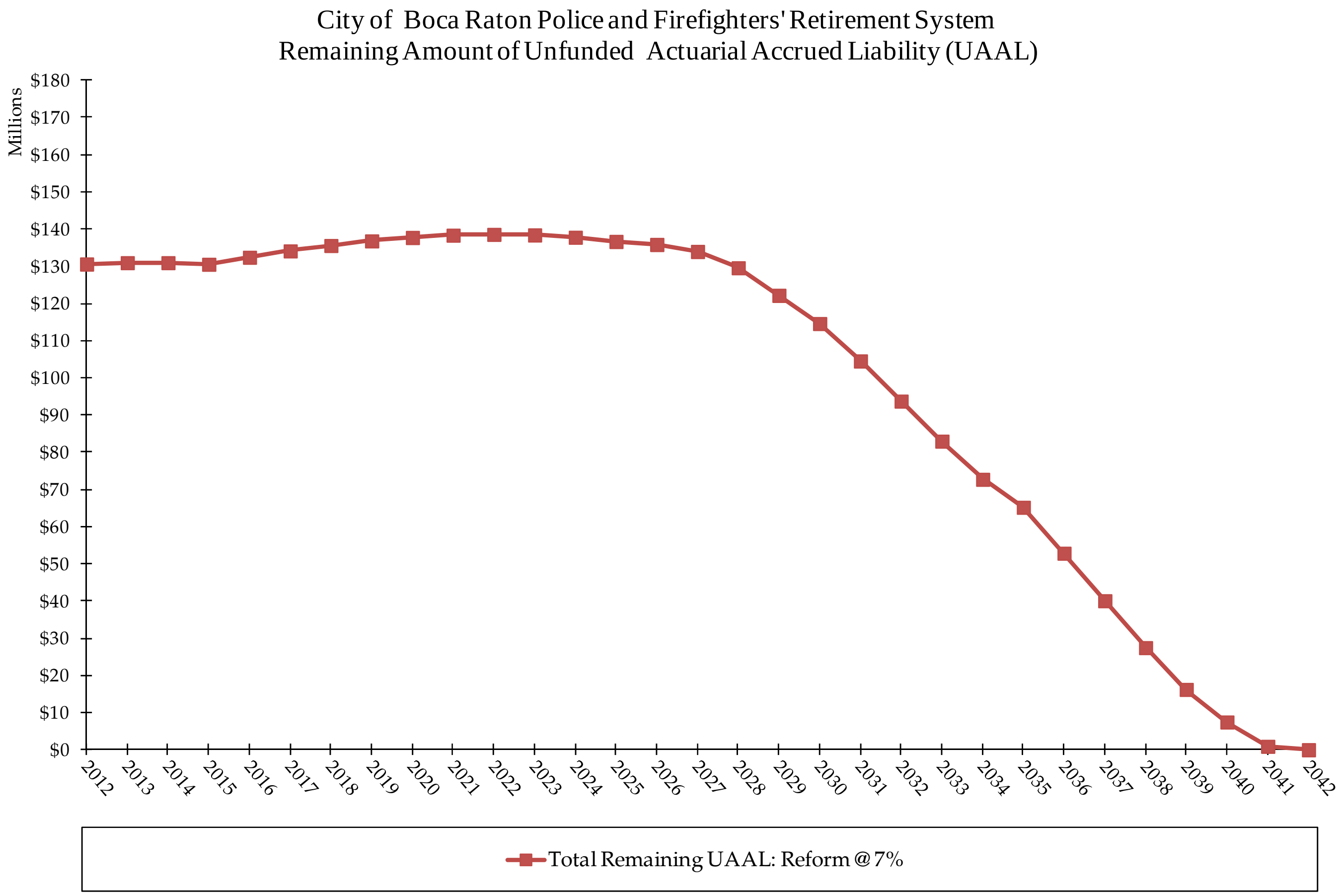
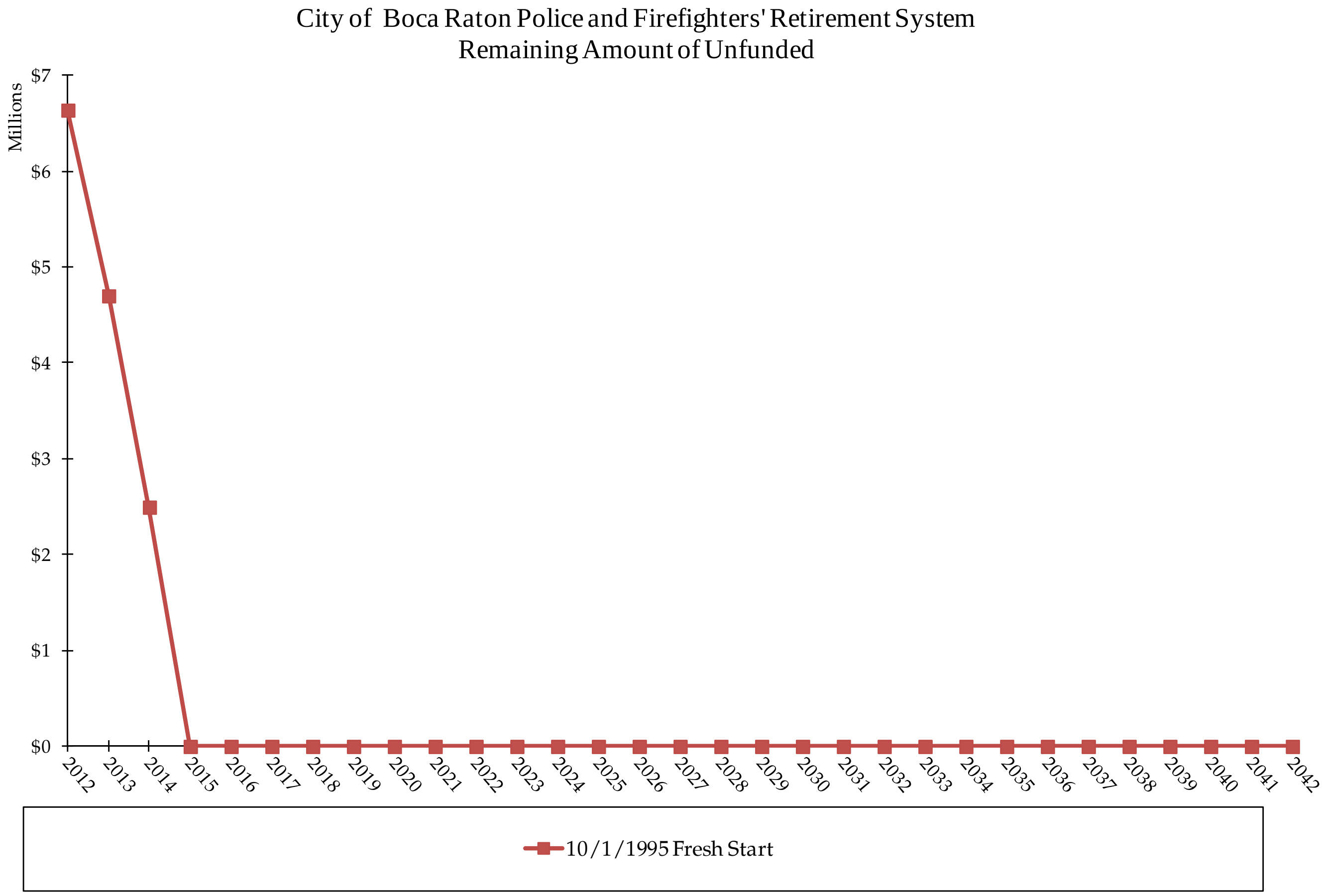
Total Remaining UAAL: Reform @ 8%



Actuarial Concepts



Actuarial Concepts


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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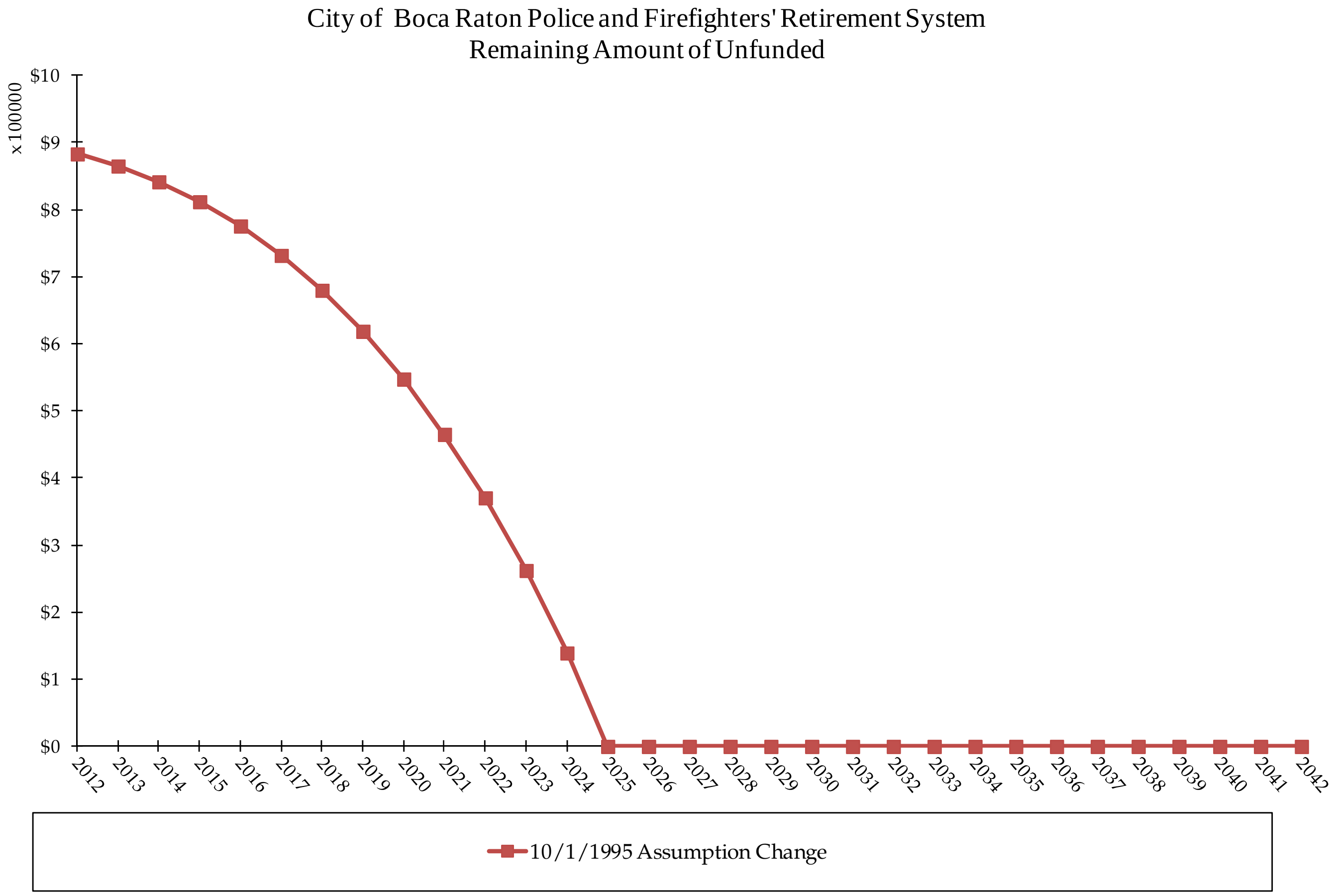
10/1/1995 Fresh Start


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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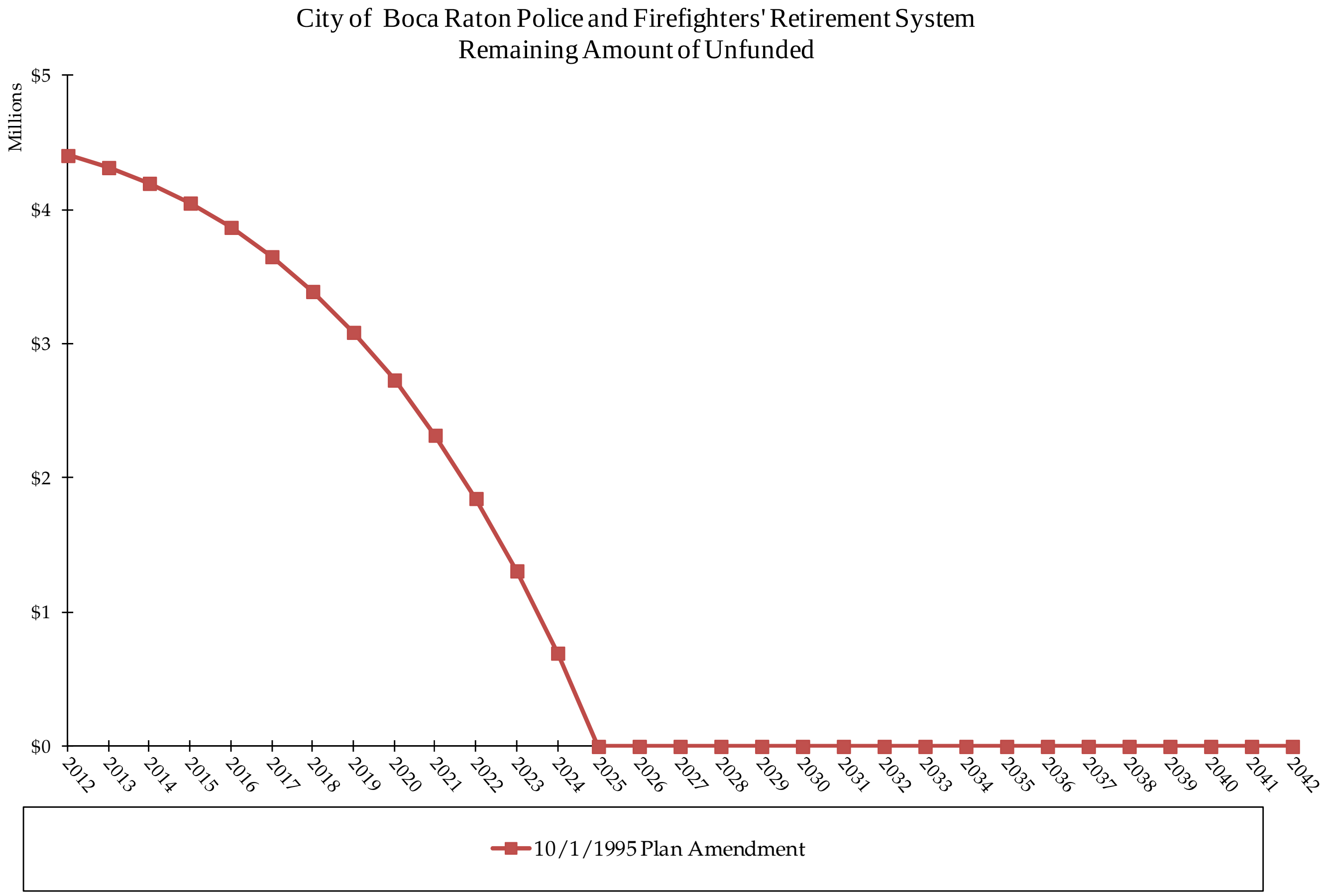
10/1/1995 Assumption Change


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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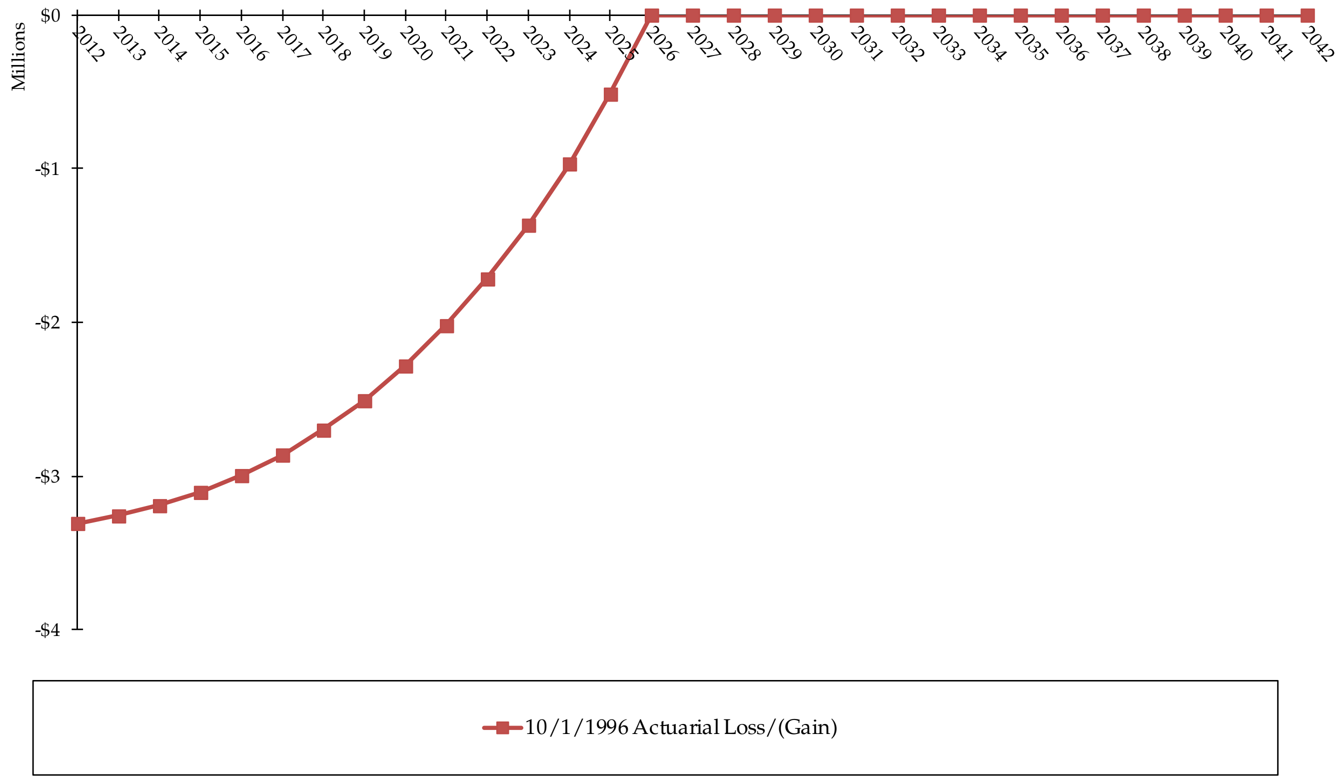
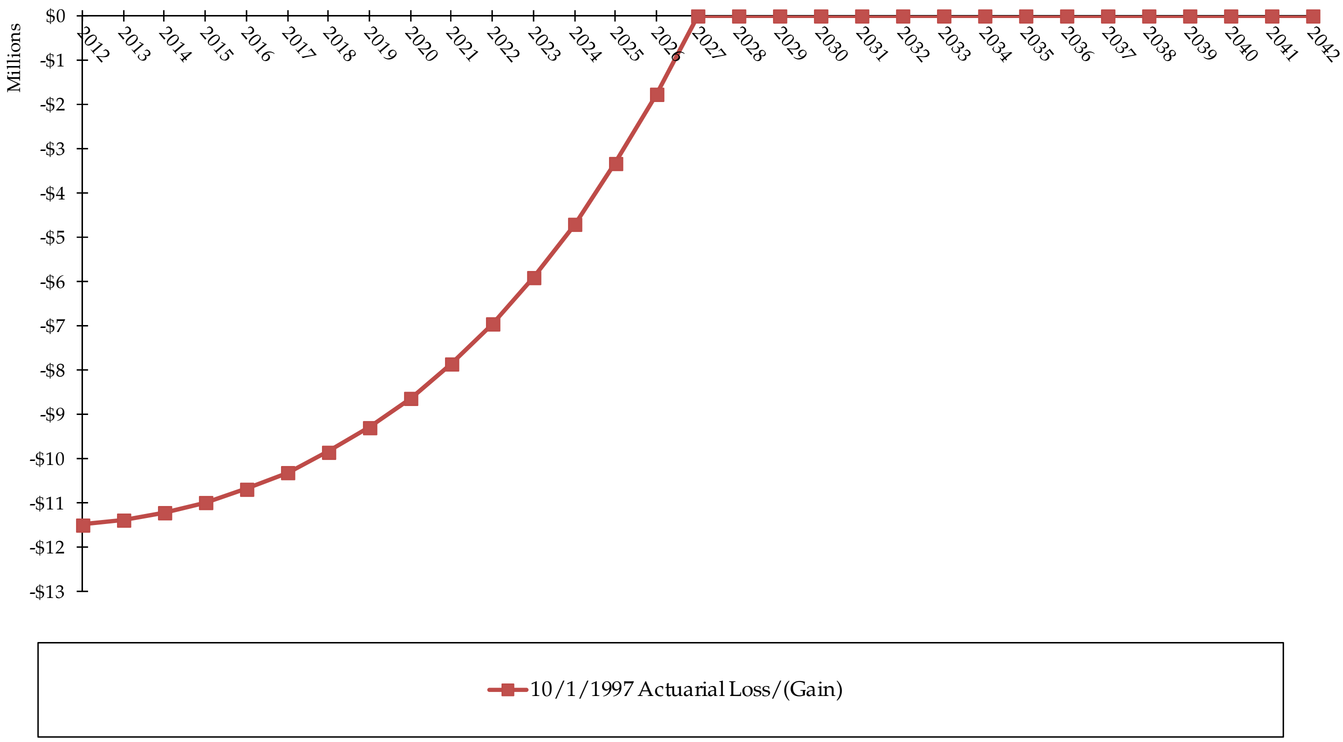
10/1/1995 Plan Amendment

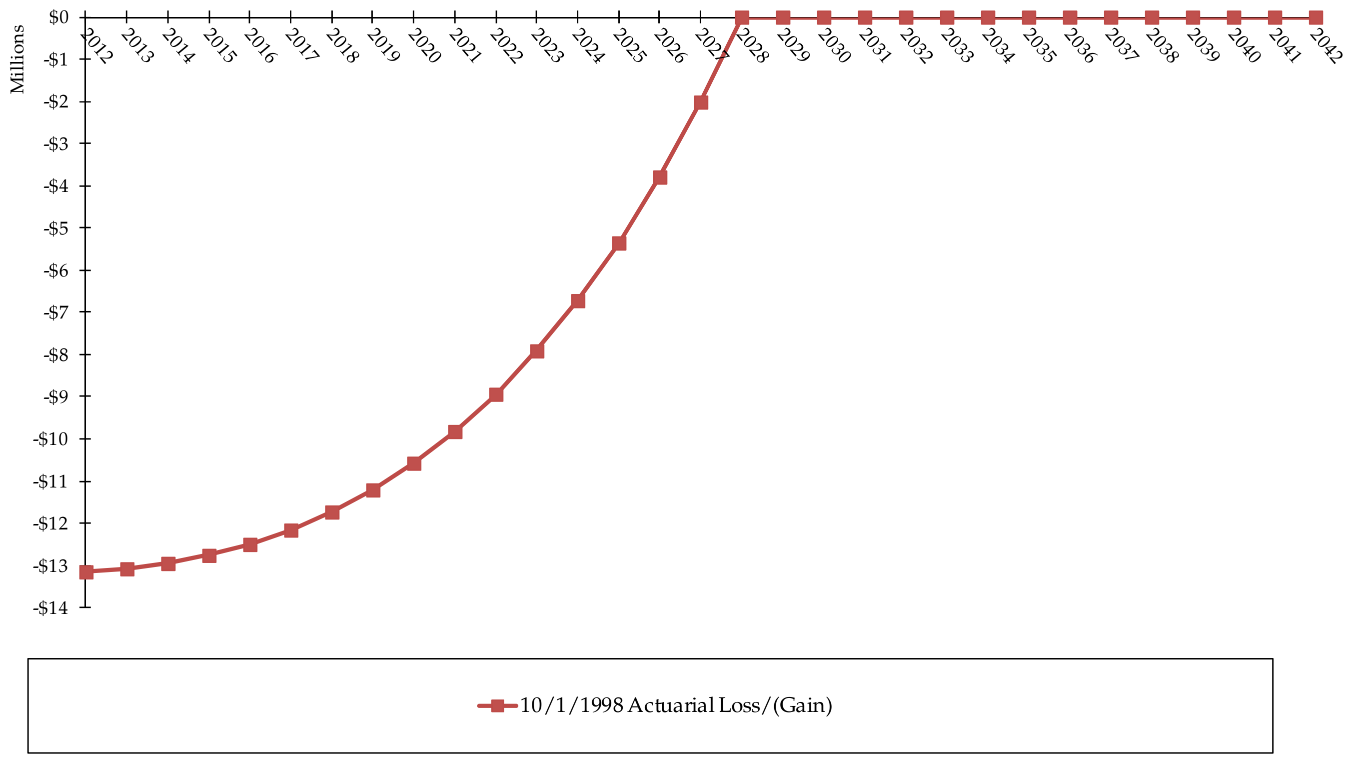
City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded



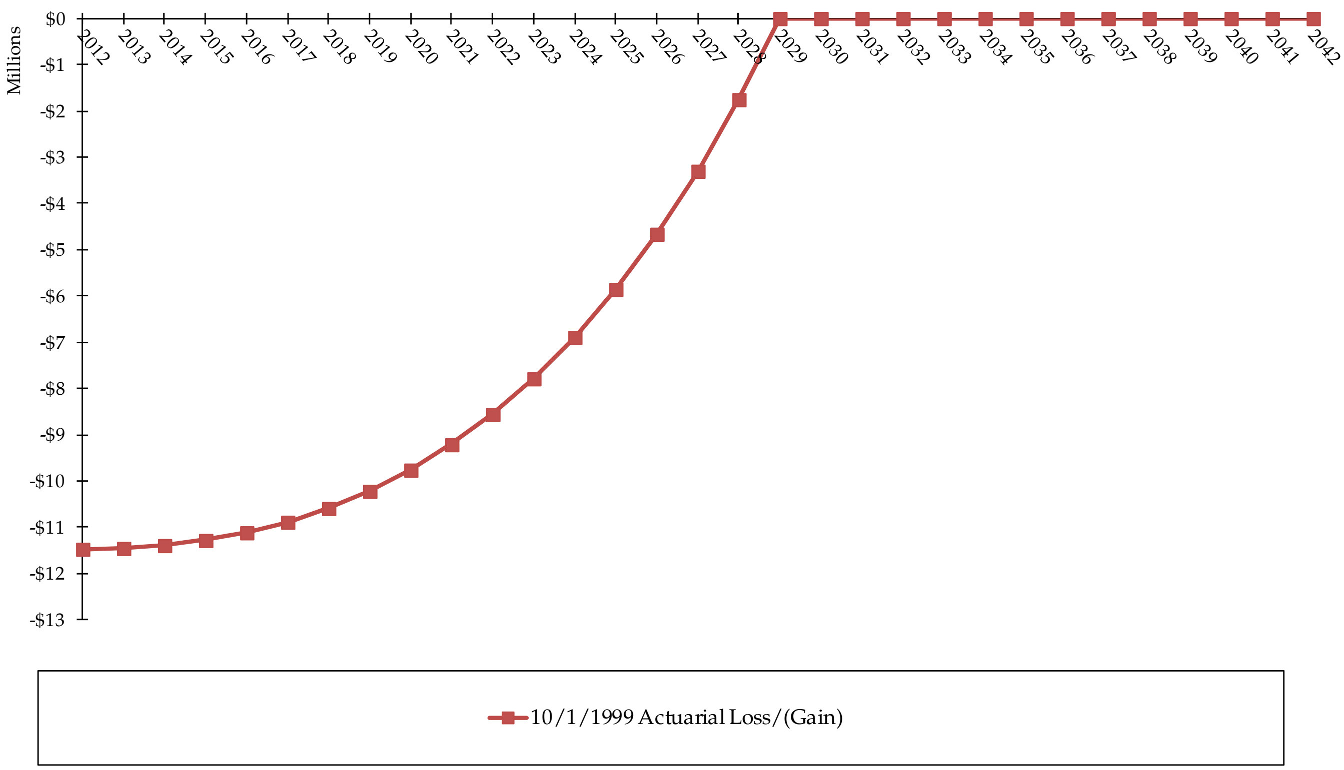
City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded

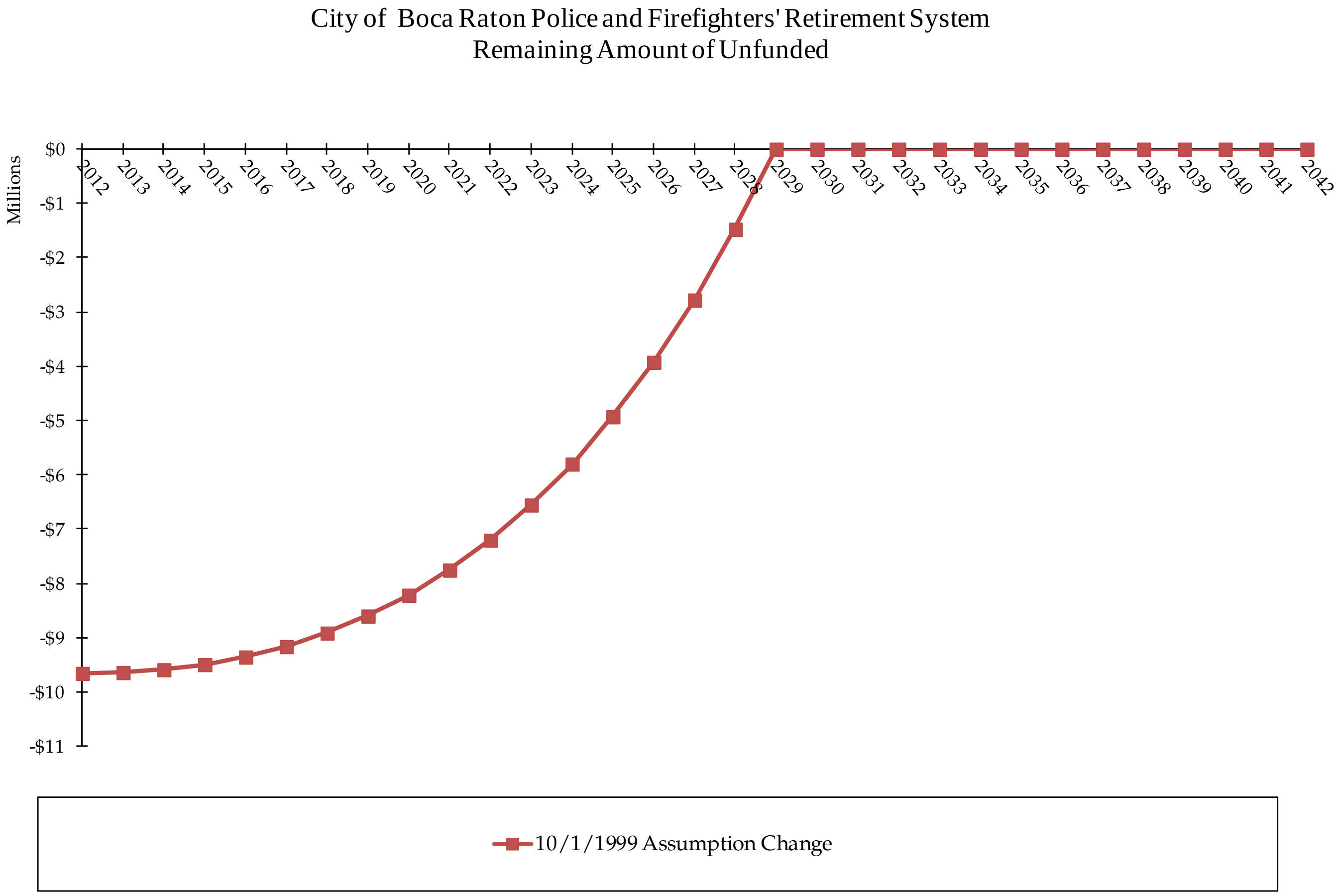


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded



City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded




City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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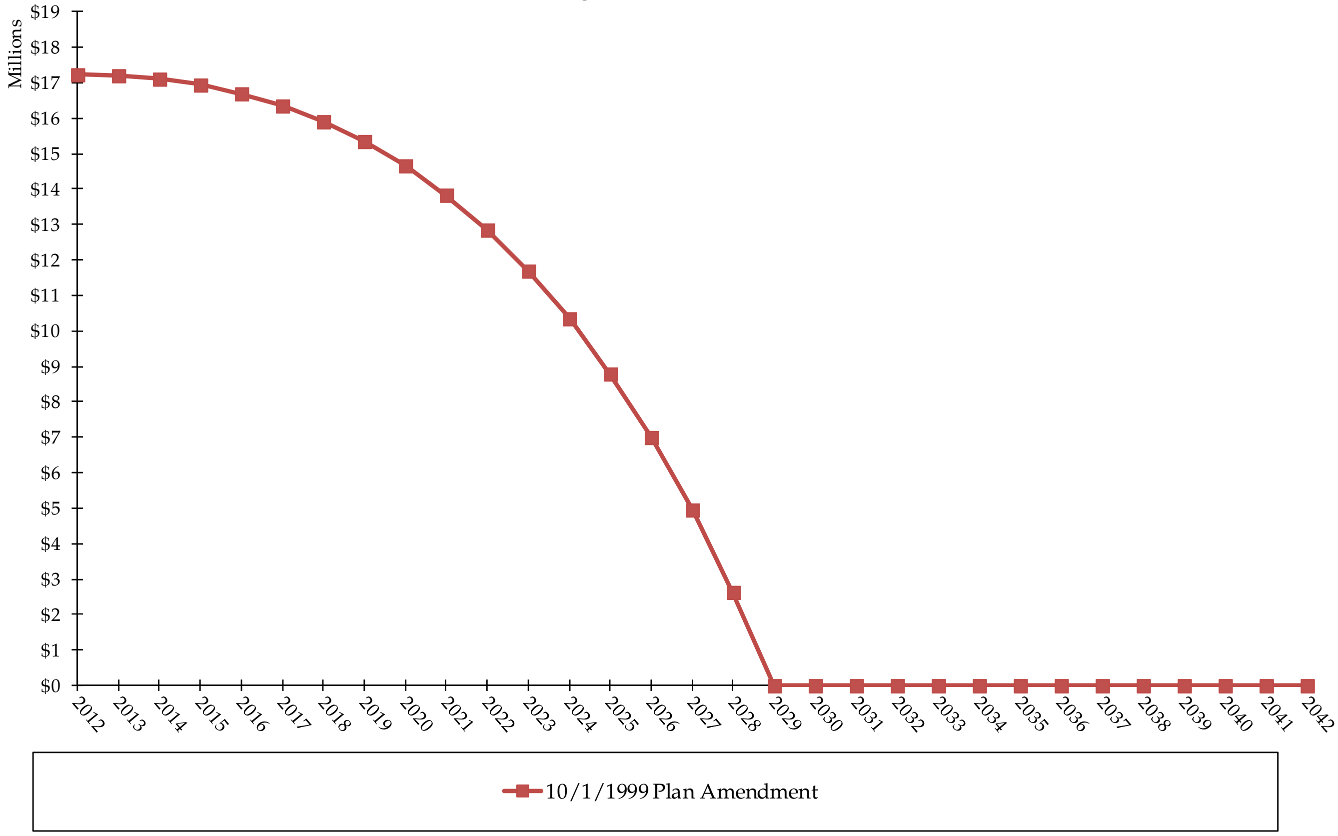
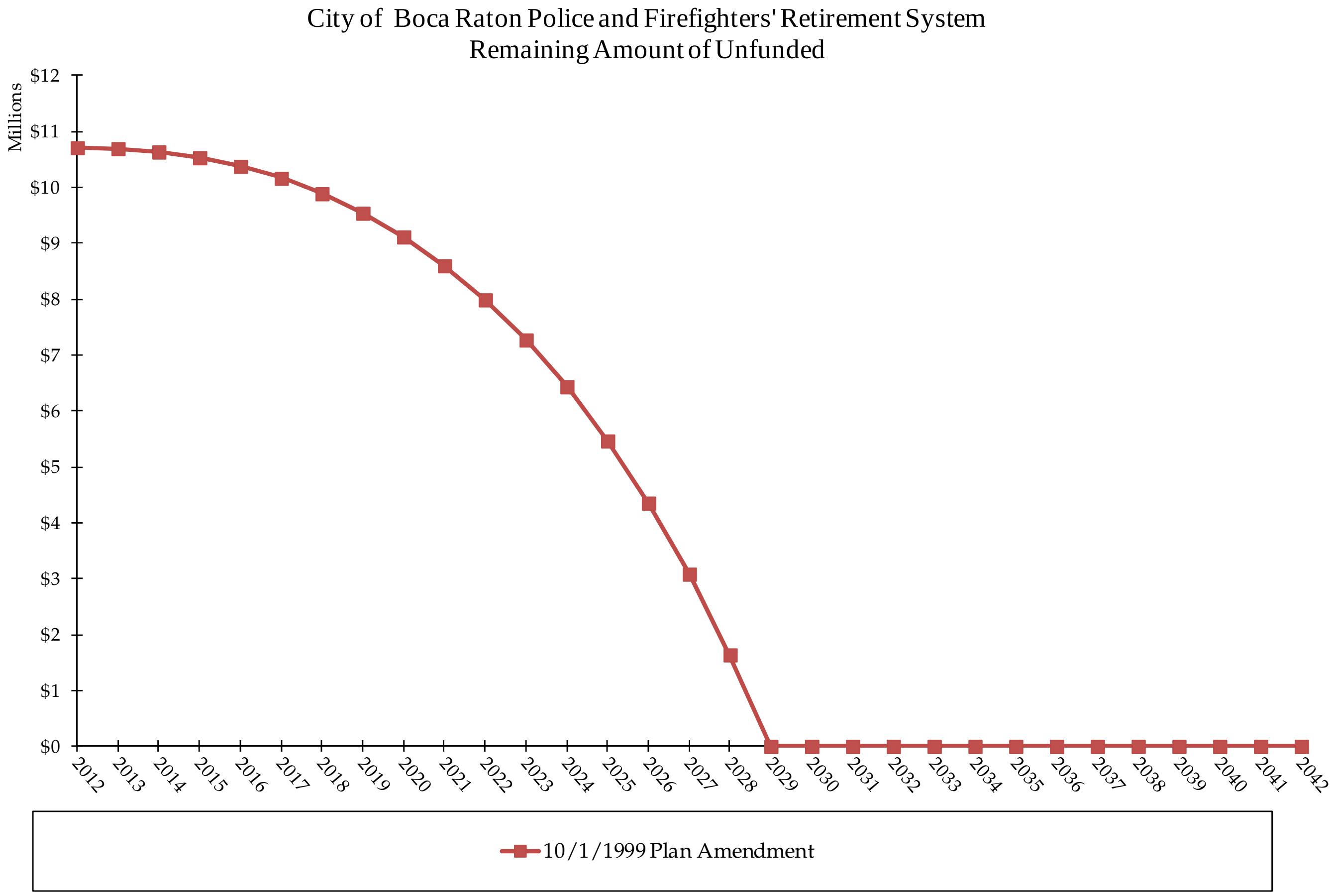
10/1/1999 Assumption Change

City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded




City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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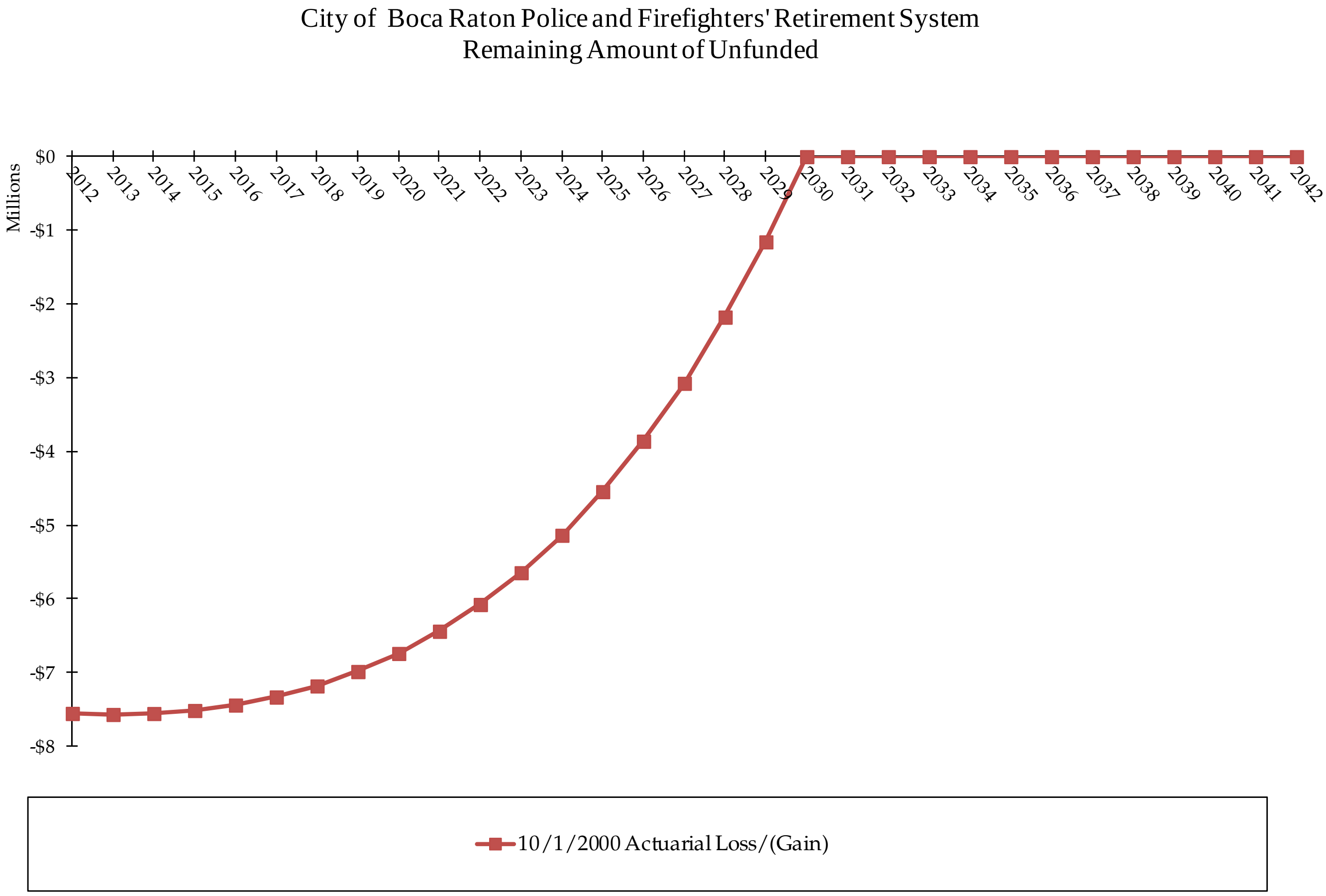
10/1/1999 Plan Amendment


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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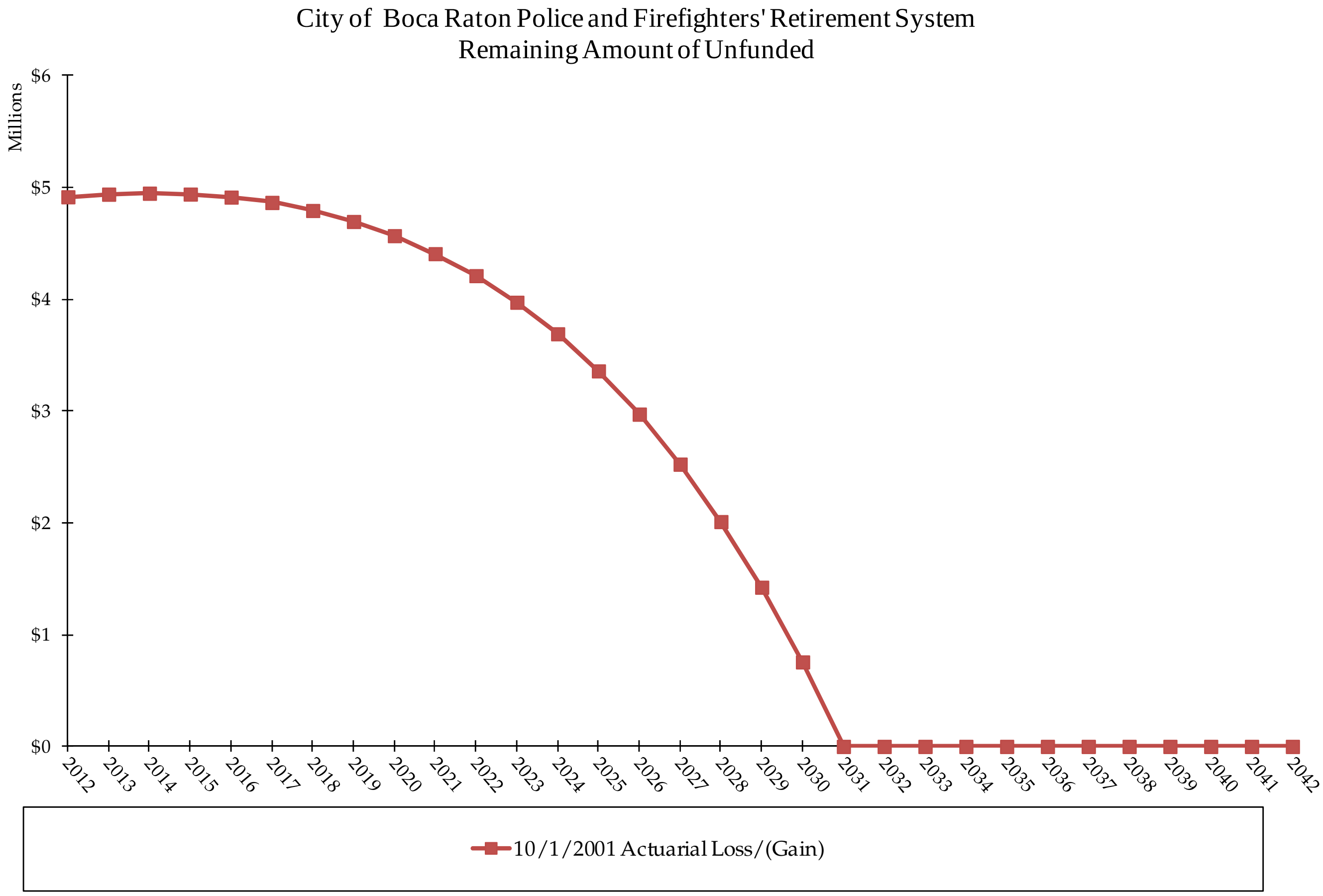
10/1/2000 Actuarial Loss/(Gain)


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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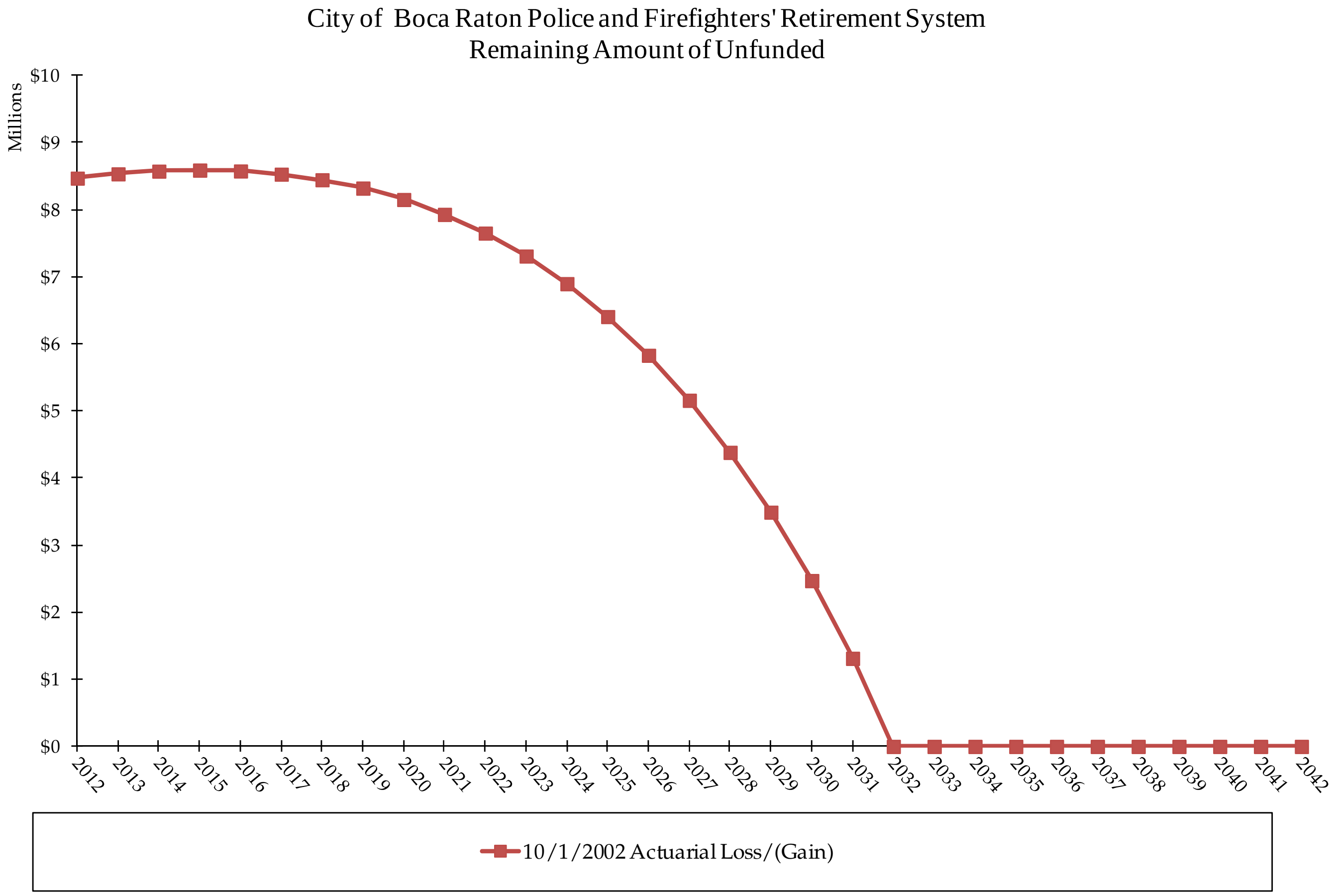
10/1/2001 Actuarial Loss/(Gain)


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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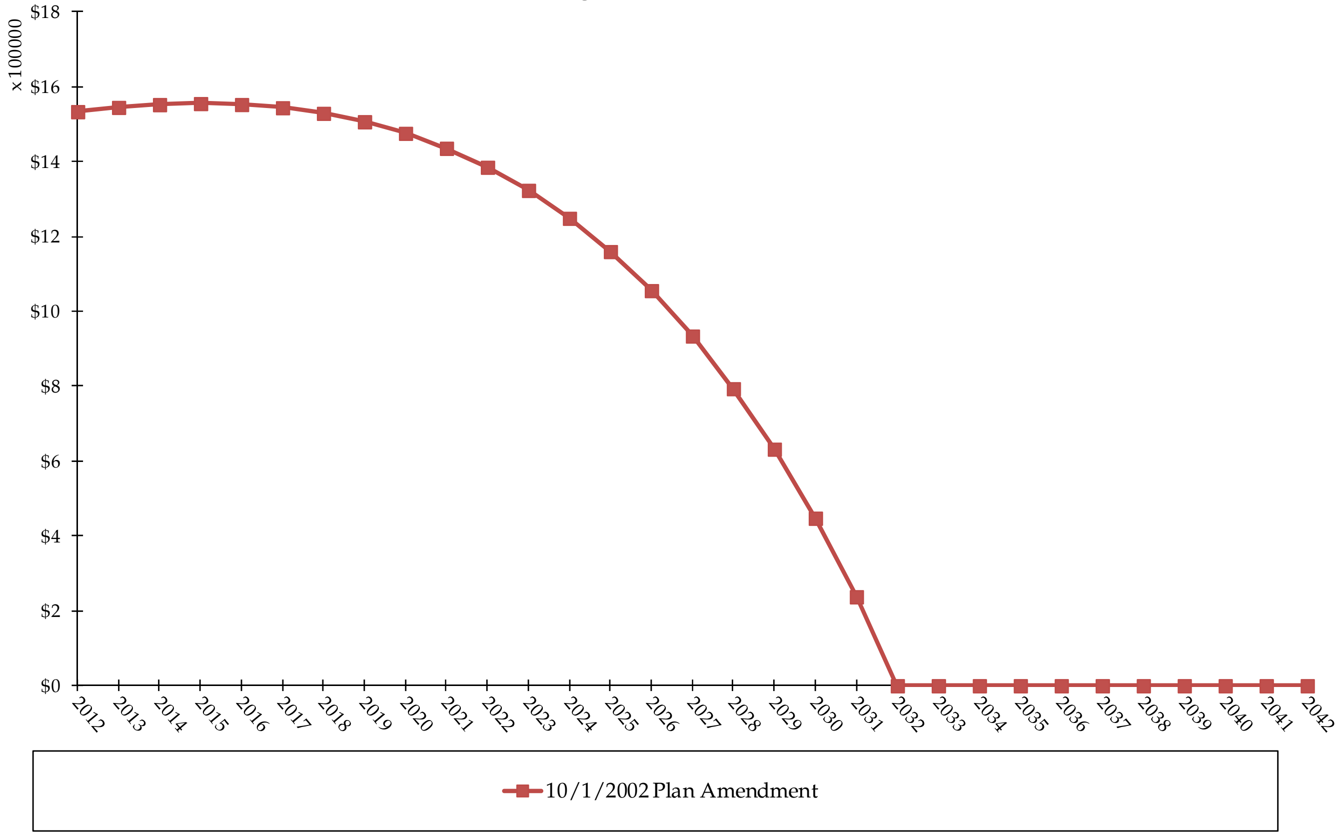
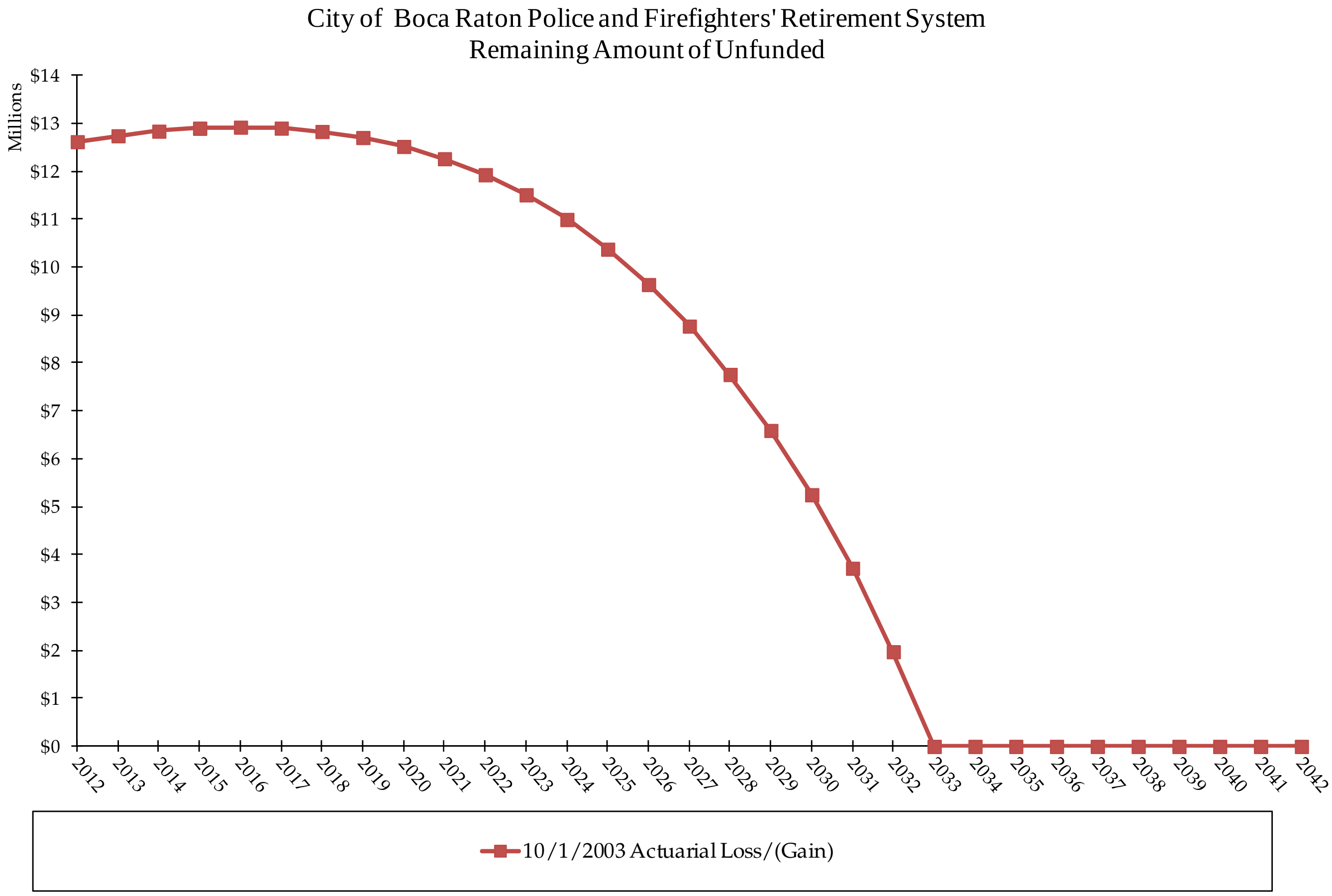
10/1/2002 Actuarial Loss/(Gain)

City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded





City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
Millions
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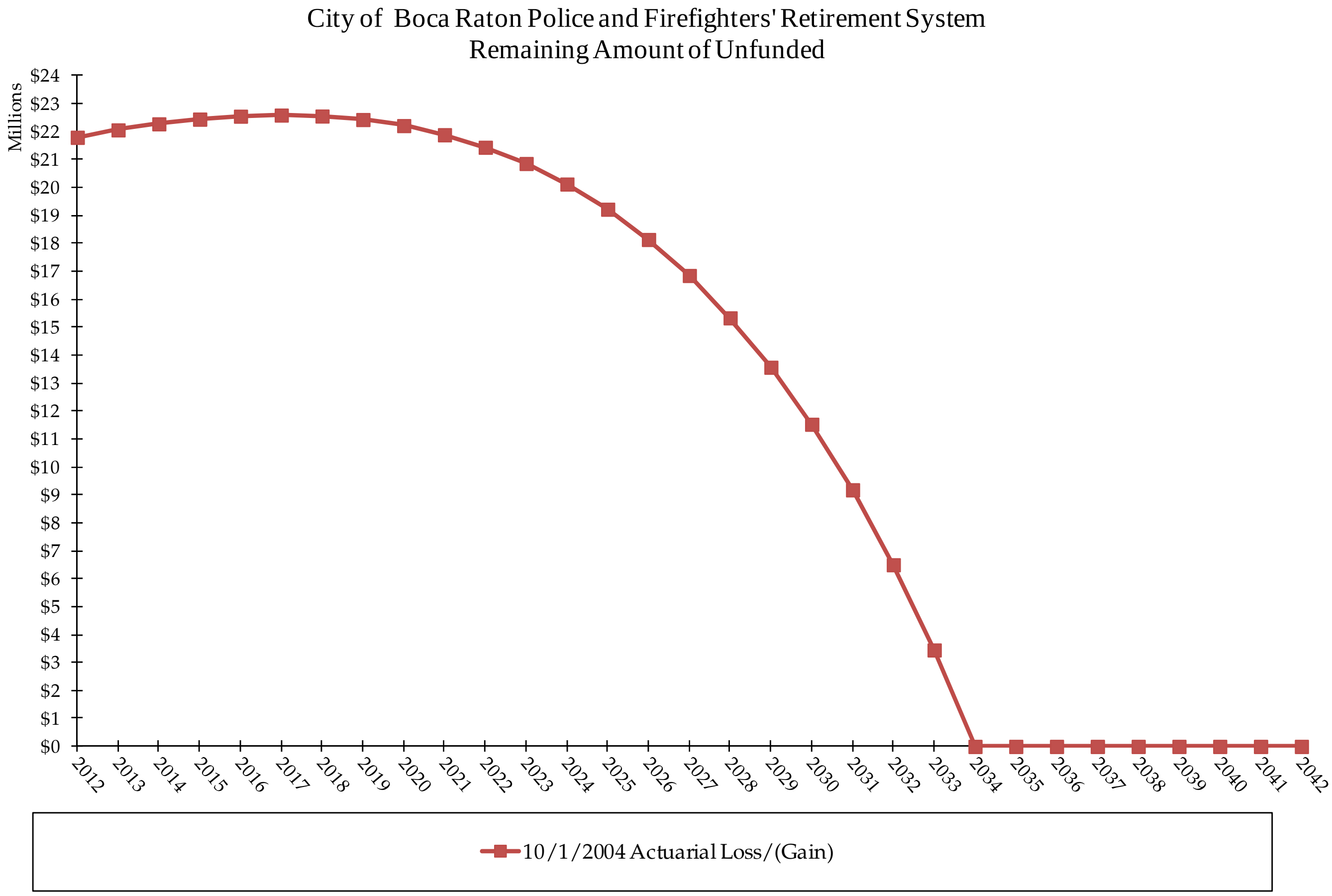
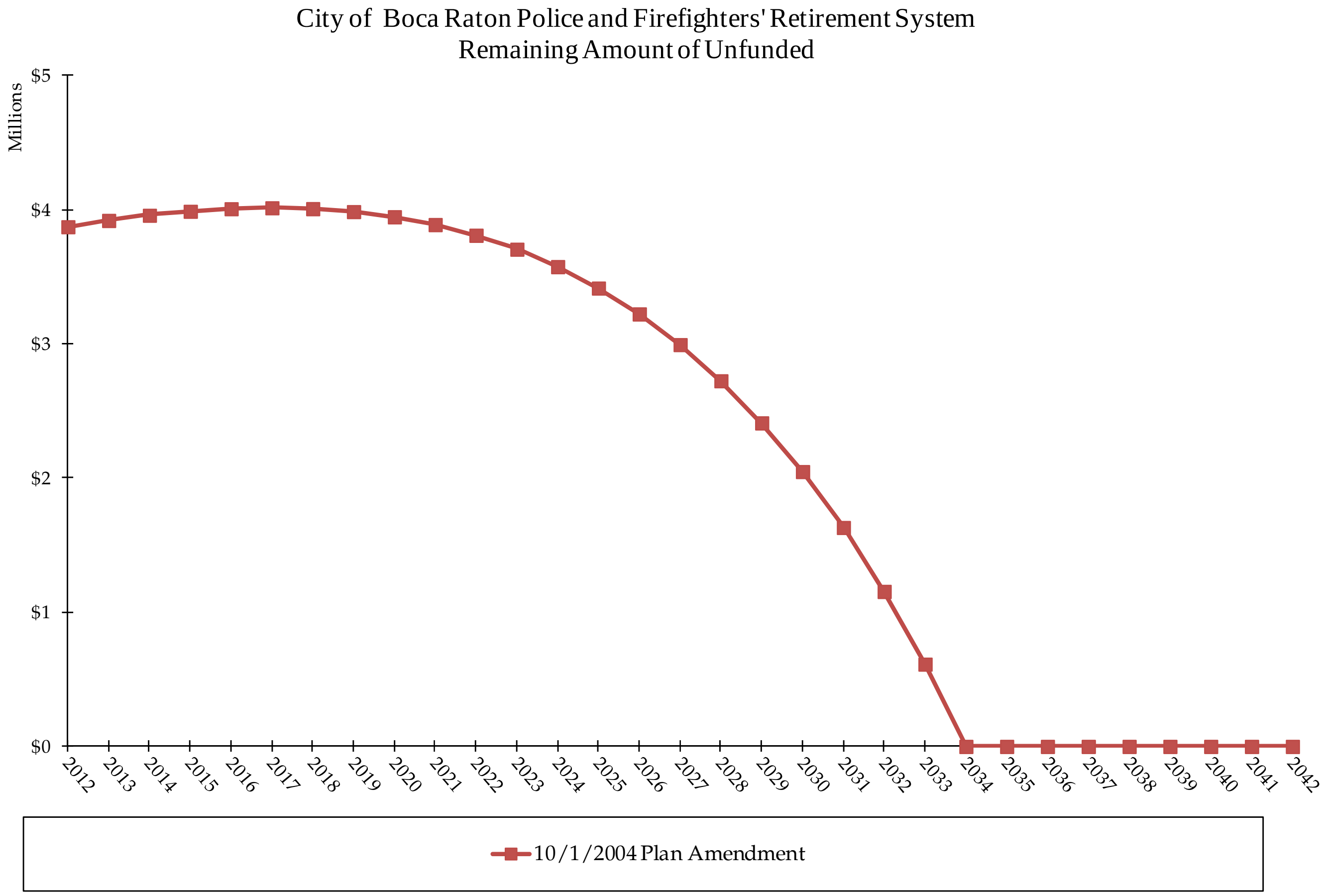
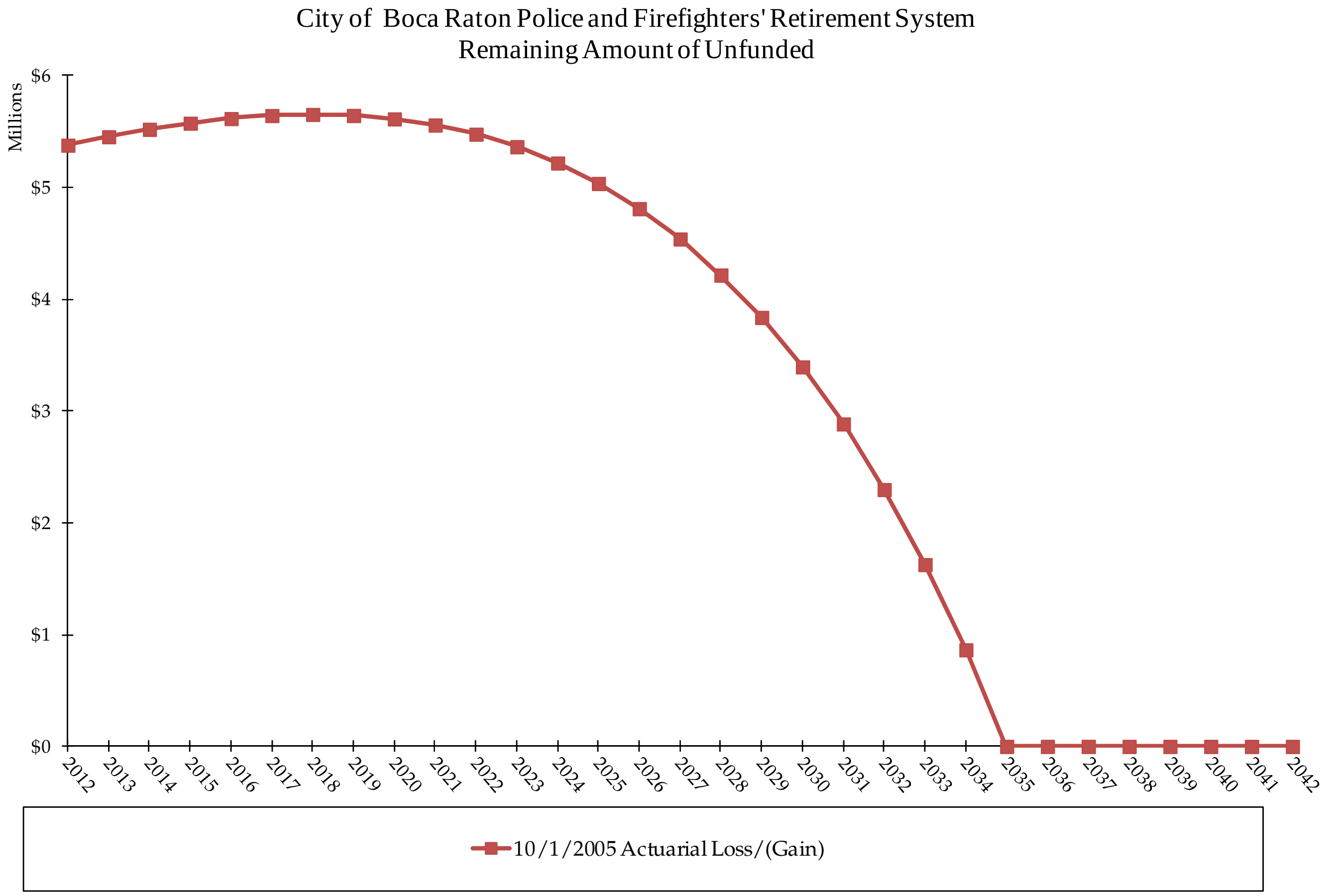
10/1/2003 Actuarial Loss/(Gain)



Actuarial Concepts



Actuarial Concepts


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
Millions
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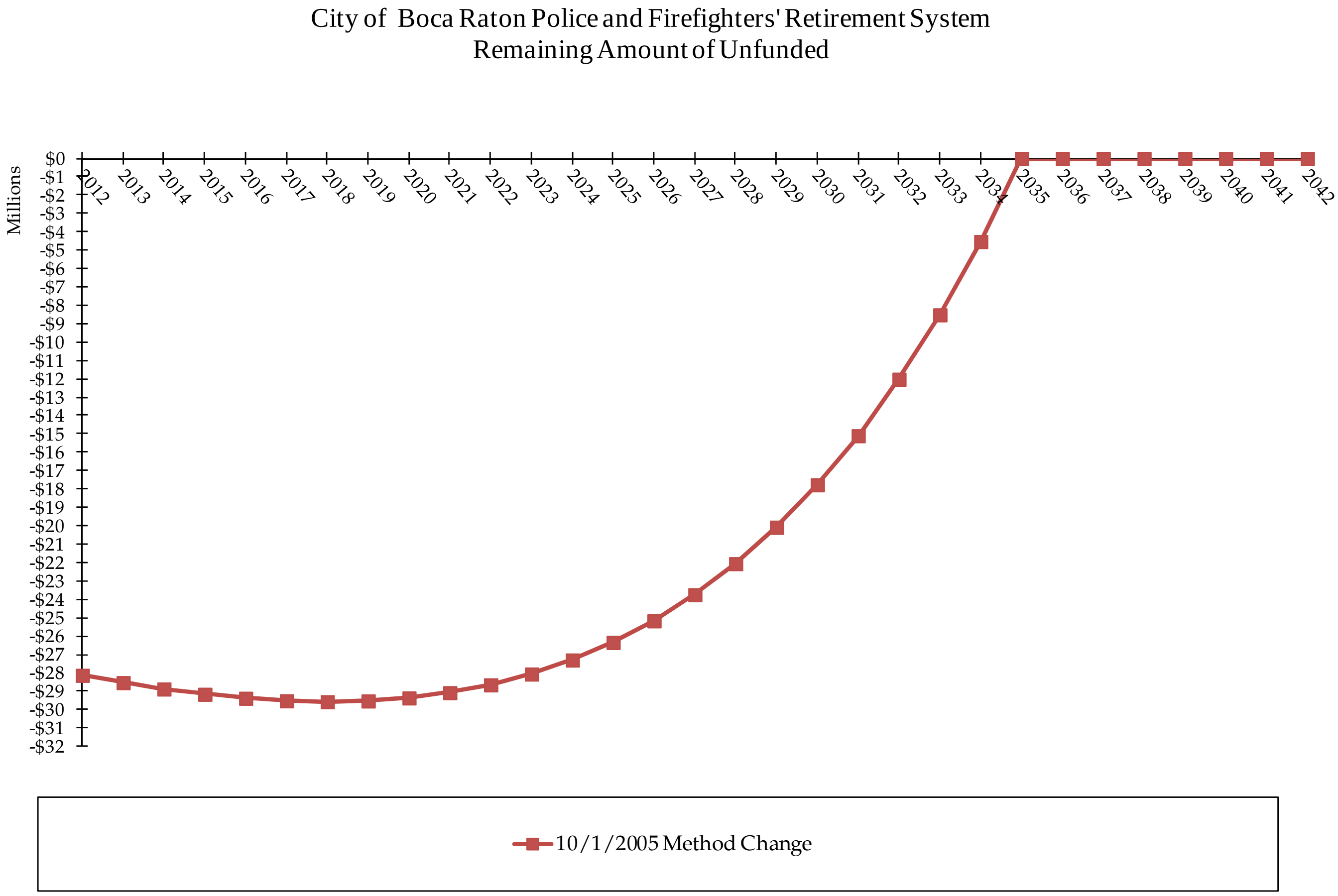
10/1/2005 Actuarial Loss/(Gain)


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
Millions
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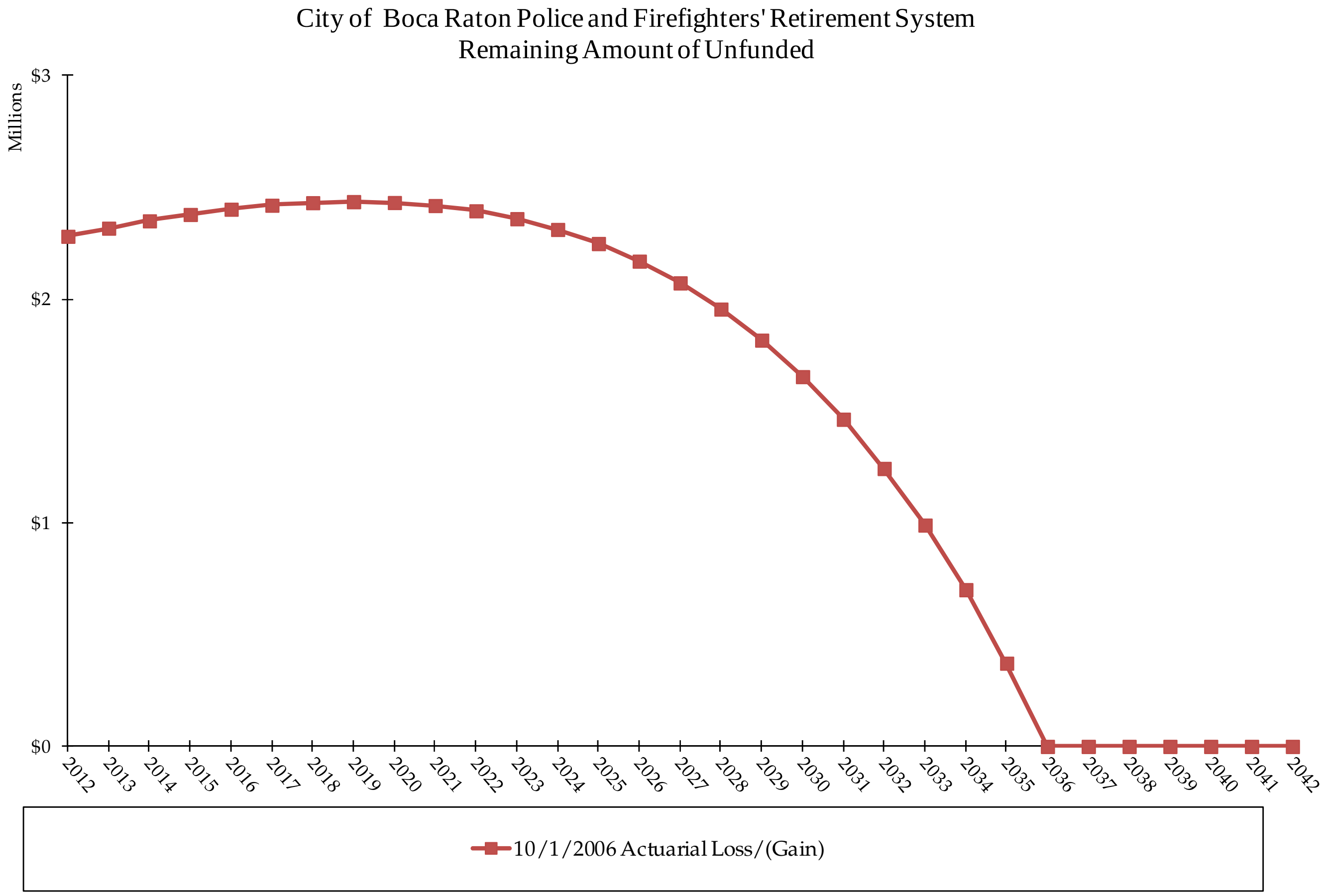
10/1/2005 Method Change


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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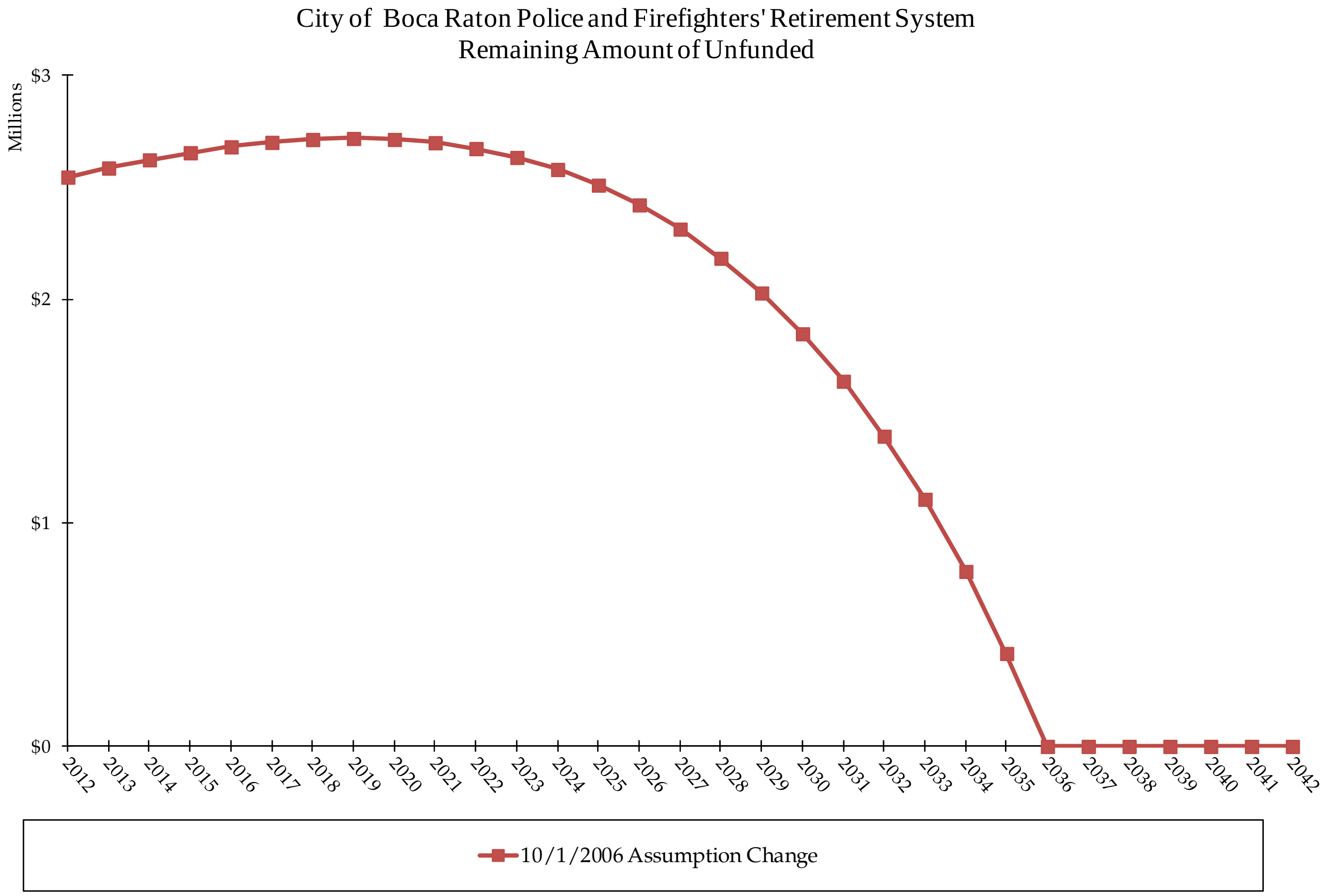
10/1/2006 Actuarial Loss/(Gain)


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
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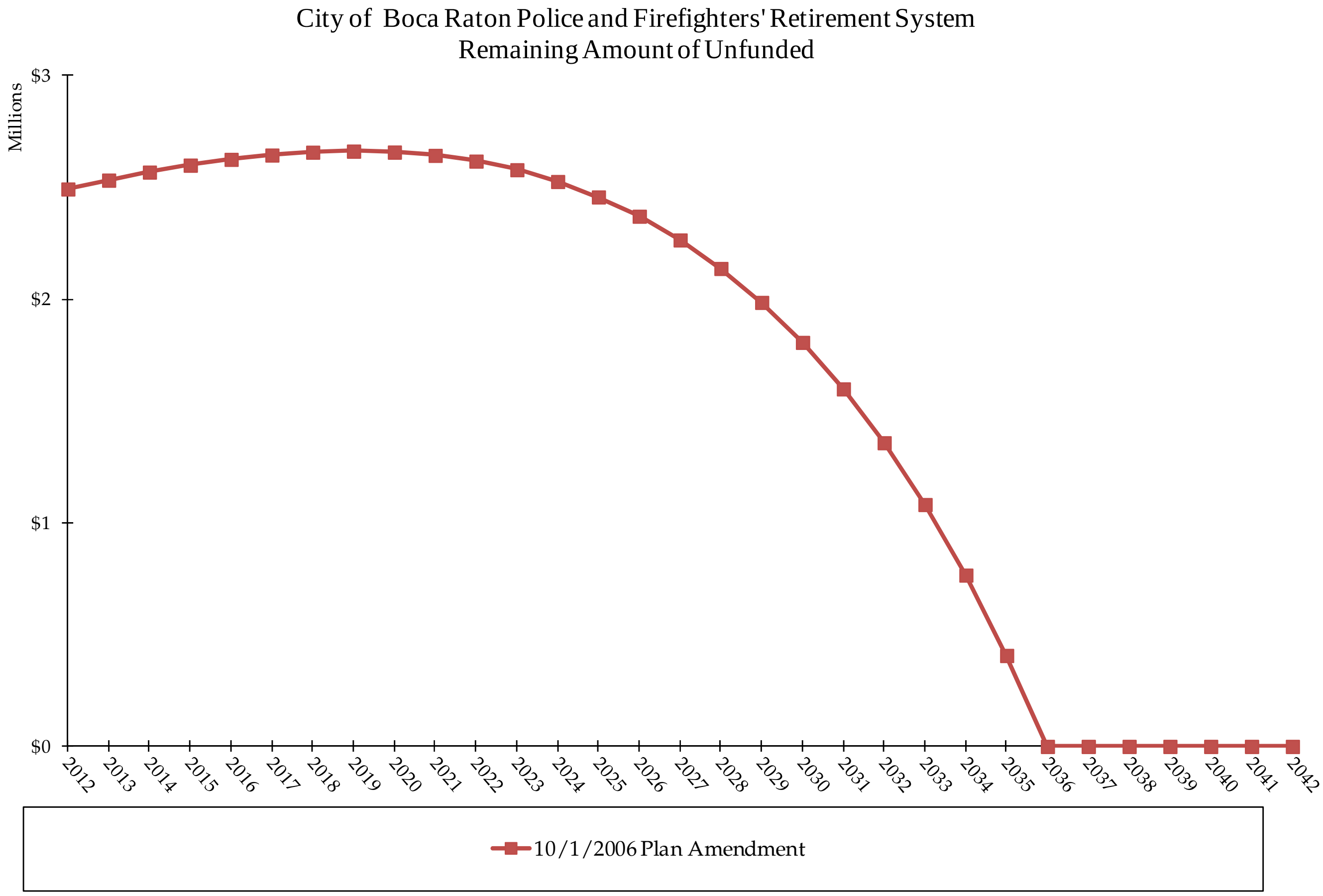
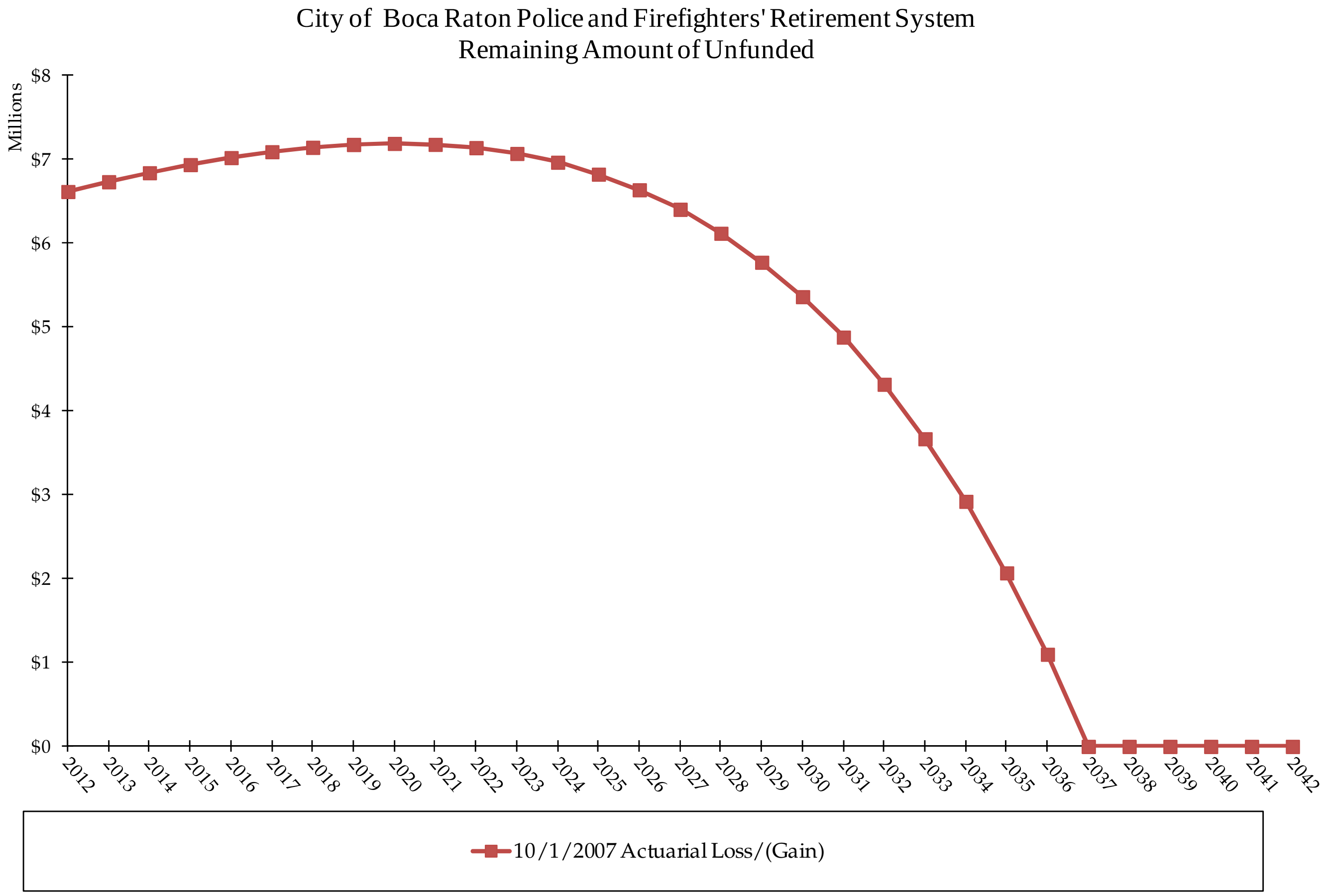
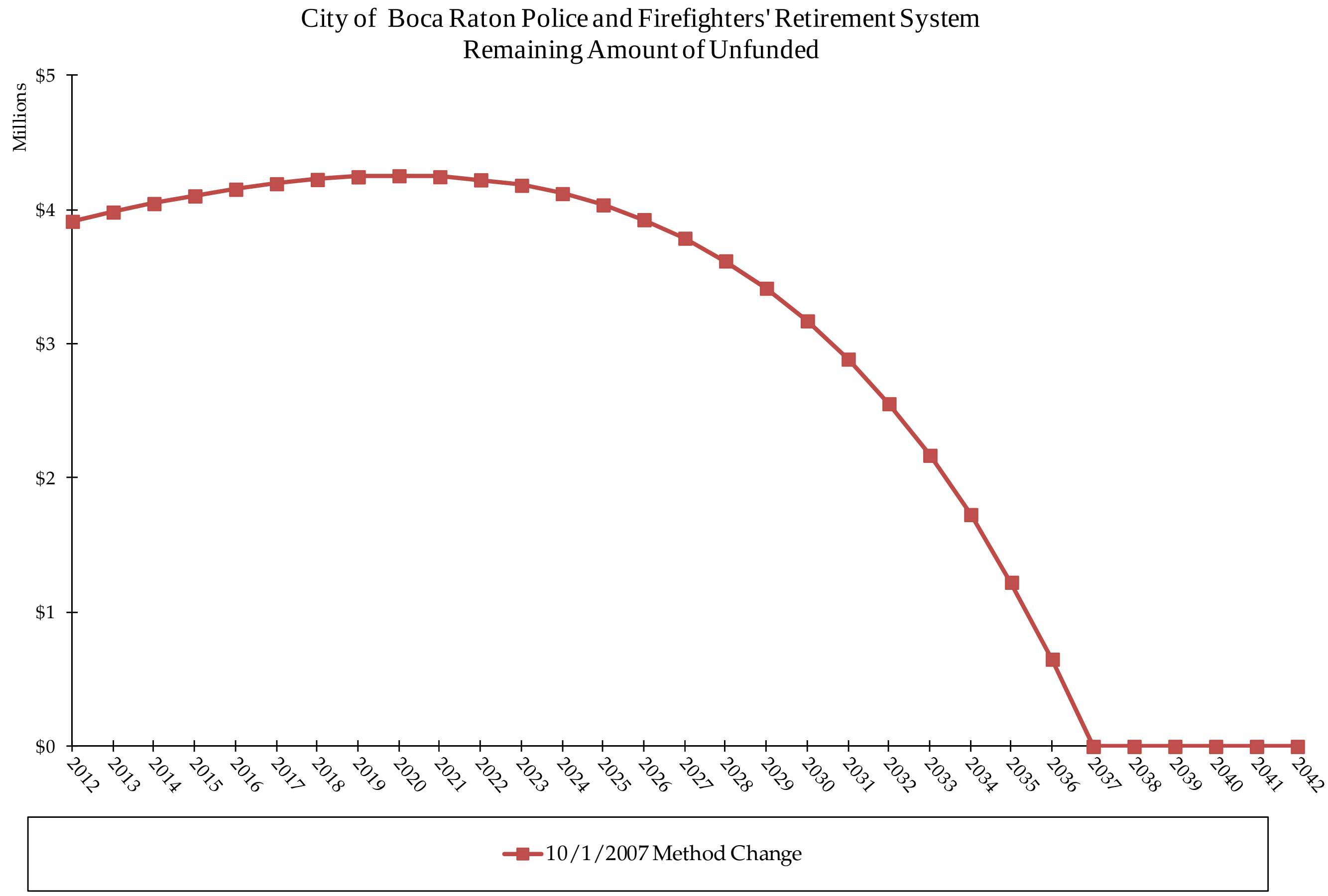
10/1/2006 Assumption Change



Actuarial Concepts

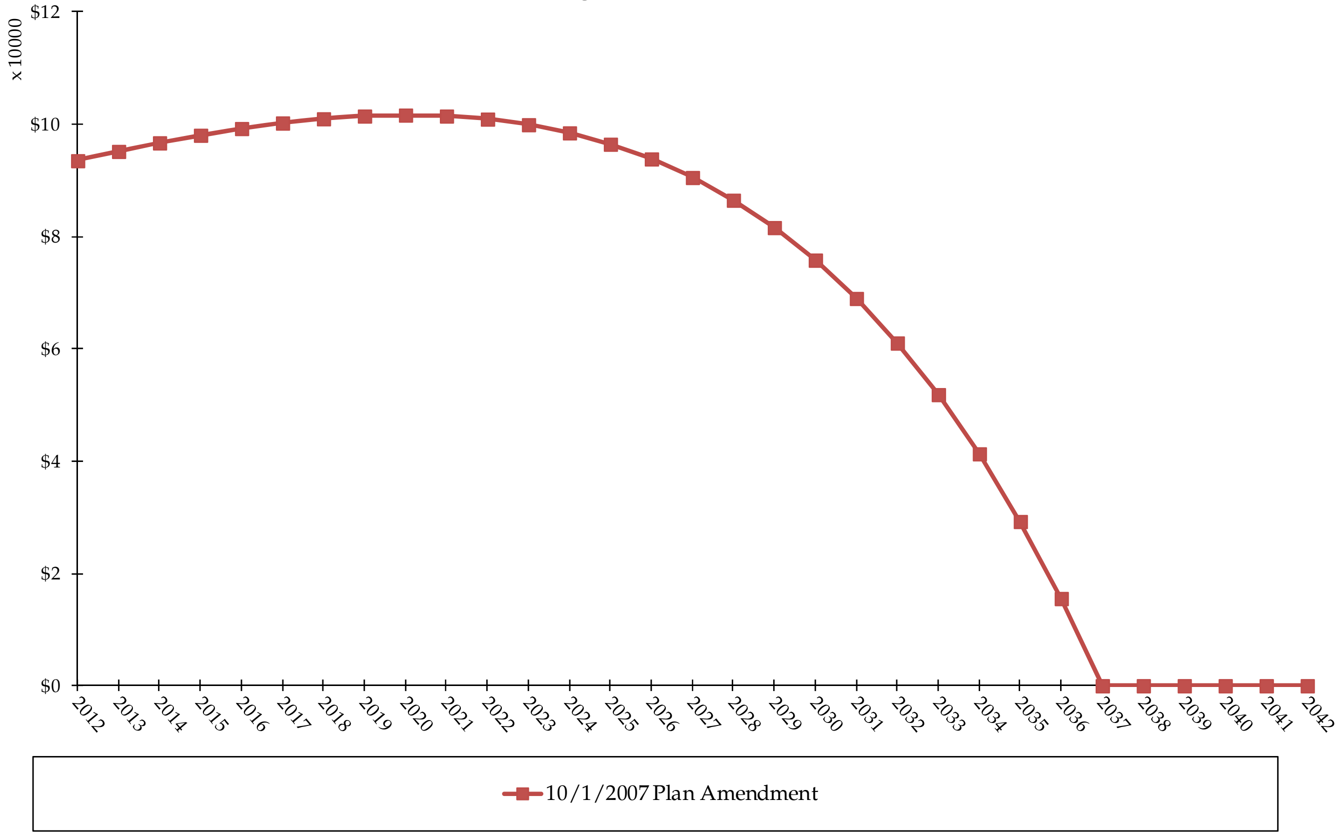


Actuarial Concepts

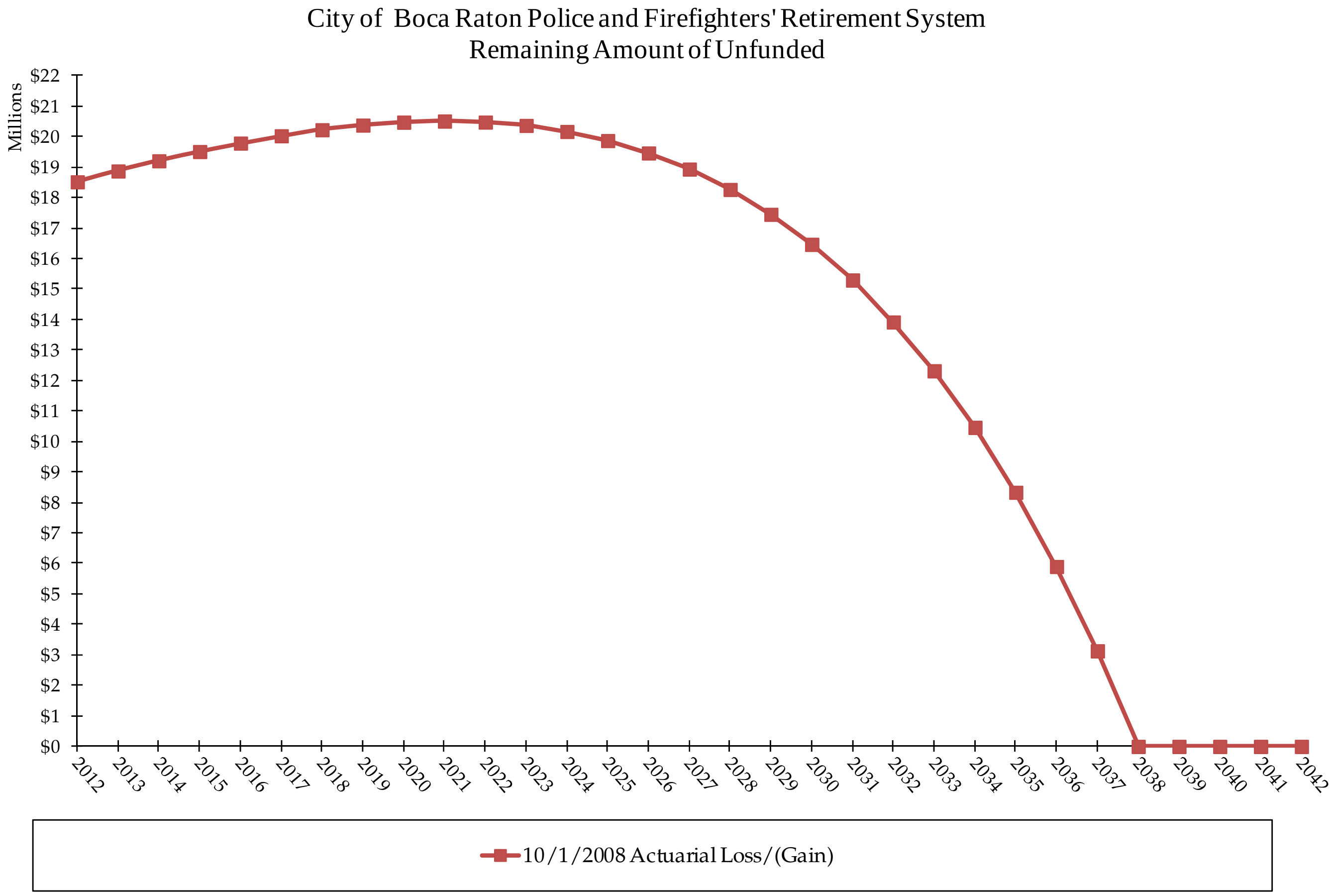


Actuarial Concepts

City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded



Actuarial Concepts


City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
Millions
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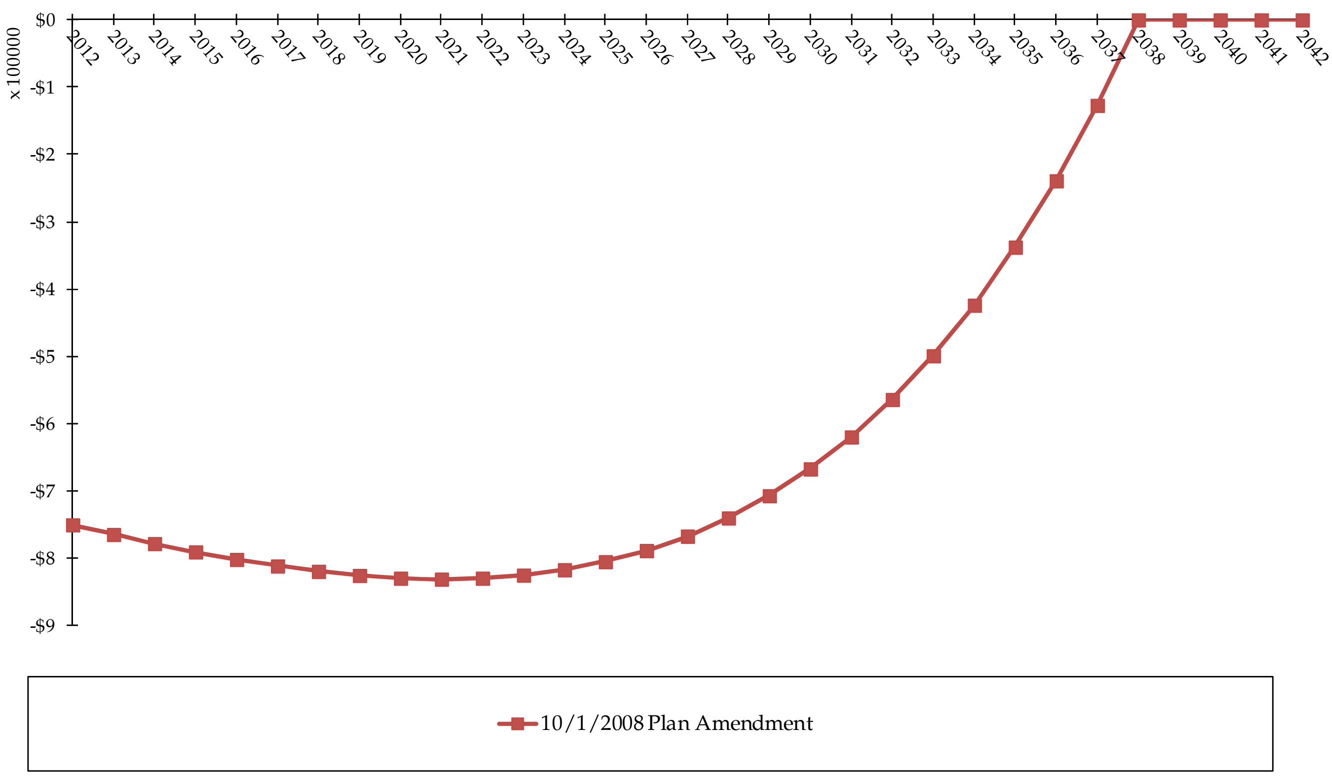
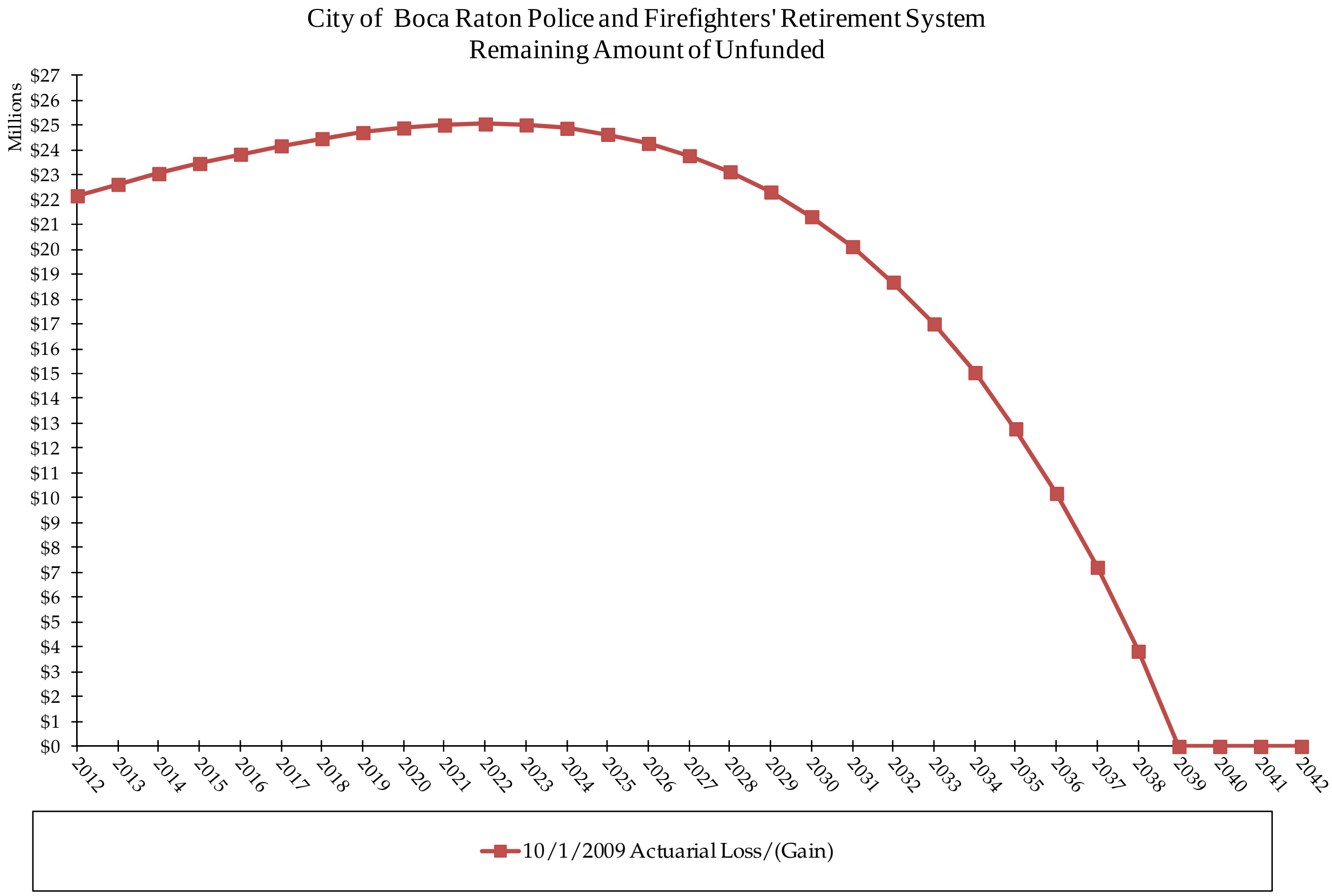
10/1/2008 Actuarial Loss/(Gain)

City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded




City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
Millions
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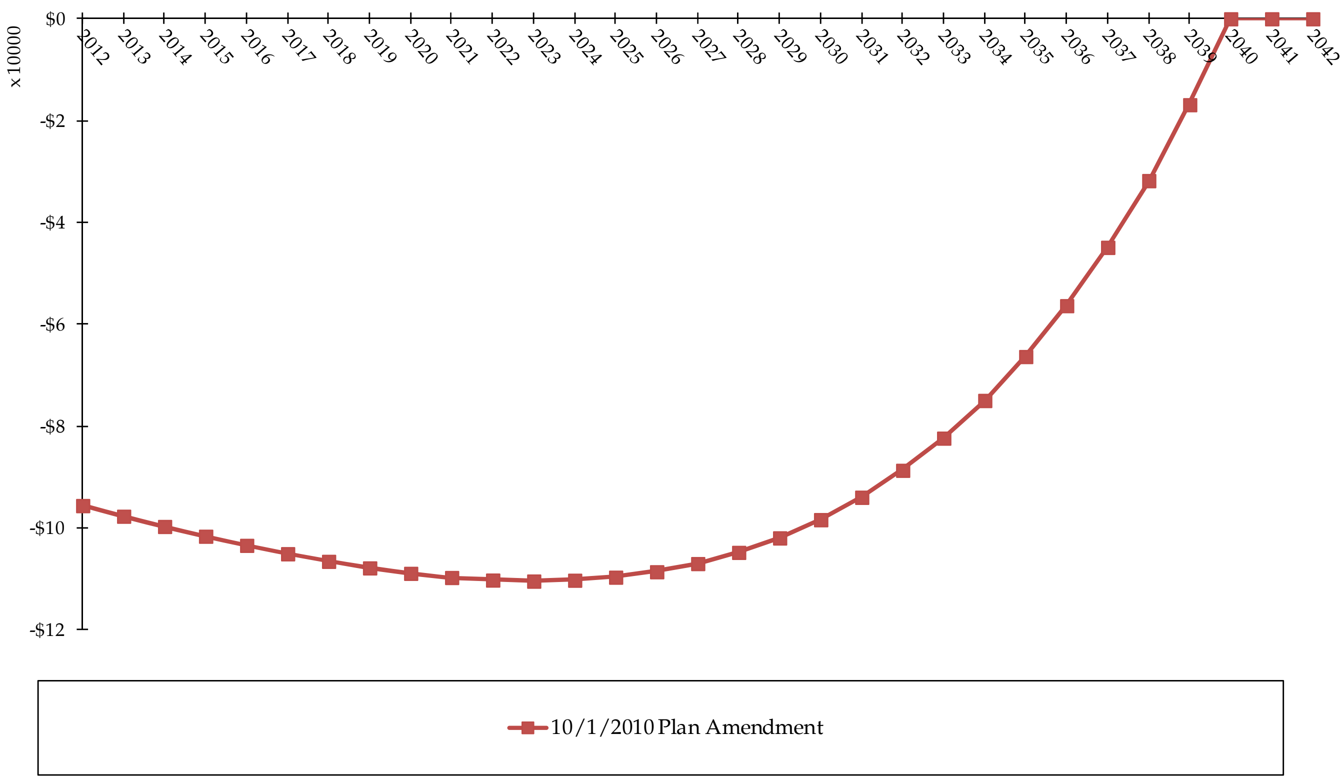
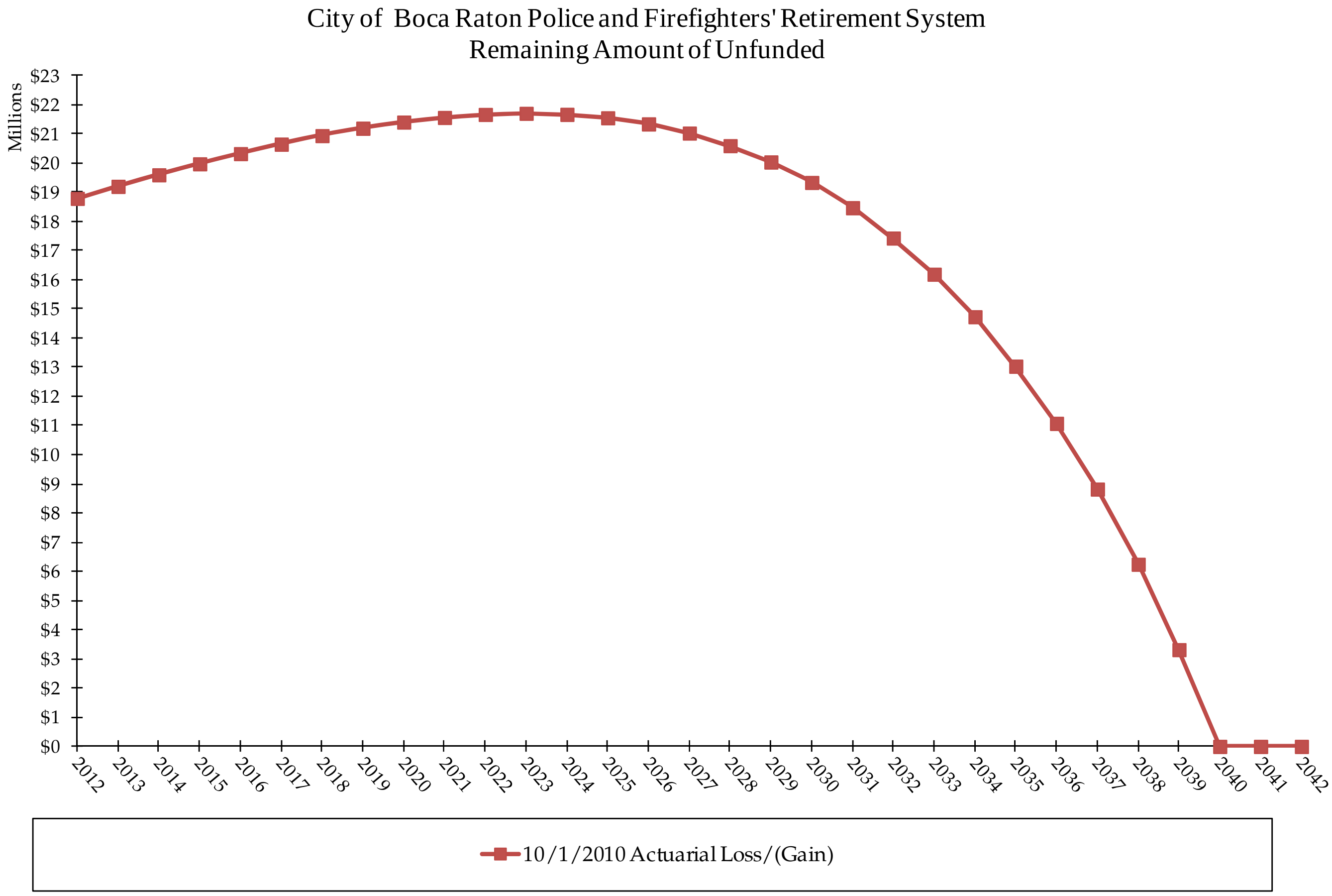
10/1/2009 Actuarial Loss/(Gain)

City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded




City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
Millions
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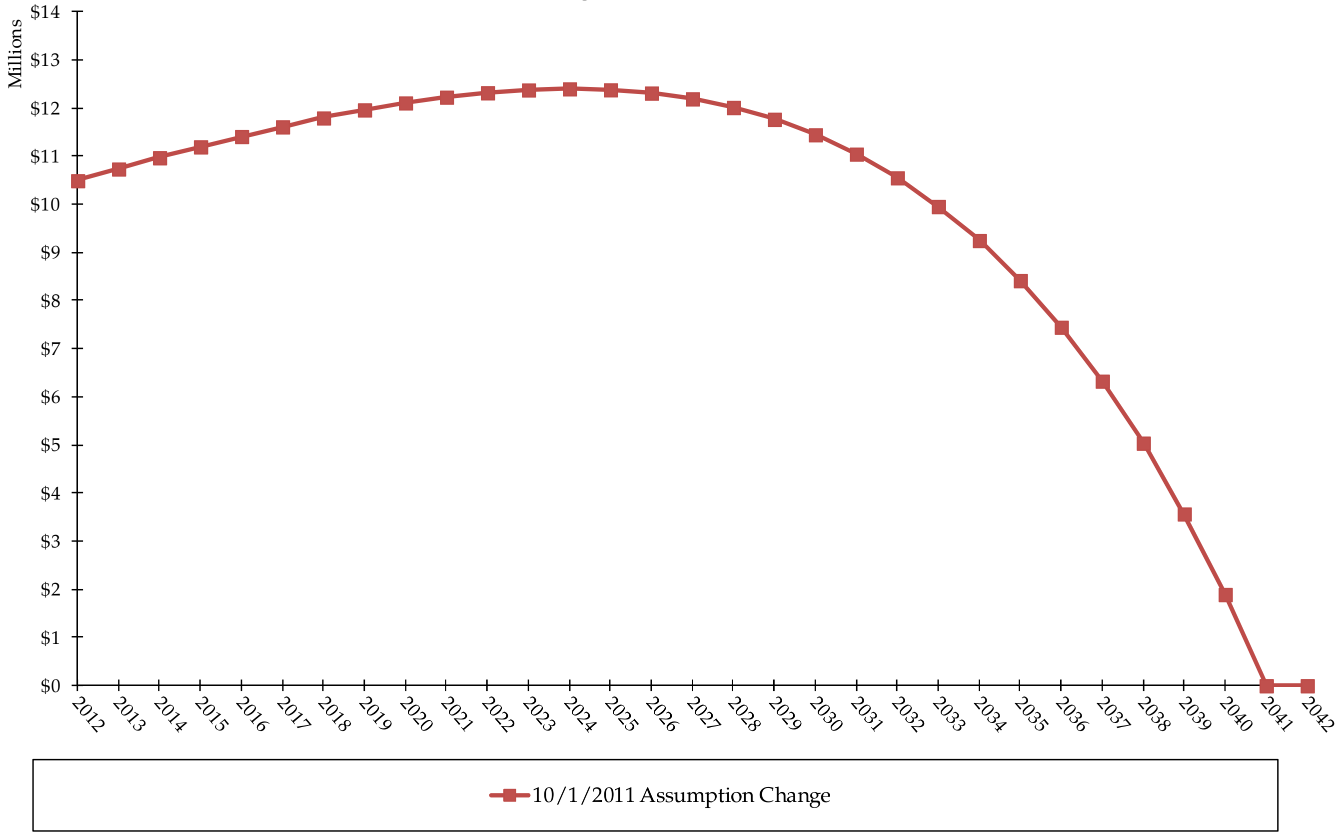
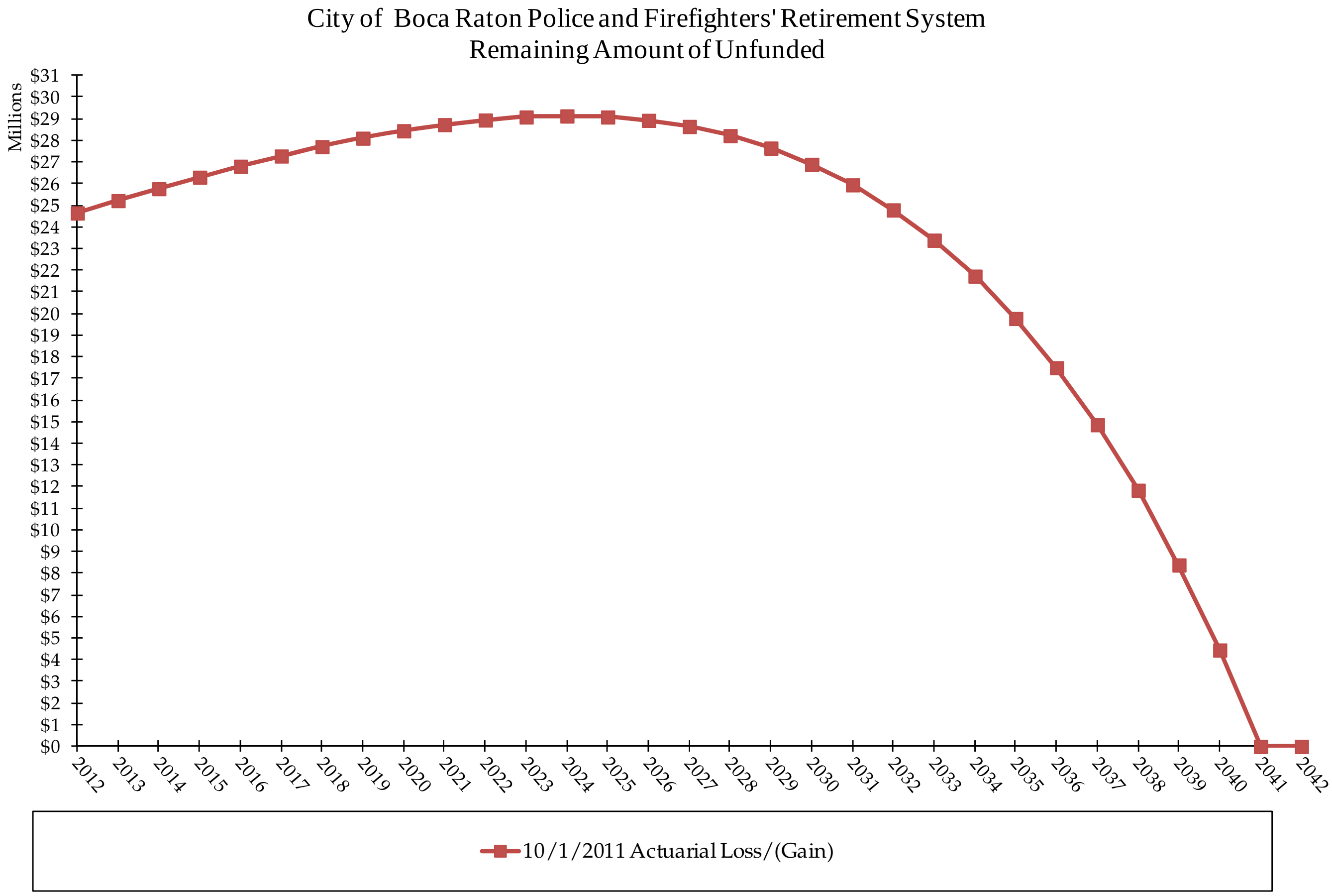
10/1/2010 Actuarial Loss/(Gain)

City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded




City of Boca Raton Police and Firefighters' Retirement System
Remaining Amount of Unfunded
Millions
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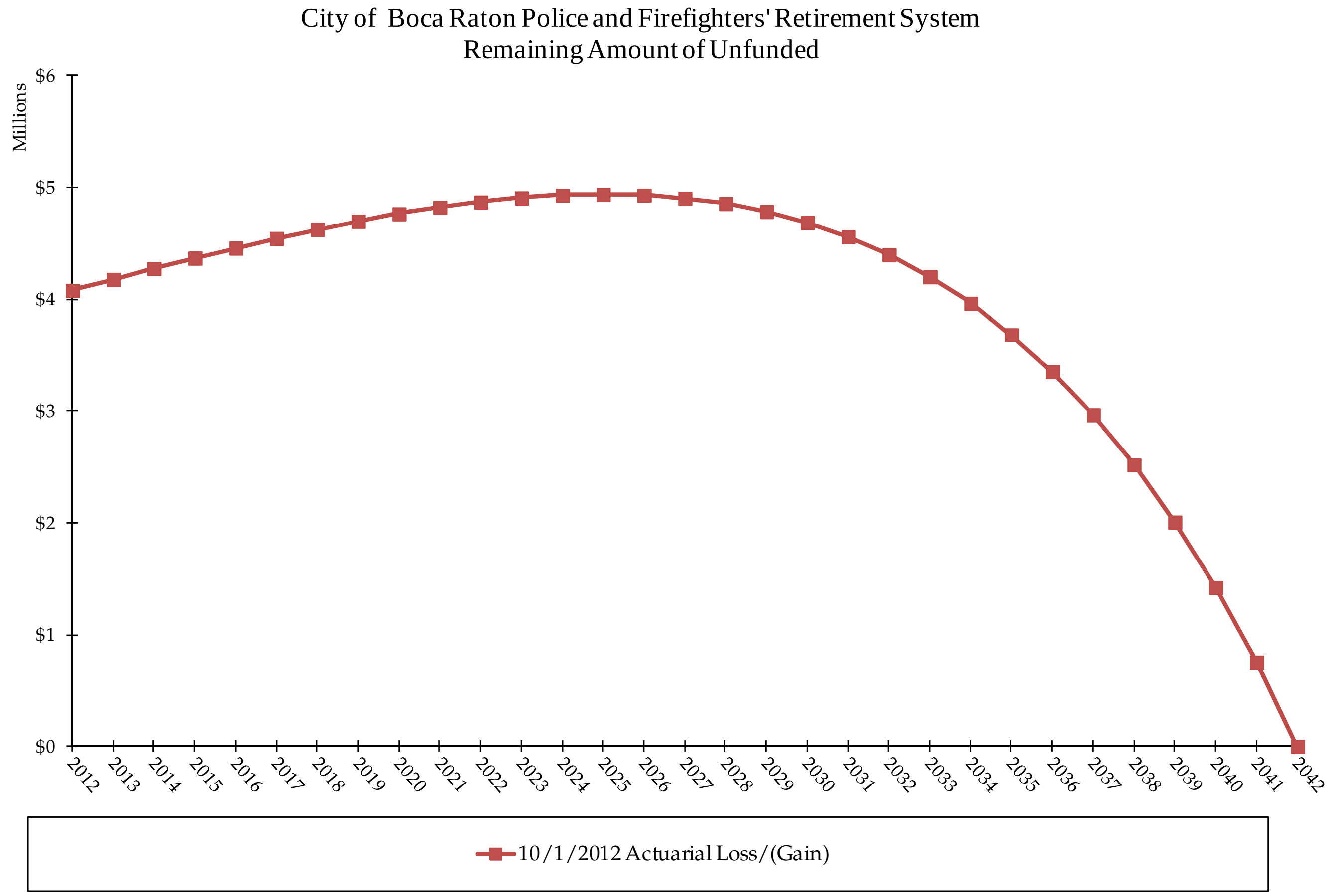
10/1/2011 Actuarial Loss/(Gain)



Actuarial Concepts

SECTION 2

Pension Funding, Pension Reform Options and Recent Pension Reform

Pension Funding Law

- State law requires that defined benefit pension plans be funded on a **“sound actuarial basis”**
- This means the cost of current benefits cannot be shifted to future taxpayers.
- City is ultimately responsible for paying current pension costs (“normal cost”) plus amortizing unfunded liabilities over period of not more than 30 years.
- City bears the risk of pension fund investment losses.

Pension Cost Components

1. **Normal Cost** – ongoing cost of benefits, with no UAAL (unfunded actuarial accrued liability)
2. **UAAL** Amortization Payment to cover past:
    - Actuarial losses
    - Plan improvements
    - Changes in actuarial assumptions & methods

What Are the Options to Reduce City Pension Costs?

- No “silver bullet”
- Keep current City pension plans, but:
  - Reduce benefits, and/or
  - Increase employee contributions
- Terminate, freeze or close exiting pension plans, and set up lower cost plans

Pension Reform Options

- Join FRS
- Set up Defined Contribution (DC) plan
- Reduce Benefits for New Hires
- Reduce Benefits for All Employees
- Hybrid Plan
- Increase Employee Contributions and/or Cost-Sharing

Key Concepts

- **“Close”** – existing plan closed to new members; current members stay in existing plan until they retire or leave the city; future employees join new plan.
- **“Freeze”** - accrued benefits of current employees in existing plan “frozen” and paid out at retirement; all current and future employees join new plan.
- **“Terminate”** – existing plan liquidated; accrued benefits paid out to plan members; City responsible for any deficit; all current and future employees join new plan.

Join FRS for New Hires

Advantages	Disadvantages
• Reduced cost over time (FRS rates are going up)	• No immediate savings -- may take many years to achieve cost savings; City still must pay off current plan liabilities
• Standardized FRS benefits	• Lose premium tax revenues immediately
• 3% employee contribution	• Portability – City employees can move to another FRS employer and take their pension with them
• Portability – easier for City to attract employees from other FRS agencies	• State legislature sets benefits and contributions
• Gets City out of pension business (eventually)	

Join FRS for All Employees

Advantages	Disadvantages
• Reduced city cost in shorter time (but FRS rates are going up)	• Current City pension plans must be terminated or frozen
• Standardized FRS benefits	• City still must pay off current plan liabilities
• 3% employee contribution	• Lose premium tax revenues immediately
• Portability – easier for City to attract employees from other FRS agencies	• Portability – City employees can move to another FRS employer and take their pension with them
• Gets City out of pension business (eventually)	• State legislature sets benefits and contributions

Reduce Benefits for New Hires (2 Tier Plan)

Advantages	Disadvantages
• Reduced cost over time	• No immediate savings -- may take many years to achieve cost savings
• Current employees keep current benefits	• Creates lower level of benefits for new hires
• Can be designed to keep premium tax	• New hires can be expected to press for greater benefits
	• City stays in pension business

Reduce Future Benefits for All Employees

Advantages	Disadvantages
• Immediate cost savings	• Reduces future benefits for current employees (employees keep what they have already earned)
• Reduces UAAL	• City stays in pension business
• Same benefits for all employees going forward	
• Can be designed to keep premium tax	

Defined Contribution Plan

Advantages	Disadvantages
• Predictable employer costs	• Employees bear investment risk
• City does not bear investment risk	• Possible that DC benefits will run out while employee is still alive
• Appeals to younger, mobile employees	• No inflation protection (COLA)
• Portability – DC account balance may be “rolled over” to an IRA or other retirement plan	• Portability – employees can easily move to another employer and take their DC balance with them
• Lower admin. costs	• Loss of premium tax revenues
• No actuarial liabilities	

Hybrid Plan

- **DB plan plus separate DC plan**
  - DB plan provides guaranteed "base" benefit (eg. 1.25%)
  - DC plan reduces risk and cost to City
- **DB plan plus DC plan – variable DC contribution**
  - If DB cost goes up, city contribution to DC plan goes down
- **"Variable Annuity" DB Plan**
  - If DB cost goes up, DB benefit goes down (eg. multiplier reduced from 2% to 1%)
- Hybrid plan results in sharing of risk and cost between the City and employees

Increase Employee Contributions or Cost – Sharing

- One percent increase in employee contribution = one percent reduction in City contribution
- Legal issue: Ch. 175/185 says employee contributions can be increased <u>only</u> if union agrees (but equivalent pay reduction can be imposed).
- Cost sharing: if City contribution goes up, employees pay one-half of increase

2011 Florida Retirement System Changes

Changes for current members:

- 3% employee contribution eff. 7/1/11 (was zero)
- No COLA for service after 7/1/11 (was 3%)

Changes for new hires:

- Delayed normal retirement age
  - Regular: age 65 or 33 years service (was age 62 or 30 years serv.)
  - Special Risk: age 60 or 30 years service (was age 55 or 25 yrs serv.)
- Average final compensation: highest 8 years (was high 5)
- 8 year vesting period* (was 6 years)
- DROP interest = 1.3% for members who enter DROP after 7/1/11 (was 6.5%)

Pension Reform: What Florida Cities Have Done

Miami Beach (2010) – All Employees

- Wage freeze
- Pension changes for current employees:
  - Increased employee pension and health plan contributions by 2%
  - 5 year final averaging period (phased in)
  - Reduced pension benefits for new hires

Pension Reform:
What Florida Cities Have Done

<u>Miami (2010) – Pension Changes (All Employees)</u>*
[Financial urgency declared – City Commission adopted wage and benefit reductions 8/31/10]:

- Later normal retirement age (to "Rule of 70" with min. age 50 from Rule of 64/68)
- 5 year average final compensation (was highest year)
- Reduce benefit formula for future service (to 3% from 3.5% after 15 yrs)
- Normal form of benefit: life and 10 years certain (PF); life annuity (General)
- $100,000 cap on benefits

* Litigation pending

Pension Reform:
What Florida Cities Have Done

<u>Palm Bay (2011) – Fire</u>

- 3 year wage freeze
- Reduction in pension benefits for <u>current</u> employees:
  - ➢ Reduction in supplemental benefit (from $25 to $12 per month per year of future service)
- Reduction in pension benefits for <u>future</u> employees:
  - ➢ Reduced multiplier - 3.2% after 20 yrs (was 5% after 20 yrs)
  - ➢ 2% COLA deferred 6 yrs (was 3%)
  - ➢ Line of duty disability benefit - 66% (was 75%)
  - ➢ Stop/Restart – increased premium tax "frozen amt. from $437K to $825K (can be used each year to offset City contribution); also one-time transfer of $825K excess premium tax reserve to reduce city contribution

Pension Reform: What Florida Cities Have Done

<u>Hollywood (2011) – All Employees</u> [City declared financial urgency; pension changes approved by referendum on 9/13/11]*

- Pension benefits frozen for <u>all</u> employees
- Pension changes for <u>current and future</u> employees:
  - Delayed normal retirement date (Police/Fire - age 55 w/10 yrs or age 52 w/25 yrs; General – age 65 or age 62 w/25yrs or age 60 w/30yrs)
  - Reduced benefit multiplier (2.5% - police/fire; 2.0% - general)
  - 5 year final averaging period (was 3 years)
  - No COLA for future service
  - No DROP

* Litigation pending – police/fire

Pension Reform:
What Florida Cities Have Done

<u>Naples (2012) – Police</u> [Agreement with FOP ratified 10/11; pension changes implemented in March 2012]

- Pension changes for <u>current and future</u> employees:
  - Benefits frozen
  - Multiplier reduced from 3.63% to 3.0%
  - Final averaging period lengthened from 3 to 8 years
  - COLA eliminated (was 3% per year from age 55 to 62)
  - Salary reduced to exclude leave payouts
  - Normal retirement delayed for future employees to age 60 with 8 yrs service or 30 yrs service (was age 50 or 25 yrs service)
  - New DROP plan – 1.3% interest on DROP account

Pension Reform:
What Florida Cities Have Done

Town of Palm Beach (2012) – All Employees

- Pension benefits frozen
- Pension changes for current and future employees:
  - “Hybrid Plan “ - Defined contribution plan on top of DB plan
  - Reduced multiplier for future service under DB Plan (to 1.25%)
  - Delayed normal retirement date (from age 50 with 10 yrs service or 20 yrs service for police & fire, and age 55 or 30 yrs service for general; to age 65 for all employees (but DC plan distributions may begin earlier)
  - Automatic joint & survivor annuity replaced with life annuity (member may purchase survivor benefit)
  - No COLA
  - Town has withdrawn from Ch. 175 & 185

Pension Reform:
What Florida Cities Have Done

<u>Sarasota (2011) – Police</u> [City Commission took final action to resolve impasse on 10/17/11; implemented July 2012]

- Pension changes for current and future employees:
  - 5 year final averaging period (was 3 years)
  - Reduce COLA from 3.2% beginning one year after retirement to 1.0% beginning at age 65
  - Overtime pay included in pensionable earnings limited to 300 hours per year
  - Standard form of benefit: 10 years certain & life (was 67% automatic spouse survivor benefit for life of spouse)
  - Reduce DROP interest to 2.0% (was 6.5%)

Pension Reform:
What Florida Cities Have Done

<u>Coral Gables (2012) – Police</u> [City Commission took final action to resolve impasse on 9/11/12]

- Pension changes for <u>current and future</u> employees:
  - ➢ 5 year final averaging period (was 3 years)
  - ➢ Reduce multiplier to 2.5% after 10 years of service (was 3%)
  - ➢ Reduce definition of pensionable earnings to exclude all OT and leave payouts
  - ➢ Defer normal retirement date to age 55 w/10 years of service or 25 years of service regardless of age (was “Rule of 70”)
  - ➢ Eliminate early retirement
  - ➢ 5% Reduction in pay (in lieu of increase in member pension contribution

Pension Reform:
What Florida Cities Have Done

Port Orange – Fire [Implemented 12/20/12]

- Employee contribution increased by 7% (from 0.5% to 7.5%)
- Reduced pension benefits for current and future employees
  - Normal retirement date – changed to age 52 with 25 yrs service or age 55 with 10 yrs service (was 20 and out). For vested members: alternate normal retirement date of age 48 with 25 yrs service.
  - Reduced pensionable earnings (exclude overtime, incentive pay and specialty pay)
  - Extended final averaging period from 3 to 5 years
  - Reduced maximum benefit to lesser of 90% or $95,000
  - Reduced COLA
  - Reduced DROP earnings

Pension Reform:
What Florida Cities Have Done

<u>Port Orange – Fire</u> - Continued

Reduced benefits for <u>new hires</u>:

- 2.5% multiplier
- Maximum benefit: 80%
- No COLA
- No DROP
- No supplemental benefit

Pension Reform:
What Florida Cities Have Done

<u>Palm Beach Gardens (2012) – Fire</u> [Changes agreed to by IAFF and implemented in 2012]

- Pension changes for <u>current and future</u> employees:
  - Redefine pensionable compensation to base pay (was total comp.)
  - Reduce COLA from 3.0% at age 55 to 1.5% for future service
  - 75% maximum benefit cap (was 100%)
  - Premium tax transfer from share plan - $507K
  - First year savings (reduction in City contribution): **$1.15 million**

Pension Reform: What Florida Cities Have Done

Palm Beach Gardens (2012) – Police [Changes imposed by City Council and implemented in 2012]

- Pension changes for current and future employees:
  - Reduce multiplier from 3.5% to 2.75% for future service
  - Redefine pensionable compensation to base pay (was total comp.)
  - Eliminate COLA (was based on actuarial gains)
  - 75% maximum benefit cap (was 100%)
  - Defer normal retirement to age 59 with 10 years (was 20 and out)
  - First year savings (reduction in City contribution): **$1.1 million**

Pension Reform:
What Florida Cities Have Done

<u>**City of Oakland Park (2013) – Firefighters**</u> [imposed by City Commission and implemented in February 2013]

- Pension changes for <u>current and future</u> employees:
  - Pension Benefits Frozen
  - Multiplier reduced to 2.25% (was 3% for first 10 yrs, 4% for next 10 yrs, and 3% thereafter)
  - Normal retirement date changed to age 55 w/10 yrs service or age 52 w/25 yrs service (was 25 and out)
  - Eliminate COLA
  - Reduce DROP period to 3 years (was 5 years)
  - Close share plan

The preceding pages are excerpts from a presentation at the FGFOA Annual Conference June 24, 2013 “Pension Reform Primer” by James W. Linn, pension attorney with Lewis, Longman and Walker, P.A.

SECTION 3

Minimum Benefits under F.S. 175 and 185 and a comparison to FRS

SUMMARY COMPARISON OF CHAPTERS 175/185, THE POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT TRUST FUNDS AND CHAPTER 121, THE FLORIDA RETIREMENT SYSTEM

	BENEFIT ELEMENT	Chapter 175 - Firefighters Minimim Benefits	Chapter 185- Police Officers Minimum Benefits	Chapter 121- Florida Retirement System Pension Plan (DB) - Special Risk Class
A.	NORMAL RETIREMENT			
	1. Eligibility:			
	Age	Age 55 & 10 or 52 & 25 years service	Same	Age 55 & 6 years of Special Risk Class service or 25 years of Special Risk Class service or age 52 & 25 years of service which may include Special Risk Class service and up to 4 years of wartime military service if initially enrolled on or after July 1, 2011. Age 60 & 8 years of Special Risk Class service or 30 years of Special Risk Class service or age 57 & 25 years of service which may include Special Risk Class service and up to 4 years of wartime military service if initially enrolled before July 1, 2011.
	Military Service	5 year limit, must return within 1 year. No contribution required.	Same	Under the provisions of USERRA member may receive credit for up to 5 years of active military service as a military leave of absence paid by the employer. Additionally, if a member before 1/1/87 up to 4 yrs wartime military service, otherwise up to 5 years of active duty time as out-of-state service; employee contributions required.
	2. Amount of Benefit:	2% per year of service.	Same	3.00% of AFC per year of service for active members
	3. Average Final Compensation:	For full-time, the best 5 of the last 10 years; for volunteers, the greater of the average of the 10 best years or the career average.	Best 5 of last 10 years.	If intially enrolled before July 1, 2011, best 5 fiscal years salary during member's covered employment. If initially enrolled on or after July 1, 2011, best 8 fiscal years salary during member's covered employment.
	4. Normal Form	Life or 10 years Certain.	Same	Option 1 - Life Annuity
	Payment Options:	1. Life Annuity	Same	A monthly benefit payable for lifetime of member. Upon death, the monthly benefit will stop.
		2. Joint & Survivor	Same	Option 2 - Life or 10 years certain from date of retirement.
		3. Other, at discretion of Board of Trustees.	Same	Provides a reduced monthly benefit payment to member for life; if the member dies within 120 months after the effective retirement date, the same amount is paid to beneficiary for the balance of the 120 months. No further survivor benefits are then payable.
				Option 3 - Joint & Survivor
				Provides a reduced monthly benefit payable for member's lifetime. Upon death, the joint annuitant will receive a lifetime monthly benefit payment in the same amount as the member was receiving. Special provisions for children under age 25 and disabled children.
				Option 4 - Joint & Survivor
				Provides an adjusted monthly benefit payment to member while both member and member's joint annuitant are living. Upon death of either, the monthly benefit payment to the survivor is reduced to two-thirds of the monthly benefit received when both were living.
	Relation to Social Security:	None	Same	Social Security Required.
B.	EARLY RETIREMENT	Age 50 with 10 years service. Adjusted, reduced 3% for each year member's age at retirement is under member's normal retirement age.	Same	If member has at least 6 years service if intitially enrolled before July 1, 2011, or at least 8 years if initially enrolled on or after July 1, 2011; and is within 20 years of normal retirement age, the monthly benefit will be reduced 5% for each year member's age at retirement is under member's normal retirement age (55 or 60, respectively).
C.	DEFERRED RETIREMENT OPTION PROGRAM (DROP)	None	Same	DROP is an alternative method for payout of retirement benefits for up to 60 months. All vested FRS members who have reached normal retirement are eligible.
	Compulsory Retirement:	None	Same	Same
	Vesting Rights:	10 years.	Same	6 years if initially enrolled before July 1, 2011, or 8 years if initially enrolled on or after July 1, 2011.
	Relation to Social Security:	None	Same	Social Security Required.
D.	DISABILITY BENEFITS			
	1. In-Line-Of-Duty:			
	a. Eligibility:	Day one coverage.	Same	Same

SUMMARY COMPARISON OF CHAPTERS 175/185, THE POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT TRUST FUNDS AND CHAPTER 121, THE FLORIDA RETIREMENT SYSTEM

BENEFIT ELEMENT	Chapter 175 - Firefighters Minimim Benefits	Chapter 185- Police Officers Minimum Benefits	Chapter 121- Florida Retirement System Pension Plan (DB) - Special Risk Class
b. Type of Disability:	Total & Permanent: cannot render useful service as a firefighter.	Total & Permanent; cannot render useful service as a police officer.	Total and permanent from all gainful employment; cannot render useful service as an officer or employee regardless if public or private employment.
c. Type of Benefit:			
(1) Amount:	2% per year of AFC	Same	3.00% per year of AFC.
(2) Minimum:	Not less than 42% of AMC	Same	Not less than 65% of AFC.
(3) Maximum:	Accrued benefit if more than 42%.	Same	Accrued benefit if more than 65%, but limited to 100% of AFC at retirement.
(4) Duration:	Life with 120 months certain, or member may choose optional forms.	Same	Life or duration of disability, if less.
(5) Survivor Benefits:	1. Balance, if any, of 120 payments.	Same	Same choices as normal retirement applying disability equivalent actuarial factors.
	2. If optional form selected by retiree, then payments continue to beneficiary for their lifetime.	Same	N/A
2. Non-Line-Of-Duty:			
a. Eligibility:	10 years of contributing service.	Same	8 years of creditable service.
b. Type of Disability:	Total and permanent; cannot render useful service as a firefighter.	Total and permanent; cannot render useful service as a police officer.	Total and permanent from all gainful employment; cannot render useful service as an officer or employee regardless if public or private employment.
c. Type of Benefit:			
(1) Amount	Same as "In-Line-Of-Duty"	Same	Same as "in-Line-Of-Duty".
(2) Minimum	Not less than 25% of AMC.	Same	Not less than 25% of AFC.
(3) Maximum	The accrued benefit if more than 25% of AMC.	Same	Same, but limited to 100% of AFC at retirement.
(4) Duration	Same as "In-Line-Of-Duty"	Same	Same as "In-Line-Of-Duty"
(5) Survivor Benefits:	Same as "In-Line-Of-Duty"	Same	Same as "In-Line-Of-Duty"

SUMMARY COMPARISON OF CHAPTERS 175/185, THE POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT TRUST FUNDS AND CHAPTER 121, THE FLORIDA RETIREMENT SYSTEM

	BENEFIT ELEMENT	Chapter 175 - Firefighters Minimim Benefits	Chapter 185- Police Officers Minimum Benefits	Chapter 121- Florida Retirement System Pension Plan (DB) - Special Risk Class
E.	DEATH BENEFITS			
	1. Before Retirement:			
	a. In-line-of-duty:			
	(1) Lump Sum:			N/A
		(a) 100% refund of employee contribution without interest.	Same	Same
		(b) If insurance purchased, larger of employees contributions or policy death benefits.	Same	N/A
	(2) Survivor Benefits	If a member has at least 10 years of contributing service, the beneficiary is entitled to the benefits otherwise payable to the officer at the early or normal retirement date.	Same	Surviving spouse or children eligible for 1/2 of last monthly salary from day one. If member is vested, choice between lifetime monthly benefit calculated as retired on date of death or 1/2 of last monthly salary, whichever is greater.
	b. Non-service-incurred:			
	(1) Lump Sum:			N/A
		(a) 100% refund of employee contribution without interest.	Same	Same
		(b) If insurance purchased, larger of employee contribution or policy death benefits.	Same	N/A
	(2) Survivor Benefit:	If a member has at least 10 years of contributing service, the beneficiary is entitled to the benefits otherwise payable to the officer at the early or normal retirement date.	Same	If member is vested and provided the beneficiary qualifies as a joint annuitant, a lifetime monthly benefit is payable as if member retired on date of death or the retirement may be deferred to start at a later date to lessen the early retirement reduction. Early retirement reduction based upon either age or years of service if the member had 20 or more years of service at death.
	2. After Retirement:			
	a. Lump Sum	None	Same	Same
	b. Survivor's Benefit			
		i. Balance, if any, of 120 payments to beneficiary under normal form.	Same	In accordance with option selected.
		ii. In accordance with option, if elected, for the lifetime of the beneficiary.	Same	N/A
F.	COST OF LIVING INCREASE	None	Same	Retirees receive an annual 3% cost-of-living increase in July of each year based on their June benefit amount if retired before August 1, 2011, or no cost-of-living credit if service is earned on or after July 1, 2011. For retirements effective August 1, 2011, with service earned on and after July 2011, the cost-of-living adjustment is a proportion of 3% based on service before and after July 1, 2011. Members initially enrolled on or after July 1, 2011, will not have a cost-of-living adjustment after retirement

03-3

SUMMARY COMPARISON OF CHAPTERS 175/185, THE POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT TRUST FUNDS AND CHAPTER 121, THE FLORIDA RETIREMENT SYSTEM

	BENEFIT ELEMENT	Chapter 175 - Firefighters Minimim Benefits	Chapter 185- Police Officers Minimum Benefits	Chapter 121- Florida Retirement System Pension Plan (DB) - Special Risk Class
G.	HEALTH INSURANCE SUBSIDY	Trust funds may be established by payment to the fund of an amount equivalent to one-half of the net increase over the previous tax year in the premium tax funds	Same	Retirees are eligible to receive a monthly supplemental payment of a minimum of $30.00, based on $5 per year of service, and a maximum of $150.00. While paid at the same time as the retirement benefit, this benefit is separate from the FRS benefit.
H.	SEPARATION (OR WITHDRAWAL) BENEFITS			
		1. 100% refund of employee's contribution, without interest, less any benefits paid. No further benefits payable.	Same	If less than 6 years of service if initially enrolled before July 1, 2011, or if less than 8 years if initially enrolled on or after July 1, 2011; only eligible for refund of member contributions, if any,
		2. After 10 years service, may leave accrued contributions in fund and upon attaining age 50, may retire at the actuarial equivalent of amount of such retirement income.	Same	If vested, member may elect to receive refund of member contributions, defer benefit to normal retirement (age 55 or age 60) or commence at earlier date reduced for early retirement (5% for each year age is under 55 or age 60 depending if initial enrollment date is before July 1, 2011, or on/after July 1, 2011).
		3. May leave contributions in fund for up to five years pending rehire. Will receive credit for all years of service.	Same	Service credit remains credited to the member indefinitely. Refunded service credit may be purchased after one year of re-employment.
I.	NON-PARTICIPATION			
		Mandatory. Chiefs may be allowed to opt-out by local ordinance.	Mandatory. Chiefs may be allowed to opt-out by local ordinance.	Mandatory for regularly established positions.
J.	CONTRIBUTIONS TO RETIREMENT FUND			
	1. By Employee:	5% of Salary. (Minimum of 1/2 of 1%).	Same	Noncontributory before July 1, 2011, 3% employee contribution effective on and after July 1, 2011.
	2. By Employer	By city, or other sources, an amount necessary to pay the normal cost and fund the actuarial deficiency over a 40 year basis.	Same	13.76% effective July 1, 2012. These rates do not include the 1.11% Health Insurance Subsidy contribution and the 0.03% administrative fee for the administration of the FRS Investment Plan and the FRS Financial Guidance Program.
	3. By Others			
		a. The State contributes 1.85% of gross premiums collected on property insurance covering property within the corporate limits of the municipality or boundaries of the fire control district.	a. The State contributes .85% of gross premiums collected on automobile, burglary and theft, glass, and fidelity bonds covering property within the corporate limits of the municipality or boundaries of the fire control district.	No additional funding is provided other than required retirement contributions by employer and employees.
		b. Fine and forfeitures.	Same	N/A
		c. Gifts, bequest and devises.	Same	N/A
		d. All accretions to the fund.	Same	Same

03-4

SUMMARY COMPARISON OF CHAPTERS 175/185, THE POLICE OFFICERS' AND FIREFIGHTERS' RETIREMENT TRUST FUNDS AND CHAPTER 121, THE FLORIDA RETIREMENT SYSTEM

	BENEFIT ELEMENT	Chapter 175 - Firefighters Minimim Benefits	Chapter 185- Police Officers Minimum Benefits	Chapter 121- Florida Retirement System Pension Plan (DB) - Special Risk Class
K.	INVESTMENT RIGHTS OF BOARD			
		1. Annuity and life Insurance.	Same	Invested by the State Board of Administration (s.215.37, F.S.)
		a. Purchase annuity of life insurance contracts in amounts sufficient to provide, in whole or in part, the benefits to which all participants shall be entitled.	Same	N/A
		2. Bonds		
		a. Any obligation guarantee by U.S. Government.	Same	a. Domestic Equities
		b. Bonds issued by the State of Israel.	Same	b. Foreign Equities
		c. Up to 10% of plan assets in foreign securities.		
		3. Banks:	Same	c. Fixed Income
		a. Time & savings accounts of a national bank, or	Same	d. Real Estate
		b. State bank insured by the Bank Insurance Fund, or;	Same	e. Cash/short term
		c. Any savings & loan association insured by the Savings Association Insurance Fund administered by the FDIC or chartered Credit Union, insured by the National Credit Union Share Insurance Fund.	Same	
		d. Corporate bonds, stocks or other evidences of indebtedness up to a maximum of 50% of assets of the fund, but not more than 5% of the fund assets in the common stock or capital stock of one issuing company.	Same	
L.	ADMINISTRATION	Board of Trustees	Same	Department of Management Services, the Division of Retirement.

SECTION 4

Minimum Benefits under F.S. 175 and 185 and a comparison to CBR

CITY OF BOCA RATON POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

2012 COST STUDY

Comparison of Current Benefit Provisions with State Required Minimums

Benefit Provision	Chapters 175 and 185 Minimum*	Police Officers	Firefighters
Credited Service	Total number of years, and fractional parts of years of service with the municipality or special fire control district	Continuous, (uninterrupted) Service (except for leave and military service) as a qualifying employee measured in years and completed months, excluding service for which Member contributions were refunded and not repaid within 6 months of rehire	
Earnings	Total cash remuneration - Police Fixed monthly compensation - Fire	Total cash remuneration, including regular longevity, assignment, crash-free bonus, pickup contributions, and Section 457 deferred compensation, and including up to 300 hours of overtime compensation per 12-month period (with a limited lookback provision), but excluding other bonuses, accumulated sick time and annual leave, and any other payments	Fixed remuneration, including basic wages, regular longevity, EMT, paramedic, fire inspection, hazardous materials, assignment, acting in a higher capacity, standby, pickup contributions, and IRC Section 457 deferred compensation, but excluding overtime, holiday, state incentive, bonuses, Time Pool pay, accumulated sick time and annual leave, and any other payments
Average Final Compensation (AFC)	Average annual compensation of the five best of the last ten years of credited service	Average Monthly Earnings (AME) during the highest 2 years preceding the date on which the Member retires or terminates	
Normal Retirement			
Eligibility	Earlier of: Age 55 with ten years of credited service, or age 52 with 25 years of credited service	Attainment if age 55 and 10 years of Continuous Service, or completion of 20 years of Continuous Service	
Benefit Amount	2 percent of AFC times years of credited service, (but not to exceed 100% of AFC, per Chapter 112)	3.5% times AME times years of Continuous Service, subject to a maximum of the greater of 87.5% of AME or 2% of AME times years of Continuous Service	3.4% times AME times years of Continuous Service, subject to a maximum of 100% of AME
Normal Form of Benefit	Ten years certain and life (optional forms available)	**Regular Pension**: 10-year certain and life monthly payments. **Supplemental**: Life monthly payments. (Actuarially equivalent optional forms may be elected for one or both benefits, and need not be the same.)	

CITY OF BOCA RATON POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

2012 COST STUDY

Comparison of Current Benefit Provisions with State Required Minimums

Benefit Provision	Chapters 175 and 185 Minimum	Police Officers	Firefighters
Vesting	Ten years of credited service	If termination occurs after the completion of 10 years of Continuous Service, the full accrued retirement benefit is payable at Normal Retirement Date, or, at the Member's option, a refund of accumulated contributions is made.	
Early Retirement			
Eligibility	Age 50 with ten years of credited service	Age 50 with 10 years of Continuous Service	
Benefit Amount	Accrued retirement benefit, actuarially reduced by 3 percent for each year member's age precedes member's normal retirement date	Computed as for Normal Retirement based upon Continuous Service and AME as of Early Retirement Date, but reduced by 0.25% for each month (3% for each year) Early Retirement precedes Normal Retirement	
Disability			
Eligibility	Day 1 coverage for line-of-duty and 10 years of service for non-line-of-duty	**Service Incurred**: Total and permanently disabled in the line of duty, meaning incapacity to perform regular duty as Firefighter or Police Officer. **Non-service Incurred**: Total and permanently disabled not in the line of duty, meaning incapacity to perform regular duty as Firefighter or Police Officer, and completion of at least 10 years of Continuous Service.	
Benefit Amount	Accrued benefit, but not less than 42 percent of average monthly earnings (AME) for line-of-duty and accrued benefit, but not less than 25 percent of AME for non-line-of-duty	**Service Incurred**: 75% of AME as of the date of disability, or the accrued benefit if greater. May be offset by other disability benefits **Non-service Incurred**: 3.25% of AME per year of Continuous Service or the accrued benefit, minimum of 25% of AME (per State requirements) on the date of disability.	
Non-Vested	Refund of contributions without interest (applies only for non-line-of-duty)	Refund of contributions without interest (applies only for non-line-of-duty)	
Normal Form of Benefit	Ten years certain and life (optional forms available)	**Regular Pension**: 10-year certain and life monthly payments. **Supplemental**: Life monthly payments. (Actuarially equivalent optional forms may be elected for one or both benefits, and need not be the same.)	

CITY OF BOCA RATON POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

2012 COST STUDY

Comparison of Current Benefit Provisions with State Required Minimums

Benefit Provision	Chapters 175 and 185 Minimum	Police Officers	Firefighters
Death Benefits			
Prior to Retirement	Less than ten years of service, beneficiary receives refund of contributions without interest Ten or more years of credited service, beneficiary receives accrued retirement benefit at early (actuarially reduced) or normal retirement date payable for ten years certain	**Eligibility – Service Incurred**: Death in the line of duty. **Non-service Incurred**: Death other than in the line of duty after 5 years of Continuous Service. (If less than 5 years, only a $5,000 lump sum is payable; if less than 1 year, only a $2,500 lump sum.). **Benefit – Service Incurred**: If the designated beneficiary is the spouse, the greater of A or B, plus C, plus D, below; otherwise B, plus C, plus D, below: A. To spouse, 75% of AME payable for life, beginning immediately. B. If the Member had at least 10 years of Continuous Service, the accrued benefit, payable for 10 years certain only, beginning when the Member would have reached Early or Normal Retirement Age. C. Minor children receive 7.5% of AME until death, marriage or attainment of age 18 (if full time student, attainment of age 22). Total monthly benefit under A and C not to exceed 90% of AME. Upon death of the surviving spouse, the allowance shall be increased to 15% for each child, subject to a maximum combined total of the greater of 50% AME or the accrued benefit. D. A lump sum of $5,000. **Non-service Incurred**: If the designated beneficiary is the spouse, the greater of A or B, plus C, plus D, below; otherwise B, plus C, plus D, below: A. To spouse, 65% of accrued benefit, with a minimum of 20% of AME payable for life, beginning immediately. B. If the Member had at least 10 years of Continuous Service, the accrued benefit, payable for 10 years certain only, beginning when the Member would have reached Early or Normal Retirement Age (i.e., same as Service Incurred). C. Minor children receive 7.5% of AME until death, marriage or attainment of age 18 (if full time student, attainment of age 22). Total monthly benefit under A and C not to exceed the greater of 50% of AME or the accrued benefit. Upon death of the surviving spouse, the allowance shall be increased to 15% for each child, subject to a maximum combined total of the greater of 50% AME or the accrued benefit. D. A lump sum of $5,000 (i.e., same as Service Incurred).	

CITY OF BOCA RATON POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

2012 COST STUDY

Comparison of Current Benefit Provisions with State Required Minimums

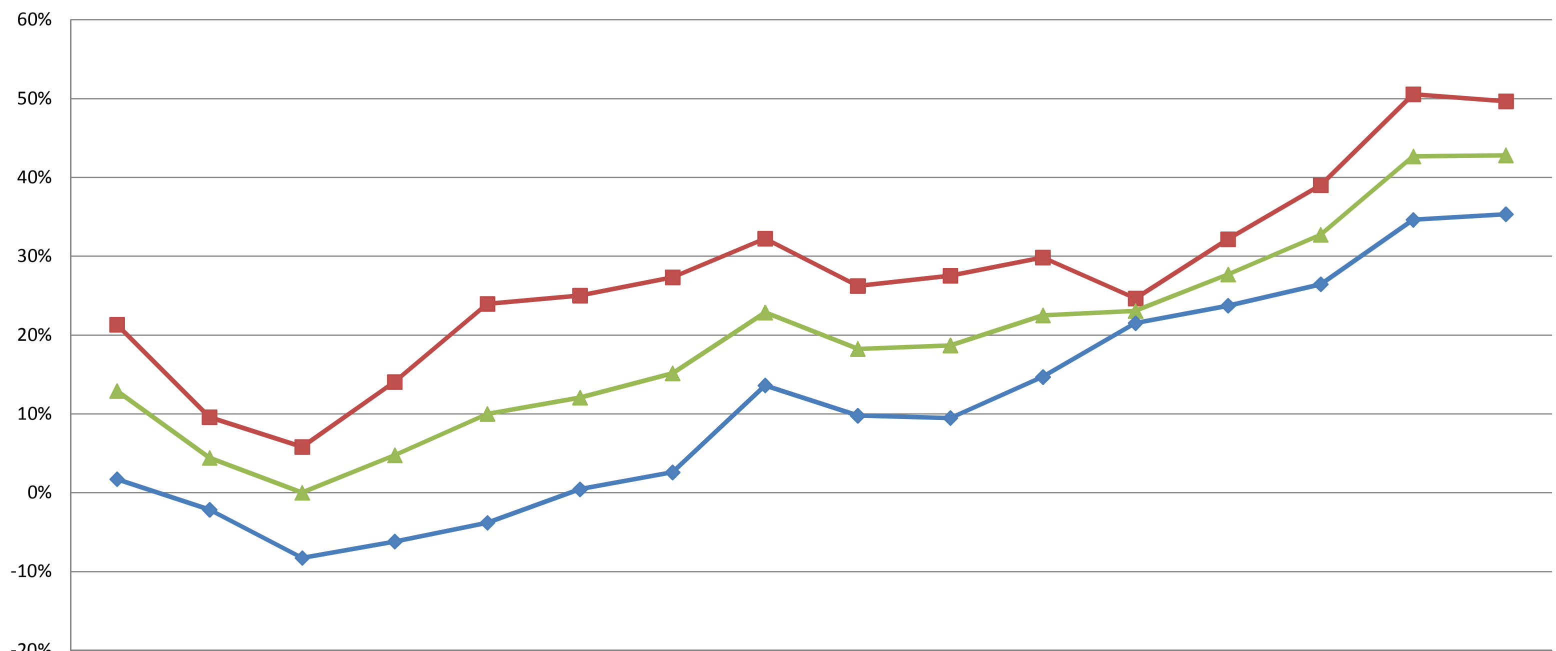
Benefit Provision	Chapters 175 and 185 Minimum	Police Officers	Firefighters
Death Benefits			
Post Retirement	Benefits payable to beneficiary in accordance with option selected at retirement date	Benefits payable to beneficiary in accordance with option selected at retirement date	
Contributions			
Employee	5 percent of earnings (may be reduced by local ordinance / resolution to one-half of 1 percent)	10.2% of annual earnings (9.2% prior to October 26, 2010) (3% interest is paid on refunds of Member contributions. Each Member is guaranteed benefit payments at least equal to his Member contributions plus 3% interest.)	
DROP	Not required	A Deferred Retirement Option Plan (DROP) is available to Members who are eligible for Normal Retirement, with maximum DROP participation of 5 years. DROP accounts are credited with the same overall rate of return on pension fund investments, or DROP Members may elect a self-directed account option. No Disability or Pre-Retirement Death Benefits are provided while a Member is in DROP.	
COLA	None required	Provided to retired, disabled, and terminated Members (after their pensions commence), and to DROP Members, and to all their survivors and beneficiaries, but not those receiving Pre-Retirement Death Benefits and not with respect to the Supplement	
Annual Increase		2% annual COLA commencing 1 year after retirement, or in the case of Disability, 1 year after eligibility for Normal Retirement	3% annual COLA, with the first increase: -With 22 years of service, the later of 1 year after retirement and age 52 -With 21 but less than 22, the later of 2 years & 52 -With 20 but less than 21, the later of 3 years & 52
Supplement	None required	Each Member who retires from the City receives a supplement of $10.50 ($10.00 for retirements prior to October 26, 2010, but after July 19, 1999) per month per completed year of Continuous Service (including DROP service).	

*Taken from the Florida Department of Management Services website on "Minimum Plan Requirements" for participating plans

SECTION 5

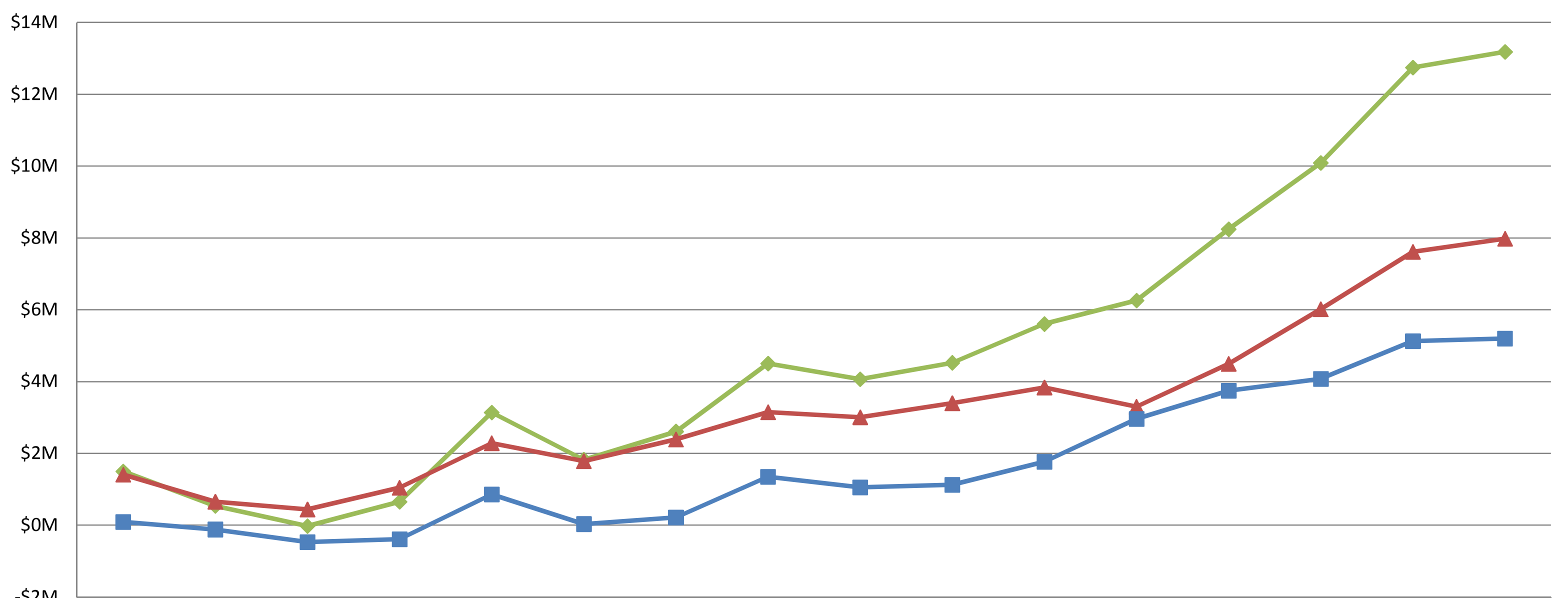
Historical City Pension Contributions and Other Graphs

City of Boca Raton
Police Officers and Firefighters' Retirement System
City Contributions
(As a Percentage of Payroll)



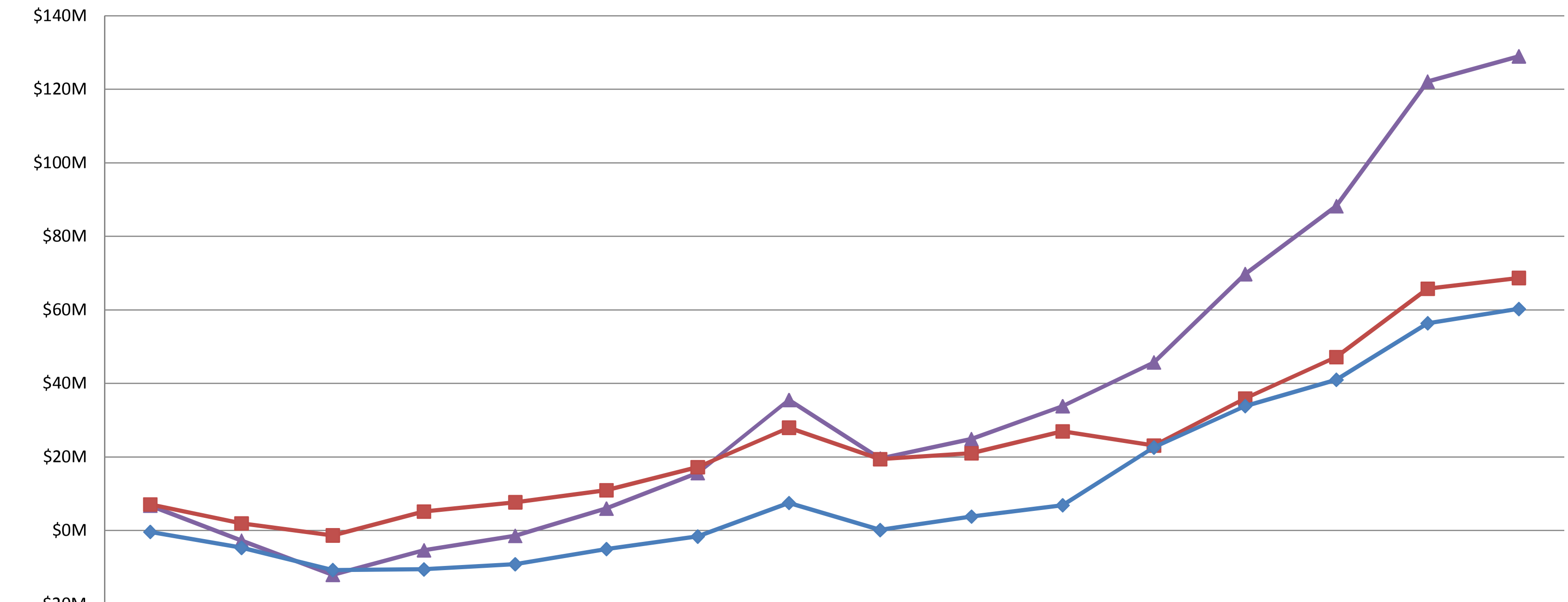
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fire	21.31%	9.58%	5.80%	14.05%	23.96%	25.01%	27.34%	32.24%	26.25%	27.55%	29.85%	24.64%	32.16%	39.01%	50.57%	49.67%
City	12.91%	4.42%	0.00%	4.76%	10.01%	12.08%	15.16%	22.86%	18.26%	18.70%	22.52%	23.06%	27.69%	32.74%	42.67%	42.82%
Police	1.72%	-2.15%	-8.27%	-6.18%	-3.81%	0.44%	2.59%	13.62%	9.78%	9.49%	14.69%	21.52%	23.74%	26.46%	34.63%	35.34%

City of Boca Raton
Police Officersand Firefighters' Retirement System
City Contributions
(In Millions of Dollars)



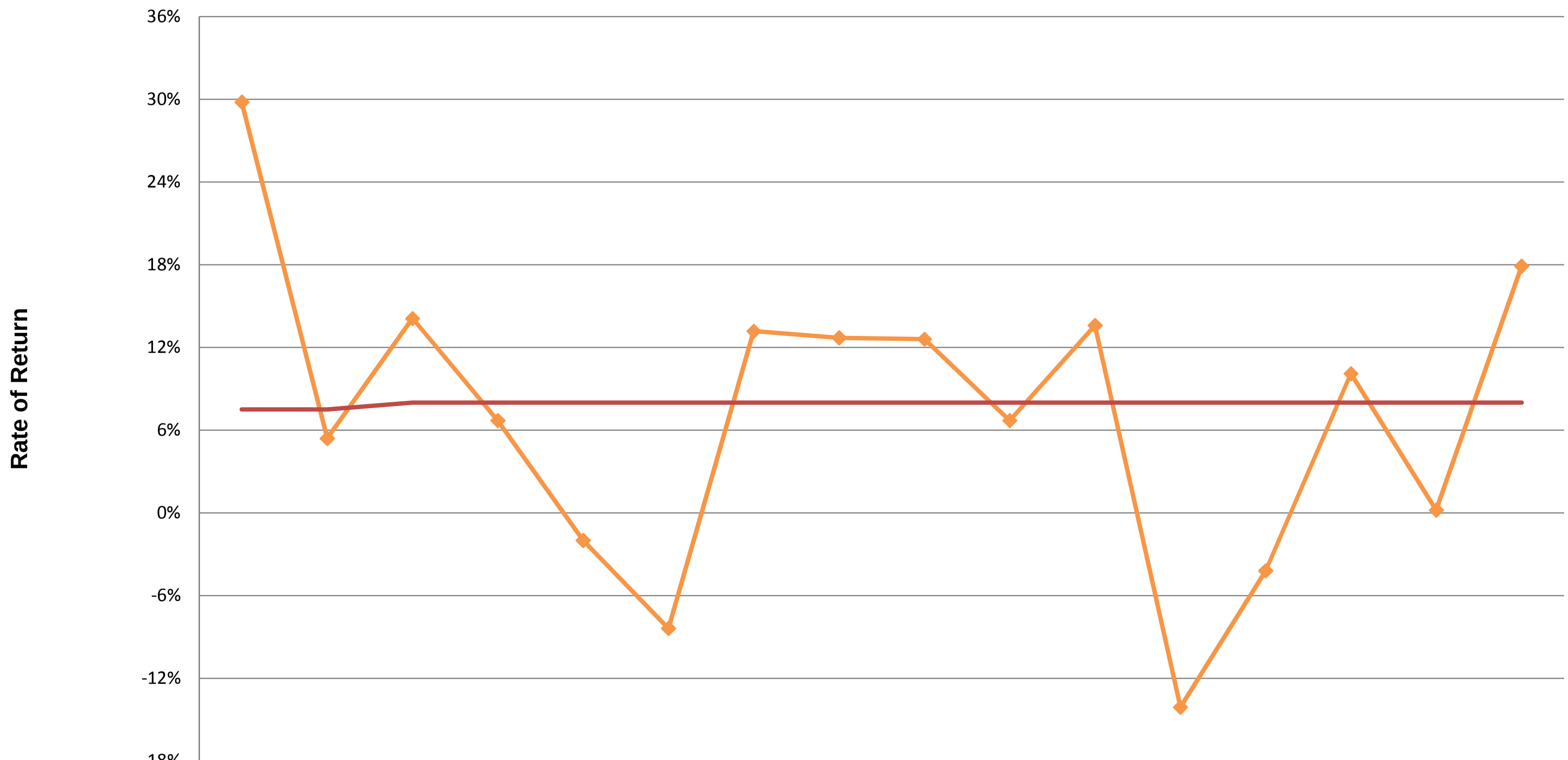
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
City	$1.5	$0.5	$0.0	$0.7	$3.1	$1.8	$2.6	$4.5	$4.1	$4.5	$5.6	$6.3	$8.2	$10.1	$12.7	$13.2
Fire	$1.4	$0.7	$0.4	$1.0	$2.3	$1.8	$2.4	$3.2	$3.0	$3.4	$3.8	$3.3	$4.5	$6.0	$7.6	$8.0
Police	$0.1	-$0.1	-$0.5	-$0.4	$0.9	$0.0	$0.2	$1.4	$1.1	$1.1	$1.8	$3.0	$3.7	$4.1	$5.1	$5.2

City of Boca Raton
Police Officers and Firefighters' Retirement System
Unfunded Actuarial Accrued Liability (UAAL)
(In Millions of Dollars)



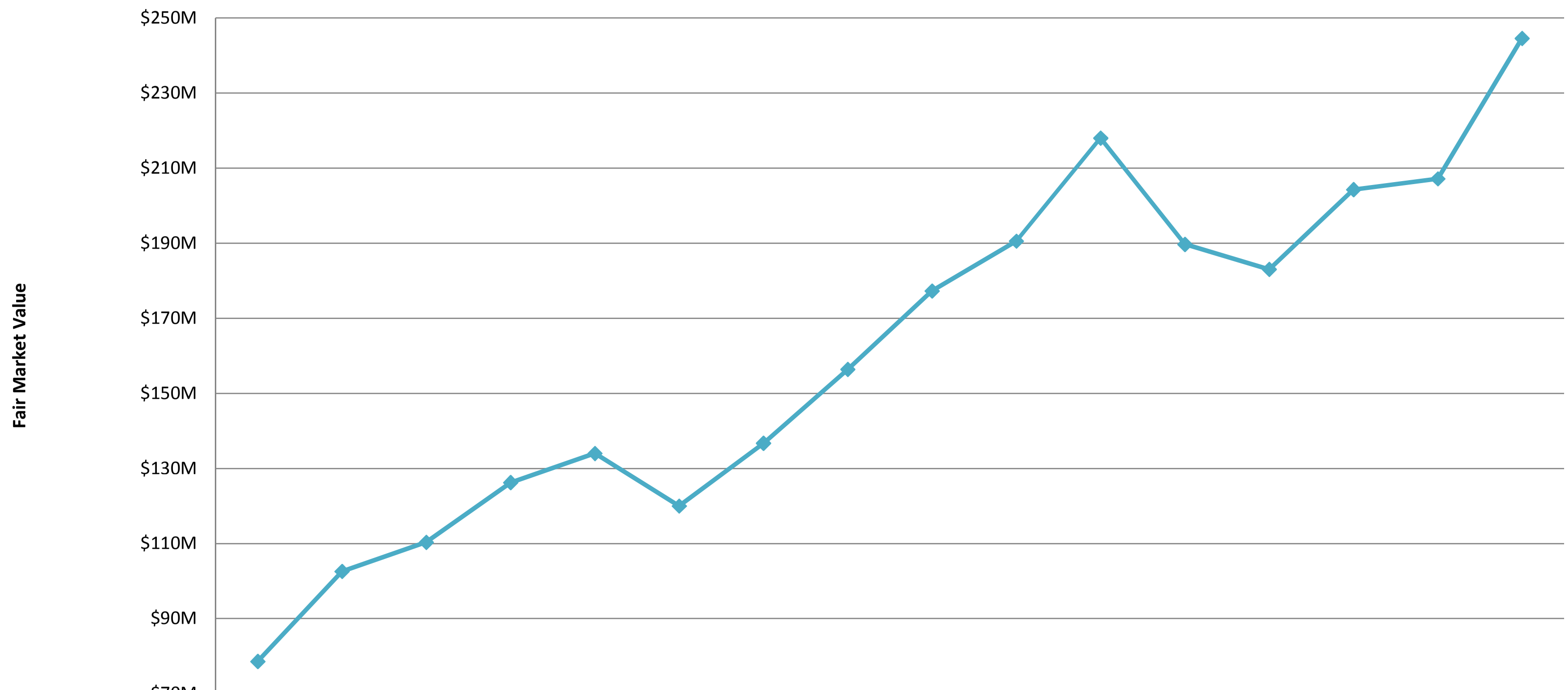
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	$6.8	-$2.7	-$12.0	-$5.3	-$1.4	$6.0	$15.7	$35.5	$19.6	$24.9	$33.9	$45.8	$69.8	$88.2	$122.2	$129.0
Fire	$7.1	$1.9	-$1.3	$5.2	$7.7	$11.0	$17.3	$28.0	$19.4	$21.1	$27.0	$23.1	$35.9	$47.2	$65.8	$68.7
Police	-$0.4	-$4.7	-$10.7	-$10.5	-$9.1	-$5.0	-$1.6	$7.5	$0.2	$3.8	$6.9	$22.6	$33.9	$41.0	$56.4	$60.3

City of Boca Raton
Police Officers and Firefighters' Retirement System
Market Recognized Rate of Return
(Net of Expenses)



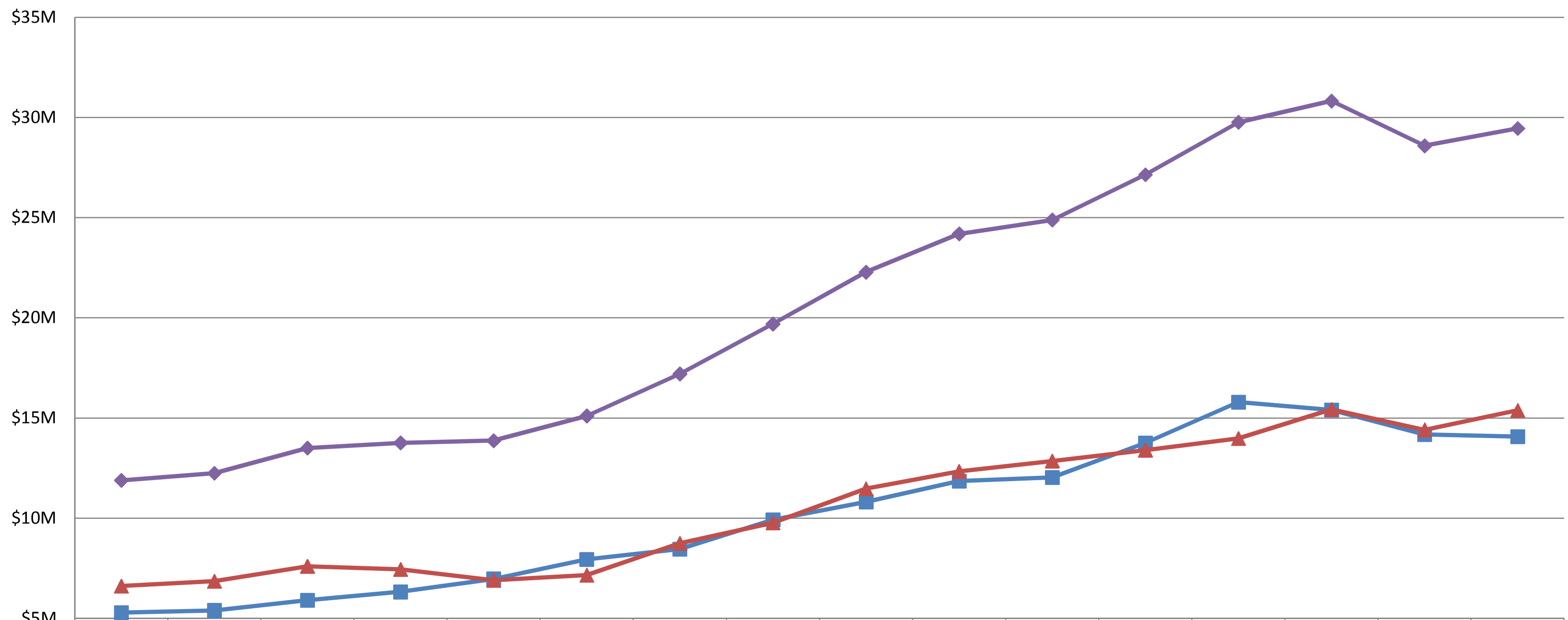
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Recognized ROR	29.80%	5.40%	14.10%	6.70%	-2.00%	-8.38%	13.18%	12.70%	12.60%	6.70%	13.60%	-14.10%	-4.20%	10.10%	0.20%	17.90%
Assumed ROR	7.50%	7.50%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%

City of Boca Raton
Police Officers and Firefighters' Retirement System
Asset Value
(In Millions of Dollars)



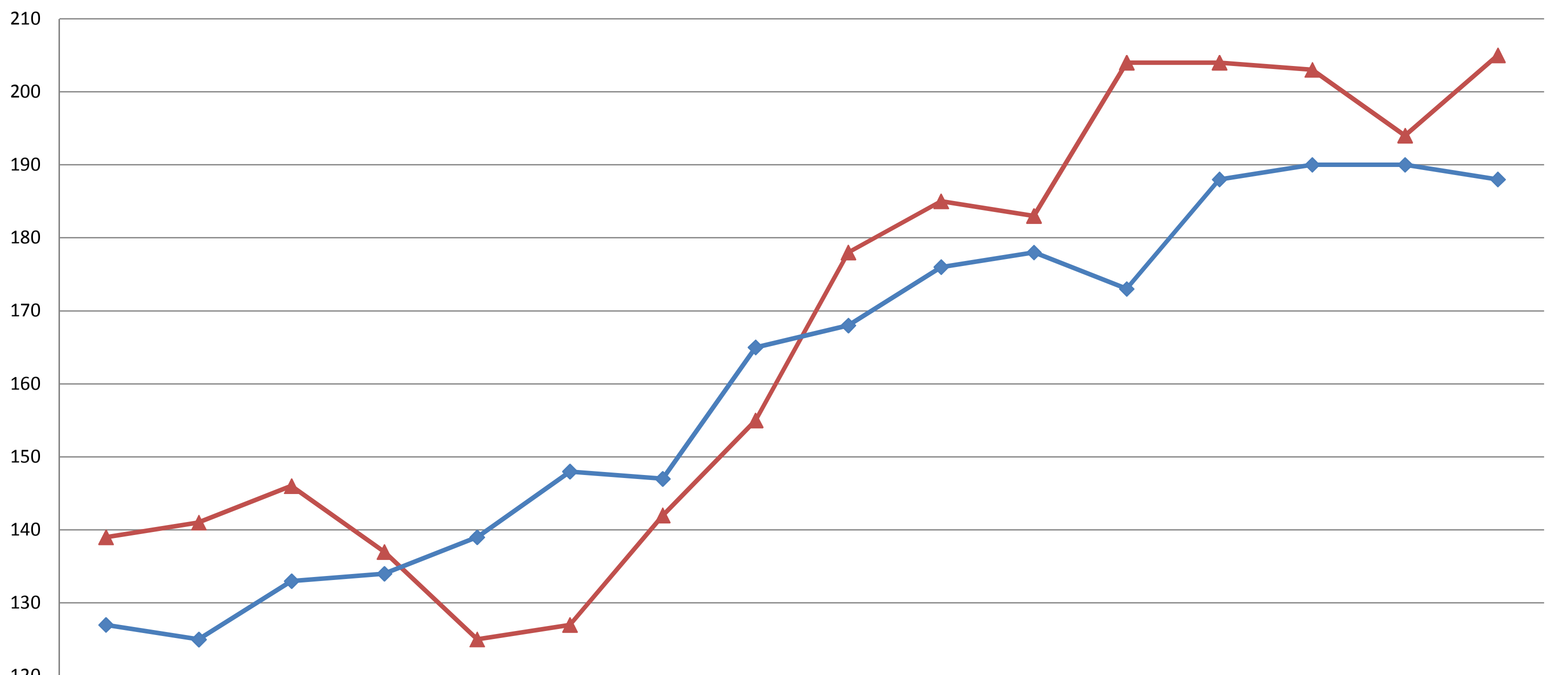
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fair Market Value	$78.6	$102.6	$110.3	$126.3	$134.0	$120.0	$136.7	$156.4	$177.3	$190.6	$218.0	$189.7	$183.1	$204.3	$207.2	$244.6

City of Boca Raton
Police Officersand Firefighters' Retirement System
Active Employees Payroll
(In Millions of Dollars)



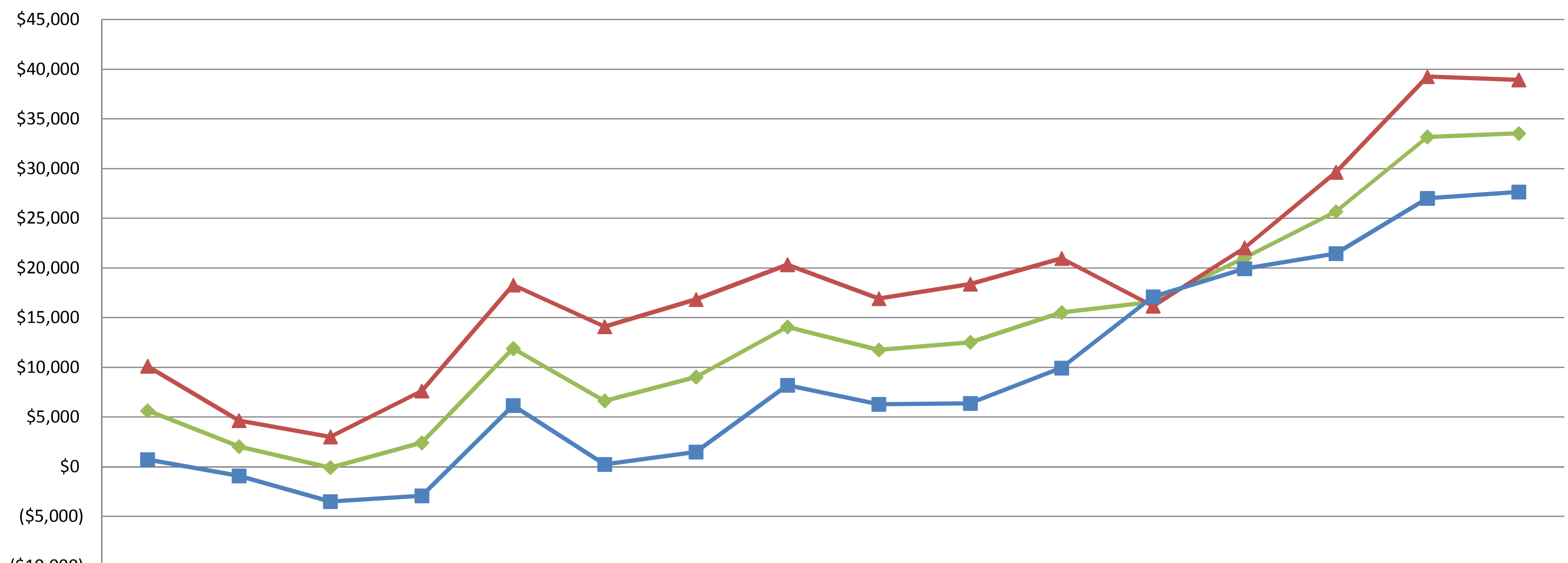
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	$11.9	$12.2	$13.5	$13.8	$13.9	$15.1	$17.2	$19.7	$22.3	$24.2	$24.9	$27.1	$29.8	$30.8	$28.6	$29.5
Police	$5.3	$5.4	$5.9	$6.3	$7.0	$7.9	$8.5	$9.9	$10.8	$11.9	$12.0	$13.8	$15.8	$15.4	$14.2	$14.1
Fire	$6.6	$6.8	$7.6	$7.4	$6.9	$7.2	$8.7	$9.8	$11.5	$12.3	$12.9	$13.4	$14.0	$15.4	$14.4	$15.4

City of Boca Raton
Police Officers and Firefighters' Retirement System
Total Number of Employees (Members)



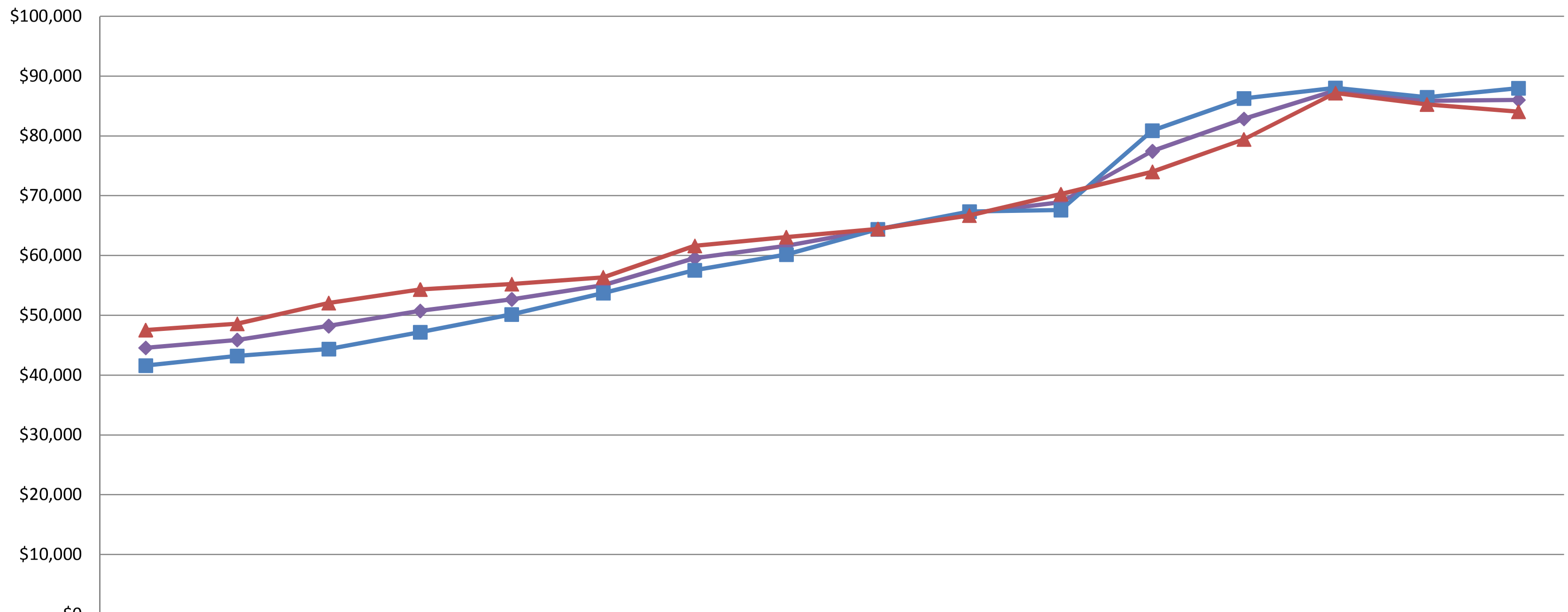
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fire Employee	139	141	146	137	125	127	142	155	178	185	183	204	204	203	194	205
Police Employee	127	125	133	134	139	148	147	165	168	176	178	173	188	190	190	188

City of Boca Raton
Police Officers and Firefighters' Retirement System
Average Dollar City Contribution
Per Employee



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Wgt Avg	$5,636	$2,030	-$84	$2,417	$11,900	$6,638	$9,032	$14,075	$11,758	$12,532	$15,527	$16,603	$21,032	$25,681	$33,196	$33,543
Fire	$10,130	$4,653	$3,021	$7,631	$18,282	$14,095	$16,842	$20,336	$16,915	$18,373	$20,968	$16,181	$22,038	$29,643	$39,259	$38,941
Police	$717	-$928	-$3,493	-$2,913	$6,160	$238	$1,488	$8,193	$6,295	$6,392	$9,934	$17,102	$19,940	$21,448	$27,006	$27,658

City of Boca Raton
Police Officer and Firefighters' Retirement System
Average Annual Salary
(Per Employee)



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average	$44,565	$45,879	$48,215	$50,740	$52,670	$55,031	$59,561	$61,604	$64,401	$67,027	$68,932	$77,448	$82,849	$87,578	$85,868	$86,015
Police	$41,591	$43,184	$44,368	$47,164	$50,132	$53,704	$57,526	$60,137	$64,365	$67,369	$67,611	$80,887	$86,282	$88,006	$86,457	$87,990
Fire	$47,540	$48,574	$52,062	$54,316	$55,209	$56,358	$61,595	$63,071	$64,438	$66,685	$70,252	$74,010	$79,417	$87,150	$85,280	$84,040

SECTION 6

Glossary of Terms

GLOSSARY OF TERMS

Accrued Benefit: The pension benefit a member earns through participation in a plan as of a specific date. In a defined benefit pension plan, once vested, this is the annual benefit a member receives at normal retirement age. In a defined contribution plan, this is the balance in the plan account, whether vested or not.

Accrual/Accrued Income: Pro-rated income earned, but not yet paid, is called accrued income.

Accrual Rate: The percentage of salary level at which a pension benefit builds up, or accrues, over years of credited service in a defined benefit pension plan.

Accrued Liability: The actuarial present value of the defined benefit plan's pension obligations as determined by an actuarial cost method. It is the projection of the total obligation to fund the costs to provide pensions for former and present members and builds these assets over time to fund the liabilities.

Active Member: An employee not yet retired, participating in a retirement plan, whereby contributions are made to the plan by the active employee, the employer or both.

Actuarial Assumptions: Projections of anticipated behavior associated with certain plan variables (such as retirement rates) that are developed by an actuary and then used to make estimates of future plan costs.

Actuarial Cost Method: A formal actuarial process used to measure the present value of future pension benefits and perhaps administrative expenses. Its purpose is to develop an allocation of pension costs and needed contributions to ensure that the plan is sufficiently funded to meet all pension obligations.

Actuarial Equivalent: Any benefit payable under the terms of this retirement system in a form other than the normal form of benefit, shall have the same actuarial present value on the date payment commences as the normal form of benefit. For purpose of establishing the actuarial present value of any form of payment, all future payments shall be discounted for interest and mortality by using the interest rate and the annuity mortality table provided in internal revenue rules. For purposes of a lump sum distribution, the actuarial present value shall be determined on the basis of the same annuity mortality table as described above and the 30-year treasury security interest rate for the month prior to the member's date of termination.

Actuarial Gains and Losses: Measures of the differences between actual plan experience and the experience that the plan's actuary had predicted based on the actuarial assumptions.

Actuarial Impact Statement: A description of the liabilities and funding requirements related to a proposed change in the retirement system, typically as a result of collective bargaining.

Actuarial Valuation: The amount of the pension contributions the employer will have to make each year to fund the actuarial liability.

Actuarial Value of Assets: The total value of a plan’s assets used for performing an actuarial valuation.

Actuary: Professional who guides those charged with governance of a defined benefit pension plan with information for making sound short and long term planning decisions. Actuarial, accounting, legal, financial, investment and human resource planning assumptions are used to assist with the projections.

Annual Required Contribution (ARC): The employer’s periodic required contributions to a defined benefit plan, as defined by GASB. If an employer’s contributions fall below the ARC, the shortfalls must appear in the employer's financial statements.

Annualized Return: Rate of return calculated for an interval of greater than 1 year, such as 2 years or 5 years, expressed in terms of the "average” return for each of the years in the period.

Annuity: A series of regular payments, usually from an insurance company, guaranteed to continue for a specific time, usually the annuitant's lifetime, in exchange for a single payment to the company. With a deferred annuity, payments begin sometime in the future.

Asset: Something with monetary value, e.g., stocks, real estate, accounts payable. Net assets are assets minus liabilities.

Asset Allocation: Proportion in which investments are divided among various types of securities, such as equities, bonds, cash equivalents of other assets. There are different levels of risks associated with different asset allocation. Overall risk, however, is reduced with an allocation to more than one type of security.

Average Monthly Earnings (AME): Formula used to help determine the member's final accrued benefit.

Beneficiary: Person entitled to receive any benefits at the death of a member who has been designated in writing by the member and filed with the board of trustees.

Benefit: A payment received from a pension plan, which could include pension, disability or survivor benefits.

Benefit Payment Forms: The payments from a pension plan to a beneficiary can be made in several ways: single-life, 50% joint & survivor, 100% joint & survivor, period certain, certain and life.

Board of Trustees: The fiduciaries entrusted with the governance of the pension plan and who administer and manage the pension plan as provided in the pension ordinance.

Buyback: A member may purchase eligible periods of other qualifying employment as a police officer or firefighter that have not been previously been included as credited service. Purchasing eligible period of employment increases the amount of your pension benefit.

Cost of Living Adjustment (COLA): A device to prevent inflation from eroding the value of a pension payment. A COLA can be a flat adjustment or can be tied to an index.

Compensation: Regular payment of salary to a member for work performed in a covered position, which may include certain overtime payments.

Contribution: Regular payment by employers and employees of the percentage of reported compensation required by law to fund the members' retirement benefits. Note that the term may also refer to contributions either required of or voluntarily made by Plan Members. Finally, the term may also refer to payments made by Plan members or their employers to purchase service credit or pay for upgraded service credit.

Contribution Rate: The percentage of compensation required to fund each member's future retirement benefits (through employer and employee contributions). Contribution rates vary, depending on retirement plan, membership class and other factors.

Continuous (Creditable) Service: Service for which retirement credit is earned by the member through paid employment in a regularly established position with an employer participating in a pension plan, as well as any additional service that may be credited under the plan, such as military service or other governmental service.

Death Benefit: Funds paid to the designated beneficiary of a deceased member.

Deferred Benefit: A benefit to which a member or his designated beneficiary is entitled, but for which application is voluntarily delayed until a later date. When the benefit application is filed by the member, the deferred monthly benefit will be calculated based on his/her actual continuous service, average final earnings at termination, and age at the time of application. If the benefit application is filed by the member's surviving beneficiary, the deferred monthly benefit will be calculated based on the member' creditable service, the member's average final compensation at termination, and the age the member would have been had he/she lived to the date of application.

Deferred Retirement Option Program (DROP): A retirement feature allowing a member, eligible to retire and receive normal benefits from the defined benefit plan, to defer the monthly benefits while continuing to work. The benefit payments are placed in a separate account until the deferred retirement period ends. During this time the calculation for years of continuous service and final average earnings formula used to calculate pension benefits is frozen.

Defined Benefit Plan (DB): A retirement plan in which the amount of the pension benefit is set by a formula established through the plan. Benefits are calculated based on age, length of service, and final salary. The benefit is payable as a lifetime annuity and possibly for the lifetime of the designated beneficiary. Benefits are typically paid out in substantially equal periodic payments. The plan funds these benefits through a combination of employee contributions, employer contributions, and investment returns. There are no individual accounts.

Defined Contribution Plan (DC): A plan that provides for an individual account for each participant and the benefits are based solely on the amount contributed to the participant's account plus any income, expenses, gains and losses, and forfeitures of accounts. An IRC 401(a), 401(k) and 457(b) are defined contribution plans. At retirement, the account balance is the total funds available to provide an individual's retirement benefits and an individual can outlive the fund's balance.

Disability: Total and permanent disability by reason of a medically determinable physical or mental impairment that prevents a member from rendering useful and efficient service as an officer or employee. Service-Incurred Disability is one where the disability results from an injury or illness arising out of and in. the actual performance of duty required by a member's employment during his regularly scheduled working hours or irregular working hours as required by the employer. Non-Service Incurred Disability means disability due to injury or illness suffered other than in the line of duty.

Early Retirement: Under a defined benefit plan, "early retirement" is an elective, service-based retirement that occurs before the member reaches his or her normal retirement age or date. If a member retires early, he or she will receive a reduced retirement benefit1 because he or she has not yet qualified for normal retirement.

Florida Retirement System (FRS): The retirement system established in December 1970 to consolidate the existing pension plans (now closed retirement systems) and provide a retirement, disability, and survivor benefit program for participating state and local government employees. Today, the FRS is a single retirement system consisting of two primary retirement plans and other nonintegrated programs administered under Chapter 121, Florida Statutes. (The primary plans are the FRS Pension Plan, a defined benefit plan established under Part I, and the FRS Investment Plan, a defined contribution plan established under Part II.) In addition to the two primary plans, alternative optional defined contribution programs are available for specified employee groups under Part I, including the SUSORP, the CCORP, and the SMSOAP.

Funded Ratio: The funded ratio places the unfunded liabilities in the context of the pension plan's assets. Expressed as a percentage of a plan's liabilities, the funded ratio is calculated by dividing net assets by the actuarial accrued liabilities. The result is the percentage of the accrued liabilities that are covered by assets.

Hybrid Plan: Benefit plan that incorporates features of both defined benefit and a defined contribution plan.

ln·Line·of·Duty: In the performance of the duties required by your employer during regular scheduled work hours or irregular work hours

Interest: The term may refer to the amount charged on money owed to a trust fund, or, for participants of the Deferred Retirement Option Program, the term may refer to the amount earned on retirement benefits that accrue on a participant's behalf. Interest owed is charged from the date required for the type of creditable service purchased and is compounded annually, while DROP interest is earned from the month following deposit and is compounded monthly.

Joint Annuitant: A type of beneficiary who is eligible to receive certain continuing benefits upon a Pension Plan member's death.

Member: Any employee who is covered by the provisions of the pension plan.

Normal Retirement Date: The date when a member first becomes eligible to retire under the pension plan with unreduced benefits, by meeting the age or service requirements for his/her class of membership. The normal retirement date occurs on the first day of the month that a vested member attains the required age, or on the first day of the month following the date that a member completes the required service.

Rate of Return: A mathematical measure of the rate of change in the market value of a fund's assets. Rates of return reflect both realized and unrealized capital gains and losses, as well as total earnings from interest and dividends. Contributions of distributions that increase or decrease the total value of the fund have no effect on investment performance.

Risk: The uncertainty associated with the possibility that actual investment results may not coincide with the expected rate of return associated with a given level of assumptions about asset mix, quality of investments and other factors.

Unfunded Actuarial Accrued Liability (UAAL): The unfunded liability of the pension plan is the difference between the actuarial value of the pension plan assets and the actuarial accrued liability.

Vest, Vested, or Vesting: Meeting the length-of-service requirements under a retirement plan necessary for a member to qualify for a future benefit under that plan.

401 (a) Qualified Plans: A retirement plan that meets the requirements of IRC 401 (a) and certain other sections. The plan, its employees and its retirees receive favorable tax status.

401(k) Plan: An employer-sponsored retirement plan that permits employees to divert part of their pay into the plan and avoid current taxes and that income. Money directed to the plan may be partially matched by the employer, and investment earnings within the plan accumulate tax until they are withdrawn. The 401 (k) is named for the section of the federal tax code that authorizes it.

457(b) Plan: A defined contribution plan, also called a deferred compensation plan, available to all state and local governmental entities. Such plans permit employees to defer (that is, move into a tax-favored account) a portion of their pay. The employee typically directs the investments. Because of the tax-favored treatment, the employee pays no tax on contributions and earnings until the individual separates from service or meets other criteria. The IRC limits the amount of the yearly deferrals. The limit is adjusted for inflation.

SECTION 7

Actuarial Valuation Report 2012

City of Boca Raton Police & Firefighters' Retirement System

Actuarial Valuation as of October 1, 2012

This Valuation Determines the Annual Contribution for the Plan Year October 1, 2013, through September 30, 2014, to be Paid in Fiscal Year October 1, 2013, through September 30, 2014

Report Dated: March 7, 2013

March 7, 2013

Board of Trustees
City of Boca Raton
Police and Firefighters' Retirement System
c/o Ms. Debra Sears
Chief Executive Officer
2333 West Glades Road
Boca Raton, FL 33431

Re: **October 1, 2012, Actuarial Valuation of the City of Boca Raton Police and Firefighters' Retirement System**

Dear Trustees:

We are pleased to present the October 1, 2012, Actuarial Valuation for the City of Boca Raton Police and Firefighters' Retirement System. The purpose of this report is to determine appropriate contribution levels, comment on the actuarial stability of the System, provide accounting expense and disclosure information, and satisfy State requirements.

This report consists of this commentary and detailed Tables I through XVI. The Tables contain basic System cost figures plus significant details on the benefits, liabilities, and experience of the System.

Retirement System Costs

The Actuarial Valuation develops the **City Minimum Required Contribution** under Chapters 112, 175 and 185 of the Florida Statutes for the fiscal year ending September 30, 2014, to be paid in the fiscal year ending September 30, 2014. The minimum contribution consists of annual normal cost, reimbursement of administrative expenses, and amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law. The **City Minimum Required Contribution** for the fiscal year ending September 30, 2014, to be paid as of October 1, 2013, is **$13,182,553**, or **42.82%** of expected covered payroll.

Under the current state interpretation, the actual required contribution is either this dollar amount, $13,182,553, which is based on *projected* Members' Compensation below the maximum assumed retirement age (age 70) (the "Dollar Method") or the percent shown, 42.82%, of *actual* Members' Compensation below the maximum assumed retirement age for the fiscal year ending September 30, 2014, (the Percentage Method), which may be more or less than the $13,182,553. The City, the Board, and the actuary are to select and maintain whichever method "best fits the funding requirements of the Plan and satisfies the legislative intent found in Section 112.61, Florida Statutes." The Board and the City have formally adopted the Dollar Method.

The split between Police and Firefighters follows:

	Dollar Amount	**% of Payroll**
Police	$5,199,714	35.34%
Firefighters	$7,982,839	49.67%
Total	$13,182,553	42.82%

For purposes of the allocation of costs between Police and Firefighters, the outstanding bases and amortization payments existing prior to 2004 were allocated on an estimated basis. Subsequent to 2003, experience gain (loss) bases and amortizations were separately calculated for Police and Firefighters. Equal amounts of the administrative expenses were allocated to Police and Firefighters.

Changes in Actuarial Assumptions, Methods, and System Benefits

There were no changes in plan benefits or actuarial assumptions for this valuation that had an effect on the contribution or funded status. There was one change in actuarial methods: the City Minimum Required Contribution was developed presuming payment on the first day of the fiscal year rather than biweekly throughout the year. This change reduced the required contribution by $517K due to interest savings. For the sake of comparability, the results from the last valuation were restated throughout this report on the same, first day presumption: $12,266,180 rather than $12,747,382.

The System benefits are summarized on Table XV (page 38). The actuarial assumptions and methods are outlined on Table XVI (page 43).

Actuarial Gains (Losses)

The System experienced an actuarial loss of **$4,078,972.** Table VI (page 14) shows that this loss is composed of an investment loss of approximately $4.5 million and a gain on System liabilities of approximately $0.5 million. Table XI (page 28) presents salary experience and tracks Member turnover and retirement experience. Table XII (page 30) provides information on investment yields.

Table XI provides a history of increases in pay experienced by System Members. Average increases have been as follows:

Period Ended September 30, 2012	Average Pay Increase
1 Year	3.8%
3 Years	4.5%
5 Years	6.7%

Table XI also provides statistics for Members terminating service in comparison to the number that are expected to terminate. Fiscal 2011-12 expected terminations numbered approximately 7 Members. In fact, only 2 Members from the prior year valuation terminated. The 3 and 5-year experience shows a continuing discrepancy between expected and actual terminations.

Table XI also shows statistics for Members retiring (including DROP enrollments) in comparison with the number expected to retire. Fiscal 2011-12 expected retirements numbered approximately 7 Members. In fact, 13 Members retired (1) or enrolled in the DROP (12).

Table XII (page 30) provides the investment experience for the System in comparison to the actuarial assumption. The actuarial value return was 5.8%. The market value return was 17.9%. The compound average rate of actuarial value returns over the last five years, ten years, and 1994/1995 to date has been 1.0%, 4.1% and 7.2% per year, respectively. The corresponding market value returns have been 1.4%, 6.4%, and 8.1% per year, respectively.

Comparison of October 1, 2011, and October 1, 2012, Valuation Results

Table II (page 4) of the report provides information of a comparative nature. Comparing the columns of Table II shows the effect of System experience during the year. The number of active Members increased by 3.0% and expected active payroll for the upcoming valuation year also increased by 3.0%. The total normal cost increased as a percentage of covered payroll and as a dollar amount. The unfunded actuarial accrued liability increased from \$122.2 million to \$129.0 million primarily as a result of the poor investment performance, but also because of the expected increase due to the amortization method (\$2.8 million). The liability gain (\$0.5M) slightly offset the increase.

The actuarial value of assets is less than the value of vested accrued benefits, resulting in a Vested Benefit Security Ratio of 71.95%. The prior year's Vested Benefit Security Ratio was 71.75%. The plan assets were 62.78% of the plan's accrued liability. For the prior year, the plan's assets were 62.71% of the plan's accrued liability.

Accounting Information

Based upon information provided by the Board, the 2011-2012 City contribution was equal to the City's portion of the Government Accounting Standards Board (GASB) Statement 27 Annual Required Contribution (ARC) for the fiscal year ended September 30, 2012. The 2011-2012 State contribution was less than the State's portion of the ARC. However, the accumulation of past excess State contributions more than covers the shortfall. (See Table III, page 10.) The net pension obligation changed from (\$7,468,916) to (\$7,241,100). The City contribution met the minimum funding contribution requirement under State rules.

Member Census and Financial Data

The Member census data used for this valuation was submitted to us by the Board. This information contains name, Social Security number, date of birth, date of hire, date of participation, and actual compensation paid and Member contributions deducted for the previous year. Dates of termination and retirement were provided where applicable. Information on DROP Members and inactive Members including retirees, beneficiaries and vested terminations was also updated by the Board.

We were supplied with information on the assets of the System by the Board. We do not audit the Member census data and asset information that is provided to us. However, we perform certain reasonableness checks and on this basis we believe that the information that we received was reliable.

Conclusion

In our opinion the benefits provided for under the current System will be sufficiently funded through the payment of the amount as indicated in this and future Actuarial Valuation reports. We will continue to update you on the future payment requirements for the System through our actuarial reports. These reports will also continue to monitor the future experience of the System. If after the review of this Actuarial Valuation report you have any questions, please do not hesitate to contact us.

The undersigned is a Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the System and/or paid from the System's assets for which current liabilities or current costs have not been established or otherwise provided for in the valuation. All known events or trends which may require a material increase in System costs or required contribution rates have been taken into account in the valuation.

Sincerely,

John A. Lessl

John A. Lessl, A.S.A., M.A.A.A., E.A.
Enrollment No. 11-02967

3-7-13
Date

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

TABLE OF CONTENTS

Table I

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Summary of Retirement Plan Costs as of October 1, 2012

	Police	% of Payroll	Fire	% of Payroll	Total	% of Payroll
A. Member Data Summary						
1. Active Employees	160	N/A	183	N/A	343	N/A
2. DROP Employees	28	N/A	22	N/A	50	N/A
3. Terminated Vested	2	N/A	1	N/A	3	N/A
4. Receiving Benefits	114	N/A	115	N/A	229	N/A
5. Expected Active Payroll for Valuation Year	$ 14,078,420	100.00%	$ 15,379,236	100.00%	$ 29,457,656	100.00%
B. Total Normal Costs						
1. Age Retirement Benefits	$ 3,208,153	22.79%	$ 4,167,819	27.10%	$ 7,375,972	25.04%
2. Vesting Benefits	779,696	5.54%	290,786	1.89%	1,070,481	3.63%
3. Death Benefits	87,387	0.62%	120,377	0.78%	207,765	0.71%
4. Disability Benefits	134,715	0.96%	156,052	1.01%	290,768	0.99%
5. Administrative Expenses	233,488	1.66%	233,488	1.52%	466,976	1.59%
6. Total Annual Normal Costs	$ 4,443,439	31.56%	$ 4,968,522	32.31%	$ 9,411,961	31.95%
C. Total Actuarial Accrued Liability						
1. Age Retirement Benefits Active Employees	$ 56,198,194	399.18%	$ 62,536,458	406.63%	$ 118,734,651	403.07%
2. Vesting Benefits Active Employees	4,734,352	33.63%	1,015,801	6.61%	5,750,153	19.52%
3. Death Benefits Active Employees	287,117	2.04%	472,891	3.07%	760,008	2.58%
4. Disability Benefits Active Employees	357,748	2.54%	552,773	3.59%	910,521	3.09%
5. Retired Members	51,423,462	365.26%	75,384,544	490.17%	126,808,006	430.48%
6. DROP Members (Includes DROP Balances)	38,634,781	274.43%	38,079,136	247.60%	76,713,917	260.42%

Table I
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Summary of Retirement Plan Costs as of October 1, 2012

	Police	% of Payroll	Fire	% of Payroll	Total	% of Payroll
7. Terminated Vested Members	427,604	3.04%	236,675	1.54%	664,279	2.26%
8. Beneficiaries of Deceased Members	1,303,921	9.26%	3,120,301	20.29%	4,424,222	15.02%
9. Disabled Members	5,686,691	40.39%	6,194,572	40.28%	11,881,264	40.33%
10. Total Actuarial Accrued Liability	$ 159,053,869	1129.77%	$ 187,593,152	1219.78%	$ 346,647,021	1176.76%
D. Actuarial Value of Assets (Table V)	$ 98,771,148	701.58%	$ 118,865,709	772.90%	$ 217,636,857	738.81%
E. Unfunded Actuarial Accrued Liability (C-D)	$ 60,282,721	428.19%	$ 68,727,443	446.88%	$ 129,010,164	437.95%
F. Valuation Year Contribution						
1. Normal Cost Excluding Expenses	$ 4,209,951	29.90%	$ 4,735,034	30.79%	$ 8,944,985	30.37%
2. Amortization of Unfunded Liability	$ 3,041,102	21.60%	$ 5,797,414	37.70%	$ 8,838,516	30.00%
3. Normal Cost plus Amortization if Paid Biweekly = (1. + 2.) x 1.03924	$ 7,535,512	53.53%	$ 10,945,636	71.17%	$ 18,481,148	62.74%
4. Minimum Required Contribution, Paid Biweekly = 3. + B.5.	$ 7,769,000	55.18%	$ 11,179,124	72.69%	$ 18,948,124	64.32%
5. Expected State Contribution	$ 1,161,626	8.25%	$ 1,671,616	10.87%	$ 2,833,242	9.62%
6. Expected Member Contribution	$ 1,435,999	10.20%	$ 1,568,682	10.20%	$ 3,004,681	10.20%
7. City Minimum Required Contribution for Valuation Year = 4. - 5. - 6.	$ 5,171,375	36.73%	$ 7,938,826	51.62%	$ 13,110,201	44.51%

Table I
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Summary of Retirement Plan Costs as of October 1, 2012

	Police	% of Payroll	Fire	% of Payroll	Total	% of Payroll
G. City Minimum Required Contribution (MRC) for Contribution Year Ending September 30, 2014*						
1. Expected Compensation for Contribution Year = A.5. x 1.045	$ 14,711,949	100.00%	$ 16,071,301	100.00%	$ 30,783,250	100.00%
2. City MRC if Paid on First Day of Contribution Year = 1. x F.6. Percentages / 1.03923	$ 5,199,714	35.34%	$ 7,982,839	49.67%	$ 13,182,553	42.82%
3. Estimated Compensation for Contribution Year for DROP Members**	$ 2,940,000	100.00%	$ 2,200,000	100.00%	$ 5,140,000	100.00%
4. Expected Compensation for Contribution Year for Active and DROP = 1. + 3.	$ 17,651,949	100.00%	$ 18,271,301	100.00%	$ 35,923,250	100.00%
5. City Minimum Required Contribution	$ 5,199,714	29.46%	$ 7,982,839	43.69%	$ 13,182,553	36.70%
H. Actuarial Gains (Losses) (Table VI)	$ (1,610,747)	(11.44%)	$ (2,468,225)	(16.05%)	$ (4,078,972)	(13.85%)
I. Actuarial Present Value of Vested Accrued Benefits						
1. Retired, Beneficiaries, and Disableds	$ 58,414,074	414.92%	$ 84,699,418	550.74%	$ 143,113,492	485.83%
2. Terminated Vested Members	427,604	3.04%	236,675	1.54%	664,279	2.26%
3. Active Members	39,745,656	282.32%	42,262,204	274.80%	82,007,860	278.39%
4. DROP Members and Remaining Balances	38,634,781	274.43%	38,079,136	247.60%	76,713,917	260.42%
5. Total Actuarial Present Value of Vested Accrued Benefits	$ 137,222,115	974.70%	$ 165,277,432	1074.68%	$ 302,499,548	1026.90%
J. Unfunded Actuarial Present Value of Vested Accrued Benefits (I. - D., not less than zero)	$ 38,450,967	273.12%	$ 46,411,723	301.78%	$ 84,862,691	288.08%
K. Vested Benefit Security Ratio (D. ÷ I.)	71.98%	N/A	71.92%	N/A	71.95%	N/A
L. Accrued Liability Funded Ratio (D. ÷ C.10.)	62.10%	N/A	63.36%	N/A	62.78%	N/A

* Percentages shown are of Expected Compensation for Active Members for the Contribution Year, except that Items 4 and 5 include DROP Members as well.
** Reported compensation for the 2011-2012 Year, if Member was in DROP for the full year; otherwise expected compensation for the next year.

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Comparison of Cost Data as of October 1, 2011, and October 1, 2012, Valuations

	October 1, 2011		October 1, 2012	
	Cost Data	% of Annual Payroll	Cost Data	% of Annual Payroll
A. Members				
1. Active Employees	333	N/A	343	N/A
2. Terminated Vested	4	N/A	3	N/A
3. Receiving Benefits	215	N/A	229	N/A
4. DROP Members	51	N/A	50	N/A
5. Expected Active Payroll for Val. Year	$ 28,591,197	100.00%	$ 29,457,656	100.00%
B. Total Normal Costs	$ 9,019,143	31.55%	$ 9,411,961	31.95%
C. Total Actuarial Accrued Liability	$ 327,580,198	1145.74%	$ 346,647,021	1176.76%
D. Actuarial Value of Assets	$ 205,429,026	718.50%	$ 217,636,857	738.81%
E. Unfunded Actuarial Accrued Liability	$ 122,151,172	427.23%	$ 129,010,164	437.95%
F. Expected State Contribution - Val. Year	$ 2,809,874	9.83%	$ 2,833,242	9.62%
G. Net City Minimum Funding Payment - Contribution Year*	$ 12,266,180	41.05%	$ 13,182,553	42.82%
H. Actuarial Gain (Loss)	$ (22,827,047)	(79.84%)	$ (4,078,972)	(13.85%)
I. Unfunded Actuarial Present Value of Vested Accrued Benefits	$ 80,869,127	282.85%	$ 84,862,691	288.08%
J. Vested Benefit Security Ratio	71.75%	N/A	71.95%	N/A
K. Accrued Liability Funded Ratio	62.71%	N/A	62.78%	N/A

* As a percent of Expected Compensation for Contribution Year; October 1, 2011, has been restated to also be payable as of the first day of the Contribution Year

Table II
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Normal Cost, Accrued Liability and Present Value of Future Benefits

	10/1/2009	10/1/2010	10/1/2011	10/1/2012
	Final	Final	Final	Final
Normal Cost				
Active Members				
Service pensions	6,856,923	6,815,300	7,041,314	7,375,972
Vested termination pensions	1,032,783	999,135	1,030,592	1,070,481
Survivor pensions	292,576	294,715	202,012	207,765
Disability pensions	266,378	267,791	278,850	290,768
Administrative Expenses	422,639	407,626	466,375	466,976
Total - Active Members	8,871,299	8,784,565	9,019,143	9,411,961
Accrued Liability				
Retired Members and Beneficiaries (including DROP)	146,083,938	168,162,864	202,989,677	219,827,409
Vested Terminated Members	1,780,710	940,255	1,042,956	664,279
Active Members				
Service pensions	120,053,259	120,399,387	116,691,009	118,734,651
Vested termination pensions	4,539,354	4,849,635	5,172,840	5,750,153
Survivor pensions	1,389,610	1,476,076	770,373	760,008
Disability pensions	887,859	913,475	913,344	910,521
Subtotal - Active Members	126,870,082	127,638,573	123,547,565	126,155,334
Total Accrued Liability	274,734,730	296,741,692	327,580,198	346,647,021
Present Value of Future Benefits				
Retired Members and Beneficiaries (including DROP)	146,083,938	168,162,864	202,989,677	219,827,409
Vested Terminated Members	1,780,710	940,255	1,042,956	664,279
Active Members				
Service pensions	185,104,556	186,869,878	186,093,133	192,189,800
Vested termination pensions	13,580,950	13,912,395	14,559,600	15,535,518
Survivor pensions	4,241,137	4,396,541	2,712,096	2,768,117
Disability pensions	3,439,643	3,526,298	3,624,840	3,756,539
Subtotal - Active Members	206,366,286	208,705,113	206,989,669	214,249,974
Total Present Value of Future Benefits	354,230,934	377,808,232	411,022,302	434,741,661

Table III

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Historical Contribution Information

		Required Contributions						Actual Contributions			
Valuation Year	Contribution Year End	Estimated Member	Percent-age of Payroll	Estimated State	Percent-age of Payroll	Net Employer = City*	Percent-age of Payroll	Member	State	City	Total
1990	9/30/1992			$ 947,502	8.94%	$ 995,716	9.39%		$ 1,033,281	$ 1,000,920	$ 2,034,201
1991	9/30/1993			$ 990,353	8.93%	$ 1,103,636	9.95%		$ 1,106,503	$ 1,327,910	$ 2,434,413
1992	9/30/1994			$ 1,033,281	8.86%	$ 1,531,642	13.14%		$ 1,233,903	$ 1,340,974	$ 2,574,877
1993	9/30/1995			$ 1,106,503	9.40%	$ 1,556,371	13.22%		$ 1,309,186	$ 1,531,059	$ 2,840,245
1994	9/30/1996			$ 1,233,903	11.16%	$ 1,828,316	16.53%		$ 1,463,302	$ 2,184,418	$ 3,647,720
1995	9/30/1997			$ 1,309,186	11.25%	$ 2,262,652	19.45%		$ 1,613,849	$ 2,213,426	$ 3,827,275
1996	9/30/1998			$ 1,463,302	12.16%	$ 2,128,627	17.68%		$ 2,152,186	$ 2,110,365	$ 4,262,551
1997	9/30/1999			$ 1,613,849	12.61%	$ 1,774,626	13.87%		$ 2,270,324	$ 1,731,613	$ 4,001,937
1998	9/30/2000			$ 2,152,186	16.33%	$ 745,702	5.66%	$ 1,365,047	$ 2,177,070	$ 651,545	$ 4,193,662
1999	9/30/2001	$ 1,246,200		$ 2,270,324	16.52%	$ 644,776	4.69%	$ 1,350,975	$ 1,753,028	$ 665,753	$ 3,769,756
2000	9/30/2002	$ 1,299,500		$ 2,177,070	15.82%	$ 655,100	4.76%	$ 1,424,365	$ 2,299,570	$ 715,392	$ 4,439,327
2001	9/30/2003	$ 1,312,900		$ 1,753,028	12.64%	$ 1,388,515	10.01%	$ 1,621,039	$ 2,512,565	$ 1,584,684	$ 5,718,288
2002	9/30/2004	$ 1,431,842		$ 2,299,570	15.22%	$ 1,825,356	12.08%	$ 1,665,864	$ 2,712,365	$ 1,814,559	$ 6,192,788
2003	9/30/2005	$ 1,812,261	9.20%	$ 2,512,565	14.60%	$ 2,610,263	15.17%	$ 2,027,933	$ 2,813,541	$ 2,633,451	$ 7,474,925
2004(b)	9/30/2006	$ 2,050,051	9.20%	$ 2,712,365	13.46%	$ 3,908,677	19.40%				
2004(a)	9/30/2006	$ 2,050,051	9.20%	$ 2,712,365	13.77%	$ 4,299,719	21.83%	$ 2,214,845	$ 2,921,564	$ 4,503,917	$ 9,640,326
2005(b)	9/30/2007	$ 2,225,814	9.20%	$ 2,954,218	13.26%	$ 5,245,843	23.54%				
2005(a)	9/30/2007	$ 2,225,814	9.20%	$ 2,954,218	13.26%	$ 4,068,422	18.26%	$ 2,325,343	$ 3,232,433	$ 4,068,422	$ 9,626,198
2006(b)	9/30/2008	$ 2,289,993	9.20%	$ 3,067,643	12.68%	$ 4,216,777	17.44%				
2006(a)	9/30/2008	$ 2,289,993	9.20%	$ 3,067,643	12.68%	$ 4,524,009	18.70%	$ 2,745,070	$ 3,592,057	$ 4,524,009	$ 10,861,136
2007(b)	9/30/2009	$ 2,634,629	9.20%	$ 3,394,055	13.64%	$ 4,971,967	19.98%				
2007(a)	9/30/2009	$ 2,634,629	9.20%	$ 3,394,055	13.64%	$ 5,605,424	22.52%	$ 2,602,981	$ 3,299,931	$ 5,605,424	$ 11,508,336
2008(b)	9/30/2010	$ 2,738,553	9.20%	$ 3,464,927	12.28%	$ 6,488,717	23.90%				
2008(a)	9/30/2010	$ 2,738,553	9.20%	$ 3,464,927	11.64%**	$ 6,687,920	22.35%	$ 2,675,830	$ 2,746,920	$ 6,687,920	$ 12,110,671
2009	9/30/2011	$ 3,008,913	10.20%	$ 2,884,266	9.78%	$ 8,614,508	27.69%	$ 2,810,410	$ 2,676,070	$ 8,614,508	$ 14,100,988
2010(b)	9/30/2012	$ 2,630,390	9.20%	$ 2,809,874	9.83%	$ 10,410,838	33.77%				
2010(a)	9/30/2012	$ 2,916,302	10.20%	$ 2,809,874	9.83%	$ 10,092,631	32.74%	$ 2,832,998	$ 2,698,326	$ 10,092,632	$ 15,623,956
2011(b)	9/30/2013	$ 3,004,681	10.20%	$ 2,833,242	9.62%	$ 11,391,182	38.13%				
2011(a)	9/30/2013	$ 3,004,681	10.20%	$ 2,833,242	9.62%	$ 12,266,180	41.05%				
2012	9/30/2014					$ 13,182,553	42.82%				

(a) After changes in benefit provisions and/or experience assumptions.

(b) Before changes in benefit provisions and/or experience assumptions.

* Beginning with the 2011 valuation, changed from payable biweekly during the Contribution Year to payable as of the first day of the Contribution Year.

** After change in expected payroll

Table III
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Historical Contribution Information - Member Contributions

		Estimated Member Contributions					Actual Member Contributions		
Valuation Year	Contribution Year End	Police	Percent-age of Payroll	Fire	Percent-age of Payroll	Total	Police	Fire	Total
1998	9/30/2000				8.70%	$ -	$ 641,414	$ 723,633	$ 1,365,047
1999	9/30/2001	$ 546,900	9.73%	$ 699,300	9.20%	$ 1,246,200	$ 682,760	$ 668,215	$ 1,350,975
2000	9/30/2002	$ 614,900	9.73%	$ 684,600	9.20%	$ 1,299,500	$ 771,715	$ 652,650	$ 1,424,365
2001	9/30/2003	$ 678,000	9.73%	$ 634,900	9.20%	$ 1,312,900	$ 837,783	$ 783,256	$ 1,621,039
2002	9/30/2004	$ 773,359	9.73%	$ 658,483	9.20%	$ 1,431,842	$ 786,912	$ 878,952	$ 1,665,864
2003	9/30/2005	$ 912,874	9.20%	$ 899,387	9.20%	$ 1,812,261	$ 997,660	$ 1,030,273	$ 2,027,933
2004	9/30/2006	$ 994,819	9.20%	$ 1,055,232	9.20%	$ 2,050,051	$ 1,068,653	$ 1,146,192	$ 2,214,845
2005	9/30/2007	$ 1,090,839	9.20%	$ 1,134,975	9.20%	$ 2,225,814	$ 1,124,306	$ 1,201,037	$ 2,325,343
2006	9/30/2008	$ 1,107,200	9.20%	$ 1,182,793	9.20%	$ 2,289,993	$ 1,390,477	$ 1,354,593	$ 2,745,070
2007	9/30/2009	$ 1,335,559	9.20%	$ 1,299,070	9.20%	$ 2,634,629	$ 1,357,232	$ 1,245,749	$ 2,602,981
2008	9/30/2010	$ 1,452,640	9.20%	$ 1,285,913	9.20%	$ 2,738,553	$ 1,368,894	$ 1,306,936	$ 2,675,830
2009	9/30/2011	$ 1,503,259	10.20%	$ 1,505,654	10.20%	$ 3,008,913	$ 1,393,222	$ 1,417,188	$ 2,810,410
2010	9/30/2012	$ 1,446,248	10.20%	$ 1,470,054	10.20%	$ 2,916,302	$ 1,367,978	$ 1,465,020	$ 2,832,998
2011	9/30/2013	$ 1,435,999	10.20%	$ 1,568,682	10.20%	$ 3,004,681			
2012	9/30/2014								

Table III
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Historical Contribution Information - City Contributions

		Minimum Required Contributions*						Actual City Contributions		
Valuation Year	Contribution Year End	Police	Percent-age of Payroll	Fire	Percent-age of Payroll	Total	Percent-age of Payroll	Police	Fire	Total
1998	9/30/2000					$ -				$ -
1999	9/30/2001					$ -				$ -
2000	9/30/2002					$ -		$ 376,307	$ 339,085	$ 715,392
2001	9/30/2003					$ -		$ 805,632	$ 779,052	$ 1,584,684
2002	9/30/2004	$ 35,231	0.44%	$ 1,790,125	25.01%	$ 1,825,356	12.08%	$ 895,217	$ 919,342	$ 1,814,559
2003	9/30/2005	$ 218,724	2.59%	$ 2,391,539	27.34%	$ 2,610,263	15.16%	$ 1,402,753	$ 1,230,698	$ 2,633,451
2004	9/30/2006	$ 1,351,837	13.62%	$ 3,152,080	32.24%	$ 4,503,917	22.86%	$ 1,351,837	$ 3,152,080	$ 4,503,917
2005	9/30/2007	$ 1,057,596	9.78%	$ 3,010,826	26.25%	$ 4,068,422	18.26%	$ 1,057,596	$ 3,010,826	$ 4,068,422
2006	9/30/2008	$ 1,125,032	9.49%	$ 3,398,977	27.55%	$ 4,524,009	18.70%	$ 1,125,032	$ 3,398,977	$ 4,524,009
2007	9/30/2009	$ 1,768,322	14.69%	$ 3,837,102	29.85%	$ 5,605,424	22.52%	$ 1,768,322	$ 3,837,102	$ 5,605,424
2008	9/30/2010	$ 3,205,002	21.13%	$ 3,482,918	23.60%	$ 6,687,920	22.35%	$ 3,205,002	$ 3,482,918	$ 6,687,920
2009	9/30/2011	$ 3,917,124	23.74%	$ 4,697,384	32.16%	$ 8,614,508	27.69%	$ 3,917,124	$ 4,697,384	$ 8,614,508
2010	9/30/2012	$ 4,075,115	26.46%	$ 6,017,516	39.01%	$ 10,092,631	32.74%	$ 4,075,115	$ 6,017,516	$ 10,092,632
2011	9/30/2013	$ 4,937,414	33.32%	$ 7,328,766	48.66%	$ 12,266,180	41.05%			
2012	9/30/2014	$ 5,199,714	35.34%	$ 7,982,839	49.67%	$ 13,182,553	42.82%			

* *Beginning with the 2011 valuation, changed from payable biweekly during the Contribution Year to payable as of the first day of the Contribution Year.*

Table III
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Historical Contribution Information - Allowable Offset of State Contribution

Valuation Date	End of Year to which valuation applies	State Contribution: Police	Fire	Fire (Supplemental)	Total
10/1/1996	9/30/1998	$ 1,108,121	$ 526,995	$ 517,070	$ 2,152,186
10/1/1997	9/30/1999	$ 1,068,665	$ 965,436	$ 236,223	$ 2,270,324
10/1/1998	9/30/2000	$ 1,073,472	$ 576,472	$ 527,127	$ 2,177,071
10/1/1999	9/30/2001	$ 1,121,422	$ 619,842	$ 11,764	$ 1,753,028
10/1/2000	9/30/2002	$ 1,215,163	$ 758,698	$ 325,709	$ 2,299,570
10/1/2001	9/30/2003	$ 1,281,354	$ 810,626	$ 420,585	$ 2,512,565
10/1/2002	9/30/2004	$ 1,382,272	$ 878,416	$ 451,677	$ 2,712,365
10/1/2003	9/30/2005	$ 1,341,306	$ 944,692	$ 527,543	$ 2,813,541
10/1/2004	9/30/2006	$ 1,378,731	$ 997,228	$ 545,605	$ 2,921,564
10/1/2005	9/30/2007	$ 1,402,612	$ 1,231,411	$ 598,410	$ 3,232,433
10/1/2006	9/30/2008	$ 1,341,306	$ 1,201,989	$ 1,048,762	$ 3,592,057
10/1/2007	9/30/2009	$ 1,270,972	$ 1,085,499	$ 943,459	$ 3,299,931
10/1/2008	9/30/2010	$ 1,138,102	$ 1,197,896	$ 410,923	$ 2,746,921
10/1/2009	9/30/2011	$ 1,097,600	$ 1,160,285	$ 418,185	$ 2,676,070
10/1/2010	9/30/2012	$ 1,106,311	$ 1,196,986	$ 395,029	$ 2,698,326

Valuation Date	End of Year to which valuation applies	State Increase Over Base Amount: Police	Fire	Fire (Supplemental)	Fire Total	Annual Cost of Enhancements Made in Budget Year: Police	Fire
10/1/1996	9/30/1998	N/A	N/A	N/A	N/A	N/A	N/A
10/1/1997	9/30/1999	none	$ 438,441	N/A	$ 438,441	N/A	N/A
10/1/1998	9/30/2000	none	$ 49,477	$ 290,904	$ 340,381	$ 447,500	$ 1,075,700
10/1/1999	9/30/2001	$ 13,301	$ 92,847	none	$ 92,847	None	None
10/1/2000	9/30/2002	$ 107,042	$ 231,703	$ 89,486	$ 321,189	None	None
10/1/2001	9/30/2003	$ 173,233	$ 283,631	$ 184,362	$ 467,993	None	None
10/1/2002	9/30/2004	$ 274,151	$ 351,421	$ 215,454	$ 566,875	$ 95,763	None
10/1/2003	9/30/2005	$ 233,185	$ 417,697	$ 291,320	$ 709,017	None	None
10/1/2004	9/30/2006	$ 270,610	$ 470,233	$ 309,382	$ 779,615	$ 633,389	None
10/1/2005	9/30/2007	$ 294,491	$ 704,416	$ 362,187	$ 1,066,603	None	None
10/1/2006	9/30/2008	$ 233,185	$ 674,994	$ 812,539	$ 1,487,533	None	$ 450,904
10/1/2007	9/30/2009	$ 162,851	$ 558,504	$ 707,236	$ 1,265,740	$ 9,226	None
10/1/2008	9/30/2010	$ 29,981	$ 670,901	$ 174,700	$ 845,600	None	None
10/1/2009	9/30/2011	none	$ 633,290	$ 181,962	$ 815,252	None	None
10/1/2010	9/30/2012	none	$ 669,991	$ 158,806	$ 828,797	$ 10,597	$ (26,318)
10/1/2011	9/30/2013				$ -	None	None
10/1/2012	9/30/2014				$ -	None	None

Valuation Date	End of Year to which valuation applies	Maximum Allowable Offset: Police	Fire	Fire (Supplemental)	Allowable Offset: Police	Fire	Fire (Supplemental)	Total Allowable Offset
10/1/1996	9/30/1998	$ 1,108,121	$ 526,995	N/A	$ 1,108,121	$ 526,995	$ 517,070	$ 2,152,186
10/1/1997	9/30/1999	$ 1,108,121	$ 526,995	$ 236,223	$ 1,068,665	$ 526,995	$ 236,223	$ 1,831,883
10/1/1998	9/30/2000	$ 1,108,121	$ 526,995	$ 236,223	$ 1,073,472	$ 576,472	$ 527,127	$ 2,177,071
10/1/1999	9/30/2001	$ 1,555,621	$ 1,236,957	$ 601,961	$ 1,121,422	$ 619,842	$ 11,764	$ 1,753,028
10/1/2000	9/30/2002	$ 1,555,621	$ 1,236,957	$ 601,961	$ 1,215,163	$ 758,698	$ 325,709	$ 2,299,570
10/1/2001	9/30/2003	$ 1,555,621	$ 1,236,957	$ 601,961	$ 1,281,354	$ 810,626	$ 420,585	$ 2,512,565
10/1/2002	9/30/2004	$ 1,651,384	$ 1,236,957	$ 601,961	$ 1,382,272	$ 878,416	$ 451,677	$ 2,712,365
10/1/2003	9/30/2005	$ 1,651,384	$ 1,236,957	$ 601,961	$ 1,341,306	$ 944,692	$ 527,543	$ 2,813,541
10/1/2004	9/30/2006	$ 2,284,773	$ 1,236,957	$ 601,961	$ 1,378,731	$ 997,228	$ 545,605	$ 2,921,564
10/1/2005	9/30/2007	$ 2,284,773	$ 1,236,957	$ 601,961	$ 1,402,612	$ 1,231,411	$ 598,410	$ 3,232,433
10/1/2006	9/30/2008	$ 2,284,773	$ 1,241,060	$ 1,048,762	$ 1,341,306	$ 1,201,989	$ 1,048,762	$ 3,592,057
10/1/2007	9/30/2009	$ 2,293,999	$ 1,241,060	$ 1,048,762	$ 1,270,972	$ 1,085,499	$ 943,459	$ 3,299,930
10/1/2008	9/30/2010	$ 2,293,999	$ 1,241,060	$ 1,048,762	$ 1,138,102	$ 1,197,896	$ 410,923	$ 2,746,920
10/1/2009	9/30/2011	$ 2,293,999	$ 1,241,060	$ 1,048,762	$ 1,097,600	$ 1,160,285	$ 418,185	$ 2,676,070
10/1/2010	9/30/2012	$ 2,304,596	$ 1,214,742	$ 1,048,762	$ 1,106,311	$ 1,196,986	$ 395,029	$ 2,698,326

Maximum Allowable Offset:
Police = $2,304,596 [1997 base of $1,108,121 + enhancement costs of $447,500, $95,763, $633,389, $9,226, and $10,597].
Fire = $2,263,504 [Fire base of $526,995 + Fire supplemental base of $236,223 + enhancement costs of $1,075,700, $450,904, and ($26,318)]
State annual contribution amounts over these amounts must be used for extra benefits.

Table III
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Historical Contribution Information - Excess/(Shortfall) of State Contributions

		Required Contributions		Actual Contributions			Excess State Contributions and Amortizations			
Valuation Year	Contribution Year End	Estimated State	Net Employer*	State	City	Total	Excess State Contributions	Cumulative Excess State Contributions	1st year Amortization of Excess	Accumulated Amortizations
1990	9/30/1992	$ 947,502	$ 995,716	$ 1,033,281	$ 1,000,920	$ 2,034,201	$ 85,779	$ 85,779	$ 5,761	$ 446,836
1991	9/30/1993	$ 990,353	$ 1,103,636	$ 1,106,503	$ 1,327,910	$ 2,434,413	$ 116,150	$ 208,791	$ 7,800	$ 541,361
1992	9/30/1994	$ 1,033,281	$ 1,531,642	$ 1,233,903	$ 1,340,974	$ 2,574,877	$ 200,622	$ 426,116	$ 13,473	$ 834,736
1993	9/30/1995	$ 1,106,503	$ 1,556,371	$ 1,309,186	$ 1,531,059	$ 2,840,245	$ 202,683	$ 662,888	$ 13,611	$ 750,761
1994	9/30/1996	$ 1,233,903	$ 1,828,316	$ 1,463,302	$ 2,184,418	$ 3,647,720	$ 229,399	$ 945,318	$ 11,842	$ 579,775
1995	9/30/1997	$ 1,309,186	$ 2,262,652	$ 1,613,849	$ 2,213,426	$ 3,827,275	$ 304,663	$ 1,325,606	$ 15,727	$ 681,140
1996	9/30/1998	$ 1,463,302	$ 2,128,627	$ 2,152,186	$ 2,110,365	$ 4,262,551	$ 688,884	$ 2,120,538	$ 35,561	$ 1,357,249
1997	9/30/1999	$ 1,613,849	$ 1,774,626	$ 2,270,324	$ 1,731,613	$ 4,001,937	$ 656,475	$ 2,946,656	$ 33,888	$ 1,134,830
1998	9/30/2000	$ 2,152,186	$ 745,702	$ 2,177,070	$ 651,545	$ 2,828,615	$ 24,884	$ 3,207,272	$ 1,285	$ 37,567
1999	9/30/2001	$ 2,270,324	$ 644,776	$ 1,753,028	$ 665,753	$ 2,418,781	$ (517,296)	$ 2,946,558	$ (26,703)	$ (677,548)
2000	9/30/2002	$ 2,177,070	$ 655,100	$ 2,299,570	$ 715,392	$ 3,014,962	$ 122,500	$ 3,304,783	$ 6,324	$ 138,313
2001	9/30/2003	$ 1,753,028	$ 1,388,515	$ 2,512,565	$ 1,584,684	$ 4,097,249	$ 759,537	$ 4,328,703	$ 39,208	$ 733,113
2002	9/30/2004	$ 2,299,570	$ 1,825,356	$ 2,712,365	$ 1,814,559	$ 4,526,924	$ 412,795	$ 5,087,794	$ 21,309	$ 337,256
2003	9/30/2005	$ 2,512,565	$ 2,610,263	$ 2,813,541	$ 2,633,451	$ 5,446,992	$ 300,976	$ 5,795,794	$ 15,537	$ 205,593
2004	9/30/2006	$ 2,712,365	$ 4,299,719	$ 2,921,564	$ 4,503,917	$ 7,425,481	$ 209,199	$ 6,468,657	$ 10,799	$ 117,616
2005	9/30/2007	$ 2,954,218	$ 4,068,422	$ 3,232,433	$ 4,068,422	$ 7,300,855	$ 278,215	$ 7,264,365	$ 14,362	$ 126,133
2006	9/30/2008	$ 3,067,643	$ 4,524,009	$ 3,592,057	$ 4,524,009	$ 8,116,066	$ 524,414	$ 8,369,928	$ 27,071	$ 186,401
2007	9/30/2009	$ 3,394,055	$ 5,605,424	$ 3,299,931	$ 5,605,424	$ 8,905,355	$ (94,124)	$ 8,945,398	$ (4,859)	$ (25,185)
2008	9/30/2010	$ 3,464,927	$ 6,687,920	$ 2,746,920	$ 6,687,920	$ 9,434,840	$ (718,007)	$ 8,943,023	$ (37,064)	$ (135,580)
2009	9/30/2011	$ 2,884,266	$ 8,614,508	$ 2,676,070	$ 8,614,508	$ 11,290,578	$ (208,196)	$ 9,450,269	$ (10,747)	$ (24,664)
2010	9/30/2012	$ 2,809,874	$ 10,092,631	$ 2,698,326	$ 10,092,632	$ 12,790,958	$ (111,548)	$ 9,546,917	$ (5,758)	$ (6,219)
2011	9/30/2013	$ 2,833,242	$ 12,266,180							
2012	9/30/2014		$ 13,182,553							

09/30/2012 Totals: $ 9,546,917 $ 7,339,484

09/30/2012 Cumulative Excess Reduced by Accumulated Amortizations: $ 2,207,433

The schedule shows the Cumulative Excess State Contributions reduced by the accumulated amortizations of the excesses, i.e., as if the Cumulative Excess were a 'prepaid' asset for purposes of the State Contribution. As long as the Cumulative Excess reduced by the amortizations is positive, the City would not need to make up a current year shortfall in the State Contribution. However, if this amount ever becomes negative, the City would have to make up the difference. Note that the yearly excess will not include any State Contributions which are greater than the Maximum Allowable Offset for the base amount and benefit enhancements, and therefore could not be used for funding current benefits.

* *Beginning with the 2011 valuation, changed from payable biweekly during the Contribution Year to payable as of the first day of the Contribution Year.*

Table IV

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Statement of Assets as of October 1, 2012

Assets:		
Cash and Short-term Investments	$	4,980,168.85
Investments, at fair value:		
Common Stock	$	99,815,725.12
US Government Securities		21,764,595.21
Corporate Bonds		21,596,903.68
Commingled Funds		77,096,707.78
Real Estate		17,961,434.72
Total Investments	$	238,235,366.51
Interest and Dividends Receivable on Investments	$	397,189.32
Unsettled Trades		353,509.22
Contributions Receivable		1,321,986.00
Prepaid Expenses		36,691.51
Total Other Assets	$	2,109,376.05
Total Assets	$	245,324,911.41
Liabilities:		
Accounts Payable	$	300,482.23
Unsettled Trades Payable		420,588.48
Total Liabilities	$	721,070.71
Net Assets Held In Trust	$	244,603,840.70

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Reconciliation of Plan Assets for the Fiscal Year Ended September 30, 2012

	Total	Police	Firefighters
Additions:			
Contributions:			
City	$ 10,092,631.75	4,075,115.30	6,017,516.45
State	2,698,326.12	1,106,310.94	1,592,015.18
Employee	2,832,998.24	1,367,978.24	1,465,020.00
Employee Buybacks	72,581.60	72,581.60	-
Transfer from General Employee Plan	-	-	
Total Contributions	$ 15,696,537.71	$ 6,621,986.08	$ 9,074,551.63
Investment Income:			
Net Appreciation in Fair Value of Investments	$ 33,231,870.81		
Interest	1,650,767.98		
Dividends	3,336,177.09		
Other	4,810.00		
Investment Expense	(1,119,783.36)		
Net Investment Income	$ 37,103,842.52		
Total Additions	$ 52,800,380.23		
Deductions:			
Benefits Paid:			
Retirement	$ 8,768,178.75	$ 3,823,645.27	$ 4,944,533.48
Disability	1,067,141.56	573,448.79	493,692.77
Death	502,616.41	118,649.30	383,967.11
DROP	4,526,561.39	957,089.03	3,569,472.36
Termination Refunds	47,603.06	16,469.35	31,133.71
Transfer to Other Plans	-	-	-
Total Benefits	$ 14,912,101.17	$ 5,489,301.74	$ 9,422,799.43
Administrative Expenses:			
Professional Fees	$ 124,230.39		
Trustee Expenses	61,124.29		
Joint Office Expense	276,000.00		
Office & Other Expense	5,621.65		
Total Administrative Expenses	$ 466,976.33	$ 233,488.17	$ 233,488.16
Total Deductions	$ 15,379,077.50	$ 5,722,789.91	$ 9,656,287.59
Net Increase	$ 37,421,302.73		
Net Assets Held In Trust, Beginning Of Year	$ 207,182,537.97		
Net Assets Held In Trust, End Of Year	$ 244,603,840.70		
Non-Investment Net Cash Flow	$ 317,460.21	$ 899,196.17	$ (581,735.96)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Derivation of Actuarial Value of Assets as of October 1, 2012

	Total	Police	Firefighters
A. Actuarial Value as of Prior Valuation Date	$ 205,429,026	$ 92,496,332	$ 112,932,694
B. Market Value as of Prior Valuation Date	$ 207,182,538		
C. Non-Investment Net Cash Flow	$ 317,460	$ 899,196	$ (581,736)
D. Investment Income (Net of Investment Expense)			
1. Market Total	$ 37,103,843		
2. Amount for Immediate Recognition	$ 3,871,972		
3. Amount for Phased-In Recognition	$ 33,231,871		
E. Phased-In Recognition of Past Capital Gains / (Losses)			
1. Current Year (0.25 x D3)	$ 8,307,968		
2. First Prior Year	(815,491)		
3. Second Prior Year	3,674,062		
4. Third Prior Year	(3,148,140)		
5. Total Recognized Capital Gains / (Losses)	$ 8,018,399		
F. Actuarial Value as of Valuation Date			
1. Preliminary Value: A + C + D2 + E5	$ 217,636,857		
2. Adjustment for 80%/115% of market value	$ -		
3. Actuarial Value of Assets	$ 217,636,857		
G. Allocation to Police and Firefighters			
1. Allocation Base: A + .5 x C	$ 205,587,756	$ 92,945,930	$ 112,641,826
2. D2 + E5 + F2 Allocated in Proportion to G1	$ 11,890,371	$ 5,375,620	$ 6,514,751
3. Actuarial Value as of Assets: A + C + G2	$ 217,636,857	$ 98,771,148	$ 118,865,709
H. Market Value as of Valuation Date: B + C + D1	$ 244,603,841		
I. Rate of Return			
1. Actuarial Value	5.8%	5.8%	5.8%
2. Market Value	17.9%		

Table VI

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Actuarial Gains (Losses) for
Plan Year Ending September 30, 2012

	Total	Police	Firefighters
A. Derivation of Actuarial Gain (Loss)			
1. Unfunded actuarial accrued liability previous valuation	122,151,172	56,395,552	65,755,620
2. BOY annual amortization payment for prior year	6,474,143	2,069,650	4,404,493
3. Interest on:			
a. Unfunded actuarial accrued liability	9,772,094	4,511,644	5,260,450
b. Amortization payment	517,931	165,572	352,359
c. Net total: (a) - (b)	9,254,163	4,346,072	4,908,091
4. Expected unfunded actuarial accrued liability current year = (1. - 2. + 3c.)	124,931,192	58,671,974	66,259,218
5. Actual unfunded actuarial accrued liability current year (before assumption changes)	129,010,164	60,282,721	68,727,443
6. Actuarial gain (loss) = (4. - 5.)	(4,078,972)	(1,610,747)	(2,468,225)
7. Effect of assumption or method changes	-	-	-
8. Actual unfunded actuarial accrued liability before plan amendment	129,010,164	60,282,721	68,727,443
9. Effect of plan amendments	-	-	-
10. Actual unfunded actuarial accrued liability current year	129,010,164	60,282,721	68,727,443
B. Approximate Portion of Gain (Loss) - Investments			
1. Actuarial value of assets previous year	205,429,026	92,496,332	112,932,694
2. Contributions during period	15,696,538	6,621,986	9,074,552
3. Benefits, refunds and expenses during period	15,379,078	5,722,790	9,656,288
4. Expected appreciation for period	16,446,776	7,434,982	9,011,794
5. Expected actuarial value of assets current year = (1. + 2. - 3. + 4.)	222,193,262	100,830,510	121,362,752
6. Actual actuarial value of assets current year	217,636,857	98,771,148	118,865,709
7. Approximate investment gain (loss) = (6. - 5.)	(4,556,405)	(2,059,362)	(2,497,043)
C. Approximate Portion Of Gain (Loss) - Liabilities = A.6. - B.7.	477,433	448,615	28,818

Table VII

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Accounting Disclosure Exhibit

I. Financial Accounting Statement 35

		10/1/2011		10/1/2012
A. Statement of Accumulated Plan Benefits				
1. Actuarial present value of accumulated vested plan benefits				
a. Participants currently receiving benefits	$	202,989,677	$	219,827,409
b. Other participants		83,308,476		82,672,139
c. Total	$	286,298,153	$	302,499,548
2. Actuarial present value of accumulated non-vested plan benefits		9,096,996		10,316,397
3. Total actuarial present value of accumulated plan benefits	$	295,395,149	$	312,815,945
B. Statement of Change in Accumulated Plan Benefits				
1. Actuarial present value of accumulated plan benefits as of Prior Valuation Date	$	267,318,608	$	295,395,149
2. Increase (decrease) during year attributable to:				
a. Plan amendment		0		0
b. Change in actuarial assumptions		7,173,076		0
c. Benefits paid		(11,096,906)		(14,912,101)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period		32,000,371		32,332,897
e. Net increase	$	28,076,541	$	17,420,796
3. Actuarial present value of accumulated plan benefits as of Current Valuation Date	$	295,395,149	$	312,815,945

	10/1/2011	10/1/2012
C. Significant Matters Affecting Calculations		
1. Assumed rate of return used in determining present values	8.0%	8.0%
2. Change in plan provisions	None	None
3. Change in actuarial assumptions:	None	None
4. Change in actuarial method:	None	None

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Accounting Disclosure Exhibit

II. Development of Annual Required Contribution (ARC), Annual Pension Cost (APC), and Net Pension Obligation (NPO)

Actuarial Valuation Date	10/1/2010	10/1/2011	10/1/2012
For Contribution Year	2011-12	2012-13	2013-14
1. Annual Required Contribution (ARC)			
a. City Minimum Required Contribution	$10,092,631	$12,266,180	$13,182,553
b. Expected State Contribution per Valuation	2,809,874	2,833,242	pending
c. ARC	$12,902,505	$15,099,422	pending
2. Annual Pension Cost (APC)			
a. ARC	$12,902,505	$15,099,422	pending
b. Interest on the Net Pension Obligation	(293,006)	(579,288)	pending
c. Adjustment to ARC*	400,675	398,524	pending
d. APC	$13,010,174	$14,918,658	pending
3. Net Pension Obligation (NPO)			
a. APC	$13,010,174	$14,918,658	pending
b. City Contributions	(10,092,632)	pending	pending
c. State Contributions	(2,698,326)	pending	pending
d. Interest on (a + b + c) to End of Year	8,600	pending	pending
e. Increase (decrease) in NPO	$227,816	pending	pending
f. NPO (beginning of year)	(7,468,916)	(7,241,100)	pending
g. NPO (end of year)	($7,241,100)	pending	pending

*Amortization over the same period and using the same method as for the latest component of the Unfunded Actuarial Accrued Liability; 10/1/2010 results assumed biweekly payment.

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Accounting Disclosure Exhibit

III. Historical Trend Information

Fiscal Year Ending	Annual Required Cost (ARC)	City and State Contributions Made	Percentage of ARC Contributed	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation
9/30/2001	$ 2,915,100	$ 2,915,100	100.0%	N/A		(2,446,101)
9/30/2002	$ 2,832,200	$ 3,014,962	106.5%	N/A		(2,513,228)
9/30/2003	$ 3,007,421	$ 4,097,249	136.2%	N/A		(3,670,035)
9/30/2004	$ 3,929,132	$ 4,526,924	115.2%	$ 3,831,323	118.2%	(4,365,636)
9/30/2005	$ 4,917,915	$ 5,446,992	110.8%	$ 4,773,577	114.1%	(5,039,051)
9/30/2006	$ 6,585,066	$ 7,425,481	112.8%	$ 6,456,320	115.0%	(6,008,212)
9/30/2007	$ 6,648,672	$ 7,300,855	109.8%	$ 6,445,043	113.3%	(6,864,024)
9/30/2008	$ 7,229,020	$ 8,116,066	112.3%	$ 6,981,107	116.3%	(7,998,983)
9/30/2009	$ 8,527,710	$ 8,905,355	104.4%	$ 8,243,112	108.0%	(8,661,226)
9/30/2010	$ 10,152,847	$ 9,434,840	92.9%	$ 10,269,222	91.9%	(7,794,111)
9/30/2011	$ 11,498,774	$ 11,290,578	98.2%	$ 11,603,498	97.3%	(7,468,916)
9/30/2012	$ 12,902,505	$ 12,790,958	99.1%	$ 13,010,174	98.3%	(7,241,100)

IV Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
10/1/1998	$ 94,809,000	$ 92,084,700	$ (2,724,300)	103.0%	$ 12,246,200	(22.2%)
10/1/1999	$ 110,727,500	$ 103,742,600	$ (6,984,900)	106.7%	$ 13,502,100	(51.7%)
10/1/2000	$ 123,696,000	$ 118,354,700	$ (5,341,300)	104.5%	$ 13,761,300	(38.8%)
10/1/2001	$ 130,476,862	$ 129,050,500	$ (1,426,362)	101.1%	$ 13,869,400	(10.3%)
10/1/2002	$ 133,781,831	$ 139,770,881	$ 5,989,050	95.7%	$ 15,105,619	39.6%
10/1/2003	$ 136,734,834	$ 152,533,288	$ 15,664,069	89.6%	$ 17,202,834	91.1%
10/1/2004	$ 143,697,504	$ 179,205,409	$ 35,507,905	80.2%	$ 19,698,487	180.3%
10/1/2005	$ 177,298,325	$ 196,887,884	$ 19,589,559	90.1%	$ 22,283,158	87.9%
10/1/2006	$ 184,595,316	$ 209,486,621	$ 24,891,305	88.1%	$ 24,193,640	102.9%
10/1/2007	$ 197,931,772	$ 231,788,992	$ 33,857,220	85.4%	$ 24,890,896	136.0%
10/1/2008	$ 203,745,215	$ 252,987,792	$ 49,242,577	80.5%	$ 28,637,275	172.0%
10/1/2009	$ 204,965,289	$ 274,734,730	$ 69,769,441	74.6%	$ 29,766,886	234.4%
10/1/2010	$ 208,496,526	$ 296,741,692	$ 88,245,166	70.3%	$ 29,499,150	299.1%
10/1/2011	$ 205,429,026	$ 327,580,198	$ 122,151,172	62.7%	$ 28,591,197	427.2%
10/1/2012	$ 217,636,857	$ 346,647,021	$ 129,010,164	62.8%	$ 29,457,656	438.0%

V. Additional Information

Valuation Date	October 1, 2011	October 1, 2012
Actuarial cost method	Entry Age	Entry Age
Amortization method	Level percent, closed	Level percent, closed
Asset valuation method	Four year smoothed average	Four year smoothed average
Actuarial assumptions:		
Investment rate of return	8.0%	8.0%
Ultimate projected salary increases	4.5% to 7.5%	4.5% to 7.5%
Cost of living adjustments	Police: 2% Annually Fire: 3% Annually	Police: 2% Annually Fire: 3% Annually

Table VIII

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Member Statistics

A. Active Plan Members Summary	Police Officers	Firefighters	Total
1. Active Members Retirement Eligible	8	24	32
2. Active Members Fully Vested but Not Retirement Eligible	67	51	118
3. Active Members Non-Vested	85	108	193
4. Total Active Members	160	183	343
5. Prior Year Active Compensation	$ 13,331,322	$ 14,583,870	$ 27,915,192

B. Retired and Terminated Vested Member Summary

1. Retired Members	85	86	171
2. DROP Members	28	22	50
3. Terminated Vested Members	2	1	3
4. Beneficiaries of Deceased Members	11	16	27
5. Disabled Members	18	13	31

C. Annual Retirement Benefits for Non-Active Members

1. Retired Members	$ 4,066,824	$ 5,387,323	$ 9,454,146
2. DROP Members	$ 2,295,298	$ 1,976,281	$ 4,271,579
3. Terminated Vested Members	$ 36,519	$ 17,600	$ 54,118
4. Beneficiaries of Deceased Members	$ 139,093	$ 408,367	$ 547,460
5. Disabled Members	$ 551,781	$ 478,528	$ 1,030,309

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Statistics for Members Entitled to Deferred Benefits and Members Receiving Benefits

A. Entitled to Deferred Benefits: Vested Terminated Members

Current Age Group	Count	Total Annual Benefit	Average Annual Benefit
Less than 45	1	$ 17,600	17,600
45-49	1	11,293	11,293
50-54	1	25,226	25,226
55-59	0	0	0
60-64	0	0	0
65 & Over	0	0	0
TOTAL	3	$ 54,119	$ 18,040

B. Entitled to Deferred Benefits: DROP Members

Current Age Group	Count	Total Annual Benefit*	Average Annual Benefit*	Total DROP Balance
Less than 50	14	$ 1,280,409	91,458	$ 1,902,280
50-54	22	1,815,072	82,503	4,014,682
55-59	11	899,018	81,729	2,106,051
60-64	3	277,080	92,360	1,140,966
Former DROP				5,149,981
TOTAL	50	$ 4,271,579	$ 85,432	$ 14,313,959

C. Receiving Benefits

Current Age Group	Count	Total Annual Benefit	Average Annual Benefit
Less than 50	22	$ 1,133,264	$ 51,512
50-54	38	2,055,578	54,094
55-59	37	2,003,749	54,155
60-64	38	2,185,509	57,513
65-69	46	2,127,010	46,239
70-74	26	903,906	34,766
75-79	15	428,002	28,533
80 & Over	7	194,898	27,843
TOTAL	229	$ 11,031,916	$ 48,174

* Excluding Supplemental Benefits

Table VIII
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Statistics for Members Entitled to Deferred Benefits and Members Receiving Benefits

D. Retired Member and Beneficiary Data as of October 1, 2012, by Category of Retirement

Category of Benefits Being Paid	Count	Annual Benefits
Police		
Normal Retirement	82	$ 4,010,657
Early Retirement	3	56,167
Disability Benefits	18	551,781
Surviving Beneficiaries	11	139,093
Total Police Benefits	114	$ 4,757,698
Firefighters		
Normal Retirement	85	$ 5,361,791
Early Retirement	1	25,532
Disability Benefits	13	478,528
Surviving Beneficiaries	16	408,367
Total Firefighters' Benefits	115	$ 6,274,218
TOTAL ANNUAL BENEFITS	229	$ 11,031,916

Table IX

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Reconciliation of Employee Data
All Participants

	Active	DROP	Terminated Vested	Disabled	Retired	Beneficiaries	Total
October 1, 2011	**333**	**51**	**4**	**35**	**157**	**23**	**603**
New Entrants	25	-	-	-	-	-	25
Retirements	(1)	(13)	(1)	-	15	-	-
Disabilities	-	-	-	-	-	-	-
Terminations							
a) with refund	(2)	-	-	-	-	-	(2)
b) without refund	-	-	-	-	-	-	-
DROP enrollments	(12)	12	-	-	-	-	-
Deaths							
a) with beneficiaries	-	-	-	(4)	-	4	-
b) without beneficiaries	-	-	-	-	(1)	-	(1)
Benefits Expired	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
October 1, 2012	**343**	**50**	**3**	**31**	**171**	**27**	**625**

Table IX
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Reconciliation of Employee Data
Police Officers

	Active	DROP	Terminated Vested	Disabled	Retired	Beneficiaries	Total
October 1, 2011	**164**	**26**	**3**	**21**	**80**	**8**	**302**
New Entrants	4	-	-	-	-	-	4
Retirements	(1)	(4)	(1)	-	6	-	-
Disabilities	-	-	-	-	-	-	-
Terminations							
a) with refund	(1)	-	-	-	-	-	(1)
b) without refund	-	-	-	-	-	-	-
DROP enrollments	(6)	6	-	-	-	-	-
Deaths							
a) with beneficiaries	-	-	-	(3)	-	3	-
b) without beneficiaries	-	-	-	-	(1)		(1)
Benefits Expired	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
October 1, 2012	**160**	**28**	**2**	**18**	**85**	**11**	**304**

Table IX
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Reconciliation of Employee Data
Firefighters

	Active	DROP	Terminated Vested	Disabled	Retired	Beneficiaries	Total
October 1, 2011	**169**	**25**	**1**	**14**	**77**	**15**	**301**
New Entrants	21	-	-	-	-	-	21
Retirements	-	(9)	-	-	9	-	-
Disabilities	-	-	-	-	-	-	-
Terminations							
a) with refund	(1)	-	-	-	-	-	(1)
b) without refund	-	-	-	-	-	-	-
DROP enrollments	(6)	6	-	-	-	-	-
Deaths							
a) with beneficiaries	-	-	-	(1)	-	1	-
b) without beneficiaries	-	-	-	-	-	-	-
Benefits Expired	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
October 1, 2012	**183**	**22**	**1**	**13**	**86**	**16**	**321**

Table IX
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Age-Service-Salary Distribution

All Active Participants

AGE	COMPLETED YEARS OF SERVICE										
	00-01	01-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
15-24	6	8	-	-	-	-	-	-	-	-	14
	$ 56,020	$ 63,023	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 60,021
25-29	11	16	16	-	-	-	-	-	-	-	43
	$ 56,372	$ 67,975	$ 76,047	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 68,010
30-34	7	16	51	4	-	-	-	-	-	-	78
	$ 56,112	$ 64,307	$ 82,650	$ 97,548	$ -	$ -	$ -	$ -	$ -	$ -	$ 77,270
35-39	1	2	33	24	5	-	-	-	-	-	65
	$ 55,301	$ 66,877	$ 84,315	$ 101,328	$ 103,079	$ -	$ -	$ -	$ -	$ -	$ 91,057
40-44	-	3	25	33	19	4	-	-	-	-	84
	$ -	$ 63,277	$ 81,049	$ 96,310	$ 100,462	$ 104,798	$ -	$ -	$ -	$ -	$ 91,932
45-49	-	-	4	9	10	12	1	-	-	-	36
	$ -	$ -	$ 88,692	$ 98,418	$ 98,783	$ 112,179	$ 114,882	$ -	$ -	$ -	$ 102,483
50-54	-	-	1	2	5	11	-	-	-	-	19
	$ -	$ -	$ 81,357	$ 92,468	$ 96,770	$ 108,307	$ -	$ -	$ -	$ -	$ 102,185
55-59	-	-	-	1	-	2	-	-	-	-	3
	$ -	$ -	$ -	$ 93,417	$ -	$ 105,980	$ -	$ -	$ -	$ -	$ 101,792
60-64	-	-	1	-	-	-	-	-	-	-	1
	$ -	$ -	$ 88,658	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 88,658
65-69	-	-	-	-	-	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
70+	-	-	-	-	-	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL	25	45	131	73	39	29	1	-	-	-	343
	$ 56,172	$ 65,428	$ 82,178	$ 98,142	$ 99,894	$ 109,265	$ 114,882	$ -	$ -	$ -	$ 85,882

Average Age: 37.82 Average Service: 9.96 Percent Female: 12.53%

Table IX
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Age-Service-Salary Distribution

Active Police Officers

AGE	00-01	01-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
	COMPLETED YEARS OF SERVICE										
15-24	1	4	-	-	-	-	-	-	-	-	5
	$ 56,370	$ 63,053	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 61,716
25-29	3	11	5	-	-	-	-	-	-	-	19
	$ 56,342	$ 68,911	$ 75,544	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 68,672
30-34	-	13	25	4	-	-	-	-	-	-	42
	$ -	$ 64,819	$ 83,571	$ 97,548	$ -	$ -	$ -	$ -	$ -	$ -	$ 79,098
35-39	-	2	12	16	4	-	-	-	-	-	34
	$ -	$ 66,877	$ 84,532	$ 105,521	$ 105,624	$ -	$ -	$ -	$ -	$ -	$ 95,852
40-44	-	2	7	17	11	1	-	-	-	-	38
	$ -	$ 62,235	$ 82,011	$ 98,077	$ 106,166	$ 99,833	$ -	$ -	$ -	$ -	$ 95,619
45-49	-	-	2	5	3	5	-	-	-	-	15
	$ -	$ -	$ 84,308	$ 98,423	$ 100,389	$ 119,664	$ -	$ -	$ -	$ -	$ 104,015
50-54	-	-	1	2	2	1	-	-	-	-	6
	$ -	$ -	$ 81,357	$ 92,468	$ 99,264	$ 132,013	$ -	$ -	$ -	$ -	$ 99,472
55-59	-	-	-	1	-	-	-	-	-	-	1
	$ -	$ -	$ -	$ 93,417	$ -	$ -	$ -	$ -	$ -	$ -	$ 93,417
60-64	-	-	-	-	-	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
65-69	-	-	-	-	-	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
70+	-	-	-	-	-	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL	4	32	52	45	20	7	-	-	-	-	160
	$ 56,349	$ 65,972	$ 82,797	$ 100,362	$ 104,501	$ 118,595	$ -	$ -	$ -	$ -	$ 87,990

Average Age: 37.32 Average Service: 9.57 Percent Female: 20.62%

Table IX
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Age-Service-Salary Distribution
Active Firefighters

AGE	00-01	01-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
	COMPLETED YEARS OF SERVICE										
15-24	5	4	-	-	-	-	-	-	-	-	9
	$ 55,950	$ 62,992	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 59,080
25-29	8	5	11	-	-	-	-	-	-	-	24
	$ 56,383	$ 65,915	$ 76,275	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 67,486
30-34	7	3	26	-	-	-	-	-	-	-	36
	$ 56,112	$ 62,090	$ 81,764	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 75,137
35-39	1	-	21	8	1	-	-	-	-	-	31
	$ 55,301	$ -	$ 84,191	$ 92,942	$ 92,899	$ -	$ -	$ -	$ -	$ -	$ 85,798
40-44	-	1	18	16	8	3	-	-	-	-	46
	$ -	$ 65,360	$ 80,675	$ 94,432	$ 92,619	$ 106,453	$ -	$ -	$ -	$ -	$ 88,886
45-49	-	-	2	4	7	7	1	-	-	-	21
	$ -	$ -	$ 93,076	$ 98,412	$ 98,094	$ 106,833	$ 114,882	$ -	$ -	$ -	$ 101,389
50-54	-	-	-	-	3	10	-	-	-	-	13
	$ -	$ -	$ -	$ -	$ 95,107	$ 105,936	$ -	$ -	$ -	$ -	$ 103,437
55-59	-	-	-	-	-	2	-	-	-	-	2
	$ -	$ -	$ -	$ -	$ -	$ 105,980	$ -	$ -	$ -	$ -	$ 105,980
60-64	-	-	1	-	-	-	-	-	-	-	1
	$ -	$ -	$ 88,658	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 88,658
65-69	-	-	-	-	-	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
70+	-	-	-	-	-	-	-	-	-	-	-
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL	21	13	79	28	19	22	1	-	-	-	183
	$ 56,138	$ 64,090	$ 81,770	$ 94,575	$ 95,044	$ 106,296	$ 114,882	$ -	$ -	$ -	$ 84,040

Average Age: 38.25 Average Service: 10.30 Percent Female: 5.46%

Table X

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Historical and Projected Retirement Benefits

Fiscal Year	Member Benefits	Member Refunds	Total Benefits Plus Refunds
1995-96	$ 1,806,383	$ 39,510	$ 1,845,893
1996-97	$ 2,165,123	$ 99,853	$ 2,264,976
1997-98	$ 2,218,357	$ 59,987	$ 2,278,344
1998-99	$ 3,387,199	$ 155,026	$ 3,542,225
1999-00	$ 4,715,035	$ 148,339	$ 4,863,374
2000-01	$ 3,906,066	$ 84,708	$ 3,990,774
2001-02	$ 4,374,067	$ 43,897	$ 4,417,964
2002-03	$ 4,605,306	$ 89,049	$ 4,694,355
2003-04	$ 4,959,031	$ 76,742	$ 5,035,773
2004-05	$ 6,407,057	$ 114,802	$ 6,521,859
2005-06	$ 8,153,150	$ 80,754	$ 8,233,904
2006-07	$ 7,940,778	$ 89,692	$ 8,030,470
2007-08	$ 7,901,457	$ 214,101	$ 8,115,558
2008-09	$ 9,692,747	$ 180,209	$ 9,872,956
2009-10	$ 9,029,697	$ 67,970	$ 9,097,667
2010-11	$11,047,322	$ 49,584	$ 11,096,906
2011-12	$14,864,498	$ 47,603	$ 14,912,101

Fiscal Year	Projected Total Annual Payout
2012-13	$ 16,032,126
2013-14	$ 16,922,725
2014-15	$ 17,880,195
2015-16	$ 18,873,326
2016-17	$ 19,882,748
2017-18	$ 21,220,407
2018-19	$ 22,466.540
2019-20	$ 23,912,866
2020-21	$ 25,694,751
2021-22	$ 27,478,616

The above projected payout of plan benefits during the next ten years is based on assumptions involving all decrements. The actual payouts may differ from the above estimates depending upon the salary, retirement, withdrawal, disability and death experience of the plan. However, since the projected payment is recomputed each valuation date, there is an automatic correction to the extent that actual experience varies from expected experience.

Table XI

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Review of Salary, Termination and Retirement Experience

A. Recent Salary Experience[1]

Period Ending	Average Salary	Actual Increase	Assumed Increase [2]
9/30/2002	$54,930	7.7%	5.9%
9/30/2003	$59,525	10.3%	5.9%
9/30/2004	$61,558	8.7%	5.9%
9/30/2005	$64,402	9.9%	6.0%
9/30/2006	$67,019	9.1%	5.8%
9/30/2007	$68,950	6.0%	5.6%
9/30/2008	$77,341	14.1%	9.2%
9/30/2009	$79,210	6.1%	5.5%
9/30/2010	$85,348	5.7%	5.5%
9/30/2011	$85,859	3.9%	5.5%
9/30/2012	$85,882	3.8%	5.5%
Last 3 Years		4.5%	5.5%
Last 5 Years		6.7%	6.2%

[1] Includes only Members who have full years of pay provided for the two consecutive years ending on the date shown

[2] Assumed increase prior to 9/30/2004 is approximate

B. Recent Termination Experience

Valuation Date	Number of Employees Previous Valuation	Expected[3] Terminations	Actual Terminations	Ratio of Actual To Expected
10/1/2004	289	9.8	6	0.6
10/1/2005	320	11.6	9	0.8
10/1/2006	346	13.2	10	0.8
10/1/2007	361	13.6	10	0.7
10/1/2008	361	12.7	8	0.6
10/1/2009	351	10.4	5	0.5
10/1/2010	359	10.1	0	0.0
10/1/2011	352	7.7	2	0.3
10/1/2012	333	7.0	2	0.3
Last 3 Years	1044	24.8	4	0.2
Last 5 Years	1756	47.9	17	0.4

[3] Based upon census data and expected rates of termination used in completing the previous valuation

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Review of Retirement Experience

C. Recent Retirement Experience*

Valuation Date	Employees Eligible to Retire Previous Valuation	Expected * Retirements	Actual** Retirements	Employees DROP Eligible Previous Valuation	DROP Enrollments
10/1/2004	45	16.9	3	45	3
10/1/2005	48	17.5	9	48	0
10/1/2006	47	15.4	11	47	8
10/1/2007	35	5.6	14	33	9
10/1/2008	29	11.2	11	27	7
10/1/2009	55	13.2	12	52	9
10/1/2010	57	11.9	15	54	13
10/1/2011	55	10.2	21	51	19
10/1/2012	49	7.5	13	42	12
Last 3 Years	161	29.6	49	147	44
Last 5 Years	245	54	72	226	60

* Based upon the expected rates of retirement used in completing the previous valuation
** Includes DROP enrollments and disablements

Table XII

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Recent Plan Asset Experience

Year	Assets at End of Year Market Value	Assets at End of Year Actuarial Value	Benefit Payments & Refunds	Administrative Expenses	City, State, and Member Contributions	Market Value Yield*	Actuarial Value Yield*
1994/1995	$ 61,911,629	$ 56,638,166	$ 1,630,663	$ 145,237	$ 3,812,295	23.3%	11.8%
1995/1996	$ 75,618,111	$ 65,003,331	$ 1,845,893	$ 196,217	$ 4,702,132	17.5%	9.8%
1996/1997	$ 101,080,972	$ 78,591,630	$ 2,264,976	$ 108,410	$ 4,939,137	29.8%	16.6%
1997/1998	$ 109,598,237	$ 94,809,016	$ 2,278,344	$ 125,605	$ 5,412,066	5.4%	16.5%
1998/1999	$ 126,697,631	$ 110,727,538	$ 3,542,224	$ 200,085	$ 5,236,648	14.1%	15.1%
1999/2000	$ 134,230,551	$ 123,696,025	$ 4,863,374	$ 221,973	$ 4,193,662	6.7%	12.6%
2000/2001	$ 131,106,532	$ 130,476,862	$ 3,990,774	$ 221,204	$ 3,770,653	-2.0%	5.8%
2001/2002	$ 119,992,324	$ 133,781,831	$ 4,417,964	$ 157,627	$ 4,439,327	-8.4%	2.6%
2002/2003	$ 136,734,834	$ 136,869,219	$ 4,694,355	$ 158,954	$ 5,718,288	13.2%	1.7%
2003/2004	$ 156,413,900	$ 143,697,504	$ 5,035,773	$ 263,765	$ 7,451,658	12.7%	3.4%
2004/2005	$ 177,298,325	$ 177,298,325	$ 6,521,859	$ 331,322	$ 7,944,389	12.6%	22.5% **
2005/2006	$ 190,582,456	$ 184,595,316	$ 8,233,904	$ 402,001	$ 10,025,596	6.7%	3.3%
2006/2007	$ 218,026,214	$ 197,931,772	$ 8,030,470	$ 416,260	$ 9,787,254	13.6%	6.5%
2007/2008	$ 189,723,247	$ 203,745,215	$ 8,115,558	$ 377,546	$ 11,207,967	-14.1%	1.6%
2008/2009	$ 183,053,193	$ 204,965,289	$ 9,872,956	$ 422,639	$ 11,560,869	-4.2%	0.0%
2009/2010	$ 204,304,759	$ 208,496,526	$ 9,097,667	$ 407,626	$ 12,110,671	10.1%	0.4%
2010/2011	$ 207,182,538	$ 205,429,026	$ 11,096,906	$ 466,375	$ 14,100,988	0.2%	-2.7%
2011/2012	$ 244,603,841	$ 217,636,857	$ 14,912,101	$ 466,976	$ 15,696,538	17.9%	5.8%
					5-Year Compound Rate of Return:	1.4%	1.0%
					10-Year Compound Rate of Return:	6.4%	4.1%
					Compound Rate of Return 1994/1995 to Date:	8.1%	7.2%

* After 9/30/2003, calculated as: $\frac{\text{2 x Investment Earnings}}{\text{(Beginning Balance + Ending Balance - Investment Earnings)}}$

** After reset.

Table XIII

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Actuarial Valuation as of October 1, 2012

State Required Exhibit

		10/1/2011		10/1/2012
A. Member Data				
1. Active Members		333		343
2. Retired Members and beneficiaries receiving benefits (including DROP)		231		248
3. Disabled Members receiving benefits		35		31
4. Terminated vested Members		4		3
5. Prior Year Active Compensation	$	27,101,642	$	27,915,192
6. Annual benefits payable to those currently receiving benefits (including DROP)	$	13,918,211	$	15,303,495
B. Assets				
1. Actuarial value	$	205,429,026	$	217,636,857
2. Market value		207,182,538		244,603,841
C. Liabilities				
1. Actuarial present value of future expected benefit payments for active members				
a. Retirement benefits	$	186,093,133	$	192,189,800
b. Termination benefits		14,559,600		15,535,518
c. Death benefits		2,712,096		2,768,117
d. Disability benefits		3,624,840		3,756,539
e. Total	$	206,989,669	$	214,249,974
2. Actuarial present value of future expected benefit payments for terminated vested members	$	1,042,956	$	664,279
3. Actuarial present value of future expected benefit payments for members currently receiving benefits				
a. Service retired, beneficiaries and DROP	$	190,192,814	$	207,946,145
b. Disability retired		12,796,863		11,881,264
c. Total	$	202,989,677	$	219,827,409
4. Total actuarial present value of future expected benefit payments	$	411,022,302	$	434,741,661
5. Actuarial accrued liabilities	$	327,580,198	$	346,647,021
6. Unfunded actuarial liabilities	$	122,151,172	$	129,010,164
7. Liabilities at FRS discount rate				
a. Discount rate		7.75%		7.75%
b. Actuarial accrued liabilities	$	337,681,272	$	358,334,374
c. Unfunded actuarial accrued liabilities	$	132,252,246	$	140,697,517

Table XIII
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

State Required Exhibit

	10/1/2011	10/1/2012
D. Statement of Accumulated Plan Benefits		
1. Actuarial present value of accumulated vested benefits		
a. Members currently receiving benefits (including DROP)	$ 202,989,677	$ 219,827,409
b. Other Members	83,308,476	82,672,139
c. Total	$ 286,298,153	$ 302,499,548
2. Actuarial present value of accumulated non-vested plan benefits	9,096,996	10,316,397
3. Total actuarial present value of accumulated plan benefits	$ 295,395,149	$ 312,815,945
4. Liabilities at FRS discount rate		
a. Discount rate	7.75%	7.75%
b. Actuarial present value of accumulated vested benefits	$ 294,750,866	$ 312,358,464
c. Total actuarial present value of accumulated plan benefits	$ 304,116,444	$ 323,409,831
E. Statement of Change in Accumulated Plan Benefits		
1. Actuarial present value of accumulated plan benefits as of Prior Valuation Date	$ 267,318,608	$ 295,395,149
2. Increase (decrease) during year attributable to:		
a. Plan amendment	0	0
b. Change in actuarial assumptions	7,173,076	0
c. Benefits paid	(11,096,906)	(14,912,101)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period	32,000,371	32,332,897
e. Net increase	$ 28,076,541	$ 17,420,796
3. Actuarial present value of accumulated plan benefits as of Current Valuation Date	$ 295,395,149	$ 312,815,945

Table XIII
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

State Required Exhibit

	10/1/2010	10/1/2011	10/1/2012
Actuarial Valuation Date	10/1/2010	10/1/2011	10/1/2012
For Contribution Year	2011-12	2012-13	2012-13
F. Past Contributions			
1. Total contribution required			
a. City	$ 10,092,631	$ 12,266,180	$ 13,182,553
b. State	2,809,874	2,833,242	N/A
c. Member	2,916,302	3,004,681	N/A
d. Total	$ 15,818,807	$ 18,104,103	N/A
2. Actual contributions made:			
a. City	$ 10,092,632	N/A	N/A
b. State	2,698,326	N/A	N/A
c. Member	2,832,998	N/A	N/A
d. Total	$ 15,623,956	N/A	N/A
G. Net Actuarial Gain (Loss)		$ (22,827,047)	$ (4,078,972)
H. Disclosure of Following Items:			
1. Actuarial present value of future salaries - attained age		$ 279,275,684	$ 290,609,098
2. Actuarial present value of future employee contributions - attained age		$ 28,486,120	$ 29,642,128
3. Actuarial present value of future contributions from other sources		N/A	N/A
4. Amount of active members' accumulated contributions		$ 23,543,725	$ 24,523,257
5. Actuarial present value of future salaries and future benefits at entry age		Not provided by software	
6. Actuarial present value of future employee contributions at entry age		Not provided by software	
7. Reconciliation of DROP Assets:			
Assets as of Prior Valuation Date		$ 10,875,540	$ 13,050,261
Payments into DROP		$ 4,008,756	$ 4,498,800
Earnings		39,927	1,291,460
Distributions		(1,893,820)	(4,526,561)
Expenses		-	-
Adjustments		19,858	-
Assets as of Current Valuation Date		$ 13,050,261	$ 14,313,959

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Unfunded Actuarial Accrued Liability - Police

October 1, 2012

Date Established	Description	Original Amount	Original Amortization Period (Years)	2011 - 2012 Plan Year Actual BOY Outstanding Balance	2011 - 2012 Plan Year BOY Annual Amortization Payment	2012 - 2013 Plan Year Actual BOY Outstanding Balance	2012 - 2013 Plan Year BOY Annual Amortization Payment	Years Remaining	2013 - 2014 Plan Year Expected BOY Outstanding Balance	2013 - 2014 Plan Year BOY Annual Amortization Payment	Payment Before 4.5% Adjustment
10/1/1995	Fresh Start	-	20	(1,603,330)	(420,852)	(1,277,076)	(439,791)	3	(904,268)	(459,581)	(439,790)
10/1/1995	Assumption Change	716,363	30	(155,975)	(13,681)	(153,678)	(14,296)	13	(150,533)	(14,940)	(14,297)
10/1/1995	Plan Amendment	2,691,496	30	(777,833)	(68,223)	(766,379)	(71,294)	13	(750,692)	(74,502)	(71,294)
10/1/1996	Actuarial Loss (Gain)	(2,271,471)	30	577,918	48,033	572,276	50,194	14	563,849	52,453	50,194
10/1/1997	Actuarial Loss (Gain)	(7,204,750)	30	1,988,776	157,317	1,977,976	164,396	15	1,958,666	171,794	164,396
10/1/1998	Actuarial Loss (Gain)	(8,403,212)	30	2,254,984	170,417	2,251,332	178,086	16	2,239,106	186,100	178,086
10/1/1999	Actuarial Loss (Gain)	(7,670,944)	30	1,952,445	141,447	1,955,878	147,812	17	1,952,711	154,464	147,812
10/1/1999	Assumption Change	(6,415,734)	30	1,642,783	119,013	1,645,672	124,369	17	1,643,007	129,966	124,369
10/1/1999	Plan Amendment	11,439,300	30	(2,931,304)	(212,362)	(2,936,457)	(221,918)	17	(2,931,702)	(231,905)	(221,919)
10/1/1999	Plan Amendment	7,087,200	30	(1,822,292)	(132,018)	(1,825,496)	(137,959)	17	(1,822,540)	(144,167)	(137,959)
10/1/2000	Actuarial Loss (Gain)	(5,371,694)	30	1,275,864	88,873	1,281,950	92,872	18	1,284,204	97,052	92,873
10/1/2001	Actuarial Loss (Gain)	3,852,582	30	(824,997)	(55,403)	(831,162)	(57,896)	19	(835,127)	(60,502)	(57,897)
10/1/2002	Actuarial Loss (Gain)	6,698,788	30	(1,413,193)	(91,717)	(1,427,194)	(95,844)	20	(1,437,858)	(100,157)	(95,844)
10/1/2002	Plan Amendment	1,242,009	30	(255,814)	(16,602)	(258,349)	(17,350)	20	(260,279)	(18,130)	(17,349)
10/1/2003	Actuarial Loss (Gain)	10,090,978	30	(2,093,416)	(131,588)	(2,118,774)	(137,510)	21	(2,139,765)	(143,697)	(137,509)
10/1/2004	Actuarial Loss (Gain)	7,079,282	30	9,978,471	608,602	10,119,361	636,084	22	10,241,939	664,707	636,083
10/1/2004	Plan Amendment	2,709,801	30	3,819,555	232,995	3,873,485	243,480	22	3,920,405	254,436	243,479
10/1/2005	Actuarial Loss (Gain)	2,630,031	30	3,745,950	222,153	3,805,701	232,150	23	3,859,435	242,597	232,150
10/1/2005	Method Change	(10,087,650)	30	(14,367,830)	(852,082)	(14,597,008)	(890,426)	23	(14,803,109)	(930,495)	(890,426)
10/1/2006	Actuarial Loss (Gain)	(216,293)	30	(236,697)	(13,670)	(240,869)	(14,285)	24	(244,711)	(14,928)	(14,285)
10/1/2006	Assumption Change	4,219,526	30	4,617,583	266,672	4,698,984	278,673	24	4,773,936	291,213	278,673
10/1/2006	Plan Amendment			-		-			-	-	-
10/1/2007	Actuarial Loss (Gain)	(356,778)	30	(436,688)	(24,596)	(445,059)	(25,703)	25	(452,904)	(26,859)	(25,702)
10/1/2007	Method Change	3,137,317	30	3,840,009	216,285	3,913,622	226,017	25	3,982,613	236,188	226,017
10/1/2007	Plan Amendment	74,966	30	91,756	5,168	93,515	5,401	25	95,163	5,644	5,401
10/1/2008	Actuarial Loss (Gain)	16,868,266	30	19,145,100	1,053,141	19,539,316	1,100,533	26	19,913,886	1,150,057	1,100,533
10/1/2008	Assumption Change			-		-			-	-	-
10/1/2008	Plan Amendment			-		-			-	-	-
10/1/2009	Actuarial Loss (Gain)	7,592,574	30	8,389,566	451,297	8,573,331	471,605	27	8,749,864	492,827	471,605
10/1/2010	Plan Amendment	72,896	30	78,728	4,146	80,549	4,333	28	82,313	4,528	4,333
10/1/2010	Actuarial Loss (Gain)	5,569,569	30	6,015,135	316,795	6,154,207	331,051	28	6,289,008	345,948	331,051
10/1/2011	Assumption Change	3,478,679	30	3,478,679	-	3,756,973	197,866	29	3,843,836	206,770	197,866
10/1/2011	Actuarial Loss (Gain)	10,421,621	30	10,421,621	-	11,255,350	592,778	29	11,515,578	619,453	592,778
10/1/2012	Actuarial Loss (Gain)	1,610,747	30		-	1,610,747	-	30	1,739,607	91,619	87,674
				56,395,553	2,069,650	60,282,721	2,953,428		61,915,638	3,177,953	3,041,102

Table XIV
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Unfunded Actuarial Accrued Liability - Firefighters

October 1, 2012

Date Established	Description	Original Amount	Original Amortization Period (Years)	2011 - 2012 Plan Year Actual BOY Outstanding Balance	2011 - 2012 Plan Year BOY Annual Amortization Payment	2012 - 2013 Plan Year Actual BOY Outstanding Balance	2012 - 2013 Plan Year BOY Annual Amortization Payment	Years Remaining	2013 - 2014 Plan Year Expected BOY Outstanding Balance	2013 - 2014 Plan Year BOY Annual Amortization Payment	Payment Before 4.5% Adjustment
10/1/1995	Fresh Start		20	9,938,466	2,608,711	7,916,135	2,726,103	3	5,605,235	2,848,778	2,726,103
10/1/1995	Assumption Change	716,363	30	1,052,396	92,305	1,036,898	96,459	13	1,015,674	100,800	96,459
10/1/1995	Plan Amendment	2,691,496	30	5,248,270	460,324	5,170,982	481,039	13	5,065,138	502,685	481,038
10/1/1996	Actuarial Loss (Gain)	(2,271,471)	30	(3,918,666)	(325,693)	(3,880,411)	(340,350)	14	(3,823,266)	(355,665)	(340,349)
10/1/1997	Actuarial Loss (Gain)	(7,204,750)	30	(13,546,702)	(1,071,576)	(13,473,136)	(1,119,797)	15	(13,341,606)	(1,170,188)	(1,119,797)
10/1/1998	Actuarial Loss (Gain)	(8,403,212)	30	(15,424,581)	(1,165,689)	(15,399,603)	(1,218,145)	16	(15,315,975)	(1,272,962)	(1,218,145)
10/1/1999	Actuarial Loss (Gain)	(7,670,944)	30	(13,407,090)	(971,293)	(13,430,661)	(1,015,002)	17	(13,408,912)	(1,060,677)	(1,015,002)
10/1/1999	Assumption Change	(6,415,734)	30	(11,280,681)	(817,243)	(11,300,513)	(854,019)	17	(11,282,214)	(892,450)	(854,019)
10/1/1999	Plan Amendment	11,439,300	30	20,128,743	1,458,252	20,164,130	1,523,873	17	20,131,478	1,592,448	1,523,874
10/1/1999	Plan Amendment	7,087,200	30	12,513,333	906,544	12,535,332	947,339	17	12,515,032	989,969	947,339
10/1/2000	Actuarial Loss (Gain)	(5,371,694)	30	(8,792,714)	(612,476)	(8,834,657)	(640,038)	18	(8,850,189)	(668,840)	(640,038)
10/1/2001	Actuarial Loss (Gain)	3,852,582	30	5,704,546	383,093	5,747,169	400,332	19	5,774,584	418,347	400,332
10/1/2002	Actuarial Loss (Gain)	6,698,788	30	9,802,175	636,166	9,899,290	664,794	20	9,973,256	694,710	664,794
10/1/2002	Plan Amendment	1,242,009	30	1,774,372	115,158	1,791,951	120,340	20	1,805,340	125,755	120,340
10/1/2003	Actuarial Loss (Gain)	10,090,978	30	14,562,477	915,369	14,738,877	956,561	21	14,884,901	999,606	956,561
10/1/2004	Actuarial Loss (Gain)	9,500,193	30	11,511,561	702,212	11,674,097	733,811	22	11,815,509	766,833	733,811
10/1/2004	Plan Amendment			-		-			-	-	-
10/1/2005	Actuarial Loss (Gain)	1,352,920	30	1,547,164	91,754	1,571,843	95,883	23	1,594,037	100,198	95,883
10/1/2005	Method Change	(11,648,626)	30	(13,321,077)	(790,005)	(13,533,558)	(825,555)	23	(13,724,643)	(862,705)	(825,555)
10/1/2006	Actuarial Loss (Gain)	2,189,082	30	2,478,468	143,135	2,522,160	149,576	24	2,562,391	156,307	149,576
10/1/2006	Assumption Change	(1,868,617)	30	(2,115,637)	(122,181)	(2,152,932)	(127,679)	24	(2,187,273)	(133,425)	(127,679)
10/1/2006	Plan Amendment	2,163,594	30	2,449,612	141,469	2,492,794	147,835	24	2,532,556	154,487	147,834
10/1/2007	Actuarial Loss (Gain)	6,274,355	30	6,929,639	390,305	7,062,481	407,869	25	7,186,981	426,223	407,869
10/1/2007	Method Change			-		-			-	-	-
10/1/2007	Plan Amendment			-		-			-	-	-
10/1/2008	Actuarial Loss (Gain)	(882,547)	30	(1,001,670)	(55,100)	(1,022,296)	(57,580)	26	(1,041,893)	(60,171)	(57,580)
10/1/2008	Assumption Change	(408,428)	30	(463,558)	(25,500)	(473,103)	(26,647)	26	(482,172)	(27,846)	(26,647)
10/1/2008	Plan Amendment	(647,621)	30	(735,035)	(40,433)	(750,170)	(42,253)	26	(764,550)	(44,154)	(42,253)
10/1/2009	Actuarial Loss (Gain)	12,036,419	30	13,299,882	715,436	13,591,202	747,630	27	13,871,058	781,274	747,631
10/1/2010	Plan Amendment	(159,424)	30	(172,178)	(9,068)	(176,159)	(9,476)	28	(180,018)	(9,903)	(9,477)
10/1/2010	Actuarial Loss (Gain)	11,436,719	30	12,351,657	650,517	12,637,231	679,790	28	12,914,036	710,380	679,789
10/1/2011	Assumption Change	6,237,022	30	6,237,022	-	6,735,984	354,760	29	6,891,722	370,724	354,760
10/1/2011	Actuarial Loss (Gain)	12,405,426	30	12,405,426	-	13,397,860	705,616	29	13,707,624	737,369	705,616
10/1/2012	Actuarial Loss (Gain)	2,468,225	30	-	-	2,468,225	-	30	2,665,683	140,392	134,346
				65,755,620	4,404,493	68,727,443	5,663,069		68,109,524	6,058,299	5,797,414

Table XIV
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Unfunded Actuarial Accrued Liability - Total

October 1, 2012

				2011 - 2012 Plan Year		2012 - 2013 Plan Year			2013 - 2014 Plan Year		
Date Established	Description	Original Amount	Original Amortization Period (Years)	Actual BOY Outstanding Balance	BOY Annual Amortization Payment	Actual BOY Outstanding Balance	BOY Annual Amortization Payment	Years Remaining	Expected BOY Outstanding Balance	BOY Annual Amortization Payment	Payment Before 4.5% Adjustment
10/1/1995	Fresh Start	-	20	8,335,136	2,187,859	6,639,059	2,286,312	3	4,700,967	2,389,197	2,286,313
10/1/1995	Assumption Change	1,432,726	30	896,421	78,624	883,220	82,163	13	865,141	85,860	82,162
10/1/1995	Plan Amendment	5,382,992	30	4,470,437	392,101	4,404,603	409,745	13	4,314,446	428,183	409,744
10/1/1996	Actuarial Loss (Gain)	(4,542,942)	30	(3,340,748)	(277,660)	(3,308,135)	(290,156)	14	(3,259,417)	(303,212)	(290,155)
10/1/1997	Actuarial Loss (Gain)	(14,409,500)	30	(11,557,926)	(914,259)	(11,495,160)	(955,401)	15	(11,382,940)	(998,394)	(955,401)
10/1/1998	Actuarial Loss (Gain)	(16,806,424)	30	(13,169,597)	(995,272)	(13,148,271)	(1,040,059)	16	(13,076,869)	(1,086,862)	(1,040,059)
10/1/1999	Actuarial Loss (Gain)	(15,341,888)	30	(11,454,645)	(829,846)	(11,474,783)	(867,190)	17	(11,456,201)	(906,213)	(867,190)
10/1/1999	Assumption Change	(12,831,468)	30	(9,637,898)	(698,230)	(9,654,841)	(729,650)	17	(9,639,207)	(762,484)	(729,650)
10/1/1999	Plan Amendment	22,878,600	30	17,197,439	1,245,890	17,227,673	1,301,955	17	17,199,776	1,360,543	1,301,955
10/1/1999	Plan Amendment	14,174,400	30	10,691,041	774,526	10,709,836	809,380	17	10,692,492	845,802	809,380
10/1/2000	Actuarial Loss (Gain)	(10,743,388)	30	(7,516,850)	(523,603)	(7,552,707)	(547,166)	18	(7,565,985)	(571,788)	(547,165)
10/1/2001	Actuarial Loss (Gain)	7,705,164	30	4,879,549	327,690	4,916,007	342,436	19	4,939,457	357,845	342,435
10/1/2002	Actuarial Loss (Gain)	13,397,576	30	8,388,982	544,449	8,472,096	568,950	20	8,535,398	594,553	568,950
10/1/2002	Plan Amendment	2,484,018	30	1,518,558	98,556	1,533,602	102,990	20	1,545,061	107,625	102,991
10/1/2003	Actuarial Loss (Gain)	20,181,956	30	12,469,061	783,781	12,620,103	819,051	21	12,745,136	855,909	819,052
10/1/2004	Actuarial Loss (Gain)	16,579,475	30	21,490,032	1,310,904	21,793,458	1,369,895	22	22,057,448	1,431,540	1,369,894
10/1/2004	Plan Amendment	2,709,801	30	3,819,555	232,995	3,873,485	243,480	22	3,920,405	254,436	243,479
10/1/2005	Actuarial Loss (Gain)	3,982,951	30	5,293,114	313,907	5,377,544	328,033	23	5,453,472	342,795	328,033
10/1/2005	Method Change	(23,736,276)	30	(27,688,907)	(1,642,087)	(28,130,566)	(1,715,981)	23	(28,527,752)	(1,793,200)	(1,715,981)
10/1/2006	Actuarial Loss (Gain)	1,972,789	30	2,241,771	129,465	2,281,291	135,291	24	2,317,680	141,379	135,291
10/1/2006	Assumption Change	2,350,909	30	2,501,946	144,491	2,546,052	150,994	24	2,586,663	157,788	150,994
10/1/2006	Plan Amendment	2,163,594	30	2,449,612	141,469	2,492,794	147,835	24	2,532,556	154,487	147,834
10/1/2007	Actuarial Loss (Gain)	5,917,577	30	6,492,951	365,709	6,617,422	382,166	25	6,734,077	399,364	382,167
10/1/2007	Method Change	3,137,317	30	3,840,009	216,285	3,913,622	226,017	25	3,982,613	236,188	226,017
10/1/2007	Plan Amendment	74,966	30	91,756	5,168	93,515	5,401	25	95,163	5,644	5,401
10/1/2008	Actuarial Loss (Gain)	15,985,719	30	18,143,430	998,041	18,517,020	1,042,953	26	18,871,993	1,089,886	1,042,953
10/1/2008	Assumption Change	(408,428)	30	(463,558)	(25,500)	(473,103)	(26,647)	26	(482,172)	(27,846)	(26,647)
10/1/2008	Plan Amendment	(647,621)	30	(735,035)	(40,433)	(750,170)	(42,253)	26	(764,550)	(44,154)	(42,253)
10/1/2009	Actuarial Loss (Gain)	19,628,993	30	21,689,448	1,166,733	22,164,533	1,219,235	27	22,620,922	1,274,101	1,219,236
10/1/2010	Plan Amendment	(86,528)	30	(93,450)	(4,922)	(95,610)	(5,143)	28	(97,705)	(5,375)	(5,144)
10/1/2010	Actuarial Loss (Gain)	17,006,288	30	18,366,792	967,312	18,791,438	1,010,841	28	19,203,044	1,056,328	1,010,840
10/1/2011	Assumption Change	9,715,701	30	9,715,701	-	10,492,957	552,626	29	10,735,558	577,494	552,626
10/1/2011	Actuarial Loss (Gain)	22,827,046	30	22,827,046	-	24,653,210	1,298,394	29	25,223,202	1,356,822	1,298,394
10/1/2012	Actuarial Loss (Gain)	4,078,972	30	-	-	4,078,972	-	30	4,405,290	232,011	222,020
				122,151,173	6,474,143	129,010,164	8,616,497		130,025,162	9,236,252	8,838,516

Table XIV
(Cont'd)

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

Schedule Illustrating the Amortization of Unfunded Liabilities Existing This Date

October 1, 2012

Projected Unfunded Actuarial Accrued Liability

October 1	Liability
2012	$ 129,010,164
2013	130,025,162
2014	130,452,023
2015	130,464,149
2020	140,209,517
2025	141,853,939
2030	121,276,133
2035	70,133,148
2040	7,846,160
2041	795,145
2042	-

The first figure is the Unfunded Actuarial Accrued Liability as of the current valuation date. For each year thereafter, the proceding year's Unfunded Liability is reduced by the annual amortization payment (increased each year by the 4.5% assumed annual increase in payroll) and adjusted with interest at 8.0% per annum.

Thus the remaining amortization period as of the October 1, 2012, valuation is 2042 less 2012, or 30 years.

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM
October 1, 2012

Outline of Principal Provisions of the Retirement System
(Reflecting all changes through Ordinance 5190, adopted 2011)

A. **Eligibility Requirements**

Employment by the City as a sworn Police Officer or Firefighter upon satisfactory physical and attainment of age 18. All Members are presumed to execute the waiver related to claims concerning State monies and are therefore eligible for the modified benefits under the Code of Ordinances, as reflected below.

B. **Continuous Service**

Uninterrupted service (except for leave and military service) as a qualifying employee measured in years and completed months, excluding service for which Member contributions were refunded and not repaid within 6 months of rehire.

C. **Earnings**

Firefighters: Fixed remuneration, including basic wages, regular longevity, EMT, paramedic, fire inspection, hazardous materials, assignment, acting in a higher capacity, standby, pickup contributions, and IRC Section 457 deferred compensation, but excluding overtime, holiday, state incentive, bonuses, Time Pool pay, accumulated sick time and annual leave, and any other payments.

Police Officers: Total cash remuneration, including regular longevity, assignment, crash-free bonus, pickup contributions, and Section 457 deferred compensation, and including up to 300 hours of overtime compensation per 12-month period (with a limited lookback provision), but excluding other bonuses, accumulated sick time and annual leave, and any other payments.

D. **Average Monthly Earnings (AME)**

Average Monthly Earnings (AME) during the highest 2 years preceding the date on which the Member retires or terminates.

E. **Normal Retirement**

1. **Eligibility**

Attainment of age 55 and 10 years of Continuous Service, or completion of 20 years of Continuous Service.

2. **Benefit**

   Police Officers: 3.5% times AME times years of Continuous Service, subject to a maximum of the greater of 87.5% of AME or 2% of AME times years of Continuous Service.

   Firefighters: 3.4% times AME times years of Continuous Service, subject to a maximum of 100% of AME.

3. **Form of Benefit for This and Other Retirement and Termination Benefits**

   Regular Pension: 10-year certain and life monthly payments.

   Supplemental: Life monthly payments.

   Actuarially equivalent optional forms may be elected for one or both benefits, and need not be the same. Actuarial equivalence is based on mortality in accordance with the GAM-1983 Male mortality table for Members and the GAM-1983 Female mortality table for joint annuitants, and 7.5% interest.

F. **Regular Early Retirement**

1. **Eligibility**: Age 50 with 10 years of Continuous Service.
2. **Benefit**: Computed as for Normal Retirement based upon Continuous Service and AME as of Early Retirement Date, but reduced by 0.25% for each month Early Retirement precedes Normal Retirement.

G. **Disability Retirement**

1. **Eligibility**

   Service Incurred: Total and permanently disabled in the line of duty, meaning incapacity to perform regular duty as Firefighter or Police Officer.

   Non-service Incurred: Total and permanently disabled not in the line of duty, meaning incapacity to perform regular duty as Firefighter or Police Officer, and completion of at least 10 years of Continuous Service.

2. **Benefit**

   Service Incurred: 75% of AME as of the date of disability, or the accrued benefit if greater. May be offset by other disability benefits

   Non-service Incurred: 3.25% of AME per year of Continuous Service or the accrued benefit, minimum of 25% of AME (per State requirements) on the date of disability.

H. **Pre-Retirement Death Benefit**

1. **Eligibility**

Service Incurred: Death in the line of duty.

Non-service Incurred: Death other than in the line of duty after 5 years of Continuous Service. (If less than 5 years, only a $5,000 lump sum is payable; if less than 1 year, only a $2,500 lump sum.)

2. **Benefit**

Service Incurred: If the designated beneficiary is the spouse, the greater of A or B, plus C, plus D, below; otherwise B, plus C, plus D, below:

A. To spouse, 75% of AME payable for life, beginning immediately.

B. If the Member had at least 10 years of Continuous Service, the accrued benefit, payable for 10 years certain only, beginning when the Member would have reached Early or Normal Retirement Age.

C. Minor children receive 7.5% of AME until death, marriage or attainment of age 18 (if full time student, attainment of age 22). Total monthly benefit under A and C not to exceed 90% of AME. Upon death of the surviving spouse, the allowance shall be increased to 15% for each child, subject to a maximum combined total of the greater of 50% AME or the accrued benefit.

D. A lump sum of $5,000.

Non-service Incurred: If the designated beneficiary is the spouse, the greater of A or B, plus C, plus D, below; otherwise B, plus C, plus D, below:

A. To spouse, 65% of accrued benefit, with a minimum of 20% of AME payable for life, beginning immediately.

B. If the Member had at least 10 years of Continuous Service, the accrued benefit, payable for 10 years certain only, beginning when the Member would have reached Early or Normal Retirement Age (i.e., same as Service Incurred).

C. Minor children receive 7.5% of AME until death, marriage or attainment of age 18 (if full time student, attainment of age 22). Total monthly benefit under A and C not to exceed the greater of 50% of AME or the accrued benefit. Upon death of the surviving spouse, the allowance shall be increased to 15% for each child, subject to a maximum combined total of the greater of 50% AME or the accrued benefit.

D. A lump sum of $5,000 (i.e., same as Service Incurred).

3. **HEART Act.** In accordance with the HEART Act, a Member who dies while performing qualified military service shall be treated for purposes of survivor benefits as if he or she resumed employment and then terminated on account of death. The Member's survivor(s) shall be eligible for any additional benefits attributable to such "reemployment," other than benefit accruals related to the qualified military service. (The liability for the additional benefits attributable to the deemed reemployment is relatively small and has a small probability of occurrence; therefore it is not anticipated or funded in advance.)

I. **Employee Contributions**

Police Officers: 10.2% of annual earnings (9.2% prior to October 26, 2010).

Firefighters: 10.2% of annual earnings (9.2% prior to October 26, 2010).

(3% interest is paid on refunds of Member contributions. Each Member is guaranteed benefit payments at least equal to his Member contributions plus 3% interest.)

J. **Termination Benefit**

If termination occurs after the completion of 10 years of Continuous Service, the full accrued retirement benefit is payable at Normal Retirement Date, or, at the Member's option, a refund of accumulated contributions is made. For purposes of determining the Normal Retirement Date, Continuous Service includes the period of time after termination. If termination occurs prior to completion of 10 years of Continuous Service, a refund of accumulated contributions is made.

K. **DROP Plan**

A Deferred Retirement Option Plan (DROP) is available to Members who are eligible for Normal Retirement, with maximum DROP participation of 5 years. DROP accounts are credited with the same overall rate of return on pension fund investments, or DROP Members may elect a self-directed account option. No Disability or Pre-Retirement Death Benefits are provided while a Member is in DROP.

L. **Cost-of-Living Adjustments**

Provided to retired, disabled, and terminated Members (after their pensions commence), and to DROP Members, and to all their survivors and beneficiaries, but not those receiving Pre-Retirement Death Benefits and not with respect to the Supplement. Other COLAs applied in the past, but for currently active Members the following apply:

Police Officers: Retirements and terminations on or after October 1, 2001, receive a 2% annual COLA commencing 1 year after retirement, or in the case of Disability, 1 year after eligibility for Normal Retirement.

Firefighters: Retirements and terminations on or after December 9, 2008, receive a 3% annual COLA, with the first increase:

- With 22 years of service, the later of 1 year after retirement and age 52
- With 21 but less than 22 years of service, the later of 2 years after retirement and age 52
- With 20 but less than 21 years of service, the later of 3 years after retirement and age 52

M. Supplement

Each Member who retires from the City receives a supplement of $10.50 ($10.00 for retirements prior to October 26, 2010, but after July 19, 1999) per month per completed year of Continuous Service (including DROP service).

N. Past Service

Members may purchase up to 5 years of past service for prior military, police or firefighter service for the full actuarial cost, in accordance with the provisions of the Code of Ordinances.

O. Transfers

Employees who transfer from the General Employees' Pension Plan to this Plan:

1. Have their Member and City contributions transferred to this Plan (considered in total to be the Entry Age Actuarial Accrued Liability and Normal Cost through the effective date of the employee's transfer), and

2. Have their accrued benefits provided by this Plan, based on their respective multipliers and Continuous Service under each plan and on their AME under this Plan, subject to a maximum of 75% of AME for Police Officers and 100% of AME for Firefighters.

P. Changes from Previous Valuation

None.

CITY OF BOCA RATON
POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM
October 1, 2012

Actuarial Assumptions and Actuarial Cost Method
Used in the Valuation

A. **Mortality**

Healthy Mortality is based on the RP-2000 (Retirement Plans-2000) Tables projected according to the year of valuation. The RP-2000 Tables are sex-distinct. The tables for annuitants, i.e., Members already in pay status, are projected 7 years beyond the valuation date. The tables for nonannuitants are projected 15 years beyond the valuation date. [ProVal name: IRS 2008+ Static (Dynamic)]

Disabled mortality is based on the 1994 Group Annuity Mortality Table (with no projected mortality improvements) set forward 5 years.

B. **Investment Return**

8.0%, compounded annually, net of investment related expenses

C. **Allowances for Expenses or Contingencies**

Estimated expenses are assumed to equal actual expenses for the prior year, net of investment-related expenses, and are split equally between Police and Firefighters.

D. **Actuarial Value of Assets**

The Actuarial Value of Assets is determined using a 4-year smoothing method, with an 80%/115% corridor. Each year the prior year's Actuarial Value is increased by the non-investment net cash flow and by the net investment income excluding the net appreciation in the fair value of investments. This net appreciation is only recognized over a four-year period, i.e., the amount from the previous sentence is further increased by only 25% of the appreciation for each of the last four years. This preliminary Actuarial Value is further constrained to be within a corridor of 80% to 115% of fair market value. A characteristic of this asset valuation method is that, over time, it is more likely to produce an actuarial value of assets that is less than the market value of assets, and hence it is considered a conservative smoothing method.

The Actuarial Value of Assets was reset to the Market Value of Assets as of September 30, 2005.

E. **Marital Assumptions**

80% of active members are assumed to be married. Female spouses are assumed to be 3 years younger than male spouses. No remarriage is assumed for surviving spouses of deceased Members.

F. **Payroll Growth Projection**

4.5% per annum

G. **State Contributions**

It is assumed that State tax revenue paid to the plan for the upcoming year will be 5% greater than the actual revenue for the prior year.

H. **Assumed Rate of Salary Increase**

Sample ultimate rates are as follows:

Age	Salary Increase	Age	Salary Increase
20	7.5%	40	4.7%
25	7.5%	45	4.7%
30	7.1%	50	4.7%
35	5.6%	55	4.6%

Annualized compensation is provided by the client for new hires. A reduction of 1% per year in the rate of salary increases for Firefighters for 3 years beginning October 1, 2008, is now expired.

I. Assumed Rates of Employment Termination and Disability

Annual Rate of Employment Termination				Annual Rate of Disability	
Age	Years of Service	Police Rates of Withdrawal	Firefighters Rates of Withdrawal	Age	Disability
All	0	13.0%	10.0%	20	0.030%
	1	13.0%	10.0%	25	0.045%
	2	10.0%	1.0%	30	0.045%
	3	10.0%	1.0%	35	0.071%
	4	10.0%	1.0%	40	0.105%
20	5 and over	3.0%	1.0%	45	0.143%
25		3.0%	1.0%	50	0.180%
30		3.0%	1.0%	55	0.240%
35		3.0%	1.0%		
40		3.0%	1.0%		
45		3.0%	1.0%		
50		3.0%	1.0%		

100% of pre-retirement deaths and disabilities are assumed to be Service Incurred.

J. Assumed Rate of Retirement

Years of Service	Firefighters' Rate of Retirement		Police Rate of Retirement
	Under Age 50	Above Age 49	
20	20%	20%	20%*
21	15%	25%	30%
22	3%	5%	33%
23	3%	5%	67%
24 – 29	10%	15%	100%
30 – 32	40%	40%	100%
33+	100%	100%	100%

*10% under age 50

After age 70 rates for both Police and Firefighters are 100% regardless of service.

K. **Actuarial Funding Method**

Normal Retirement, Termination, Disability and Death Benefits

Entry Age Actuarial Cost Method. Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his age at hire to his assumed retirement age to fund his estimated benefits, assuming the current Plan has always been in effect. The normal cost for the Plan is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the Plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the actuarial value of assets of the Plan.

Unfunded actuarial accrued liability bases are funded as a level percentage of increasing payroll.

L. **Changes From Previous Valuation**

None.

SECTION 8

Pension Ordinance for Police Officers and Firefighters

ARTICLE IV. PENSION PLAN FOR POLICE AND FIREFIGHTERS [4]

Sec. 12-126. Definitions.

As used in this article, unless otherwise defined or required by the context, the following words and phrases shall have the meanings indicated:

"Actuarial equivalent" shall mean that any benefit payable under the terms of this retirement system in a form other than the normal form of benefit, shall have the same actuarial present value on the date payment commences as the normal form of benefit. For purpose of establishing the actuarial present value of any form of payment, all future payments shall be discounted for interest and mortality by using the interest rate and the annuity mortality table provided in internal revenue rules. For purposes of a lump sum distribution, the actuarial present value shall be determined on the basis of the same annuity mortality table as described above and the 30-year treasury security interest rate for the month prior to the member's date of termination.

"Agreement" shall mean this written instrument setting forth the provisions of the retirement system.

"Average monthly earnings" shall mean 1/12 of the arithmetic average of annual earnings for the highest 2 years preceding the actual retirement or termination date of a member or the date the member begins participation in the deferred retirement option plan, whichever is earlier. The limitation on compensation for an employee who was a member of the retirement system before October 1, 1996, shall not be less than the amount which was allowed to be taken into account under this section as in effect on July 1, 1993.

"Beneficiary" shall mean the person entitled to receive any benefits hereunder at the death of a member who has been designated in writing by the member and filed with the board. If no such designation is in effect at the time of death of the member, or if no person so designated is living at that time, the board shall have the authority to designate the beneficiary as provided herein.

"Board" shall mean the board of pension trustees, which shall administer and manage the system provided in this article and serve as trustee of the fund.

"Continuous service" shall mean the aggregate number of years of service by a member (expressed as years and completed months), where service for each period of employment shall start from the date the member entered employment as an employee and end on the date the member begins participation in the deferred retirement option plan or the date the member's employment shall be terminated by death, retirement, resignation or discharge; however, there shall be no service credit for periods of employment for which the member accepted a refund of his contributions and such contributions are not repaid, with interest as determined by the board, within 6 months following the date he was last rehired. The continuous service of any member shall not be deemed to be interrupted by:

(a) Any authorized leave of absence or vacation, provided that all members similarly situated in similar circumstances shall be treated alike pursuant to uniform, nondiscriminatory rules. However, the member shall not receive more than 6 months of continuous service credit for benefit computation purposes for the period of such leave of absence or vacation.

(b) Any service, voluntary or involuntary in the armed forces of the United States, provided the member is legally entitled to reemployment under the provision of the Uniformed Services Employment and Reemployment Rights Act (USERRA) and any amendment thereto, or any law applicable to such reemployment, and provided, further, that the member shall apply for reemployment within 3 months following termination of such service. Notwithstanding any provision of this retirement system to the contrary, contributions, benefits and service credit with respect to qualified military service will be provided in accordance with section 414(u) of the Internal Revenue Code.

"Earnings," for firefighters, shall mean the fixed monthly remuneration including basic wages, EMT and paramedic certification pay, fire inspection pay, hazardous materials certification pay, assignment pay, acting in a higher capacity pay, stand by duty pay, and continuous service benefit (annual longevity) paid to a member, but excluding overtime, holiday pay, state incentive pay, bonuses, accumulated sick and annual leave and any other payments. Earnings shall be calculated prior to salary reductions for contributions picked up by the city pursuant to section 12-133(5) or deferred compensation pursuant to section 457 of the Internal Revenue Code. Earnings shall include any elective deferral (as defined in code section 402(e)(3) of the Internal Revenue Code), and any amount which is contributed or deferred by the employer at the election of the member and which is not includible in the gross income of the member by reason of section 125 or 457 of the Internal Revenue Code. For limitation years beginning on and after January 1, 2001, for the purposes of applying the limitations described in subsection (1) of section 12-152 hereof, earnings shall for any limitation year shall include elective amounts that are not includible in the gross income of the member by reason of section 132(f)(4) of the Internal Revenue Code.

Effective October 1, 2004, "earnings," for police officers, shall mean the total cash remuneration paid by the primary employer for services rendered, assignment pay, crash-free bonus and continuous service benefit (annual longevity) paid to a member, including up to 300 hours of overtime compensation earned by a member in each 12-month period during the 24 consecutive months immediately preceding the member's date of retirement or termination of employment, whichever occurs first. If a member does not earn 300 hours of overtime compensation in each 12-month period during the 24 consecutive months immediately preceding the member's date of retirement or termination of employment, then up to 100 hours of overtime compensation earned by the member prior to the 24 consecutive months immediately preceding the member's date of retirement or termination of employment shall be added to the overtime compensation earned by a member in each of the final 2 consecutive 12-month periods to make up to 300 hours. Provided, in no event shall the total amount of overtime compensation included in a member's earnings exceed 300 hours in any 12-month period; and overtime compensation, added to a member's earnings as provided above, shall be at the member's average overtime rate for the 24 consecutive month period immediately preceding the member's date of retirement or termination of employment, whichever occurs first. Payments for extra duty or special detail work performed on behalf of an outside employer, overtime in excess of 300 hours, other bonuses or accumulated sick and annual leave and other payments will not be included. Total cash remuneration shall be calculated prior to salary reductions for contributions picked up by the city pursuant to section 12-133(5) or deferred compensation pursuant to section 457 of the Internal Revenue Code. Earnings shall include any elective deferral (as defined in code section 402(e)(3) of the Internal Revenue Code), and any amount which is contributed or deferred by the employer at the election of the member and which is not includible in the gross income of the member by reason of section 125 or 457 of the Internal Revenue Code. For limitation years beginning on and after January 1, 2001, for the purposes of applying the limitations described in subsection (1) of section 12-152 hereof, earnings shall include for any limitation year, elective amounts that are not includible in the gross income of the member by reason of section 132(f)(4) of the Internal Revenue Code.

"Effective date" shall mean the date on which Ordinance Number 1806 became effective.

"Employees" shall mean all regular and all probationary full-time employees of the city classified as sworn police officers or firefighters, but shall exclude all civilian members thereof.

"Fiscal agent" shall mean any person or entity designated to serve as investment agent or custodian of the fund of the retirement system.

"Fund" shall mean the trust fund established in this article as part of the plan.

"Member" shall mean an employee who fulfills the prescribed participation requirements.

"System" shall mean the city police and firefighters' retirement system as contained in this article and all amendments thereto.

(Code 1966, § 17-31; Ord. No. 4011, § 1, 7-14-92; Ord. No. 4281, § 2, 8-27-96; Ord. No. 4334, § 1, 6-24-97; Ord. No. 4471, § 1, 10-26-99; Ord. No. 4504, § 1, 4-11-00; Ord. No. 4523, § 1, 7-11-00; Ord. No. 4838, § 1, 12-14-04; Ord. No. 5154, § 1, 11-9-10; Ord. No. 5166, § 1, 5-10-11)

Sec. 12-127. Eligibility.

(1) All police officers or firefighters shall become members if at least 18 years of age provided that:

(a) Such employee satisfactorily completes all required medical examinations for an employee of his classification; and

(b) Such employee meets all requirements of the civil service board of the city;

(c) The fire chief and police chief may waive participation. Such waiver is irrevocable and must be exercised in writing within 60 days of the effective date of this ordinance or initial employment as or promotion to the chief position.

(2) Anyone previously ineligible hereunder because of being hired after attaining the age of 32 shall be eligible for participation as provided in section 12-150

(Code 1966, § 17-32(1); Ord. No. 3878, § 1, 9-25-90; Ord. No. 4504, § 2, 4-11-00)

Cross reference— *Definitions and rules of construction generally, § 1-2.*

Sec. 12-128. Application.

Each eligible employee shall complete an application form covering the following points, as well as such other points or items as may be prescribed by the board:

(a) Such employee's acceptance of the terms and conditions of the pension plan and pension trust agreement; and, if requested,

(b) Such employee's designation of a beneficiary or beneficiaries.

(Code 1966, § 17-32(2))

Sec. 12-129. Change in designation of beneficiary.

A member may from time to time change his designated beneficiary in accordance with F.S. chs. 175 and 185 by written notice to the board upon forms provided by the board. Upon such change, the rights of all previously designated beneficiaries to receive any benefit under the plan shall cease.

(Code 1966, § 17-32; Ord. No. 4504, § 3, 4-11-00)

Sec. 12-130. Retirement dates and benefits—Firefighters.

Firefighters who do not execute the waiver described in section 12-151 shall only receive the benefits in this section. Firefighters who execute the waiver shall receive the benefits in this section except as modified in section 12-151.

(1) Normal retirement date. Firefighters may elect to retire on the first day of the month coincident with or subsequent to attainment of age 52 and the completion of 20 years of continuous service or attainment of age 55 and completion of 10 years of continuous service.

(2) Normal retirement benefit.

(a) Duration. A member retiring hereunder on his or her normal retirement date shall receive a monthly benefit, which shall commence on said normal retirement date and be continued thereafter during his or her lifetime, but in no event for less than 10 years. Upon reaching normal retirement age a member's benefits shall be fully vested.

(b) Amount.

1. The amount of normal retirement benefit for members who became members prior to April 17, 1973, shall be the greater of 50 percent of average monthly earnings or 2½ percent of average monthly earnings multiplied by years of continuous service subject in any event to a maximum of 75 percent of average monthly earnings.

2. The amount of normal retirement benefit for members who became members on or after April 17, 1973, shall be 2½ percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 75 percent of average monthly earnings. In no event, however, shall a member's normal retirement benefit be less than 2% of average monthly earnings multiplied by years of continuous service.

(3) Early retirement date. A member may retire on the first day of any month following the completion of 20 years of continuous service or the attainment of age 50 and completion of 10 years of continuous service.

(4) Early retirement benefit. A member retiring hereunder on his or her early retirement date may receive either a deferred or an immediate monthly retirement benefit as follows:

(a) A deferred monthly retirement benefit which shall commence on the member's normal retirement date and shall be continued on the first day of each month thereafter during his or her lifetime, but in no event for less than 10 years. The amount of each such deferred monthly retirement benefit shall be determined in the same manner as for retirement at the member's normal retirement date except that continuous service and average monthly earnings shall be determined as of his or her early retirement date; or

(b) An immediate monthly retirement benefit which shall commence on the member's early retirement date and shall be continued on the first day of each month thereafter during his or her lifetime, but in no event for less than 10 years.

The maximum benefit payable, as determined in (a) above, shall be reduced by 3/12 of 1 percent for each month by which the actual early retirement date precedes the member's regular normal retirement date.

(5) Disability.

(a) Service-incurred. Any firefighter member who receives a service-connected injury, disease or disability, which injury, disease or disability permanently incapacitates the member physically or mentally from regular and continuous duty as a firefighter shall receive in equal monthly installments an amount equal to 75 percent of average monthly earnings in effect at the date of disability retirement or, if greater, the accrued normal retirement benefit. The benefit shall be payable for life, unless the member recovers from the disability, in which case the benefit shall cease. If the member does not recover and dies before 120 consecutive monthly payments have been made, the balance of the 120 payments shall be paid to the member's beneficiary.

(b) Non-service-incurred. Any member with 10 years of service who receives a non-service-connected injury, disease or disability, which injury, disease or disability permanently incapacitates or shall in the future permanently incapacitate the member physically or mentally from regular and continuous duty as a firefighter shall receive in equal monthly installments an amount equal to the member's accrued normal retirement benefit. The benefit shall be payable for life, unless the member recovers from the disability, in which case the benefit shall cease. If the member does not recover and dies before 120 consecutive monthly payments have been made, the balance of the 120 payments shall be paid to the member's beneficiary.

(c) Determination of disability. All questions relating to eligibility for continuance of disability benefits shall be determined by the board of trustees based upon the recommendation of the medical board.

(d) Disability pension offset. A member receiving a service-incurred disability pension from the city and who is receiving benefits for the same disability under social security or worker's compensation, or who is receiving another retirement benefit from another plan of the city, shall have a deduction made from the monthly disability pension payment in an amount necessary to bring the total of all disability payments to no more than 100 percent of the gross monthly salary of the disabled person last paid by the city as of the time the disability retirement occurred. However, in no event will the benefit be reduced below the greater of the accrued normal retirement benefit or 42 percent of average monthly earnings. The amount of gross monthly salary shall be escalated bi-monthly, for the purpose of this calculation, by the percentage increase, if any, in the Bureau of Labor Statistics Consumer Price Index, urban wage earners, Miami index, measured on a bi-monthly basis. Lump sum disability payments and lump sum scheduled injury disability payments shall not be included in this computation.

(e) Participants in the deferred retirement option plan shall not be eligible to receive disability benefits from the retirement system.

(f) Any other provision of the system notwithstanding, a member shall not qualify for disability retirement and payment of a disability pension if the board determines the disability is a direct result of the excessive and habitual use of drugs, intoxicants or narcotics or occurs after employment has terminated or while:

1. Willfully and illegally participating in fights, riots, or civil insurrections
2. Committing a crime or
3. Serving in any armed forces.

(6) Preretirement death.

(a) Service-incurred. A death benefit shall be payable on behalf of any member who dies as a direct result of an occurrence arising in the performance of service. The benefit shall be payable as follows:

1. To the surviving spouse or other designated beneficiaries, as the case may be, a lump sum payment of $5,000.00; plus
2. To the surviving spouse, for life, a monthly benefit equal to 75 percent of the member's average monthly earnings; unless a member with 10 or

more years of credited service has designated a beneficiary (which may be the spouse) to receive the preretirement death benefit, in which case the beneficiary is entitled to the benefits otherwise payable to the member at the time the member would have reached early or normal retirement age (a 10-year certain benefit); except that a survivor spouse who is also designated as the early retirement benefit beneficiary is entitled to elect between the 2 options; plus

3. For each child until he or she has reached the age of 18 years, and for each child from age 18 until age 22 who is a full-time student in an accredited school, there shall be paid in equal monthly installments an amount equal to 7½ percent of the average monthly earnings subject to an overall limitation of a total of 90 percent of average monthly earnings for the surviving spouse and children combined. The nonstudent child's pension shall terminate on the earlier of death, marriage or the attainment of age 18; the pension of a child who is a student shall terminate on the earlier of death, marriage or the attainment of age 22. Legally adopted children shall be eligible the same as natural children.

   Upon the death of the surviving spouse, the 7½ percent child allowance shall be increased to 15 percent for each child, and shall be paid in trust to eligible children, not to exceed a combined total of the greater of 50 percent of the member's average monthly earnings or the member's accrued pension benefit.

   The trusteeship and disbursements of the pension to any child or children shall be determined by the board of trustees. These benefits are not to be limiting to other benefits available under state law.

(b) Non-service-incurred. If any member shall die in active service from causes not attributable to active duty or service, a death benefit shall be payable as follows:

1. With less than 1 year of continuous service, a single sum amount of $2,500.00.
2. With 1 but less than 5 years of continuous service, a single sum amount of $5,000.00.
3. With 5 years of continuous service:
   a. A single sum amount of $5,000.00; plus
   b. To the surviving spouse in equal monthly payments an immediate pension equal to 65 percent of such member's accrued pension as of date of death or, if greater, the pension benefit otherwise payable to the member starting at early or normal retirement age, subject to a minimum of 20 percent of average monthly earnings; unless a member with 10 or more years of credited service has designated a beneficiary (which may be the spouse) to receive the preretirement death benefit, in which case the beneficiary is entitled to the benefits otherwise payable to the member at the time the member would have reached early or normal retirement age (a 10-year certain benefit); except that a survivor spouse who is also designated as the early retirement benefit beneficiary is entitled to elect between the 2 options; plus
   c. To the child or children of such deceased member the same

benefits as are payable by reason of service-connected death; subject, however, to a maximum combined limitation of monthly payments to the surviving spouse and children of the greater of 50 percent of the member's average monthly earnings or the member's accrued pension benefit.

(c) The death benefit shall not be payable on behalf of any member who is participating in the deferred retirement option plan.

(7) Vesting. If a member terminates employment with the fire-rescue services department, either voluntarily or by lawful discharge, and is not eligible for any other benefits under this system, the member shall be entitled to the following:

(a) With less than 10 years of continuous service, refund of member contributions plus 3 percent interest per annum or, pursuant to section 175.032(4)(b), Fla. Stat., voluntarily leave his or her contributions in the fund for a period of up to five (5) years. If, within five (5) years of termination of employment, the member is not reemployed by the city in a position which requires membership in this plan, then the member's contributions shall be returned to him or her without interest.

(b) With 10 or more years of continuous service:

1. The pension benefit accrued to the member's date of termination, based on the terms of the plan in effect on such date of termination, payable commencing at his or her otherwise normal retirement date, provided the member does not elect to withdraw member contributions; or

2. Refund of member contributions plus 3 percent interest calculated annually.

(c) Any member of this system who, for whatever reason, has his or her employment with the city as a firefighter terminated, but who remains or was previously employed by the city in some other capacity so that the total period of employment with the city is 10 years or more, shall have all benefits accrued under this system preserved, provided he or she does not elect to withdraw his or her member contributions. Such accrued benefits shall be paid at the member's otherwise normal retirement date in accordance with the provisions of this system.

(d) If a member, with ten or more years of continuous service, dies prior to retirement, his or her designated beneficiaries are entitled to the benefits otherwise payable to the member at the normal retirement date.

For purposes of determining normal retirement age under this vesting provision, continuous service shall include all employment with the city as well as the period of time subsequent to termination as a member of this system; however, benefits shall not be payable under this system during any period of continued employment by the city.

(Ord. No. 3740, § 1, 1-23-89; Ord. No. 4011, § 2, 7-14-92; Ord. No. 4170, § 30, 9-27-94; Ord. No. 4223, § 1, 6-13-95; Ord. No. 4504, § 4, 4-11-00; Ord. No. 4744, § 1, 11-12-03)

Sec. 12-131. Same—Police officers.

Police officers who do not execute the waiver described in section 12-153 shall receive the following benefits:

(1) Normal retirement date. Police officers may elect to retire on the first day of the month

coincident with or subsequent to the completion of 20 years of continuous service or attainment of age 55 and completion of 10 years of continuous service.

(2) Normal retirement benefit.

(a) Duration. A member retiring hereunder on or after his or her normal retirement date shall receive a monthly benefit, which shall commence on said normal retirement date and be continued thereafter during the member's lifetime, but in no event for less than 10 years. Upon reaching normal retirement age a member's benefits shall be fully vested.

(b) Amount.

1. The amount of normal retirement benefit for members who became members prior to April 17, 1973, shall be the greater of 50 percent of average monthly earnings or 2½ percent of average monthly earnings multiplied by years of continuous service subject in any event to a maximum of 75 percent of average monthly earnings.

2. The amount of normal retirement benefit for members who became members on or after April 17, 1973 shall be 2½ percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 75 percent of average monthly earnings. In no event, however, shall a member's normal retirement benefit be less than 2 percent of average monthly earnings multiplied by years of continuous service.

(3) Early retirement date. A member may retire on the first day of any month following the attainment of age 50 and completion of 10 years of continuous service.

(4) Early retirement benefit. A member retiring hereunder on his or her early retirement date may receive either a deferred or an immediate monthly retirement benefit as follows:

(a) A deferred monthly retirement benefit which shall commence on the member's normal retirement date and shall be continued on the first day of each month thereafter during his or her lifetime, but in no event for less than 10 years. The amount of each such deferred monthly retirement benefit shall be determined in the same manner as for retirement at the member's normal retirement date except that continuous service and average monthly earnings shall be determined as of his or her early retirement date; or

(b) An immediate monthly retirement benefit which shall commence on the member's early retirement date and shall be continued on the first day of each month thereafter during the member's lifetime, but in no event for less than 10 years. The maximum benefit payable, as determined in (a) above, shall be reduced by 3/12 of 1 percent for each month by which the actual early retirement date precedes the member's normal retirement date.

(5) Disability.

(a) Service-incurred. Any police officer member who receives a service connected injury, disease or disability, which injury, disease or disability permanently incapacitates him or her, physically or mentally, from regular and continuous duty as a police officer shall receive in equal monthly installments an amount equal to 75 percent of average monthly earnings in effect at the date of disability retirement or, if greater, the accrued normal retirement benefit. The benefit shall be payable for life unless the member recovers from the disability, in which case the benefit shall cease. If the member does not recover and dies before 120 consecutive monthly payments have been made, the balance of the 120 payments shall be paid to the member's beneficiary.

(b) Non-service-incurred. Any member with 10 years of service who receives a non-service-connected injury, disease or disability, which injury, disease or disability permanently incapacitates or shall in the future permanently incapacitate the member physically or mentally from regular and continuous duty as a police officer shall receive in equal monthly installments an amount equal to the member's accrued normal retirement benefit. The benefit shall be payable for life unless the member recovers from the disability, in which case the benefit shall cease. If the member does not recover and dies before 120 monthly payments have been made, the balance of the 120 payments shall be paid to the member's beneficiary.

(c) Determination of disability. All questions relating to eligibility for continuance of disability benefits shall be determined by the board of trustees based upon the recommendation of the medical board.

(d) Disability pension offset. A member receiving a service-incurred disability pension from the city and who is receiving benefits for the same disability under social security or worker's compensation, or who is receiving another retirement benefit from another plan of the city, shall have a deduction made from the monthly disability pension payment in an amount necessary to bring the total of all disability payments to no more than 100 percent of the gross monthly salary of the disabled person last paid by the city as of the time the disability retirement occurred. However, in no event will the benefit be reduced below the greater of the accrued normal retirement benefit or 42 percent of average monthly earnings. The amount of gross monthly salary shall be escalated bi-monthly, for the purpose of this calculation, by the percentage increase, if any, in the Bureau of Labor Statistics Consumer Price Index, urban wage earners, Miami index, measured on a bi-monthly basis. Lump sum disability payments and lump sum scheduled injury disability payments shall not be included in this computation.

(e) Any other provision of the system notwithstanding, a member shall not qualify for disability retirement and payment of a disability pension if the board determines the disability is a direct result of the excessive and habitual use of drugs, intoxicants or narcotics or occurs after employment has terminated or while:

1. Willfully and illegally participating in fights, riots, or civil insurrections
2. Committing a crime or
3. Serving in any armed forces.

(6) Preretirement death.

(a) Service-incurred. A death benefit shall be payable on behalf of any member who dies as a direct result of an occurrence arising in the performance of service. The benefit shall be payable as follows:

1. To the surviving spouse, or other designated beneficiaries, as the case may be, a lump sum payment of $5,000.00; plus
2. To the surviving spouse, for life, a monthly benefit equal to 75 percent of the member's average monthly earnings; unless a member with 10 or more years of credited service has designated a beneficiary (which may be the spouse) to receive the preretirement death benefit, in which case

the beneficiary is entitled to the benefits otherwise payable to the member at the time the member would have reached early or normal retirement age (a 10-year certain benefit); except that a survivor spouse who is also designated as the early retirement benefit beneficiary is entitled to elect between the 2 options; plus

3. For each child until he or she has reached the age of 18 years, and for each child from age 18 until age 22 who is a full-time student in an accredited school, there shall be paid in equal monthly installments an amount equal to 7½ percent of the average monthly earnings subject to an overall limitation of a total of 90 percent of average monthly earnings for the surviving spouse and children combined. The nonstudent child's pension shall terminate on the earlier of death, marriage or the attainment of age 18; the pension of a child who is a student shall terminate on the earlier of death, marriage or the attainment of age 22. Legally adopted children shall be eligible the same as natural children.

   Upon the death of the surviving spouse, the 7½ percent child allowance shall be increased to 15 percent for each child, and shall be paid in trust to eligible children, not to exceed a combined total of the greater of 50 percent of the a member's average monthly earnings or the member's accrued pension benefit.

   The trusteeship and disbursements of the pension to any child or children shall be determined by the board of trustees. These benefits are not to be limiting to other benefits available under state law.

(b) Non-service-incurred. If any member shall die in active service from causes not attributable to active duty or service, a death benefit shall be payable as follows:

1. With less than 1 year of continuous service, a single sum amount of $2,500.00.
2. With 1 but less than 5 years of continuous service, a single sum amount of $5,000.00.
3. With 5 years of continuous service:
   a. A single sum amount of $5,000.00; plus
   b. To the surviving spouse in equal monthly payments an immediate pension equal to 65 percent of such member's accrued pension as of date of death or, if greater, the pension benefit otherwise payable to the member starting at early or normal retirement age, subject to a minimum of 20 percent of average monthly earnings; unless a member with 10 or more years of credited service has designated a beneficiary (which may be the spouse) to receive the preretirement death benefit, in which case the beneficiary is entitled to the benefits otherwise payable to the member at the time the member would have reached early or normal retirement age (a 10-year certain benefit); except that a survivor spouse who is also designated as the early retirement benefit beneficiary is entitled to elect between the 2 options; plus
   c. To the child or children of such deceased member the same benefits as are payable by reason of service-connected death; subject, however, to a maximum combined limitation of monthly

payments to the surviving spouse and children of the greater of 50 percent of the member's average monthly earnings or the member's accrued pension benefit.

(7) Vesting. If a member terminates employment with the police services department, either voluntarily or by lawful discharge, and is not eligible for any other benefits under this system, the member shall be entitled to the following:

(a) With less than 10 years of continuous service, refund of member contributions plus 3 percent interest per annum or, pursuant to section 185.02(5)(b), Fla., Stat., voluntarily leave his or her contributions in the fund for a period of up to five (5) years. If, within five (5) years of termination of employment, the member is not reemployed by the city in a position which requires membership in this plan, then the member's contributions shall be returned to him or her without interest.

(b) With 10 or more years of continuous service:

1. The pension benefit accrued to the member's date of termination, based on the terms of the plan in effect on such date of termination, payable commencing at the member's otherwise normal retirement date, provided the member does not elect to withdraw his or her member contributions; or

2. Refund of member contributions plus 3 percent interest calculated annually.

(c) Any member of this system who, for whatever reason, has employment with the city as a police officer terminated, but who remains or was previously employed by the city in some other capacity so that the total period of employment with the city is 10 years or more, shall have all benefits accrued under this system preserved, provided the member does not elect to withdraw member contributions. Such accrued benefits shall be paid at the member's otherwise normal retirement date in accordance with the provisions of this system.

(d) If a member, with ten or more years of continuous service, dies prior to retirement, his or her designated beneficiaries are entitled to the benefits otherwise payable to the member at the normal retirement date.

For purposes of determining normal retirement age under this vesting provision, continuous service shall include all employment with the city as well as the period of time subsequent to termination as a member of this system; however, benefits shall not be payable under this system during any period of continued employment by the city.

(Ord. No. 3740, § 1, 1-23-89; Ord. No. 3937, § 1, 7-9-91; Ord. No. 4170, § 33, 9-27-94; Ord. No. 4223, § 2, 6-13-95; Ord. No. 4504, § 5, 4-11-00; Ord. No. 4744, § 2, 11-12-03)

Cross reference— *Retirement dates and benefits, optional provisions for police officers, § 12-153.*

Sec. 12-132. Optional forms of retirement benefits.

(1) Each member entitled to a benefit shall have the right at any time prior to retirement (inclusive of entry into the deferred retirement option plan) to elect to have his or her benefit payable under any 1 of the options hereinafter set forth in lieu of the benefits otherwise provided herein, and to revoke any such elections and make a new election at any time prior to retirement (inclusive of entry into the deferred retirement option plan). The value of optional benefits shall be actuarially equivalent to the value of benefits otherwise payable.

The members shall make such an election by written request to the board and such an election shall be subject to the approval of the board.

(a) Option 1: Joint and last survivor option. A retiring member may elect to receive a decreased retirement benefit during the member's lifetime and have such decreased retirement benefit (or a designated fraction thereof) continued after his or her death to and during the lifetime of a joint pensioner designated by the member of 100 percent, 75 percent, 662/3 percent, or 50 percent. The election of this option shall be null and void if the designated contingent annuitant dies before the member's retirement.

(b) Option 2: Life of member only option. A retirement income of an increased amount, payable to the member for his or her lifetime only.

(c) Option 3: Other. In lieu of the other optional forms enumerated in this section, retirement benefits may be paid in any form approved by the board so long as actuarial equivalence with the benefits otherwise payable is maintained. Such other optional forms shall be limited to those which will result in the present value of payments to the retiring member being at least 50 percent of the total present value of payments to the retiring member and his or her beneficiary. If the present value of a benefit is less than $5,000.00 and the payment of such benefit has not begun, the board may, in its sole discretion, pay the actuarial equivalent of such benefit in a lump sum, without the consent of the member. A lump sum payment of any benefit with a present value in excess of $5,000.00 will only be made on consent of the retiring member or, in the event the member is deceased, the member's beneficiary.

(2) The member upon electing any option under subsection (1) shall designate a joint pensioner or beneficiary (or beneficiaries) to receive the benefit, if any, payable under the plan in the event of the member's death, and shall have the power to change such designation from time to time but any such change shall be deemed a new election. Such designation shall name a joint pensioner or 1 or more primary beneficiaries where applicable. If a member elects an option with a joint pensioner or beneficiary and their retirement income benefits have commenced, they may thereafter change the designated joint pensioner or beneficiary up to two times without the approval of the board of trustees or the current joint annuitant or beneficiary. The member need not provide proof of the good health of the joint annuitant or beneficiary being removed, and the joint annuitant or beneficiary being removed need not be living. Any subsequent change to the joint pensioner or beneficiary may be made but only if the board of trustees consents to the change and the joint pensioner last previously designated by the member is alive when the member files with the board of trustees a request for such change. The consent of a member's joint pensioner or beneficiary to any such change shall not be required. Additionally, for such subsequent changes, the board of trustees may request such evidence of the good health of the joint pensioner that is being removed as it may require. The amount of the retirement income payable to the member upon the designation of a new joint pensioner shall be actuarially redetermined taking into account the age and sex of the former joint pensioner, the new joint pensioner, and the member, with the new benefit actuarially equivalent to the original benefit. Each such designation shall be made in writing on a form prepared by the board of trustees, and on completion will be filed with the board of trustees. In the event that no designated beneficiary survives the member, such benefits as are payable in the event of the death of the member subsequent to their retirement shall be paid to the estate of the member.

(3) A member participating in the deferred retirement option plan may, during the participation period and with the approval of the board of trustees, make a one-time election to revoke his or her benefit payable under any of the options set forth in subsection (1) above and make a new election subject to the following conditions:

(a) A new election may be made by a deferred retirement option plan participant only in the event of the participant's marriage, dissolution of marriage, or annulment.

(b) If the participant's former spouse was the designated joint pensioner or beneficiary prior to the new election, the written consent of the former spouse or a judicial order shall be required.

(c) If the participant had previously elected Option 1 under section 12-132(1)(a) above, or an option including a joint annuitant under section 12-132(1)(c) above, a new election may be made only if the joint pensioner last previously designated by the participant is alive when the participant files with the board of trustees a request for such change. The board of trustees may request evidence of the good health of the participant or the joint pensioner.

(d) The participant shall be entitled to one election under this subsection (3) following commencement of the participant's deferred retirement option plan participation and such election shall be irrevocable. The amount of the retirement income payable to the participant upon making a new election shall be actuarially redetermined taking into account the age and sex of the former joint pensioner (if any), the new joint pensioner (if any), and the participant, with the new monthly benefit being the lesser of 1. or 2. below:

1. The monthly benefit that results in no change in system accrued liability as of the option change effective date, based on assumptions used for the actuarial valuation; or

2. The monthly benefit that was available to the participant upon entry into the deferred retirement option plan; or in the case of a new election of a joint and survivor option, the monthly benefit that would have been available to the participant upon entry into the deferred retirement option plan had the new election and new joint annuitant information been provided at that time; increased with cost of living adjustments (if any) as they would have been applied to the option change effective date.

(e) The participant shall request a new election pursuant to this subsection (3) by submitting a written request to the board of trustees, and such election shall not be effective unless and until approved by the board. The participant shall pay all administrative and actuarial costs associated with an election made pursuant to this subsection.

(Code 1966, § 17-34; Ord. No. 4471, § 2, 10-26-99; Ord. No. 4504, § 6, 4-11-00; Ord. No. 5063, § 1, 10-28-08; Ord. No. 5115, § 1, 10-27-09)

Sec. 12-133. Contributions.

(1) Member contributions.

(a) Commencing October 1, 1999 and until October 26, 2010, firefighter members of the retirement system shall make regular contributions to the trust fund at a rate equal to 9.2 percent of their annual earnings. Commencing October 26, 2010, firefighter members of the retirement system shall make regular contributions to the trust fund at a rate equal to 10.2 percent of their annual earnings. In the event the city's contribution to the trust fund, made pursuant to subsection (3) herein, should decrease to less than 10.2 percent as determined by the annual actuarial valuation report for the plan establishing the required city contribution for the fiscal year beginning on October 1, the contribution made by firefighter members shall be reduced to 9.2 percent commencing with the second payday immediately following October 1 of the plan year specified in the annual actuarial valuation report.

(b) Commencing October 1, 2004 and until October 26, 2010, police officer members of the retirement system shall make regular contributions to the trust fund at a rate equal to 9.2 percent of their annual earnings. Commencing October 26, 2010, police officer members of the retirement system shall make regular contributions to the trust fund at a rate equal to 10.2 percent of their annual earnings. In the event the city's contribution to the trust fund, made pursuant to subsection (3) herein, should decrease to less than 10.2 percent as determined by an annual actuarial valuation report for the plan establishing the required city contribution for the fiscal year beginning on October 1, the contribution made by police officer members shall be reduced to 9.2 percent commencing with the second payday immediately following October 1 of the plan year specified in the annual actuarial valuation report.

(c) Eligible employees, as a condition of membership, shall agree in writing upon becoming a member to make the contribution specified herein. The contributions shall be deducted from the earnings before the same are paid, until the member terminates city employment or upon the effective date of a member's commencement of participation in the deferred retirement option plan. Such member contributions shall be deposited into the trust fund immediately following each payday.

(2) State contributions. Any moneys received or receivable by reason of laws of the state for the express purpose of funding and paying for retirement benefits for police and firefighters of the city shall be deposited in the trust fund comprising part of this system. Such state contributions shall be deposited immediately, and under no circumstances more than 5 days after receipt, into the trust fund. In lieu thereof the city may authorize the division of retirement to make direct payment to the board of trustees of the trust fund.

(3) City contributions. So long as this plan is in effect, the city shall make an annual contribution to the trust fund in an amount equal to the difference in each year as between the total of aggregate member contributions for the year plus state contributions for the year and the amount necessary for the year to maintain the plan on a sound actuarial basis as shown by the most recent actuarial valuation and report for the plan. The total cost for any year shall be defined as the total of normal cost plus the additional amount sufficient to amortize the accrued past service liability in accordance with Florida Statutes.

(4) Guaranteed refund of member contributions. All retirement, death and disability benefits payable under this system are in lieu of a refund of member contributions. In any event, however, each member shall be guaranteed the payment of benefits at least equal in total amount to his accumulated contributions plus 3 percent interest.

(5) Additional city contributions. The city shall pick up the member contribution required by (1) above for all compensation earned after January 1, 1985, the effective date of this subsection. The contributions so picked up shall be treated as contributions being paid by the employer in lieu of contributions by the employee in determining tax treatment under the United States Internal Revenue Code. The city shall pick up the member contributions from funds established and available in the salaries account, which funds would otherwise have been designated as member contributions and paid to the pension plan. Member contributions picked up by the city pursuant to this subsection shall be treated for all other purposes of this and other laws of the city in the same manner and to the same extent as member contributions made prior to the effective date of this subsection.

(6) Employee option. No employee shall have the option of choosing to receive the contributed amounts, pursuant to (5) above, directly instead of having them paid by the city to the pension system.

(7) Deferred retirement option plan. Upon the effective date of a member's commencement of

participation in the deferred retirement option plan, the member's contributions will be discontinued and the city's contribution for the normal cost of the member's service after the effective date will be discontinued.

(Code 1966, § 17-35; Ord. No. 4011, § 3, 7-14-92; Ord. No. 4471, § 2, 10-26-99; Ord. No. 4504, § 7, 4-11-00; Ord. No. 4838, § 2, 12-14-04; Ord. No. 5064, § 1, 10-28-08; Ord. No. 5154, § 2, 11-9-10)

Sec. 12-134. Administration.

(1) The general administration and responsibility for the proper operation of the pension system and for making effective the provisions of this article are hereby vested in a board of trustees consisting of 8 persons as follows:

(a) Four members other than firefighters or police officers to be appointed as hereinafter provided.

(b) Two eligible firefighters to be elected as hereinafter provided.

(c) Two eligible police officers to be elected as hereinafter provided.

(d) At any time, only one police officer trustee and only one firefighter trustee may elect to participate in the deferred retirement option plan and continue service as a trustee, and such trustee shall be eligible to be reelected as a trustee during the deferred retirement option plan participation period; provided however, such trustee shall cease to serve (and shall be ineligible to be reelected) as a trustee upon termination of employment.

(2) The term of office of each elected trustee, for terms commencing after January 1, 2000, shall be 2 years, except that the term of office for those trustees elected in 2000 shall be for an initial term of 1 year and shall expire in 2001. Each successive term shall be for 2 years. Each appointed trustee, for terms commencing after January 1, 2000, shall serve for a period of 2 years, unless sooner replaced by city council at whose pleasure such trustee shall serve.

(3) The appointive trustees shall be appointed by the city council.

(4) The elective trustees shall be elected in the following manner: By per capita vote of all active members of each of the respective departments who come within the purview of this article, excluding those members participating in the deferred retirement option plan who shall not be eligible to vote or to serve as trustees (except as provided in subsection (1)(d) above), at a meeting to be held at a place designated by the city manager or the city manager's designee. Per capita votes may, at the option of the above-described active members, be submitted by absentee ballot in accordance with the board's written procedures. The election shall be conducted by the city manager or the city manager's designee on behalf of the board, which shall provide procedures for submission of absentee ballots by the above-described active members prior to the above-described meeting. No later than the first business day of each calendar year, the board shall file a copy of the board's written procedures, which shall govern the election of trustees, with the city manager. All qualified members entitled to vote shall be notified by depositing the notice in the mail at least 10 days in advance of the meeting. The candidate receiving the majority of votes cast for each office shall be declared elected and shall take office immediately upon commencement of the term of office for which elected or as soon thereafter as the candidate shall qualify therefor. If a candidate does not receive a majority of the votes cast, then a runoff election shall be held between the 2 candidates receiving the greatest number of votes. For the purpose of this section, a candidate will be deemed to have received the majority of the votes cast for each office if the candidate has received any percent or fraction thereof greater than fifty percent of the votes cast for the office. An election shall be held each year not more than 30 and not

less than 10 days prior to the commencement of the terms for which trustees are to be elected in that year. The board of trustees shall elect 1 of its members as chairman and 1 member as vice-chairman at the first meeting after trustees are elected and duly qualified.

(5) If a vacancy occurs in the office of trustee, the vacancy shall be filled for the unexpired term in the same manner as the office was previously filled.

(6) The trustees shall serve without compensation, but they may be reimbursed from the expense fund for all necessary expenses, which they may actually expend through services on the board in accordance with F.S. § 112.061.

(7) Each trustee shall, within 10 days after his appointment or election, take an oath of office before the city clerk of the city, that so far as it develops upon him he will diligently and honestly administer the affairs of the board, and that he will not knowingly violate or willingly permit to be violated any of the provisions of the law applicable to the retirement system. Such oath shall be subscribed to by the members making it and certified by the clerk and filed in his office.

(8) Each trustee, including the Chairman, shall be entitled to 1 vote on the board. Five votes shall be necessary for a decision by the trustees at any meeting of the board.

(9) Subject to the limitations of this article the board of trustees shall from time to time establish uniform rules and regulations for the administration of funds created by this article and for transactions of its business, including provisions for compulsory attendance of its members.

(10) The board of trustees shall by majority of its members appoint a secretary, who may, but need not be, one of its members. It shall engage such actuarial and other services as shall be required to transact the business of the retirement system. The compensation of all persons engaged by the board of trustees and all other expenses of the board necessary for the operation of the retirement system shall be paid at such rates and in such amounts as the board of trustees shall agree. All funds shall be disbursed by the secretary upon authorization by the board of trustees.

(11) The duties and responsibilities of the board of trustees shall include the following:

   (a) Construe the provisions of the system and determine all questions arising thereunder.

   (b) Determine all questions relating to eligibility and participation.

   (c) Determine and certify the amount of all retirement allowances or other benefits hereunder.

   (d) Establish uniform rules and procedures to be followed for administrative purposes, benefit applications and all matters required to administer the plan.

   (e) Distribute at regular intervals to employees information concerning the plan.

   (f) Receive and process all applications for participation and benefits.

   (g) Authorize all payments whatsoever from the fund.

   (h) Review ordinances proposing changes to the provisions of the system referred to the board by the city council, and recommend to the city council the action to be taken on each ordinance which the board finds necessary or advisable. Any ordinance proposing a change to the provisions of the plan shall be referred to the board upon introduction and first reading, and the board, at its option shall have up to 30 days after introduction and first reading to review the ordinance and submit its recommendations, if any, to the city council. Nothing in this article shall empower the board of trustees to amend the provisions of the retirement system without the approval of city council.

   (i) Perform such duties as are specified in section 12-135

   (j) To ensure that all meetings of the board are recorded by tape.

(k) The board of trustees may, upon the written request of a retiree, authorize the plan administrator to withhold from the retirement payment those funds that are necessary to pay for premiums for accident, health, and long-term care insurance for the retiree and the retiree's spouse and dependents. The fund, and its board of trustees, shall not incur any liability for participation in this permissive program should its actions be taken in good faith.

(Code 1966, § 17-36; Ord. No. 3937, § 2, 7-9-91; Ord. No. 4471, § 4, 10-26-99; Ord. No. 4504, §§ 8—13, 4-11-00; Ord. No. 4535, § 1, 9-26-00; Ord. No. 4744, § 3, 11-12-03; Ord. No. 5106, § 1, 9-22-09; Ord. No. 5115, § 2, 10-27-09)

Cross reference— *Administration, ch. 2; boards, committees, commissions, § 2-46 et seq.*

Sec. 12-135. Establishment and operation of fund.

(1) As part of the system there is hereby established the fund, into which shall be deposited all of the contributions and assets whatsoever attributable to the system.

(2) The actual custody and supervision of the fund, and assets thereof, shall be vested in the pension board of trustees. Payment of benefits and disbursements from the fund may be made on authorization from the pension board of trustees. The fund may be made on authorization from the pension board of trustees.

(3) The pension board may hire and appoint such persons, agents or entities (including corporate fiduciaries) as in its discretion may be required or advisable to enable it to perform custodial and investment duties hereunder; provided, further, the pension board may enter into agency, investment advisory and custodial agreements for the purpose of securing investment and custodianship services for the system and fund.

(4) All funds and securities of the system may be commingled in the fund, provided that accurate records are maintained at all times reflecting the financial composition of the fund, including accurate current accounts and entries as regards the following:

(a) Current amounts of accumulated contributions of employees on both an individual and aggregate account basis;

(b) Receipts and disbursements;

(c) Payments to retirees;

(d) Current amounts clearly reflecting all moneys, funds and assets whatsoever attributable to contributions and deposits from the city;

(e) All interest, dividends and gains (or losses) whatsoever;

(f) Such other entries as may be properly required so as to reflect a clear and complete financial report of the fund;

(g) An annual report to be made by the CPA firm performing the city's annual audit.

(5) The board of pension trustees shall have the following investment powers and authority:

(a) Invest and reinvest the fund in such securities or in such property, real or personal, wherever situated, as it shall deem advisable, including but not limited to, stocks, common or preferred, bonds and mortgages, and other evidences of indebtedness or ownership, although the same may not be of the character permitted for the trustees' investment by the laws of the state. The board of pension trustees is authorized to invest up to 75 percent of the fund in stocks at market value. The board of pension trustees is authorized to invest up to 25 percent of plan assets in foreign securities on a market-value basis. The board of pension trustees shall be vested with full legal title to the fund; subject, however, and in any event to the authority and power of the city council to amend or terminate this trust; provided, that no amendment or fund termination shall ever result in the use or application of any fund assets except for the payment of benefits under this plan. The board shall identify and publicly report any direct or indirect holdings it may have in any scrutinized company, as defined in F.S. § 215.473, and proceed to sell, redeem, divest, or withdraw all publicly traded securities it may have in such company beginning January 1, 2010 and shall thereafter be prohibited from purchasing or holding such securities. The divestiture of any such security must be completed by September 30, 2010. In accordance with Ch. 2009-97, Laws of Florida, no person may bring any civil, criminal, or administrative action against the board or any employee, officer, director, or advisor of such board based upon the divestiture of any security pursuant to this paragraph. All contributions from time to time paid into the fund, and the income thereof, without distinction between principal and income, shall be held and administered by the board or its agent, in the fund and the board shall not be required to segregate or invest separately any portion of the fund.

(b) The board may retain in cash and keep unproductive of income such amount of the fund as it may deem advisable, having regard for the cash requirements of the system.

(c) Neither the board nor any person or entity shall be liable for the making, retention or sale of any investment or reinvestment made as herein provided, nor for any loss or diminishment of the fund, except that due to his or its own negligence, willful misconduct or lack of good faith.

(d) The board may cause any investment in securities held by it to be registered in or transferred into its name as trustee or into the name of such nominee as it may direct, or it may retain them unregistered and in form permitting transferability, but the books and records shall at all times show that all investments are part of the fund.

(e) The board is empowered, but is not required, to vote upon any stocks, bonds, or securities of any corporation, association, or trust and to give general or specific proxies or powers of attorney with or without power of substitution; to participate in mergers, reorganizations, recapitalizations, consolidations and similar transactions with respect to such securities; to deposit such stock or other securities in any voting trust or any protective or like committee or with the trustees or with depositaries designated thereby to amortize or fail to amortize any part or all of the premium or discount resulting from the acquisition or disposition of assets; and generally, to exercise any of the powers of an owner with respect to stocks, bonds or other investments, comprising the fund which it may deem to be the best interest of the fund to exercise.

(f) The board shall not be required to make any inventory or appraisal or report to any court, nor to secure any order of court for the exercise of any power herein contained.

(g) Where any action which the board is required to take or any duty or function which it is required to perform, either under the terms herein or under the general law applicable to it as trustees under this agreement, can reasonably be taken or performed only after receipt by it from a member, the city or any person or entity, of specific information, certification, direction or instructions, the board shall incur no liability in failing to take such action or perform such duty or function until such information, certification, direction, or instruction has been received by it.

(h) Any overpayments or underpayments from the fund to a retired member or beneficiary caused by errors of computation shall be adjusted with interest at the rate per annum approved by the board. Overpayments shall be charged against retirement payments next succeeding the correction. Underpayments shall be made up from the trust fund.

(i) The board shall sustain no liability whatsoever for the sufficiency of the fund to meet the payments and benefits herein provided for and shall be under no duty or obligation to inquire into the sufficiency of the payments made into the fund by the city.

(j) In any application to or proceeding or action in the courts, only the city and the board shall be necessary parties, and no member or other person having an interest in the fund shall be entitled to any notice of service or process. A judgment entered in such a proceeding or action shall be conclusive upon all persons.

(6) Any of the foregoing powers and functions reposed in the board may be performed or carried out by the board through duly authorized agents, provided that the board shall at all times maintain continuous supervision over the acts of any such agent. Legal title to the fund shall always remain in the board of pension trustees.

(7) No change in any of the administrative rules and procedures established by the board shall be made without the approval of the board of trustees as provided in subsection 12-134(8).

(Code 1966, § 17-37; Ord. No. 4504, § 14, 4-11-00); Ord. No. 4744, § 4, 11-12-03; Ord. No. 5115, § 3, 10-27-09)

Cross reference— *Funds, § 15-161 et seq.*

Sec. 12-136. Medical board.

The board of trustees shall designate a medical board to be composed of 3 physicians who shall arrange for and pass upon all medical examinations required under the provisions of this article, shall investigate all essential statements or certificates made by or on behalf of a member in connection with an application for disability or retirement and shall report in writing to the board of trustees its conclusions and recommendations upon all matters referred to it. The payment for such services shall be determined by the board of trustees.

(Code 1966, § 17-38(1))

Sec. 12-137. Discharged members.

Members entitled to a pension shall not forfeit the same upon dismissal from the department but shall be retired as herein described.

(Code 1966, § 17-38(2))

Sec. 12-138. Recovery from disability.

If a member who has been retired on a pension on account of permanent incapacity regains his or her full health and is shown to be physically able to perform all duties in the police services department or fire-rescue services department, the board shall require the member to resume employment within the respective department and discontinue the pension. If such member shall after resuming his or her position pay into the fund an amount equal to the aggregate contributions plus interest at a rate to be determined by the board (computed upon his or her annual earnings at the time of the disability retirement) that the member would have been required to make hereunder, as determined by the board, during the period of the member's disability retirement had the member not been retired, such member shall receive creditable service for the period of such disability retirement, as well as for the period of continuous service prior to the date of disability.

(Code 1966, § 17-38(3); Ord. No. 4170, §§ 30, 33, 9-27-94; Ord. No. 4504, § 15, 4-11-00)

Sec. 12-139. Nonassignability.

No pension provided for in this article shall be assignable or subject to garnishment for debt or for other legal process.

(Code 1966, § 17-38(4))

Sec. 12-140. Duration of pension.

Pensions granted to retired members shall be paid to them for life, but in no event for less than 10 years, and shall not be revoked nor in any way diminished except as provided in this article.

(Code 1966, § 17-38(5); Ord. No. 4504, § 16, 4-11-00)

Sec. 12-141. Pension validity.

The board of trustees shall have the power to examine into the facts upon which any pension shall heretofore have been granted under any prior or existing law, or shall hereafter be granted or obtained erroneously, fraudulently, or illegally for any reason. The board is empowered to purge the pension rolls of any person heretofore granted a pension under prior or existing law or hereafter granted under this article if the same is found to be erroneous, fraudulent or illegal for any reason; and to reclassify any pensioner who has heretofore under any prior or existing law, or who shall hereafter under this article be erroneously, improperly or illegally classified.

(Code 1966, § 17-38(6))

Sec. 12-142. Incompetents.

If any member or beneficiary is a minor or is, in the judgment of the pension board otherwise incapable of personally receiving and giving a valid receipt for any payment due him or her under the plan, the board may, unless and until claims shall have been made by a duly appointed guardian or committee of such person, make such payment or any part thereof to such person's spouse, children or other person deemed by the board to have incurred expenses or assumed responsibility for the expenses of such person. Any payment so made shall be a complete discharge of any liability under the plan for such payment.

(Code 1966, § 17-38(7); Ord. No. 4504, § 17, 4-11-00)

Sec. 12-143. Actuarial computations.

(1) The board will furnish the actuary with all data required for necessary actuarial computations under the plan.

(2) No payment or any benefit, contribution or other sum which would constitute a violation of any applicable wage control law or section 415(b)(1)(A) of the Internal Revenue Code shall be made hereunder.

(Code 1966, § 17-38(8); Ord. No. 4471, § 5, 10-26-99; Ord. No. 4504, § 18, 4-11-00)

Sec. 12-144. Certain transfers; vested rights on transfer.

Transfer of members; vested rights. If an employee transfers to the police and firefighters' pension plan from the general employees pension plan, the following rules shall be applied:

The employee's contributions plus accrued interest as calculated in section 12-130(7) or 12-131(7) and the city's contributions shall be transferred from the plan being vacated to the plan being entered. Funds contributed by the city on behalf of employees who have previously transferred from one plan to another shall be transferred to the plan being entered after November 27, 1990.

(b) Years of service shall be computed from the date upon which the employee was hired by the city, without consideration of the transfer.

(c) Upon death or application for retirement by the employee, all benefits provided in the plan in which the employee is a member shall apply as of the effective date of the transfer.

(d) In determining the member's accrued pension, the amount shall be the sum of:

1. The percentage of average monthly earnings for each year of continuous service while a member of this plan based on the formula of this plan; plus
2. The percentage of average monthly earnings for each year of continuous service while a member of the general employees' pension plan based on the formula of that plan; provided, that the total of the pension computed under 1. and 2. above shall not exceed 75 percent of average monthly earnings for police officers and 100 percent of average monthly earnings for firefighters. For the purpose of this subsection, the definition of "average monthly earnings" shall be that definition set forth in the plan from which the member is retiring.

(Code 1966, § 17-38(9); Ord. No. 3888, §§ 2, 3, 11-27-90; Ord. No. 4504, § 19, 4-11-00)

Sec. 12-145. Nonrevision clause.

Under no circumstances before the satisfaction of all liabilities to members and their beneficiaries shall any part of the corpus or income of the trust fund be used for, or diverted to, purposes other than for the exclusive benefit of members and their beneficiaries; and until such liabilities are satisfied, all city contributions will remain in the plan for the benefit of the members or beneficiaries in the event that the plan is terminated or city contributions cease.

(Code 1966, § 17-38(10))

Sec. 12-146. Contributions remain in plan.

Any amounts contributed by the city are to remain in the plan if a member terminated participation and his contributions are returned. The amount forfeited must be used only to reduce the city's current or subsequent year's contribution under the plan.

(Code 1966, § 17-38(12))

Sec. 12-147. Termination or discontinuance.

Upon the termination of the plan or upon the complete discontinuance of contributions under the plan, each employee will have nonforfeitable rights to the benefits accrued to date of such termination or discontinuance. The board shall determine the date of distribution and the asset value required to fund all nonforfeitable benefits after taking into account the expenses of such distribution. The board shall inform the city, or then current plan sponsor, if additional assets are required, in which event the city, or then current plan sponsor, shall continue to financially support the plan until all nonforfeitable benefits have been funded.

(Code 1966, § 17-38(11); Ord. No. 5115, § 4, 10-27-09)

Sec. 12-148. Reentry.

Reentry to the plan after discontinuance of original participation will be permitted on a uniform, nondiscriminatory basis, and in no event will any duplication of benefits result therefrom.

(Code 1966, § 17-38(13))

Sec. 12-149. Reserved.

Editor's note—

Ord. No. 4152, § 1, adopted March 29, 1994, deleted former § 12-149, relative to a biennial review, which derived from Code 1966, § 17-38(14) and Ord. No. 4011, § 4, 7-14-92.

Sec. 12-150. Transfer of certain employees.

(1) Otherwise eligible employees who are currently enrolled in the general employees' plan due to hiring after age 32 shall have a 1-time option to transfer into the police and firefighters' plan. Such option may be exercised by written request received by the police and firefighters' pension board no later than 60 days from the effective date of the ordinance from which this section is derived.

(2) The employee exercising the option to transfer shall make payment into the police and firefighters' plan of an amount equal to that which the employee would have contributed from the date he became an employee, had enrollment commenced on that date, plus accrued interest at 7½ percent. Any employee contribution made into the general employees' plan, plus accrued interest at 3 percent, will be transferred into the police and firefighters' plan upon the employee's election to transfer, and the amount shall be a credit against the payment required above.

(3) Upon receipt of the written request, the employee shall be deemed a member of the police and firefighters' plan. However, notwithstanding any provision in this chapter to the contrary, no benefits under the plan may be paid to such employee until the payments specified in (2) above have been made in full.

(4) The exercise of this option shall be irrevocable.

(5) Upon exercise of the option, the employee's years of service shall be computed from the date he or she became an employee and benefits shall be determined by the formula of the police and firefighters' plan.

(6) Any other provisions of this plan involving date of hire shall be applied to employees as of the date of original hire by the city.

(7) Otherwise eligible employees currently in the general employee's plan who, due to hiring after age 32, choose not to exercise the option provided herein shall continue to be members of the general employee's plan.

(Ord. No. 3878, § 2(17-49), 9-25-90; Ord. No. 4504, § 20, 4-11-00)

Sec. 12-151. Retirement dates and benefits; optional provisions for firefighters.

Firefighters who elect to execute a waiver acceptable to the city relating to any claims concerning the use of chapter 175 monies are eligible for the following optional benefits:

(1) Normal retirement date. Firefighters may elect to retire on the first day of the month

coincident with or subsequent to the completion of 20 years of continuous service or the attainment of age 55 and 10 years of continuous service.

(2) Normal retirement benefit.

(a) For members who retire or terminate employment on or after October 1, 1998 and prior to October 1, 1999 the amount of normal retirement benefit shall be 3 percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 75 percent of average monthly earnings or if age 52 or older with 20 years of service at retirement, a choice of 3 percent pension accrual rate or 2½ pension accrual rate plus a 3 percent annual cost of living increase after 1 year of retirement. In no event, however, shall a member's normal retirement benefit be less than 2 percent of average monthly earnings multiplied by years of continuous service.

(b) For members who retire or terminate employment on or after October 1, 1999 and prior to April 21, 2000 the amount of normal retirement benefit shall be 3 percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 90 percent of average monthly earnings. In no event, however, shall a member's normal retirement benefit be less than 2 percent of average monthly earnings multiplied by years of continuous service.

(c) For members who retire or terminate employment on or after April 21, 2000 and prior to October 1, 2005 the amount of normal retirement benefit shall be 3.25 percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 100 percent of average monthly earnings.

(d) For members who retire or terminate employment on or after October 1, 2005 the amount of normal retirement benefit shall be 3.4 percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 100 percent of average monthly earnings.

(3) Disability.

(a) Any member who is receiving service incurred disability benefits shall, starting with the date the retiree attains age 52, be eligible for the provisions of subsection (6) of this section as provided in subsection (6)(b).

(b) Any member who is receiving non-service incurred disability benefits prior to December 9, 2008, shall, starting with the date the retiree attains age 52, be eligible for the provisions of subsection (6)(b) of this section, if the member had 20 or more years of continuous service at the time of disability or if member was receiving disability benefits as of July 14, 1992. A member who retires with a non-service disability on or after December 31, 1999 will have his or her benefits calculated using a 3.25 percent multiplier. Any member who retires with 20 or more years of continuous service and who begins receiving non-service incurred disability benefits on or after December 9, 2008, shall be eligible for the provisions of subsection (6), starting when the member attains the age and years of service as provided in subsection (6)(c).

(c) In addition to the disability pension offset provided in section 12-130, Code of Ordinances, there shall be an additional deduction made from the monthly service-incurred disability pension payment provided in section 12-130(5)(a) of 50 percent of wages that are in excess of 200 percent of the difference between the gross monthly salary of the disabled person last paid by the city as of the time of the disability retirement and the disability benefits, and provided further that the disability pension shall never be reduced below 25 percent of the original disability benefit, 25 percent of the average monthly earnings or the accrued normal retirement benefit. For purposes of this section, wages shall mean wages as shown on IRS W-2 Form issued to the disabled person and the amounts of the disabled person's net earnings from self-employment for each taxable year. The amount of gross average monthly earnings shall be escalated bi-monthly, for the purpose of this calculation, by the percentage increase, if any, in the Bureau of Labor Statistics Urban Wage Earners and Clerical Workers Index for Miami measured on a bi-monthly basis. A member shall furnish the plan administrator by April 30 of each calendar year or at the end of any extension approved by the IRS, tax and other records the board deems necessary to administer the provisions of this subsection. Failure to timely provide the records can result in immediate termination of disability pension benefits until the month following the month in which the records are provided. The trustees will provide due notice and an opportunity for a hearing to any participant who is subject to termination of benefits.

(d) If a member has 20 or more years of continuous service at the time of disability, the member may elect a pension as provided in subsection (2).

(4) Preretirement death.

(a) Service incurred. If a member is otherwise entitled to the provisions relating to service incurred preretirement death provided in section 12-130, starting with the date the member would have attained age 52, the provisions of subsection (6) shall be applicable as provided in subsection (6)(b).

(b) Non-service incurred. If a member is otherwise entitled to the provisions relating to non-service incurred preretirement death provided in section 12-130, the member's accrued benefit will be calculated using a 3.25 percent multiplier, and if the deceased member had 20 or more years of continuous service at the time of death, and the death occurred prior to December 9, 2008, the provisions of subsection (6)(b) shall be applicable starting with the date the member would have attained age 52. If the deceased member had 20 or more years of continuous service at the time of death and the death occurred on or after December 9, 2008, the provisions of subsection (6) shall be applicable starting when the member's attained (or would have attained) the age and years of service as provided in subsection (6)(c).

(5) Vesting. Vested benefits shall accrue at 3.25 percent of average monthly earnings per year of continuous service.

(6) Cost of living increases.

(a) For retirees or beneficiaries receiving benefits as of July 14, 1992, the cost of living adjustment shall commence on October 1, 1992 and shall be an amount equal to 3 percent of the benefit paid the immediately preceding month.

(b) Eligible members who retire or terminate employment prior to December 9, 2008 and members eligible for benefits under subsections (3)(a) or (4)(a), or their beneficiaries shall receive a cost of living increase equal to 3 percent of the benefit paid the preceding month starting at the later of the member's one-year anniversary of retirement or age 52 and annually thereafter.

(c) Eligible members who retire or terminate employment on or after December 9, 2008 shall receive a cost of living increase calculated as follows:

1. Members with 20 or more years but less than twenty-one years of continuous service shall receive a cost of living increase equal to 3 percent of the benefit paid the preceding month starting at the later of the member's 3-year anniversary of retirement or age 52 and annually thereafter.
2. Members with 21 or more years but less than 22 years of continuous service shall receive a cost of living increase equal to 3 percent of the benefit paid the preceding month starting at the later of the member's 2-year anniversary of retirement or age 52 and annually thereafter.
3. Members with 22 or more years of continuous service shall receive a cost of living increase equal to 3 percent of the benefit paid the preceding month starting at the later of the member's 1-year anniversary of retirement or age 52 and annually thereafter.

(7) Deferred retirement option plan for firefighters. A deferred retirement option plan for firefighters is hereby authorized. The board of trustees shall develop and administer the plan consistent with the terms and conditions set forth in Article 33 of the agreement between the city and the Firefighters of Boca Raton, Local 1560, I.A.F.F, Inc., dated November 30, 1998 provided that in no event shall the board administer a plan which results in the disqualification of the system under the Internal Revenue Code. The board of trustees may implement a self-directed account option for members who participate in the deferred retirement option plan. Prior to implementing the self-directed account option, the board of trustees must adopt a separate investment policy for such accounts, and approve such investment managers and products for the self-directed account option that the board of trustees determines to be prudent. The board of trustees may change such investment managers and products from time to time, as it deems prudent to do so. Members may elect the self-directed account option as follows: (a) members who are participating in the DROP as of the effective date of Ordinance No. 4743, may elect the self-directed account option within 240 days following the effective date of Ordinance No. 4743; (b) members who enter the DROP after the effective date of Ordinance No. 4743, may elect the self-directed account option prior to entering the DROP; or (c) any DROP participant who does not elect the self-directed account option in accordance with (a) or (b), above, may elect the self-directed account option one time only at any time prior to the fourth anniversary of entering the DROP. A member who elects the self-directed account option may revoke that election at any time after one year following election of the self-directed account option, but shall not thereafter be eligible for the self-directed account option. Members who elect the self-directed account option shall direct the board of trustees to invest their self-directed DROP account in any of the managers and products approved by the board, in accordance with an agreement between the member and the investment manager or product provider. A member's self-directed DROP account shall be credited with earnings or debited with losses based on the performance of the investments selected by the member. Neither the board of trustees nor the city shall be liable for the performance of investment managers or products selected, and the performance of self-directed DROP accounts shall not result in any increased costs to the plan or increased contributions by the city.

(8) Retirement supplement. Employees who retired from the employ of the city under this system and began collecting benefits after July 19, 1999 and before October 26, 2010, will receive a monthly lifetime retirement supplement of $10.00 per month times completed years of continuous service. Commencing October 26, 2010, employees

who retire from the employ of the city under this system and begin collecting benefits on or after October 26, 2010, or who are in the DROP and still employed by the city on that date, will receive, upon leaving the employ of the city, a monthly lifetime retirement supplement of $10.50 per month times completed years of continuous service. DROP participants shall not receive the retirement supplement while actively employed by the city. Active service as a firefighter while participating in the DROP shall be counted as continuous service for purposes of determining the amount of the retirement supplement, up to a maximum of 5 years. Members who receive the retirement supplement may elect a survivor option in accordance with section 12-132, which option may differ or may be the same as the retirement option chosen for the member's pension benefit, in which case the amount of the retirement supplement shall be actuarially adjusted.

(Ord. No. 4011, § 5, 7-14-92; Ord. No. 4471, § 6, 10-26-99; Ord. No. 4504, §§ 21—28, 4-11-00; Ord. No. 4523, §§ 2—6, 7-11-00; Ord. No. 4625, § 1, 1-8-02; Ord. No. 4743, § 1, 11-12-03; Ord. No. 4935, § 1, 4-11-06; Ord. No. 5071, § 1, 12-9-08; Ord. No. 5154, § 3, 11-9-10)

Sec. 12-152. Internal Revenue Code compliance.

(1) Maximum pension. Notwithstanding any provision of this plan to the contrary, the annual pension that is accrued by or paid to a member shall not exceed the dollar limitation set forth below. If the benefit the member would otherwise accrue in a limitation year would produce an annual pension in excess of the dollar limitation, the benefit shall be limited to a benefit that does not exceed the dollar limitation.

(a) Definitions used in this section.

1. "Annual pension" means the benefits received by a member under this plan expressed in the form of a straight life annuity. In determining whether benefits payable exceed the dollar limitation set forth below, benefits payable in any form other than a straight life annuity shall be adjusted to the larger of:

a. The annual amount of the straight life annuity (if any) payable to the member under the plan commencing at the same annuity starting date as the form of benefit payable to the member; or

b. The annual amount of the straight life annuity commencing at the same annuity starting date that has the same actuarial present value as the form of benefit payable to the member, computed using a 5 percent interest assumption and the applicable mortality table described in § 1.417(e)-1(d)(2) for that annuity starting date.

No actuarial adjustment to the benefit shall be made for benefits that are not directly related to retirement benefits (such as a qualified disability benefit, preretirement incidental death benefits, and postretirement medical benefits); or the inclusion in the form of benefit of an automatic benefit increase feature, provided the form of benefit is not subject to § 417(e)(3) of the Internal Revenue Code and would otherwise satisfy the limitations of this section, and the amount payable under the form of benefit in any limitation year shall not exceed the limits of this section 12-152 applicable at the annuity starting date, as increased in subsequent years pursuant to § 415(d) of the Code. For this purpose, an automatic benefit increase feature is included in a form of benefit if the form of benefit provides for automatic, periodic increases to the benefits paid in that form.

2. "Dollar Limitation" means $160,000 (subject to the annual adjustments

provided under Section 415(d) of the IRC). Said amount shall be adjusted based on the age of the member when benefits begin, as follows:

a. Except with respect to a member who is a "qualified participant" as defined in section 415(b)(2)(H) of the code, for benefits (except survivor and disability benefits as defined in section 415(b)(2)(I) of the code) beginning before age 62 the age-adjusted dollar limitation is equal to the lesser of:

   (i) The actuarial equivalent of the annual amount of a straight life annuity commencing at the annuity starting date that has the same actuarial present value as a deferred straight life annuity commencing at age 62, where annual payments under the straight life annuity commencing at age 62 are equal to the dollar limitation (as adjusted pursuant to section 415(d) for the limitation year), and where the actuarially equivalent straight life annuity is computed using a 5 percent interest rate and the applicable mortality table under § 1.417(e)-1(d)(2) that is effective for that annuity starting date (and expressing the member's age based on completed calendar months as of the annuity starting date); and

   (ii) The dollar limitation (as adjusted pursuant to section 415(d)) multiplied by the ratio of the annual amount of the straight life annuity under the plan to the annual amount of the straight life annuity under the plan commencing at age 62, with both annual amounts determined without applying the rules of section 415.

b. For benefits beginning after the age of 65, the age-adjusted dollar limitation is equal to the lesser of:

   (i) The actuarial equivalent of the annual amount of a straight life annuity commencing at the annuity starting date that has the same actuarial present value as a straight life annuity commencing at age 65, where annual payments under the straight life annuity commencing at age 65 are equal to the dollar limitation of section 415(b)(1)(A) (as adjusted pursuant to section 415(d) for the limitation year), and where the actuarial equivalent straight life annuity is computed using a 5 percent interest rate and the applicable mortality table under § 1.417(e)-1(d)(2) that is effective for that annuity starting date (and expressing the member's age based on completed calendar months as of the annuity starting date); and

   (ii) The section 415(b)(1)(A) dollar limitation (as adjusted pursuant to section 415(d) and § 1.415(d)-1 for the limitation year) multiplied by the ratio of the annual amount of the adjusted immediately commencing straight life annuity under the plan to the adjusted age 65 straight life annuity. The adjusted immediately commencing straight life annuity means the annual amount of the immediately commencing straight life annuity payable to the member, computed disregarding the member's accruals after age 65 but including actuarial adjustments even if those actuarial adjustments are applied to offset accruals. For this purpose, the annual amount of the immediately commencing straight life annuity is determined without applying the rules of section 415.

The adjusted age 65 straight life annuity means the annual amount of the straight life annuity that would be payable under the plan to a hypothetical member who is 65 years old and has the same accrued benefit (with no actuarial increases for commencement after age 65) as the member receiving the distribution (determined disregarding the member's accruals after age 65 and without applying the rules of section 415).

c. There shall be no age adjustment of the Dollar Limitation with respect to benefits beginning between the ages of 62 and 65.

(b) The limitations set forth in this Section 12-152 shall not apply if the annual pension does not exceed $10,000 provided the member has never participated in a defined contribution plan maintained by the city.

(c) Cost-of-living adjustments in the Dollar Limitation for benefits shall be limited to scheduled annual increases determined by the secretary of the treasury under subsection 415(d) of the code.

(d) In the case of a member who has fewer than 10 years of participation in the plan, the dollar limitation set forth in paragraph (1)(B) of this section (a) shall be multiplied by a fraction:

(i) The numerator of which is the number of years (or part thereof) of participation in the plan, and

(ii) The denominator of which is 10.

(e) Any portion of a member's benefit that is attributable to mandatory employee contributions (unless picked-up by the city) or rollover contributions, shall be taken into account in the manner prescribed in the regulations under section 415 of the code.

(f) Should any member participate in more than one defined benefit plan maintained by the city, in any case in which the member's benefits under all such defined benefit plans (determined as of the same age) would exceed the dollar limitation applicable at that age, the accrual of the member's benefit under this plan shall be reduced so that the member's combined benefits will equal the dollar limitation.

(g) For a member who has or will have distributions commencing at more than one annuity starting date, the annual benefit shall be determined as of each such annuity starting date (and shall satisfy the limitations of this section as of each such date), actuarially adjusting for past and future distributions of benefits commencing at the other annuity starting dates. For this purpose, the determination of whether a new starting date has occurred shall be made without regard to § 1.401(a)-20, Q&A 10(d), and with regard to § 1.415(b)1(b)(1)(iii)(B) and (C) of the income tax regulations.

(h) The determination of the annual pension under paragraph (a)(1) of this section 12-152 shall take into account (in the manner prescribed by the regulations under section 415 of the code) social security supplements described in § 411(a)(9) of the Internal Revenue Code and benefits transferred from another defined benefit plan, other than transfers of distributable benefits pursuant § 1.411(d)-4, Q&A-3(c) of the income tax regulations.

(i) The above limitations are intended to comply with the provisions of section 415 of the Code, as amended, so that the maximum benefits provided by plans of the city shall be exactly equal to the maximum amounts allowed under section 415 of the code and regulations thereunder. If there is any discrepancy between the provisions of this section 12-152 of the plan and the provisions of section 415 of the code and regulations thereunder, such discrepancy shall be resolved in such a way as to give full effect to the provisions of section 415 of the code. The value of any benefits forfeited as a result of the application of this section 12-152 shall be used to decrease future employer contributions.

(2) Required beginning date. Notwithstanding any other provision of the Plan, payment of a Member's retirement benefits under the Plan shall commence not later than the Member's Required Beginning Date, which is defined as the later of:

-April 1 of the calendar year that next follows the calendar year in which the Member attains or will attain the age of 70½ years; or

-April 1 of the calendar year that next follows the calendar year in which the Member retires.

(3) Required minimum distributions.

(a) Required beginning date. The member's entire interest will be distributed, or begin to be distributed, to the member no later than the member's required beginning date as defined in subsection (b) of this section 12-152

(b) Death of member before distributions begin.

1. If the member dies before distributions begin, the member's entire interest will be distributed, or begin to be distributed, no later than as follows:

a. If the member's surviving spouse is the member's sole designated beneficiary, then distributions to the surviving spouse will begin by December 31 of the calendar year immediately following the calendar year in which the member died, or by December 31 of the calendar year in which the member would have attained age 70½, if later.

b. If the member's surviving spouse is not the member's sole designated beneficiary, then distributions to the designated beneficiary will begin by December 31 of the calendar year immediately following the calendar year in which the member died.

c. If there is no designated beneficiary as of September 30 of the year following the year of the member's death, the member's entire interest will be distributed by December 31 of the calendar year containing the fifth anniversary of the member's death.

2. The member's entire interest shall be distributed as follows:

a. Member survived by designated beneficiary. If the member dies before the date distribution of his or her interest begins and there is a designated beneficiary, the member's entire interest will be distributed, beginning no later than the time described in subparagraph (2)(A) above, over the life of the designated beneficiary or over a period certain not exceeding:

(i) Unless the annuity starting date is before the first distribution calendar year, the life expectancy of the designated beneficiary determined using the beneficiary's age as of the beneficiary's birthday in the calendar year immediately following the calendar year of the member's death; or

(ii) If the annuity starting date is before the first distribution calendar year, the life expectancy of the designated beneficiary determined using the beneficiary's age as of the beneficiary's birthday in the calendar year that contains the annuity starting date.

b. No designated beneficiary. If the member dies before the date distributions begin and there is no designated beneficiary as of September 30 of the year following the year of the member's death, distribution of the member's entire interest will be completed by December 31 of the calendar year containing the fifth anniversary of the member's death.

3. Death of surviving spouse before distributions to surviving spouse begin. In any case in which (i) the member dies before the date distribution of his or her interest begins, (ii) the member's surviving spouse is the member's sole designated beneficiary, and (iii) the surviving spouse dies before distributions to the surviving spouse begin, subparagraphs (2)(A) and 2(B) above shall apply as though the surviving spouse were the member.

(c) Requirements for annuity distributions that commence during member's lifetime.

1. Joint life annuities where the beneficiary is not the member's spouse. If the member's interest is being distributed in the form of a joint and survivor annuity for the joint lives of the member and a nonspousal beneficiary, annuity payments to be made on or after the member's required beginning date to the designated beneficiary after the member's death must not at any time exceed the applicable percentage of the annuity payment for such period that would have been payable to the member using the table set forth in Q&A-2 of section 1.401(a)(9)-6T of the treasury regulations. If the form of distribution combines a joint and survivor annuity for the joint lives of the member and a nonspousal beneficiary and a period certain annuity, the requirement in the preceding sentence will apply to annuity payments to be made to the designated beneficiary after the expiration of the period certain.

2. Period certain annuities. Unless the member's spouse is the sole designated beneficiary and the form of distribution is a period certain and no life annuity, the period certain for an annuity distribution commencing during the member's lifetime may not exceed the applicable distribution period for the member under the Uniform Lifetime Table set forth in section 1.401(a)(9)-9 of the treasury regulations for the calendar year that contains the annuity starting date. If the annuity starting date precedes the year in which the member reaches age 70, the applicable distribution period for the member is the distribution period for age 70 under the uniform lifetime table set forth in section 1.401(a)(9)-9 of the treasury regulations plus the excess of 70 over the age of the member as of the member's birthday in the year that contains the annuity starting date. If the member's spouse is the member's sole designated beneficiary and the form of distribution is a period certain and no life annuity, the period certain may not exceed the longer of the member's applicable distribution period, as determined under this subparagraph (3)(B), or the joint life and last survivor expectancy of the member and the member's spouse as determined under the joint and last survivor table set forth in section 1.401(a)(9)-9 of the treasury regulations, using the member's and spouse's attained ages as of the member's and spouse's birthdays in the calendar year that contains the annuity starting date.

(d) Form of distribution. Unless the member's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the required beginning date, as of the first distribution calendar year distributions will be made in accordance with subparagraphs (4)(A), (4)(B) and (4)(C) below. If the member's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder will be made in accordance with the requirements of section 401(a)(9) of the Code and the treasury regulations. Any part of the member's interest which is in the form of an individual account described in section 414(k) of the Code will be distributed in a manner satisfying the requirements of section 401(a)(9) of the code and the treasury regulations that apply to individual accounts.

1. General annuity requirements. If the member's interest is paid in the form of annuity distributions under the plan, payments under the annuity will satisfy the following requirements:
   a. The annuity distributions will be paid in periodic payments made at intervals not longer than one year;
   b. The distribution period will be over a life (or lives) or over a period certain, not longer than the distribution period described in paragraphs 2 or 3 above, whichever is applicable, of this subsection (c);
   c. Once payments have begun over a period certain, the period certain will not be changed even if the period certain is shorter than the maximum permitted;
   d. Payments will either be non-increasing or increase only as follows:
      (i) By an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the bureau of labor statistics;
      (ii) To the extent of the reduction in the amount of the member's payments to provide for a survivor benefit upon death, but only if the beneficiary whose life was being used to determine the distribution period dies or is no longer the member's beneficiary pursuant to a qualified domestic relations order within the meaning of section 414(p) of the code;
      (iii) To provide cash refunds of employee contributions upon the member's death; or
      (iv) To pay increased benefits that result from a plan amendment.
2. Amount required to be distributed by required beginning date. The amount that must be distributed on or before the member's required beginning date (or, if the member dies before distributions begin, the date distributions are required to begin under subparagraph (2)(A)(i) or (2)(A)(ii), whichever is applicable) is the payment that is required for one payment interval. The second payment need not be made until the end of the next payment interval even if that payment interval ends in the next calendar year. Payment intervals are the periods for which payments are received, e.g., bi-monthly, monthly, semi-annually, or annually. All of the member's benefit accruals as of the last day of the first distribution calendar year will be included in the calculation of the amount of the annuity payments for payment intervals ending on or after the member's required beginning date.
3. Additional accruals after first distribution calendar year. Any additional benefits accruing to the member in a calendar year after the first distribution calendar year will be distributed beginning with the first payment interval ending in the calendar year immediately following the calendar year in which such amount accrues.

(e) For purposes of subsection (c), distributions are considered to begin on the member's required beginning date. If annuity payments irrevocably commence to the member (or to the member's surviving spouse) before the member's required beginning date (or, if to the member's surviving spouse, before the date distributions are required to begin in accordance with subparagraph (2)(A) above), the date distributions are considered to begin is the date distributions actually commence.

(f) Definitions.

1. Designated beneficiary. The individual who is designated as the beneficiary under the plan and is the designated beneficiary under section 401(a)(9) of the code and section 1.401(a)(9)-1, Q&A-4, of the treasury regulations.
2. Distribution calendar year. A calendar year for which a minimum distribution is required. For distributions beginning before the member's death, the first distribution calendar year is the calendar year immediately preceding the calendar year which contains the member's required beginning date. For distributions beginning after the member's death, the first distribution calendar year is the calendar year in which distributions are required to begin pursuant to paragraph (2) of subsection (c).
3. Life expectancy. Life expectancy as computed by use of the single life table in section 1.401(a)(9)-9 of the treasury regulations.

(4) Eligible rollover distributions:

(a) Notwithstanding any provision of the plan to the contrary that would otherwise limit a distributee's election under this subsection, a distributee may elect, at the time and in the manner prescribed by the board of trustees, to have any portion of an eligible rollover distribution paid directly to an eligible retirement plan specified by the distribute in a direct rollover.

(b) Definitions:

1. Eligible rollover distribution: An eligible rollover distribution is any distribution of all or any portion of the balance to the credit of the distributee, except that an eligible rollover distribution does not include: any distribution that is 1 of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the distributee or the joint lives (or joint life expectancies) of the distributee and the distributee's designated beneficiary, or for a specified period of 10 years or more; any distribution to the extent such distribution is required under section 401(a)(9) of the code; and the portion of any distribution that is not includable in gross income (determined without regard to the exclusion for net unrealized appreciation with respect to employer securities).
2. Eligible retirement plan: An eligible retirement plan is an individual retirement account described in section 408(a) of the Internal Revenue Code, an individual retirement annuity described in section 408(b) of the code, an annuity plan described in section 403(a) of the code or a qualified trust described in section 401(a) of the code, that accepts the distributee's eligible rollover distribution. An eligible retirement plan shall also mean, with respect to distributions made after December 31, 2001, an annuity contract described in section 403(b) of the code and an eligible plan under section 457(b) of the code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and which agrees to separately account for amounts transferred into such plan from this plan. The

definition of eligible retirement plan shall also apply in the case of a distribution to a surviving spouse, or to a spouse or former spouse who is the alternate payee under a domestic relation order, as defined in Section 414(p) of the code. With respect to distributions on or after January 1, 2008, the definition of eligible retirement plan shall include a Roth IRA (subject to the limitations of code section 408A(c)(3)) that accepts the distributes eligible rollover distribution.

3. Distributee: A distributee includes an employee or former employee. In addition, the employee's or former employee's surviving spouse and the employee's or former employee's spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in section 414(p) of the Code, are distributees with regard to the interest of the spouse or former spouse. Furthermore, effective January 1, 2007, a surviving designated beneficiary as defined in section 401(a)(9)(E) of the code who is not the surviving spouse and who elects a direct rollover to an individual retirement account described in section 408(a) of the code or an individual retirement annuity described in section 408(b) of the code shall be considered a distributee.

4. Direct rollover: A direct rollover is a payment by the plan to the eligible retirement plan specified by the distributee.

(5) Notwithstanding any other provision of this plan, the maximum amount of any mandatory distribution, as defined in section 401(a)(31) of the code, payable under the plan shall be $1000.00.

(6) Compensation limitations under 401(a)(17). In addition to other applicable limitations set forth in the plan, and notwithstanding any other provision of the plan to the contrary, the annual compensation of each member taken into account under the plan shall not exceed the EGTRRA annual compensation limit for limitation years beginning after December 31, 2001. The EGTRRA annual compensation limit is $200,000.00, as adjusted by the commissioner for increases in the cost of living in accordance with section 401(a)(17)(B) of the Code. The cost-of-living adjustment in effect for a calendar year applies to any period, not exceeding 12 months, over which compensation is determined (determination period) beginning in such calendar year. If a determination period consists of fewer than 12 months, the EGTRRA annual compensation limit will be multiplied by a fraction, the numerator of which is the number of months in the determination period, and the denominator of which is 12.

Any reference in the plan to the limitation under section 401 (a)(17) of the code shall mean the EGTRRA annual compensation limit set forth in this provision.

(Ord. No. 4066, § 1, 1-12-93; Ord. 5166, § 2, 5-10-11)

Sec. 12-152.5. Rollovers or transfers into the fund.

On or after the effective date of Ordinance No. 4742, the fund will accept member rollover cash contributions and/or direct cash rollovers of distributions for the purchase of service as authorized under the plan, as follows:

1. Direct rollovers or member rollover contributions from other plans. The fund will accept either a direct rollover of an eligible rollover distribution or a member contribution of an eligible rollover distribution from a qualified plan described in section 403(a) of the Internal Revenue Code, from an annuity contract described in section

403(b) of the Internal Revenue Code, or from an eligible plan under section 457(b) of the Internal Revenue Code, which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state.

2. Member rollover contributions from 401(a) plans and IRAs. The fund will accept a member rollover contribution of the portion of a distribution from a qualified plan described in section 401(a) of the Internal Revenue Code, or from an individual retirement account or annuity described in section 408(a) or 408(b) of the Internal Revenue Code, that is eligible to be rolled over and would otherwise be includible in the member's gross income.

(Ord. No. 4742, § 1, 11-12-03)

Sec. 12-153. Retirement dates and benefits; optional provisions for police officers.

Police officers, retired police officers, future police officers, and beneficiaries of such police officers shall be entitled to the benefits set forth in this section only if they execute a waiver of the right to sue the city, its past, present, and future officials, employees, and agents and/or past, present, or future trustees of the fund concerning any claims for previous or future use of F.S. ch. 175/185, excise tax receipts. The continued applicability of this section is conditioned upon the continued application of the excise tax receipts entirely as an integral part of the fund.

(1) Normal retirement date. Police officers may elect to retire on the first day of the month coincident with or subsequent to the completion of 20 years of continuous service or the attainment of age 55 and completion of 10 years of continuous service.

(2) Normal retirement benefit.

(a) Duration. A member retiring hereunder on his or her normal retirement date shall receive a monthly benefit which shall commence on said normal retirement date and be continued thereafter during his or her lifetime, but in no event for less than 10 years. Upon reaching normal retirement age a member's benefits shall be fully vested.

(b) For members retiring or terminating employment between March 29, 1994 and September 30, 1999 the amount of normal retirement benefit shall be 3 percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 75 percent of average monthly earnings. In no event, however, shall a member's normal retirement benefit be less than 2 percent of average monthly earnings multiplied by years of continuous service.

(c) For members retiring or terminating employment on or after October 1, 1999 and before October 1, 2004, the amount of normal retirement benefit shall be 3.25 percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 75 percent of average monthly earnings. In no event, however, shall a member's normal retirement benefit be less than 2 percent of average monthly earnings multiplied by years of continuous service.

(d) For members retiring or terminating employment on or after October 1, 2004 and prior to October 1, 2007, the amount of normal retirement benefit shall be 3.5 percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 84 percent of average monthly earnings. In no event, however, shall a member's normal retirement benefit be less than 2 percent of average monthly earnings multiplied by years of continuous service.

(e) For members retiring or terminating employment on or after October 1, 2007, the amount of normal retirement benefit shall be 3.5 percent of average monthly earnings multiplied by years of continuous service, subject in any event to a maximum of 87.5 percent of average monthly earnings. In no event, however, shall a member's normal retirement benefit be less than 2 percent of average monthly earnings multiplied by years of continuous service.

(3) Early retirement date. A member may retire on the first day of any month following the attainment of age 50 and completion of 10 years of continuous service.

(4) Early retirement benefit. A member retiring hereunder on his or her early retirement date may receive either a deferred or an immediate monthly retirement benefit as follows:

(a) A deferred monthly retirement benefit which shall commence on the member's normal retirement date and shall be continued on the first day of each month thereafter during his or her lifetime, but in no event for less than 10 years. The amount of each such deferred monthly retirement benefit shall be determined in the same manner as for retirement at the member's normal retirement date except that continuous service and average monthly earnings shall be determined as of his or her early retirement date; or

(b) An immediate monthly retirement benefit which shall commence on the member's early retirement date and shall be continued on the first day of each month thereafter during his or her lifetime, but in no event for less than 10 years. The maximum benefit payable, as determined in (a) above, shall be reduced by 3/12 of 1% for each month by which the actual early retirement date precedes the member's normal retirement date.

(5) Disability.

(a) Service-incurred. Any police officer member who receives a service-connected injury, disease or disability, which injury, disease or disability permanently incapacitates the member physically or mentally, from regular and continuous duty as a police officer shall receive in equal monthly installments an amount equal to 75 percent of average monthly earnings in effect at the date of disability retirement or, if greater, the accrued normal retirement benefit. The benefit shall be payable for life unless the member recovers from the disability, in which case the benefit shall cease. If the member does not recover and dies before 120 consecutive monthly payments have been made, the balance of the 120 payments shall be paid to the member's beneficiary.

(b) Non-service-incurred. Any member with 10 years of service who receives a non-service-incurred injury, disease or disability, which injury, disease or disability permanently incapacitates or shall in the future permanently incapacitate the member physically or mentally from regular and continuous duty as a police officer shall receive in equal monthly installments an amount equal to the member's accrued normal retirement benefit. The benefit shall be payable for life unless the member recovers from the disability, in which case the benefit shall cease. If the member does not recover and dies before 120 consecutive monthly payments have been made, the balance of the 120 payments shall be paid to the member's beneficiary.

(c) Determination of disability. All questions relating to eligibility for continuance of disability benefits shall be determined by the board of trustees, based upon the recommendation of the medical board.

(d) Disability pension offset. A member who is receiving a service-incurred disability pension benefit from the city and who is receiving benefits for the same disability under social security or worker's compensation, or who is receiving another retirement benefit from another plan of the city, shall have a deduction made from the monthly disability pension payment in an amount necessary to bring the total of all disability payments to no more than 100 percent of the gross monthly salary of the disabled person last paid by the city as of the time the disability retirement occurred. However, in no event will the benefit be reduced below the greater of the accrued normal retirement benefit or 42 percent of average monthly earnings. The amount of gross monthly salary shall be escalated bi-monthly, for the purpose of this calculation, by·the percentage increase, if any, in the bureau of Labor Statistics Consumer Price Index, urban wage earners, Miami index, measured on a bi-monthly basis. Lump sum disability payments and lump sum scheduled injury disability payments shall not be included in this computation.

(e) In addition to the disability pension offset provided in (d) above, there shall be an additional deduction made from the monthly service-incurred disability pension payment provided in (a) of 50 percent of wages that are in excess of 200 percent of the difference between the gross monthly salary of the disabled person last paid by the city as of the time of the disability retirement and the disability benefits, and provided further that the disability pension shall never be reduced below 42 percent of the original disability benefit, 42 percent of the average monthly earnings or the accrued normal retirement benefit. For purposes of this section, wages shall mean wages as shown on IRS W-2 Form issued to the disabled person and the amounts of the disabled person's net earnings from self-employment for each taxable year. The amount of gross average monthly earnings shall be escalated bi-monthly, for the purpose of this calculation, by the percentage increase, if any, in the Bureau of Labor Statistics Urban Wage Earners and Clerical Workers Index for Miami measured on a bi-monthly basis. A member shall furnish the plan administrator by April 30 of each calendar year or at the end of any extension approved by the IRS, tax and other records the board deems necessary to administer the provisions of this subsection. Failure to timely provide the records can result in immediate termination of disability pension benefits until the month following the month in which the records are provided. The trustees will provide due notice and an opportunity for a hearing to any participant who is subject to termination of benefits.

(f) Any other provision of the system notwithstanding, a member shall not qualify for disability retirement and payment of a disability pension if the board determines the disability is a direct result of the excessive and habitual use of drugs, intoxicants or narcotics or occurs after employment has terminated or while:

1. Willfully and illegally participating in fights, riots, or civil insurrections
2. Committing a crime or
3. Serving in any armed forces.

(g) Participants in the deferred retirement option plan shall not be eligible to receive disability benefits from the retirement system.

(6)

Preretirement death.

(a) Service-incurred. A death benefit shall be payable on behalf of any member who dies as a direct result of an occurrence arising in the performance of service. The benefit shall be payable as follows:

1. To the surviving spouse or other designated beneficiaries, as the case may be, a lump sum payment of $5,000.00; plus
2. To the surviving spouse, for life, a monthly benefit equal to 75 percent of the member's average monthly earnings; unless a member with 10 or more years of credited service has designated a beneficiary (which may be the spouse) to receive the preretirement death benefit, in which case the beneficiary is entitled to the benefits otherwise payable to the member at the time the member would have reached early or normal retirement age (a 10-year certain benefit); except that a survivor spouse who is also designated as the early retirement benefit beneficiary is entitled to elect between the 2 options; plus
3. For each child until he or she has reached the age of 18 years, and for each child from age 18 until age 22 who is a full time student in an accredited school, there shall be paid in equal monthly installments an amount equal to 7½ percent of the average monthly earnings subject to an overall limitation of a total of 90 percent of average monthly earnings for the surviving spouse and children combined. The nonstudent child's pension shall terminate on the earlier of death, marriage or the attainment of age 18; the pension of a child who is a student shall terminate on the earlier of death, marriage or the attainment of age 22. Legally adopted children shall be eligible the same as natural children.

Upon the death of the surviving spouse, the 7½ percent child allowance shall be increased to 15 percent for each child, and shall be paid in trust to eligible children, not to exceed a combined total of the greater of 50 percent of the a member's average monthly earnings or the member's accrued pension benefit. The trusteeship and disbursements of the pension to any child or children shall be determined by the board of trustees. These benefits are not to be limiting to other benefits available under state law.

(b) Non-service-incurred. If any member shall die in active service from causes not attributable to active duty or service, a death benefit shall be payable as follows:

1. With less than 1 year of continuous service, a single sum amount of $2,500.00.
2. With 1 but less than 5 years of continuous service, a single sum amount of $5,000.00.
3. With 5 years of continuous service:
    a. A single sum amount of $5,000.00; plus
    b. To the surviving spouse in equal monthly payments an immediate pension equal to 65 percent of such member's accrued pension as of date of death or, if greater, the accrued pension benefit otherwise payable to the member starting at early or normal retirement age, subject to a minimum of 20 percent of average monthly earnings; unless a member with 10 or more years of credited service has designated a beneficiary (which may be the

spouse) to receive the preretirement death benefit, in which case the beneficiary is entitled to the benefits otherwise payable to the member at the time the member would have reached early or normal retirement age (a 10-year certain benefit); except that a survivor spouse who is also designated as the early retirement benefit beneficiary is entitled to elect between the 2 options;

c. To the child or children of such deceased member the same benefits as are payable by reason of service-connected death; subject, however, to a maximum combined limitation of monthly payments to the surviving spouse and children of the greater of 50 percent of the member's average monthly earnings or the member's accrued pension benefit.

(c) The death benefit shall not be payable on behalf of any member who is participating in the deferred retirement option plan.

(7) Vesting. If a member terminates employment with the police services department, either voluntarily or by lawful discharge, and is not eligible for any other benefits under this system, the member shall be entitled to the following:

(a) With less than 10 years of continuous service, refund of member contributions plus 3 percent interest per annum or, pursuant to section 185.02(5)(b), Fla. Stat., voluntarily leave his or her contributions in the fund for a period of up to five (5) years. If, within five (5) years of termination of employment, the member is not reemployed by the city in a position which requires membership in this plan, then the member's contributions shall be returned to him or her without interest.

(b) With 10 or more years of continuous service:

1. The pension benefit accrued to the member's date of termination, based on the terms of the plan in effect on such date of termination, payable commencing at the member's otherwise normal retirement date, provided the member does not elect to withdraw his or her member contributions; or

2. Refund of member contributions plus 3 percent interest calculated annually. Any member of this system who, for whatever reason, has employment with the city as a police officer terminated, but who remains or was previously employed by the city in some other capacity so that the total period of employment with the city is 10 years or more, shall have all benefits accrued under this system preserved, provided the member does not elect to withdraw his or her member contributions. Such accrued benefits shall be paid at the member's otherwise normal retirement date in accordance with the provisions of this system.

(c) If a member, with ten or more years of continuous service, dies prior to retirement, his or her designated beneficiaries are entitled to the benefits otherwise payable to the member at the normal retirement date.

For purposes of determining normal retirement age under this vesting provision, continuous service shall include all employment with the city as well as the period of time subsequent to termination as a member of this system; however, benefits shall not be payable under this system during any period of continued employment by the city.

(8) Early retirement program. Employees who retire between October 1, 1999 and

September 30, 2000 and who have at least 17 years of continuous service by September 30, 1999, will receive, according to their years of continuous service at the time of retirement, a benefit of the following percent of average monthly earnings, multiplied by years of continuous service instead of the benefit provided in section 12-153(2)(c), subject in any event to a maximum of 75 percent of average monthly earnings:

Years of continuous service	Benefit rate
17.0000	3.8235
17.0833	3.8207
17.1667	3.8180
17.2500	3.8152
17.3333	3.8125
17.4167	3.8098
17.5000	3.8071
17.5833	3.8045
17.6667	3.8019
17.7500	3.7993
17.8333	3.7967
17.9167	3.7942
18.0000	3.7917
18.0833	3.7892
18.1667	3.7867
18.2500	3.7842
18.3333	3.7818
18.4167	3.7794
18.5000	3.7770
18.5833	3.7747
18.6667	3.7723
18.7500	3.7700
18.8333	3.7677
18.9167	3.7654
19.0000	3.7632
19.0833	3.7609
19.1667	3.7587
19.2500	3.7565
19.3333	3.7543
19.4167	3.7521
19.5000	3.7500
19.5833	3.7479
19.6667	3.7458
19.7500	3.7437
19.8333	3.7416
19.9167	3.7395
20.0000	3.7375
20.0833 and higher	3.7344

Those employees retiring under the early retirement program between October 1, 1999 and April 21, 2000 shall have the pension benefit recalculated, using the amended definition of earnings in Section 12-126 and a 10-year certain benefit, to be effective May 1, 2000. The benefits will not be applied retroactively.

Two eligible employees may retire each month, or more at the city's option. A minimum of 2 weeks' written notice must be submitted. Thereafter, retirement dates will be chosen first by date of hire seniority, then on a first come, first served basis. Selected dates may not be exchanged between eligible employees, and any employees who delay retirement after selecting a date on the basis of seniority shall revert to a first come, first served basis. Those employees retiring under the early retirement program will receive a monthly retirement supplement of $10.00 per month times the completed years of continuous service times the corresponding benefit rate divided by the normal retirement benefit of 3.25 percent.

(9) Deferred retirement option plan (DROP) for police officers. A deferred retirement option plan for police officers is hereby authorized. The board of trustees shall develop and administer the plan consistent with the terms and conditions set forth in Article 34 of the agreement between the city and the Fraternal Order of Police, Lodge 35 dated February 17, 1999, provided that in no event shall the board administer a plan which results in the disqualification of the system under the Internal Revenue Code. The board of trustees may implement a self-directed account option for members who participate in the deferred retirement option plan. Prior to implementing the self-directed account option, the board of trustees must adopt a separate investment policy for such accounts, and approve such investment managers and products for the self-directed account option that the board of trustees determines to be prudent. The board of trustees may change such investment managers and products from time to time, as it deems prudent to do so. Members may elect the self-directed account option as follows: (a) members who are participating in the DROP as of the effective date of Ordinance No. 4743, may elect the self-directed account option within two hundred and forty (240) days; (b) members who enter the DROP after the effective date of Ordinance No. 4743, may elect the self-directed account option prior to entering the DROP; or (c) any DROP participant who does not elect the self-directed account option in accordance with (a) or (b), above, may elect the self-directed account option one time only at any time prior to the fourth anniversary of entering the DROP. A member who elects the self-directed account option may revoke that election at any time after one year following election of the self-directed account option, but shall not thereafter be eligible for the self-directed account option. Members who elect the self-directed account option shall direct the board of trustees to invest their self-directed DROP account in any of the managers and products approved by the Board, in accordance with an agreement between the member and the investment manager or product provider. A member's self-directed DROP account shall be credited with earnings or debited with losses based on the performance of the investments selected by the member. Neither the board of trustees nor the city shall be liable for the performance of investment managers or products selected, and the performance of self-directed DROP accounts shall not result in any increased costs to the plan or increased contributions by the city.

(10) Retirement supplement. Employees who retired from the employ of the city under this system and began collecting benefits after July 19, 1999 and before October 26, 2010, will receive a monthly lifetime retirement supplement of $10.00 per month times completed years of continuous service. Commencing October 26, 2010, employees who retire from the employ of the city under this system and begin collecting benefits on or after October 26, 2010, or who are in the DROP and still employed by the city on that date, will receive, upon leaving the employ of the city, a monthly lifetime retirement supplement of $10.50 per month times completed years of continuous service. DROP participants shall not receive the retirement supplement while actively

employed by the city. Active service as a police officer while participating in the DROP shall be counted as continuous service for purposes of determining the amount of the retirement supplement, up to a maximum of 5 years. Members eligible to receive the retirement supplement may elect a survivor option in accordance with section 12-132, which option may differ or may be the same as the retirement option chosen for the member's pension benefit, in which case the amount of the retirement supplement shall be actuarially adjusted.

(11) Biennial increases. For those police officers retiring after October 1, 1995 and before October 1, 2001, retired police officers or their survivors shall receive a 3 percent biennial increase in their pension benefit beginning 3 years after retirement; provided, however, disability retirees shall not receive their first biennial increase until 3 years after their eligibility for normal retirement would have occurred.

(12) Annual increases. For those police officers retiring on or after October 1, 2001, retired police officers or their survivors shall receive a 2 percent annual increase in their pension benefit beginning 1 year after retirement; provided, however, disability retirees shall not receive their first annual increase until 1 year after their eligibility for normal retirement would have occurred.

(Ord. No. 4152, § 2, 3-29-94; Ord. No. 4170, § 33, 9-27-94; Ord. No. 4223, § 3, 6-13-95; Ord. No. 4471, § 7, 10-26-99; Ord. No. 4504, § 29, 4-11-00; Ord. No. 4523, §§ 7, 8, 7-11-00; Ord. No. 4625, §§ 2—4, 1-8-02; Ord. No. 4743, § 2, 11-12-03; Ord. No. 4744, § 5, 11-12-03; Ord. No. 4838, §§ 3, 4, 12-14-04; Ord. No. 5029 § 1, 2-26-08; Ord. No. 5154, § 4, 11-9-10)

Cross reference— *Retirement dates and benefits for police officers generally, § 12-131.*

Sec. 12-154. Purchase of past service

(1) Notwithstanding any other provision of this plan, a member may purchase up to 5 additional years of service credit at any time prior to separation from city employment for a like period of full-time employment prior to employment by the city in the active service of the U.S. armed forces, or full-time employment as a police officer or firefighter for another employer. For purposes of determining credit for prior service as a firefighter, in addition to service as a municipal, district, county, or state firefighter in this state, credit may be given for federal, other state, municipal, district or county service if the prior service as a firefighter is recognized by the Division of State Fire Marshal pursuant to F.S. § 175.032(4)(c). For purposes of determining credit for prior service as a police officer, credit may be given for federal, other state, municipal, or county service if the prior service as a police officer or deputy sheriff is recognized by the Criminal Justice Standards and Training Commission within the Department of Law Enforcement pursuant to F.S. § 185.02(5)(c). The member shall pay, in accordance with subsection (3) of this section 12-154, into the plan the full actuarial cost of such service as determined by the plan actuary. Such service credit shall be counted as continuous service for purposes of benefit calculations, but shall not be counted for purposes of vesting or eligibility for benefits under the plan. No additional service credit will be allowed if the participant has received, is receiving, is entitled to receive, or will receive any other retirement benefit for such other prior service as a police officer or firefighter; provided, a member may make a direct transfer of eligible rollover distributions of all or any portion of the balance in another eligible retirement plan that is attributable to such other prior service as a police officer or firefighter to purchase additional service under this paragraph, in accordance with section 12-152.5. The sum of the past service purchased under this subsection (1) and of any benefit purchased under subsection (2) of this section 12-154 shall not exceed the actuarial equivalent of 5 years of additional continuous service. For the purpose of this section 12-154, "full actuarial cost" means the difference in actuarial

present value of projected benefits (based on service and compensation at normal retirement date, and using all service, including purchased service or the equivalent of purchased service, to calculate the probability of retirement), with, as compared to without additional service credits (as provided for in this subsection (1)), or with, as compared to without an additional benefit (as provided for in subsection (2) hereof).

(2) Any police officer member who, prior to employment by the city, was employed full-time as a police officer or deputy sheriff for another employer or any firefighter member who, prior to employment by the city, was employed full-time as a firefighter for another employer, who participated in a defined contribution retirement plan while so employed and wishes to transfer assets from that defined contribution plan to this fund, but who is not eligible to purchase service credit relating to such prior employment under subsection (1) of this section due to the interpretation or application of F.S. § 112.65(2), shall be entitled to purchase an additional benefit percentage equivalent to the period of such prior employment, up to 5 years of service credit, based on the normal retirement benefit formula in effect on the date of purchase, plus an additional benefit amount equivalent to the period of such prior employment, up to 5 years of service credit, based on the retirement supplement formula in effect on the date of purchase, as contained in section 12-151(8) and 12-153(10). The service equivalencies of the additional benefit percentage and the additional benefit amount purchased in accordance with the preceding sentence shall not exceed 5 years, less any service credit purchased pursuant to subsection (1). For purposes of determining eligibility to purchase such additional benefit percentage due to prior service as a firefighter, in addition to service as a municipal, district, county, or state firefighter in this state, credit may be given for federal, other state, municipal, district, or county service if the prior service as a firefighter is recognized by the Division of State Fire Marshal pursuant to F.S. § 175.032(4)(c). For purposes of determining eligibility to purchase such additional benefit percentage due to prior service as a police officer, credit may be given for federal, other state, municipal, or county service if the prior service as a police officer or deputy sheriff is recognized by the Criminal Justice Standards and Training Commission within the Department of Law Enforcement pursuant to F.S. § 185.02(5)(c). To obtain the additional benefit percentage and the additional benefit amount under this subsection (2), the member must pay to the plan, within 6 months following the commencement of the member's participation in the plan or within 6 months following the effective date of this subsection (2), whichever is later, and in accordance with subsection (3) of this section, the full actuarial cost of the additional benefit percentage and the additional benefit amount purchased pursuant to this subsection (2). Notwithstanding any provision in this section to the contrary, the retirement benefit of a member electing to purchase an additional benefit percentage under this subsection shall not exceed the maximum benefit provisions contained in sections 12-130, 12-131 and 12-153 of this plan.

(3) Payment for the purchase of past service as provided in subsection (1) of this section shall be made in one or more of the manners set forth in paragraphs (a) and (b) below. Payment for the purchase of the additional benefit provided in subsection (2) of this section must first be made by transfer of sufficient assets from the defined contribution retirement plan in which the member participated while employed by the other municipality or fire district prior to employment by the city, and then, only if not sufficient, in one or more of the following manners:

a) Cash lump sum payment;

b) Direct transfer or rollover of an eligible rollover distribution from a qualified or eligible plan, in accordance with section 12-152.5

(Ord. No. 4742, § 2, 11-12-03; Ord. No. 4922, § 1, 4-25-06; Ord. No. 5145, § 5, 11-9-10)

Sec. 12-155. Survivor payments with respect to qualified military service.

On or after January 1, 2007, if a member dies while performing qualified military service, (as defined in Chapter 43 of Title 38 of the United States Code), the member's survivors shall be entitled to any additional benefits (other than benefit accruals related to the period of qualified military service) that would have been provided under the plan had the member resumed employment and then terminated employment on account of death.

(Ord. No. 5190, § 1, 12-13-11)

Secs. 12-156—12-159. Reserved.

FOOTNOTE(S):

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Cross reference— *Fire-rescue services department, § 2-421 et seq.; police services department, § 2-521 et seq.; insurance premium taxes levied for police and firefighters' pension programs, § 15-26 et seq.* (Back)

SECTION 9

Pension Funding: A Guide for Elected Officials

PENSION FUNDING:

A Guide for Elected Officials

Report from the Pension Funding Task Force 2013

Issued by:

National Governors Association (NGA)
National Conference of State Legislatures (NCSL)
The Council of State Governments (CSG)
National Association of Counties (NACo)
National League of Cities (NLC)
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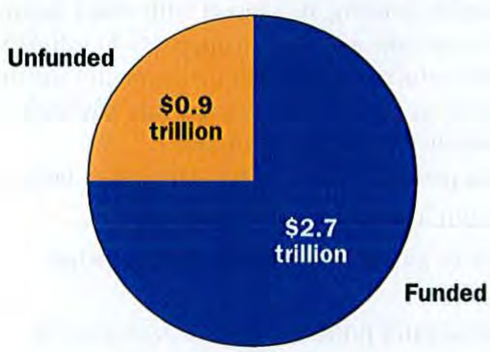
International City/County Management Association (ICMA)
National Council on Teacher Retirement (NCTR)
National Association of State Auditors, Comptrollers and Treasurers (NASACT)
Government Finance Officers Association (GFOA)
National Association of State Retirement Administrators (NASRA)

PENSION FUNDING:
A Guide for Elected Officials

Introduction

Defined benefit pension plans have a long history in public sector compensation. These plans are typically funded through a combination of employer and employee contributions and earnings from investments. Public pension plans hold more than $3 trillion in assets in trust on behalf of more than 15 million working and 8 million retired state and local government employees and their surviving family members. The pie chart below illustrates the 2011 funded status of 109 state-administered plans and 17 locally administered plans. These plans represent 85 percent of total state and local government pension assets and members.

Figure 1. *Funding of Aggregate Pension Liability, 2011*



Source: BC-CRR Estimates based on *Public Plans Database* (PPD).

The value of securities held by public and private retirement plans declined significantly following the economic crisis of 2008–2009, causing an increase in unfunded pension liabilities. The range of those unfunded public pension liabilities varies widely among governments. These same governments also have enacted major changes in their retirement plans over the past decade. Today, some public pension plans are well funded, while others have seen their funded status decline.

Now another change is on the horizon: new pension accounting standards issued by the Governmental Accounting Standards Board (GASB) in 2012. GASB Statement No. 67, *Financial Reporting for Pension Plans,* takes effect for pension plan fiscal years beginning after June 15, 2013 (fiscal years ending on or after June 30, 2014). GASB Statement No. 68, *Accounting and Reporting for Pensions,* applies to employers (and contributing nonemployers) in fiscal years beginning after June 15, 2014 (fiscal years ending on or after June 30, 2015).

These new accounting standards will change the way public pensions and their sponsoring governments report their pension liabilities. In particular, the new standards no longer provide guidance on how to calculate the actuarially determined annual required contribution (ARC), which many governments have used not only for accounting, but also to budget their pension plan contribution each year. In fact, these new GASB accounting standards end the relationship between pension accounting and the funding of the ARC.

In addition to GASB's new accounting standards, policymakers should be aware that rating agencies such as Moody's may use yet another set of criteria to assess the impact of pension obligations on the creditworthiness of a municipal bond issuer. If the ratings agencies publicize their pension calculations, state and local officials would be faced with the challenge of interpreting three sets of pension numbers: an accounting number to comply with the GASB's financial reporting requirements, an actuarial calculation to determine funding requirements for budgeting purposes, and a financial analysis figure produced by bond rating agencies to evaluate and compare issuers of municipal debt.

This guide provides key facts about public pension plans, why it is essential to have a pension funding policy, a brief overview of the new GASB standards, and which issues state and local officials need to address. The guide also offers guidance for policy makers to use when developing their pension plan's funding policy.

Pension funding background

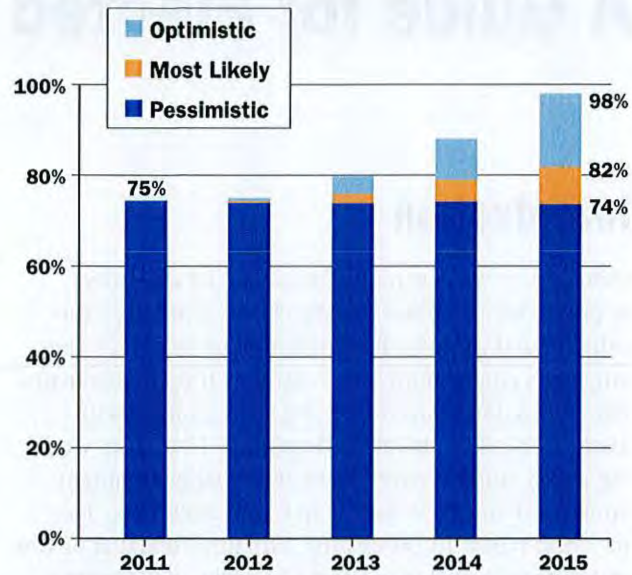
In the 1970s, it was not uncommon for state and local governments to fund their pensions on a pay-as-you-go basis. Following the passage of ERISA, which set private sector funding requirements, state and local officials took steps to fully advance-fund their pensions. They were further encouraged to meet their actuarial funding obligations by new accounting and reporting standards issued by the GASB in 1986.

The trend to improve pension funding continued over the next decade. When the GASB issued Statements 25 and 27 in 1994, employers were required to disclose information on plan assets and liabilities in their financial reports. More important, to comply with GASB, employers also had to disclose their actuarially determined ARC and the percentage of the ARC the employer actually paid. The GASB defined the ARC to include the normal cost of pensions for today's employees plus a contribution to pay for any unfunded liabilities, typically amortized over a maximum 30-year period. Paying the full ARC has been an important measure of whether or not a pension plan is on track to fund its pension promises.

By the turn of the century, public pensions were as well funded as private pensions. In fact, most public plans were nearly 100 percent funded in 2000. Unfortunately, the last decade of economic upheaval and the wide swings in the stock market have reduced pension assets in both public and private plans.

In 2011, the estimated aggregate ratio of assets to liabilities slipped to 75 percent[1]. State and local officials have stepped up their efforts to restore pension funding. According to the National Conference of State Legislatures, 44 states have enacted major changes in state retirement plans from 2009–2012.[2] Changes have included increases in employee contributions to pension plans, longer vesting periods, reduced benefit levels, higher retirement ages, and lower cost-of-living adjustments. Some modifications may apply to new workers only, while others affect current employees and/or retirees.

Figure 2. *Projected State and Local Funding Ratios Under Three Scenarios, 2011–2015*



Source: BC-CRR estimates for 2011–2015 based on *Public Plans Database* (PPD).

Pension funding policies

A variety of state and local laws and policies guide decisions concerning pension funding practices. Many state and local governments have passed legislation that stipulates how pensions should be funded. Others have policies that address how pension assets are to be invested or if pension reserves must be maintained.

Generally speaking, employers with well-funded pension plans take a long-term approach to estimating investment returns, adjust their demographic and other assumptions as needed, and consistently pay their annual required contribution in full.

A clear pension funding policy is important because it:

- Lays out a plan to fund pensions;
- Provides guidance in making annual budget decisions;
- Demonstrates prudent financial management practices;
- Reassures bond rating agencies; and
- Shows employees and the public how pensions will be funded.

GASB's new approach

Under prior GASB statements, there was a close link between accounting and funding measures. That link has now been broken. The new GASB standards

1 Munnell, Alicia H., Aubrey, Jean-Pierre, Hurwitz, Josh, Medinica, Madeline, and Quinby, Laura, "The Funding of State and Local Pensions: 2011–2015," Center for State and Local Government Excellence, May 2012.

2 Snell, Ron, "State Retirement Legislation 2009–2012," National Conference of State Legislatures, July 31, 2012.

focus entirely on accounting measurements of pension liabilities and no longer on how employers fund the cost of benefits or calculate their ARC. This is a significant change for government employers because the ARC historically served as a guide for policy makers, employees, bond rating agencies and the public to determine whether pension obligations were being appropriately funded. The ARC also often was used to inform budget decisions.

Today, employers report a liability on the face of their financial statements only if they fail to fully fund their ARC (just as a homeowner would report a liability only for mortgage payments in arrears). Thus, many government employers today do *not* report a liability for pensions on the face of their financial statements. However, if the plan they sponsor does have an unfunded pension liability, it is reported in the notes to the financial statements, which are considered an integral part of financial reporting. In contrast, under the new GASB standards, employers will report their unfunded pension liability on the face of their financial statements, even if they fully fund each year's ARC (just as a homeowner would report a mortgage liability even if all monthly mortgage payments are paid on time, in full). Thus, in the future, all employers will report any unfunded pension liability on the face of their financial statements, and that amount may be substantial for many.

Furthermore, those seeking to know how much an employer should be contributing each year to the pension plan and how much the employer actually contributed (funding information) today can find that information in the employer's financial report. In contrast, under the new GASB pension accounting standards, employers will no longer *automatically* be required to obtain an actuarially determined ARC and then include information concerning that amount and actual employer contributions in their financial report.

Filling the gap in funding guidance

Because the GASB's new standards focus entirely on how state and local governments should account for pension liabilities and no longer focus on how employers fund the costs of benefits or calculate their ARC, a new source of guidance is needed.

To help fill that gap, the national associations representing local and state governments established a Pension Funding Task Force (Task Force) to develop policy guidelines.

The "Big 7" (National Governors Association, National Conference of State Legislatures, Council of State Governments, National Association of Counties, National League of Cities, U.S. Conference of Mayors, and the International City/County Management Association) and the Government Finance Officers Association established a pension funding task force in 2012. The National Association of State Auditors, Comptrollers and Treasurers; the National Association of State Retirement Administrators; and the National Council on Teacher Retirement also serve on it. The Center for State and Local Government Excellence is the convening organization for the Task Force.

The Task Force has monitored the work of the actuarial community and the rating agencies, as well as considered recommendations from their own organizations to develop guidelines for funding standards and practices and to identify methods for voluntary compliance with these standards and practices.

The actuarial and finance communities have been working on the pension funding issues and will be invaluable resources as governments make needed changes. Indeed, the California Actuarial Advisory Panel and the Government Finance Officers Association have issued guidelines consistent with the Task Force's recommendations, but with a greater level of specificity. The Conference of Consulting Actuaries is also preparing similar guidance. State and local officials are encouraged to review the guidelines and best practices of these organizations.

It also is important to note that some governments with well-funded pension plans will determine that they need to make few, if any, changes to their funding policies, while others may face many challenges. Keep in mind that changes can be made over time. A transition plan can address changes that may need to be phased in over a period of years. For example, an employer or retirement board that currently amortizes its unfunded liabilities over 30 years could adopt a transition plan to continue that schedule (as a fixed, decreasing period) for current unfunded liabilities and to amortize any new unfunded liabilities over 25 years. In five years, that pension plan would have completed its transition to a 25-year amortization period.

In many cases, governments will need to strike a balance between competing objectives to determine the most appropriate timeframe in which to meet their goals.

Task force recommendations

States and localities have established distinct statutory, administrative and procedural rules governing how retirement benefits are financed. While nothing in the new GASB standards or the possible credit rating agency changes *requires* a change in funding policy, the Task Force recommends pension funding policies be based on the following five general policy objectives:

1. Have a pension funding policy that is based on an actuarially determined contribution.
2. Build funding discipline into the policy to ensure that promised benefits can be paid.
3. Maintain intergenerational equity so that the cost of employee benefits is paid by the generation of taxpayers who receives services.
4. Make employer costs a consistent percentage of payroll.
5. Require clear reporting to show how and when pension plans will be fully funded.

A sound pension funding policy should address at least the following three core elements of pension funding in a manner consistent with the policy objectives:

- Actuarial cost method;
- Asset smoothing method; and
- Amortization policy.

These core elements should be consistent with the parameters established by GASB Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers*, with which most governmental entities currently comply. Such parameters specify an actuarially determined ARC that should comply with applicable Actuarial Standards of Practice (ASOP No. 4), be based on an estimated long-term investment yield for the plan, and should amortize unfunded liabilities over no more than 30 years. The actuarially determined ARC, the parameters for determining the ARC, and the percentage of the ARC the employer actually paid should be disclosed and reassessed periodically to be sure that they remain effective. To that end, the Task Force recommends that state and local governments not only stay within the ARC calculation parameters established in GASB 27, but also consider the following policy objectives when reviewing each core element of their funding policy:

Actuarial Cost Method: the method used to allocate the pension costs (and contributions) over an employee's working career.

Policy Objectives:

1. Each participant's benefit should be fully funded under a reasonable allocation method by the expected retirement date.
2. The benefit costs should be determined as a level percentage of member compensation and include expected income adjustments.

The Entry Age Normal (level percentage of payroll) actuarial cost method is especially well-suited to meeting these policy objectives.

Asset Smoothing Method: the method used to recognize gains or losses in pension assets over some period of time to reduce the effects of market volatility and provide stability to contributions.

Policy Objectives:

1. The funding policy should specify all components of asset smoothing, such as the amount of return subject to smoothing and the time period(s) used for smoothing a specific gain or loss.
2. The asset smoothing method should be the same for both gains and losses and should not be reset or biased toward high or low investment returns.

The use of a five-year period for "smoothing" investment experience is especially well-suited to meeting these policy objectives.

Amortization Policy: the policy that determines the length of time and structure of payments required to systematically fund accrued employee benefits not covered by the actuarial value of assets.

Policy Objectives:

1. The adjustments to contributions should be made over periods that appropriately balance intergenerational equity against the goal of keeping contributions level as a percentage of payroll over time.
2. The amortization policy should reflect explicit consideration of (a) gains and losses actually experienced by a plan, (b) any changes in assumptions and methods, and (c) benefit or plan changes.
3. The amortization of surplus requires special consideration consistent with the goal of stable costs and intergenerational equity.

Amortizing the various components of the unfunded actuarial accrued liability over periods that focus on matching participant demographics but also, except for plan amendments, consider managing contribution volatility, is especially well-suited to meeting these policy objectives.

Conclusion

The most important step for local and state governments to take is to base their pension funding policy on an actuarially determined contribution (ADC). The ADC should be obtained on an annual or biannual basis. The pension policy should promote fiscal discipline and intergenerational equity, and clearly report when and how pension plans will be fully funded.

Other issues to address in the policy are periodic audits and outside reviews. The ultimate goal is to ensure that pension promises can be paid, employer costs can be managed, and the plan to fund pensions is clear to everyone.

Resources

1. GFOA best practice, *Guidelines for Funding Defined Benefit Pension Plans*, at: www.gfoa.org
2. GASB Statements No. 67 and 68 at: www.GASB.org
3. GASB Statement 27: http://www.gasb.org/cs/ContentServer?site=GASB&c=Document_C&pagename=GASB%2FDocument_C%2FGASBDocumentPage&cid=1176160029312
4. Moody's Request for Comments: Adjustments to US State and Local Government Reported Pension Data at: http://www.wikipension.com/wiki/Moodys_Request_For_Comments
5. National Conference of State Legislatures, changes to state pension plans at: http://www.ncsl.org/documents/employ/2012-LEGISLATION-FINAL-Aug-31-2012.pdf
6. The National Association of State Retirement Administrators for examples of state funding policies at: www.NASRA.org
7. Center for State and Local Government Excellence for examples of changes to state and local government pension plans at: http://slge.org
8. California Actuarial Advisory Panel at: http://www.sco.ca.gov/caap.html
9. Conference of Consulting Actuaries at: http://www.ccactuaries.org/index.cfm

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SECTION 10

GFOA Best Practices

BEST PRACTICE

Designing and Implementing Sustainable Pension Benefit Tiers (2011)

Background. In times of fiscal stress many state and local governments face formidable financial challenges that will require difficult decisions to ensure the continued sustainability of their pension plans. Economic cycles, combined with funding deficiencies and enhanced benefits, can create unfunded liabilities for these plans. As state and local governments review total compensation packages in an effort to manage future costs and ensure sustainability, many are changing the structure of their employee pension benefits. One of the changes some governments have made is to limit existing pension benefits to current employees and create lower-cost pension benefit tiers for new employees.[1] Such tiers may combine defined benefit and defined contribution plan designs.[2] In some cases, these changes can also be applied to existing employees.

Recommendation. The Government Finance Officers Association (GFOA) recommends that jurisdictions considering new benefit tiers examine the following issues: A government's authority to revise its pension benefits, the overall goals it wants to accomplish by doing so, and the effect of such changes on the workforce; and the financial impacts resulting from changes to pension plan design, as well as the effects on employees. The GFOA further recommends that as governments consider new benefit tiers they solicit input from actuaries during the analysis, design, and implementation related to forecasting benefit costs, determining funding adequacy, and making decisions regarding employer and employee contribution rates.

In examining the first set of issues, GFOA recommends the following review process:

1) **Identify and address legal constraints.** Consult with legal counsel to identify any federal and state legal impediments. In some states, there may be a legal foundation for changing current employees' pension benefits prospectively. However, many states have constitutional restrictions, statutory provisions, or case law limiting or proscribing such changes.[3] Governments should also review collective bargaining laws, labor contracts, and other potential restrictions such as local ordinances and plan documents before embarking on plan design changes.[4]

2) **Identify financial sustainability goals.** Identify key factors that are likely to affect the financial sustainability of current benefit levels. Based on this information, establish a pension benefit cost goal for the overall plan, for particular employee groups, and/or for each benefit tier. This target gives employers a fact-based context for evaluating alternative benefit tier designs.

3) **Review total compensation and the impact of pension benefit tiers.** Consider how the government's total compensation package compares to those of other employers in the labor market in which it competes and how current benefits support workforce management objectives.[5] Total compensation that exceeds market rates creates unnecessary costs for taxpayers, compensation that falls below market rates may eventually impair the quality of services the government delivers.

Employers also need to keep in mind the effect of pension benefit tiers on the equitable treatment of employees, employee morale, and the jurisdiction's ability to recruit, motivate, and retain employees.

4) **Investigate alternative plan design options.** Conduct a broad review of options. Some public employers offer new employees a hybrid plan that includes a mix of defined benefit and defined contribution features. Hybrid structures take many forms that can be customized for an employer's workforce. (See the GFOA's best practice on *Essential Design Elements of Hybrid Retirement Plans.*)

5) **Reconsider Other Postemployment Benefits (OPEB).** Along with pension benefits, retiree medical benefits should be sustainable and competitive. Developing a new tier for pension benefits offers an opportunity to evaluate the design of OPEB benefits, identifying alternative benefits or plan designs that have the potential to control costs and increase long-term sustainability.[6] (See the GFOA's best practice on *Ensuring the Sustainability of Other Postemployment Benefits.*)

The second set of issues relates to understanding how changes in key plan design elements will affect the government's financial goals and its employees. (See the GFOA's best practices on *Essential Design Elements of Defined Benefit Plans, Defined Contribution Plans, and Hybrid Retirement Plans.*) These elements include:

1) **Retirement ages.** Normal Social Security retirement age is now 67 for Americans who were born after 1960. In light of this, employers should consider recalibrating normal retirement ages for new hires. Where legally permissible and appropriate, governments might choose to incrementally increase the retirement age for current employees, provided the change does not affect protected accrued benefits. Governments that provide early retirement should recognize the actuarial cost of this practice, and they should consider funding the early retirement benefit through both employer and employee contributions. (See the GFOA Advisory on *Evaluating the Use of Early Retirement Incentives,* which recommends extreme caution if considering early retirement incentives.)

2) **Pension formula multipliers.** When establishing multipliers for pension benefits, consider the amount of income the pension is designed to replace in retirement, taking into account the availability of Social Security, Medicare, employer-provided retiree medical benefits,[7] and the amount of personal savings employees can reasonably be expected to have at retirement. Employers might also consider whether it is appropriate to limit the maximum benefit to a specified percentage of final average earnings.

3) **Cost of living allowances (COLAs).** If a system provides a COLA, it must be actuarially funded for the system to remain financially sound. If new benefit tiers are established, they should have affordable COLA limits while also providing sufficient inflation protection for retirees. (See the GFOA's advisory on *Responsible Management and Design Practices for Defined Benefit Pension Plans.*)

4) **Employee contribution requirements.** Governments that do not already require employee contributions may need to consider establishing them. Governments that create new, lower-benefit tiers for new employees may also wish to consider different contribution rates for existing and new employees to provide some level of equity between the groups.

5) **Benefit enhancements.** Governments that establish new benefit tiers should express their intent to make future changes only on a prospective basis, in order to avoid increasing pension liabilities through retroactive modifications, and should include this intent in all policy statements and plan documents that explain new benefit tiers. (See the GFOA's advisory on *Responsible Management and Design Practices for Defined Benefit Pension Plans.)*

6) **Purchase of service credit.** Governments should consider whether they will permit employees to purchase service credit within or among the jurisdiction's benefit plans. Governments that allow employees to purchase service credits in new benefit tiers should ensure that the cost of such credits is based on an actuarial valuation.

7) **Anti-spiking provisions**. Governments should consider including provisions that exclude extraordinary income from final average compensation calculations in their new benefit tiers. Extraordinary income includes lump sum payouts of vacation, sick, and compensatory time as well as extraordinary overtime pay. Allowing these payments to be included in final average compensation increases retirement system liabilities, often without prefunding and often amortized over an extended period of time, long after the employee's period of active service.

8) **Vesting periods.** Governments should evaluate potential impacts on employee recruitment and retention before implementing longer vesting periods for new hires, which might decrease plan liabilities.

9) **Notice to employees and transition issues.** In making changes to current employees' pension benefits, governments need to provide ample time and sufficient notice so participants can adapt to such changes. A multi-year implementation may help employees adjust. New employees should receive specific information on the particular benefit tier that applies to them. (See the GFOA's best practice on *Preparing an Effective Summary Plan Description for Retirement Systems.*) In addition, governments should clearly indicate how benefit tiers will apply when employees are rehired or are transferred within the organization.

Notes

[1] A tier refers to a group whose benefit formulas are different from those of other pension plan members, usually predecessor employees. For example, a new benefit tier might apply to employees hired after a specific date, while those hired previously receive different benefits. In states where laws allow, a new tier can also be established for current employees hired after a certain date.

[2] The National Conference of State Legislatures maintains an ongoing tally of recent developments in state pension laws, which might be useful to employers considering new benefits tiers (available at http://www.ncsl.org/default.aspx?tabid=20836).

[3] If state law allows public employers to change plan benefits prospectively for current employees, this right should be clearly stated in the plan documents that are distributed to employees. If there is no explicit or implied contract that entitles an employee to accrual of benefits indefinitely under the current benefit structure for future service, this should be clearly stated in the plan documents as well. Consult with legal counsel to ensure that such descriptions do not violate the requirement that benefits be "definitely determinable" under Internal Revenue Code 401(a). Generally, a plan does not provide definitely determinable benefits if a member's ability to receive the benefit is conditioned on the employer's discretion, absent plan changes.

[4] See "Public Pension Plan Reform: The Legal Framework" by Amy B. Monahan, *Education and Finance Policy,* Fall 2010.

[5] Employers should consider whether state and local government employees' total compensation, which includes both salary and all benefits, may be less than their private sector counterparts with comparable education and experience. (See "Out of Balance? Comparing Public and Private Sector Private Compensation Over 20 Years," Center for State and Local Government Excellence, 2011.) Jurisdictions

should also take into account the total compensation available to current and future employees, including any Social Security coverage.

[6] See "Strategies to Consider As OPEB Costs Escalate" by Girard Miller, *Government Finance Review*, February 2011.

[7] For example, a lower multiplier may be sufficient for general employees who have Social Security and a Medicare benefits supplement, but a higher multiplier might be more appropriate for employees who are outside of Social Security. Moreover, multipliers are generally lower for hybrid plans that combine a defined benefit plan with a defined contribution plan.

Approved by the GFOA Executive Board, May 22, 2011

BEST PRACTICE

Guidelines for Funding Defined Benefit Pensions (2013) (CORBA)

Background. Governments that offer defined benefit pensions to their employees should fund the cost of those benefits in an equitable and sustainable manner. An actuarial valuation provides an employer with crucial information on the amount that needs to be contributed each period to fund the long-term cost of benefits promised to plan participants. Generally accepted accounting principles (GAAP) have required that this actuarially determined amount, known as the *actuarially required contribution* (ARC),[1] be calculated within standardized parameters and disclosed as part of an employer's annual financial report.

Recently, the Governmental Accounting Standards Board (GASB) changed its approach with regard to pension reporting and moved from one that served both the purposes of accounting/financial reporting and funding to one related solely to accounting/financial reporting. As a result, GAAP will no longer require that employers calculate and disclose an ARC in their financial reports starting with fiscal years ending on or after June 30, 2014. Likewise, the parameters (e.g., actuarial cost method, asset smoothing, and amortization) that have standardized how an ARC is calculated have been eliminated from GAAP. In the absence of ARC disclosures, it will be difficult for stakeholders, including policy-makers, employees and the public to determine whether obligations are being appropriately funded. Consequently, there is a pressing need for widely recognized, standardized guidelines as to what constitutes a sound funding plan for a state or local government employer that offers defined benefit pensions. The GFOA and ten other national associations[2] representing state and local governments and retirement systems developed a set of pension funding guidelines to meet this need.[3] The following recommendation is a practical application of those guidelines.

Recommendation. The Government Finance Officers Association (GFOA) recommends that every state and local government that offers defined benefit pensions formally adopt a funding policy that provides reasonable assurance that the cost of those benefits will be funded in an equitable and sustainable manner. Such a funding policy should incorporate each of the following principles and objectives:

1. Every government employer that offers defined benefit pensions should continue to obtain no less than biennially an actuarially determined contribution (ADC) to serve as the basis for its contributions;
2. The ADC should be calculated in a manner that fully funds the long-term costs of promised benefits, while balancing the goals of 1) keeping contributions relatively stable and 2) equitably allocating the costs over the employees' period of active service;
3. Every government employer that offers defined benefit pensions should make a commitment to fund the full amount of the ADC each period. For some government employers, a reasonable transition period will be necessary before this objective can be accomplished;
4. Every government employer that offers defined benefit pensions should demonstrate accountability and transparency by communicating all of the information necessary for assessing the government's progress toward meeting its pension funding objectives.

The GFOA intends to develop additional best practices that will provide specific guidance on the practical application of these principles and objectives to each of the three core elements of a comprehensive pension funding policy: actuarial cost method, asset smoothing, and amortization.

Notes

[1]The new GASB standards no longer use the term "annual required contribution," or (ARC). Instead, the new standards refer to the disclosure of an "actuarially determined contribution" (ADC).

[2] The other ten national organizations include: National Governors Association, National Conference of State Legislatures, Council of State Governments, National Association of Counties, National League of Cities, U.S. Conference of Mayors, International City/County Management Association), the National Association of State Auditors, Comptrollers and Treasurers, the National Association of State Retirement Administrators, and the National Council on Teacher Retirement. The Center for State and Local Government Excellence is convening this task force.

[3] The GFOA Executive Board passed a resolution expressing the GFOA's support for the pension funding guidelines developed by the GFOA and nine other national associations. The resolution can be found at: http://www.gfoa.org/index.php?option=com_content&task=view&id=2539

Approved by the GFOA's Executive Board, February 2013.

Best Practice

Reviewing, Understanding and Using the Actuarial Valuation Report and Its Role in Plan Funding (CORBA) (2013)

The actuarial valuation report has always played an important role as the basic source document for information regarding actuarially determined contributions[1] and the funded status of pension and other post-employment benefit (OPEB) plans. The actuarial valuation report, prepared in accordance with Actuarial Standards of Practice (ASOP), will soon come to play an even more critical role in the wake of the implementation of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, because funding information for pensions will no longer automatically be provided in financial reports. That is, the actuarial valuation report will soon be the sole source of information for many financial decision makers desiring to make informed decisions about the funding of pension benefits.

The GFOA recommends that state and local government finance officials and others with decision-making authority carefully review and understand their actuarial valuation report and use the information it contains to make policy decisions that ensure that pension benefits are funded in a sustainable manner, consistent with the pension funding guidelines developed by GFOA and the other major state and local government professional organizations.[2]

Reviewing and Understanding the Valuation Report

The purpose of an actuarial valuation is 1) to determine the amount of actuarially determined contributions (i.e., an amount that, if contributed consistently and combined with investment earnings, would be sufficient to pay promised benefits in full over the long-term) and 2) to measure the plan's funding progress. Key items to consider in reviewing the valuation report include:

- **Actuarially Determined Contribution.** The actuarially determined contribution represents the amount needed to fund benefits over time. If the contributions are not fully paid, interest accrues on the unpaid portion at the plan's expected long-term rate of return.[3] Persistent underfunding will ultimately jeopardize the plan's sustainability. The GFOA recommends that the full amount of the actuarially determined contribution be paid to the plan each year.

- **Liabilities, Assets, and Funded Ratio.** The *actuarial accrued liability* (AAL) represents the present value of benefits earned, calculated using the plan's actuarial cost method. The *actuarial value of assets* (AVA) reflects the financial resources available to liquidate the liability. The *unfunded actuarial accrued liability* (UAAL) is the difference between the AAL and the AVA. The *funded ratio* (AVA/AAL) reflects the extent to which accumulated plan assets are sufficient to pay future benefits. The GFOA recommends that the funding policy aim to achieve a funded ratio that approaches 100 percent, with asset smoothing and amortization methods consistent with the government's funding policy and ASOP.

- **Actuarial Assumptions.** Since the future is unknown, actuarial valuations must be based on assumptions. For an actuarial valuation to be reliable, the assumptions used should reflect the best information available, which should be supported by rigorous discussion and analysis. Likewise, information concerning the demographic characteristics of the covered population needs to be current.

- **Historical Information.** Certain historical information is especially useful for understanding funding:

  - Multi-year information on the plan's funding progress that includes the AAL, the AVA, the funded ratio, and the UAAL as a percentage of payroll, consistent with the government's funding policy; and
  - Multi-year information on both actuarially determined contributions and actual amounts contributed (by definition, if actuarially determined annual required contributions are paid faithfully each year to the plan, the plan should accumulate sufficient resources over time to pay benefits, regardless of the actuarial cost method selected).

  In both cases, the number of periods for which data are presented should be sufficient to allow for the meaningful analysis of trends (e.g., 6 to 10 years and longer if available).

- **Actuarial Comments.** Actuarial Standards of Practice (ASOPs) require actuaries to make certain disclosures in their reports. These disclosures are commonly presented as *comments* intended to help users understand the report and include: 1) the report's intended purpose; 2) cautions regarding risk and uncertainty; and 3) constraints regarding the use of the report for other than its intended purpose. In addition, if a prescribed assumption or method is used that the actuary believes is unreasonable or conflicts with the ASOPs, the actuary has a duty to disclose that fact in the report. [4]

- **Information Needed to Prepare Financial Reports.** The actuarial report may also provide all of the information needed to prepare the government's financial reports in conformity with generally accepted accounting principles (GAAP) or legal or contractual requirements. This information may be provided as part of the valuation report or through a separate actuarial report.

- **Other information.** An actuarial valuation report also may include: 1) projections of future contributions and funded status; 2) an analysis of the impact of potential changes in actuarial assumptions; and 3) the impact of economic volatility on the plan's contributions and funded ratio.[5]

Using the Actuarial Report to Make Appropriate Decisions

The information contained in an actuarial report is complex and can be difficult to understand for those who are not accustomed to working with this kind of information. For this reason, simply providing a copy of the actuarial report to decision makers does not ensure that everyone has a full understanding of its short-term and long-term implications. In most governments, the finance officer is in the best position to communicate the contents of the actuarial report, as the finance officer is familiar with the nuances of the actuarial report and is also intimately familiar with the organization's financial situation. Accordingly, the first step toward using an actuarial report to make appropriate decisions is for the finance officer to communicate the information the report contains to decision makers and the general public in a clear and understandable manner. Effective communication is especially important when changes to benefits are being considered.

To draw full benefit from the information contained in an actuarial report, the review of the information it contains must be followed by appropriate action steps:

- **Making Required Contributions.** The key purpose of an actuarial valuation is to inform plan sponsors of the amount that needs to be contributed each year to adequately fund benefits. Consequently, the first action step is to take appropriate steps to ensure that actuarially determined contributions are faithfully paid to the plan each year. If those contributions are *not* made, follow-up action should be taken to understand the underlying cause of the underfunding and to resolve it.

- **Assessing Funding Progress.** Historical information should be used to assess funding progress (e.g., Is the plan's funded ratio improving over time? Is the rate of improvement consistent with the employee's funding policy?).

- **Mitigating Risks.** Information from the actuarial valuation can help to uncover risk exposure related to the funding of benefits. Decision makers should identify those risks and take appropriate and timely action to mitigate them. For example, if the valuation shows a high degree of asset volatility, it may be prudent to lower that volatility through adjustments to asset allocations or by other means, such as examining the methodology used to determine the actuarial value of assets.

- **Ensuring Reliable Data.** For an actuarial valuation to be reliable, the underlying data must be reliable as well, including the demographic information related to plan members, the economic information related to investment returns and payroll growth, and the detailed descriptions of current benefits. Employers should work closely with the actuary to ensure that reliable information is provided in a timely manner.

- **Validating Methods and Assumptions through Experience Studies.** The reliability of an actuarial valuation also depends on the use of reasonable methods and assumptions. Experience studies, performed no less frequently than every five years, can help to ensure the assumptions are in line with the plan's demographic and economic experience, or can be used as a guide to make necessary changes. Likewise, a comprehensive audit of the plan's actuarial valuations performed by an independent actuary at least once every five to eight years can be used to evaluate the appropriateness of the actuarial methods, assumptions, and their application.

Notes

[1] The new GASB standards no longer use the term "annual required contribution" or "ARC." Instead, the new standards refer to the disclosure of an "actuarially determined contribution."

[2] Guidelines for Funding Defined Benefit Pensions, GFOA best practice, 2013.

[3] The long-term expected rate of return is significantly higher than the short-term rates used in operating funds.

[4] Actuarial Standards Board, Actuarial Standards of Practice No. 41, *Actuarial Communications*, December 2010.

[5] California Actuarial Advisory Panel, *Model Disclosure Elements for Actuarial Valuation Reports on Public Retirement Systems in California*, December 2011.

BEST PRACTICE

Sustainable Funding Practices of Defined Benefit Pension Plans (1994, 2005, 2008 and 2009) (CORBA)

Background. The fundamental financial objective of a public employee defined benefit (DB) pension plan is to fund the long-term cost of benefits promised to the plan participants. It is widely acknowledged that the appropriate way to attain reasonable assurance that pension benefits will remain sustainable is for a government to accumulate resources for future benefit payments in a systematic and disciplined manner during the active service life of the benefitting employees.

Long-term funding is accomplished through contributions from the employer and employee, and from investment earnings, which typically provide the largest component of funding. Contributions are often expressed as a percentage of active member payroll, which should remain approximately level from one year to the next. Principles of accrual accounting require that the total cost of employee services be recognized in the period in which those services are rendered. A plan's funding policy codifies the pension system's commitment to fund benefit promises based on regular actuarial valuations. Creating a funding policy that embodies these accounting and funding principles is a prudent governance practice and helps achieve intergenerational equity among those who are called on to financially support the plan, thereby avoiding the transfer of costs to future generations.

Recommendation. The Government Finance Officers Association (GFOA) recommends that state and local government officials ensure that the costs of the benefits promised in public employee DB plans are properly measured and reported, in accordance with generally accepted accounting principles (GAAP)[1]. The GFOA believes sustainability requires that governments that sponsor or participate in a defined benefit pension plan contribute the full amount of their actuarially determined annual required contribution (ARC) each year. Failing to fund the ARC during recessionary periods impairs investment returns by depriving the fund of its opportunity to invest when stock prices are low. Long-term investment performance will suffer and ultimately require higher contributions.

In pursuing these standards and criteria, public officials and retirement system trustees should, at a minimum, adhere to the following best practices:

1. Adopt a funding policy targeting a 100 percent or more funded ratio (full funding). The funding policy should provide for a stable amortization period over time[2], with parameters provided for making changes that are based on specific circumstances. Establish a period for amortization of unfunded actuarial accrued liabilities that does not exceed the parameters established by GAAP[3] and that is consistent with the funding policy of the plan.

2. Discuss the funding and amortization methods with your actuary, and select the one that most closely aligns with the funding policy. The actuarial funding method selected is a key component of the funding

[1] The Governmental Accounting Standards Board (GASB) currently sets GAAP for state and local governments.
[2] Public officials and retirement system trustees should exercise extreme caution when considering the use of "open amortization" since this method can delay full amortization indefinitely, and could even result in the amount to be amortized increasing rather than decreasing.
[3] GASB standards set a maximum amortization period of no longer than 30 years.

policy of the plan[4]. Some funding methods may result in more variations in the ARC (the portion of the present value of projected benefits that is attributable to the current period) than others. Governments should take measures to reduce the volatility in the ARC in order to create a more predictable operating budget and enhance their ability to meet funding obligations.

3. The funding policy should stipulate that employer and employee contributions are to be made at regular intervals, with the contribution amount determined by the results of a recent actuarial valuation of the system. To ensure that this objective can be achieved, the funding policy should be integrated with investment and asset allocation policies. Reductions or postponements in collecting the ARC would typically be inconsistent with the assumptions made in computing the ARC. When contributions fall below the ARC, the board of trustees should prepare a report that analyzes what effect the underfunding has on the system and distribute the report to all stakeholders.

4. Have an actuarial valuation prepared at least biennially by a qualified actuary in accordance with generally accepted actuarial principles applied in a manner consistent with GAAP. Each valuation should include a gain/loss analysis that identifies the magnitude of actuarial gains and losses, based on variations between actual and assumed experience for each major assumption. Have a comprehensive audit of the plan's actuarial valuations performed by an independent actuary at least once every five to eight years. The purpose of such a review is to provide an independent critique of the reasonableness of the actuarial methods and assumptions in use and the validity of the resulting actuarially computed contributions and liabilities.

5. Actuarial assumptions should be carefully reviewed by retirement system staff, discussed with outside experts (including investment advisors), and explicitly approved by trustees. Assumptions that should be carefully reviewed include the long-term return on assets, salary growth, inflation, mortality tables, age eligibility, and any anticipated changes in the covered population of plan participants. Have an actuarial experience study performed at least once every five years, and update actuarial assumptions as needed.

6. Prepare and widely distribute a comprehensive annual financial report (CAFR) covering retirement system activity, and distribute summary information to all plan participants. The CAFR should be prepared following the guidance provided by the GFOA for the preparation of a public employee retirement system CAFR.

GFOA recommends the following options to reduce ARC volatility:

1. *Smoothing returns on assets.* Smoothing investment returns over several years recognizes that the system's investment portfolio performance does fluctuate, and only by coincidence will it exactly equal the assumed actuarial rate of return for any given year. This approach reduces the volatility within the calculation of the ARC. A smoothing period is used to balance the need for a longer-term investment horizon with the short-term market fluctuations in the value of plan assets. While the smoothing period is typically about five years, it can be longer, if controls are in place to assure that any variation between the market value and actuarial value of assets does not become too large. A common approach is to establish corridors around market value of assets to stipulate the maximum percentage by which the actuarially smoothed value will be allowed to deviate from the actual market value (pension funds commonly limit the actuarial value of assets to no less than 80 percent of market value and no more than 120 percent). Once a smoothing method is established, the retirement board should adhere to it and avoid making arbitrary changes to the methodology.

2. *Diversifying the investment portfolio to reduce volatility in investment returns.* Diversifying assets across and within asset classes is a fundamental risk management tool that also has the effect of reducing the fluctuations in ARC volatility. Although annual changes in the ARC are affected by numerous factors, the

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[4] The use of projected unit credit method (one of six actuarial cost allocation methods permitted by GAAP) typically would *not* be consistent with the goal of level funding.

most significant is usually investment return. It is recommended that retirement systems periodically conduct asset-liability studies for use in reviewing their asset allocation policies. (See GFOA's Best Practice, *Asset Allocation Guidance for Defined Benefit Plans,* 2009).

3. *Managing investment returns long term.* Because the investment return assumption is an average long-term expected rate of return, excess earnings in any one year will likely be offset by lower-than-expected rates of return in a future year. Thus, any program that is derived from an excess-earnings concept is detrimental to the funded status of the plan.

4. *Managing growth in liabilities.* Managing growth in liabilities should also be done long term. All benefit increases for members and beneficiaries should be carefully considered and appropriately approved, and be consistent with all Internal Revenue Service requirements. Whether cost of living adjustments (COLAs), benefit formula enhancements, or post-retirement benefit increases, a clear strategy should be developed that integrates benefit enhancements with the funding policy of the plan. Further, all benefit enhancements and COLAs should be actuarially valued and presented to the Board of Trustees, plan sponsor and appropriate legislative body before they are adopted so the effect of the benefit enhancements on the fund's actuarial accrued liability, funded ratio, and contribution rates is fully understood. This step will help ensure that the goal of fully funding member benefits is achieved, and the financial condition of the retirement system remains sustainable. If a benefit enhancement is being considered, a source of funding should be identified that can support the enhancement over the long term.

5. *Maintaining vigilance against ethical violations and benefit calculation abuse.* While affecting only a small percentage of retirement systems, and often only in select instances in these systems, headline-grabbing abuses of retirement benefit enhancements such as salary spiking can create negative public perceptions that are harmful to all retirement systems and can adversely affect the sustainability of the system. Policies to safeguard against these abuses or undesired outcomes should be considered.

Resources.

- *Financing Retirement System Benefits*, Richard G. Roeder, GFOA, 1987.
- *Pension Accounting and Reporting, Second Edition*, William R. Schwartz, GFOA, 1995.
- *Guidelines for the Preparation of a Public Employee Retirement System Comprehensive Annual Financial Report*, Stephen Gauthier, GFOA, 1996.
- *An Elected Officials Guide to Public Retirement Plans*, Cathie G. Eitelberg, GFOA, 1997.
- *A Guide for Selecting Pension Actuarial Consultants: Writing RFPs and Evaluating Proposals*, Robert Pam, GFOA, 1999.
- *Public Pension Systems – Operational Risks of Defined Benefit and Related Plans and Controls Investment Policy Checklist for Pension Fund Assets*, GFOA, May 2003.
- GFOA Best Practice, *Asset Allocation Guidance for Defined Benefit Plans,* 2009.

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