MIAMIBEACH

City Commission Workshop

City Hall, Commission Chambers, 3rd Floor, 1700 Convention Center Drive
August 29, 2012

Mayor Matti Herrera Bower
Vice-Mayor Jorge R. Exposito
Commissioner Michael Góngora
Commissioner Jerry Libbin
Commissioner Edward L. Tobin
Commissioner Deede Weithorn
Commissioner Jonah Wolfson

Interim City Manager Kathie G. Brooks
City Attorney Jose Smith
City Clerk Rafael E. Granado

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Call to Order - 5:00 p.m.

COMMISSION WORKSHOP AGENDA

1. Discussion Regarding The Budget Advisory Committee's Proposed Recommendations Concerning Pension Reform

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City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

COMMISSION MEMORANDUM

TO: Mayor Matti Herrera Bower and Members of the City Commission

FROM: Kathie G. Brooks, Interim City Manager

DATE: August 29, 2012

SUBJECT: **DISCUSSION REGARDING THE BUDGET ADVISORY COMMITTEE'S PROPOSED RECOMMENDATIONS CONCERNING PENSION REFORM**

BACKGROUND

The City currently has two (2) pension plans, which include the City Pension Fund for Firefighters and Police Officers in the City of Miami Beach and the Miami Beach Employees' Retirement Plan (MBERP). During the previous collective bargaining process for the City's five (5) collective bargaining units, issues were raised concerning the long-term fiscal health of the City's two (2) pension plans in terms of the growing unfunded liability, the funding ratio percentages of each plan and the growing costs of the plans as they relate to percentage of payroll. As a result, the City and the Unions negotiated several changes that were implemented for each of the pension plans for both, current and future employees in November 2011. In particular, the General Employees' pension plan (MBERP) was amended to include significant pension reform initiatives that will significantly reduce the City's pension contributions in the short-term, mid-term and long-term. Although the changes made to both plans will yield both short-term and long-term savings, these changes fail to fully address the increasing costs derived from the benefits that are currently provided to the pension plan members, particularly in the Fire and Police Pension Plan, which represents the fastest growing costs to the City's budget in recent years.

In early 2011, the Mayor approached the City's Budget Advisory Committee (BAC) regarding undertaking a study of pension reform for each of the pension plans in an effort to identify options available to ensure the long-term sustainability of the Plans, particularly the Police and Fire Pension system which represents the fastest growing costs to the City budget within recent years. The Mayor's Charge" to the BAC was:

"...to develop recommendations that address the benefits and funding concerns associated with the City's pension plans. While the BAC will examine all retirement benefits, the focus will be to address the Fire and Police pension system, as this plan has significantly greater cost to the City that the General Employees' pension plan."

More specifically, the requested deliverable work product was:

"...to develop a series of written, implementable recommendations that address the long-term sustainability of the Fire and Police Pension Plan. An explanation of the recommendations, cost implications, impacts to the City and its employees, advantages and disadvantages should be included. Recommendations may be split into short-term and long-term objectives. Subsequently, the BAC may provide additional recommendations regarding other pension benefits in the City."

Agenda Item 1
Date 8-29-12

Over the past year, the BAC has held twenty meetings to accomplish their objective by developing an approach that included the following components:

- Develop an understanding of the City's current pension plans benefits and costs for the Fire and Police Pension Plan and the Miami Beach Employees' Retirement Plan (for General employees) from the perspective of legal counsel, the City's actuary, the City Manager and the pension plan administrator for each of the City's pension plans (the Fire and Police Pension Plan and the Miami Beach Employees' Retirement Plan - MBERP).
- Solicit input from the City's collective bargaining groups and employees.
- Survey comparative jurisdictions in the region regarding pension plan costs and benefits.
- Develop draft policies and guidelines to guide management of the City's pension plans into the future, (a copy of which is attached for your review).
- Identify and review options of potential changes to the Fire and Police Pension Plan based on 6 major categories, namely:
    - Florida Retirement System (FRS)
    - Defined Benefit similar to FRS, including a Social Security equivalent
    - Hybrid Plans with both, a defined benefit and a defined contribution component
    - Changes to the existing plan with a combination of past service benefits and benefits earned prospectively
    - Freezing the existing plan and defining new benefits based on Florida Statute Chapter 175 and 185 minimum benefits to continue receiving premium taxes
    - Changes to the existing plan to reflect the savings associated with plan changes included in the 2010 collective bargaining agreements with the International Federation of Fire Fighters (IAFF) and the Fraternal Order of Police (FOP) that have not yet been implemented by the Fire and Police Pension Board
- Evaluate the cost impacts of potential options
- Develop Recommendations

On April 17, 2012, by a majority vote of 7-2, the BAC approved a motion for the Committees' final recommendation on pension reform for the Fire and Police Pension Plan. The Committee's final recommendation is for the City to negotiate a "*Hybrid Plan*" that is comprised of a defined benefit component for Police and Fire employees that are not vested (have less than ten (10) years of creditable service) and for newly hired employees that would provide the minimum benefits required to receive Premium Taxes from the State of Florida, as defined by F.S. Chapters 175 and 185, while also providing a defined contribution component that will be funded by the City, while employees would be required to provide a matching contribution. In addition, the Committee is also recommending that the City negotiate changes for vested Fire and Police Pension Plan members to achieve thresholds in the policies and guidelines that were adopted by the BAC. The Committee's final recommendation report is attached.

On August 29, 2012, a Commission Workshop on Pension Reform will be held, where the BAC will present their final recommendation report to the Mayor and City Commission. This workshop is intended to be educational and informative in nature.

KGB:CG

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City of Miami Beach
Budget Advisory Committee

Recommendation Report on Pension Reform

July 2012

Budget Advisory Committee Members

Marc Gidney, Committee Chair
Jack Benveniste
John Gardiner
Antonio Hernandez
Larry Herrup
Stephen Hertz
Dushan Koller
Jacqueline Lalonde
David Lancz

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- Supporting Rationale and Data for Proposed Guidelines and Policy Statements
- Presentations by City Pension Counsel/Actuary and Pension Plan Administrators
- History of Plan Benefits
    - Fire and Police Pension Plan
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REFERENCES

- Presentations by City Pension Counsel/Actuary and Pension Plan Administrators
- History of Plan Benefits
- GFOA Best Practices and Advisories
    - Designing and Implementing Sustainable Pension Benefit Tiers (2011)
    - Responsible Management and Design Practices for Defined Benefit Pension Plans (2010)
    - Governance of Public Employee Post-Retirement Benefits Systems (2010) (CORBA)
    - Sustainable Funding Practices for Defined Benefit Plans
    - Developing a Policy for Retirement Plan Design Options (1999, 2007) (CORBA)
- Florida Department of Management Services, Financial Rating of Local Government Defined Benefit Pension Plans, January 25, 2012
- United State Government Accountability Office (GAO) Report to Congressional Requestors , State and Government Local Pension Plans, Economic Downturn Spurs Efforts to Address Costs and Sustainability, March 2012
- Center For State and Local Government Excellence, What are Hybrid Retirement Plans, A Quick Reference Guide, January 2011
- The Leroy Collins Institute (LCI) Report Card: Florida Municipal Pension Plans, 2011
- US Postal Service Office of The Inspector General Report of Pension Funding, June 2010
- United State Government Accountability Office (GAO) State and Local Government Retiree Benefits Current Funded Status of Pension and Health Benefits, January 2008

GLOSSARY OF TERMS

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 on that income. Money direcxted 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 entitites. 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 of meets other criteria. The IRC limist the amount of the yearly deferrals. The limit is adjusted for inflation.

Accrued Benefit: The pension benefit an employee earns through participation ina plan as of a specific date. In a defined benefit plan, once vested, this is the annual benefit an individual 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 typical defined benefit plan.

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

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

Actuarial Assumptions: Projections of anticipated behavior associated with certain plan variables (such as mortality 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 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.

Actuarial Valuation: The amount 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 asstes used for performing an actuarial valuation.

Actuary: Professional who guides the fiduciaries of a pension fund with information for making sound short and long range planning decisions for events that might occur next year, 5, 10 or more years from now. Using actuarial, accounting, legal, financial, investment and human resource planning assumptions to assist with the projections.

Administrator: The person appointed by a court to administer and settle the estate of a person dying without a will or the estate of a person whose will appoints an executer who cannot serve.

Adjusted Gross Income (AGI): Taken from the individual's income tax return, this term means total annual income, less tax – exempt income, less othef 'adjustments to income' such as deductible IRA contributions, self-employed health insurance premiums.

Annual Leave Payment - Any payment, made either during an employee's employment or at termination or retirement, for leave accrued during the employee's career that was intended for personal use, but never utilized by the employee.

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 amoung 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.

Beneficiary: Person or organization entitled to receive income and/or principal under the terms of a trust or a will. The person designated to receive the benefits of an insurance policy or a retirement plan such as an IRA.

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

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

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. The index can be internal or external. The COLA with which most people are familiar with is the one enacted in 1973 for Social Security and Supplemental Security Income Benefits. The Social Security COLA is based upon the Consumer.

Collectively Bargained Plan: A retirement plan negotiated through a collective bargaining process between an employer and a union or employee representative.

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.

Cost-of-Living Adjustment (COLA) - An annual increase in the pension plan retirement benefit.

Creditable Service - Service for which retirement credit is earned 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. (The term may also be used to refer to service for which retirement credit is earned under any other defined benefit plan, such as one of the closed retirement systems.)

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

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 creditable service, average final compensation 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 an employee, 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 service and final compensation formula used to calculate pension benefits is frozen. DROPs can be used for phased retirement or to retain experienced employees.

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. A 401(k), 403(b) 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. ***In-Line-of-Duty Disability*** - Means disability resulting 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. ***Regular 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/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.

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

Florida Administrative Code (FAC) - Rules and regulations of Florida regulatory agencies divisions of Chapter 120, Florida Statutes.

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 retirement system's assets. Expressed as a percentage of a system'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.

In-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 officer or employee who is covered by the provisions of the pension plan.

Normal Retirement Age or **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. "Normal retirement age" is attained on the normal retirement date.

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. Often referred to as Performance or Total Return.

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 plan is the actuarial accrued liability less the actuarial value of plan assets.

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.

EXECUTIVE SUMMARY

RECOMMENDATIONS

On April 17, 2012, the Budget Advisory Committee (BAC) approved a motion for Fire and Police Pension Plan reform combining a number of prior individual motions. The combined motion includes the following motion and vote counts for pension reform for the Fire and Police Pension Plan:

- Recommending that the City negotiate Options IIID2 for all new and non-vested Fire and Police Pension Plan members shown in the table on the following page.

  Note: this portion of the motion was initially adopted as a separate motion by a 7-2 vote of the BAC.

- Recommending that the City negotiate changes for vested Fire and Police Pension Plan members to achieve thresholds in the policies and guidelines adopted by the BAC (see Section 4 entitled Policies and Guidelines).

  Note: This portion of the motion was initially adopted as a separate motion by unanimous vote of the BAC.

HYBRID OPTION IIID2 FOR NEW AND NON-VESTED EMPLOYEES

Provide a defined benefit component for Police and Fire non-vested and new hire employees to equal the minimum benefits to receive Premium Taxes from the State as defined by F.S. Chapter175/185 and a defined contribution component of 11 percent funded by the City (with employees providing a matching 5% contribution).

Multiplier	2%
Final Average Monthly Earnings (FAME) Calc - in years	Highest 5 of last 10
Retiree COLA*	0.0%
Normal Retirement Age	55&10 or 52&25
% Employee Contribution to DB**	5.00%
% Employee Contribution to DC	5.00%
% City Contribution to Social Security	0.00%
% City Contribution to DC	11.00%
Share Plan DC (See Note Below)	Yes
Social Security	No
Beneficiaries	75% Joint & Survivor with 120 months guaranteed

*Provided that the City Commission may periodically adjust the COLA up to 1.5% compounded for a given year, and COLA resets to 0% for the following year unless the City Commission affirmatively votes to increase above 0% for the next fiscal year

** This represents a minimum consistent with F.S. 175/185 but the defined benefit employee contribution can be set at any level

Note Premium tax revenues for Fire and Police Plans are expected to continue.

This results in reduction of pension benefits as a percentage of payroll to 21% over 30 years and a net present value (NPV) savings of $74 million over 30 years. In addition, year 1 savings are estimated at $2.5 million.

While the savings can be achieved by other means, the reduction of risk through a hybrid plan is the key benefit to the City. The City will retain risk on the defined benefit portion of the pension; however, the City will have no risk on the defined contribution portion. In this regard, the City's risk is reduced by 40-50 percent. The employees will have a new risk associated with the defined contribution portion of this plan; however, (1) this is a risk of investment that a majority of the public faces (i.e., nearly all private sector employees have defined contribution plans), and (2) along with the risk comes the reward as well to the extent that the employee invests wisely. The reward potential of a defined contribution plan exceeds the reward potential under the current defined benefit plan.

MAYOR'S CHARGE

In early 2011, the Mayor approached the City's Budget Advisory Committee (BAC) regarding undertaking a study of pension reform for the City's pension plans. The "Mayor's Charge" to the BAC was:

> "... to develop recommendations that address the benefits and funding concerns associated with the City's pension plans. While the BAC will examine all retirement benefits, the focus will be to address the Fire and Police pension system, as this plan has a significantly greater cost to the City than the General Employees' pension plan."

More specifically, the requested deliverable work product was "to develop a series of written, implementable recommendations that address the long-term sustainability of the Fire and Police Pension Plan. An explanation of the recommendations, cost implications, impacts to the City and its employees, advantages, and disadvantages should be included. Recommendations may be split into short-term and long-term objectives. Subsequently, the BAC may provide additional recommendations regarding other pension benefits in the City."

While the direction provided by the Mayor did not have specific dates, the desire was to have the Committee's recommendations finalized in time for the collective bargaining negotiations with the City's five unions for the contract period October 1, 2012 through September 30, 2015. Initial discussions centered on a desired goal of January 2012 for preliminary recommendations.

RECENT EVENTS IMPACTING PENSION PLANS

Key events impacting the financial sustainability of City defined Benefit plans have been salary growth in excess of assumptions and investment return below assumed rates, due to one of the worst decades of investment returns in the United States. Also we have also reached and surpassed an inflection point where the number of Fire and Police retirees increasingly exceeds the number of employees.

Both plans demonstrate strong investment returns well in excess of assumed rates, prior to 2001. However, rates of return post 2001, and particularly since 2008, have been below assumed rates, thereby helping drive increases in unfunded liabilities and annual contribution requirements over that time period.

Further, while MBERP salary growth has generally been in line with the assumed salary growth rate, Fire and Police Plan salary growth has almost consistently exceeded salary growth assumptions for the base plan, especially considering the fact that the salary basis for retirement benefits is the average of the last two years' salary, including incentive pays, longevity pays and approximately 11 percent of overtime that can be counted as pensionable pay.

SUMMARY OF RECOMMENDED PENSION REFORM POLICIES AND GUIDELINES

As part of the evaluation for Pension Reform in the City of Miami Beach, the Budget Advisory Committee (BAC) is recommending policies for long-term pension reform. The BAC is also recommending guidelines for the City to adopt which establish thresholds which if surpassed will require the City to take prompt and appropriate measures to meet the guideline criteria.

The policies and guidelines address four perspectives: (1) Affordability and Sustainability, (2) Appropriate Benefits to Provide to Employees, (3) Recruitment and Retention, and (4) Management of Risk/Risk Sharing.

These policies and guidelines were adopted unanimously by the BAC.

Affordability and Sustainability

- GUIDELINE STATEMENT: If the City's portion of the total annual cost of retirement benefits contribution exceeds 25 percent of payroll for general employees and 60 percent of payroll for high risk employees, the City should review and evaluate potential changes to the collective bargaining agreements between the City and the Unions, applicable towards the next contract negotiations, in order to identify potential approaches to reduce the contributions to these levels over the long term.

- POLICY STATEMENT: The City shall fund at least the normal cost of pension. If this exceeds the amount of the actuarially determined annual required contribution, the excess should be placed in a pension stabilization fund, to be made available for future pension shortfalls.

- POLICY STATEMENT: The City should strive to maintain a funded ratio of at least 80 percent for each of its defined benefit pension plans.

- GUIDELINE STATEMENT: If the funded ratio (actuarial value of assets minus actuarial liabilities) of either of the City of Miami Beach's pension plans falls below 70 percent, the City should strive to implement approaches to increase the funded ratio to that level over five (5) years.

- POLICY STATEMENT: Salary growth should not exceed the average actuarially assumed salary growth in each of the City's pension plans.

- POLICY STATEMENT: The City should require 5, 10 and 20-year projections of required pension contributions as part of the annual actuarial valuations for each of the City's pension plans. These projections shall be based on the current actuarial assumptions for each plan. The projections shall be updated to reflect the cost of any proposed benefit enhancement before the City Commission agrees to the enhancement. The cost of these studies shall be funded separately from the annual contribution to the pension plan.

- POLICY STATEMENT: There shall be an experience study of each of the City's pension plan's actuarial assumptions performed by an actuary that is independent from the pension board. The experience study should be conducted at least once every three (3) years, to compare actual experience to the assumptions. The independent actuary shall make recommendations for any changes in assumptions based on the results of the experience study, and any deviations from those assumptions by the pension board shall be justified to the City Commission.

- POLICY STATEMENT: Once pension reform is implemented, a $5/7^{th}$ vote of the City Commission should be required for any further pension changes.

Appropriate Benefits to Provide to Employees

- POLICY STATEMENT: The City of Miami Beach should strive to provide a retirement benefit that provides for a replacement of salary at a level at least equivalent to Social Security plus a supplemental retirement benefit.

- POLICY STATEMENT: The City of Miami Beach retirement benefits should be adjusted periodically after retirement to reflect the impacts of inflation, with rates no more than the Consumer Price Index for All Workers - CPI(W) that is subject to City Commission approval and with a maximum of 3 percent annually.

Recruitment and Retention

- POLICY STATEMENT: The City of Miami Beach should strive to provide retirement benefits that ensure that the City is competitive in the recruitment and retention of employees.

Management of Risk/Risk Sharing

- POLICY STATEMENT: The City of Miami Beach should strive to share some portion of retirement benefit risk with employees.

- GUIDELINE STATEMENT: If the City's contribution to a defined pension benefit plan exceeds 25 percent of payroll for general employees and 60 percent of payroll for high-risk employees, the employee contribution should be reviewed.

PENSION REFORM OPTIONS EVALUATED FOR THE FIRE AND POLICE PENSION PLAN

	CURRENT PLAN	Option I FRS DB + SS		OPTION II DC equiv to FRS Inv Plan - ELIMINATES RISK	
Employees to Which Applicable	**All**	**IA. New**	**IB. New/Non Vested**	**IIA. New**	**IIB. New/Non Vested**
Multiplier	3 first 15 years, then 4%	3%	3%	0	0
Final Average Monthly Earnings (FAME) Calc - in years	2	8	8	0	0
Retiree COLA	2.5%	0	0	0	0
Normal Retirement Age	Rule of 70	55&6 special risk YOS or 52&25 special risk YOS + military or 25 special risk YOS regardless of age	55&6 special risk YOS or 52&25 special risk YOS + military or 25 special risk YOS regardless of age	As Defined in the Plan	As Defined in the Plan
% City Contribution to Social Security	0.00%	6.25%	6.25%	0.00%	0.00%
% City Contribution to DB or DC + Social Security	0.00%	17.75%	17.75%	24.00%	24.00%
Share Plan DC (See Note Below)	Yes	No	No	No	No
Social Security	No	Yes	Yes	TBD	TBD
Beneficiaries	75% Joint & Survivor with 120 months guarenteed	Life Annuity	Life Annuity	Not Applicable	Not Applicable
Employee Contribution to DB Plan**	10%	3%	3%	10%	10%
Year 1 $Amount of City Contribution	35,439,063	35,559,519	33,612,185	35,559,519	33,612,185
Year 31 $ Amount of City Contribution	42,349,557	34,156,148	34,156,148	34,156,148	34,156,148
Yr 1 % of Payroll	74.14%	74.39%	70.32%	74.39%	70.32%
Yr 31% of Payroll	31.57%	25.46%	25.46%	25.46%	25.46%
City Year 1 Savings/(Cost)	N/A	(120,456)	1,826,878	(120,456)	1,826,878
City 30 NPV Savings/(Cost)	N/A	22,030,653	51,225,419	22,030,653	51,225,419

	C RREN PLAN	OP ON A		OP ON B		OP ON C		OP ON D	
		Hybrid - Replaces 1 2 of DB with DC - RED CES R S		Hybrid - Replaces 1 of DB with DC - RED CES R S		Hybrid - Minimum DB Benefits Per State Statute 17. % DC - RED CES R S		Hybrid - Minimum DB Benefits Per State Statute 12. % DC - RED CES R S	
Employees to hich Applicable	All	A1. New	A2. New Non ested	B1. New	B2. New Non ested	C1. New	C2. New Non ested	D1. New	D2. New Non ested
Multiplier	3 first 15 years, then 4%	1 1/2 first 15 years, then 2%	1 1/2 first 15 years, then 2%	2% first 15 years, then 2.66%	2% first 15 years, then 2.66%	2%	2%	2%	2%
Final Average Monthly Earnings (FAME) Calc - in years	2	2	2	2	2	Highest 5 of last 10	Highest 5 of last 10	Highest 5 of last 10	Highest 5 of last 10
Retiree COLA	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Normal Retirement Age	Rule of 70	Rule of 70	Rule of 70	Rule of 70	Rule of 70	55&10 or 52&25	55&10 or 52&25	55&10 or 52&25	55&10 or 52&25
% City Contribution to Social Security	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% City Contribution to DB or DC + Social Security	0.00%	16.00%	16.00%	10.00%	10.00%	16.00%	16.00%	11.00%	11.00%
Share Plan DC (See Note Below)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Social Security	No	No	No	No	No	No	No	No	No
Beneficiaries	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed
Employee Contribution to DB Plan**	10%	10%	10%	10%	10%	5%	5%	5%	5%
Year 1 $Amount of City Contribution	35,439,063	35,439,063	35,718,266	35,439,063	35,672,176	35,439,063	33,844,490	35,439,063	32,960,590
Year 31 $ Amount of City Contribution	42,349,557	43,354,448	43,354,448	43,204,184	43,204,184	34,139,547	34,139,547	27,431,335	27,431,355
Yr 1 % of Payroll	74.14%	74.14%	74.72%	74.14%	74.63%	74.14%	70.80%	74.14%	68.96%
Yr 31% of Payroll	31.57%	32.31%	32.31%	32.20%	32.20%	25.45%	25.45%	20.45%	20.45%
City Year 1 Savings/(Cost)	N/A	-	(279,203)	-	(233,113)	-	1,594,573	-	2,478,473
City 30 NPV Savings/(Cost)	N/A	(2,839,080)	(7,678,193)	(2,414,545)	(4,218,739)	17,851,123	43,128,414	36,803,593	74,067,418

	CURRENT PLAN	OPTION IV CHANGES TO EXISTING PLAN							
		Option IVA 3% Multiplier All Years		Option IVB 2% Multiplier All Years		Option IVC Change FAME to high 5		Option IVD Change Existing COLA to 1.5%	
Employees to Which Applicable	All	IVA1. New and Non-Vested	IVA2. All except NR	IVB1. New and Non-Vested	IVB2. All except NR	IVC1. New and Non-Vested	IVC2. All except NR	IVD1. New and Non-Vested	IVD2. All except NR
Multiplier	3 first 15 years, then 4%	No Other Changes		No Other Changes		No Other Changes		No Other Changes	
Final Average Monthly Earnings (FAME) Calc - in years	2								
Retiree COLA	2.5%								
Normal Retirement Age	Rule of 70								
% City Contribution to Social Security	0.00%								
% City Contribution to DB or DC + Social Security	0.00%								
Share Plan DC (See Note Below)	Yes								
Social Security	No								
Beneficiaries	75% Joint & Survivor with 120 months guarenteed								
Employee Contribution to DB Plan**	10%	10%	10%	10%	10%	10%	10%	10%	10%
Year 1 $Amount of City Contribution	35,439,063	34,786,003	33,593,541	33,205,899	30,523,193	35,002,758	34,552,299	34,636,516	32,932,490
Year 31 $ Amount of City Contribution	42,349,557	38,464,161	38,464,161	26,043,236	26,043,236	39,137,666	39,137,666	37,694,058	37,694,058
Yr 1 % of Payroll	74.14%	72.77%	70.28%	69.47%	63.86%	73.23%	72.29%	72.46%	68.90%
Yr 31% of Payroll	31.57%	28.67%	28.67%	19.41%	19.41%	29.17%	29.17%	28.10%	28.10%
City Year 1 Savings/(Cost)	N/A	653,060	1,845,522	2,233,164	4,915,870	436,305	886,764	802,547	2,506,573
City 30 NPV Savings/(Cost)	N/A	19,448,159	34,362,906	77,134,350	107,938,123	14,415,514	19,762,322	23,737,634	45,190,053

	CURRENT PLAN	OPTION IV CHANGES TO EXISTING PLAN (CONTINUED)							
		Option IVE Change Existing Plan to No COLA		Option IVF Change Existing Plan to 55&10 or 52&25		Option IVG Change Existing Plan to Normal Form of Life Annuity		Option IVH Change Existing Plan Increase Employee Contribution by 2%	
Employees to Which Applicable	All	IVE1. New and Non-Vested	IVE2. All except NR	IVF1. New and Non-Vested	IVF2. All except NR	IVG1. New and Non-Vested	IVG2. All except NR	IVh1. New and Non-Vested	IVH2. All except NR
Multiplier	3 first 15 years, then 4%								
Final Average Monthly Earnings (FAME) Calc - in years	2								
Retiree COLA	2.5%								
		No Other Changes		No Other Changes		No Other Changes		No Other Changes	
Normal Retirement Age	Rule of 70								
% City Contribution to Social Security	0.00%								
% City Contribution to DB or DC + Social Security	0.00%								
Share Plan DC (See Note Below)	Yes								
Social Security	No								
Beneficiaries	75% Joint & Survivor with 120 months guerenteed								
Employee Contribution to DB Plan**	10%	10%	10%	10%	10%	10%	10%	12%	12%
Year 1 $Amount of City Contribution	35,439,063	33,660,923	29,889,218	34,450,821	32,003,876	34,863,363	33,746,253	35,085,376	34,597,069
Year 31 $ Amount of City Contribution	42,349,557	32,040,378	32,040,378	36,487,922	36,847,922	38,868,451	38,868,451	39,666,273	39,666,273
Yr 1 % of Payroll	74.14%	70.42%	62.53%	72.07%	66.95%	72.94%	70.60%	73.40%	72.38%
Yr 31% of Payroll	31.57%	23.88%	23.88%	27.20%	27.20%	28.97%	28.97%	29.57%	29.57%
City Year 1 Savings/(Cost)	N/A	1,778,140	5,549,845	988,242	3,435,187	575,700	1,692,810	353,687	841,994
City 30 NPV Savings/(Cost)	N/A	53,673,164	100,633,984	29,833,132	61,555,116	17,096,883	30,067,071	11,477,082	15,672,414

	CURRENT PLAN	OPTION V STATE STATUTE 175/185 Minimum Benefits	OPTION VI 2010 Contract Changes (New Employees - see footnote*** re existing employees)
Employees to Which Applicable	**All**		
Multiplier	3 first 15 years, then 4%	2%	3 first 20 years, then 4%
Final Average Monthly Earnings (FAME) Calc - in years	2	Highest 5 of last 10	3
Retiree COLA	2.5%	0%	1.5% Deferred to 1 year after DROP
Normal Retirement Age	Rule of 70	55&10 or 52&25	Rule of 70 - Minimum age of 48
% City Contribution to Social Security	0.00%	0.00%	0.00%
% City Contribution to DB or DC + Social Security	0.00%	0.00%	0.00%
Share Plan DC (See Note Below)	Yes	Yes	Yes
Social Security	No	No	No
Beneficiaries	75% Joint & Survivor with 120 months guarenteed	10 Year Certain and Life, thereafter annuity	75% Joint & Survivor with 120 months guarenteed
Employee Contribution to DB Plan**	10%	5%	10%
Year 1 $Amount of City Contribution	35,439,063	24,259,101	35,439,063
Year 31 $ Amount of City Contribution	42,349,557	30,858,185	30,722,497
Yr 1 % of Payroll	74.14%	50.75%	74.14%
Yr 31% of Payroll	31.57%	12.23%	22.90%
City Year 1 Savings/(Cost)	N/A	11,179,962	-
City 30 NPV Savings/(Cost)	N/A	167,331,205	32,849,516

Note: The impacts of changes to existing employees with the 2010 contract were estimated to be minimal by Buck Consultants.

NOTES ON RECOMMENDATION AND REASONS FOR NOT RECOMMENDING OTHER OPTIONS

OPTION I: Florida Retirement System (FRS) - The FRS was not recommended because the City's loss of control of expenses to Tallahassee, ongoing litigation regarding FRS pension changes implemented in 2011, news of projected shortfalls and payment increases and loss of the premium insurance payments.

OPTION II: Defined contribution similar to FRS, including a Social Security equivalent – Although this option eliminates risk, it was not recommended because of concerns with savings potential given the relatively early ages for retirement eligibility, the impact on morale for existing non-vested employees and the potential that this may prove to be unattractive to recruit police and fire employees in the future.

OPTION III: Hybrid Plans – We recommend the City adopt a hybrid plan approach in Option IIID2, and do not recommend the other hybrid plans because although they reduced the risk to the City, they did not generate the NPV savings of Option IIID2.

OPTION IV: Changes to the Existing Pension Plan – Past Service/Future Service Approach (with a combined benefit). Changes to the existing pension plan are recommended in regards to vested employees in order to meet the Policies and Guidelines identified in Section IV. However, they are not recommended for non-vested and new hire employees because although they can generate the NPV savings, they do not reduce the City's risk, and risk reduction was a key factor in the BAC's recommendation.

1. BACKGROUND

MAYOR'S CHARGE

In early 2011, the Mayor approached the City's Budget Advisory Committee (BAC) regarding undertaking a study of pension reform for the City's pension plans. The "Mayor's Charge" to the BAC was:

> "to develop recommendations that address the benefits and funding concerns associated with the City's pension plans. While the BAC will examine all retirement benefits, the focus will be to address the Fire and Police pension system, as this plan has a significantly greater cost to the City than the General Employees' pension plan."

More specifically, the requested deliverable work product was,

> "to develop a series of written, implementable recommendations that address the long-term sustainability of the Fire and Police Pension Plan. An explanation of the recommendations, cost implications, impacts to the City and its employees, advantages, and disadvantages should be included. Recommendations may be split into short-term and long-term objectives. Subsequently, the BAC may provide additional recommendations regarding other pension benefits in the City."

While the direction provided by the Mayor did not have specific dates, the desire was to have the Committee's recommendations finalized in time for the collective bargaining negotiations with the City's five unions for the contract period October 1, 2012 through September 30, 2015. Initial discussions centered on a desired goal of January 2012 for preliminary recommendations.

APPROACH

To accomplish this objective, the BAC developed an approach that included the following components:

- Develop an understanding of the City's current pension plans benefits and costs for the Fire and Police Pension Plan and the Miami Beach Employees' Retirement Plan (for General employees) from the perspective of legal counsel, the City's actuary, the City Manager and the pension plan administrator for each of the City's pension plans (the Fire and Police Pension Plan and the Miami Beach Employees' Retirement Plan - MBERP).
- Solicit input from the City's collective bargaining groups and employees.

- Survey comparative jurisdictions in the region regarding pension plan costs and benefits.
- Develop draft policies and guidelines to guide management of the City's pension plans into the future, (a copy of which is attached for your review).
- Identify and review options of potential changes to the Fire and Police Pension Plan based on 6 major categories, namely:
    - Florida Retirement System (FRS)
    - Defined Benefit similar to FRS, including a Social Security equivalent
    - Hybrid Plans with both, a defined benefit and a defined contribution component
    - Changes to the existing plan with a combination of past service benefits and benefits earned prospectively
    - Freezing the existing plan and defining new benefits based on Florida Statute Chapter 175 and 185 minimum benefits to continue receiving premium taxes
    - Changes to the existing plan to reflect the savings associated with plan changes included in the 2010 collective bargaining agreements with the International Federation of Fire Fighters (IAFF) and the Fraternal Order of Police (FOP) that have not yet been implemented by the Fire and Police Pension Board
- Evaluate the cost impacts of potential options
- Develop Recommendations

TYPES OF PENSION PLANS

A retirement benefit is a form of deferred compensation designed to assist the employer in the recruitment and retention of public employees and other workforce management goals. It is also provided to assist employees in preparing for retirement and to compensate individuals for their years in public service. Broadly speaking, there are two types of retirement plans, (1) defined benefit and (2) defined contribution.

Defined Benefit Plans

With very few exceptions, defined benefit plans provide a retirement benefit that is calculated using a formula based upon a plan participant's years of service and compensation. Generally, both employers and participants contribute to these public sector defined benefit plans. All assets accumulated to fund the retirement benefits are invested by the retirement board or by a central agency responsible for investing government funds. All investment-related risk is generally borne by the employer. These plans are predominant in the public sector, and based upon the Department of Labor, Bureau of Labor Statistics 1988 data, 90 percent of full-time public sector employees receive defined benefits.

Principal features of defined benefit plans generally include:

1. Investment risk born by the plan sponsor;
2. Life expectancy risk born by the plan sponsor;
3. Survivor and disability coverage generally provided;
4. Guaranteed lifetime annuity to members at retirement unless they choose an alternate payment method;
5. Investments directed by the plan;
6. Generally lower investment costs associated with a defined benefit plan as compared to other plan designs;
7. More useful tool for employers to attract and retain employees for full careers and to manage workforce levels; and
8. Guaranteed or ad-hoc cost-of-living adjustments may be provided to annuitants.

Defined Contribution Plans

Defined contribution plans provide benefits based solely on the assets available in an employee's individual account, to which both employees and employers may contribute. All employees have their own accounts set up within the plan to which contributions and investment gains and losses are recorded. Typically, under a defined contribution plan, employees direct the investment of their contributions among investment options selected by plan trustees, the employer or the employer's designated agent, and therefore, fully bear the investment risk. The dollar amount accumulated in a defined contribution plan will vary depending upon the amount contributed to the plan, the investment performance, the level of risk taken and the fees paid.

Principal features of defined contribution plans generally include:

1. Portable vested benefits;
2. Employer obligations fulfilled annually as contributions are made, so there is no unfunded liability;
3. Investments directed by participants;
4. Account balances at retirement dependent upon a combination of investment rate of return, contribution levels and the period of investment;
5. Easier to understand account values as participants can see their balance on a regular basis;
6. Investment risk and fees born by participant;
7. Life expectancy risk born by the participant;

8. No cost of living allowances after retirement; however, participants continue to earn investment income on their remaining assets; and
9. Neither disability nor survivor coverage generally provided.

In addition to defined benefit and defined contribution plans, some entities provide retirement benefits through **"hybrid plans"** that incorporate features of both defined benefit and defined contribution plans, thereby reducing (although not eliminating) the risks to the plan sponsor.

For any of these plans, the actual costs to plan sponsors and participants are determined by the number and amount of benefits actually paid to recipients, and the source and amount of plan contributions and investment returns.

Source: GFOA Best Practices and Advisories, Developing a Policy for Retirement Plan Design Options (1999, 2007) (CORBA)
Source: Florida Pensions, Volume 1, Issue 1, April 2012.

Actuarial Valuation Reports

Independent actuarial reports are used to determine contribution requirements to a defined benefit plan by the plan sponsor, in accordance with Florida State Statutes. The valuation reports are based on various assumptions established by each pension plan Board in consultation with the pension plan Actuary and Investment Consultant. These assumptions include current wage data, mortality rates, retirement ages, future salary increases, pension plan expenses and investment performance assumptions.

The actuarial valuation of the pension plan is a mathematical determination of the financial condition of the plan, which includes the computation of the present monetary value of benefits payable to present members, and the present monetary value of future employer and employee contributions, considering the expected mortality rates among employees and retirees, rates of disability, retirement age, withdrawal from service, salary increases, investment earnings and value of assets. In contrast to the market value of the pension plan assets, the actuarial value of the pension plan assets is equal to the market value of the assets at a specific data, adjusted to reflect a five-year phase-in (or smoothing) of any asset experience gain or loss. The 5-year smoothing of pension plan asset value means that only 20% of the experience gain or loss that the fund experiences in any one year is recognized immediately for the purpose of determining the actuarial value of the plan and the annual required contribution.

The market value of the plan is the total value of all plan investments as of a given point in time based on current market value on that date. Both the actuarial and market value of the pension plan assets are important indicators of the plan's condition. Using the actuarial value methodology allows the pension plan to spread the annual plan experience over a period of time (5 years). By doing this, the short-term swings of the market, economic upswings or downturns, or other near-term factors can be softened over time. The market value methodology for pension plan assets gives a point-in-time assessment of the plan's assets without any smoothing. This approach typically results in more volatility in the plan assets as any short-term experience affects the plan immediately.

As part of the annual actuarial valuation for each plan based on plan data as of October 1, the Actuary evaluates how the actual data for the preceding year compared to the actuarial valuation for that year. Any differences are reflected as actuarial gains or losses. The unfunded liability for a plan is the difference between the value of benefits earned (accrued) and projected future benefits, and the assets of the plan on a given date, and is typically amortized and funded over 30 years. The amortization methodology varies by plan.

Actuarial Accrued Liability

The actuarial accrued liability reflects a snapshot at a point in time based on plan benefits and assumptions. For example, the actuary estimates when members of the plan will retire, how much they will get paid over their remaining lifetime once retired, and how long they will live, in order to calculate the total amount that will be paid in the future for plan members. The total value of these benefits is then "present valued" to current dollars.

As a result, the investment rate of return is significant as this affects the calculation of present value of the plan benefits, i.e. how much the plan should have on hand today, which together with investment earnings (the investment rate of return), should be sufficient to fund the plan in the future.

Each year, experience "gains" in the prior year reduces the actuarial accrued liability. Examples of experience gains would be investment earnings for the prior year in excess of plan assumptions, employees retiring later than assumed, salary growth less than assumed, etc. Experience "losses" for the prior year, conversely, increase the actuarial accrued liability.

Changes to plan benefits can also affect the actuarial accrued liability of a plan, either positively or negatively. If plan benefits are increased, the mathematical calculations will result in more benefits anticipated to be paid to plan members in the future, which must be recognized at the time of the increase, although payments would be amortized over the long term. Conversely, if plan benefits are reduced, all else being equal, the plan will see a reduction in the actuarial accrued liability.

Rate of Return of Investments and Asset Value

The annual plan valuation is based on actuarial value of assets rather than market value. As noted earlier, actuarial value uses a 5-year smoothing approach. The intent of the smoothing is to mitigate the impact of significant annual changes in actual investment returns.

Unfunded Actuarial Accrued Liability

The unfunded liability of the plan is the actuarial accrued liability less the actuarial value of plan assets. This amount is expected to have year-by-year fluctuations; however, if the plan's assumptions are consistent with the plans long-term experience, the changes in the unfunded liability should be offsetting over the life of the plan.

The percent of the actuarial accrued liability funded (funded ratio) is a measure of a pension fund's fiscal health. It compares assets to pension obligations. A percentage over 100% means the fund has more money than it needs to meet its obligations at that point in time. A funded ration of 80% or greater (actuarial value of assets divided by actuarial accrued liability) is generally considered a sign of an adequately funded plan.

OVERVIEW OF MIAMI BEACH PENSION PLANS

The Fire and Police Pension Plan provides defined pension benefits to police officers and fire fighters, while the MBERP provides defined pension benefits for almost all other full-time employees. Approximately 50 current employees participate in a defined contribution 401 Plan that is no longer offered to new employees.

The Fire and Police Pension Fund was formerly known as the City Pension Fund for Firemen and Policemen – City of Miami Beach and City Supplemental Pension Fund for Fire Fighters and Police Officers – City of Miami Beach. The former plans were merged and the name changed to City Pension Fund for Fire Fighters and Police Officers in the City of Miami Beach. The defined benefit plan covers substantially all police officers and firefighters of the City of Miami Beach.

The earliest origin of a retirement program for the City of Miami Beach was the Retirement System for General Employees created under and by authority of Chapter 18691, Laws of Florida, Acts in 1937. The Retirement System for Unclassified Employees and Elected Officials was created in 1988. In March 2006, the Retirement System for General Employees and the Retirement System for Unclassified Employees and Elected Officials merged to form the Miami Beach Employees' Retirement Plan (Ord. 2006-3530).

RECENT EVENTS DRIVING PENSION PLAN COSTS - CMB INVESTMENT RETURNS AND SALARY GROWTH

In the Fire and Police Pension Plan, key drivers of the recent increases in unfunded liability have been salary growth in excess of assumptions and investment returns below assumed rates, due to one of the worst decades of investment returns in recent history. Also, we have also reached and surpassed an inflection point where the number of Fire and Police retirees exceeds the number of active employees.

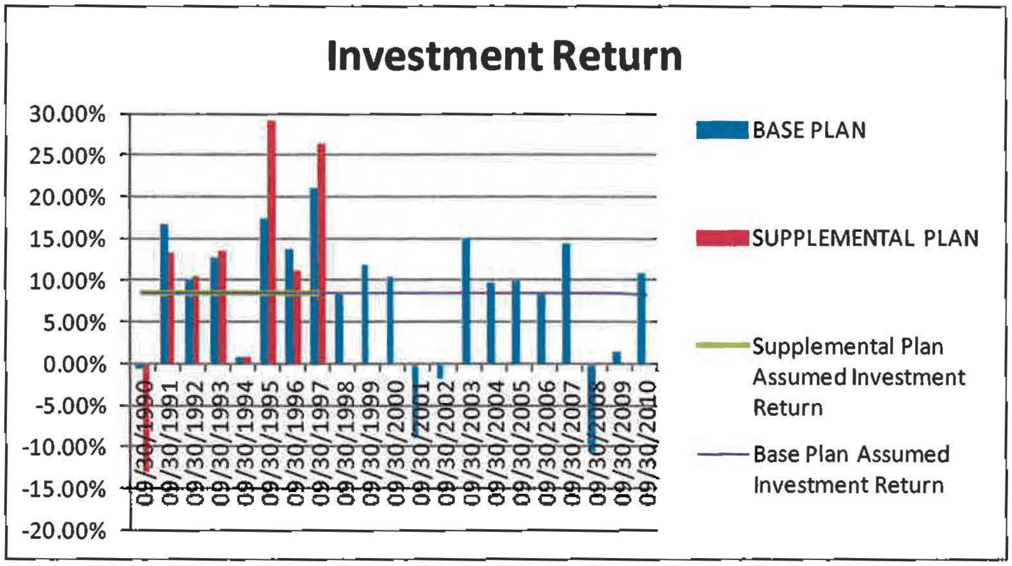
The following tables and graphs reflect the assumed and actuarial rate of return for each of the two plans as well as the assumed and actual salary growth for each of the two plans. In any year where the actuarial rate of return exceeded the assumed rate of return for the plan year, this would have resulted in a decrease in the actuarial accrued liability, all else being equal. Conversely, in any year where the actual rate of return was less than the assumed rate of return for the plan, this would have resulted in an increase in the actuarial accrued liability, all else being equal.

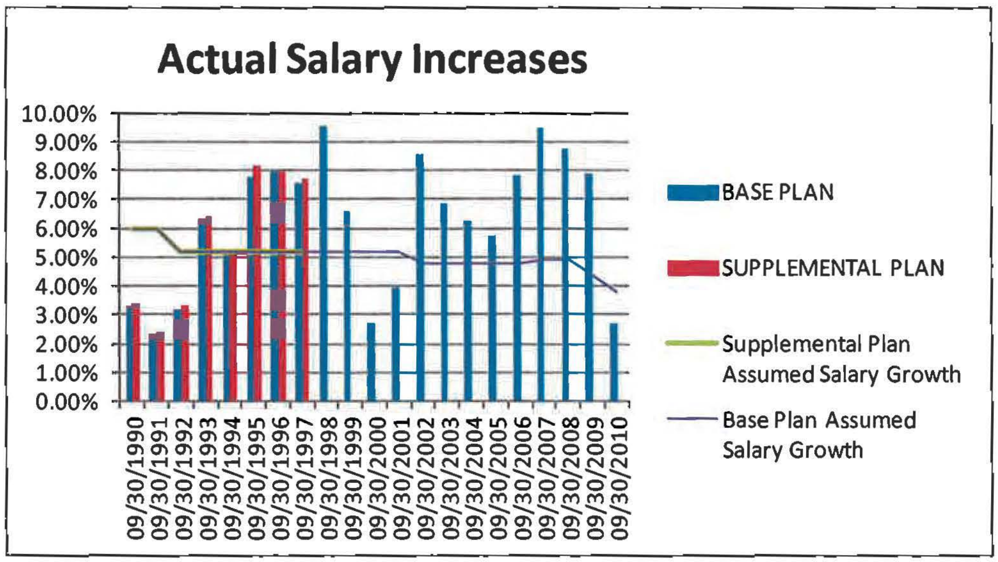
Both plans demonstrated strong investment returns well in excess of assumed rates, prior to 2001. However, rates of return post 2001, and particularly since 2008, have been below assumed rates, thereby helping to drive increases in unfunded liabilities and annual contribution requirements over that time period. Further, while MBERP salary growth has generally been in line with the assumed salary growth rate, Fire and Police Plan salary growth has almost consistently exceeded salary growth assumptions for the base plan, especially considering the fact that the salary basis for retirement benefits is the average of the last two years' salary, including incentive pays, longevity pays and approximately 11% of overtime that can be counted as pensionable pay.

Fire and Police Pension Plan

Fire & Police Pension Plan Historical Return and Salary Growth								
	BASE PLAN				**SUPPLEMENTAL PLAN**			
	INVESTMENT RETURN		**SALARY INCREASES**		**INVESTMENT RETURN**		**SALARY INCREASES**	
Year Ending	Actual	Assumed	Actual	Assumed	Actual	Assumed	Actual	Assumed
	-				-			
09/30/1990	0.51%	8.50%	3.30%	6.00%	13.14%	8.50%	3.40%	6.00%
09/30/1991	16.67%	8.50%	2.30%	6.00%	13.17%	8.50%	2.40%	6.00%
09/30/1992	10.28%	8.50%	3.20%	5.20%	10.46%	8.50%	3.30%	5.20%
09/30/1993	12.82%	8.50%	6.30%	5.20%	13.42%	8.50%	6.40%	5.20%
09/30/1994	0.84%	8.50%	5.30%	5.20%	0.74%	8.50%	5.30%	5.20%
09/30/1995	17.35%	8.50%	7.80%	5.20%	29.21%	8.50%	8.20%	5.20%
09/30/1996	13.58%	8.50%	8.00%	5.20%	11.24%	8.50%	8.00%	5.20%
09/30/1997	20.97%	8.50%	7.60%	5.20%	26.40%	8.50%	7.70%	5.20%
09/30/1998	8.32%	8.50%	9.54%	5.20%				
09/30/1999	11.73%	8.50%	6.57%	5.20%				
09/30/2000	10.52%	8.50%	2.74%	5.20%				
09/30/2001	-8.79%	8.50%	4.00%	5.20%				
09/30/2002	-1.65%	8.50%	8.58%	4.82%				
09/30/2003	15.05%	8.50%	6.88%	4.82%				
09/30/2004	9.72%	8.50%	6.25%	4.82%				
09/30/2005	9.99%	8.50%	5.73%	4.80%				
09/30/2006	8.28%	8.50%	7.87%	4.80%				
09/30/2007	14.31%	8.50%	9.48%	4.90%				
09/30/2008	-10.43%	8.50%	8.77%	4.90%				
09/30/2009	1.35%	8.40%	7.93%	4.40%				
09/30/2010	10.85%	8.30%	2.71%	3.83%				
The assumed salary scale from 1992 through 2010 is a graded salary scale								

Fire and Police Pension Plan (Continued)





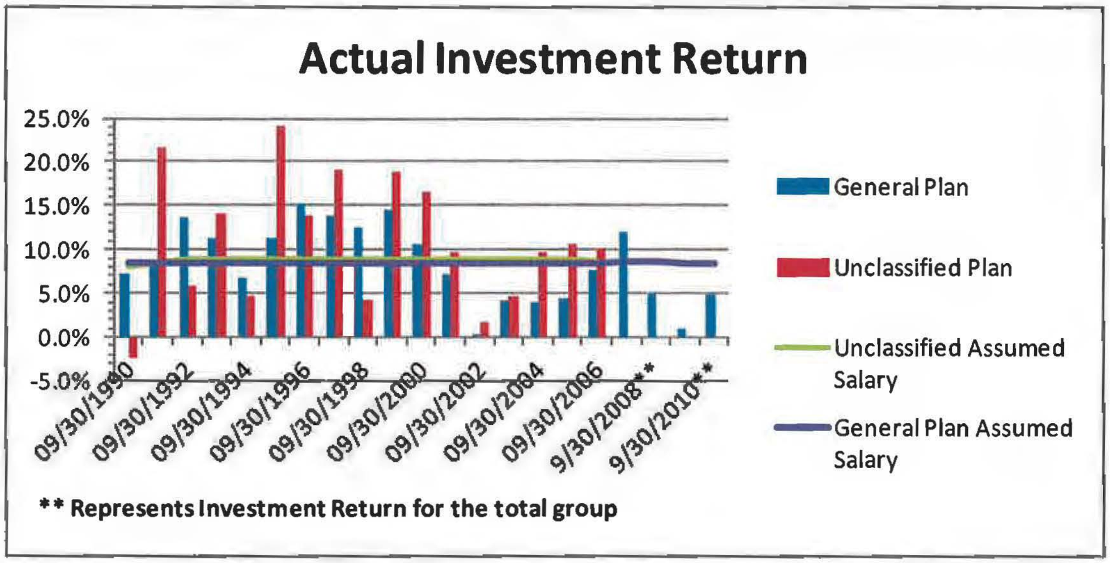
FIRE AND POLICE PLAN MEMBERS 5 YEAR TREND ACTIVE VS. INACTIVE

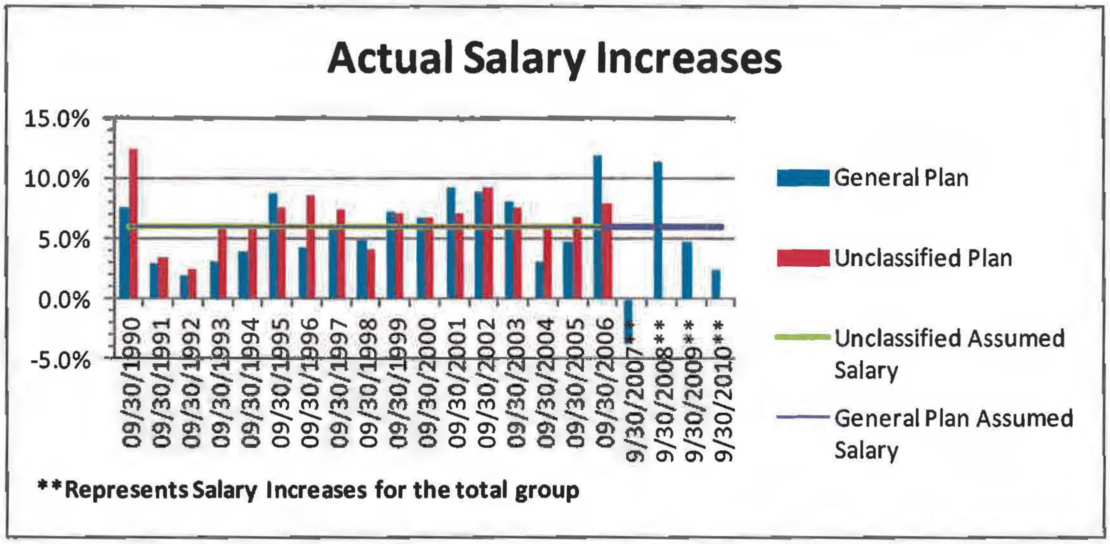
	2007	2008	2009	2010	2011
Active Members	482	487	478	468	457
Retirees & Beneficiaries	463	493	506	505	524
Disabled Members	61	62	62	59	56
DROP Members	48	46	66	67	66
Vested or Dormant	17	14	12	13	15
Total	1071	1102	1124	1112	1118

Miami Beach Employees Retirement Plan

	Miami Beach Employees Retirement Plan (MBERP) History of Investment Returns and Salary Increases							
	General Plan				Unclassified Plan			
	BASE PLAN				SUPPLEMENTAL PLAN			
	INVESTMENT RETURN		SALARY INCREASES		INVESTMENT RETURN		SALARY INCREASES	
Year Ending	Actual	Assumed	Actual	Assumed	Actual	Assumed	Actual	Assumed
09/30/1990	7.3%	8.5%	7.5%	6.0%	-2.3%	8.0%	12.3%	6.0%
09/30/1991	8.1%	8.5%	3.0%	6.0%	21.6%	8.5%	3.4%	6.0%
09/30/1992	13.7%	8.5%	2.0%	6.0%	5.8%	9.0%	2.4%	6.0%
09/30/1993	11.4%	8.5%	3.1%	6.0%	14.1%	9.0%	6.3%	6.0%
09/30/1994	6.8%	8.5%	3.9%	6.0%	4.8%	9.0%	6.0%	6.0%
09/30/1995	11.4%	8.5%	8.8%	6.0%	24.1%	9.0%	7.6%	6.0%
09/30/1996	15.3%	8.5%	4.2%	6.0%	13.9%	9.0%	8.6%	6.0%
09/30/1997	13.8%	8.5%	6.0%	6.0%	19.1%	9.0%	7.4%	6.0%
09/30/1998	12.5%	8.5%	5.0%	6.0%	4.3%	9.0%	4.1%	6.0%
09/30/1999	14.4%	8.5%	7.3%	6.0%	18.8%	9.0%	7.1%	6.0%
09/30/2000	10.7%	8.5%	6.7%	6.0%	16.5%	9.0%	6.7%	6.0%
09/30/2001	7.2%	8.5%	9.3%	6.0%	9.7%	9.0%	7.0%	6.0%
09/30/2002	0.3%	8.5%	8.9%	6.0%	1.7%	9.0%	9.2%	6.0%
09/30/2003	4.3%	8.5%	8.1%	6.0%	4.6%	9.0%	7.5%	6.0%
09/30/2004	4.1%	8.5%	3.1%	6.0%	9.7%	9.0%	5.7%	6.0%
09/30/2005	4.4%	8.5%	4.7%	6.0%	10.7%	9.0%	6.8%	6.0%
09/30/2006	7.7%	8.5%	11.9%	6.0%	10.2%	8.75%	7.9%	6.0%
9/30/2007**	12.0%	8.75%	-3.6%	6.0%	NA	NA	NA	NA
9/30/2008**	5.2%	8.65%	11.3%	6.0%	NA	NA	NA	NA
9/30/2009**	1.1%	8.50%	4.8%	6.0%	NA	NA	NA	NA
9/30/2010**	5.0%	8.35%	2.5%	6.0%	NA	NA	NA	NA

Miami Beach Employees Retirement Plan





MBERP MEMBERS 5 YEAR TREND ACTIVE VS. INACTIVE

	2006	2007	2008	2009	2010
Active Members	1018	1061	1158	1154	1117
Retirees & Beneficiaries	950	959	968	972	981
Disabled Members	454	42	43	41	40
DROP Members	N/A	N/A	N/A	35	49
Vested or Dormant	64	70	87	79	75
Total	2077	2132	2256	2281	2262

In 2011, the Florida legislature mandated that the Florida Department of Management Services develop a plan to create a rating system for use in classifying the financial strength of all local government pension plans. As part of the recommendations contained in the report, the Department recommended the following percentage point system components (in conjunction with other components totaling to 100 percent) to evaluate the financial sustainability of a plan, for each component deriving a ratio by comparing the 5 year average of actual experience to the plan assumption, thereby emphasizing the importance of these assumptions.

Rate of Return Ratio		Salary Growth Ratio	
GT 1.0	5%	LT 1.0	5%
0.75 – 0.99	3%	1.01 – 1.33	3%
0.54 – 0.74	1%	1.34 – 1.66	1%
LT 0.50	0%	GT 1.67	0%

RECENT CHANGES IN INVESTMENT RETURN ASSUMPTIONS IN OTHER PLANS

Investment rates of return for the past decade have been essentially flat, resulting in the examination of the assumed rate of return for defined benefit pension plans, across several pension plans. The rate of return adopted and assumed by a pension board is a critical component to the actuarial calculations of payments and liabilities. If the assumed rate is higher than the actual rate, then the plan will require additional funds and the liability will increase. The rate of return adopted by the city's plans as of the 10/1/10 valuation reports were 8.2 percent for the Fire and Police Pension Plan and 8.25 percent for MBERP.

California (CalPERS)

The California Public Employees' Retirement System (CalPERS) manages retirement benefits for more than 1.6 million California public employees, retirees, and their families. As of June 30, 2011, CalPERS provided pension benefits to 1,103,426 active and inactive members and 536,234 retirees, beneficiaries, and survivors. CalPERS membership is divided approximately in thirds among current and retired employees of the state, schools, and participating public agencies. CalPERS is a defined benefit retirement plan. It provides benefits based on a member's years of service, age, and highest average compensation. In addition, benefits are provided for disability and death, with payments in some cases going to survivors or beneficiaries of eligible members. Approximately half of their members pay into Social Security. CalPERS manages health benefits for more than 1.3 million members and their families

In March 2012, the Staff administration recommended to reduce the discount rate for CalPERS from 7.75 percent to 7.5 percent, even though this is projected to require an additional $303 million per year in pension fund contributions.

Source: CalPERS

Local Florida Government Pension Plans

The Florida Division of Retirement, a Division of the Florida Department of Management Services, is responsible for reviewing and commenting on actuarial valuations, impact statements and reports submitted by local governments, special districts and schools boards, as well as, determining if actuarial reports are timely, complete, and accurate and are based on reasonable assumptions. This is in addition to other responsibilities including; publishing the "Local Government Retirement Systems Annual Report," maintaining computerized data information of all public employee retirement systems in Florida, cooperating with local retirement systems on areas of mutual concerns and publishing fact sheets on each local government's defined benefit plan.
As part of the recommendations contained in the Financial Rating of Local Government Defined Benefit Pension Plans Report prepared by the Florida Department of Management Services, the Department has recommended that the Legislature establish a standard rate after having evaluated the issue with feedback from interested parties. Further, the report noted that, as of September 30, 2011, the average (mean) rate of return assumption for local government pension plans in Florida is 7.78 percent and the median rate of return assumption is 8 percent. (Source: Financial Rating of Local Government Defined Benefit Pension Plans, Department of Management Services, January 25, 2012.

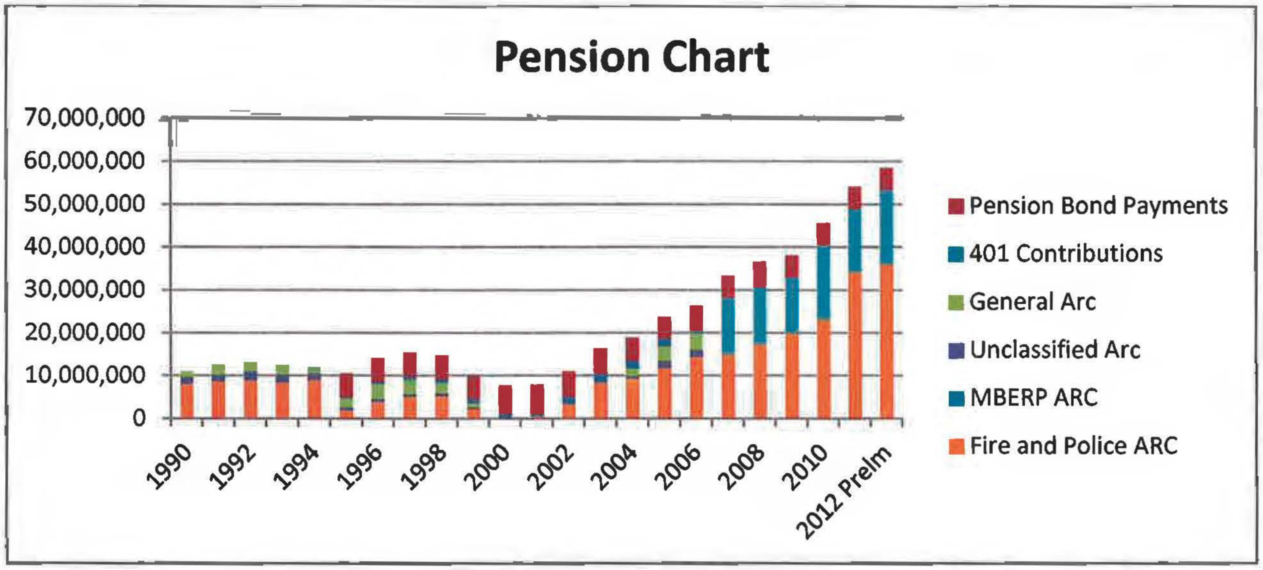
In the meantime, given the poor investment return experience in recent years, the Florida Division of Management Services is already cautioning the local government pension plans regarding their assumed rate of return, as shown in the except below regarding the MBERP 10/1/2010 valuation.

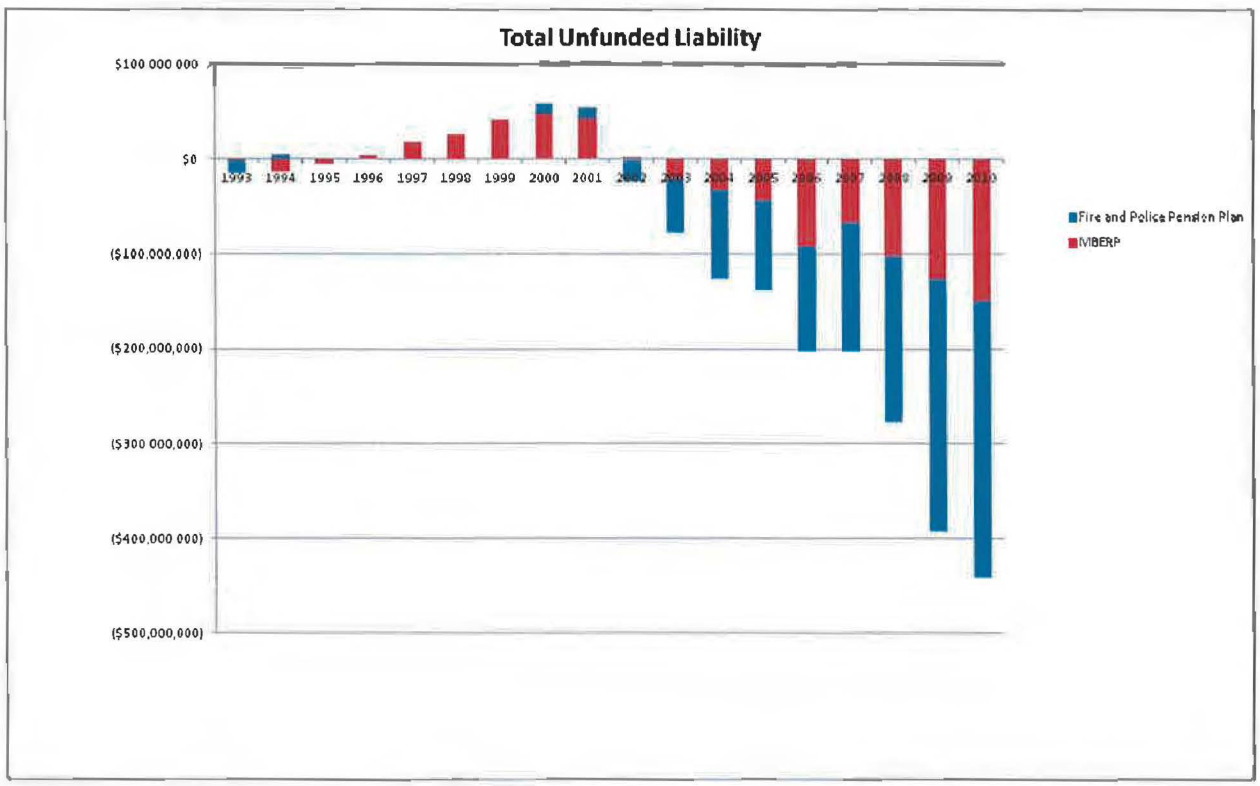
(2) **Valuation Interest Assumption:** The 10/1/2010 valuation uses an **8.25%** interest assumption to discount Plan liabilities. Plan annualized investment returns through 10/1/2010 were **3.75%, 6.14% and 5.58%** per annum over the last **three, five and eleven plan year periods respectively ending on 10/1/2010.** We will continue to monitor these results in future reports.

Source: March 12, 2012 Department of Management Services letter to MBERP

CMB HISTORICAL PENSION COSTS AND UNFUNDED LIABILITY

The following tables reflect the historical changes of annual required contributions, the unfunded actuarial accrued liability and the percent funded for each of the City of Miami Beach defined benefit pension plans.





The Total Unfunded Actuarial Accrued Liability (UAAL) of City pension plans as of 10/1/10 was $441 million:

Fire/Police:	$291.9 million
General:	$148.8 million

By law, the City is responsible for funding the UAAL – even if employees are transferred to other employers, and even if the current pension plans are closed, frozen or terminated. However, this also means that the combined assets of the plan today are almost $1 billion.

Funded Status of Miami Beach Pension Plan as of 10/1/11

	Fire and Police	MBERP
– ACT. ACCRUED LIABILITY:	$818 MILLION	$580 MILLION
– ACT. VALUE OF ASSETS:	$531MILLION	$431 MILLION
– PERCENT FUNDED:	62.0%	74.4%

The 2011 report prepared by the Leroy Collins Institute at Florida State University for pension systems across Florida assigned the following grades to pension plans based on percent funded.

GRADE	PERCENT FUNDED
A	More than 90% funded
B	80 to 90% funded
C	70 to 80% funded
D	60 to 70% funded
F	Less than 60% funded

Based on this grading approach, the Fire and Police Pension Plan would receive a D rating while MBERP would receive a C rating as of 10/1/11.

CMB BUDGET IMPACTS

The total adopted General Fund Operating Budget is $244,336,740. Of note, the FY 2011/12 General Fund budget is only about $6.6 million (less than 3 percent) over the FY 2006/07 budget and the operating millage is 1.2085 mills less than the FY 2006/07 budget despite pension increases of $24 million during that same period. At this point, pension costs alone represent $52.4 million (21 percent) of the total General Fund budget, with the Fire and Police Pension Plan representing approximately 16 percent and the MBERP representing approximately 5 percent.

The FY 2011/12 City contribution for the Fire and Police Pension Plan is $36.2 million (72.76% of Fire and Police Pension Plan members' payroll). The FY 2011/12 City contribution for the General Plan is $17.1 million (25.02% of MBERP members payroll), following collectively bargained benefit adjustments in 2010. Of note, while City contributions for the Fire and Police Plan are more than twice that of the General Plan, employee contributions for each are $7 million and $5 million, respectively.

As part of the recommendations contained in the Financial Rating of Local Government Defined Benefit Pension Plans Report prepared by the Florida Department of Management Services, the Department recommended the following percentage point system components (in conjunction with other components totaling to 100%) to evaluate the financial sustainability of a plan, for each component deriving a ratio by comparing the sponsor contributions as a percent of the valuation payroll.

Percentage of Valuation Payroll	
LT 10%	5%
10 – 19.99%	3%
20 – 39.99%	1%
GT = 40%	0%

Based on this grading approach, the Fire and Police Pension Plan would receive Zero percentage points while MBERP would receive a 1-percentage point.

2. RECENT CHANGES TO PUBLIC PENSION PLANS

CITY OF MIAMI BEACH

The collective bargaining agreements entered into by the five bargaining units in the City of Miami Beach in 2010, included a series of changes to the both the Fire and Police Pension Plan and the Miami Beach Employees' Retirement Plan (MBERP). These changes are outlined below.

Changes to the Fire and Police Pension Plan

- All Employees
  - No retiree cost of living adjustment (COLA) for at least 2 years for participants entering the deferred retirement option plan (DROP) after 9/1/12 (Years 3 and 4 of DROP)
  - Off-duty compensation pensionable/sick leave sell back up to the overtime compensation cap

- New Employees Only
  - Minimum retirement Age of 48 for Rule of 70
  - Pushed back increase in multiplier from 3% to 4% so that it occurs in year 20 instead of year 15
  - Final Average Monthly Earning (FAME) increased from highest or last 2 to highest or last 3 years
  - Retire COLA decreased from 2.5% to 1.5%

The impacts estimated by Buck Consultants, the actuary for the Fire and Police Pension Plan for changes for existing Fire and Police Pension Plan employees were minimal, with an initial cost increase of $368,865 included in the actuarial impact statement, to be offset in the future by a savings of approximately $651,322. At this time, these changes have not been implemented pending litigation. The savings estimated by Actuarial Concepts Inc., the City's actuary, from these changes for new Fire and Police Pension Plan employees generates a Net Present Value of $32.8 million over 30 years; however, savings in the early years were minimal.

Changes to MBERP

- Pension changes for all employees:
    - Increase employee pension contribution by 2%
    - 5 year final averaging period (phased in)
- Additional reduced pension benefits for employees hired after 10/1/10:
    - Increased normal retirement age
    - Reduced multiplier from 3% to 2.5%
    - Reduced retiree COLA from 2.5% to 1.5%

The savings estimated by Gabriel Roeder Smith and Company (GRS), the actuary for MBERP, based on the changes to existing MBERP employees was $3.3 million in year one. The impact of the changes to new MBERP employees was estimated as $900,000 in the first year, and approximately $6 million per year after 10 years.

Other Jurisdictions in Florida

(Source: Lewis Longman and Walker, P.A.)

Many jurisdictions in Florida have also experienced similar changes to their defined benefit pension plans. Below are examples as of February 2012.

Stuart (2007) - All Employees

- All City pension plans terminated
- City joined Florida Retirement System (FRS) for all employees
- City purchased past service credit under FRS for all employees

Ft. Lauderdale (2007) - General

- Closed general employee defined benefit pension plan
- Set up defined contribution plan for new hires

Coral Gables (2009) - Police

- Increased employee contributions for police officers by 5%
- Reduced pensionable earnings (excluded overtime in excess of 300 hrs. and lump sum payments for compensatory time)

Naples (2009) - Fire

- "Stop & Restart" implemented; premium taxes that the City can use to offset City pension contributions increased from $776K to $1. 67 million per year
- "Share Plan" set up with excess premium tax revenues

Port Orange (2010) – Fire
[Not Yet Implemented]*

- Reduced wages by 6% (imposed in lieu of increase in employee pension contribution)
- Reduced pension benefits for current and future employees
  - Push back normal retirement date
  - Reduce pensionable earnings (exclude OT)
  - Extend final averaging period from 3 to 5 years
  - Reduce maximum benefit from 90% to 80%
  - Reduce COLA
  - Reduce deferred retirement option plan (DROP) earnings

* Litigation pending

Delay Beach (2010) General Employees

- Final average compensation period extended from 2 to 5 years
- Normal retirement age delayed to age 62 (was 60)
- Employee contributions raised from 2.5 to 3.05%
- Standard benefit changed to single life annuity (was 60 & joint & survivor annuity)
- Line of duty disability reduced from 75% to 65%

Coral Gables (2010) – General
[Settlement approved by union members and City Commission in July 2011]

- Pension benefits frozen; reduced benefits for future service
- Pension changes for current and future employees:
  - Reduced multiplier for future service (from 3% to 2.25%)
  - Increase employee pension contribution by 5% (to 10%)
  - 5 year final averaging period (phased in from 3 year average)
  - Delay retirement age to age 65 or "Rule of 85" (from age 52 or "Rule of 70")
  - Reduced disability benefits
- Future pension cost increases shared by City and employees
- City may establish defined contribution plan in future for new hires

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

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

* Litigation pending

Palm Bay (2011) – Fire

[Settlement approved 5/19/11; implemented March 2012]*

- 3 year wage freeze
- Reduction in pension benefits for current employees
  - Reduction in supplemental benefit (from $25 to $12 per month per year of service)
- Reduce future pension benefits for future employees
  - Reduced multiplier – 3.2% after 20 years (was 5 percent after 20)
  - 2% retiree COLA deferred 6 years (was 3%)
  - Line of duty disability benefit – 66% (was 75%)
- Stop/Restart – one-time transfer of excess premium tax reserve to reduce city's contribution; increase each year in "frozen amount" used to offset City annual contribution. As a result of the stop/restart, the City is able to use $825,000 in premium tax revenues each year to reduce the City's required pension contributions; and the City received a one-time transfer of $825,000 to reduce the City's contributions this year.

Town of Palm Beach (2011) – Firefighter Pension Changes

[Town Council imposed wage and benefit reductions; changes implemented in May 2012]

- Pension benefits frozen; "Hybrid" plan implement
- Pension changes for current and future employees:
  - Reduced multiplier for future service (to 1.25%)
  - Defined contribution plan on top of defined benefit plan, with Town contribution match
  - Normal retirement under defined benefit plan delayed to age 65 (but defined contribution plan distributions may begin earlier)
  - Joint & Survivor Annuity abolished; replaced with life annuity (member may purchase survivor benefit)
  - No COLA
  - Town withdrew from participation in Ch. 175/185

Florida Retirement System (2011)*

- 3% contribution effective 7/1/11 (was 0)
- No retiree COLA for service after 7/1/11 (was 3%)
- Delayed normal retirement age for members who join FRS on or after 7/1/11
  - Regular: Age 65 or 33 years (was 62 or 30 years)
  - Special Risk: Age 60 or 30 years (was 55 or 25 years)
- Average final compensation: highest 8 years for members who join FRS on or after 7/1/11 (was high 5)
- 8 year vesting period for members who join FRS on or after 7/1/11 (was 6 years)
- DROP interest = 1.3% for members who enter DROP after 7/1/11 (was 6.5%)

* Litigation pending

Hollywood (2011) – All Employees *

[City declared financial urgency; pension changes approved by referendum on 9/13/11]

- Pension benefits frozen for all employees
- Pension changes for current and future employees:
  - Delayed normal retirement date (Police/Fire – age 55 with 10 years or age 52 with 25 years; General – age 65 or age 62 with 25 years or age 60 with 30 years)
  - Reduced benefit multiplier 2.5% police/fire; 2.0% - general)
  - 5 year final averaging period (now 3 years)
  - No COLA for future service
  - No DROP
  - City will withdraw from participation in Chapter 175 and 185

* Litigation pending

Sarasota (2011) – Police

[City Commission took final action to resolve impasse 10/17/11; not yet implemented]

- Pension benefits frozen for all employees
- Pension changes for current and future employees:
  - 5 year final averaging period (now 3 years)
  - Reduce retiree COLA from 3.2% to 1.0% beginning at age 65
  - Overtime limited to 300 hours per year
  - Standard form of benefit: 10 years certain and life (now 2/3 automatic spouse survivor benefit for life of spouse)
  - Reduce DROP interest to 2.5% (now 6.5%)
- City will withdraw from participation in Chapter 185

Other Jurisdictions Outside of Florida

California (2012)
(Source Associated Press, March 13, 2012)

In March 2012, Governor Brown proposed changes for public employee pension benefits in California with the aim to replace about 75 percent of an employee's salary through retirement funds and Social Security for employees with at least 30 years of service. The proposed changes were estimated to save about $900 million annually. The proposed changes included:

- Raising the retirement age to 67 for new employees who are not public safety workers
- Requiring state and local workers to pay more toward their retirement

- Creating a mandatory "hybrid" system in which future employees would get retirement from a guaranteed benefit and a 401(k) style plan
- Eliminating "spiking" (boosting payouts by including overtime and other benefits) and "air time" (buying additional service credits)
- Mandating that that public employees pay an equal share of pension costs

New York (2012)
(Source: msnbc.com staff and news services, March 30 2012, 8:14 AM)

In March 2012, changes for New York retirement benefits were approved by the legislature affecting future workers and reducing costs by approximately $80 billion over 30 years. The reform included the following changes among other measure:

- Increases the amount higher-earning public employees contribute toward their retirement plans
- Raises the retirement age by a year to 63

Texas
(Source: WSJ.com - Opinion: Considering the Texas Alternative to Social Security* September 30, 2011)

In the 1980s, Galveston, Texas pulled its employees out of Social Security and set up an alternate plan based on individual accounts. This plan has generated higher returns and benefits than Social Security.

3. CURRENT PLAN STATUS

The following section provides an overview of the benefits provided to both the Fire and Police defined benefit pension plan and the MBERP pension plan, including an overview of current benefits, changes in benefits over the years, the plan status and projected costs of each defined benefit pension plan for the next five (5) years.

It is important to note that City of Miami Beach employees do not participate in Social Security, a factor that should be taken into account when evaluating benefits received.

FIRE AND POLICE PENSION PLAN

Overview of Current Benefits

Benefit	MB Fire/Police *	FRS **
Multiplier	3.0/4.0% (90% after 26 yrs)	3.0% (90% after 30 yrs)
Norm. Ret. Date	Age 50 w/10 yrs or Rule of 70	Age 55 w/6 yrs or 25 YOS or Age 52 w/25 Yrs include military: Hired after 7/1/11 Age 60 w/8 yrs or 30 YOS or Age 57 w/30 Yrs including military
Final Avg. Comp.	Highest 2 yrs	High 8
COLA	2.5% annual	None for benefits earned after 7/1/11
DROP	3 yrs/invested rate	5 yrs/1.3%
Share Plan	Yes	None
Employee Cost	10%	3% as of 7/1/11
City Cost	71.67% (79.8% next year)	14.1 (19.5% next year)
Premium Tax	0.02%	
Total Cost	87% (90% next year)	17.1% (22.5% next year)
Social Security	No	Yes

* These do not reflect changes negotiated in the last collective bargaining agreement, which are subject to litigation, as discussed in the prior section "2. Recent Changes to Public Pension Plans".
**FRS changes implemented 7/1/11 subject to litigation

Premium Taxes/Share Plans

Chapters 175 & 185, F.S. provide for a rebate of the state excise tax on property and casualty insurance premiums to cities with police and firefighter pension plans, known as "premium taxes". The premium tax monies must be used exclusively for firefighter and police pensions, and the local pension plan must comply with the requirements of Ch. 175 & 185. Premium taxes received in excess of the "frozen amount" must be used for extra benefits.

In 2010 the City received a total of $3 million in premium tax revenues – about 3.87% of payroll, (approximately $2.4 million in Chapter 175 premium taxes for firefighters and approximately $525,000 in Chapter 185 premium taxes for police officers.

The City is able to use $120,000 of the premium tax money received each year to offset the City's contributions to the pension plan. This is the "frozen amount." The rest of the premium tax money – $2.8 million last year – went to "share plans" for fire fighters and police officers.

A "Share plan" is a defined contribution plan with individual accounts where a proportionate share of the premium tax proceeds based on tenure are deposited each year. The fire and police share plans provide a lump sum payout to retiring firefighters and police officers on top of their City pension benefit – this is an extra benefit. Typical benefits for those members who had the most years of service are $100,000 for fire fighters and $60,000 for police officers.

Under current law and State non-rule policy, the "City" will lose premium tax monies if:

- The current plan is closed or terminated; or
- The City joins FRS; or
- Benefits are reduced below Ch. 175/185 minimums

Also, any increase in employee contributions for police officers and firefighters under Chapter 175/185 must be agreed to by the police and fire unions. Any transfer of premium tax monies for the police and fire share plans to the City pension fund to reduce the City's required contributions must also be agreed to by the unions.
(Reminder: only $120,000 is used to offset cost of the City's defined benefit plan for Police and Fire; while the balance of $1.9 million annually goes to share plans).

Summary of Changes in Benefits

Both, the Fire and Police Pension Plan and the Miami Beach Employees' Retirement Plan have evolved in Benefit changes over the years and details of these changes are provided in the Appendix.

In the Fire and Police Pension Plan, there are currently 34 members who were hired prior to October 1, 1989 (when the Plan's benefits were generally lower than they are today) who have not joined the Deferred Retirement Option Program (DROP). In 1989, the Supplemental Plan was introduced for Miami Beach Fire Fighters and Police Officers. This plan provided for benefits above the levels in the original Base Plan. For example, the multiplier of 2.5 percent for the first 25 years and 2 percent thereafter was modified to 3 percent for the first 15 years and 4 percent thereafter. In addition, benefit increases were also made to the retiree COLA, the maximum final average monthly earnings as a percent of salary, disability, beneficiary supplements and buyback of military time. However, at the same time, employee contributions were increased to 10 percent.

In 1993, some of the benefits were reduced for new employees. For example, the multiplier was reduced to 3 percent for all years and there was a reduction in the retiree COLA. However, the employee contribution was maintained at 10 percent. There are currently 15 active members hired between October 1, 1989 and May 19, 1993, which have not joined the DROP.

In 2000, the Base Plan and Supplemental Plan were merged and most benefits were returned to the 1989 levels for all employees. In addition, the retirement age benefit was changed to age 50 or the Rule of 70 and in 2009, a DROP benefit and a buyback provision were added.

Plan Status

As of 10/1/10 Valuation (FY 2011/12 Budget)		FIRE AND POLICE PENSION PLAN
FY 2010/11		
ANNUAL CONTRIBUTION REQUIREMENTS (ARC)*	$	34,416,519
PENSION BOND PAYMENTS		4,495,500
401K MATCH		
TOTAL ANNUAL CITY PAYMENTS	$	38,912,019
GENERAL FUND COMPONENT		
ARC	$	33,748,250
PENSION BONDS		4,366,259
401K MATCH		
% OF GENERAL FUND BUDGET		16%
FY 2011/12		
ANNUAL CONTRIBUTION REQUIREMENTS (ARC)*	$	36,175,910
PENSION BOND PAYMENTS		4,495,500
401K MATCH		
TOTAL ANNUAL CITY PAYMENTS	$	40,671,410
GENERAL FUND COMPONENT		
ARC	$	35,602,142
PENSION BONDS		4,366,259
401K MATCH		
% OF GENERAL FUND BUDGET		16%
EMPLOYER ARC AS A % OF PAYROLL		
NORMAL COST*		32.59%
AMORTIZATION OF UNFUNDED LIABILITY		40.17%
TOTAL EMPLOYER % OF PAYROLL		72.76%
ANTICIPATED EMPLOYEE CONTRIBUTION	$	4,971,896
UNFUNDED LIABILITY AS OF 10/1/10 (UAAL)	$	291,931,506
FUNDED RATIO (Actuarial Value of Plan Assets less Accrued Laibility - Past Service)		64.3%
PENSION PLAN MEMBERS		
ACTIVE		468
DROP		67
DISABLED		59
RETIRED & BENEFICIARIES		505
TERMINATED VESTED MEMBERS		13
TOTAL		1,112

Plan Projections

The following projections were provided by the plan actuary, Buck Consultants, based on the 10/1/10 valuation data, which assumed that the assumed rate of return for FY 2010/11 would be 8.3 percent. The actual market rate of return was - 0.58%. However, preliminary estimates for the increases in contribution requirements for the 10/1/10 valuation are between $3 million and $3.6 million, similar to those projected below.

Valuation Date 10/1	2009	2010	2011	2012	2013	2014	2015
Contribution for FY	2011	2012	2013	2014	2015	2016	2017
Discount Rate	8.3%	8.2%	8.1%	8.0%	8.0%	8.0%	8.0%
Salary Scale	Current Bargaining Agreement						
ARC (in millions)	34.4	36.2	39.7	43.3	43.9	44.5	45.2
% of Payroll	66.66%	72.76%	77.22%	81.94%	81.76%	81.28%	81.05%

MBERP

Overview of Current Benefits

Benefit	MB Fire/Police	FRS
Multiplier	3% prior to 2.5% after 10/1/10	1.6 %
Norm. Ret. Date	Age 55 30 years or 62 after 10/1/10	30 years or 62 after
Final Avg. Comp.	Highest 5 yrs	High 8
Retiree COLA	2.5% 1.5% after 10/1/10	None
DROP	3 yrs/invested rate 5 years after 10/1/10	5 yrs/1.3%
Employee Cost	12%	3%
City Cost	25.54%	4.91% (6.58% next year)
Total Cost	37.54%	7.91% (9.58% next year)
Social Security	No	Yes

Summary of Changes in Benefits

As noted previously, the details of benefit changes to the Miami Beach Employees' Retirement Plan over the years are provided in the Appendix.

Between1988 and 2006, the General Plan (Classified employees) and the Unclassified Plan were separate. The Unclassified Plan generally provided for higher benefits; however, required a higher member contribution. For example, the Unclassified Plan provided for a 4 percent multiplier, a normal retirement of age 50 with 5 years of service, 90 percent maximum pension benefit and a member contribution of 10 percent. The General Plan provided for a 2.75 multiplier for the first 25 years and 2 percent thereafter, a normal retirement age between 55 and 60 (depending on years of service), an 80 percent maximum pension benefit and a 6 percent member contribution.

In the early 1990's both plans bifurcated, providing for different benefits in each of the plans for all new members. Upon implementation, the current active members of the General Plan (Classified employees) generally received higher benefits, while newly hired members of the General Plan received benefits that were similar to the newly hired members in the Unclassified Plan. In the Unclassified Plan, benefit levels for both, existing and new members were generally reduced.

In 2006, the two plans were merged to create the Miami Beach Employees' Retirement Plan (MBERP) and some benefits were increased, for example:

- Retiree COLA was increased from 1.5% simple to 2.5% compounding for all members
- Retirement age became 50 with 5 years of creditable service for pre-bifurcation members (Unclassified employees received pre-bifurcation date benefits and Classified employees experienced increased benefits)
- Retirement age was decreased for post-bifurcation members from 60 to 55
- Member contributions were reduced to 8 percent for post- bifurcation members

Further reductions were implemented in 2010 for both, existing and new MBERP members, as presented in the prior section.

Plan Status

As of 10/1/10 Valuation (FY 2011/12 Budget)		MIAMI BEACH EMPLOYEES RETIREMENT PENSION PLAN (FOR GENERAL EMPLOYEES)
FY 2010/11		
ANNUAL CONTRIBUTION REQUIREMENTS (ARC)*	$	14,474,678
PENSION BOND PAYMENTS		499,500
401K MATCH		
TOTAL ANNUAL CITY PAYMENTS	$	14,974,178
GENERAL FUND COMPONENT		
ARC	$	9,287,147
PENSION BONDS		485,140
401K MATCH		
% OF GENERAL FUND BUDGET		4%
FY 2011/12		
ANNUAL CONTRIBUTION REQUIREMENTS (ARC)*	$	17,116,313
PENSION BOND PAYMENTS		499,500
401K MATCH		
TOTAL ANNUAL CITY PAYMENTS	$	17,615,813
GENERAL FUND COMPONENT		
ARC	$	10,964,684
PENSION BONDS		485,140
401K MATCH		
% OF GENERAL FUND BUDGET		5%
EMPLOYER ARC AS A % OF PAYROLL		
NORMAL COST*		10.80%
AMORTIZATION OF UNFUNDED LIABILITY		14.22%
TOTAL EMPLOYER % OF PAYROLL		25.02%
ANTICIPATED EMPLOYEE CONTRIBUTION	$	6,995,774
UNFUNDED LIABILITY AS OF 10/1/10 (UAAL)	$	148,766,860
FUNDED RATIO (Actuarial Value of Plan Assets less Accrued Laibility - Past Service)		74.4%
PENSION PLAN MEMBERS		
ACTIVE		1,117
DROP		49
DISABLED		40
RETIRED & BENEFICIARIES		981
TERMINATED VESTED MEMBERS		75
TOTAL		2,262

Plan Projections

The following projections were provided by the plan actuary, GRS, based on the 10/1/10 valuation data, which assumed that the assumed rate of return for FY 2010/11 would be 8.25 percent. The actual market rate of return was **-1.2%.** However, preliminary estimates for the increases in contribution requirements for the 10/1/10 valuation are still pending from the pension board.

Valuation Date 10/1	2009	2010	2011	2012	2013	2014	2015
Contribution for FY	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Discount Rate	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%	8.25%
Salary Scale	Current Bargaining Agreement						
ARC (in millions)	17.6*	21.8	25.8	27.7	29.0	29.6	28.2
% of Payroll	25.54%	30.76%	35.34%	36.87%	37.45%	37.12%	34.31%

4. RECOMMENDATIONS

Through a series of meetings over the past 12 months, the Budget Advisory Committee (BAC) evaluated the options under consideration for changes to the Fire and Police Pension Plan over the course of several meetings.

BAC MOTION RECOMMENDING PENSION REFORM

On April 17, 2012, the BAC approved a motion for Fire and Police Plan pension reform combining a number of prior individual motions. The combined motion includes the following motion and vote counts for pension reform for the Fire and Police Pension Plan:

- Recommending Options IIID2 for new and non-vested Fire and Police Pension Plan employees shown in the table on the following page.

  Note: this portion of the motion was initially adopted as a separate motion by a 7-2 vote of the BAC.

- Recommending that the City negotiate changes for vested Fire and Police Pension Plan employees to achieve thresholds in the policies and guidelines adopted by the BAC (see Section 4 on Policies and Guidelines).

  Note: this portion of the motion was initially adopted as a separate motion by unanimous vote of the BAC.

HYBRID OPTION IIID2 FOR NEW AND NON-VESTED EMPLOYEES

Provide a defined benefit component for Police and Fire non-vested and new hire employees to equal the minimum benefits to receive Premium Taxes from the State as defined by F.S. Chapter175/185 and a defined contribution component of 11 percent funded by the City (with employees providing a matching 5% contribution).

Multiplier	2%
Final Average Monthly Earnings (FAME) Calc - in years	Highest 5 of last 10
Retiree COLA*	0.0%
Normal Retirement Age	55&10 or 52&25
% Employee Contribution to DB**	5.00%
% Employee Contribution to DC	5.00%
% City Contribution to Social Security	0.00%
% City Contribution to DC	11.00%
Share Plan DC (See Note Below)	Yes
Social Security	No
Beneficiaries	75% Joint & Survivor with 120 months guaranteed

*Provided that the City Commission may periodically adjust the COLA up to 1.5% compounded for a given year, and COLA resets to 0% for the following year unless the City Commission affirmatively votes to increase above 0% for the next fiscal year
** This represents a minimum consistent with F.S. 175/185 but the defined benefit employee contribution can be set at any level
Note Premium tax revenues for Fire and Police Plans are expected to continue.

This results in reduction of pension benefits as a percentage of payroll to 21% over 30 years and a net present value (NPV) savings of $74 million over 30 years. In addition, year 1 savings are estimated at $2.5 million.

While the savings can be achieved by other means, the reduction of risk through a hybrid plan is the key benefit to the City. The City will retain risk on the defined benefit portion of the pension; however, will have no risk on the defined contribution portion. In this regard, the City's risk is reduced by 40-50 percent. The employees will have a new risk associated with the defined contribution portions of this plan; however, (1) this is a risk of investment that a majority of the public faces (i.e., nearly all private sector employees have defined contribution plans), and (2) along with the risk comes the reward as well to the extent that the employee invests wisely. The reward potential exceeds the reward potential under the current defined benefit plan.

NOTES ON RECOMMENDATION AND REASONS FOR NOT RECOMMENDING OTHER OPTIONS

OPTION I: Florida Retirement System (FRS) - The FRS was not recommended because the City's loss of control of expenses to Tallahassee, ongoing litigation regarding FRS pension changes implemented in 2011, news of projected shortfalls and payment increases and loss of the premium insurance payments.

OPTION II: Defined contribution similar to FRS, including a Social Security equivalent – Although this option eliminates risk, it was not recommended because of concerns with savings potential given the relatively early ages for retirement eligibility, the impact on morale for existing non-vested employees and the potential that this may prove to be unattractive to recruit police and fire employees in the future.

OPTION III: Hybrid Plans – We recommend the City adopt a hybrid plan approach in Option IIID2, and do not recommend the other hybrid plans because although they reduced the risk to the City, they did not generate the NPV savings of Option IIID2.

OPTION IV: Changes to the Existing Pension Plan – Past Service/Future Service Approach (with a combined benefit). Changes to the existing pension plan are recommended in regards to vested employees in order to meet the Policies and Guidelines identified in Section IV. However, they are not recommended for non-vested and new hire employees because although they can generate the NPV savings, they do not reduce the City's risk, and risk reduction was a key factor in the BAC's recommendation.

5. FACTORS FOR CONSIDERATION

In developing recommendations for pension reform, several factors need to be taken into account.

FINANCIAL AFFORDABILITY AND SUSTAINABILITY OF THE PLAN VS. PROVIDING APPROPRIATE BENEFITS AND ENSURING COMPETITIVENESS

Financial stability and affordability, including the ability to reduce risk or share the risk with employees, is often contrary to providing appropriate benefits for employees and ensuring that these benefits are competitive with other jurisdictions in order to ensure that the City has the ability to recruit highly qualified employees.

This trade-off was considered in developing recommended policies and guidelines as discussed in the following section and in evaluating pension reform alternatives.

In addition, it is important to note that City of Miami Beach employees do not participate in Social Security, a factor that should be taken into account when evaluating benefits received.

UNFUNDED LIABILITY – NO INSTANT FIX

Under all scenarios, the City retains responsibility for funding the unfunded accrued actuarial liability (UAAL) of the plan. The UAAL is typically amortized over a period of up to 30 years and is only reduced (although usually not eliminated) through actuarial gains or benefit reductions. Therefore, under most scenarios, it will take at least 30 years to eliminate the current unfunded liability even while maintaining the assumption that there will be no further increases due to experience losses or assumption changes.

In the City of Miami Beach Pension Plans, the payment for the UAAL each year amounts to approximately half of the City's annual required contribution. Therefore, in the short term, the ability to reduce costs is significantly limited.

HOW MUCH RISK IS THE CITY WILLING TO TAKE?

Risk in defined benefit pension plans results from the volatility of investment markets which impacts the City's required contribution rates. The City's risk can be reduced by:

- Sharing risk with employees – For example, increasing employee contribution rates in some relationship to increases in City contribution rates.

- Adopting a more conservative investment policy and reducing the associated assumed rate of return – However, this typically increases costs significantly in the short term.

- Converting a portion, or all, of the defined benefit plan to a defined contribution plan, because the defined contribution plan specifies the City's risk-free contribution rate, and the employees then assume the risk of their investments.

LEGAL GUIDELINES

(Source: Lewis Longman and Walker, P.A.)

The following are legal guidelines that must be taken into account when considering potential pension reform:

- Changes in retirement benefits and employee contributions are mandatory subjects of collective bargaining. As a result, any recommendations by the BAC must be bargained.

- Accrued pension benefits (benefits earned in the past) cannot be reduced or taken away. However, future benefits can be reduced for current employees who have not reached retirement status.

- The City is ultimately responsible for unfunded pension liabilities.

What are Options to Reduce City Pension Costs?

The options to reduce costs are as follows, each of which are discussed in the following section:

- Terminate, freeze or close current pension plan (see definitions below), and set up a lower cost plan/benefit such as:
  - Florida Retirement System (FRS)
  - Defined contribution plan
  - Hybrid Plan
- Keep current City pension plan, but:
  - Reduce benefits for new and/or current employees
  - Increase employee contributions

"Close" – existing plan is closed to new members; current members stay in existing plan and will continue to accrue benefits, until they retire or leave the City; future employees join new plan.

"Freeze" - accrued benefits of current employees in existing plan are "frozen" and paid out at retirement; all current and future employees join a new plan, or continue in current plan with reduced benefits.

"Terminate" – existing plan liquidated; accrued benefits paid out to plan members; City responsible for any deficit; all current and future employees join new plan.

2011 State Legislation

2011 SB 1128, revised the definition of pensionable compensation to exclude overtime pay in excess of 300 hours (and allows plans to exclude all overtime pay), and exclude payouts for accrued sick and annual leave. These changes must be implemented with the first collective bargaining agreement implemented after 7/1/11.

EMPLOYEE GROUPS IMPACTED

There are three groups of employees to consider when considering impacts – vested employees (having worked at least 10 years), non-vested employees (having worked less than 10 years) and new hires. Under the options evaluated, the impacts on the three groups of employees depend on the following scenarios:

1. Reduce benefits for new hires only
   - Reduces cost over time
   - Current employees (vested and non-vested) keep current benefits
   - No immediate savings – may take many years to achieve cost savings – savings are achieved only as new staff are hired
   - Creates lower level of benefits for new hires
   - New hires can be expected to eventually press for benefits similar to longer tenured employees

   Note: The City implemented a number of pension changes to the General Plan in 2010. Modifications for the Fire and Police Pension Plan are pending implementation, subject to litigation.

2. Reduce benefits for new hires and non-vested employees
   - Reduced cost over time
   - Some reductions to UAAL
   - Vested employees keep current benefits
   - Some immediate savings – may take many years to achieve cost savings – immediate savings as applied to non-vested - savings for new staff are achieved only as they are hired
   - Creates lower level of benefits for new hires and non-vested employees

- New hires and non-vested employees can be expected to eventually press for benefits similar to longer tenured employees

3. Reduce benefits for all employees (excluding those employees who have reached normal retirement age).
   - Immediate cost savings
   - Reduces UAAL
   - Same benefits for all employees going forward
   - Reduces future benefits for current employees (employees keep what they have already earned)
   - Loss of premium tax revenues if Fire and Police Plan benefits are reduced below Chapter 175/185 minimums

Note: The City implemented a two percent increase in employee pension contributions and increased the averaging period from three years to five years for all members of General Plan in 2010. Changes agreed to for the Fire and Police Pension Plan for existing employees were minimal and are pending implementation subject to litigation.

6. RECOMMENDED POLICIES AND GUIDELINES

The Government Finance Officers Association (GFOA) recommends that state and local governments have a policy statement that will guide their on-going plan design decisions. This policy should encourage governments to provide sustainable and properly funded retirement plans, which will attract employees in a competitive labor market, facilitate effective management of the workforce and fulfill retirement needs.

In developing a policy for retirement plan design, a state or local government should consider the following:

- Purpose of the retirement plan (e.g., level of replacement income and purchasing power retention);
- Ability of public retirees to contribute to the economic viability of their community and not become a financial liability to the community in which they live due to inadequate retirement income;
- Organization's philosophy regarding employer and employee responsibilities in preparing for retirement;
- Availability of Social Security, retiree medical benefits, disability and survivor benefits and supplemental (e.g. 457) savings plans;
- Costs, including the employer's ability to sustain payments and perhaps increase benefits over time and cost predictability;
- Labor market considerations such as competitive environment, workforce mobility, length of employee service and recruitment and retention of employees;
- Investment risk and control, including how investment risk is allocated between employer and employee;
- Portability of benefits;
- A plan design that can be communicated to and understood by plan participants;
- Employee educational efforts; and
- Advantages of the different types of plans (e.g., defined benefit, defined contribution and hybrid).

Source: GFOA Best Practices and Advisories, Developing a Policy for Retirement Plan Design Options (1999, 2007) (CORBA)
Source: Florida Pensions, Volume 1, Issue 1, April 2012.

CITY OF MIAMI BEACH RECOMMENDED POLICIES AND GUIDELINES

As part of the evaluation for Pension Reform in the City of Miami Beach, the Budget Advisory Committee (BAC) is recommending policies for long term pension reform. The BAC is also recommending guidelines for the City to adopt which establish thresholds which if surpassed will require the City to take prompt and appropriate measures to meet the guideline criteria.

The policies and guidelines address four perspectives: (1) Affordability and Sustainability, (2) Appropriate Benefits to Provide to Employees, (3) Recruitment and Retention, and (4) Management of Risk/Risk Sharing.

These policies and guidelines were adopted unanimously by the BAC.

Affordability and Sustainability

- GUIDELINE STATEMENT: If the City's portion of the total annual cost of retirement benefits contribution exceeds 25 percent of payroll for general employees and 60 percent of payroll for high risk employees, the City should review and evaluate potential changes to the collective bargaining agreements between the City and the Unions, applicable towards the next contract negotiations, in order to identify potential approaches to reduce the contributions to these levels over the long term.

- POLICY STATEMENT: The City shall fund at least the normal cost of pension. If this exceeds the amount of the actuarially determined annual required contribution, the excess should be placed in a pension stabilization fund, to be made available for future pension shortfalls.

- POLICY STATEMENT: The City should strive to maintain a funded ratio of at least 80 percent for each of its defined benefit pension plans.

- GUIDELINE STATEMENT: If the funded ratio (actuarial value of assets minus actuarial liabilities) of either of the City of Miami Beach's pension plans falls below 70 percent, the City should strive to implement approaches to increase the funded ratio to that level over five (5) years.

- POLICY STATEMENT: Salary growth should not exceed the average actuarially assumed salary growth in each of the City's pension plans.

- POLICY STATEMENT: The City should require 5, 10 and 20 year projections of required pension contributions as part of the annual actuarial valuations for each of the City's pension plans. These projections shall be based on the current actuarial assumptions for each plan. The projections shall be updated to reflect the cost of any proposed benefit enhancement before the City Commission agrees to the enhancement. The cost of these studies shall be funded separately from the annual contribution to the pension plan.

- POLICY STATEMENT: There shall be an experience study of each of the City's pension plan's actuarial assumptions performed by an actuary that is independent from the pension board. The experience study should be conducted at least once every three (3) years, to compare actual experience to the assumptions. The independent actuary shall make recommendations for any changes in assumptions based on the results of the experience study, and any deviations from those assumptions by the pension board shall be justified to the City Commission.

- POLICY STATEMENT: Once pension reform is implemented, a 5/7th vote of the City Commission should be required for any further pension changes.

Appropriate Benefits to Provide to Employees

- POLICY STATEMENT: The City of Miami Beach should strive to provide a retirement benefit that provides for a replacement of salary at a level at least equivalent to Social Security plus a supplemental retirement benefit.

- POLICY STATEMENT: The City of Miami Beach retirement benefits should be adjusted periodically after retirement to reflect the impacts of inflation, with rates no more than the Consumer Price Index for All Workers - CPI(W), that is subject to City Commission approval and with a maximum of 3 percent annually.

Recruitment and Retention

- POLICY STATEMENT: The City of Miami Beach should strive to provide retirement benefits that ensure that the City is competitive in the recruitment and retention of employees.

Management of Risk/Risk Sharing

- POLICY STATEMENT: The City of Miami Beach should strive to share some portion of retirement benefit risk with employees.

- GUIDELINE STATEMENT: If the City's contribution to a defined pension benefit plan exceeds 25 percent of payroll for general employees and 60 percent of payroll for high risk employees, the employee contribution should be reviewed.

7. OPTIONS EVALUATED

Based upon the direction of the Mayor's Charge, as well as the condition of both plans, the Budget Advisory Committee (BAC) focused on recommending changes to the Fire and Police Pension Plan. Below are specifics on each of the options evaluated for the Fire and Police Pension Plan, including a table summarizing the results of the projected cost impact of each. Each of these options was evaluated on a macro level, as well as on a micro level, as to their impacts on the three aforementioned employee groups (i.e., vested, non-vested and new hire employees).

The options that changed retirement benefits from the current plan to another plan were evaluated for new employees and for new and non-vested employees. These options include converting to the Florida Retirement System (FRS), converting to a defined contribution plan and converting to a hybrid plan.

The options that evaluated changes in benefits for under the current defined benefit plan were evaluated for new employees and for all employees that have not yet reached normal retirement age.

Legal note: City of Miami Beach employees who join the Miami Beach pension plan sign individual contracts, which state that the benefits cannot be reduced. Whether these contracts would prevail over changes implemented through the collective bargaining process is a potential legal issue that would likely result in litigation. A recommended approach to implement this option is to incentivize existing employees to voluntarily sign new contracts by offering them alternative reductions in other items not governed by the individual pension contract (e.g. salary and/or non-pension benefits).

I. FRS + Social Security

Issues to Consider:

- Reduced cost over time (FRS rates likely going up)
- Favorable employee contribution rate (FRS contribution is 3%)
- City must join Social Security as a condition of joining FRS
- Standardized FRS benefits
- Portability – easier for City to attract employees from other FRS agencies (but also easier for other FRS agencies to hire employees away)
- City still must pay off current plan liabilities and may have to shorten amortization period, thereby increasing cost in the short-term
- Lose premium tax revenues immediately
- State legislature sets benefits and contributions (i.e., City loses control of benefits and contributions)

Legal note: The FRS statute requires that when a city joins FRS, all active members of the city pension plan be given an opportunity to individually elect to join FRS or continue participating in the city plan. The city would not be able to force non-vested employees to join FRS. It is possible to achieve this result by freezing benefits under the city plan for non-vested employees before joining FRS, but this could lead to Social Security issues. These issues are probably resolvable, but would be complicated to work out. The recommended approach to implement this option is to join FRS for new hires, while providing current employees with the option to elect either to stay in the city plan or to join FRS. Future benefit accruals under the city plan could be reduced to encourage more current employees to move to FRS.

The BAC requested that this option be evaluated separately based on the option being applied to:

A. New employees, and
B. Non-vested existing employees

Benefit	FRS Benefit levels *
Multiplier	3.0% (90% after 30 yrs)
Norm. Ret. Date	Age 60 w/8 yrs or 30 YOS or Age 57 w/30 Yrs including military
Final Avg. Comp.	High 8
COLA	None
DROP	5 yrs/1.3%
Share Plan	None
Employee Cost	3%
City Cost	19.5%
Premium Tax	No
Total Cost	22.5%
Social Security	Yes

* Changes implemented 7/1/11 subject to litigation

Results:

This option results in a normal cost equivalent to approximately 25 percent of projected payroll, with a net present value of savings of approximately $22 million for only new employees and approximately $51 million for both, new and non-vested employees over the next 30 years.

II. Defined Contribution + Social Security equivalent contribution

This option eliminates the City's risk for any future benefits earned. The option could be implemented by participating in social security and having an additional defined contribution component, that together total to 24 percent as explained below; or by a defined contribution of 24 percent.

Issues to Consider:

- Predictable employer costs – this is the standard pension in the private sector.
- City does not bear investment risk – however, employees bear all risk, a particular concern since if the City does not participate in Social Security under this option
- Appeals to younger, mobile employees
- Portability – defined contribution account balance may be "rolled over" to an IRA or other retirement plan with another employer
- Lower administrative costs
- No actuarial liabilities - Employees bear investment risk and reward
- Possible that defined contribution benefits will run out while employee is still alive
- No inflation protection (Retiree COLA)
- Loss of premium tax revenues for Fire and Police Plans
- Investment costs are higher for individual employees than for a pension plan
- Benefit would have to exceed Social Security to be competitive

The amount of the City's annual required contribution would be equivalent to the FRS amount of 17 percent employer contribution for the FRS investment plan for high risk employees, plus an additional seven (7) percent for a Social Security equivalent, thus representing a total employer contribution of 24 percent, along with an employee contribution of three (3) percent plus a Social Security equivalent of approximately six (6) percent, for a total employee contribution of nine (9) percent.

The BAC requested that this option be evaluated separately based on the option being applied to:

A. New employees, and
B. Non-vested existing employees

Results:

This option is designed to be similar in cost to FRS and thus results in a normal cost equivalent to approximately 25 percent of projected payroll, with a net present value of savings of approximately $22 million for only new employees and approximately $51 million for both, new and non-vested employees over the next 30 years.

III. Hybrid Plans

These options reduce but do not fully eliminate the City's risk for any future benefits earned.

Issues to Consider:

- Reduced cost over time
- Sharing of risk between City and employees
- Defined benefit base plan – guaranteed benefit
- Defined contribution plan on top of defined benefit plan
- Continuation of premium tax revenues for Fire and Police Plans, if requirements of F.S. 175 and 185 are met

The BAC requested that this option be evaluated separately based on the option being applied to:

1. New employees, and
2. Non-vested existing employees

A. Replace one-half (1/2) of the multiplier (1 and ½ percent for the first 20 years and 2 percent thereafter), with a defined contribution plan that provides matching requirements based on an actuarially equivalent value. The normal cost as of the 10/1/10 valuation was 32.59 percent, resulting in an actuarially equivalent value of 16.3 percent as the City's contribution.

The employees would continue to have a defined benefit with a multiplier of 1 and ½ percent for the first 20 years and 2 percent thereafter.

B. Replace one third of the multiplier (1 percent for the first 20 years and 1 and 1/3 percent thereafter) with a defined contribution plan that provides matching requirements based on an actuarially equivalent value. The normal cost as of the 10/1/10 valuation was 32.59 percent, resulting in an actuarially equivalent value of 10.86 percent as the City's contribution.

   The employees would continue to have a defined benefit with a multiplier of 2 percent for the first 20 years and 2 and 2/3 percent thereafter.

C. Provide a defined benefit component equivalent to the minimum benefits for Police and Fire to receive premium taxes from the State as defined by F.S. Chapter175/185 (see Option V for additional details) and a defined contribution component so that the City's total normal costs are similar to FRS, resulting in a defined contribution component of 17.46 percent funded by the City.

D. Provide a defined benefit component equivalent to the minimum benefits for Police and Fire to receive Premium Taxes from the State as defined by F.S. Chapter175/185 (see Option V for additional details) and a defined contribution component of 12.46 percent funded by the City (with employees providing a 5% contribution to the defined benefit plan and a matching contribution of 5 percent to the defined contribution component). The amount of employee match for the defined contribution plan can be determined in collective bargaining negotiations, as it will not impact the City's cost.

Results:

Options A and B are designed to simply be a substitution of defined benefits with defined contributions without significantly impacting cost but substantially reducing risk, therefore the cost impacts for these are minimal. . In other words, the results are practically the same as the current defined benefit plan, but the risk is eliminated.

Options C and D result in a range of normal cost equivalents that range between 20 and 25 percent of projected payroll, with a net present value savings over 30 years ranging between $18 million and $37 million if applied to new employees only; and between $43 million and $74 million if applied to both, new and non-vested current employees.

IV. Changes to the Existing Pension Plan - Past Service/Future Service Approach With a Combined Benefit):

Issues to Consider:

- Reduced cost over time (savings more significant if changes are made for all employees)
- Can be designed to keep premium tax revenues – but requires agreement of union
- Does nothing to deal with the risks the City assumes

Potential items were previously identified by the City's Actuary as being the most significant drivers of cost proposed for either:

1. New employees and those employees who have not yet vested in the retirement plan (less than 10 years of service); and
2. All employees who have not yet reached normal retirement age (Rule of 70).

    A. Multiplier: Reduce to 3 percent (consistent with FRS but, FRS also has Social Security);
    B. Multiplier: Reduce to 2 percent (consistent with F.S. 175/185 minimum);
    C. Final Average Monthly Earnings (FAME): Highest 5 of last 10 years (consistent with F.S. 175/185 minimum and FRS);
    D. Retiree cost of living adjustment (COLA): Reduce to 1.5 percent (consistent with general employees hired after 10/1/10 in the General Employee Retirement Plan - MBERP);
    E. Retiree COLA: Reduce to 0 percent (for prospectively earned benefits consistent with FRS);
    F. Change Normal Retirement Age: Age 55 with 10 years of service or age 52 with 25 years of service (consistent with F.S. 175/185 minimum and FRS); Beneficiaries: Change benefit to be consistent with FRS benefit; and
    G. Employee Contributions: Increase by 2 percent.

Results:

The costs impacts vary significantly for each of the potential components as shown below.

	Normal Cost	**Net Present Value Savings (in $millions over 30 years)**	
		New Employees	All Employees Except Those at Normal Retirement Age
A	28.67%	19.5	34.4
B	19.41%	77.1	107.9
C	29.17%	14.4	19.8
D	28.10%	23.7	45.2
E	23.88%	53.7	100.6
F	27.20%	29.8	61.6
G	28.97%	17.1	30.1
H	29.57%	11.5	15.7

Further, some of the options are mutually exclusive, and the impacts of all options are inter-related. Any recommendations will therefore need to be evaluated as a group in order to determine cost impacts.

V. Changes to the Existing Pension Plan – "Freeze" Current Plan Benefits for Past Accruals and Create a "Minimum" Benefits Plan for Future Service

This option reflects the minimum benefits required to receive State premium taxes as defined in Florida Statutes 175 and 185 (excluding employees who have already reached normal retirement age). This is essentially the most a City can save while still continuing to receive premium taxes. This option "freezes" the past service benefits based on current salaries. The accrued benefits do not continue to grow as salaries increase.

- Retiree COLA : Reduce to 0 percent (for benefits based on future service consistent with FRS);
- Multiplier: Reduce to 2 percent per year for future service;
- FAME: Highest 5 of last 10 years
- Change Normal Retirement Age: Age 55 with 10 years of service or age 52 with 25 years of service;
- Share Plan: Use 100% of future Chapter175/185 premium tax revenue towards benefits provided by the defined benefit pension plan (requires union agreement);

- Beneficiaries: Change automatic spousal benefit to 10 year certain benefit, and allow members to purchase other survivor options; and
- Employee Contribution: Reduced from 10 percent to 5 percent.

Results:

This option results in a normal cost equivalent to approximately 12 percent of projected payroll, with a net present value of savings of approximately $167 million if applied to all new and existing employees who have not yet reached normal retirement age, over 30 years. It is important to note that this is a low normal cost for a plan for high-risk employees that do not include Social Security.

VI. Changes to Existing Plan– Package of Items Incorporated Into the Collective Bargaining Agreements in 2010: (See list below)

- All Employees
    - No retiree COLA for at least 2 years of 5-Year Deferred Retirement Option Plan (DROP) period (Years 3 and 4 of DROP) for participants entering DROP after 9/1/12; and
    - Off-duty compensation pensionable and Sick Leave sell back up to the overtime compensation cap.
- New Employees Only
    - Minimum retirement age of 48 for Rule of 70;
    - Pushed back the increase in multiplier from 3 percent to 4 percent so that, the multiplier increase from 3 percent to 4 percent occurs in year 20 instead of year 15;
    - FAME increased from 2 to 3 years; and
- Retiree COLA decreased from 2.5 percent to 1.5 percent.

Results:

This option results in a normal cost equivalent to approximately 23 percent of projected payroll, with a net present value of savings of approximately $33 million for new employees, over 30 years. In 2010, Buck Consultants, the actuary for the Fire and Police Pension Plan, estimated the impacts to existing employees to be minimal.

Additional Policy Changes

The following were additional policy changes discussed by the Committee that could be implemented without the need for additional actuarial analyses:

- Use 100% of 175/185 share plan monies towards benefits provided by the defined benefit pension plan (requires union agreement).
- Eliminate the provision that allows for transfer of years of service from Miami Beach Employee Retirement Plan (MBERP) to Fire and Police Pension Plan (proposed by Fire and Police Pension Plan Administration).
- Change purchase of service provisions to be based on full actuarial costs (Government Finance Officers Best Practice and Advisory Papers on Pension Reform).
- Eliminate the use of sick and vacation hours that are currently used to increase "pensionable pay" (SB 1128 required by 2011).
- Reduce the amount of annual overtime pay included in pensionable earnings to a maximum of 300 hours (SB 1128 required by 2011).

CITY OF MIAMI BEACH
BUDGET ADVISORY COMMITTEE: PENSION REFORM
SUMMARY COST IMPACTS OF POTENTIAL FIRE AND POLICE PENSION OPTIONS

		Option I		OPTION II	
	CURRENT PLAN	FRS DB + SS		DC equiv to FRS Inv Plan - ELIMINATES RISK	
Employees to Which Applicable	All	IA. New	IB. New/Non Vested	IIA. New	IIB. New/Non Vested
Multiplier	3 first 15 years, then 4%	3%	3%	0	0
Final Average Monthly Earnings (FAME) Calc - in years	2	8	8	0	0
Retiree COLA	2.5%	0	0	0	0
Normal Retirement Age	Rule of 70	55&6 special risk YOS or 52&25 special risk YOS + military or 25 special risk YOS regardless of age	55&6 special risk YOS or 52&25 special risk YOS + military or 25 special risk YOS regardless of age	As Defined in the Plan	As Defined in the Plan
% City Contribution to Social Security	0.00%	6.25%	6.25%	0.00%	0.00%
% City Contribution to DB or DC + Social Security	0.00%	17.75%	17.75%	24.00%	24.00%
Share Plan DC (See Note Below)	Yes	No	No	No	No
Social Security	No	Yes	Yes	TBD	TBD
Beneficiaries	75% Joint & Survivor with 120 months guarenteed	Life Annuity	Life Annuity	Not Applicable	Not Applicable
Employee Contribution**	10%	3%	3%	10%	10%
Year 1 $Amount of City Contribution	35,439,063	35,559,519	33,612,185	35,559,519	33,612,185
Year 31 $ Amount of City Contribution	42,349,557	34,156,148	34,156,148	34,156,148	34,156,148
Yr 1 % of Payroll	74.14%	74.39%	70.32%	74.39%	70.32%
Yr 31% of Payroll	31.57%	25.46%	25.46%	25.46%	25.46%
City Year 1 Savings/(Cost)	N/A	(120,456)	1,826,878	(120,456)	1,826,878
City 30 NPV Savings/(Cost)	N/A	22,030,653	51,225,419	22,030,653	51,225,419

Notes:
All analyses by Actuarial Concepts Inc. based onf 10/1/10 data
DC = Defined Contribution
DB = Defined Benefit, all DB plans assume 1.46% admin costs
NR = Normal Retirement Age
All DB optoions are based on an assumed rate of return of 8.2%

<u>Share Plans/Use of State Authorized "Premium Taxes"</u>
Chapters 175 and 185, F.S. provide for a rebate of the state excise tax on property and casualty insurance premiums to cities with local Police and Fire pension plans
In 2008 the City received $2.3 million in premium tax revenues.

But nearly all of this money went to separate fire and police "share plans," <u>not</u> to the City's pension fund for firefighters and police officers ($1.5 million to the fire share plan and $500K to the police share plan).

Share plan distributions to retiring firefighters typically exceed $100,000. Share plan distributions to retiring police officers are typically in the $50,000 to $60,000 range.

* FRS rates assume 4% increase for future - may change - litigation pending

** Employee Contributions in DC Option II may be changed without impact to City contribution requirements - reduced match for DC

CITY OF MIAMI BEACH
BUDGET ADVISORY COMMITTEE: PENSION REFORM
SUMMARY COST IMPACTS OF POTENTIAL FIRE AND POLICE PENSION OPTIOI

		OPTION IIIA		OPTION IIIB		OPTION IIIC		OPTION IIID	
	CURRENT PLAN	Hybrid - Replaces 1/2 of DB with DC - REDUCES RISK		Hybrid - Replaces 1/3 of DB with DC - REDUCES RISK		Hybrid - Minimum DB Benefits Per State Statute + 17.46% DC - REDUCES RISK		Hybrid - Minimum DB Benefits Per State Statute + 12.46% DC - REDUCES RISK	
Employees to Which Applicable	All	IIIA1. New	IIIA2. New/Non Vested	IIIB1. New	IIIB2. New/Non Vested	IIIC1. New	IIIC2. New/Non Vested	IIID1. New	IIID2. New/Non Vested
Multiplier	3 first 15 years, then 4%	1 1/2 first 15 years, then 2%	1 1/2 first 15 years, then 2%	2% first 15 years, then 2.66%	2% first 15 years, then 2.66%	2%	2%	2%	2%
Final Average Monthly Earnings (FAME) Calc - in years	2	2	2	2	2	Highest 5 of last 10	Highest 5 of last 10	Highest 5 of last 10	Highest 5 of last 10
Retiree COLA	2.5%	2.5%	2.5%	2.5%	2.5%	0.0%	0.0%	0.0%	0.0%
Normal Retirement Age	Rule of 70	Rule of 70	Rule of 70	Rule of 70	Rule of 70	55&10 or 52&25	55&10 or 52&25	55&10 or 52&25	55&10 or 52&25
% City Contribution to Social Security	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% City Contribution to DB or DC + Social Security	0.00%	16.00%	16.00%	10.00%	10.00%	16.00%	16.00%	11.00%	11.00%
Share Plan DC (See Note Below)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Social Security	No	No	No	No	No	No	No	No	No
Beneficiaries	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed	75% Joint & Survivor with 120 months guarenteed
Employee Contribution**	10%	10%	10%	10%	10%	5%	5%	5%	5%
Year 1 $Amount of City Contribution	35,439,063	35,439,063	35,718,266	35,439,063	35,672,176	35,439,063	33,844,490	35,439,063	32,960,590
Year 31 $ Amount of City Contribution	42,349,557	43,354,448	43,354,448	43,204,184	43,204,184	34,139,547	34,139,547	27,431,335	27,431,355
Yr 1 % of Payroll	74.14%	74.14%	74.72%	74.14%	74.63%	74.14%	70.80%	74.14%	68.96%
Yr 31% of Payroll	31.57%	32.31%	32.31%	32.20%	32.20%	25.45%	25.45%	20.45%	20.45%
City Year 1 Savings/(Cost)	N/A	-	(279,203)	-	(233,113)	-	1,594,573	-	2,478,473
City 30 NPV Savings/(Cost)	N/A	(2,839,080)	(7,678,193)	(2,414,545)	(4,218,739)	17,851,123	43,128,414	36,803,593	74,067,418

Notes:
All analyses by Actuarial Concepts Inc. based onf 10/1/10 data
DC = Defined Contribution
DB = Defined Benefit, all DB plans assume 1.46% admin costs
NR = Normal Retirement Age
All DB optoions are based on an assumed rate of return of 8.2%

<u>Share Plans/Use of State Authorized "Premium Taxes"</u>
Chapters 175 and 185, F.S. provide for a rebate of the state excise tax on property and casualty insurance premiums to cities with local Police and Fire pension plans
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Share plan distributions to retiring firefighters typically exceed $100,000.
Share plan distributions to retiring police officers are typically in the $50,000 to $60,000 range.

** Employee Contribitions in Hybrid Plan IIIC and IID may be rincreased without impacting City cost

CITY OF MIAMI BEACH
BUDGET ADVISORY COMMITTEE: PENSION REFORM
SUMMARY COST IMPACTS OF POTENTIAL FIRE AND POLICE PENSION OPTIOI

		OPTION IV CHANGES TO EXISTING PLAN							
	CURRENT PLAN	Option IVA 3% Multiplier All Years		Option IVB 2% Multiplier All Years		Option IVC Change FAME to high 5		Option IVD Change Existing COLA to 1.5%	
Employees to Which Applicable	All	IVA1. New and Non-Vested	IVA2. All except NR	IVB1. New and Non-Vested	IVB2. All except NR	IVC1. New and Non-Vested	IVC2. All except NR	IVD1. New and Non-Vested	IVD2. All except NR
Multiplier	3 first 15 years, then 4%								
Final Average Monthly Earnings (FAME) Calc - in years	2								
Retiree COLA	2.5%								
		No Other Changes		No Other Changes		No Other Changes		No Other Changes	
Normal Retirement Age	Rule of 70								
% City Contribution to Social Security	0.00%								
% City Contribution to DB or DC + Social Security	0.00%								
Share Plan DC (See Note Below)	Yes								
Social Security	No								
Beneficiaries	75% Joint & Survivor with 120 months guarenteed								
Employee Contribution**	10%	10%	10%	10%	10%	10%	10%	10%	10%
Year 1 $Amount of City Contribution	35,439,063	34,786,003	33,593,541	33,205,899	30,523,193	35,002,758	34,552,299	34,636,516	32,932,490
Year 31 $ Amount of City Contribution	42,349,557	38,464,161	38,464,161	26,043,236	26,043,236	39,137,666	39,137,666	37,694,058	37,694,058
Yr 1 % of Payroll	74.14%	72.77%	70.28%	69.47%	63.86%	73.23%	72.29%	72.46%	68.90%
Yr 31% of Payroll	31.57%	28.67%	28.67%	19.41%	19.41%	29.17%	29.17%	28.10%	28.10%
City Year 1 Savings/(Cost)	N/A	653,060	1,845,522	2,233,164	4,915,870	436,305	886,764	802,547	2,506,573
City 30 NPV Savings/(Cost)	N/A	19,448,159	34,362,906	77,134,350	107,938,123	14,415,514	19,762,322	23,737,634	45,190,053

Notes:
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CITY OF MIAMI BEACH
BUDGET ADVISORY COMMITTEE: PENSION REFORM
SUMMARY COST IMPACTS OF POTENTIAL FIRE AND POLICE PENSION OPTIOI

		OPTION IV CHANGES TO EXISTING PLAN (CONTINUED)							
	CURRENT PLAN	Option IVE Change Existing Plan to No COLA		Option IVF Change Existing Plan to 55&10 or 52&25		Option IVG Change Existing Plan to Normal Form of Life Annuity		Option IVH Change Existing Plan Increase Employee Contribution by 2%	
Employees to Which Applicable	All	IVE1. New and Non-Vested	IVE2. All except NR	IVF1. New and Non-Vested	IVF2. All except NR	IVG1. New and Non-Vested	IVG2. All except NR	IVH1. New and Non-Vested	IVH2. All except NR
Multiplier	3 first 15 years, then 4%								
Final Average Monthly Earnings (FAME) Calc - in years	2								
Retiree COLA	2.5%								
		No Other Changes		No Other Changes		No Other Changes		No Other Changes	
Normal Retirement Age	Rule of 70								
% City Contribution to Social Security	0.00%								
% City Contribution to DB or DC + Social Security	0.00%								
Share Plan DC (See Note Below)	Yes								
Social Security	No								
Beneficiaries	75% Joint & Survivor with 120 months guarenteed								
Employee Contribution**	10%	10%	10%	10%	10%	10%	10%	12%	12%
Year 1 $Amount of City Contribution	35,439,063	33,660,923	29,889,218	34,450,821	32,003,876	34,863,363	33,746,253	35,085,376	34,597,069
Year 31 $ Amount of City Contribution	42,349,557	32,040,378	32,040,378	36,487,922	36,847,922	38,868,451	38,868,451	39,666,273	39,666,273
Yr 1 % of Payroll	74.14%	70.42%	62.53%	72.07%	66.95%	72.94%	70.60%	73.40%	72.38%
Yr 31% of Payroll	31.57%	23.88%	23.88%	27.20%	27.20%	28.97%	28.97%	29.57%	29.57%
City Year 1 Savings/(Cost)	N/A	1,778,140	5,549,845	988,242	3,435,187	575,700	1,692,810	353,687	841,994
City 30 NPV Savings/(Cost)	N/A	53,673,164	100,633,984	29,833,132	61,555,116	17,096,883	30,067,071	11,477,082	15,672,414

Notes:
All analyses by Actuarial Concepts Inc. based onf 10/1/10 data
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CITY OF MIAMI BEACH
BUDGET ADVISORY COMMITTEE: PENSION REFORM
SUMMARY COST IMPACTS OF POTENTIAL FIRE AND POLICE PENSION OPTIOI

	CURRENT PLAN	OPTION V STATE STATUTE 175/185 Minimum Benefits	OPTION VI 2010 Contract Changes (New Employees - see footnote*** re existing employees)
Employees to Which Applicable	All		
Multiplier	3 first 15 years, then 4%	2%	3 first 20 years, then 4%
Final Average Monthly Earnings (FAME) Calc - in years	2	Highest 5 of last 10	3
Retiree COLA	2.5%	0%	1.5% Deferred to 1 year after DROP
Normal Retirement Age	Rule of 70	55&10 or 52&25	Rule of 70 - Minimum age of 48
% City Contribution to Social Security	0.00%	0.00%	0.00%
% City Contribution to DB or DC + Social Security	0.00%	0.00%	0.00%
Share Plan DC (See Note Below)	Yes	Yes	Yes
Social Security	No	No	No
Beneficiaries	75% Joint & Survivor with 120 months guarenteed	10 Year Certain and Life, thereafter annuity	75% Joint & Survivor with 120 months guarenteed
Employee Contribution**	10%	5%	10%
Year 1 $Amount of City Contribution	35,439,063	24,259,101	35,439,063
Year 31 $ Amount of City Contribution	42,349,557	30,858,185	30,722,497
Yr 1 % of Payroll	74.14%	50.75%	74.14%
Yr 31% of Payroll	31.57%	12.23%	22.90%
City Year 1 Savings/(Cost)	N/A	11,179,962	-
City 30 NPV Savings/(Cost)	N/A	167,331,205	32,849,516

Notes:
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DC = Defined Contribution
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NR = Normal Retirement Age
All DB optoions are based on an assumed rate of return of 8.2%

***Buck Consultant Estimated Impact for Existing Employees = $651,322 (in future) - $368,665 = $282,667

<u>Share Plans/Use of State Authorized "Premium Taxes"</u>
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APPENDICES

DRAFT REPORT

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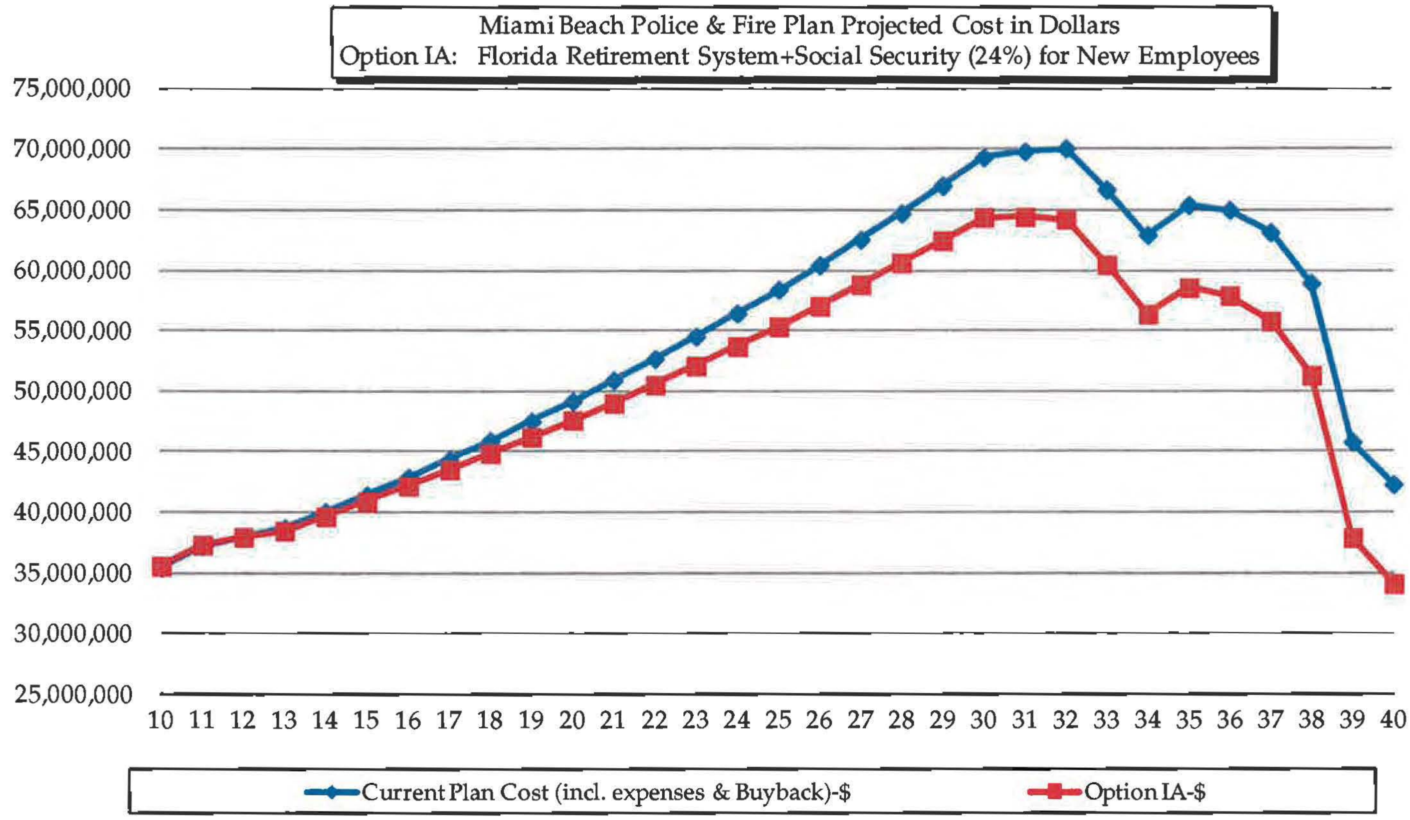
Section 1
Option IA: Florida Retirement System+Social Security (24%) for New Employees



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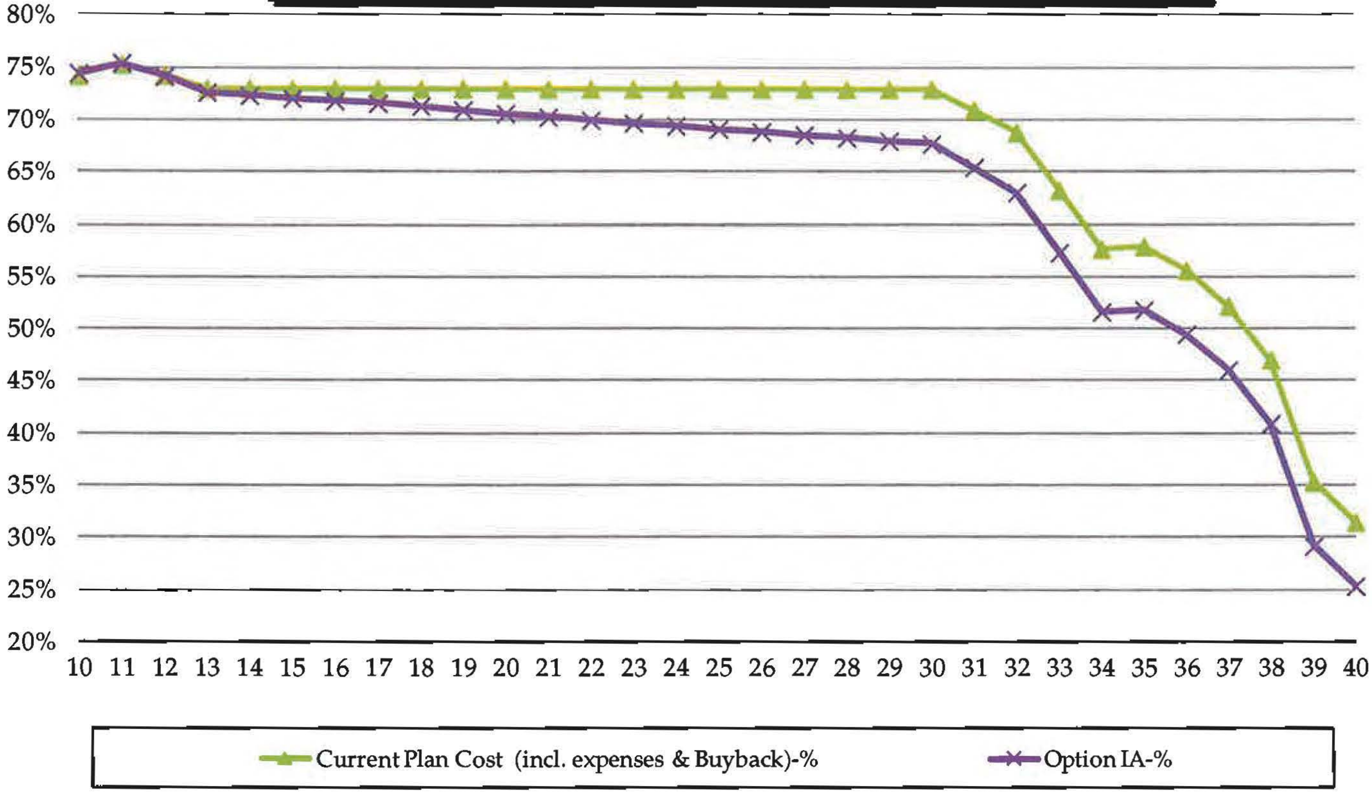

Actuarial Concepts

Option IA: Florida Retirement System+Social Security (24%) for New Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IA-$	Option IA-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,559,519	74.39%	(120,456)	(120,456)
2011	37,226,360	75.25%	37,293,728	75.38%	(67,368)	(62,262)
2012	37,981,309	74.18%	37,944,846	74.10%	36,463	31,146
2013	38,660,638	72.95%	38,468,359	72.59%	192,279	151,792
2014	40,013,760	72.95%	39,654,486	72.29%	359,274	262,130
2015	41,414,242	72.95%	40,893,091	72.03%	521,150	351,420
2016	42,863,740	72.95%	42,183,979	71.79%	679,761	423,636
2017	44,363,971	72.95%	43,518,681	71.56%	845,290	486,872
2018	45,916,710	72.95%	44,876,659	71.30%	1,040,051	553,652
2019	47,523,795	72.95%	46,224,799	70.96%	1,298,996	639,091
2020	49,187,128	72.95%	47,603,208	70.60%	1,583,920	720,213
2021	50,908,677	72.95%	49,031,793	70.26%	1,876,884	788,747
2022	52,690,481	72.95%	50,529,248	69.96%	2,161,233	839,410
2023	54,534,648	72.95%	52,105,048	69.70%	2,429,600	872,128
2024	56,443,360	72.95%	53,710,919	69.42%	2,732,441	906,503
2025	58,418,878	72.95%	55,347,114	69.11%	3,071,764	941,844
2026	60,463,539	72.95%	57,064,064	68.85%	3,399,475	963,331
2027	62,579,763	72.95%	58,835,864	68.59%	3,743,899	980,530
2028	64,770,054	72.95%	60,642,991	68.30%	4,127,064	998,965
2029	67,037,006	72.95%	62,479,597	67.99%	4,557,409	1,019,530
2030	69,383,301	72.95%	64,402,151	67.71%	4,981,151	1,029,875
2031	69,868,207	70.98%	64,461,469	65.48%	5,406,738	1,033,149
2032	70,122,087	68.82%	64,270,583	63.08%	5,851,504	1,033,398
2033	66,721,958	63.27%	60,489,234	57.36%	6,232,724	1,017,304
2034	62,987,707	57.71%	56,395,736	51.67%	6,591,972	994,400
2035	65,472,079	57.96%	58,601,035	51.88%	6,871,044	957,946
2036	65,058,318	55.65%	57,926,472	49.55%	7,131,846	918,953
2037	63,213,581	52.24%	55,823,595	46.13%	7,389,986	880,050
2038	58,980,901	47.09%	51,332,265	40.99%	7,648,636	841,823
2039	45,863,374	35.38%	37,947,036	29.27%	7,916,338	805,256
2040	42,349,557	31.57%	34,156,148	25.46%	8,193,410	770,277
					Total APV	22,030,653

Section 2
Option IB: Florida Retirement System+Social Security (24%) for New and Non-vested Existing Employees

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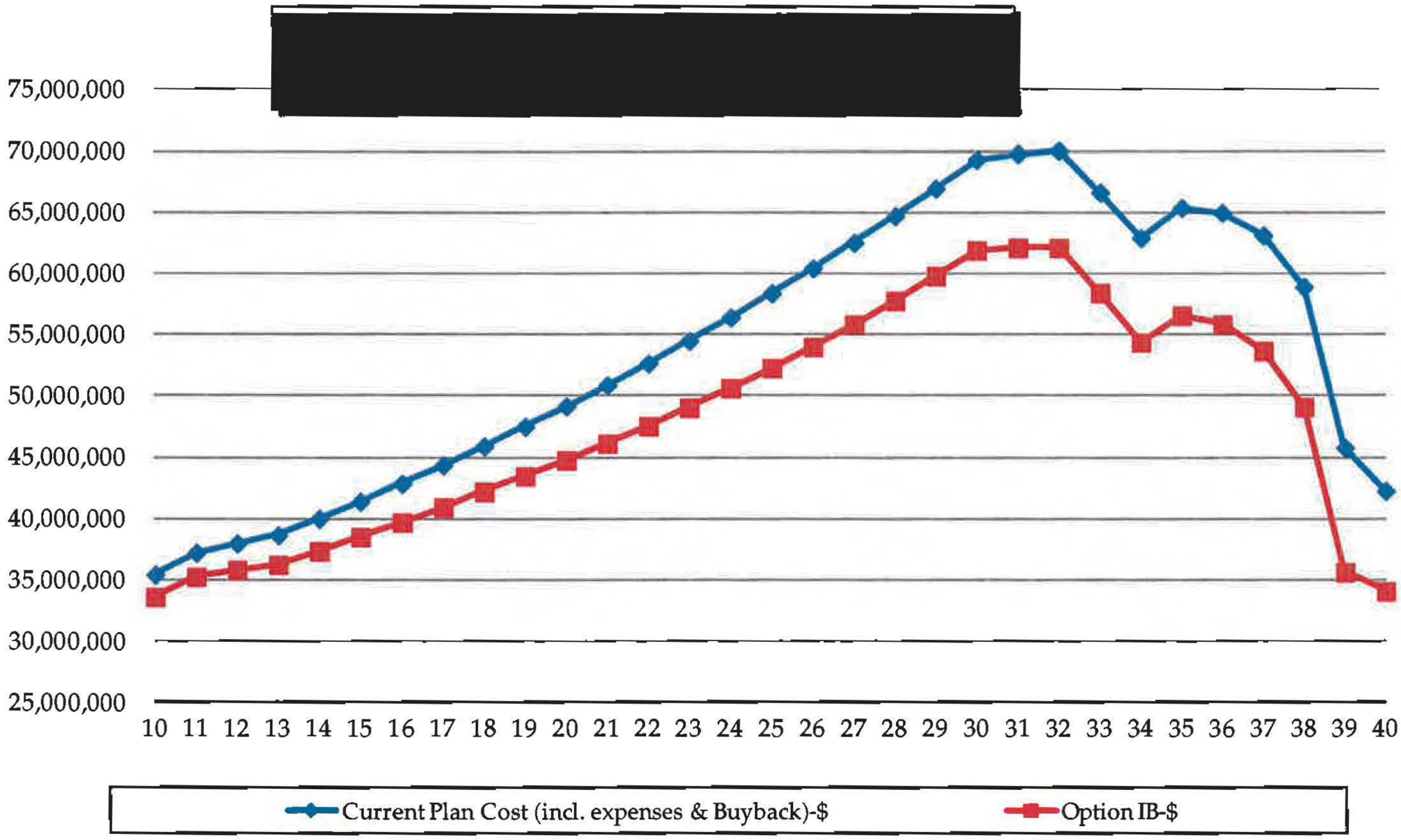

Actuarial Concepts

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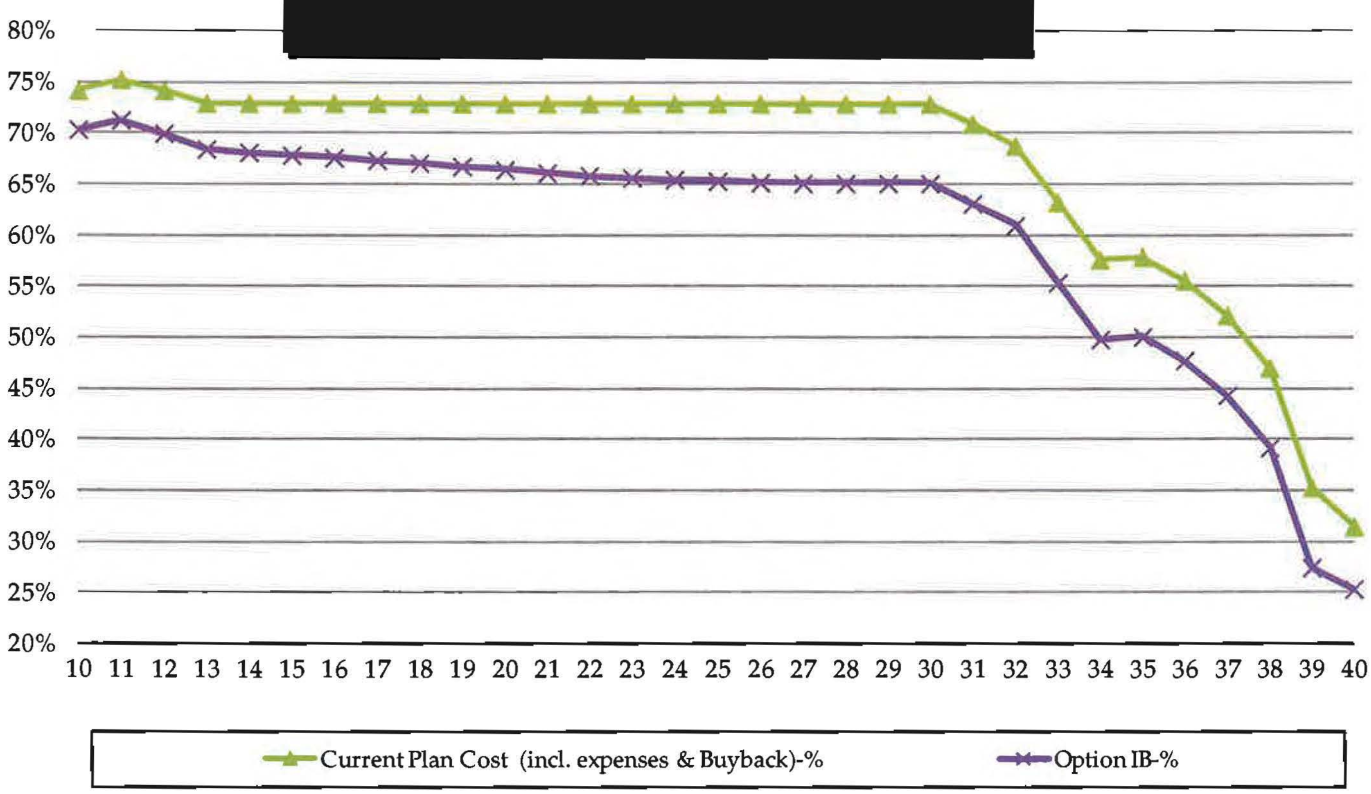
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Current Plan Cost (incl. expenses & Buyback)-%
Option IB-%

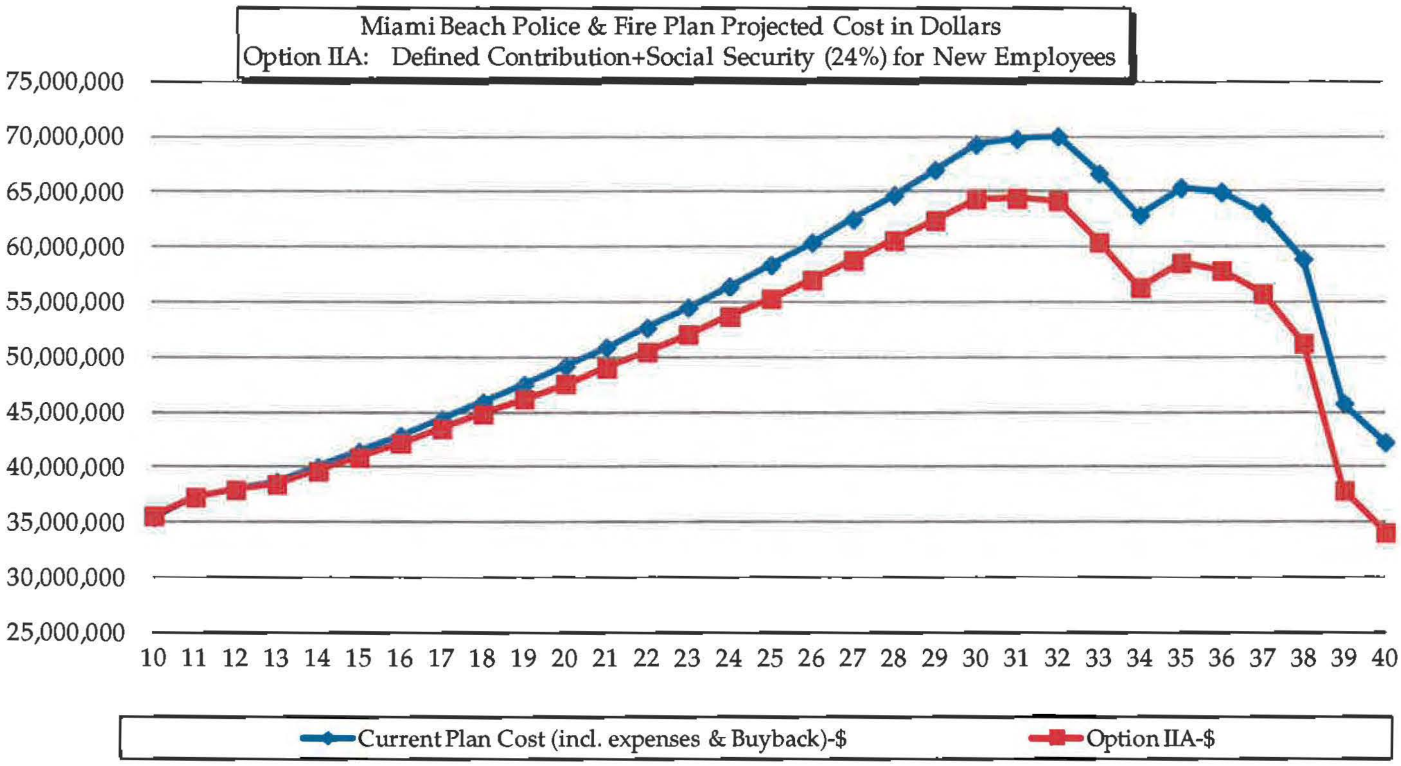
Option IB: Florida Retirement System+Social Security (24%) for
New and Non-vested Existing Employees

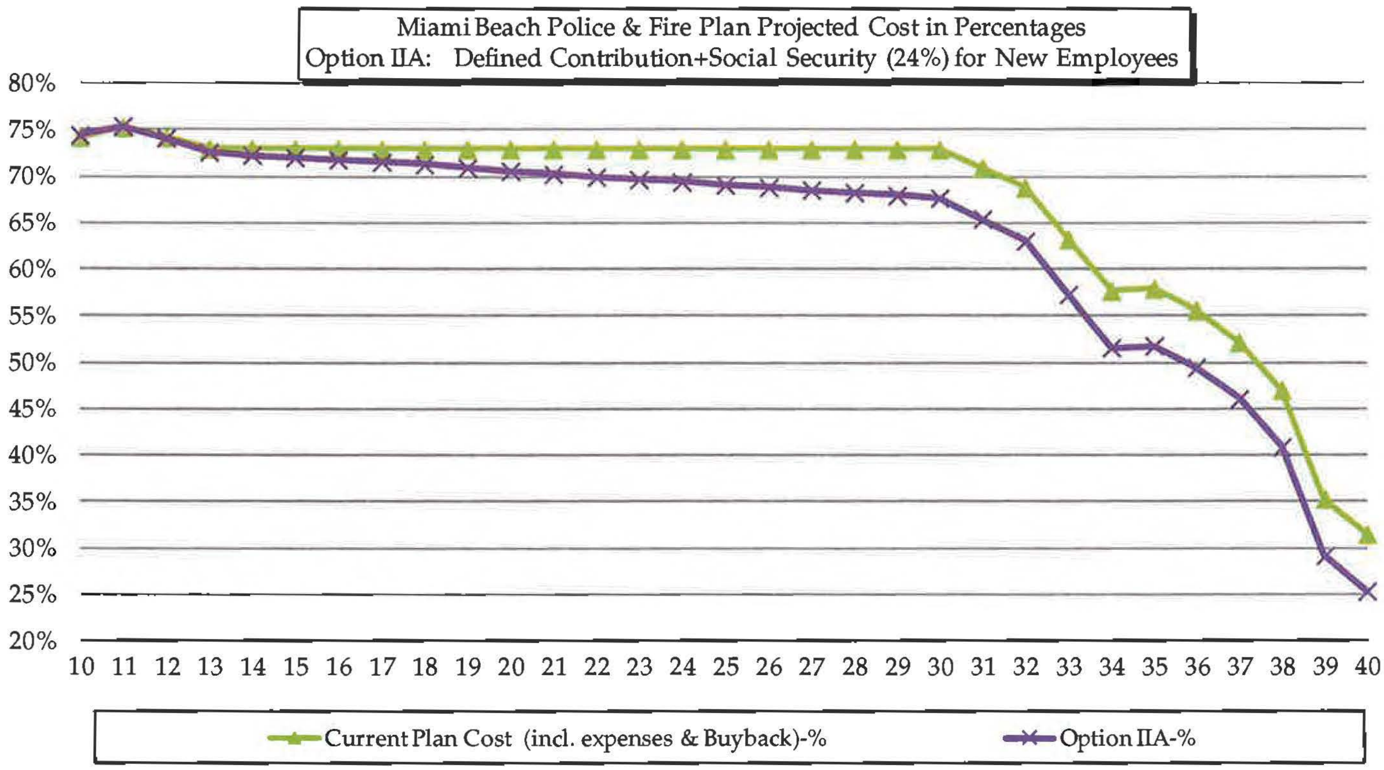
Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IB-$	Option IB-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	33,612,185	70.32%	1,826,879	1,826,879
2011	37,226,360	75.25%	35,258,369	71.27%	1,967,991	1,818,846
2012	37,981,309	74.18%	35,820,049	69.96%	2,161,260	1,846,088
2013	38,660,638	72.95%	36,260,618	68.42%	2,400,020	1,894,668
2014	40,013,760	72.95%	37,361,347	68.11%	2,652,413	1,935,228
2015	41,414,242	72.95%	38,512,858	67.84%	2,901,384	1,956,451
2016	42,863,740	72.95%	39,715,055	67.59%	3,148,685	1,962,301
2017	44,363,971	72.95%	40,962,964	67.36%	3,401,007	1,958,920
2018	45,916,710	72.95%	42,231,195	67.09%	3,685,515	1,961,914
2019	47,523,795	72.95%	43,496,664	66.77%	4,027,131	1,981,301
2020	49,187,128	72.95%	44,794,698	66.43%	4,392,429	1,997,249
2021	50,908,677	72.95%	46,146,149	66.12%	4,762,528	2,001,417
2022	52,690,481	72.95%	47,572,655	65.86%	5,117,826	1,987,735
2023	54,534,648	72.95%	49,080,189	65.65%	5,454,458	1,957,930
2024	56,443,360	72.95%	50,672,140	65.49%	5,771,221	1,914,635
2025	58,418,878	72.95%	52,312,751	65.32%	6,106,127	1,872,220
2026	60,463,539	72.95%	54,035,571	65.19%	6,427,968	1,821,535
2027	62,579,763	72.95%	55,867,606	65.13%	6,712,156	1,757,918
2028	64,770,054	72.95%	57,818,725	65.12%	6,951,329	1,682,586
2029	67,037,006	72.95%	59,842,380	65.12%	7,194,626	1,609,497
2030	69,383,301	72.95%	61,936,864	65.12%	7,446,438	1,539,584
2031	69,868,207	70.98%	62,161,144	63.15%	7,707,063	1,472,707
2032	70,122,087	68.82%	62,145,277	60.99%	7,976,810	1,408,736
2033	66,721,958	63.27%	58,465,960	55.44%	8,255,999	1,347,543
2034	62,987,707	57.71%	54,442,749	49.88%	8,544,959	1,289,008
2035	65,472,079	57.96%	56,628,047	50.13%	8,844,032	1,233,016
2036	65,058,318	55.65%	55,904,745	47.82%	9,153,573	1,179,456
2037	63,213,581	52.24%	53,739,633	44.41%	9,473,948	1,128,223
2038	58,980,901	47.09%	49,175,365	39.26%	9,805,536	1,079,215
2039	45,863,374	35.38%	35,714,644	27.55%	10,148,730	1,032,336
2040	42,349,557	31.57%	34,156,148	25.46%	8,193,410	770,277
					Total APV	51,225,419

Actuarial Concepts

Section 3

Option IIA: Defined Contribution+Social Security (24%) for New Employees

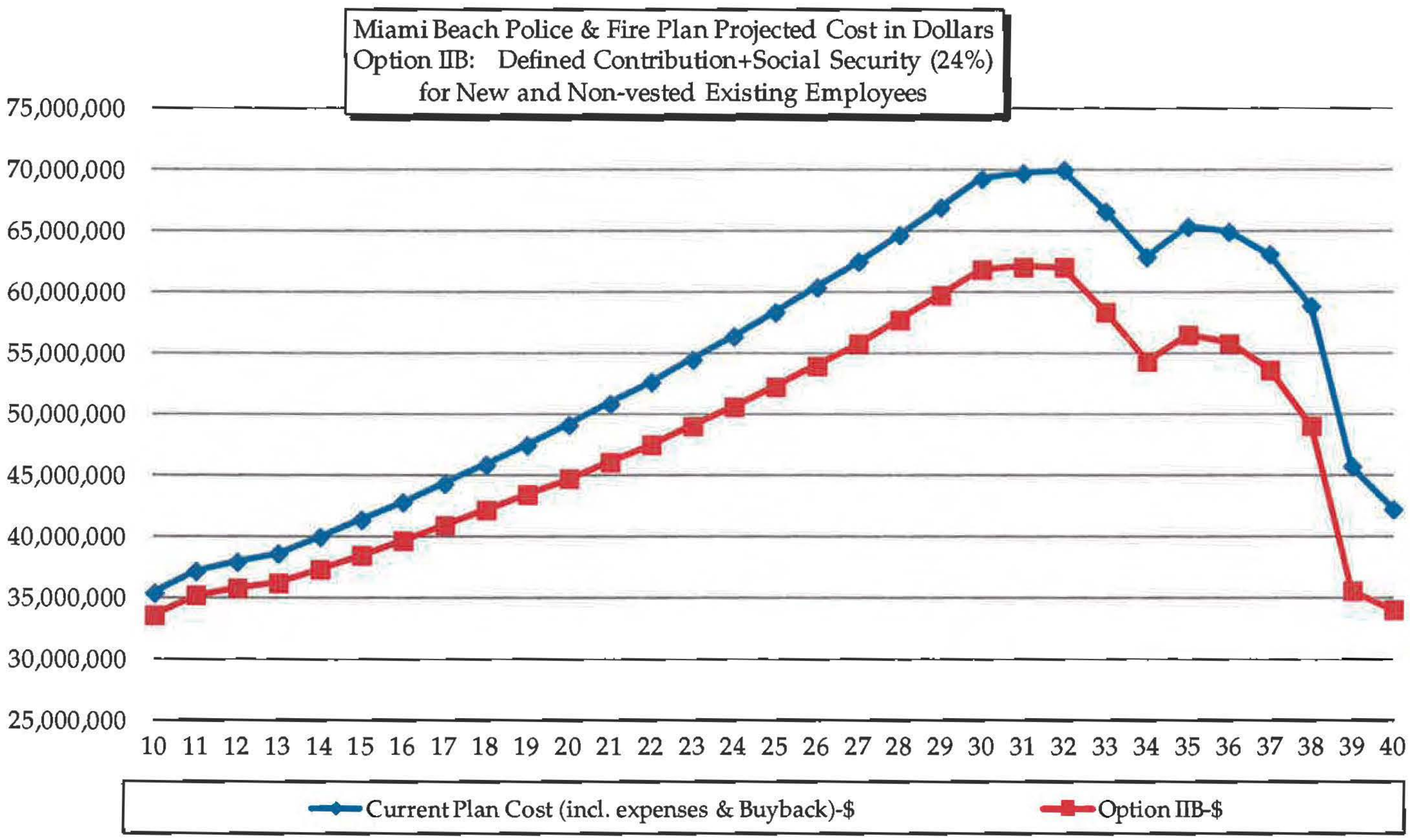



Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IIA: Defined Contribution+Social Security (24%) for New Employees
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IIA-%

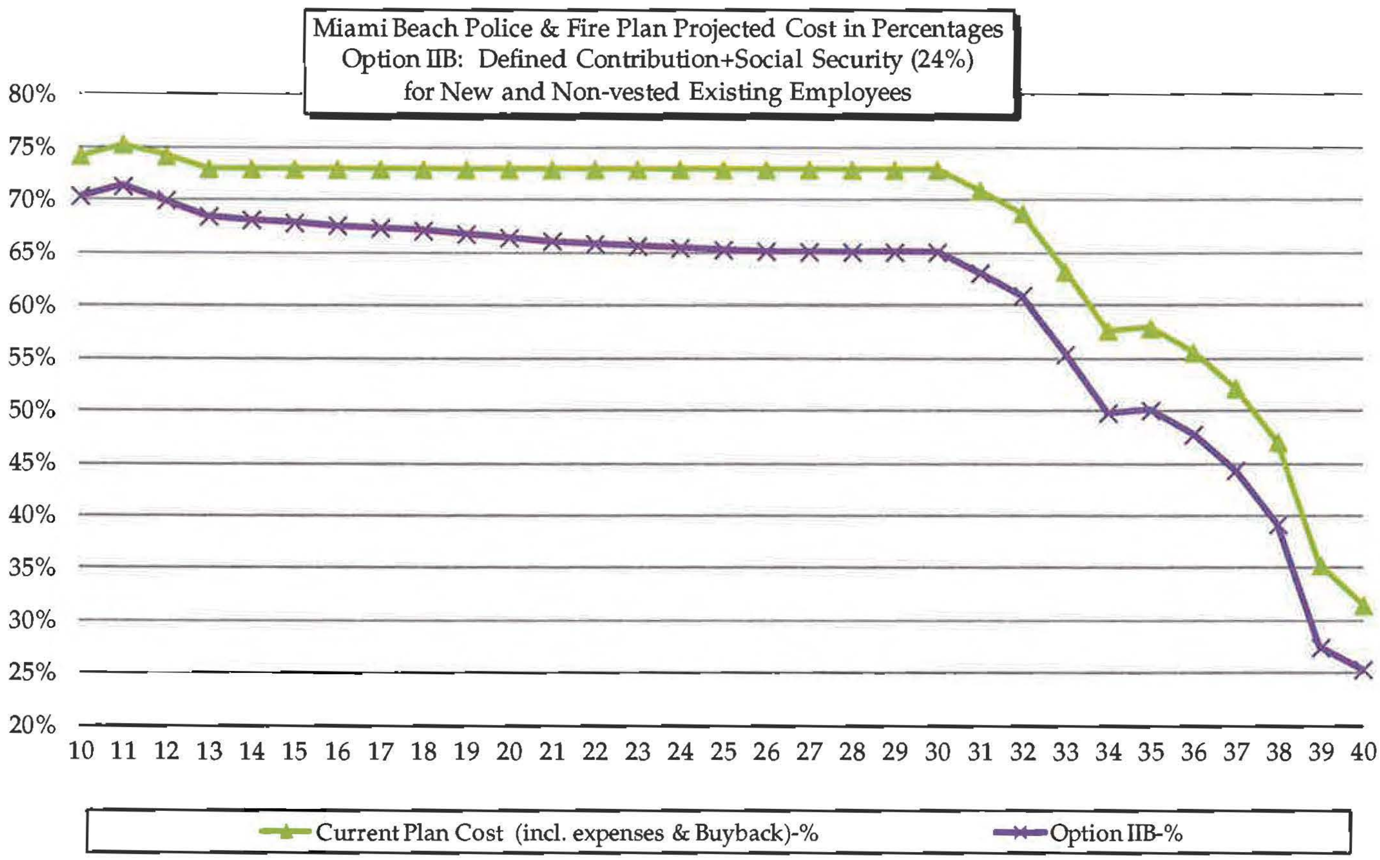
Option IIA: Defined Contribution+Social Security (24%) for New Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIA-$	Option IIA-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,559,519	74.39%	(120,456)	(120,456)
2011	37,226,360	75.25%	37,293,728	75.38%	(67,368)	(62,262)
2012	37,981,309	74.18%	37,944,846	74.10%	36,463	31,146
2013	38,660,638	72.95%	38,468,359	72.59%	192,279	151,792
2014	40,013,760	72.95%	39,654,486	72.29%	359,274	262,130
2015	41,414,242	72.95%	40,893,091	72.03%	521,150	351,420
2016	42,863,740	72.95%	42,183,979	71.79%	679,761	423,636
2017	44,363,971	72.95%	43,518,681	71.56%	845,290	486,872
2018	45,916,710	72.95%	44,876,659	71.30%	1,040,051	553,652
2019	47,523,795	72.95%	46,224,799	70.96%	1,298,996	639,091
2020	49,187,128	72.95%	47,603,208	70.60%	1,583,920	720,213
2021	50,908,677	72.95%	49,031,793	70.26%	1,876,884	788,747
2022	52,690,481	72.95%	50,529,248	69.96%	2,161,233	839,410
2023	54,534,648	72.95%	52,105,048	69.70%	2,429,600	872,128
2024	56,443,360	72.95%	53,710,919	69.42%	2,732,441	906,503
2025	58,418,878	72.95%	55,347,114	69.11%	3,071,764	941,844
2026	60,463,539	72.95%	57,064,064	68.85%	3,399,475	963,331
2027	62,579,763	72.95%	58,835,864	68.59%	3,743,899	980,530
2028	64,770,054	72.95%	60,642,991	68.30%	4,127,064	998,965
2029	67,037,006	72.95%	62,479,597	67.99%	4,557,409	1,019,530
2030	69,383,301	72.95%	64,402,151	67.71%	4,981,151	1,029,875
2031	69,868,207	70.98%	64,461,469	65.48%	5,406,738	1,033,149
2032	70,122,087	68.82%	64,270,583	63.08%	5,851,504	1,033,398
2033	66,721,958	63.27%	60,489,234	57.36%	6,232,724	1,017,304
2034	62,987,707	57.71%	56,395,736	51.67%	6,591,972	994,400
2035	65,472,079	57.96%	58,601,035	51.88%	6,871,044	957,946
2036	65,058,318	55.65%	57,926,472	49.55%	7,131,846	918,953
2037	63,213,581	52.24%	55,823,595	46.13%	7,389,986	880,050
2038	58,980,901	47.09%	51,332,265	40.99%	7,648,636	841,823
2039	45,863,374	35.38%	37,947,036	29.27%	7,916,338	805,256
2040	42,349,557	31.57%	34,156,148	25.46%	8,193,410	770,277
					Total APV	22,030,653

Section 4
Option IIB: Defined Contribution+Social Security (24%) for New and Non-vested Existing Employees



Actuarial Concepts

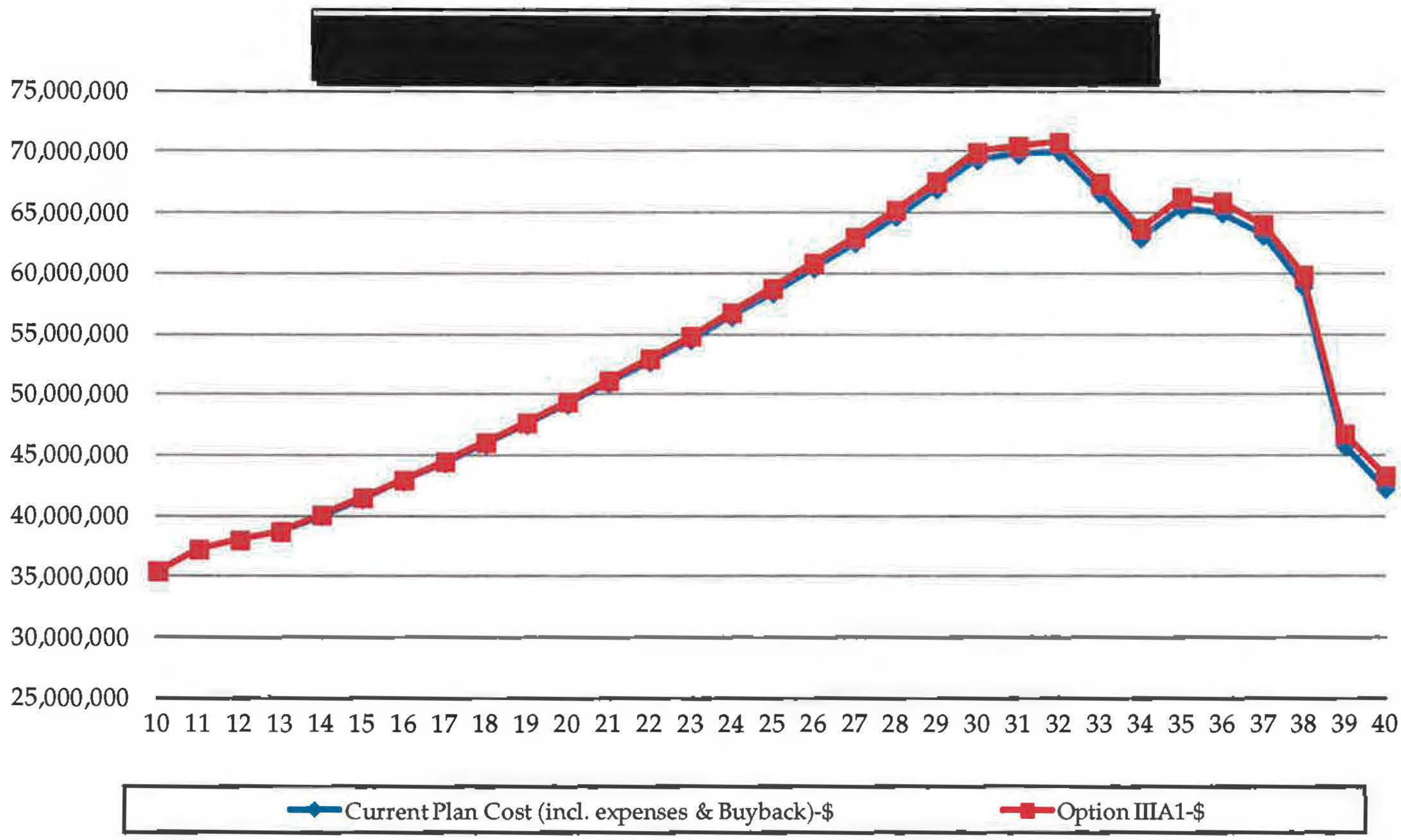


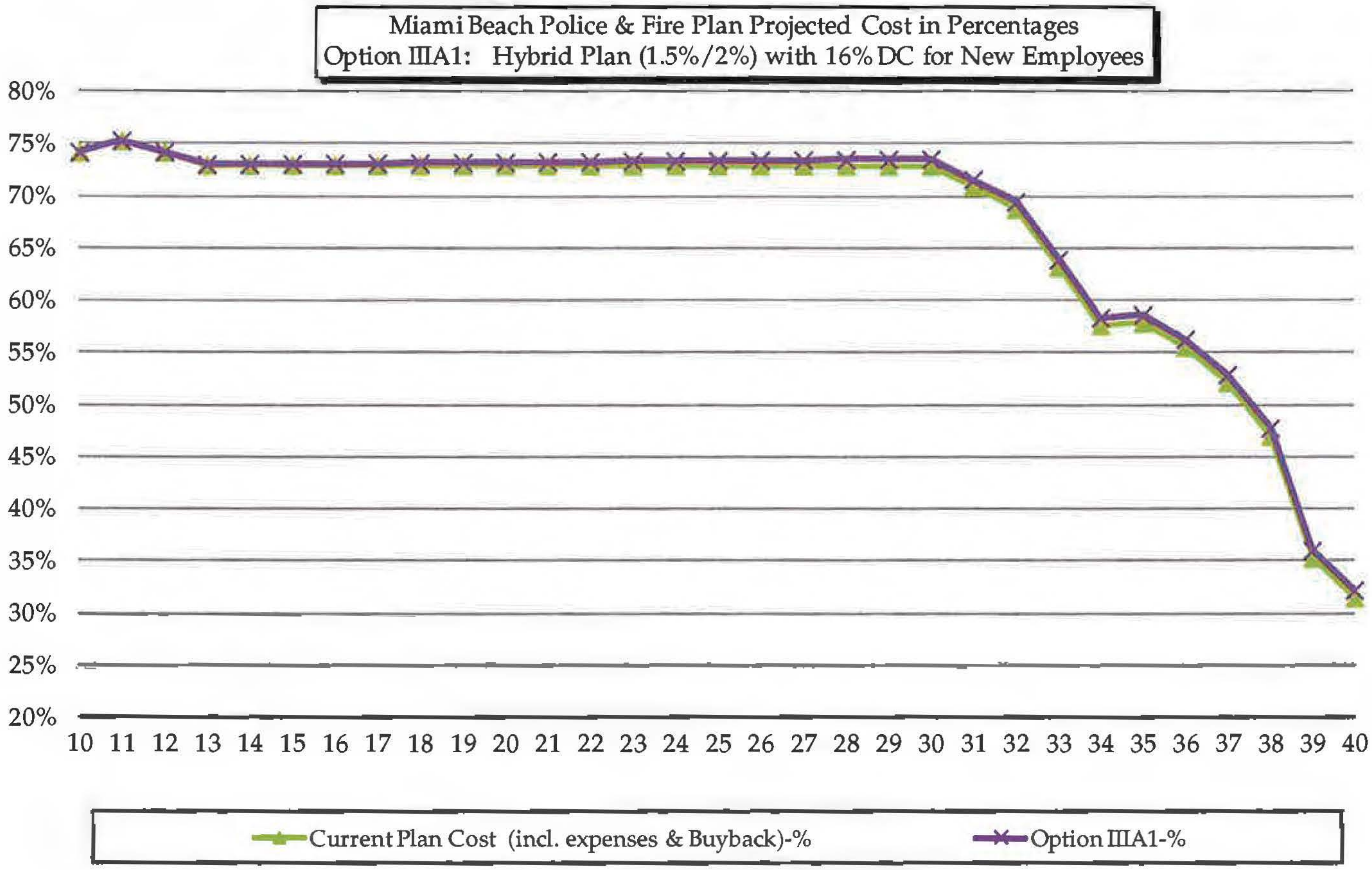
Actuarial Concepts

Option IIB: Defined Contribution+Social Security (24%)
for New and Non-vested Existing Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIB-$	Option IIB-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	33,612,185	70.32%	1,826,879	1,826,879
2011	37,226,360	75.25%	35,258,369	71.27%	1,967,991	1,818,846
2012	37,981,309	74.18%	35,820,049	69.96%	2,161,260	1,846,088
2013	38,660,638	72.95%	36,260,618	68.42%	2,400,020	1,894,668
2014	40,013,760	72.95%	37,361,347	68.11%	2,652,413	1,935,228
2015	41,414,242	72.95%	38,512,858	67.84%	2,901,384	1,956,451
2016	42,863,740	72.95%	39,715,055	67.59%	3,148,685	1,962,301
2017	44,363,971	72.95%	40,962,964	67.36%	3,401,007	1,958,920
2018	45,916,710	72.95%	42,231,195	67.09%	3,685,515	1,961,914
2019	47,523,795	72.95%	43,496,664	66.77%	4,027,131	1,981,301
2020	49,187,128	72.95%	44,794,698	66.43%	4,392,429	1,997,249
2021	50,908,677	72.95%	46,146,149	66.12%	4,762,528	2,001,417
2022	52,690,481	72.95%	47,572,655	65.86%	5,117,826	1,987,735
2023	54,534,648	72.95%	49,080,189	65.65%	5,454,458	1,957,930
2024	56,443,360	72.95%	50,672,140	65.49%	5,771,221	1,914,635
2025	58,418,878	72.95%	52,312,751	65.32%	6,106,127	1,872,220
2026	60,463,539	72.95%	54,035,571	65.19%	6,427,968	1,821,535
2027	62,579,763	72.95%	55,867,606	65.13%	6,712,156	1,757,918
2028	64,770,054	72.95%	57,818,725	65.12%	6,951,329	1,682,586
2029	67,037,006	72.95%	59,842,380	65.12%	7,194,626	1,609,497
2030	69,383,301	72.95%	61,936,864	65.12%	7,446,438	1,539,584
2031	69,868,207	70.98%	62,161,144	63.15%	7,707,063	1,472,707
2032	70,122,087	68.82%	62,145,277	60.99%	7,976,810	1,408,736
2033	66,721,958	63.27%	58,465,960	55.44%	8,255,999	1,347,543
2034	62,987,707	57.71%	54,442,749	49.88%	8,544,959	1,289,008
2035	65,472,079	57.96%	56,628,047	50.13%	8,844,032	1,233,016
2036	65,058,318	55.65%	55,904,745	47.82%	9,153,573	1,179,456
2037	63,213,581	52.24%	53,739,633	44.41%	9,473,948	1,128,223
2038	58,980,901	47.09%	49,175,365	39.26%	9,805,536	1,079,215
2039	45,863,374	35.38%	35,714,644	27.55%	10,148,730	1,032,336
2040	42,349,557	31.57%	34,156,148	25.46%	8,193,410	770,277
					Total APV	51,225,419

Section 5
Option IIIA1: Hybrid Plan (1.5%/2%) with 16% DC for New Employees

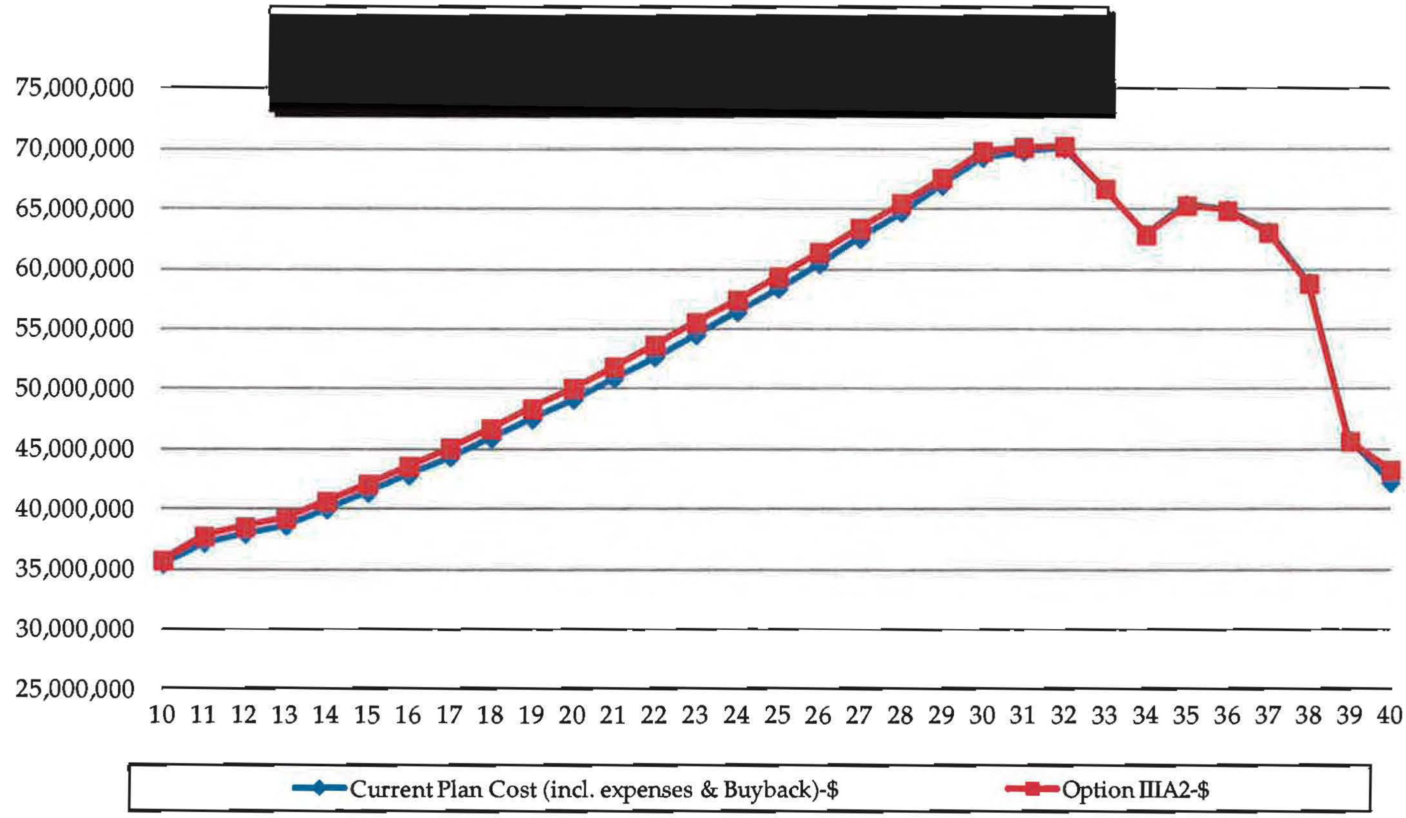



Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IIIA1: Hybrid Plan (1.5%/2%) with 16% DC for New Employees
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IIIA1-%

Option IIIA1: Hybrid Plan (1.5%/2%) with 16% DC for New Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIIA1-$	Option IIIA1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,439,063	74.14%	-	-
2011	37,226,360	75.25%	37,233,110	75.26%	(6,750)	(6,238)
2012	37,981,309	74.18%	38,000,802	74.21%	(19,493)	(16,651)
2013	38,660,638	72.95%	38,699,016	73.02%	(38,378)	(30,297)
2014	40,013,760	72.95%	40,072,358	73.06%	(58,598)	(42,754)
2015	41,414,242	72.95%	41,492,477	73.09%	(78,235)	(52,755)
2016	42,863,740	72.95%	42,961,247	73.12%	(97,507)	(60,767)
2017	44,363,971	72.95%	44,481,585	73.14%	(117,614)	(67,744)
2018	45,916,710	72.95%	46,057,896	73.17%	(141,186)	(75,158)
2019	47,523,795	72.95%	47,696,135	73.21%	(172,340)	(84,789)
2020	49,187,128	72.95%	49,393,705	73.26%	(206,577)	(93,931)
2021	50,908,677	72.95%	51,150,462	73.30%	(241,784)	(101,608)
2022	52,690,481	72.95%	52,966,482	73.33%	(276,002)	(107,197)
2023	54,534,648	72.95%	54,843,010	73.36%	(308,362)	(110,689)
2024	56,443,360	72.95%	56,788,169	73.40%	(344,809)	(114,392)
2025	58,418,878	72.95%	58,804,458	73.43%	(385,580)	(118,224)
2026	60,463,539	72.95%	60,888,550	73.46%	(425,012)	(120,438)
2027	62,579,763	72.95%	63,046,204	73.49%	(466,441)	(122,161)
2028	64,770,054	72.95%	65,282,518	73.53%	(512,464)	(124,043)
2029	67,037,006	72.95%	67,601,081	73.56%	(564,075)	(126,188)
2030	69,383,301	72.95%	69,998,241	73.60%	(614,940)	(127,142)
2031	69,868,207	70.98%	70,534,264	71.65%	(666,056)	(127,274)
2032	70,122,087	68.82%	70,841,553	69.53%	(719,466)	(127,060)
2033	66,721,958	63.27%	67,487,385	64.00%	(765,427)	(124,933)
2034	62,987,707	57.71%	63,796,544	58.45%	(808,837)	(122,013)
2035	65,472,079	57.96%	66,314,920	58.71%	(842,841)	(117,507)
2036	65,058,318	55.65%	65,933,051	56.39%	(874,733)	(112,711)
2037	63,213,581	52.24%	64,119,934	52.99%	(906,353)	(107,935)
2038	58,980,901	47.09%	59,918,977	47.84%	(938,076)	(103,246)
2039	45,863,374	35.38%	46,834,283	36.13%	(970,908)	(98,761)
2040	42,349,557	31.57%	43,354,448	32.31%	(1,004,890)	(94,471)
					Total APV	(2,839,080)

Section 6
Option IIIA2: Hybrid Plan (1.5%/2%) with 16% DC for New Employees and Non-vested Existing Employees



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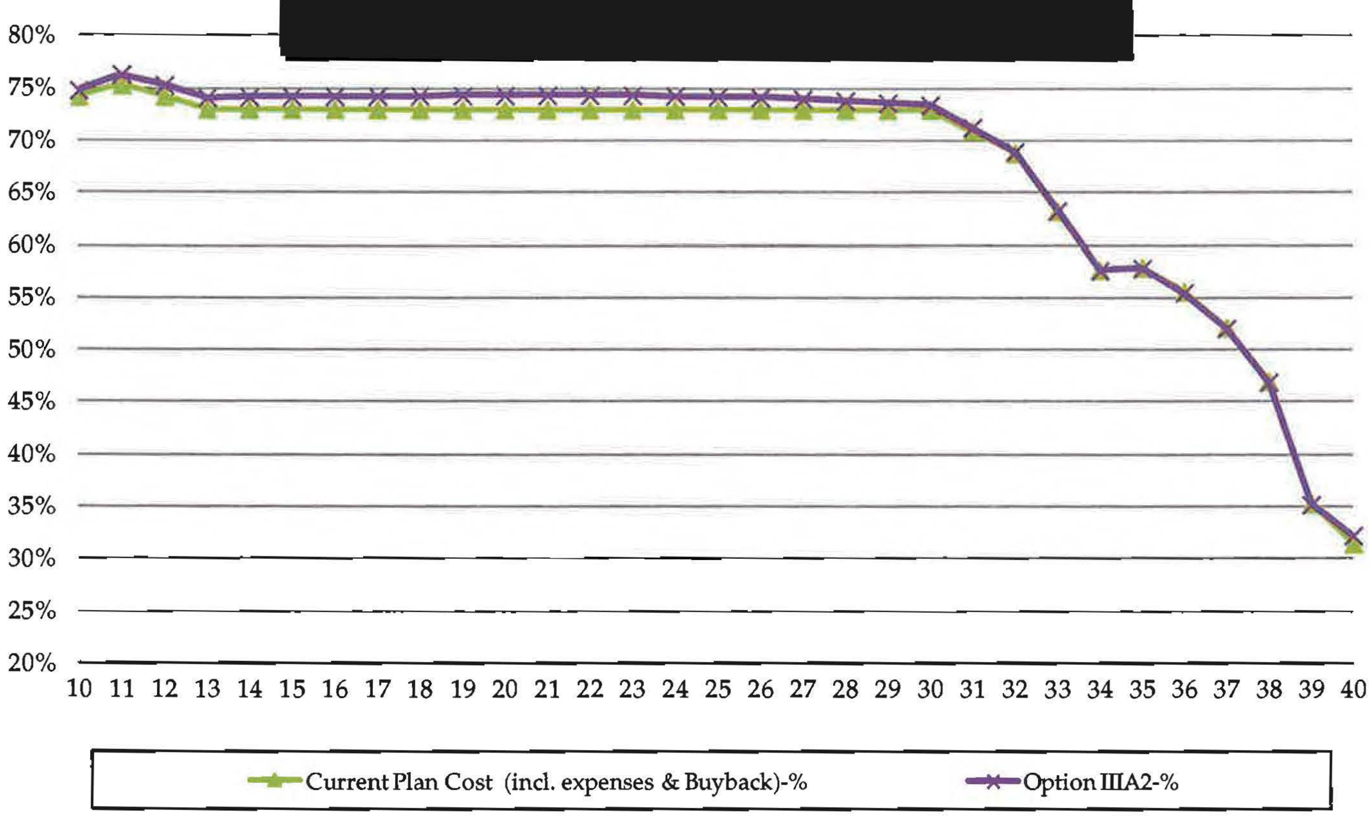
80%
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40%
35%
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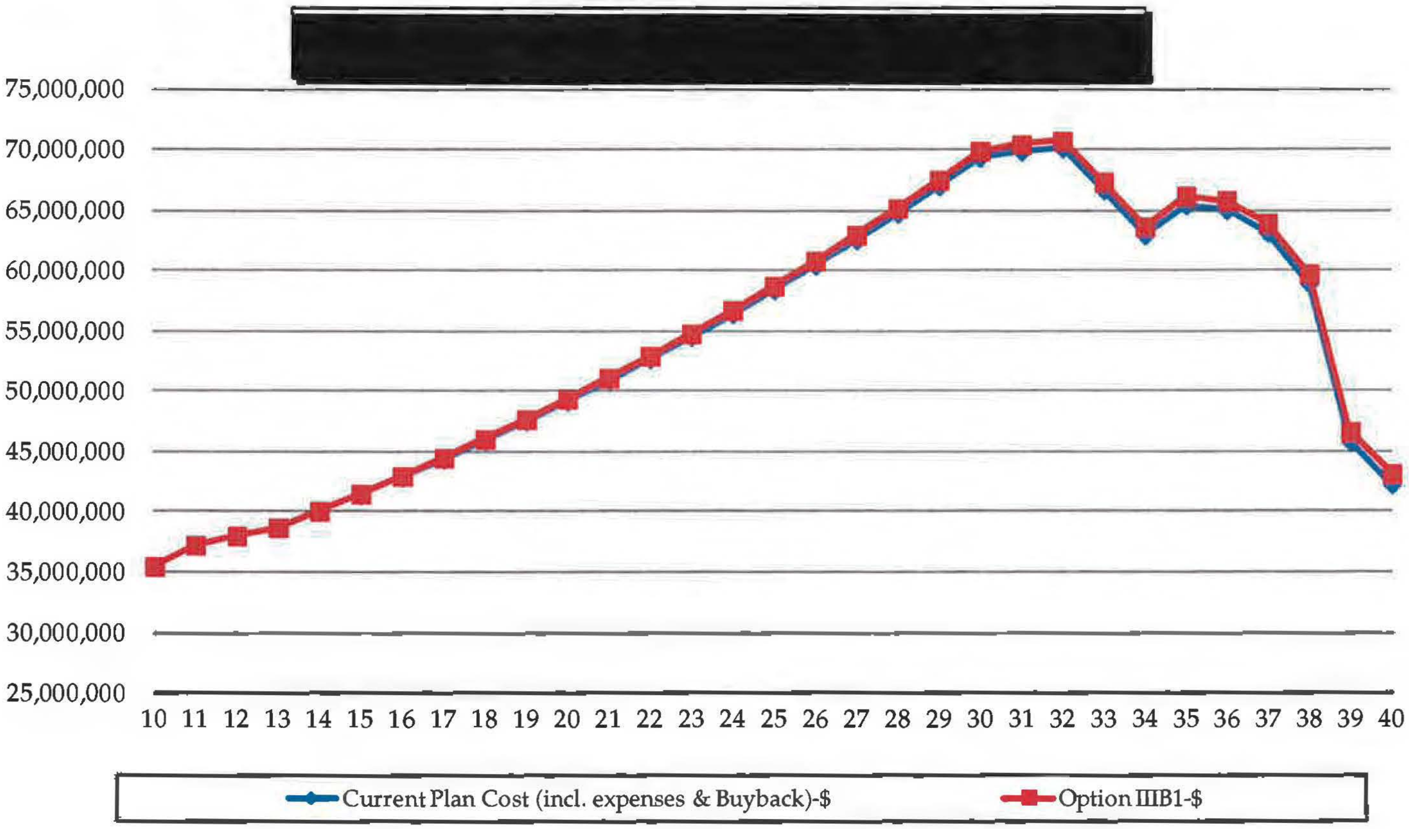
25%
20%
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IIIA2-%

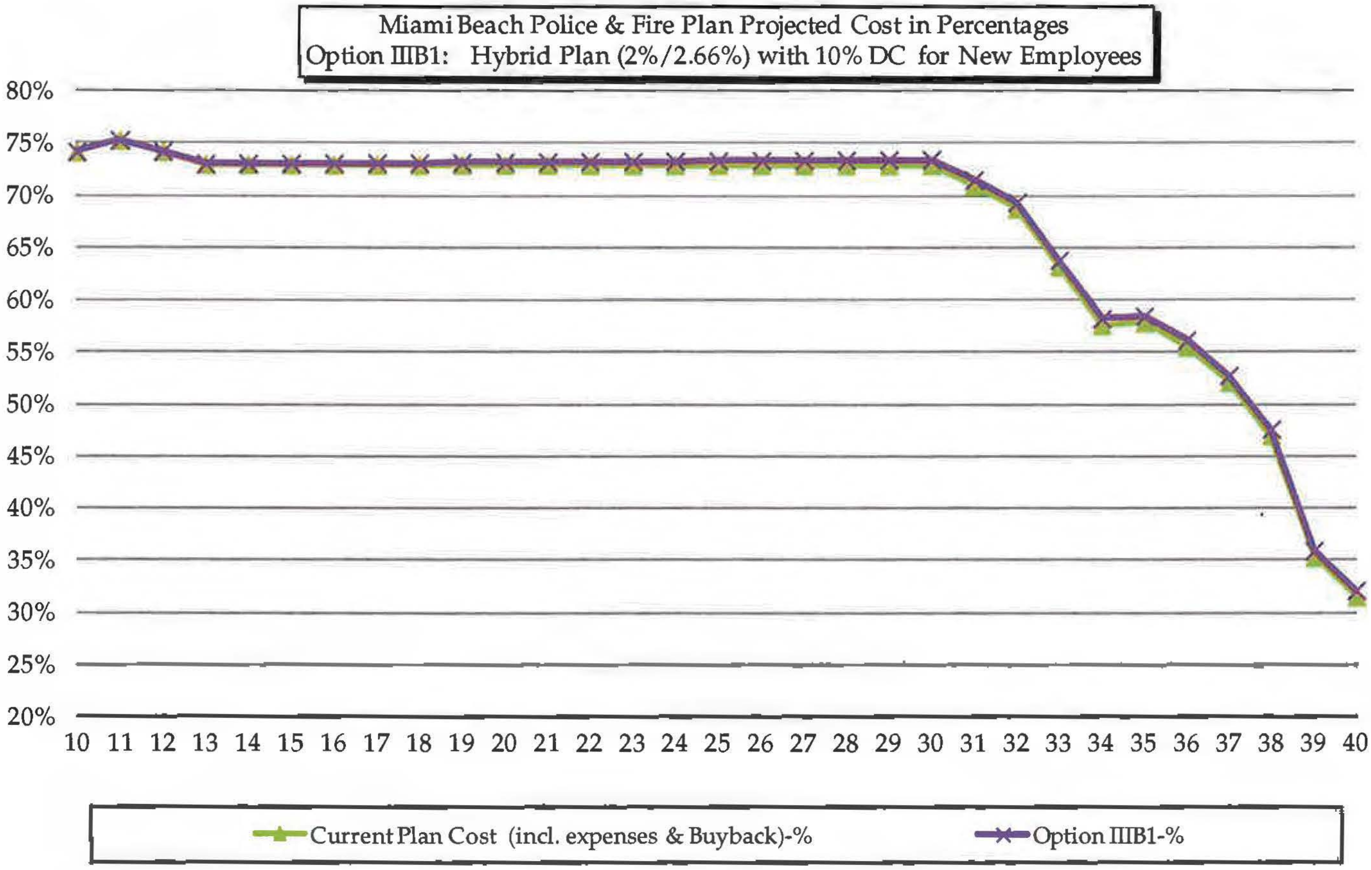
Option IIIA2: Hybrid Plan (1.5%/2%) with 16% DC for New Employees
and Non-vested Existing Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIIA2-$	Option IIIA2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,718,266	74.72%	(279,202)	(279,202)
2011	37,226,360	75.25%	37,736,065	76.28%	(509,704)	(471,076)
2012	37,981,309	74.18%	38,535,477	75.26%	(554,168)	(473,355)
2013	38,660,638	72.95%	39,259,056	74.08%	(598,418)	(472,414)
2014	40,013,760	72.95%	40,658,303	74.12%	(644,543)	(470,265)
2015	41,414,242	72.95%	42,104,230	74.16%	(689,988)	(465,270)
2016	42,863,740	72.95%	43,598,586	74.20%	(734,846)	(457,966)
2017	44,363,971	72.95%	45,141,526	74.23%	(777,555)	(447,858)
2018	45,916,710	72.95%	46,741,166	74.26%	(824,455)	(438,883)
2019	47,523,795	72.95%	48,395,625	74.29%	(871,830)	(428,930)
2020	49,187,128	72.95%	50,105,957	74.31%	(918,829)	(417,794)
2021	50,908,677	72.95%	51,871,229	74.33%	(962,552)	(404,505)
2022	52,690,481	72.95%	53,689,172	74.33%	(998,691)	(387,886)
2023	54,534,648	72.95%	55,563,680	74.33%	(1,029,032)	(369,381)
2024	56,443,360	72.95%	57,462,748	74.27%	(1,019,387)	(338,187)
2025	58,418,878	72.95%	59,416,732	74.20%	(997,854)	(305,955)
2026	60,463,539	72.95%	61,435,330	74.12%	(971,791)	(275,383)
2027	62,579,763	72.95%	63,483,192	74.00%	(903,429)	(236,609)
2028	64,770,054	72.95%	65,542,546	73.82%	(772,492)	(186,983)
2029	67,037,006	72.95%	67,648,469	73.61%	(611,463)	(136,789)
2030	69,383,301	72.95%	69,842,351	73.43%	(459,050)	(94,911)
2031	69,868,207	70.98%	70,178,052	71.29%	(309,844)	(59,207)
2032	70,122,087	68.82%	70,274,686	68.97%	(152,599)	(26,950)
2033	66,721,958	63.27%	66,763,850	63.31%	(41,891)	(6,837)
2034	62,987,707	57.71%	62,938,247	57.67%	49,460	7,461
2035	65,472,079	57.96%	65,389,080	57.89%	82,999	11,572
2036	65,058,318	55.65%	64,959,051	55.56%	99,267	12,791
2037	63,213,581	52.24%	63,105,231	52.15%	108,350	12,903
2038	58,980,901	47.09%	58,868,759	47.00%	112,142	12,343
2039	45,863,374	35.38%	45,747,307	35.29%	116,067	11,806
2040	42,349,557	31.57%	43,354,448	32.31%	(1,004,890)	(94,471)
					Total APV	(7,678,193)

Actuarial Concepts

Section 7
Option IIIB1: Hybrid Plan (2%/2.66%) with 10% DC for New Employees



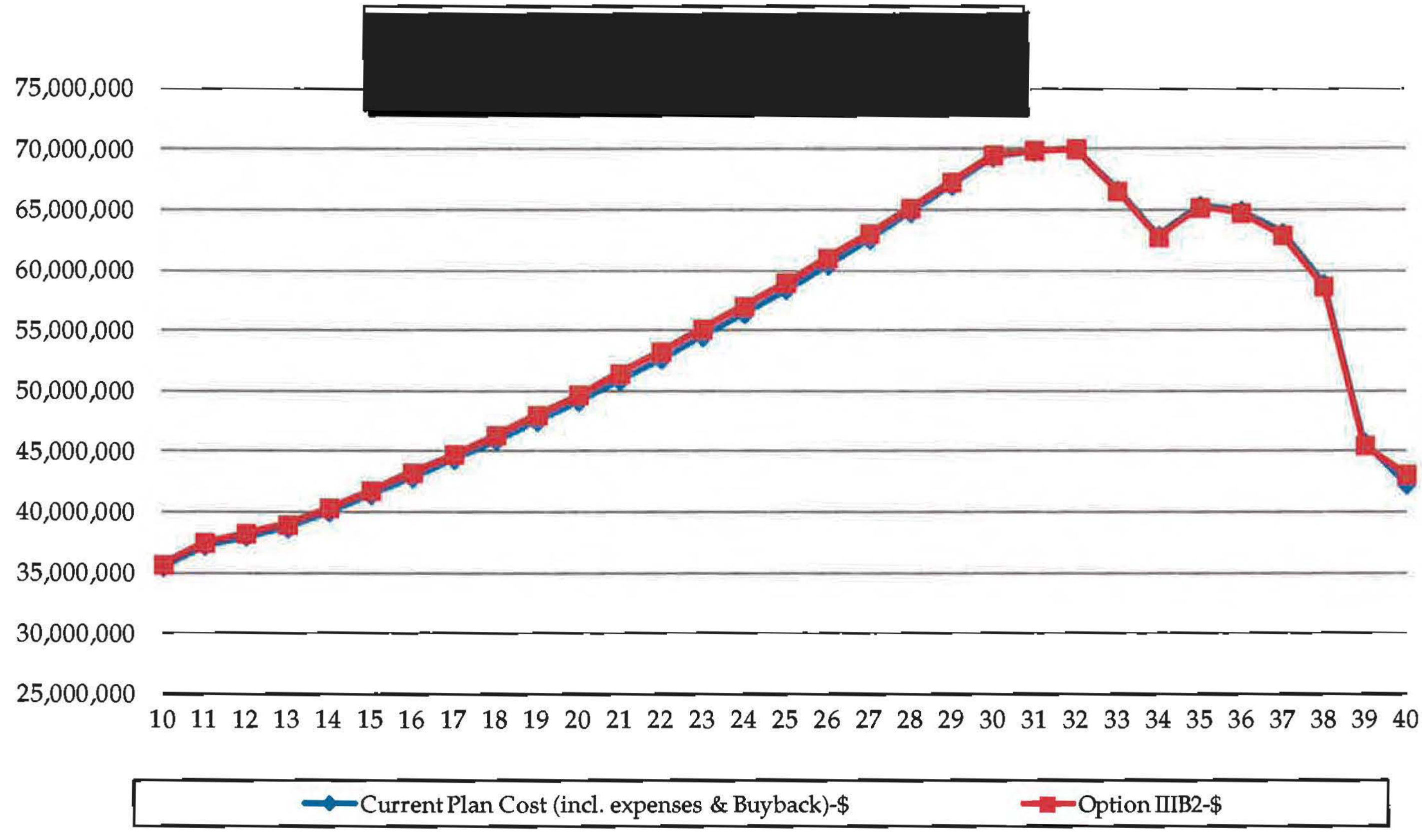


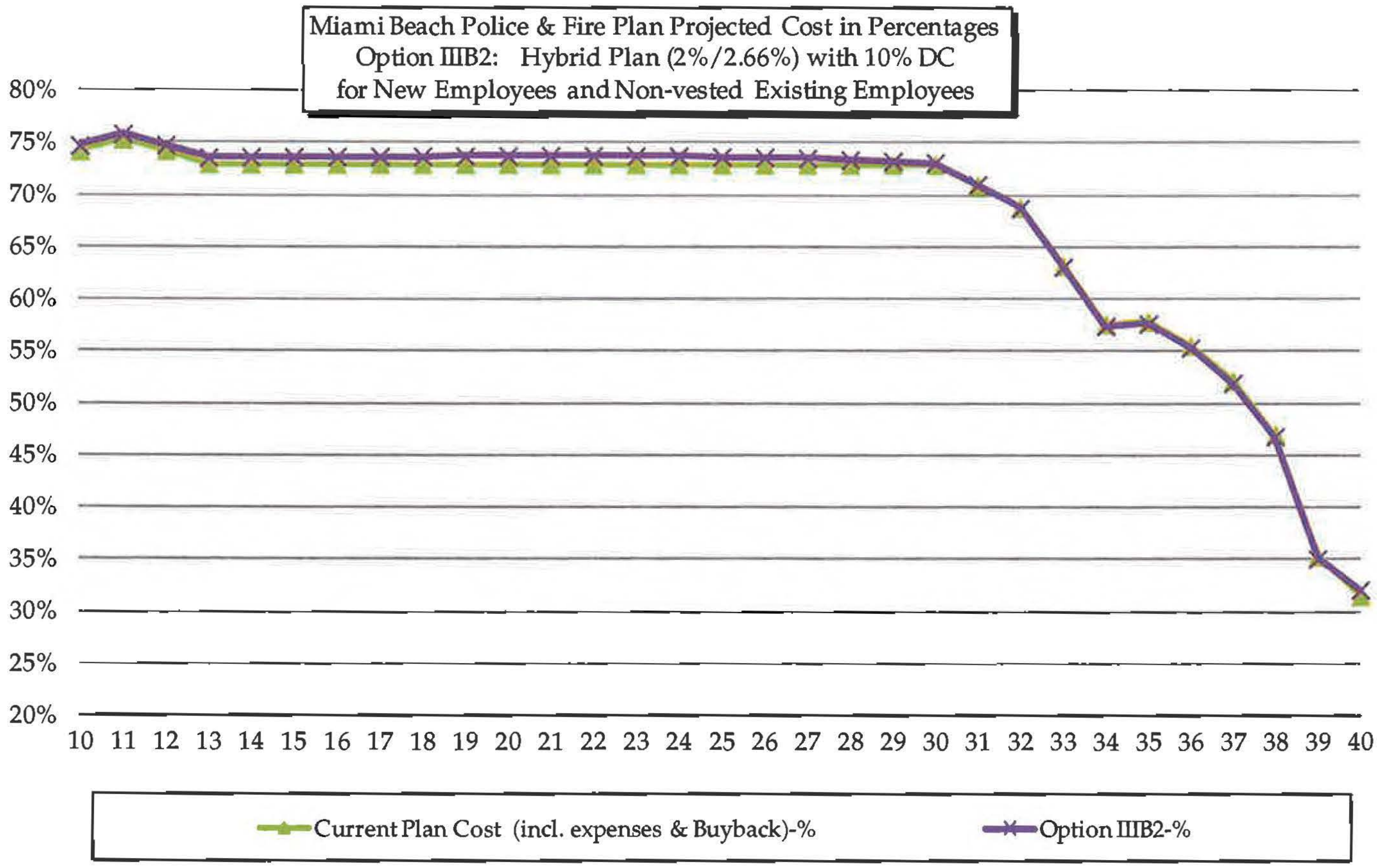
Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IIIB1: Hybrid Plan (2%/2.66%) with 10% DC for New Employees
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IIIB1-%

Option IIIB1: Hybrid Plan (2%/2.66%) with 10% DC for New Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIIB1-$	Option IIIB1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,439,063	74.14%	-	-
2011	37,226,360	75.25%	37,232,100	75.26%	(5,740)	(5,305)
2012	37,981,309	74.18%	37,997,887	74.21%	(16,578)	(14,161)
2013	38,660,638	72.95%	38,693,277	73.01%	(32,639)	(25,767)
2014	40,013,760	72.95%	40,063,596	73.04%	(49,836)	(36,361)
2015	41,414,242	72.95%	41,480,778	73.07%	(66,536)	(44,866)
2016	42,863,740	72.95%	42,946,667	73.09%	(82,926)	(51,681)
2017	44,363,971	72.95%	44,463,998	73.11%	(100,027)	(57,614)
2018	45,916,710	72.95%	46,036,784	73.14%	(120,074)	(63,919)
2019	47,523,795	72.95%	47,670,364	73.17%	(146,570)	(72,110)
2020	49,187,128	72.95%	49,362,815	73.21%	(175,687)	(79,885)
2021	50,908,677	72.95%	51,114,307	73.24%	(205,630)	(86,414)
2022	52,690,481	72.95%	52,925,211	73.27%	(234,730)	(91,168)
2023	54,534,648	72.95%	54,796,899	73.30%	(262,252)	(94,138)
2024	56,443,360	72.95%	56,736,609	73.33%	(293,249)	(97,287)
2025	58,418,878	72.95%	58,746,801	73.36%	(327,923)	(100,546)
2026	60,463,539	72.95%	60,824,997	73.39%	(361,459)	(102,429)
2027	62,579,763	72.95%	62,976,455	73.41%	(396,693)	(103,894)
2028	64,770,054	72.95%	65,205,888	73.44%	(435,833)	(105,495)
2029	67,037,006	72.95%	67,516,733	73.47%	(479,727)	(107,319)
2030	69,383,301	72.95%	69,906,288	73.50%	(522,986)	(108,130)
2031	69,868,207	70.98%	70,434,666	71.55%	(566,459)	(108,242)
2032	70,122,087	68.82%	70,733,969	69.42%	(611,882)	(108,061)
2033	66,721,958	63.27%	67,372,929	63.89%	(650,970)	(106,251)
2034	62,987,707	57.71%	63,675,596	58.34%	(687,889)	(103,768)
2035	65,472,079	57.96%	66,188,888	58.59%	(716,809)	(99,936)
2036	65,058,318	55.65%	65,802,250	56.28%	(743,932)	(95,857)
2037	63,213,581	52.24%	63,984,405	52.88%	(770,824)	(91,795)
2038	58,980,901	47.09%	59,778,704	47.73%	(797,803)	(87,808)
2039	45,863,374	35.38%	46,689,100	36.02%	(825,726)	(83,993)
2040	42,349,557	31.57%	43,204,184	32.20%	(854,626)	(80,345)
					Total APV	(2,414,545)

Section 8
Option IIIB2: Hybrid Plan (2%/2.66%) with 10% DC
for New Employees and Non-vested Existing Employees



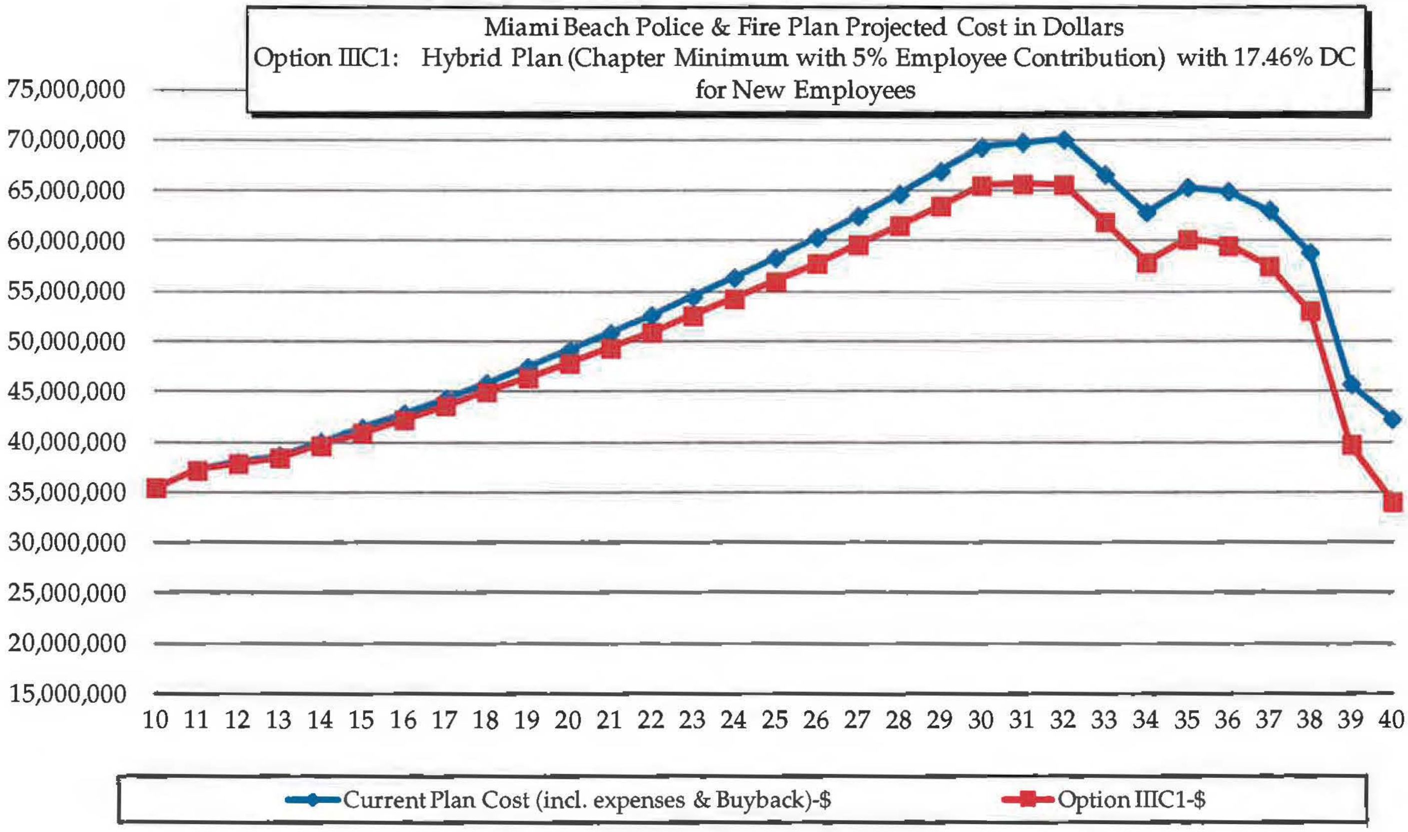


Actuarial Concepts

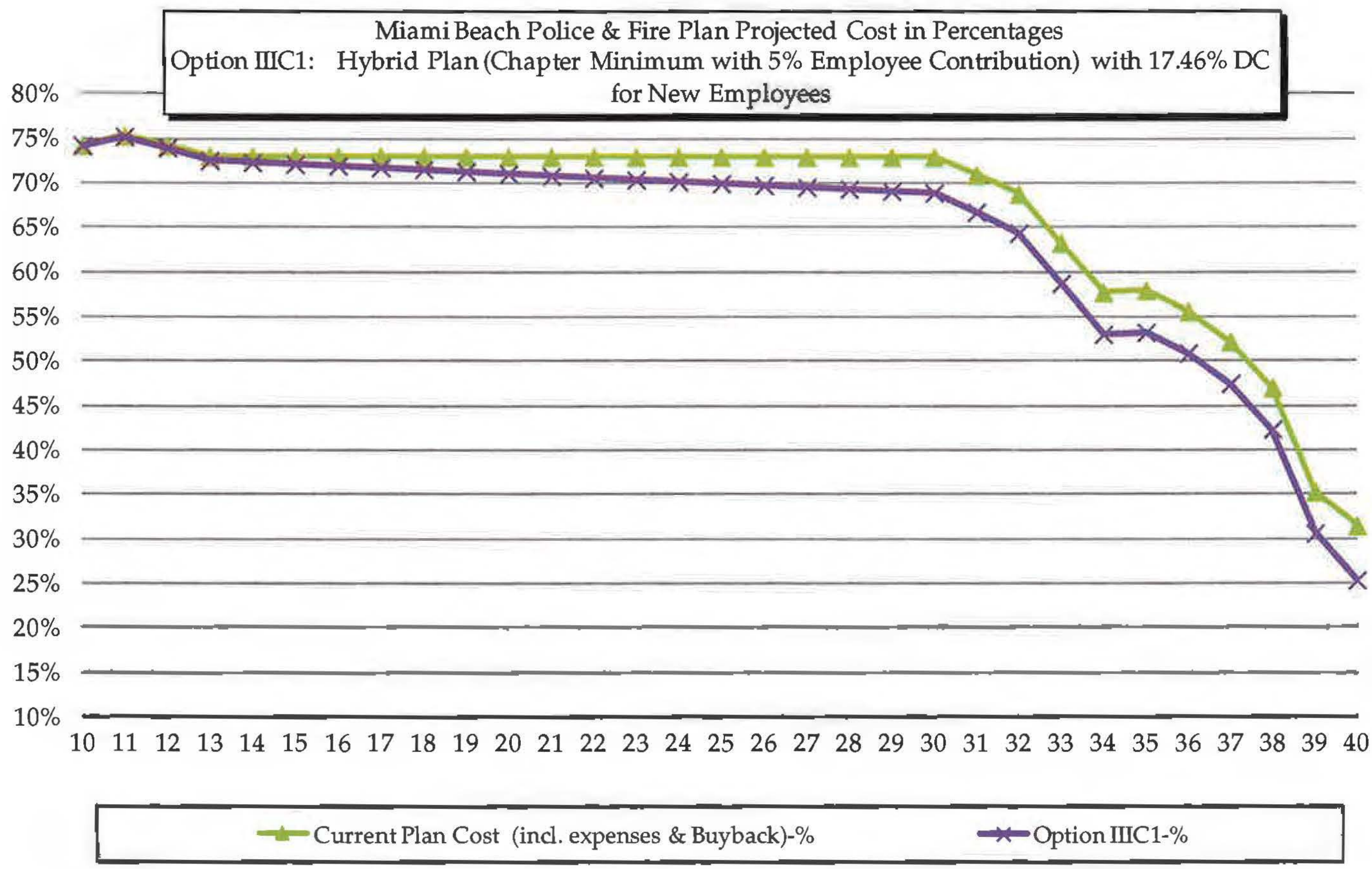
Option IIIB2: Hybrid Plan (2%/2.66%) with 10% DC
for New Employees and Non-vested Existing Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIIB2-$	Option IIIB2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,672,176	74.63%	(233,113)	(233,113)
2011	37,226,360	75.25%	37,484,576	75.77%	(258,216)	(238,647)
2012	37,981,309	74.18%	38,269,463	74.74%	(288,154)	(246,133)
2013	38,660,638	72.95%	38,979,195	73.55%	(318,557)	(251,481)
2014	40,013,760	72.95%	40,364,104	73.59%	(350,344)	(255,614)
2015	41,414,242	72.95%	41,795,658	73.62%	(381,416)	(257,195)
2016	42,863,740	72.95%	43,275,602	73.65%	(411,862)	(256,678)
2017	44,363,971	72.95%	44,804,661	73.67%	(440,690)	(253,830)
2018	45,916,710	72.95%	46,389,538	73.70%	(472,828)	(251,701)
2019	47,523,795	72.95%	48,029,870	73.73%	(506,075)	(248,983)
2020	49,187,128	72.95%	49,726,382	73.75%	(539,254)	(245,200)
2021	50,908,677	72.95%	51,478,665	73.77%	(569,987)	(239,533)
2022	52,690,481	72.95%	53,285,377	73.77%	(594,896)	(231,054)
2023	54,534,648	72.95%	55,149,811	73.77%	(615,164)	(220,819)
2024	56,443,360	72.95%	57,050,021	73.73%	(606,660)	(201,263)
2025	58,418,878	72.95%	59,008,714	73.69%	(589,836)	(180,852)
2026	60,463,539	72.95%	61,032,876	73.64%	(569,338)	(161,337)
2027	62,579,763	72.95%	63,097,868	73.55%	(518,105)	(135,692)
2028	64,770,054	72.95%	65,191,763	73.42%	(421,709)	(102,076)
2029	67,037,006	72.95%	67,340,889	73.28%	(303,883)	(67,981)
2030	69,383,301	72.95%	69,575,282	73.15%	(191,981)	(39,693)
2031	69,868,207	70.98%	69,950,391	71.06%	(82,183)	(15,704)
2032	70,122,087	68.82%	70,088,644	68.79%	33,443	5,906
2033	66,721,958	63.27%	66,605,531	63.16%	116,427	19,003
2034	62,987,707	57.71%	62,801,769	57.54%	185,939	28,049
2035	65,472,079	57.96%	65,257,208	57.77%	214,871	29,957
2036	65,058,318	55.65%	64,826,506	55.45%	231,812	29,869
2037	63,213,581	52.24%	62,969,701	52.04%	243,880	29,043
2038	58,980,901	47.09%	58,728,486	46.89%	252,415	27,781
2039	45,863,374	35.38%	45,602,125	35.18%	261,250	26,575
2040	42,349,557	31.57%	43,204,184	32.20%	(854,626)	(80,345)
					Total APV	(4,218,739)

Section 9
Option IIIC1 - Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 17.46% DC for New Employees



Actuarial Concepts


Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IIIC1: Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 17.46% DC for New Employees
80%
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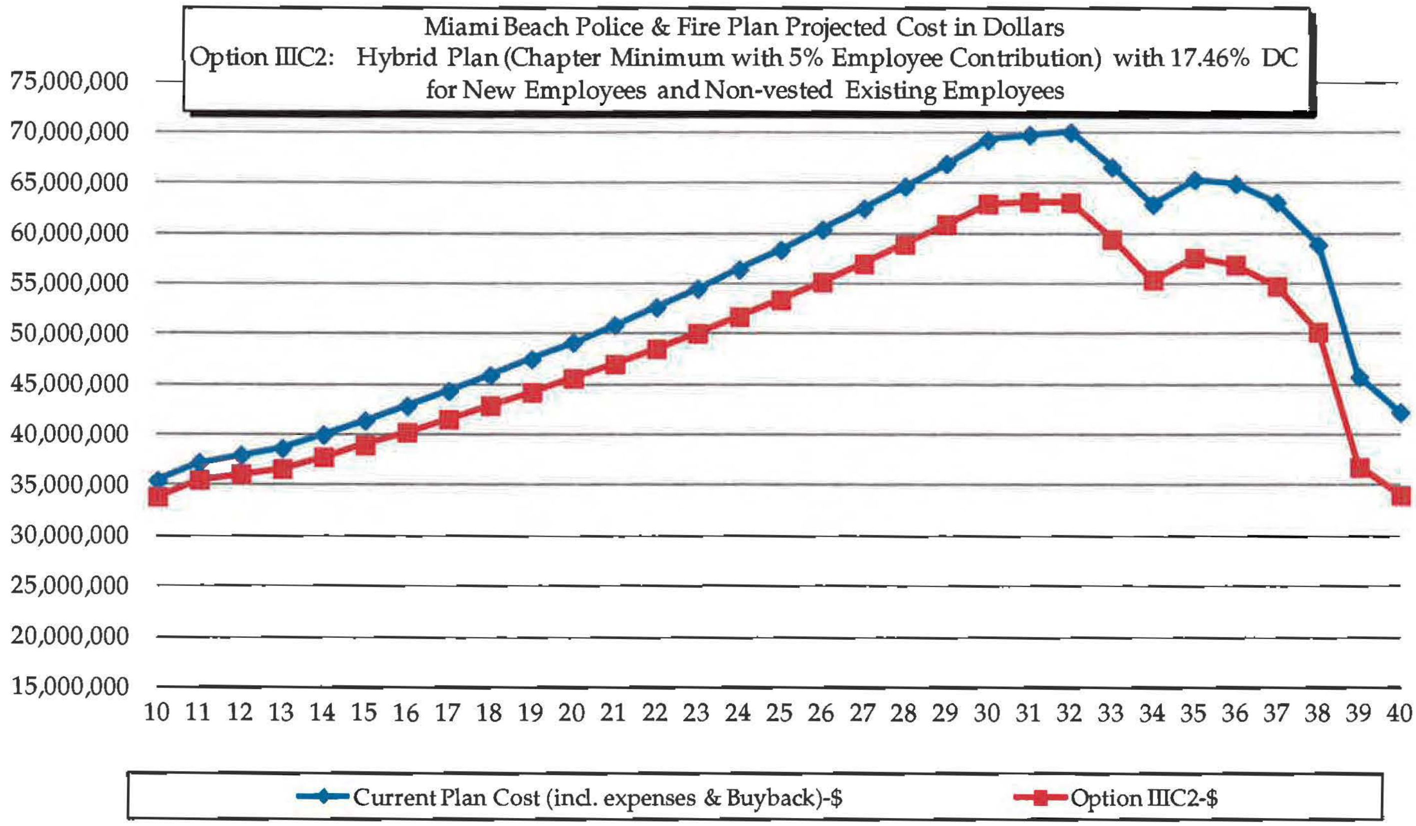
Current Plan Cost (incl. expenses & Buyback)-%
Option IIIC1-%

Option IIIC1: Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 17.46% DC for New Employees

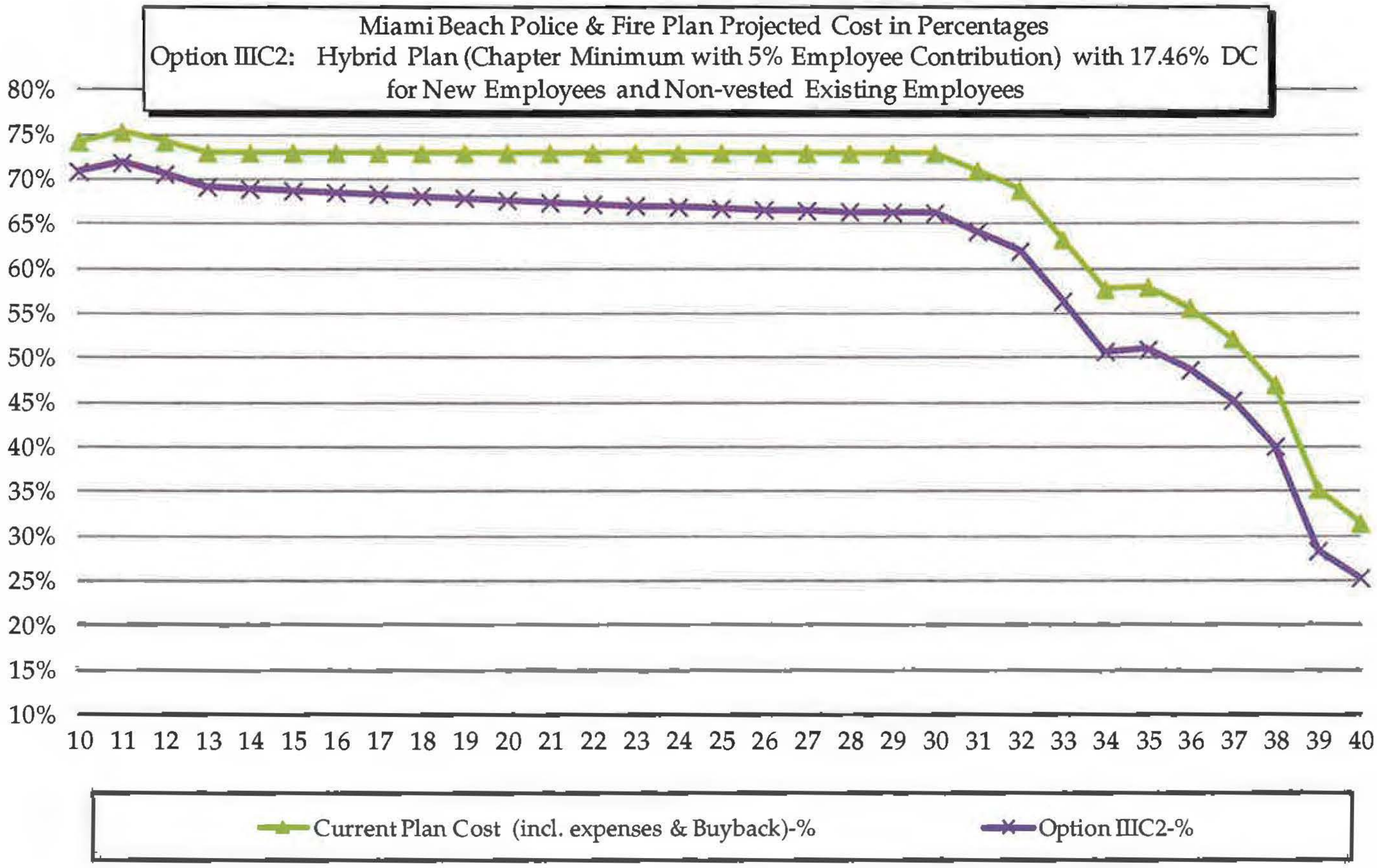
Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIIC1-$	Option IIIC1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,439,063	74.14%	-	-
2011	37,226,360	75.25%	37,184,359	75.16%	42,001	38,818
2012	37,981,309	74.18%	37,860,005	73.94%	121,304	103,615
2013	38,660,638	72.95%	38,421,816	72.50%	238,822	188,535
2014	40,013,760	72.95%	39,649,111	72.28%	364,649	266,052
2015	41,414,242	72.95%	40,927,397	72.09%	486,844	328,287
2016	42,863,740	72.95%	42,256,970	71.92%	606,770	378,147
2017	44,363,971	72.95%	43,632,075	71.75%	731,896	421,559
2018	45,916,710	72.95%	45,038,130	71.55%	878,580	467,695
2019	47,523,795	72.95%	46,451,349	71.30%	1,072,446	527,631
2020	49,187,128	72.95%	47,901,631	71.04%	1,285,497	584,519
2021	50,908,677	72.95%	49,404,090	70.79%	1,504,587	632,292
2022	52,690,481	72.95%	50,972,965	70.57%	1,717,516	667,073
2023	54,534,648	72.95%	52,615,759	70.38%	1,918,889	688,804
2024	56,443,360	72.95%	54,297,667	70.18%	2,145,693	711,846
2025	58,418,878	72.95%	56,019,472	69.95%	2,399,406	735,690
2026	60,463,539	72.95%	57,818,755	69.76%	2,644,783	749,469
2027	62,579,763	72.95%	59,677,171	69.57%	2,902,592	760,191
2028	64,770,054	72.95%	61,581,071	69.36%	3,188,983	771,901
2029	67,037,006	72.95%	63,526,856	69.13%	3,510,151	785,250
2030	69,383,301	72.95%	65,556,623	68.93%	3,826,678	791,183
2031	69,868,207	70.98%	65,723,440	66.76%	4,144,767	792,005
2032	70,122,087	68.82%	65,644,959	64.43%	4,477,128	790,678
2033	66,721,958	63.27%	61,958,823	58.76%	4,763,135	777,438
2034	62,987,707	57.71%	57,954,440	53.10%	5,033,268	759,269
2035	65,472,079	57.96%	60,227,205	53.32%	5,244,874	731,229
2036	65,058,318	55.65%	59,614,984	50.99%	5,443,334	701,385
2037	63,213,581	52.24%	57,573,481	47.58%	5,640,100	671,662
2038	58,980,901	47.09%	53,143,398	42.43%	5,837,503	642,486
2039	45,863,374	35.38%	39,821,558	30.72%	6,041,816	614,578
2040	42,349,557	31.57%	34,139,547	25.45%	8,210,011	771,838
					Total APV	17,851,123

Actuarial Concepts

Section 10
Option IIIC2 - Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 17.46% DC for New Employees and Non-vested Existing Employees



Actuarial Concepts



Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IIIC2: Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 17.46% DC for New Employees and Non-vested Existing Employees
80%
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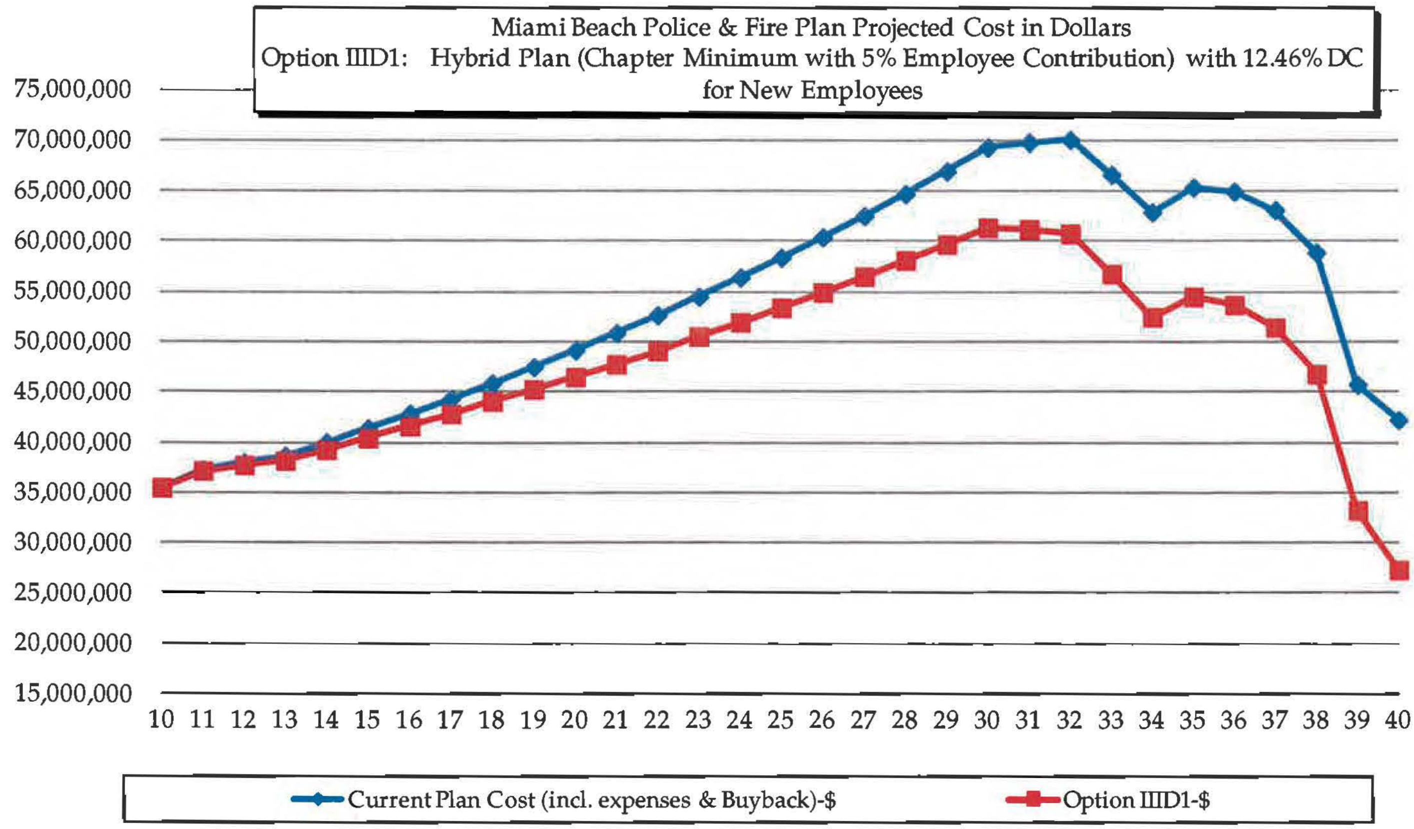
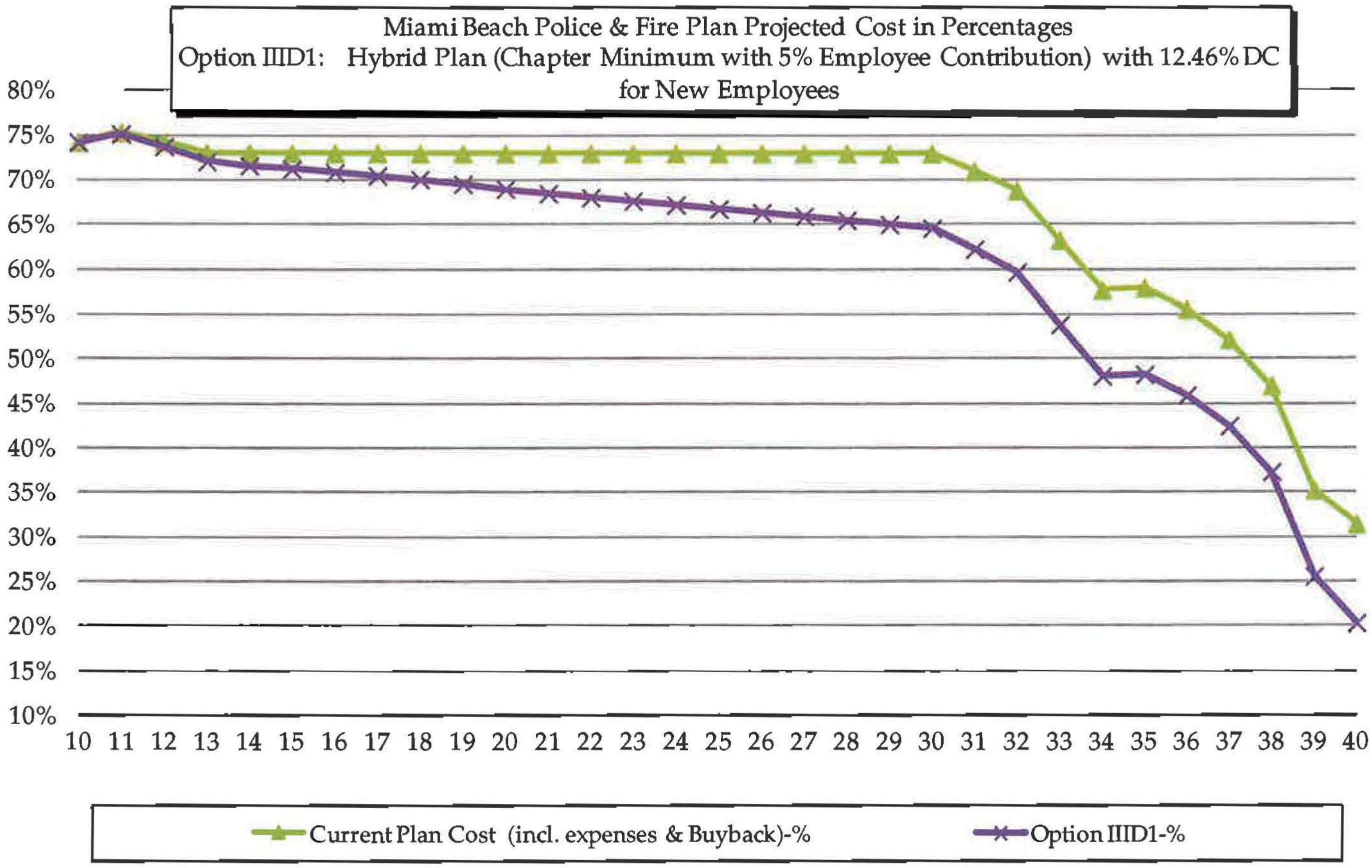
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IIIC2-%

Option IIIC2: Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 17.46% DC for New Employees and Non-Vested Existing Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIIC2-$	Option IIIC2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	33,844,490	70.80%	1,594,574	1,594,574
2011	37,226,360	75.25%	35,524,864	71.81%	1,701,496	1,572,547
2012	37,981,309	74.18%	36,134,081	70.57%	1,847,228	1,577,851
2013	38,660,638	72.95%	36,631,553	69.12%	2,029,085	1,601,838
2014	40,013,760	72.95%	37,792,461	68.90%	2,221,299	1,620,682
2015	41,414,242	72.95%	39,002,630	68.70%	2,411,611	1,626,189
2016	42,863,740	72.95%	40,262,368	68.52%	2,601,372	1,621,209
2017	44,363,971	72.95%	41,567,488	68.35%	2,796,483	1,610,725
2018	45,916,710	72.95%	42,901,146	68.16%	3,015,564	1,605,279
2019	47,523,795	72.95%	44,244,120	67.92%	3,279,675	1,613,561
2020	49,187,128	72.95%	45,624,078	67.67%	3,563,050	1,620,128
2021	50,908,677	72.95%	47,056,527	67.43%	3,852,150	1,618,838
2022	52,690,481	72.95%	48,557,017	67.23%	4,133,464	1,605,414
2023	54,534,648	72.95%	50,131,402	67.06%	4,403,246	1,580,587
2024	56,443,360	72.95%	51,768,524	66.91%	4,674,836	1,550,903
2025	58,418,878	72.95%	53,452,607	66.75%	4,966,271	1,522,725
2026	60,463,539	72.95%	55,213,445	66.62%	5,250,094	1,487,753
2027	62,579,763	72.95%	57,056,905	66.51%	5,522,857	1,446,440
2028	64,770,054	72.95%	58,982,770	66.43%	5,787,285	1,400,826
2029	67,037,006	72.95%	60,968,721	66.35%	6,068,286	1,357,526
2030	69,383,301	72.95%	63,030,125	66.27%	6,353,176	1,313,547
2031	69,868,207	70.98%	63,223,732	64.23%	6,644,476	1,269,662
2032	70,122,087	68.82%	63,174,942	62.01%	6,947,146	1,226,893
2033	66,721,958	63.27%	59,483,257	56.41%	7,238,702	1,181,500
2034	62,987,707	57.71%	55,456,935	50.81%	7,530,772	1,136,018
2035	65,472,079	57.96%	57,664,462	51.05%	7,807,617	1,088,521
2036	65,058,318	55.65%	56,971,860	48.73%	8,086,458	1,041,956
2037	63,213,581	52.24%	54,841,758	45.32%	8,371,823	996,974
2038	58,980,901	47.09%	50,316,065	40.17%	8,664,837	953,668
2039	45,863,374	35.38%	36,895,268	28.46%	8,968,106	912,242
2040	42,349,557	31.57%	34,139,547	25.45%	8,210,011	771,838
					Total APV	43,128,414

Section 11
Option IIID1 - Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 12.46% DC for New Employees





Actuarial Concepts

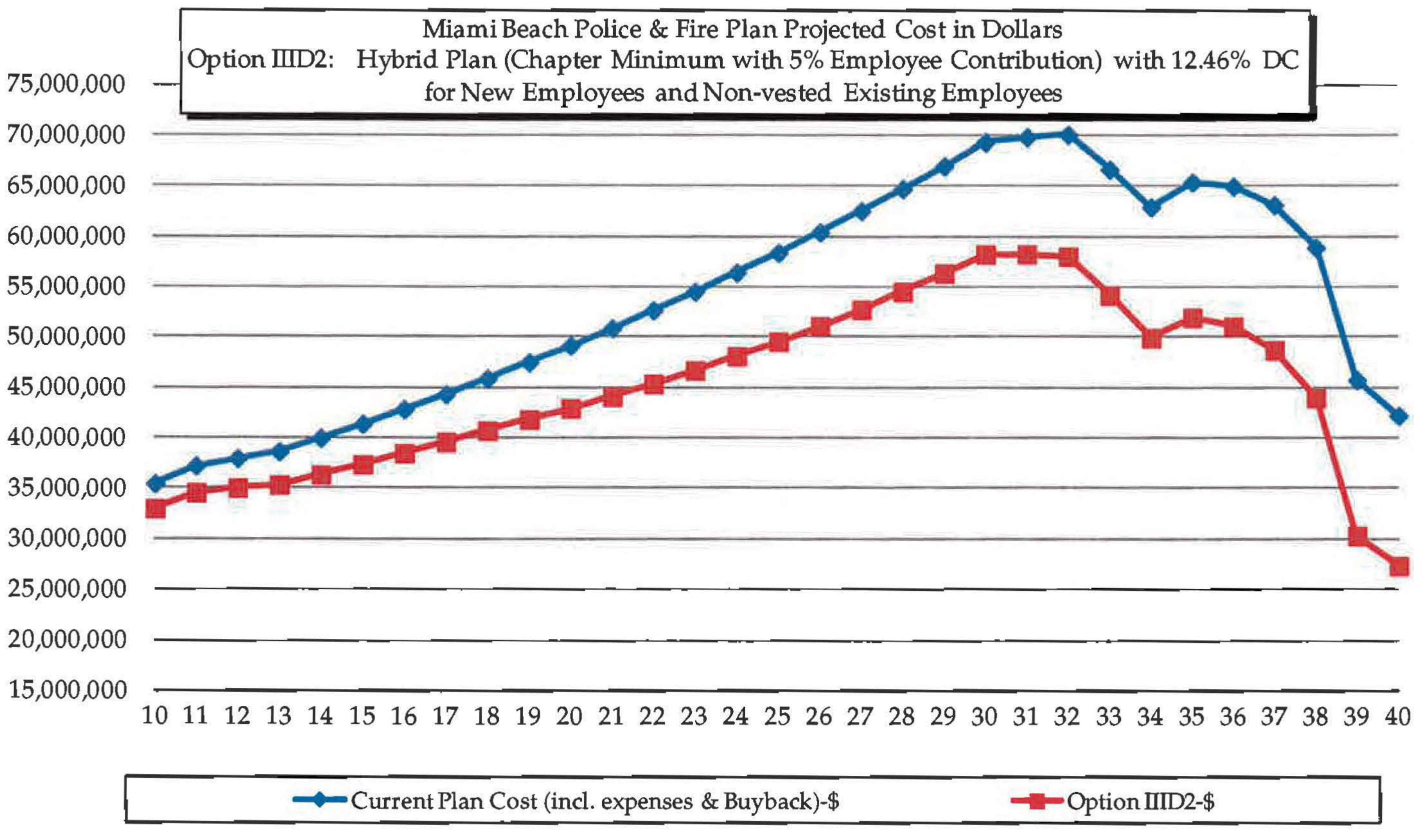
Option IIID1: Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 12.46% DC for New Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIID1-$	Option IIID1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,439,063	74.14%	-	-
2011	37,226,360	75.25%	37,139,302	75.07%	87,059	80,461
2012	37,981,309	74.18%	37,729,876	73.68%	251,433	214,767
2013	38,660,638	72.95%	38,165,620	72.02%	495,017	390,786
2014	40,013,760	72.95%	39,257,934	71.57%	755,826	551,459
2015	41,414,242	72.95%	40,405,135	71.17%	1,009,107	680,457
2016	42,863,740	72.95%	41,606,057	70.81%	1,257,683	783,804
2017	44,363,971	72.95%	42,846,933	70.45%	1,517,038	873,787
2018	45,916,710	72.95%	44,095,633	70.06%	1,821,077	969,416
2019	47,523,795	72.95%	45,300,882	69.54%	2,222,913	1,093,647
2020	49,187,128	72.95%	46,522,613	69.00%	2,664,514	1,211,561
2021	50,908,677	72.95%	47,790,043	68.48%	3,118,635	1,310,583
2022	52,690,481	72.95%	49,130,498	68.02%	3,559,982	1,382,677
2023	54,534,648	72.95%	50,557,269	67.63%	3,977,379	1,427,718
2024	56,443,360	72.95%	51,995,873	67.20%	4,447,488	1,475,479
2025	58,418,878	72.95%	53,445,507	66.74%	4,973,371	1,524,902
2026	60,463,539	72.95%	54,981,561	66.34%	5,481,977	1,553,464
2027	62,579,763	72.95%	56,563,413	65.94%	6,016,350	1,575,686
2028	64,770,054	72.95%	58,160,086	65.50%	6,609,968	1,599,958
2029	67,037,006	72.95%	59,761,338	65.03%	7,275,668	1,627,627
2030	69,383,301	72.95%	61,451,550	64.61%	7,931,751	1,639,925
2031	69,868,207	70.98%	61,277,138	62.25%	8,591,070	1,641,628
2032	70,122,087	68.82%	60,842,115	59.72%	9,279,972	1,638,879
2033	66,721,958	63.27%	56,849,165	53.91%	9,872,793	1,611,436
2034	62,987,707	57.71%	52,554,997	48.15%	10,432,710	1,573,776
2035	65,472,079	57.96%	54,600,762	48.34%	10,871,317	1,515,656
2036	65,058,318	55.65%	53,775,642	45.99%	11,282,676	1,453,796
2037	63,213,581	52.24%	51,523,058	42.58%	11,690,523	1,392,188
2038	58,980,901	47.09%	46,881,210	37.43%	12,099,691	1,331,714
2039	45,863,374	35.38%	33,340,194	25.72%	12,523,180	1,273,867
2040	42,349,557	31.57%	27,431,335	20.45%	14,918,222	1,402,488
					Total APV	36,803,593

Actuarial Concepts

Section 12

Option IIID2 - Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 12.46% DC for New Employees and Non-vested Existing Employees



Actuarial Concepts

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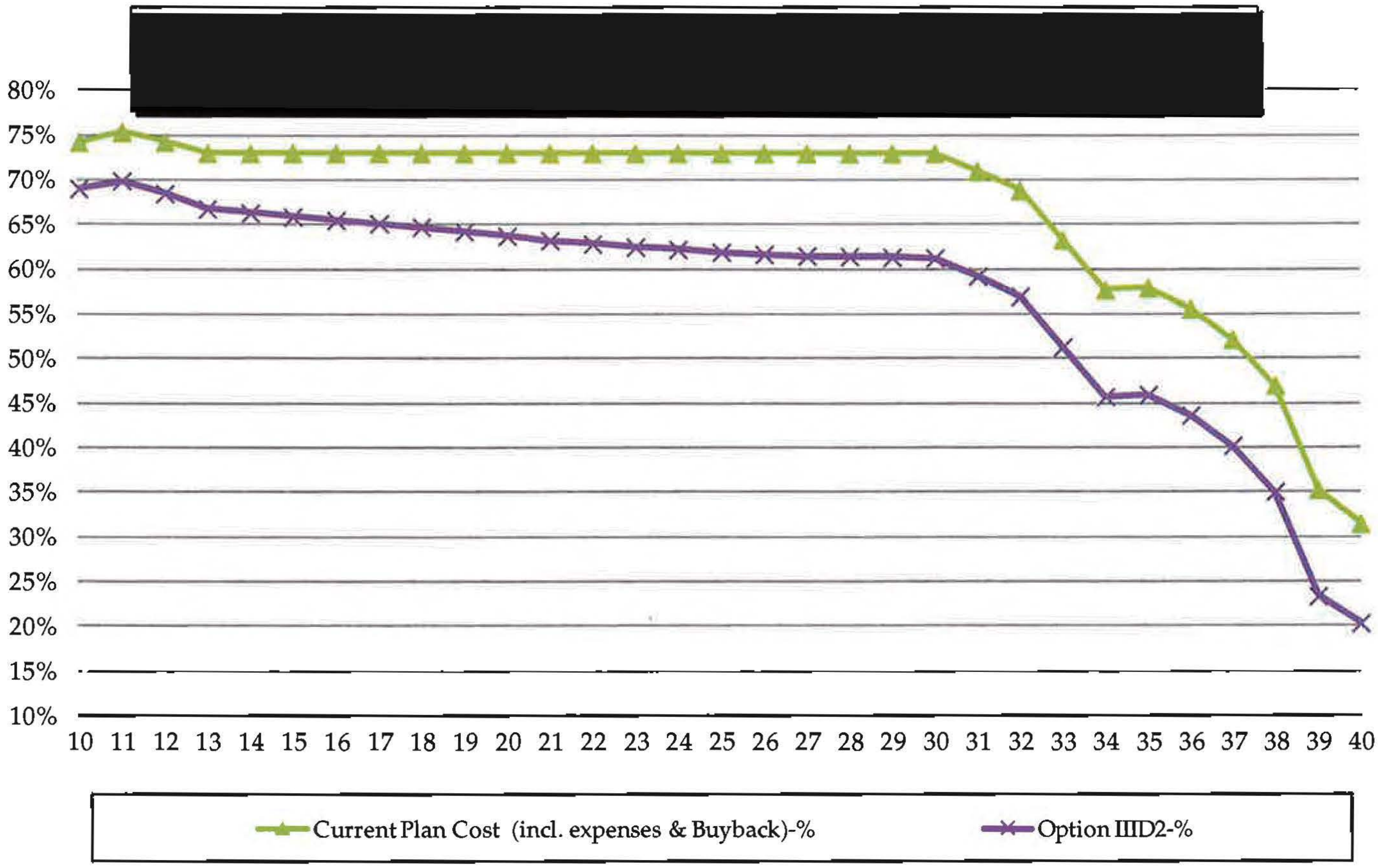
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Current Plan Cost (incl. expenses & Buyback)-%
Option IIID2-%

Option IIID2: Hybrid Plan (Chapter Minimum with 5% Employee Contribution) with 12.46% DC for New Employees and Non-Vested Existing Employees

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IIID2-$	Option IIID2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	32,960,590	68.96%	2,478,473	2,478,473
2011	37,226,360	75.25%	34,549,349	69.84%	2,677,012	2,474,133
2012	37,981,309	74.18%	35,026,618	68.41%	2,954,691	2,523,816
2013	38,660,638	72.95%	35,357,071	66.72%	3,303,566	2,607,962
2014	40,013,760	72.95%	36,340,969	66.25%	3,672,791	2,679,706
2015	41,414,242	72.95%	37,377,567	65.84%	4,036,674	2,721,995
2016	42,863,740	72.95%	38,465,825	65.46%	4,397,915	2,740,838
2017	44,363,971	72.95%	39,596,320	65.11%	4,767,651	2,746,083
2018	45,916,710	72.95%	40,730,878	64.71%	5,185,832	2,760,580
2019	47,523,795	72.95%	41,830,709	64.21%	5,693,085	2,800,931
2020	49,187,128	72.95%	42,949,796	63.70%	6,237,332	2,836,131
2021	50,908,677	72.95%	44,118,521	63.22%	6,790,156	2,853,513
2022	52,690,481	72.95%	45,367,879	62.81%	7,322,602	2,844,057
2023	54,534,648	72.95%	46,706,798	62.48%	7,827,850	2,809,882
2024	56,443,360	72.95%	48,125,099	62.20%	8,318,261	2,759,630
2025	58,418,878	72.95%	49,577,154	61.91%	8,841,724	2,710,991
2026	60,463,539	72.95%	51,117,333	61.67%	9,346,206	2,648,495
2027	62,579,763	72.95%	52,770,874	61.52%	9,808,889	2,568,954
2028	64,770,054	72.95%	54,543,387	61.43%	10,226,667	2,475,389
2029	67,037,006	72.95%	56,373,960	61.35%	10,663,046	2,385,412
2030	69,383,301	72.95%	58,274,547	61.27%	11,108,754	2,296,784
2031	69,868,207	70.98%	58,301,709	59.23%	11,566,498	2,210,189
2032	70,122,087	68.82%	58,080,648	57.01%	12,041,439	2,126,565
2033	66,721,958	63.27%	54,210,663	51.41%	12,511,296	2,042,092
2034	62,987,707	57.71%	49,999,800	45.81%	12,987,907	1,959,228
2035	65,472,079	57.96%	52,016,328	46.05%	13,455,751	1,875,972
2036	65,058,318	55.65%	51,126,041	43.73%	13,932,277	1,795,202
2037	63,213,581	52.24%	48,791,335	40.32%	14,422,246	1,717,500
2038	58,980,901	47.09%	44,053,877	35.17%	14,927,024	1,642,895
2039	45,863,374	35.38%	30,413,904	23.46%	15,449,470	1,571,531
2040	42,349,557	31.57%	27,431,335	20.45%	14,918,222	1,402,488
					Total APV	74,067,418

Actuarial Concepts

Section 13
Option IVA1: Change Existing Plan to 3% Multiplier for all FS, Vested Employees Grandfathered

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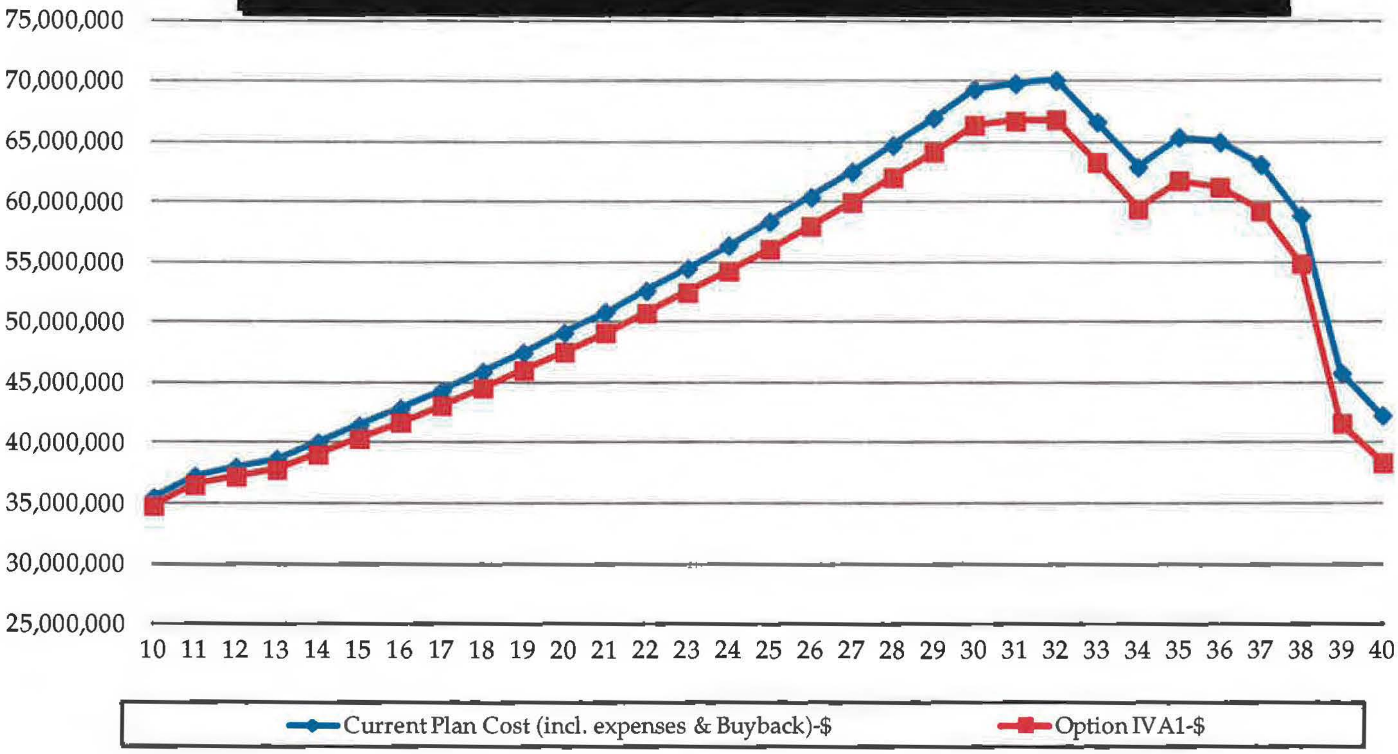
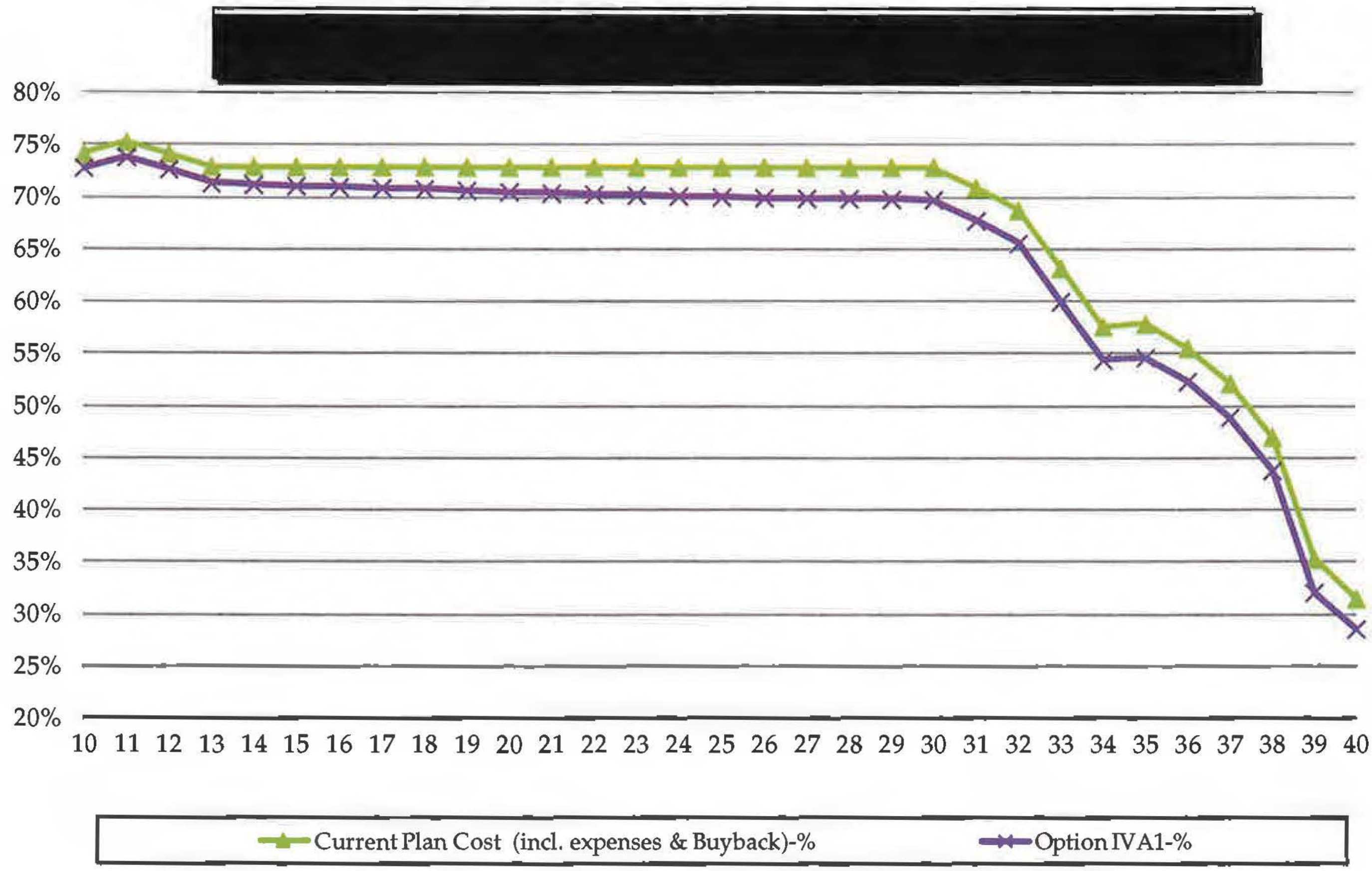


Actuarial Concepts



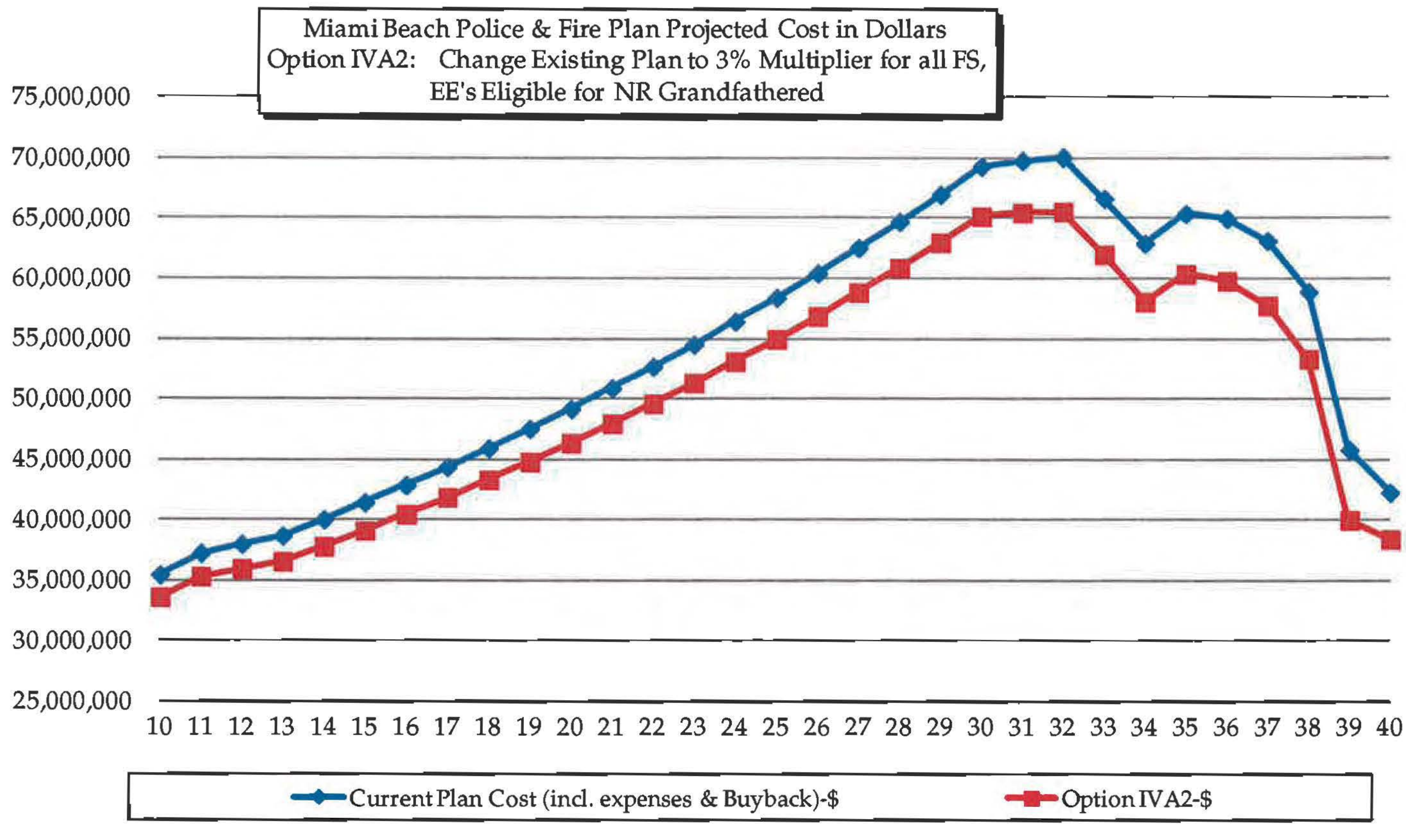
Actuarial Concepts

Option IVA1: Change Existing Plan to 3% Multiplier for all FS, Vested EE's Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVA1-$	Option IVA1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	34,786,003	72.77%	653,061	653,061
2011	37,226,360	75.25%	36,523,174	73.82%	703,186	649,895
2012	37,981,309	74.18%	37,207,793	72.67%	773,516	660,716
2013	38,660,638	72.95%	37,798,145	71.32%	862,493	680,885
2014	40,013,760	72.95%	39,057,080	71.21%	956,680	698,003
2015	41,414,242	72.95%	40,364,647	71.10%	1,049,595	707,759
2016	42,863,740	72.95%	41,721,804	71.01%	1,141,936	711,669
2017	44,363,971	72.95%	43,127,226	70.92%	1,236,745	712,343
2018	45,916,710	72.95%	44,572,807	70.81%	1,343,903	715,401
2019	47,523,795	72.95%	46,049,469	70.69%	1,474,326	725,351
2020	49,187,128	72.95%	47,572,622	70.55%	1,614,506	734,120
2021	50,908,677	72.95%	49,151,396	70.43%	1,757,281	738,484
2022	52,690,481	72.95%	50,795,013	70.33%	1,895,468	736,189
2023	54,534,648	72.95%	52,507,508	70.24%	2,027,140	727,661
2024	56,443,360	72.95%	54,284,920	70.16%	2,158,440	716,075
2025	58,418,878	72.95%	56,119,413	70.08%	2,299,465	705,047
2026	60,463,539	72.95%	58,027,521	70.01%	2,436,018	690,310
2027	62,579,763	72.95%	60,014,389	69.96%	2,565,374	671,873
2028	64,770,054	72.95%	62,081,599	69.92%	2,688,455	650,747
2029	67,037,006	72.95%	64,217,948	69.88%	2,819,058	630,647
2030	69,383,301	72.95%	66,431,836	69.85%	2,951,466	610,229
2031	69,868,207	70.98%	66,781,358	67.84%	3,086,849	589,852
2032	70,122,087	68.82%	66,894,568	65.66%	3,227,519	569,992
2033	66,721,958	63.27%	63,358,949	60.08%	3,363,009	548,910
2034	62,987,707	57.71%	59,488,975	54.51%	3,498,732	527,784
2035	65,472,079	57.96%	61,844,717	54.75%	3,627,362	505,719
2036	65,058,318	55.65%	61,301,404	52.43%	3,756,914	484,086
2037	63,213,581	52.24%	59,324,086	49.02%	3,889,495	463,188
2038	58,980,901	47.09%	54,955,274	43.88%	4,025,627	443,068
2039	45,863,374	35.38%	41,696,851	32.17%	4,166,524	423,822
2040	42,349,557	31.57%	38,464,161	28.67%	3,885,396	365,273
					Total APV	19,448,159

Actuarial Concepts

Section 14
Option IVA2: CHange Existing Plan to 3% Multiplier for all FS, Employees Eligible for NR Grandfathered



Actuarial Concepts

Option IVA2: Change Existing Plan to 3% Multiplier for all FS,
EE's Eligible for NR Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVA2-$	Option IVA2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	33,593,541	70.28%	1,845,523	1,845,523
2011	37,226,360	75.25%	35,294,056	71.34%	1,932,304	1,785,863
2012	37,981,309	74.18%	35,950,252	70.21%	2,031,057	1,734,873
2013	38,660,638	72.95%	36,529,504	68.93%	2,131,134	1,682,399
2014	40,013,760	72.95%	37,785,784	68.89%	2,227,976	1,625,554
2015	41,414,242	72.95%	39,092,844	68.86%	2,321,398	1,565,356
2016	42,863,740	72.95%	40,448,344	68.84%	2,415,396	1,505,306
2017	44,363,971	72.95%	41,852,398	68.82%	2,511,573	1,446,622
2018	45,916,710	72.95%	43,304,690	68.80%	2,612,020	1,390,460
2019	47,523,795	72.95%	44,803,780	68.77%	2,720,015	1,338,215
2020	49,187,128	72.95%	46,354,396	68.75%	2,832,732	1,288,050
2021	50,908,677	72.95%	47,959,507	68.72%	2,949,170	1,239,367
2022	52,690,481	72.95%	49,622,366	68.70%	3,068,115	1,191,639
2023	54,534,648	72.95%	51,345,330	68.68%	3,189,318	1,144,836
2024	56,443,360	72.95%	53,126,918	68.66%	3,316,442	1,100,248
2025	58,418,878	72.95%	54,969,207	68.64%	3,449,671	1,057,715
2026	60,463,539	72.95%	56,877,685	68.62%	3,585,853	1,016,147
2027	62,579,763	72.95%	58,852,593	68.60%	3,727,170	976,148
2028	64,770,054	72.95%	60,894,750	68.58%	3,875,304	938,027
2029	67,037,006	72.95%	63,006,014	68.56%	4,030,992	901,766
2030	69,383,301	72.95%	65,192,692	68.54%	4,190,609	866,427
2031	69,868,207	70.98%	65,513,305	66.55%	4,354,902	832,158
2032	70,122,087	68.82%	65,596,841	64.38%	4,525,246	799,176
2033	66,721,958	63.27%	62,025,956	58.82%	4,696,003	766,481
2034	62,987,707	57.71%	58,117,448	53.25%	4,870,259	734,679
2035	65,472,079	57.96%	60,427,969	53.49%	5,044,110	703,239
2036	65,058,318	55.65%	59,836,240	51.18%	5,222,078	672,875
2037	63,213,581	52.24%	57,808,132	47.77%	5,405,449	643,718
2038	58,980,901	47.09%	53,386,261	42.63%	5,594,640	615,756
2039	45,863,374	35.38%	40,072,922	30.91%	5,790,452	589,009
2040	42,349,557	31.57%	38,464,161	28.67%	3,885,396	365,273
					Total APV	34,362,906

Actuarial Concepts

Detail of Actuarial Studies

Section 15
Option IVB1: Change Existing Plan to 2% Multiplier for all FS, Vested Employees Grandfathered

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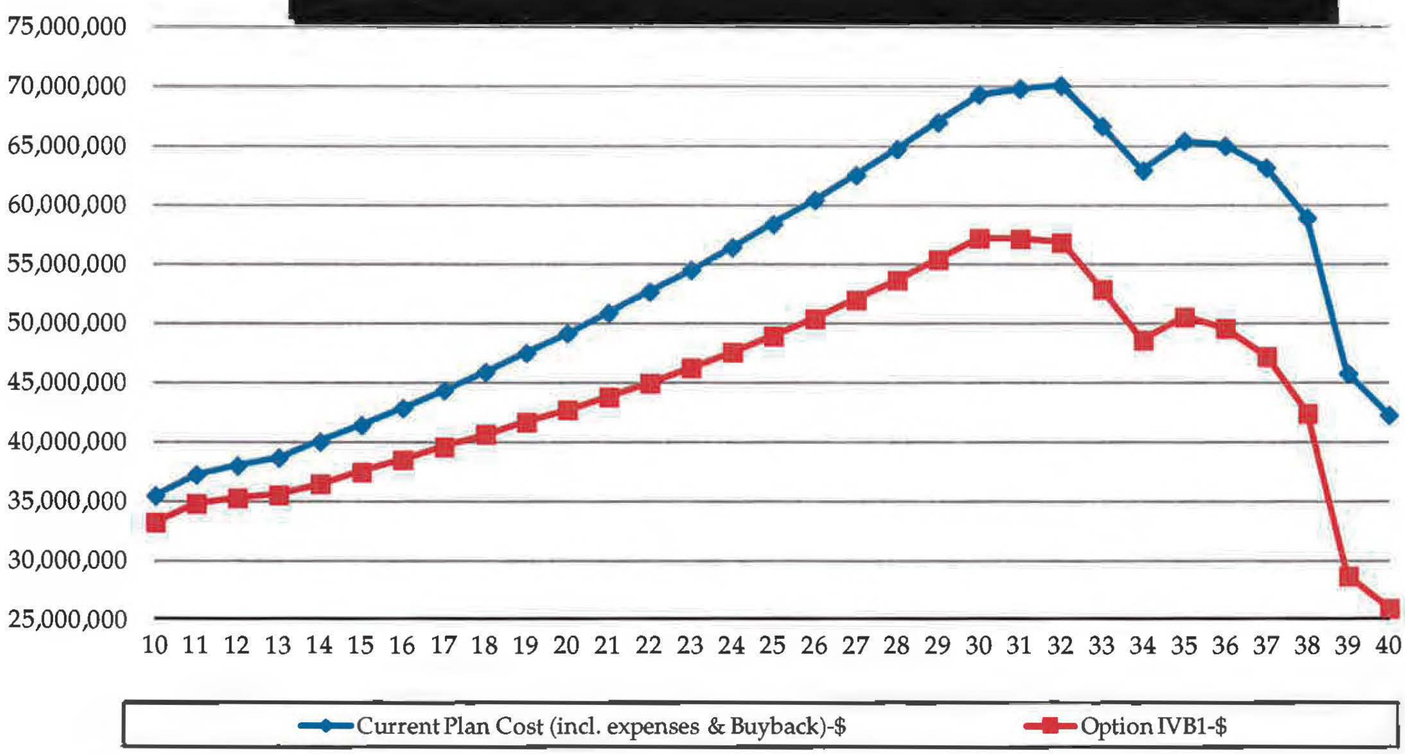
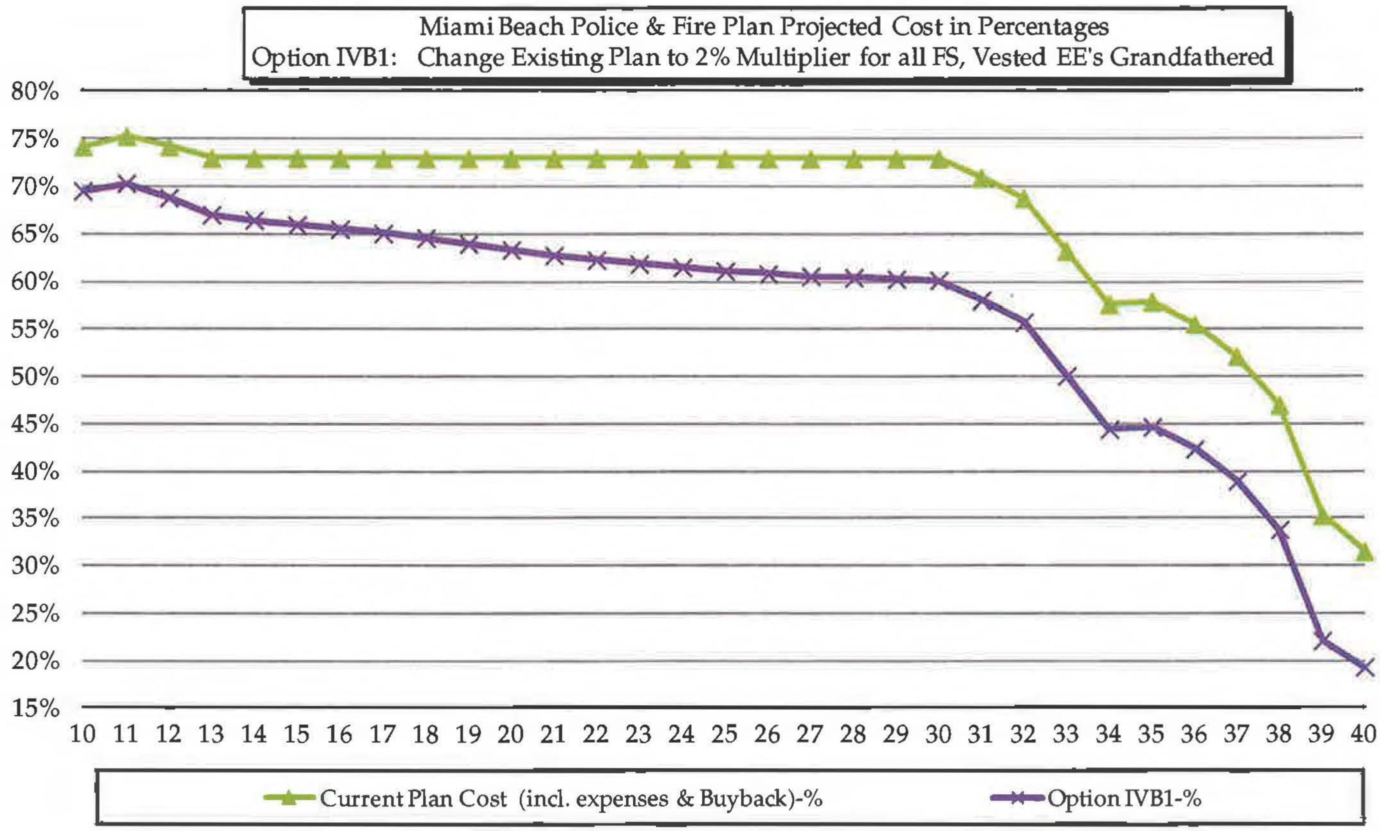




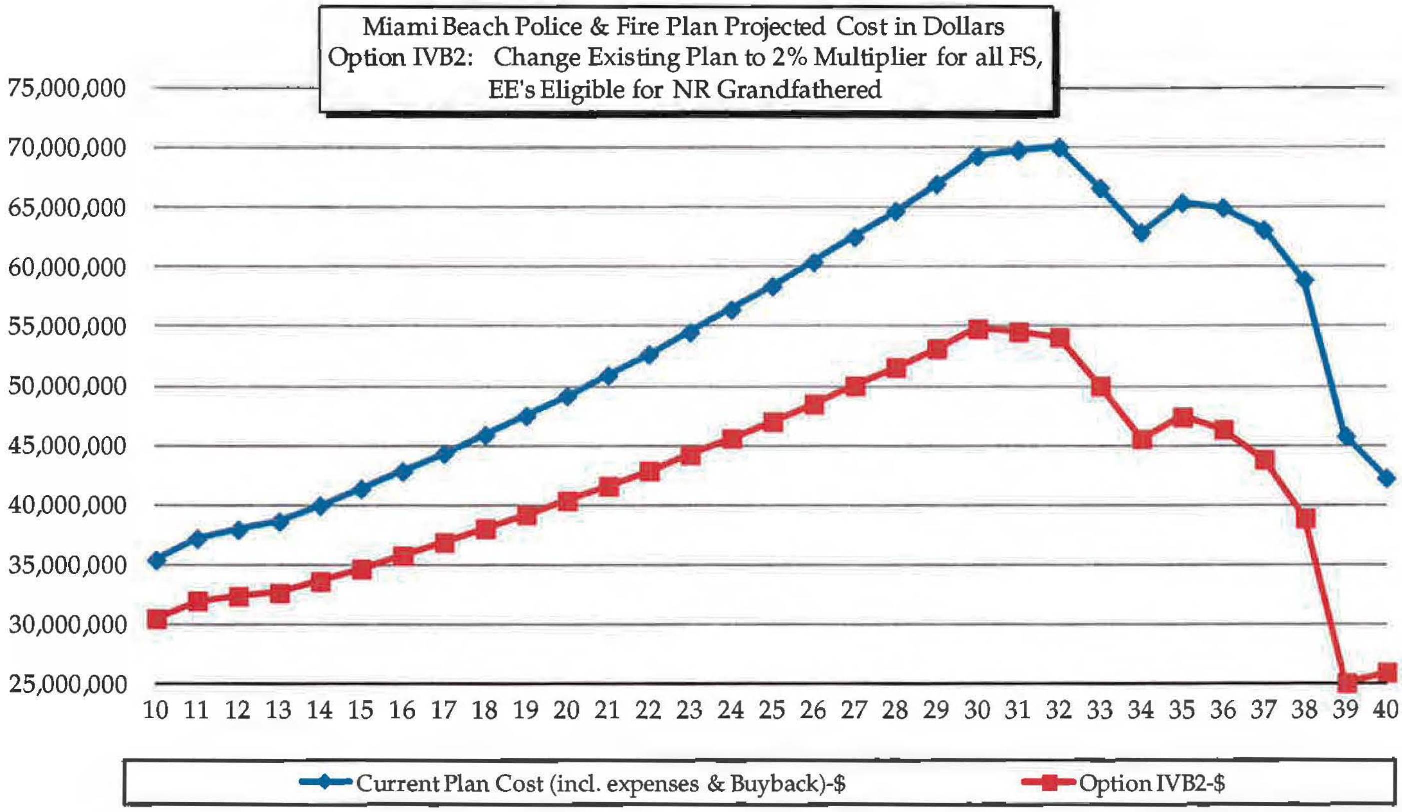
Actuarial Concepts

Option IVB1: Change Existing Plan to 2% Multiplier for all FS, Vested EE's Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVB1-$	Option IVB1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	33,205,899	69.47%	2,233,165	2,233,165
2011	37,226,360	75.25%	34,782,499	70.31%	2,443,861	2,258,652
2012	37,981,309	74.18%	35,231,589	68.81%	2,749,720	2,348,735
2013	38,660,638	72.95%	35,518,353	67.02%	3,142,284	2,480,640
2014	40,013,760	72.95%	36,455,234	66.46%	3,558,526	2,596,337
2015	41,414,242	72.95%	37,446,857	65.96%	3,967,385	2,675,273
2016	42,863,740	72.95%	38,491,611	65.51%	4,372,129	2,724,767
2017	44,363,971	72.95%	39,577,204	65.08%	4,786,767	2,757,093
2018	45,916,710	72.95%	40,657,731	64.59%	5,258,979	2,799,519
2019	47,523,795	72.95%	41,684,271	63.99%	5,839,524	2,872,977
2020	49,187,128	72.95%	42,722,625	63.36%	6,464,503	2,939,426
2021	50,908,677	72.95%	43,809,100	62.78%	7,099,577	2,983,545
2022	52,690,481	72.95%	44,980,424	62.27%	7,710,057	2,994,542
2023	54,534,648	72.95%	46,247,534	61.86%	8,287,114	2,974,739
2024	56,443,360	72.95%	47,589,820	61.51%	8,853,540	2,937,212
2025	58,418,878	72.95%	48,956,969	61.13%	9,461,909	2,901,148
2026	60,463,539	72.95%	50,416,999	60.83%	10,046,540	2,846,953
2027	62,579,763	72.95%	51,992,008	60.61%	10,587,755	2,772,940
2028	64,770,054	72.95%	53,683,842	60.46%	11,086,212	2,683,444
2029	67,037,006	72.95%	55,424,301	60.31%	11,612,706	2,597,858
2030	69,383,301	72.95%	57,236,170	60.18%	12,147,132	2,511,473
2031	69,868,207	70.98%	57,174,234	58.08%	12,693,974	2,425,633
2032	70,122,087	68.82%	56,860,057	55.81%	13,262,030	2,342,126
2033	66,721,958	63.27%	52,910,309	50.17%	13,811,649	2,254,335
2034	62,987,707	57.71%	48,624,307	44.55%	14,363,400	2,166,721
2035	65,472,079	57.96%	50,582,540	44.78%	14,889,539	2,075,868
2036	65,058,318	55.65%	49,637,805	42.46%	15,420,513	1,986,964
2037	63,213,581	52.24%	47,249,221	39.05%	15,964,360	1,901,146
2038	58,980,901	47.09%	42,457,788	33.90%	16,523,113	1,818,564
2039	45,863,374	35.38%	28,761,953	22.19%	17,101,422	1,739,569
2040	42,349,557	31.57%	26,043,236	19.41%	16,306,321	1,532,986
					Total APV	77,134,350

Actuarial Concepts

Section 16
Option IVB2: Change Existing Plan to 2% Multiplier for all FS, Employees Eligible for NR Grandfathered



Actuarial Concepts

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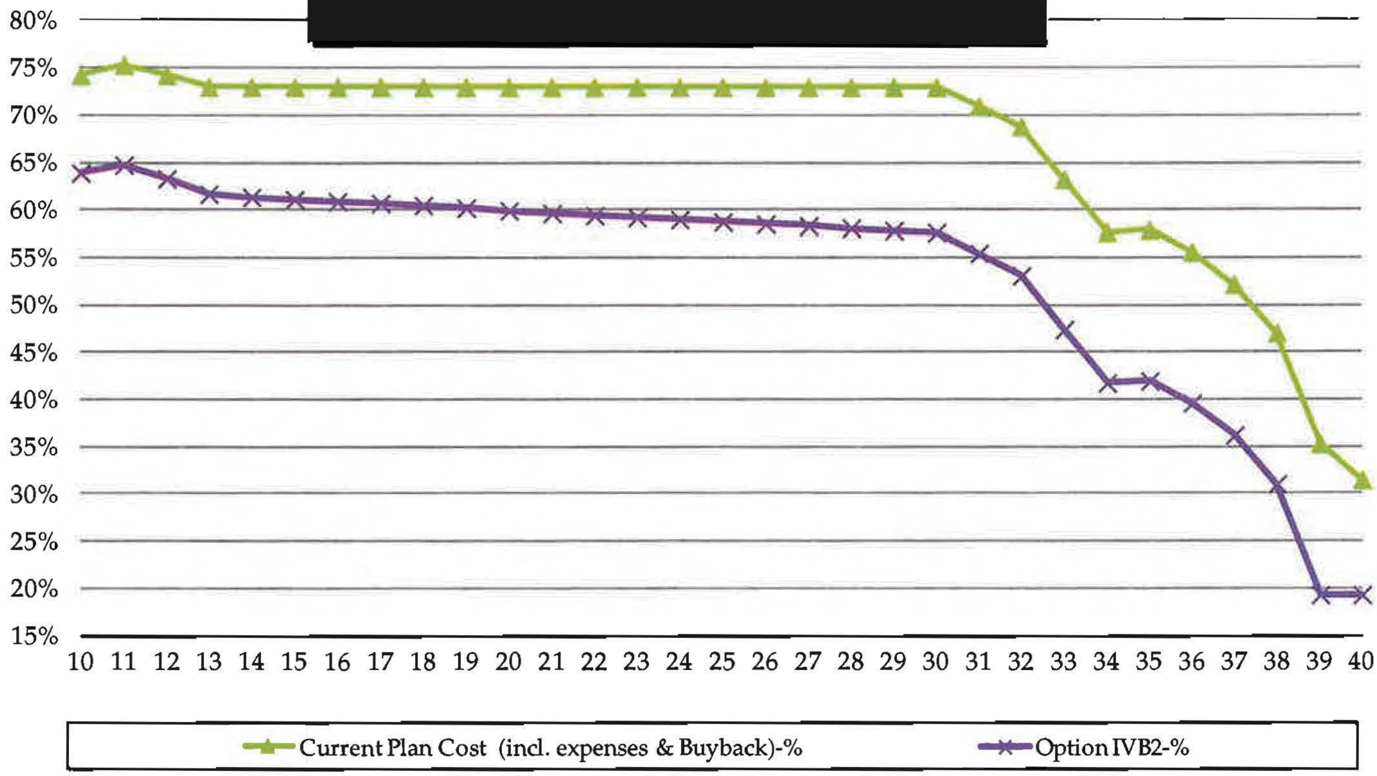
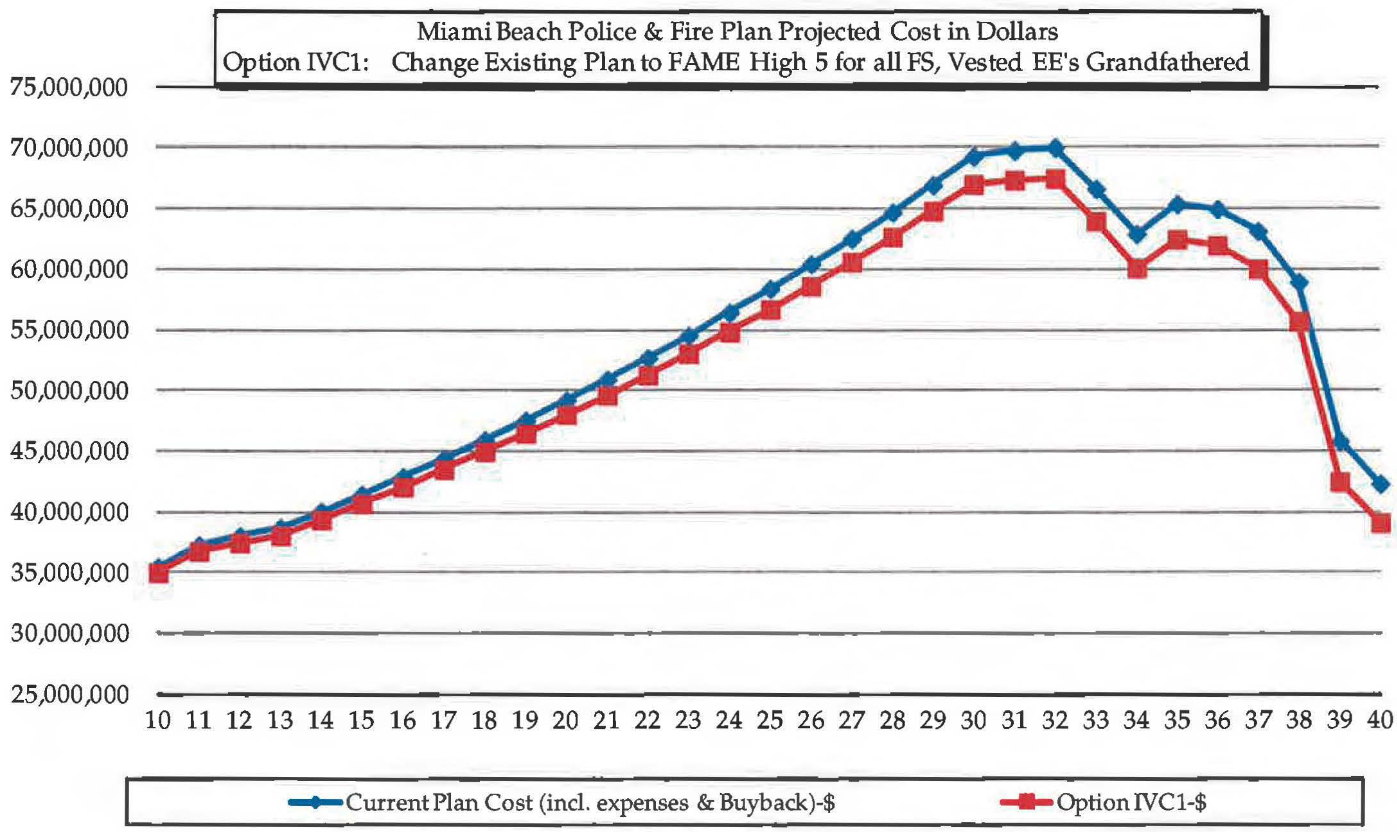


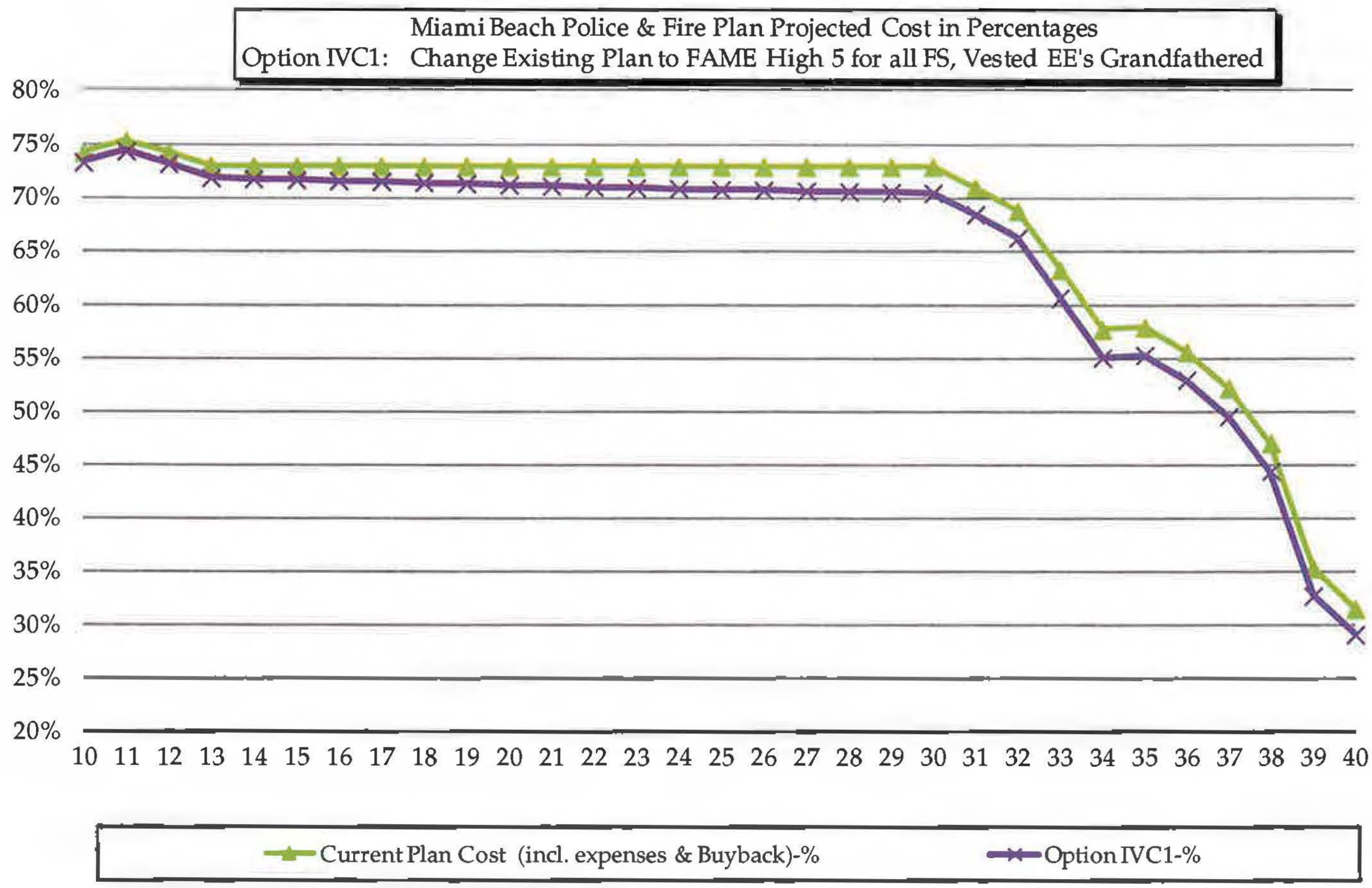
Actuarial Concepts

Option IVB2: Change Existing Plan to 2% Multiplier for all FS,
EE's Eligible for NR Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVB2-$	Option IVB2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	30,523,193	63.86%	4,915,870	4,915,870
2011	37,226,360	75.25%	32,011,324	64.70%	5,215,036	4,819,812
2012	37,981,309	74.18%	32,393,548	63.26%	5,587,761	4,772,910
2013	38,660,638	72.95%	32,674,494	61.65%	5,986,144	4,725,691
2014	40,013,760	72.95%	33,643,225	61.34%	6,370,535	4,648,008
2015	41,414,242	72.95%	34,681,817	61.09%	6,732,424	4,539,784
2016	42,863,740	72.95%	35,773,102	60.88%	7,090,638	4,418,977
2017	44,363,971	72.95%	36,906,993	60.69%	7,456,978	4,295,088
2018	45,916,710	72.95%	38,065,664	60.48%	7,851,046	4,179,357
2019	47,523,795	72.95%	39,220,133	60.20%	8,303,662	4,085,303
2020	49,187,128	72.95%	40,402,940	59.92%	8,784,188	3,994,193
2021	50,908,677	72.95%	41,629,047	59.65%	9,279,630	3,899,696
2022	52,690,481	72.95%	42,913,887	59.41%	9,776,594	3,797,173
2023	54,534,648	72.95%	44,264,302	59.21%	10,270,346	3,686,640
2024	56,443,360	72.95%	45,642,795	58.99%	10,800,566	3,583,149
2025	58,418,878	72.95%	47,050,090	58.75%	11,368,788	3,485,822
2026	60,463,539	72.95%	48,525,227	58.55%	11,938,312	3,383,037
2027	62,579,763	72.95%	50,047,907	58.34%	12,531,855	3,282,101
2028	64,770,054	72.95%	51,603,084	58.12%	13,166,971	3,187,096
2029	67,037,006	72.95%	53,186,372	57.88%	13,850,635	3,098,502
2030	69,383,301	72.95%	54,841,961	57.66%	14,541,341	3,006,486
2031	69,868,207	70.98%	54,622,106	55.49%	15,246,102	2,913,308
2032	70,122,087	68.82%	54,143,220	53.14%	15,978,867	2,821,930
2033	66,721,958	63.27%	50,046,337	47.46%	16,675,622	2,721,793
2034	62,987,707	57.71%	45,618,468	41.80%	17,369,239	2,620,152
2035	65,472,079	57.96%	47,457,231	42.01%	18,014,848	2,511,592
2036	65,058,318	55.65%	46,397,118	39.68%	18,661,200	2,404,533
2037	63,213,581	52.24%	43,892,594	36.27%	19,320,987	2,300,876
2038	58,980,901	47.09%	38,983,680	31.13%	19,997,222	2,200,931
2039	45,863,374	35.38%	25,166,250	19.41%	20,697,124	2,105,326
2040	42,349,557	31.57%	26,043,236	19.41%	16,306,321	1,532,986
					Total APV	107,938,123

Section 17
Option IVC1: Change Existing Plan to FAME High 5 for all FS, Vested Employees Grandfathered



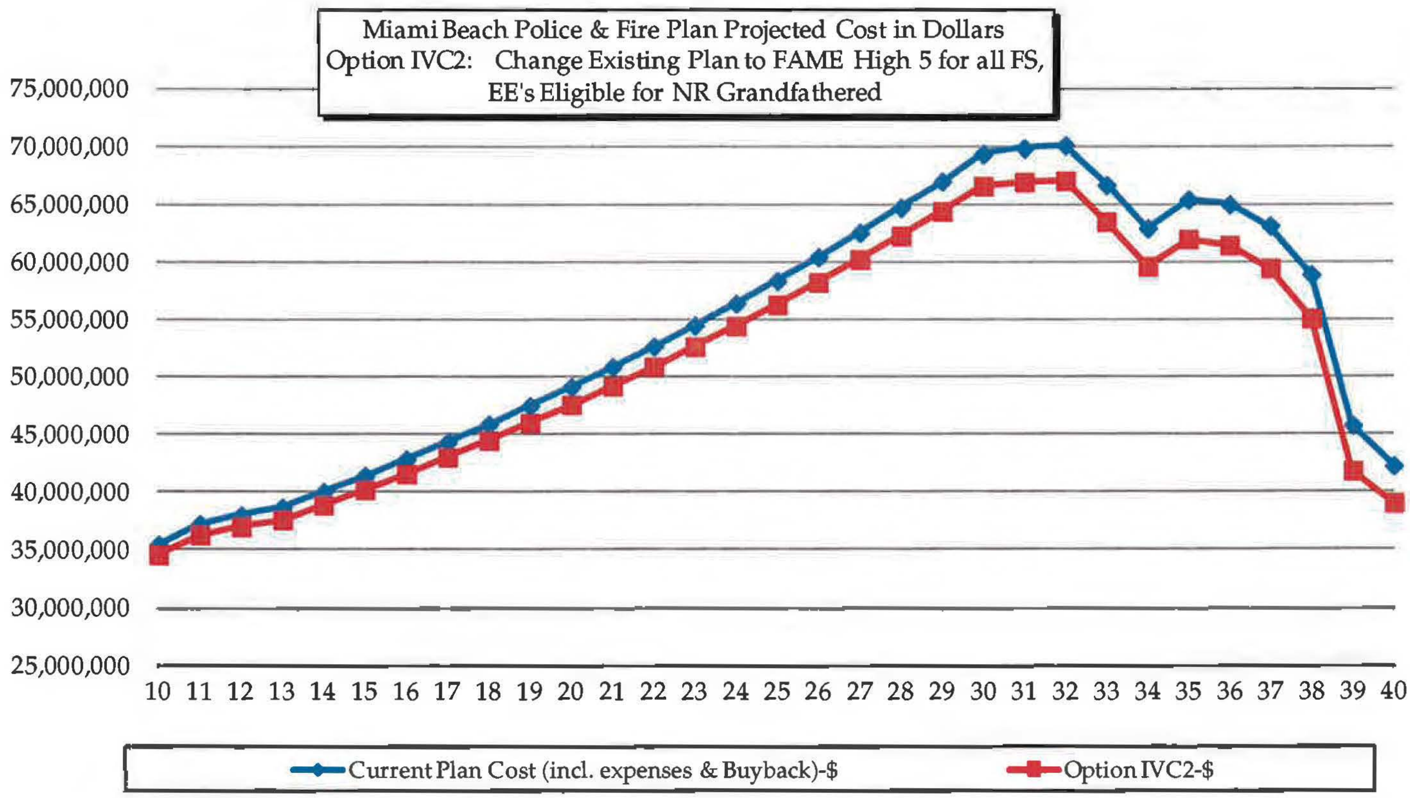

Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IVC1: Change Existing Plan to FAME High 5 for all FS, Vested EE's Grandfathered
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IVC1-%

Option IVC1: Change Existing Plan to FAME High 5 for all FS, Vested EE's Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVC1-$	Option IVC1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,002,758	73.23%	436,305	436,305
2011	37,226,360	75.25%	36,754,876	74.29%	471,484	435,752
2012	37,981,309	74.18%	37,458,587	73.16%	522,722	446,495
2013	38,660,638	72.95%	38,071,141	71.84%	589,497	465,372
2014	40,013,760	72.95%	39,353,443	71.75%	660,317	481,774
2015	41,414,242	72.95%	40,684,145	71.66%	730,096	492,316
2016	42,863,740	72.95%	42,064,334	71.59%	799,406	498,200
2017	44,363,971	72.95%	43,492,989	71.52%	870,982	501,671
2018	45,916,710	72.95%	44,964,454	71.44%	952,257	506,916
2019	47,523,795	72.95%	46,470,974	71.33%	1,052,821	517,975
2020	49,187,128	72.95%	48,025,626	71.23%	1,161,502	528,138
2021	50,908,677	72.95%	49,635,985	71.13%	1,272,692	534,840
2022	52,690,481	72.95%	51,309,533	71.04%	1,380,948	536,352
2023	54,534,648	72.95%	53,050,222	70.96%	1,484,426	532,849
2024	56,443,360	72.95%	54,850,695	70.89%	1,592,666	528,376
2025	58,418,878	72.95%	56,708,409	70.81%	1,710,469	524,453
2026	60,463,539	72.95%	58,638,512	70.75%	1,825,027	517,170
2027	62,579,763	72.95%	60,640,826	70.69%	1,938,937	507,809
2028	64,770,054	72.95%	62,714,471	70.63%	2,055,583	497,559
2029	67,037,006	72.95%	64,854,716	70.57%	2,182,290	488,196
2030	69,383,301	72.95%	67,074,021	70.52%	2,309,281	477,454
2031	69,868,207	70.98%	67,429,978	68.50%	2,438,229	465,910
2032	70,122,087	68.82%	67,549,576	66.30%	2,572,512	454,316
2033	66,721,958	63.27%	64,025,618	60.72%	2,696,340	440,096
2034	62,987,707	57.71%	60,169,968	55.13%	2,817,739	425,056
2035	65,472,079	57.96%	62,546,458	55.37%	2,925,621	407,884
2036	65,058,318	55.65%	62,026,409	53.05%	3,031,909	390,668
2037	63,213,581	52.24%	60,073,922	49.64%	3,139,659	373,892
2038	58,980,901	47.09%	55,731,354	44.50%	3,249,547	357,651
2039	45,863,374	35.38%	42,500,093	32.79%	3,363,281	342,115
2040	42,349,557	31.57%	39,137,666	29.17%	3,211,892	301,956
					Total APV	14,415,514

Actuarial Concepts

Section 18
Option IVC2: Change Existing Plan to FAME High 5 for all FS, Employees Eligible for NR Grandfathered



Actuarial Concepts

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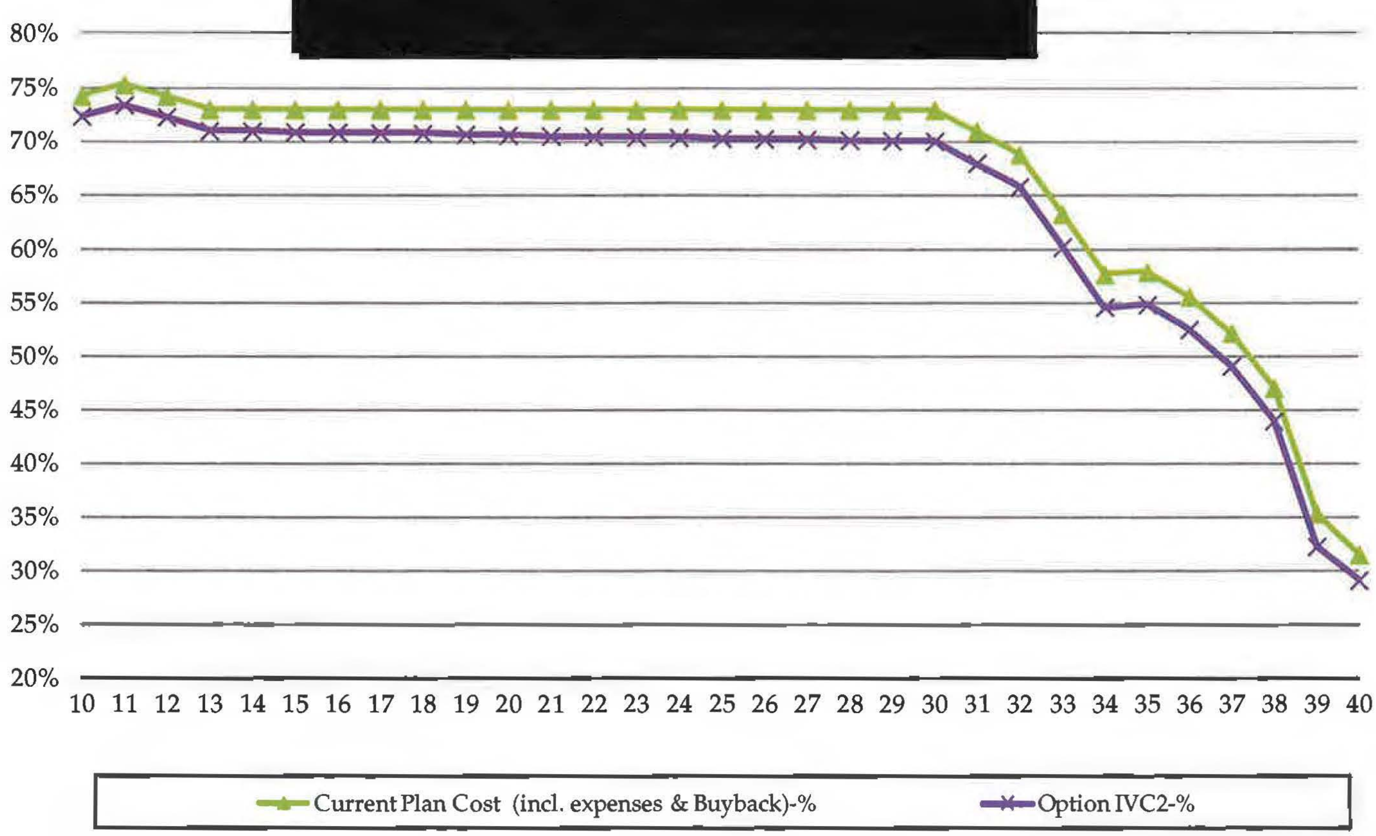

Actuarial Concepts

Option IVC2: Change Existing Plan to FAME High 5 for all FS,
EE's Eligible for NR Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVC2-$	Option IVC2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	34,552,299	72.29%	886,764	886,764
2011	37,226,360	75.25%	36,296,527	73.37%	929,833	859,365
2012	37,981,309	74.18%	36,997,364	72.25%	983,945	840,458
2013	38,660,638	72.95%	37,612,058	70.97%	1,048,580	827,789
2014	40,013,760	72.95%	38,897,735	70.91%	1,116,025	814,263
2015	41,414,242	72.95%	40,230,900	70.86%	1,183,342	797,947
2016	42,863,740	72.95%	41,612,545	70.82%	1,251,195	779,761
2017	44,363,971	72.95%	43,042,380	70.78%	1,321,591	761,213
2018	45,916,710	72.95%	44,517,935	70.73%	1,398,775	744,611
2019	47,523,795	72.95%	46,034,417	70.66%	1,489,378	732,756
2020	49,187,128	72.95%	47,600,832	70.60%	1,586,295	721,293
2021	50,908,677	72.95%	49,222,440	70.53%	1,686,237	708,629
2022	52,690,481	72.95%	50,904,347	70.48%	1,786,134	693,724
2023	54,534,648	72.95%	52,649,972	70.43%	1,884,676	676,522
2024	56,443,360	72.95%	54,452,014	70.38%	1,991,346	660,640
2025	58,418,878	72.95%	56,312,304	70.32%	2,106,574	645,904
2026	60,463,539	72.95%	58,242,097	70.27%	2,221,442	629,504
2027	62,579,763	72.95%	60,238,453	70.22%	2,341,310	613,191
2028	64,770,054	72.95%	62,299,695	70.17%	2,470,359	597,956
2029	67,037,006	72.95%	64,426,773	70.11%	2,610,234	583,931
2030	69,383,301	72.95%	66,632,345	70.06%	2,750,956	568,772
2031	69,868,207	70.98%	66,974,029	68.04%	2,894,178	553,035
2032	70,122,087	68.82%	67,078,874	65.84%	3,043,213	537,443
2033	66,721,958	63.27%	63,539,275	60.25%	3,182,684	519,477
2034	62,987,707	57.71%	59,667,269	54.67%	3,320,439	500,889
2035	65,472,079	57.96%	62,026,391	54.91%	3,445,688	480,390
2036	65,058,318	55.65%	61,488,236	52.59%	3,570,082	460,012
2037	63,213,581	52.24%	59,516,953	49.18%	3,696,628	440,220
2038	58,980,901	47.09%	55,154,892	44.04%	3,826,010	421,098
2039	45,863,374	35.38%	41,903,454	32.33%	3,959,920	402,806
2040	42,349,557	31.57%	39,137,666	29.17%	3,211,892	301,956
					Total APV	19,762,322

Section 19

Option IVD1: Change Existing Plan to 1.5% COLA, Vested Employees Grandfathered

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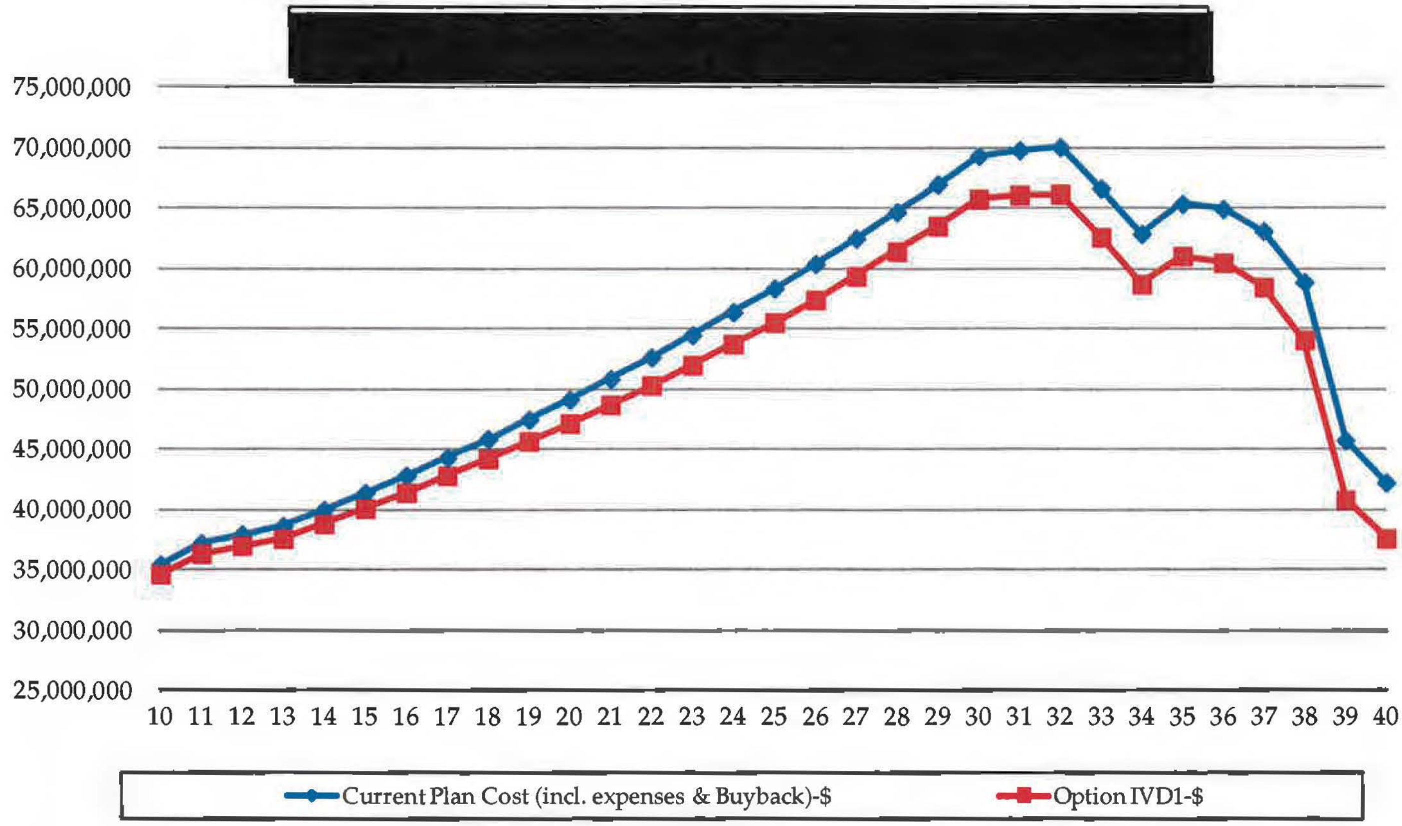

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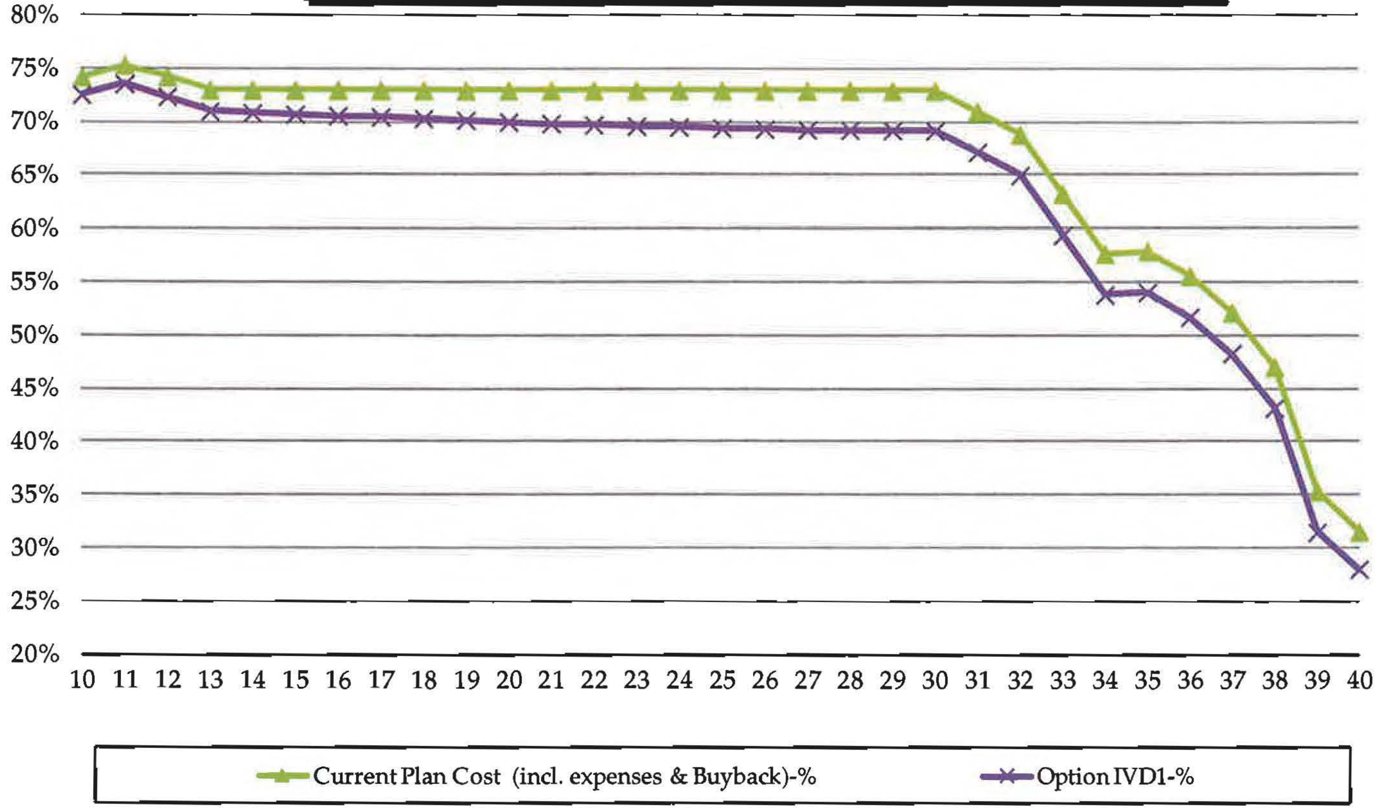


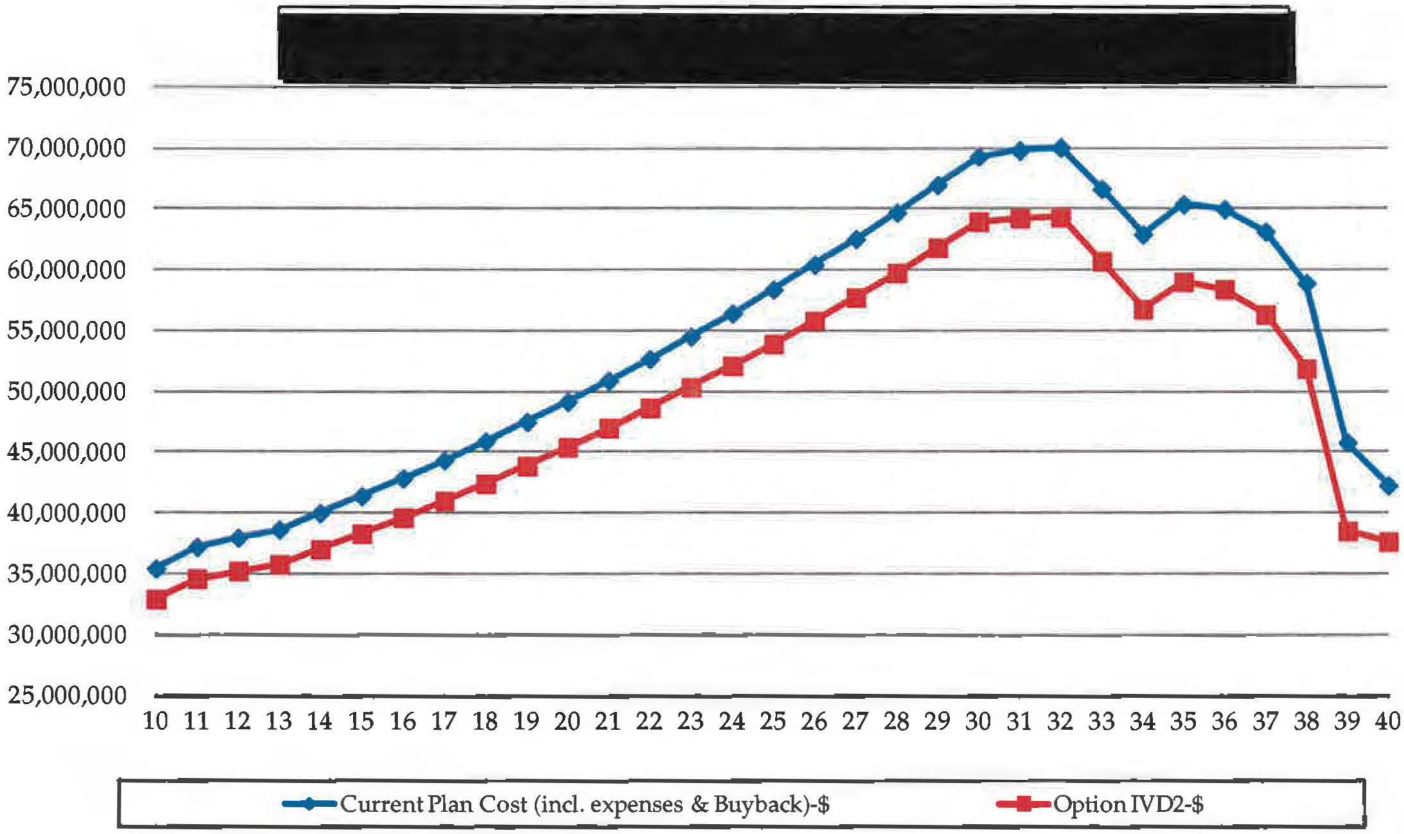
Actuarial Concepts

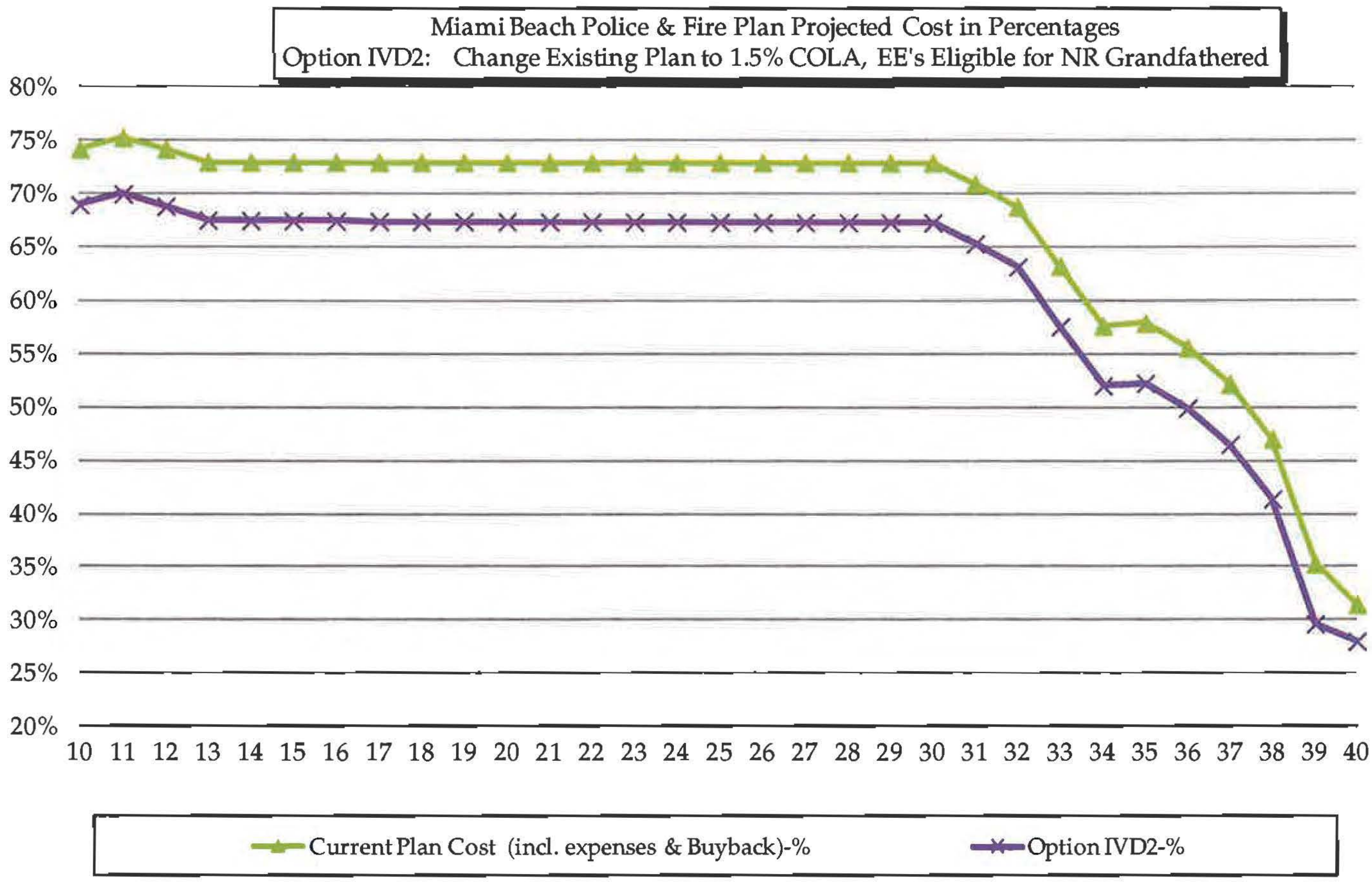
Option IVD1: Change Existing Plan to 1.5% COLA, Vested EE's Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVD1-$	Option IVD1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	34,636,516	72.46%	802,547	802,547
2011	37,226,360	75.25%	36,361,093	73.50%	865,268	799,693
2012	37,981,309	74.18%	37,028,447	72.32%	952,862	813,908
2013	38,660,638	72.95%	37,597,627	70.94%	1,063,011	839,182
2014	40,013,760	72.95%	38,834,182	70.80%	1,179,578	860,632
2015	41,414,242	72.95%	40,119,717	70.67%	1,294,525	872,919
2016	42,863,740	72.95%	41,455,037	70.55%	1,408,703	877,922
2017	44,363,971	72.95%	42,838,287	70.44%	1,525,684	878,767
2018	45,916,710	72.95%	44,258,813	70.32%	1,657,897	882,550
2019	47,523,795	72.95%	45,705,490	70.16%	1,818,305	894,585
2020	49,187,128	72.95%	47,196,654	70.00%	1,990,474	905,073
2021	50,908,677	72.95%	48,743,162	69.85%	2,165,515	910,042
2022	52,690,481	72.95%	50,356,065	69.72%	2,334,415	906,674
2023	54,534,648	72.95%	52,039,683	69.61%	2,494,965	895,592
2024	56,443,360	72.95%	53,791,198	69.52%	2,652,162	879,870
2025	58,418,878	72.95%	55,598,625	69.43%	2,820,253	864,727
2026	60,463,539	72.95%	57,480,983	69.35%	2,982,555	845,186
2027	62,579,763	72.95%	59,446,698	69.30%	3,133,064	820,552
2028	64,770,054	72.95%	61,498,607	69.26%	3,271,448	791,862
2029	67,037,006	72.95%	63,620,261	69.23%	3,416,746	764,354
2030	69,383,301	72.95%	65,818,506	69.20%	3,564,795	737,037
2031	69,868,207	70.98%	66,151,580	67.20%	3,716,628	710,193
2032	70,122,087	68.82%	66,247,851	65.02%	3,874,236	684,205
2033	66,721,958	63.27%	62,693,121	59.45%	4,028,838	657,586
2034	62,987,707	57.71%	58,802,660	53.88%	4,185,047	631,315
2035	65,472,079	57.96%	61,135,347	54.12%	4,336,732	604,618
2036	65,058,318	55.65%	60,567,612	51.80%	4,490,706	578,637
2037	63,213,581	52.24%	58,564,781	48.40%	4,648,799	553,611
2038	58,980,901	47.09%	54,169,394	43.25%	4,811,507	529,563
2039	45,863,374	35.38%	40,883,464	31.54%	4,979,910	506,560
2040	42,349,557	31.57%	37,694,058	28.10%	4,655,499	437,672
					Total APV	23,737,634

Section 20

Option IVD2: Change Existing Plan to 1.5% COLA, Employees Eligible for NR Grandfathered





Actuarial Concepts

Option IVD2: Change Existing Plan to 1.5% COLA, EE's Eligible for NR Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVD2-$	Option IVD2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	32,932,490	68.90%	2,506,573	2,506,573
2011	37,226,360	75.25%	34,600,649	69.94%	2,625,711	2,426,720
2012	37,981,309	74.18%	35,222,147	68.79%	2,759,162	2,356,800
2013	38,660,638	72.95%	35,771,601	67.50%	2,889,037	2,280,717
2014	40,013,760	72.95%	37,002,084	67.46%	3,011,676	2,197,350
2015	41,414,242	72.95%	38,285,916	67.44%	3,128,326	2,109,482
2016	42,863,740	72.95%	39,618,302	67.43%	3,245,438	2,022,599
2017	44,363,971	72.95%	40,999,307	67.42%	3,364,664	1,937,987
2018	45,916,710	72.95%	42,429,416	67.41%	3,487,294	1,856,396
2019	47,523,795	72.95%	43,908,425	67.40%	3,615,370	1,778,719
2020	49,187,128	72.95%	45,439,275	67.39%	3,747,853	1,704,158
2021	50,908,677	72.95%	47,023,887	67.38%	3,884,790	1,632,554
2022	52,690,481	72.95%	48,664,744	67.38%	4,025,737	1,563,573
2023	54,534,648	72.95%	50,363,689	67.37%	4,170,959	1,497,206
2024	56,443,360	72.95%	52,121,732	67.36%	4,321,628	1,433,725
2025	58,418,878	72.95%	53,941,061	67.36%	4,477,817	1,372,958
2026	60,463,539	72.95%	55,824,635	67.35%	4,638,903	1,314,556
2027	62,579,763	72.95%	57,774,031	67.35%	4,805,732	1,258,624
2028	64,770,054	72.95%	59,791,126	67.34%	4,978,929	1,205,161
2029	67,037,006	72.95%	61,878,150	67.34%	5,158,856	1,154,079
2030	69,383,301	72.95%	64,038,650	67.33%	5,344,651	1,105,030
2031	69,868,207	70.98%	64,331,515	65.35%	5,536,693	1,057,981
2032	70,122,087	68.82%	64,386,547	63.19%	5,735,540	1,012,919
2033	66,721,958	63.27%	60,782,179	57.64%	5,939,780	969,490
2034	62,987,707	57.71%	56,837,240	52.08%	6,150,468	927,799
2035	65,472,079	57.96%	59,105,387	52.32%	6,366,692	887,631
2036	65,058,318	55.65%	58,468,389	50.01%	6,589,929	849,126
2037	63,213,581	52.24%	56,392,836	46.60%	6,820,745	812,261
2038	58,980,901	47.09%	51,921,430	41.46%	7,059,471	776,978
2039	45,863,374	35.38%	38,556,821	29.74%	7,306,553	743,228
2040	42,349,557	31.57%	37,694,058	28.10%	4,655,499	437,672
					Total APV	45,190,053

Section 21

Option IVE1: Change Existing Plan to No COLA, Vested Employees Grandfathered

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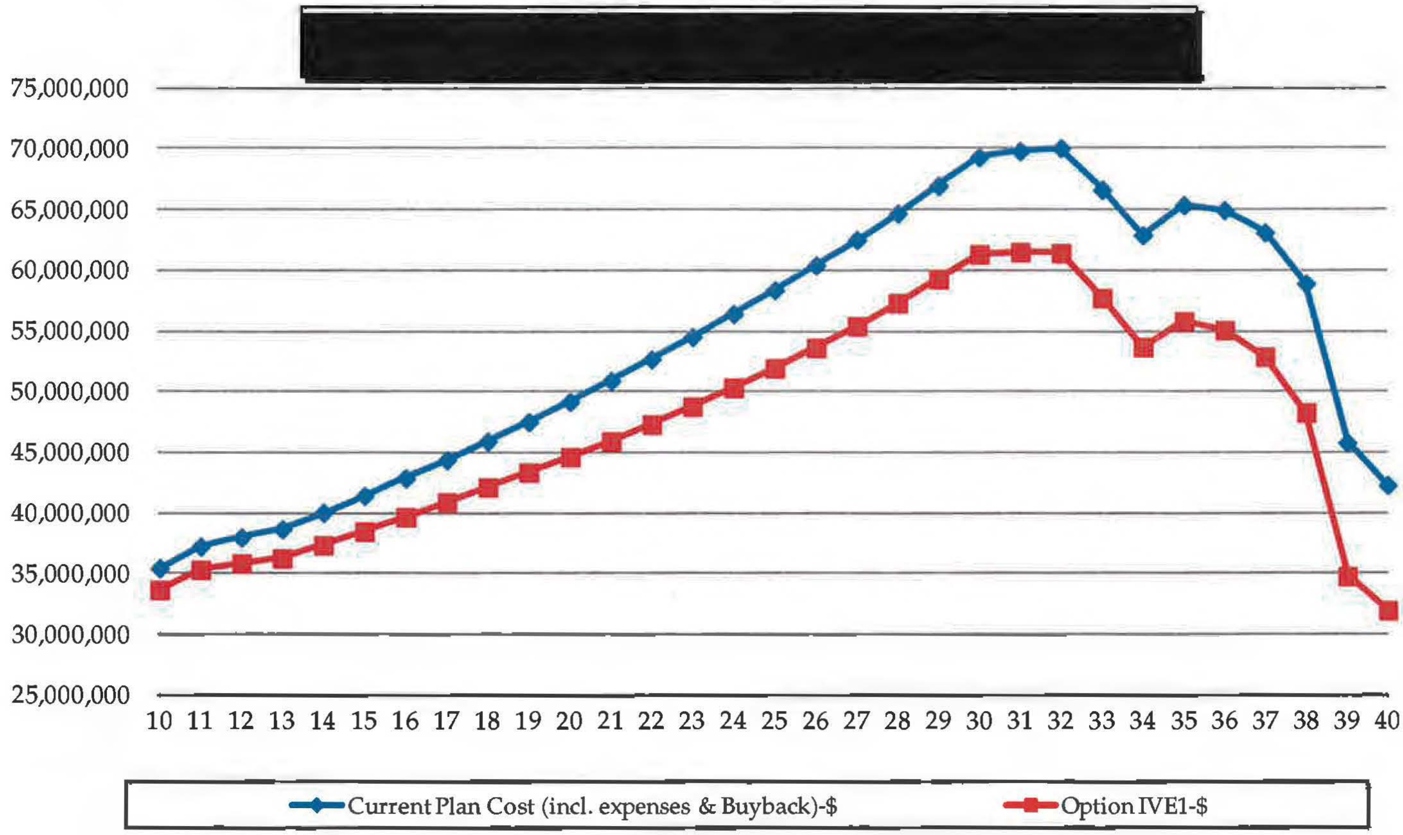
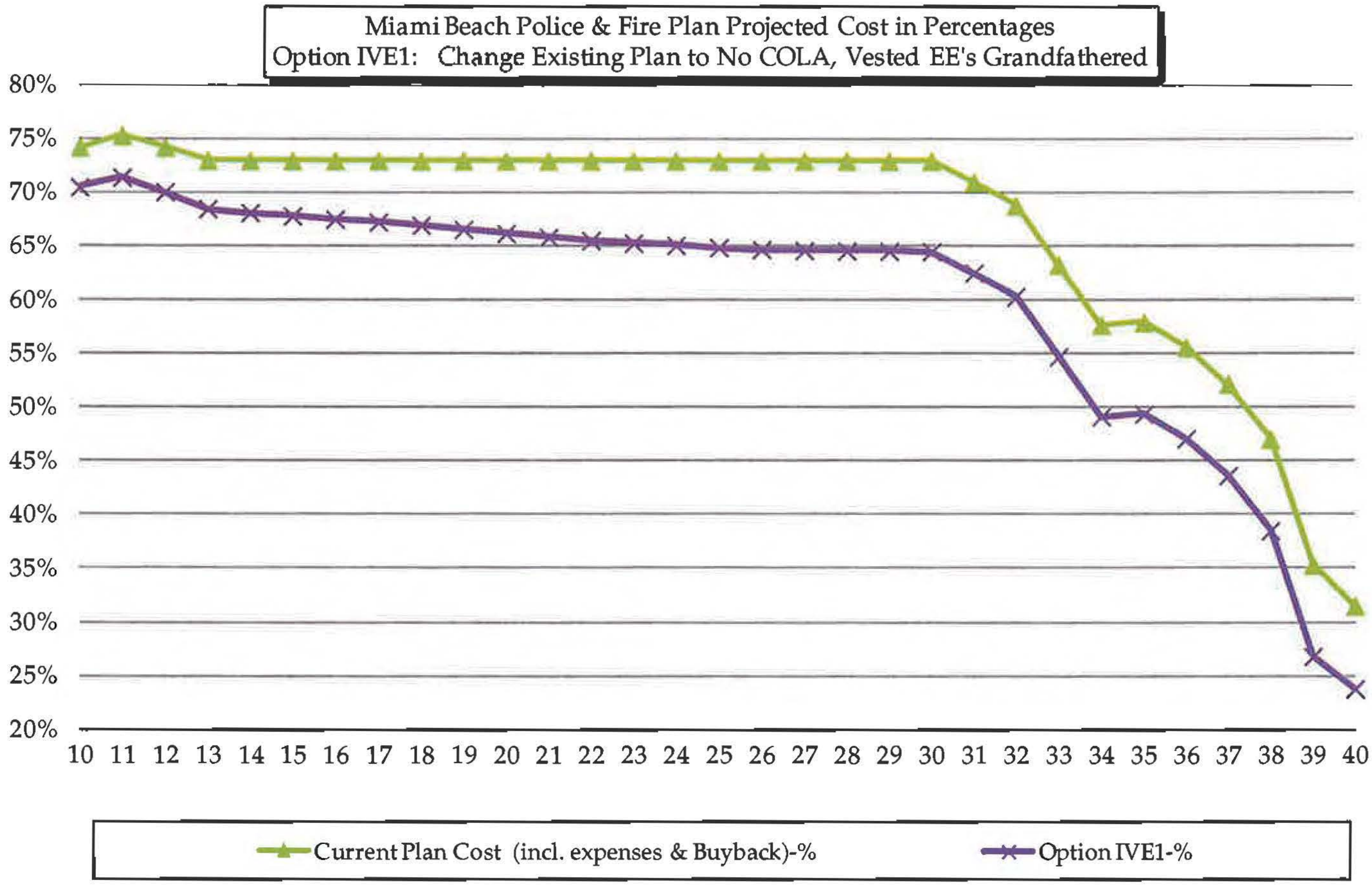


Actuarial Concepts

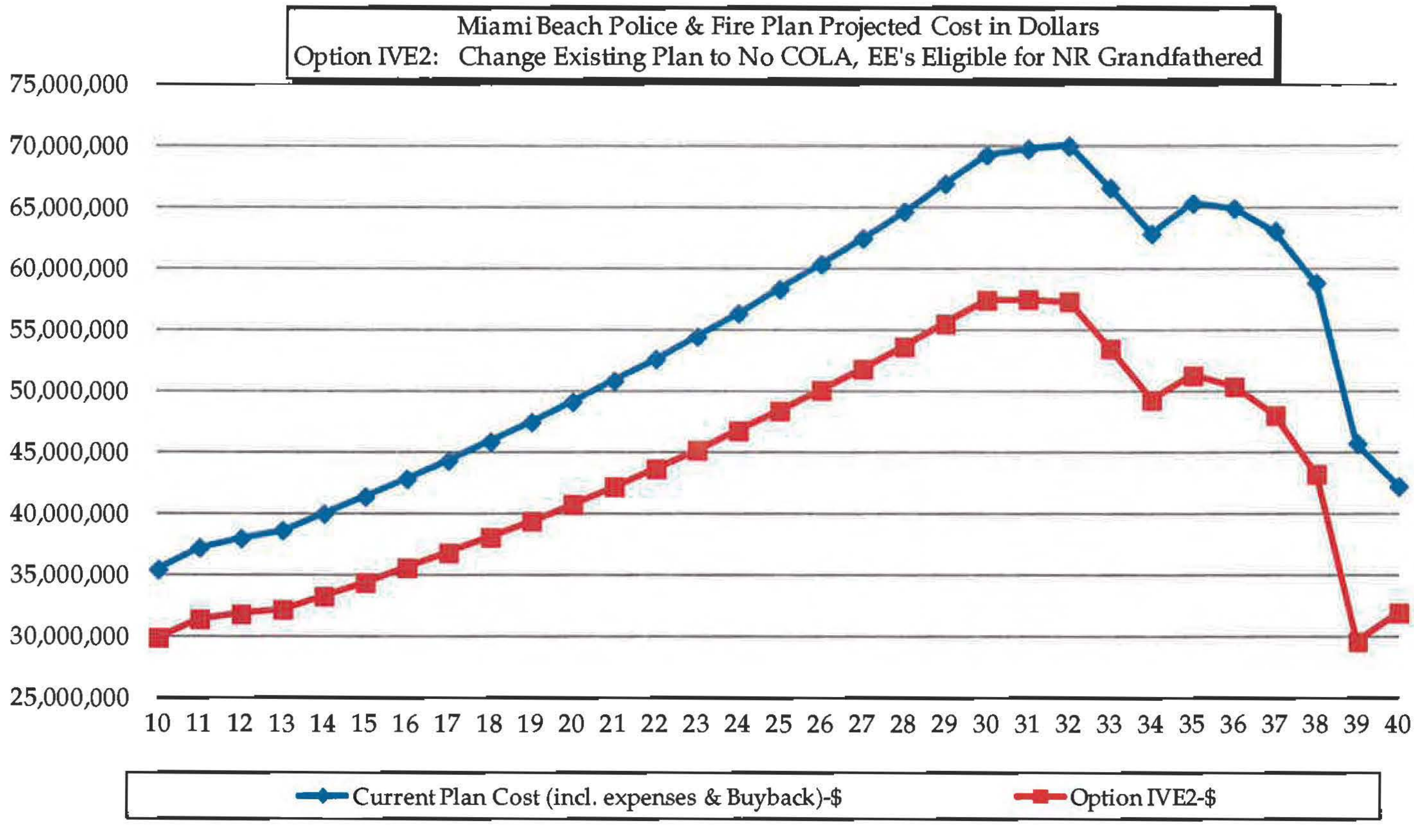


Actuarial Concepts

Option IVE1: Change Existing Plan to No COLA, Vested EE's Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVE1-$	Option IVE1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	33,660,923	70.42%	1,778,141	1,778,141
2011	37,226,360	75.25%	35,299,960	71.35%	1,926,400	1,780,407
2012	37,981,309	74.18%	35,847,513	70.01%	2,133,796	1,822,630
2013	38,660,638	72.95%	36,267,156	68.43%	2,393,482	1,889,506
2014	40,013,760	72.95%	37,345,450	68.08%	2,668,310	1,946,826
2015	41,414,242	72.95%	38,475,324	67.77%	2,938,918	1,981,760
2016	42,863,740	72.95%	39,656,434	67.49%	3,207,306	1,998,834
2017	44,363,971	72.95%	40,882,548	67.22%	3,481,423	2,005,238
2018	45,916,710	72.95%	42,124,964	66.93%	3,791,746	2,018,465
2019	47,523,795	72.95%	43,356,181	66.55%	4,167,614	2,050,417
2020	49,187,128	72.95%	44,616,640	66.17%	4,570,488	2,078,213
2021	50,908,677	72.95%	45,929,736	65.81%	4,978,941	2,092,363
2022	52,690,481	72.95%	47,319,564	65.51%	5,370,917	2,086,034
2023	54,534,648	72.95%	48,792,975	65.27%	5,741,673	2,061,029
2024	56,443,360	72.95%	50,348,623	65.07%	6,094,737	2,021,964
2025	58,418,878	72.95%	51,948,892	64.87%	6,469,986	1,983,784
2026	60,463,539	72.95%	53,633,284	64.71%	6,830,255	1,935,534
2027	62,579,763	72.95%	55,427,209	64.61%	7,152,554	1,873,258
2028	64,770,054	72.95%	57,338,778	64.58%	7,431,276	1,798,758
2029	67,037,006	72.95%	59,318,480	64.55%	7,718,527	1,726,698
2030	69,383,301	72.95%	61,369,529	64.52%	8,013,773	1,656,883
2031	69,868,207	70.98%	61,550,088	62.53%	8,318,119	1,589,471
2032	70,122,087	68.82%	61,488,563	60.35%	8,633,524	1,524,714
2033	66,721,958	63.27%	57,769,504	54.78%	8,952,455	1,461,218
2034	62,987,707	57.71%	53,708,514	49.21%	9,279,193	1,399,768
2035	65,472,079	57.96%	55,863,522	49.45%	9,608,557	1,339,605
2036	65,058,318	55.65%	55,111,531	47.14%	9,946,787	1,281,664
2037	63,213,581	52.24%	52,917,847	43.73%	10,295,734	1,226,087
2038	58,980,901	47.09%	48,324,817	38.58%	10,656,085	1,172,828
2039	45,863,374	35.38%	34,834,327	26.87%	11,029,048	1,121,883
2040	42,349,557	31.57%	32,040,378	23.88%	10,309,180	969,184
					Total APV	53,673,164

Section 22
Option IVE2: Change Existing Plan to No COLA, Employees Eligible for NR Grandfathered



Actuarial Concepts

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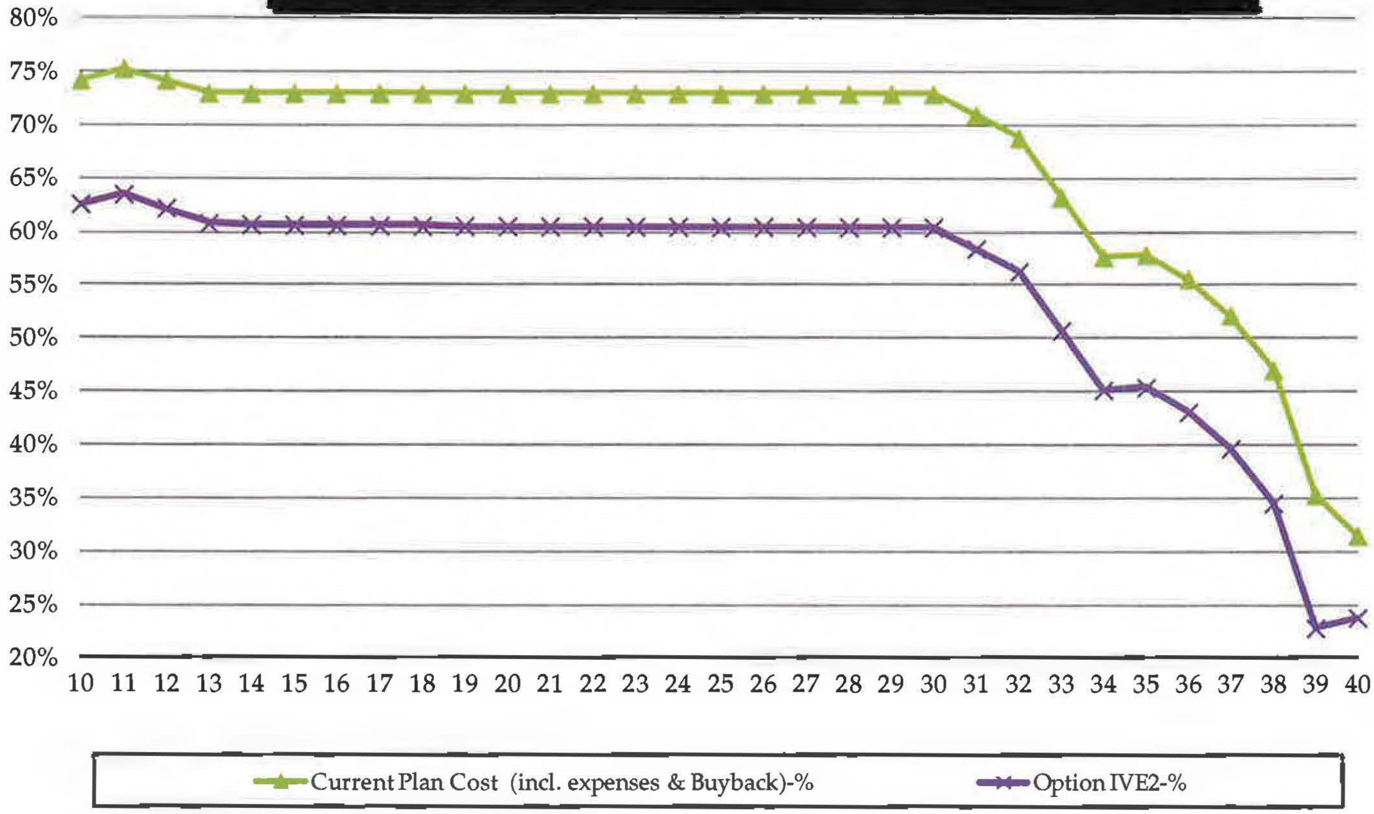


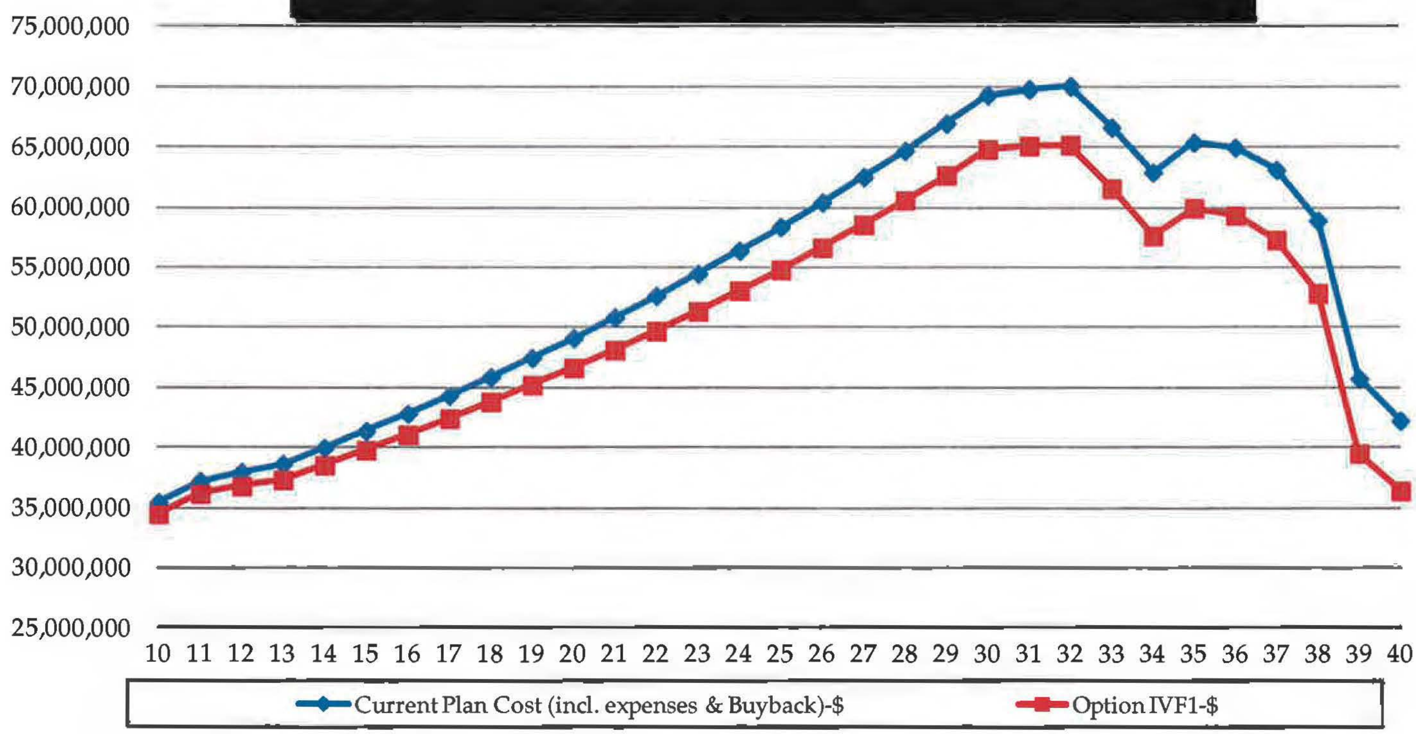
Actuarial Concepts

Option IVE2: Change Existing Plan to No COLA, EE's Eligible for NR Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVE2-$	Option IVE2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	29,889,218	62.53%	5,549,845	5,549,845
2011	37,226,360	75.25%	31,393,688	63.46%	5,832,672	5,390,639
2012	37,981,309	74.18%	31,828,575	62.16%	6,152,734	5,255,494
2013	38,660,638	72.95%	32,202,550	60.76%	6,458,088	5,098,262
2014	40,013,760	72.95%	33,273,998	60.66%	6,739,762	4,917,400
2015	41,414,242	72.95%	34,412,270	60.62%	7,001,971	4,721,544
2016	42,863,740	72.95%	35,600,498	60.59%	7,263,242	4,526,546
2017	44,363,971	72.95%	36,836,118	60.57%	7,527,853	4,335,911
2018	45,916,710	72.95%	38,118,193	60.56%	7,798,517	4,151,394
2019	47,523,795	72.95%	39,444,201	60.55%	8,079,594	3,975,065
2020	49,187,128	72.95%	40,817,541	60.54%	8,369,587	3,805,673
2021	50,908,677	72.95%	42,239,399	60.53%	8,669,278	3,643,200
2022	52,690,481	72.95%	43,712,500	60.52%	8,977,981	3,486,997
2023	54,534,648	72.95%	45,237,982	60.51%	9,296,666	3,337,128
2024	56,443,360	72.95%	46,816,849	60.51%	9,626,511	3,193,650
2025	58,418,878	72.95%	48,451,346	60.50%	9,967,532	3,056,178
2026	60,463,539	72.95%	50,143,715	60.50%	10,319,823	2,924,395
2027	62,579,763	72.95%	51,895,236	60.49%	10,684,527	2,798,284
2028	64,770,054	72.95%	53,707,644	60.49%	11,062,411	2,677,683
2029	67,037,006	72.95%	55,582,960	60.49%	11,454,046	2,562,365
2030	69,383,301	72.95%	57,524,250	60.48%	11,859,051	2,451,911
2031	69,868,207	70.98%	57,590,178	58.50%	12,278,030	2,346,152
2032	70,122,087	68.82%	57,410,348	56.35%	12,711,739	2,244,943
2033	66,721,958	63.27%	53,562,562	50.79%	13,159,396	2,147,875
2034	62,987,707	57.71%	49,365,535	45.23%	13,622,172	2,054,907
2035	65,472,079	57.96%	51,372,378	45.48%	14,099,701	1,965,750
2036	65,058,318	55.65%	50,464,811	43.16%	14,593,507	1,880,403
2037	63,213,581	52.24%	48,109,169	39.76%	15,104,412	1,798,737
2038	58,980,901	47.09%	43,347,835	34.61%	15,633,066	1,720,604
2039	45,863,374	35.38%	29,683,151	22.90%	16,180,224	1,645,864
2040	42,349,557	31.57%	32,040,378	23.88%	10,309,180	969,184
					Total APV	100,633,984

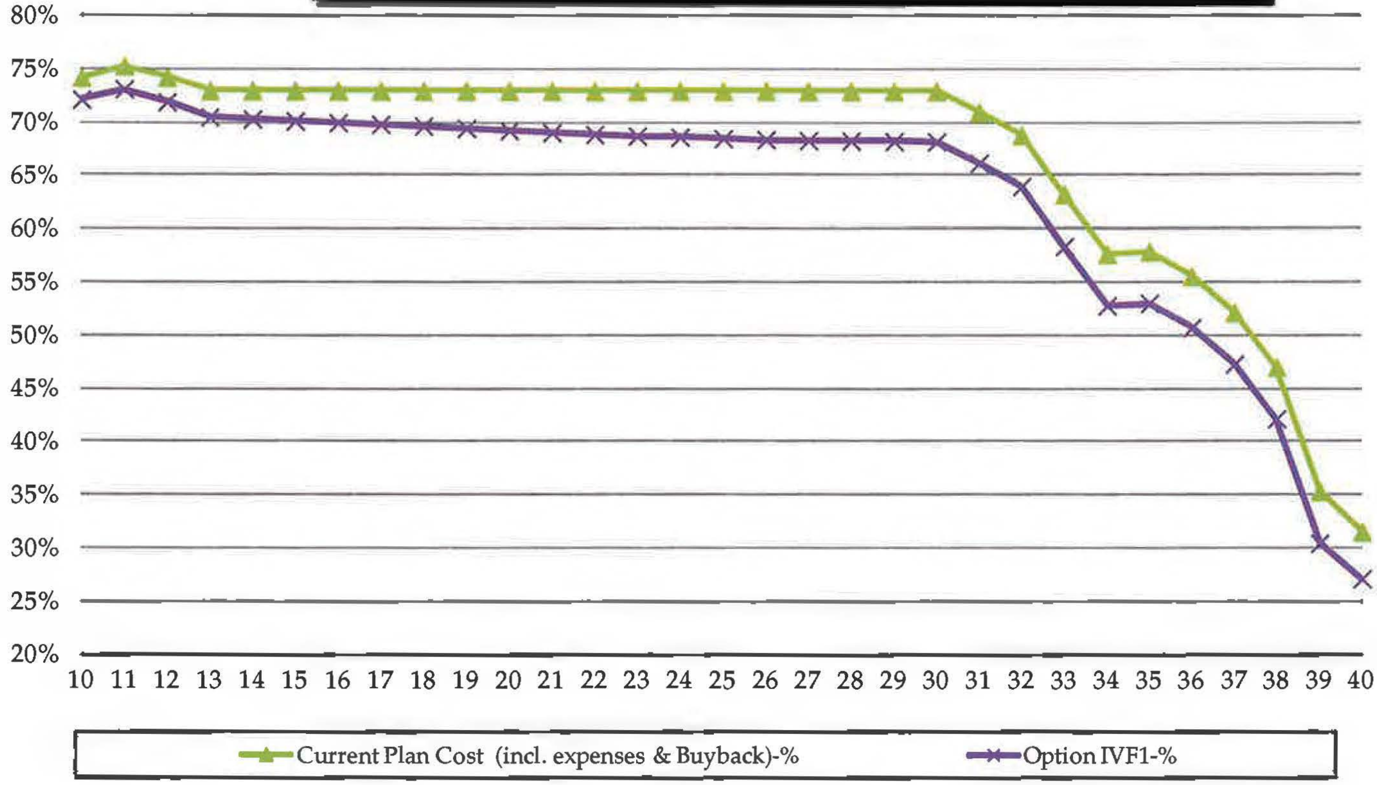
Section 23
Option IVF1: Change Existing Plan to 55&10 or 52&25, Vested Employees Grandfathered

[redacted]



Actuarial Concepts

[redacted]



Actuarial Concepts

Option IVF1: Change Existing Plan to 55&10 or 52&25, Vested EE's Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVF1-$	Option IVF1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	34,450,821	72.07%	988,242	988,242
2011	37,226,360	75.25%	36,158,400	73.09%	1,067,960	987,024
2012	37,981,309	74.18%	36,801,453	71.87%	1,179,856	1,007,800
2013	38,660,638	72.95%	37,339,806	70.46%	1,320,832	1,042,716
2014	40,013,760	72.95%	38,543,699	70.27%	1,470,061	1,072,572
2015	41,414,242	72.95%	39,797,136	70.10%	1,617,106	1,090,441
2016	42,863,740	72.95%	41,100,672	69.95%	1,763,068	1,098,767
2017	44,363,971	72.95%	42,451,434	69.80%	1,912,537	1,101,587
2018	45,916,710	72.95%	43,835,033	69.64%	2,081,677	1,108,142
2019	47,523,795	72.95%	45,236,612	69.44%	2,287,182	1,125,267
2020	49,187,128	72.95%	46,679,335	69.23%	2,507,793	1,140,300
2021	50,908,677	72.95%	48,176,709	69.03%	2,731,968	1,148,089
2022	52,690,481	72.95%	49,742,499	68.87%	2,947,982	1,144,980
2023	54,534,648	72.95%	51,381,643	68.73%	3,153,005	1,131,802
2024	56,443,360	72.95%	53,090,425	68.62%	3,352,936	1,112,355
2025	58,418,878	72.95%	54,852,235	68.50%	3,566,643	1,093,581
2026	60,463,539	72.95%	56,690,857	68.40%	3,772,682	1,069,089
2027	62,579,763	72.95%	58,617,096	68.33%	3,962,667	1,037,825
2028	64,770,054	72.95%	60,634,222	68.29%	4,135,832	1,001,088
2029	67,037,006	72.95%	62,719,688	68.25%	4,317,319	965,820
2030	69,383,301	72.95%	64,880,928	68.22%	4,502,373	930,885
2031	69,868,207	70.98%	65,175,971	66.21%	4,692,236	896,618
2032	70,122,087	68.82%	65,232,792	64.03%	4,889,295	863,468
2033	66,721,958	63.27%	61,638,872	58.45%	5,083,086	829,661
2034	62,987,707	57.71%	57,708,584	52.87%	5,279,123	796,356
2035	65,472,079	57.96%	60,001,974	53.12%	5,470,105	762,630
2036	65,058,318	55.65%	59,394,150	50.80%	5,664,168	729,840
2037	63,213,581	52.24%	57,350,071	47.39%	5,863,510	698,267
2038	58,980,901	47.09%	52,912,169	42.25%	6,068,732	667,936
2039	45,863,374	35.38%	39,582,236	30.54%	6,281,138	638,922
2040	42,349,557	31.57%	36,487,922	27.20%	5,861,635	551,063
					Total APV	29,833,132

Section 24
Option IVF2: Change Existing Plan to 55&10 or 52&25,
Employees Eligible for NR Grandfathered

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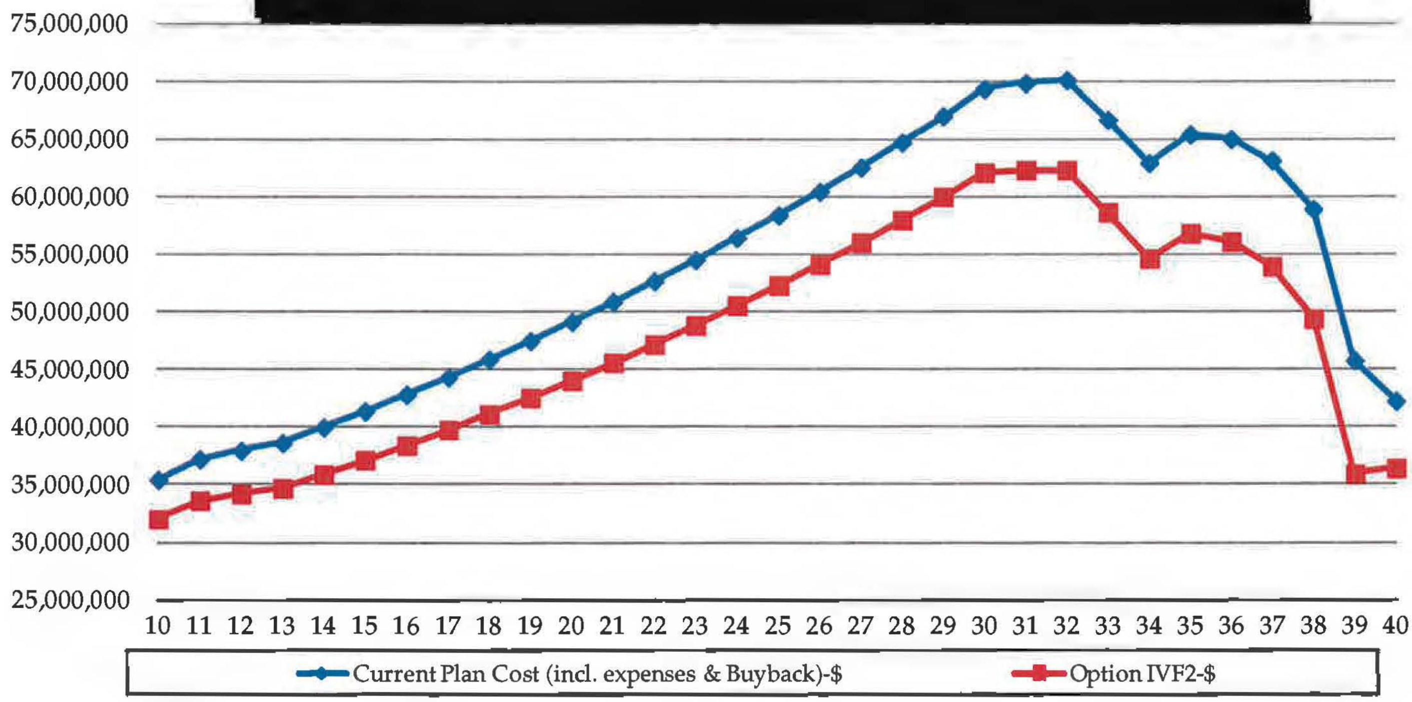
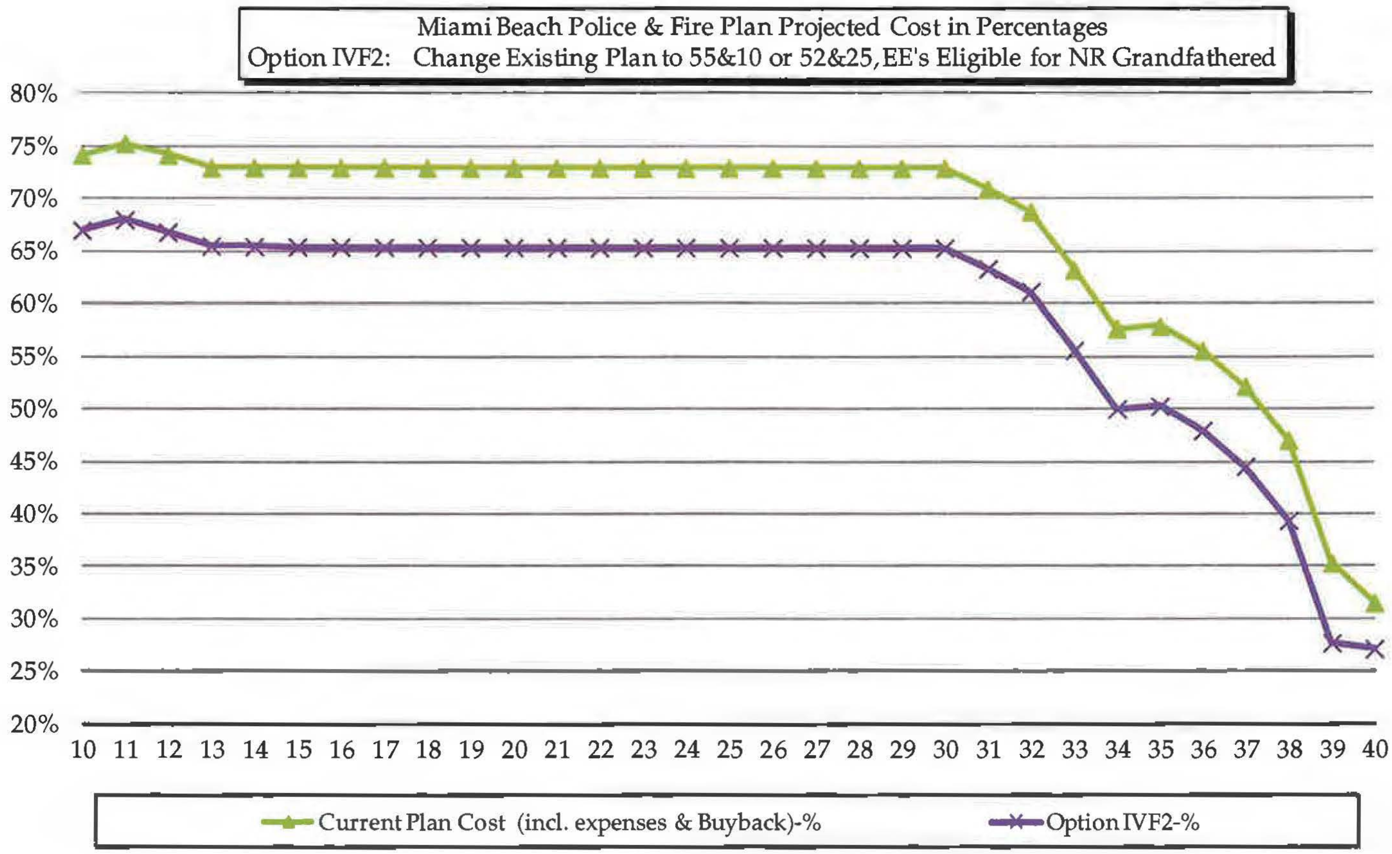


Actuarial Concepts



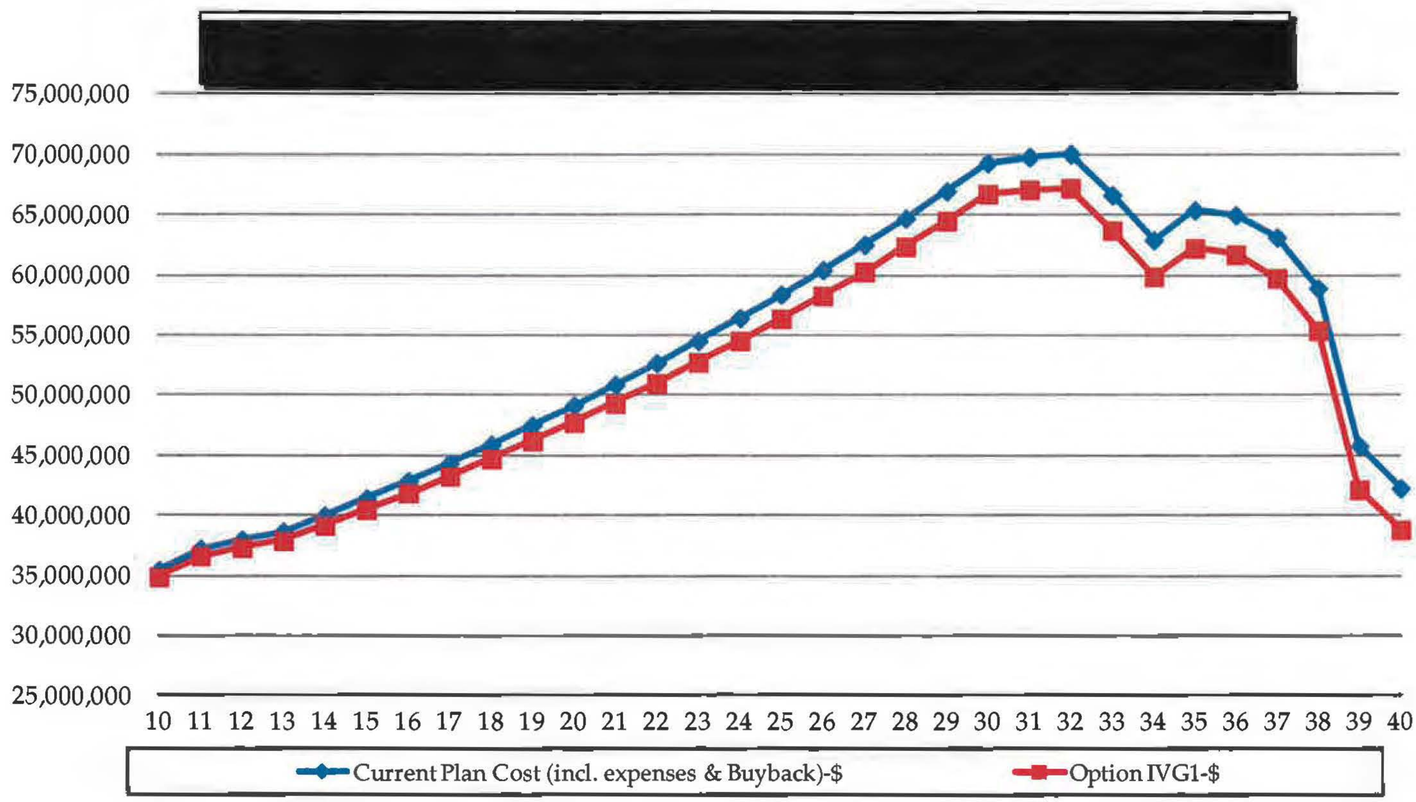
Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IVF2: Change Existing Plan to 55&10 or 52&25, EE's Eligible for NR Grandfathered
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IVF2-%

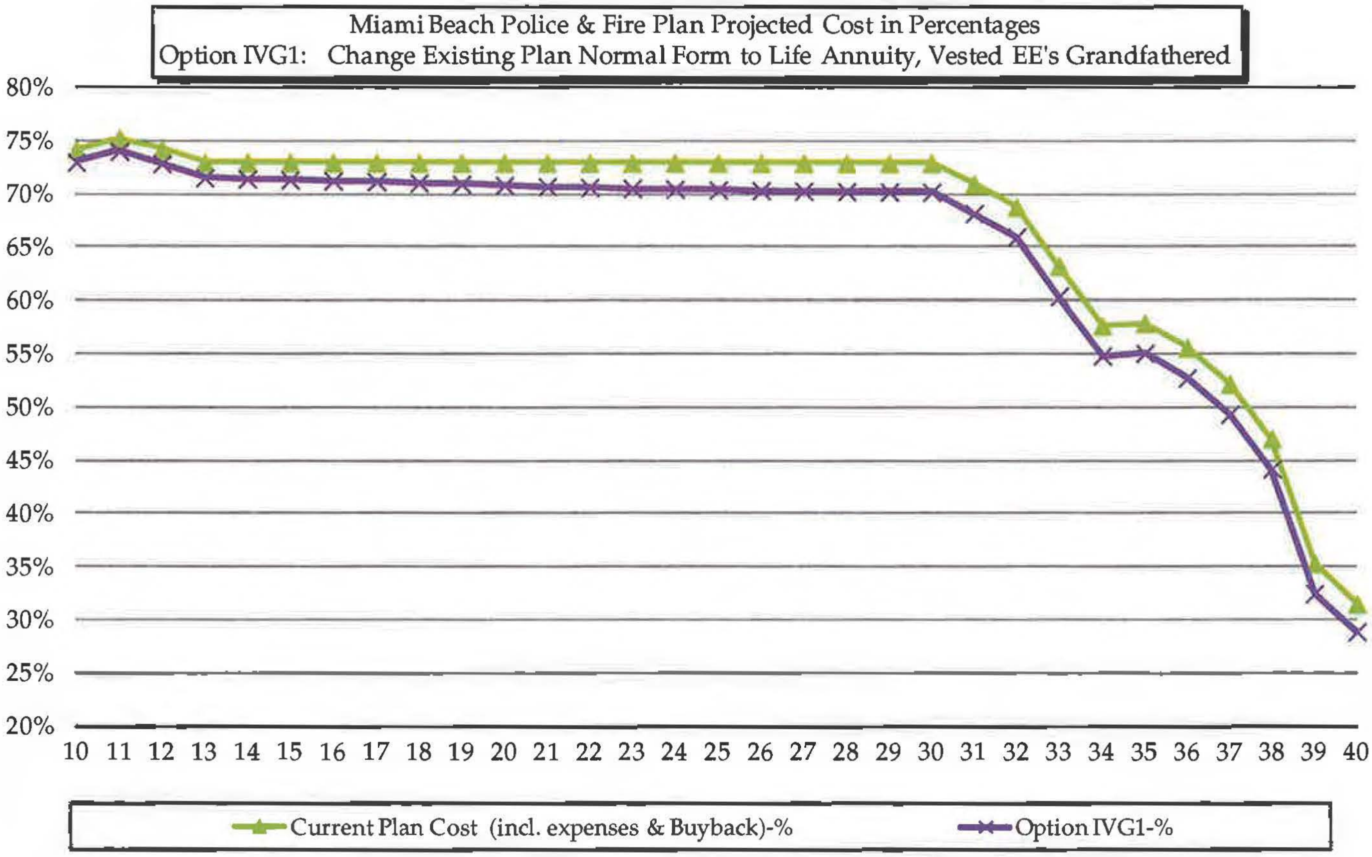
Option IVF2: Change Existing Plan to 55&10 or 52&25, EE's Eligible for NR Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVF2-$	Option IVF2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	32,003,876	66.95%	3,435,188	3,435,188
2011	37,226,360	75.25%	33,627,022	67.97%	3,599,338	3,326,560
2012	37,981,309	74.18%	34,198,513	66.79%	3,782,796	3,231,160
2013	38,660,638	72.95%	34,700,788	65.48%	3,959,850	3,126,057
2014	40,013,760	72.95%	35,887,691	65.43%	4,126,069	3,010,422
2015	41,414,242	72.95%	37,130,672	65.40%	4,283,570	2,888,481
2016	42,863,740	72.95%	38,422,173	65.39%	4,441,567	2,768,042
2017	44,363,971	72.95%	39,761,753	65.38%	4,602,218	2,650,796
2018	45,916,710	72.95%	41,149,801	65.38%	4,766,909	2,537,574
2019	47,523,795	72.95%	42,585,948	65.37%	4,937,847	2,429,362
2020	49,187,128	72.95%	44,072,811	65.36%	5,114,316	2,325,493
2021	50,908,677	72.95%	45,611,939	65.36%	5,296,738	2,225,915
2022	52,690,481	72.95%	47,205,675	65.36%	5,484,806	2,130,267
2023	54,534,648	72.95%	48,855,607	65.35%	5,679,041	2,038,546
2024	56,443,360	72.95%	50,563,275	65.35%	5,880,085	1,950,752
2025	58,418,878	72.95%	52,330,887	65.35%	6,087,991	1,866,659
2026	60,463,539	72.95%	54,160,703	65.35%	6,302,836	1,786,076
2027	62,579,763	72.95%	56,054,519	65.34%	6,525,244	1,708,965
2028	64,770,054	72.95%	58,014,405	65.34%	6,755,649	1,635,221
2029	67,037,006	72.95%	60,042,616	65.34%	6,994,390	1,564,703
2030	69,383,301	72.95%	62,141,989	65.34%	7,241,313	1,497,173
2031	69,868,207	70.98%	62,371,434	63.36%	7,496,774	1,432,524
2032	70,122,087	68.82%	62,360,877	61.21%	7,761,210	1,370,660
2033	66,721,958	63.27%	58,687,691	55.65%	8,034,267	1,311,352
2034	62,987,707	57.71%	54,671,109	50.09%	8,316,598	1,254,560
2035	65,472,079	57.96%	56,864,012	50.34%	8,608,067	1,200,118
2036	65,058,318	55.65%	56,148,806	48.02%	8,909,512	1,148,009
2037	63,213,581	52.24%	53,992,167	44.62%	9,221,414	1,098,149
2038	58,980,901	47.09%	49,436,738	39.47%	9,544,163	1,050,448
2039	45,863,374	35.38%	35,985,165	27.76%	9,878,209	1,004,819
2040	42,349,557	31.57%	36,487,922	27.20%	5,861,635	551,063
					Total APV	61,555,116

Actuarial Concepts

Section 25
Option IVG1: Change Existing Plan Normal Form to Life Annuity, Vested EE's Grandfathered



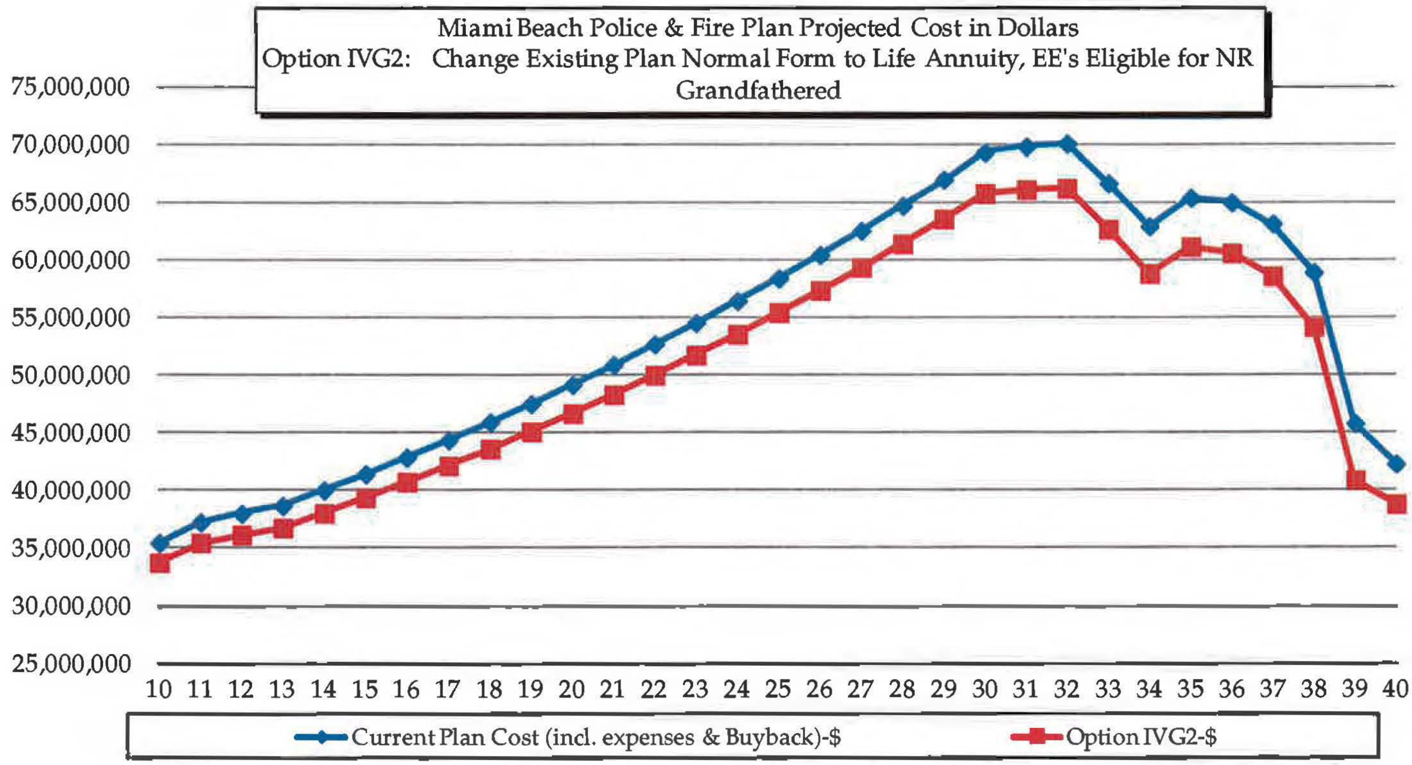

Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IVG1: Change Existing Plan Normal Form to Life Annuity, Vested EE's Grandfathered
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IVG1-%

Option IVG1: Change Existing Plan Normal Form to Life Annuity, Vested EE's Grandfathered

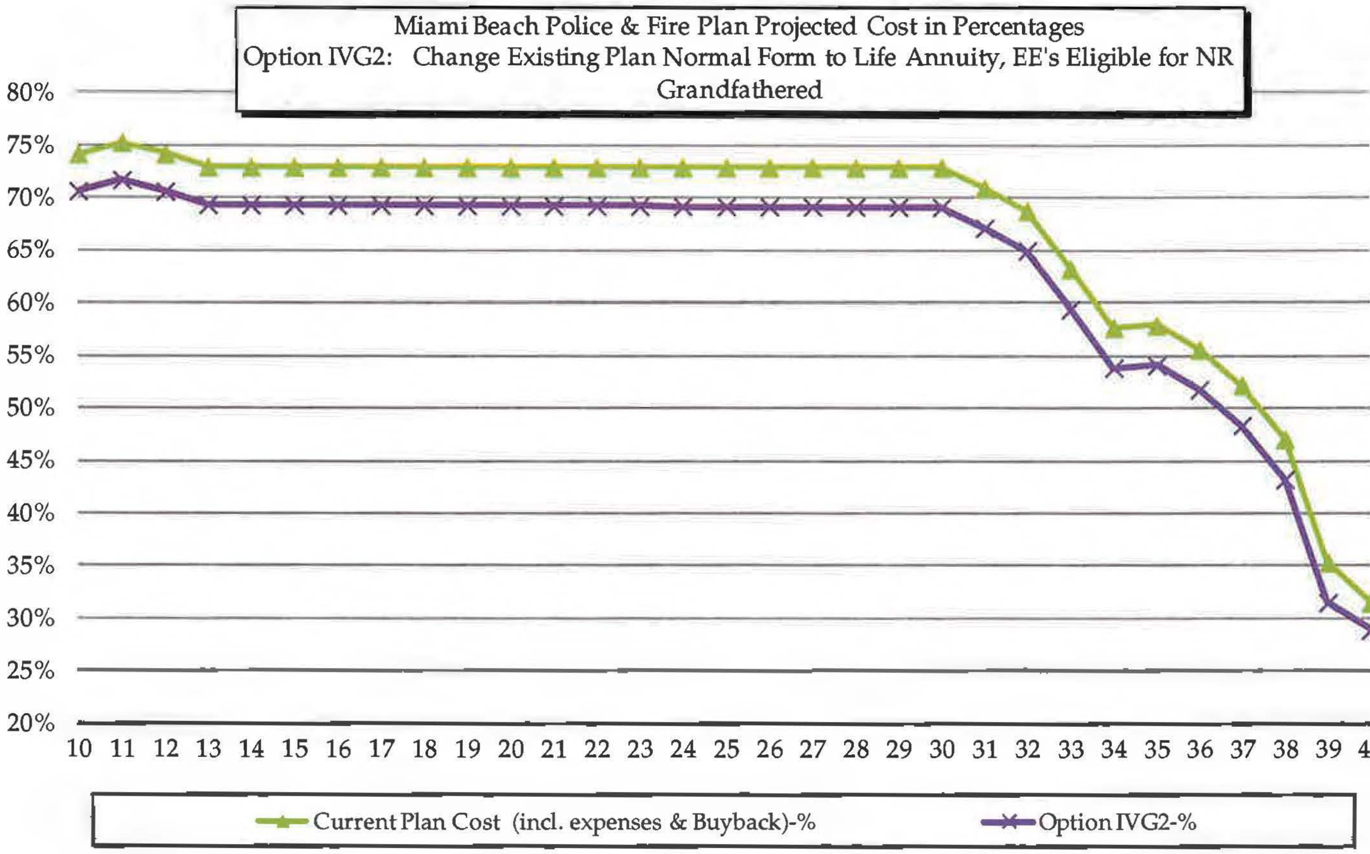
Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVG1-$	Option IVG1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	34,863,363	72.94%	575,701	575,701
2011	37,226,360	75.25%	36,606,489	73.99%	619,871	572,894
2012	37,981,309	74.18%	37,299,544	72.84%	681,765	582,345
2013	38,660,638	72.95%	37,900,660	71.52%	759,978	599,956
2014	40,013,760	72.95%	39,170,996	71.41%	842,764	614,890
2015	41,414,242	72.95%	40,489,808	71.32%	924,434	623,361
2016	42,863,740	72.95%	41,858,141	71.24%	1,005,599	626,702
2017	44,363,971	72.95%	43,275,062	71.16%	1,088,909	627,192
2018	45,916,710	72.95%	44,733,653	71.07%	1,183,057	629,778
2019	47,523,795	72.95%	46,226,224	70.96%	1,297,571	638,390
2020	49,187,128	72.95%	47,766,506	70.84%	1,420,622	645,960
2021	50,908,677	72.95%	49,362,756	70.73%	1,545,922	649,662
2022	52,690,481	72.95%	51,023,326	70.64%	1,667,155	647,513
2023	54,534,648	72.95%	52,752,002	70.56%	1,782,646	639,898
2024	56,443,360	72.95%	54,545,831	70.50%	1,897,530	629,516
2025	58,418,878	72.95%	56,398,036	70.43%	2,020,842	619,617
2026	60,463,539	72.95%	58,323,328	70.37%	2,140,210	606,485
2027	62,579,763	72.95%	60,326,781	70.32%	2,252,982	590,057
2028	64,770,054	72.95%	62,410,234	70.29%	2,359,821	571,200
2029	67,037,006	72.95%	64,563,975	70.26%	2,473,031	553,237
2030	69,383,301	72.95%	66,795,418	70.23%	2,587,883	535,056
2031	69,868,207	70.98%	67,162,842	68.23%	2,705,365	516,956
2032	70,122,087	68.82%	67,294,670	66.05%	2,827,418	499,333
2033	66,721,958	63.27%	63,776,689	60.48%	2,945,270	480,726
2034	62,987,707	57.71%	59,924,243	54.90%	3,063,465	462,124
2035	65,472,079	57.96%	62,296,215	55.15%	3,175,864	442,772
2036	65,058,318	55.65%	61,769,123	52.83%	3,289,195	423,819
2037	63,213,581	52.24%	59,808,351	49.42%	3,405,230	405,518
2038	58,980,901	47.09%	55,456,489	44.28%	3,524,413	387,903
2039	45,863,374	35.38%	42,215,607	32.57%	3,647,767	371,053
2040	42,349,557	31.57%	38,868,451	28.97%	3,481,106	327,265
					Total APV	17,096,883

Actuarial Concepts

Section 26
Option IVG2: Change Existing Plan Normal Form to Life Annuity, EE's Eligible for NR Grandfathered



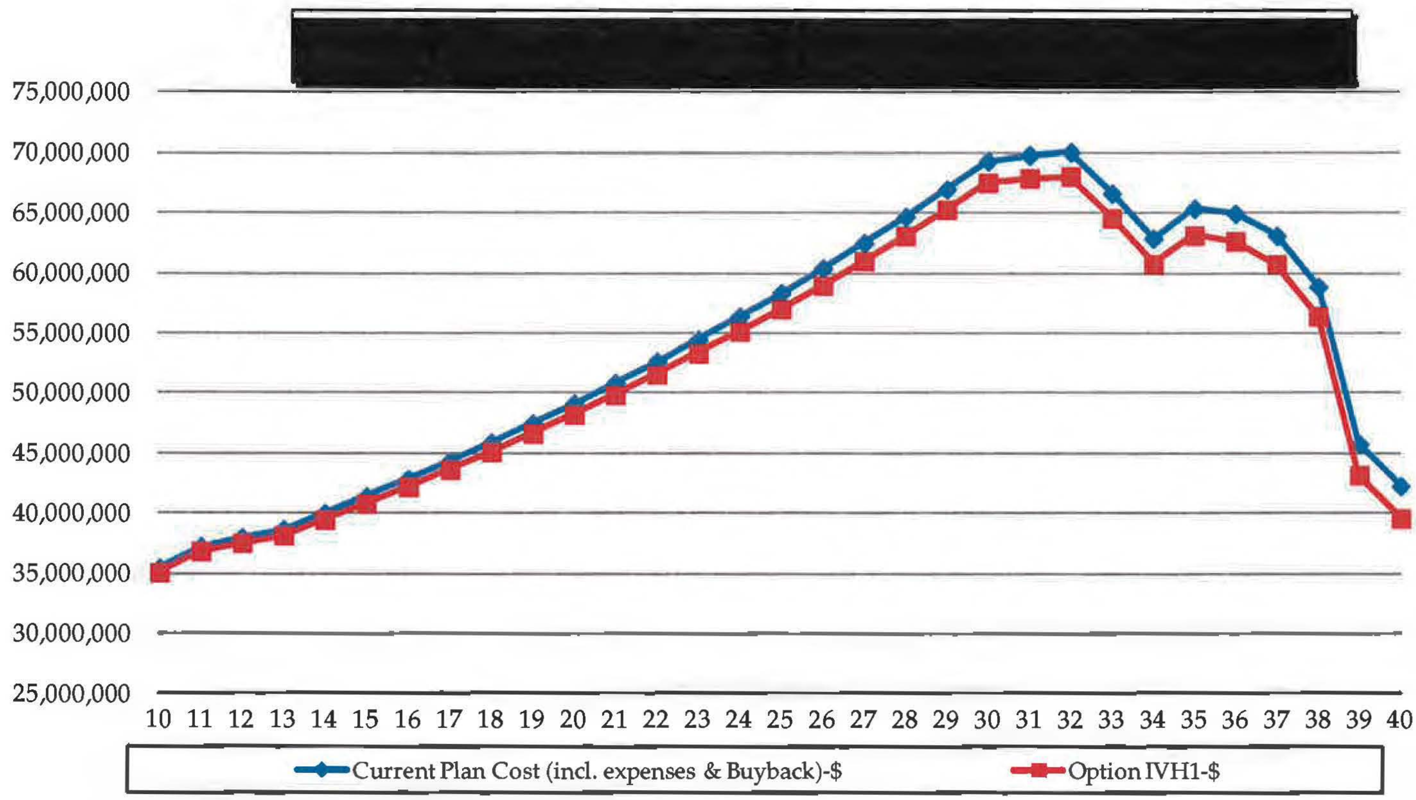
Actuarial Concepts

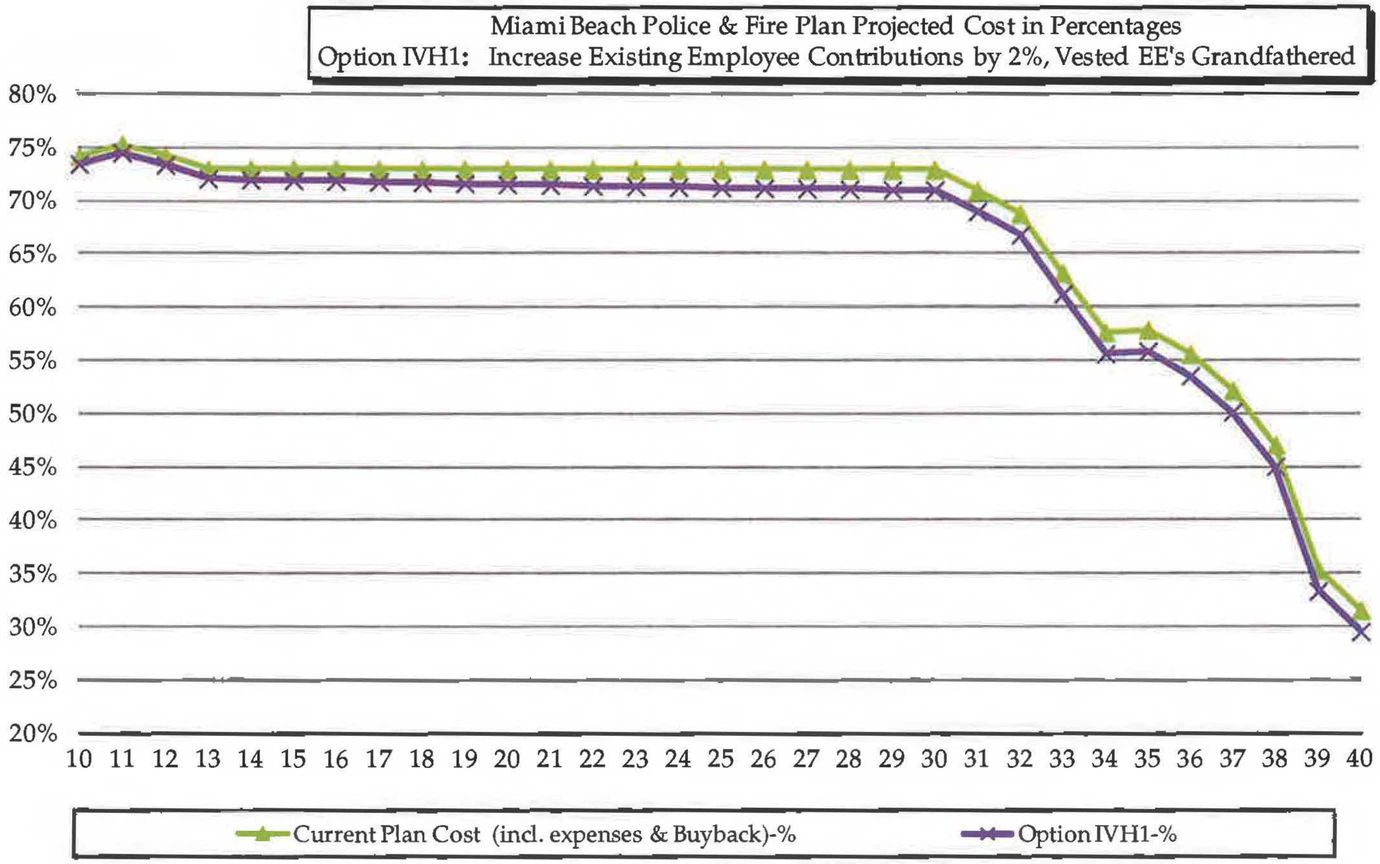

Miami Beach Police & Fire Plan Projected Cost in Percentages
Option IVG2: Change Existing Plan Normal Form to Life Annuity, EE's Eligible for NR Grandfathered
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
Current Plan Cost (incl. expenses & Buyback)-%
Option IVG2-%

Option IVG2: Change Existing Plan Normal Form to Life Annuity, EE's Eligible for NR Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVG2-$	Option IVG2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	33,746,253	70.60%	1,692,810	1,692,810
2011	37,226,360	75.25%	35,467,274	71.69%	1,759,086	1,625,773
2012	37,981,309	74.18%	36,150,496	70.60%	1,830,813	1,563,830
2013	38,660,638	72.95%	36,755,633	69.35%	1,905,005	1,503,884
2014	40,013,760	72.95%	38,033,831	69.34%	1,979,929	1,444,577
2015	41,414,242	72.95%	39,358,845	69.33%	2,055,397	1,385,988
2016	42,863,740	72.95%	40,731,111	69.32%	2,132,630	1,329,082
2017	44,363,971	72.95%	42,151,708	69.31%	2,212,263	1,274,225
2018	45,916,710	72.95%	43,621,493	69.30%	2,295,217	1,221,815
2019	47,523,795	72.95%	45,140,895	69.29%	2,382,900	1,172,359
2020	49,187,128	72.95%	46,713,008	69.28%	2,474,119	1,124,988
2021	50,908,677	72.95%	48,340,232	69.27%	2,568,445	1,079,370
2022	52,690,481	72.95%	50,025,079	69.26%	2,665,402	1,035,227
2023	54,534,648	72.95%	51,769,744	69.25%	2,764,903	992,489
2024	56,443,360	72.95%	53,574,699	69.24%	2,868,662	951,695
2025	58,418,878	72.95%	55,442,050	69.23%	2,976,828	912,735
2026	60,463,539	72.95%	57,375,522	69.22%	3,088,017	875,071
2027	62,579,763	72.95%	59,376,500	69.22%	3,203,263	838,937
2028	64,770,054	72.95%	61,446,663	69.21%	3,323,391	804,435
2029	67,037,006	72.95%	63,588,209	69.20%	3,448,797	771,525
2030	69,383,301	72.95%	65,805,397	69.19%	3,577,904	739,747
2031	69,868,207	70.98%	66,157,091	67.21%	3,711,117	709,140
2032	70,122,087	68.82%	66,272,959	65.05%	3,849,128	679,771
2033	66,721,958	63.27%	62,732,503	59.49%	3,989,455	651,158
2034	62,987,707	57.71%	58,854,136	53.92%	4,133,571	623,550
2035	65,472,079	57.96%	61,192,296	54.17%	4,279,783	596,678
2036	65,058,318	55.65%	60,628,097	51.86%	4,430,221	570,843
2037	63,213,581	52.24%	58,628,031	48.45%	4,585,550	546,079
2038	58,980,901	47.09%	54,234,857	43.30%	4,746,044	522,358
2039	45,863,374	35.38%	40,951,219	31.59%	4,912,156	499,668
2040	42,349,557	31.57%	38,868,451	28.97%	3,481,106	327,265
					Total APV	30,067,071

Section 27
Option IVH1: Increase Existing Employee Contributions by 2%, Vested EE's Grandfathered





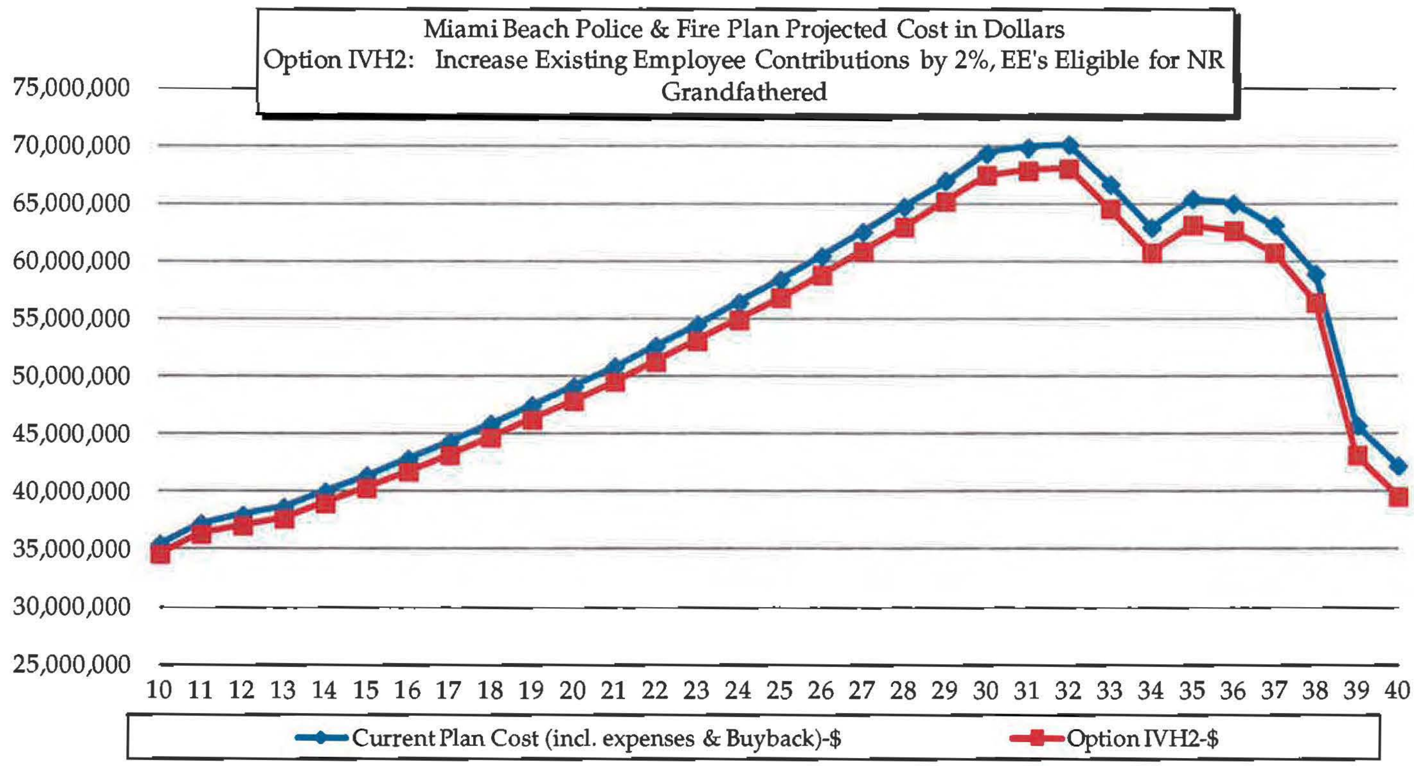
Actuarial Concepts

Option IVH1: Increase Existing Employee Contributions by 2%, Vested EE's Grandfathered

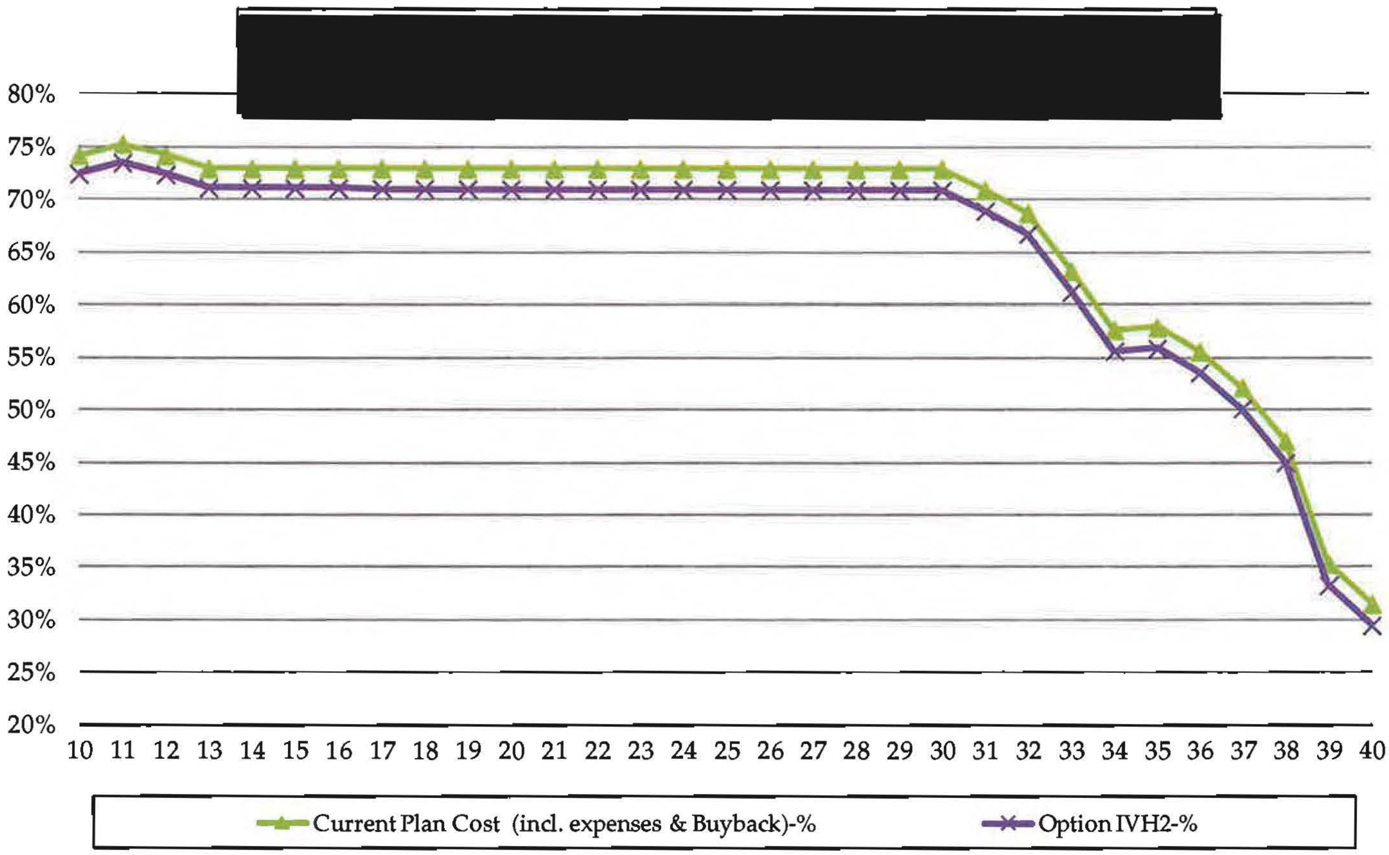
Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVH1-$	Option IVH1-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,085,376	73.40%	353,688	353,688
2011	37,226,360	75.25%	36,843,702	74.47%	382,659	353,659
2012	37,981,309	74.18%	37,556,886	73.35%	424,423	362,531
2013	38,660,638	72.95%	38,182,354	72.05%	478,284	377,575
2014	40,013,760	72.95%	39,478,383	71.97%	535,377	390,616
2015	41,414,242	72.95%	40,822,628	71.91%	591,613	398,935
2016	42,863,740	72.95%	42,216,298	71.85%	647,442	403,494
2017	44,363,971	72.95%	43,659,049	71.79%	704,923	406,023
2018	45,916,710	72.95%	45,146,556	71.73%	770,154	409,977
2019	47,523,795	72.95%	46,673,356	71.64%	850,439	418,406
2020	49,187,128	72.95%	48,250,106	71.56%	937,021	426,066
2021	50,908,677	72.95%	49,883,289	71.48%	1,025,389	430,912
2022	52,690,481	72.95%	51,579,394	71.41%	1,111,086	431,540
2023	54,534,648	72.95%	53,341,885	71.35%	1,192,763	428,154
2024	56,443,360	72.95%	55,167,146	71.30%	1,276,215	423,392
2025	58,418,878	72.95%	57,052,342	71.24%	1,366,537	418,998
2026	60,463,539	72.95%	59,009,447	71.20%	1,454,092	412,055
2027	62,579,763	72.95%	61,040,673	71.16%	1,539,090	403,089
2028	64,770,054	72.95%	63,146,857	71.12%	1,623,197	392,899
2029	67,037,006	72.95%	65,323,323	71.08%	1,713,684	383,365
2030	69,383,301	72.95%	67,578,516	71.05%	1,804,785	373,147
2031	69,868,207	70.98%	67,970,661	69.05%	1,897,546	362,593
2032	70,122,087	68.82%	68,128,029	66.87%	1,994,058	352,158
2033	66,721,958	63.27%	64,637,329	61.30%	2,084,630	340,253
2034	62,987,707	57.71%	60,813,496	55.72%	2,174,212	327,980
2035	65,472,079	57.96%	63,216,075	55.96%	2,256,004	314,527
2036	65,058,318	55.65%	62,720,961	53.65%	2,337,357	301,173
2037	63,213,581	52.24%	60,793,412	50.24%	2,420,169	288,210
2038	58,980,901	47.09%	56,476,026	45.09%	2,504,875	275,691
2039	45,863,374	35.38%	43,270,829	33.38%	2,592,546	263,716
2040	42,349,557	31.57%	39,666,273	29.57%	2,683,285	252,260
					Total APV	11,477,082

Actuarial Concepts

Section 28
Option IVH2: Increase Existing Employee Contributions by 2%, EE's Eligible for NR Grandfathered



Actuarial Concepts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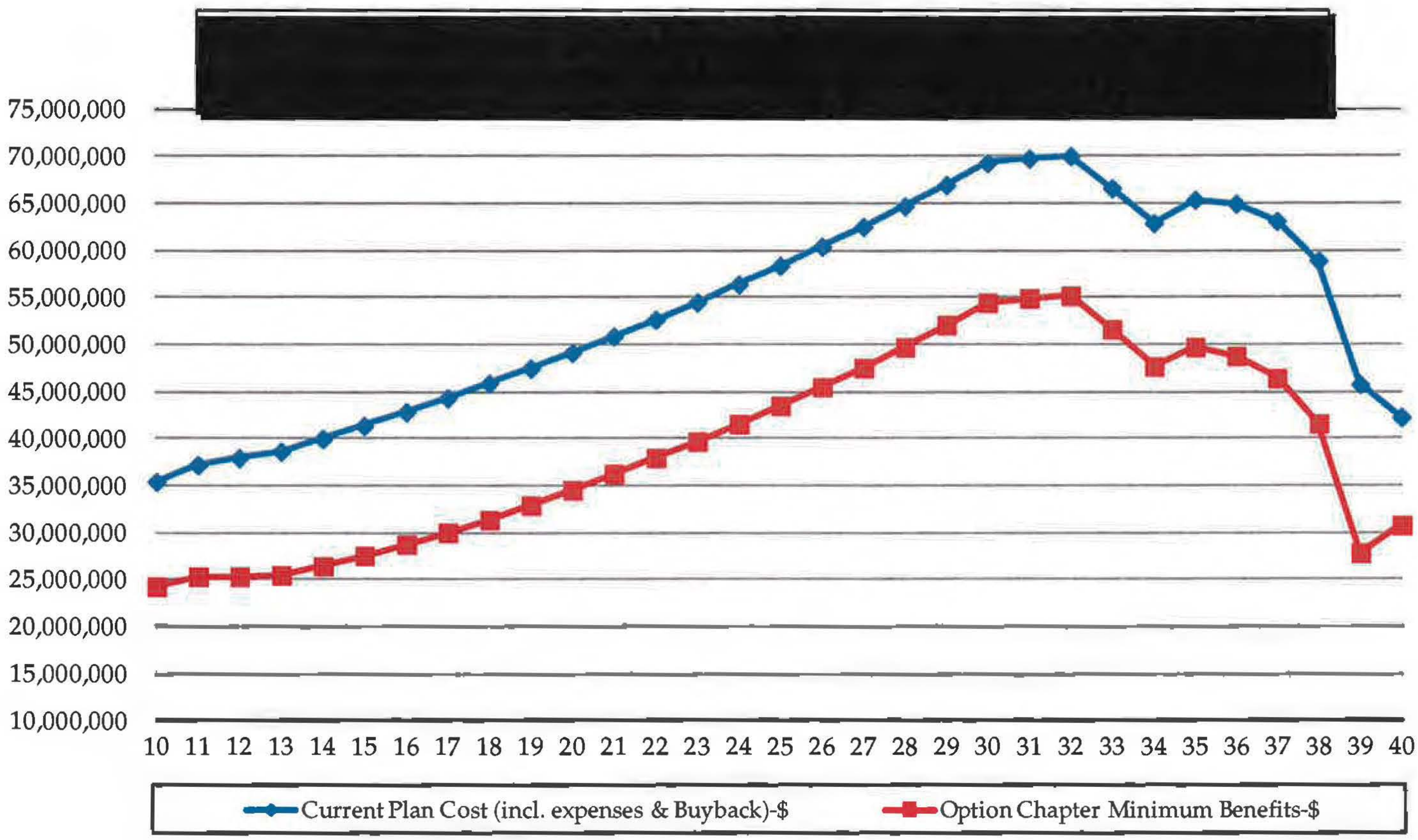
Current Plan Cost (incl. expenses & Buyback)-%
Option IVH2-%

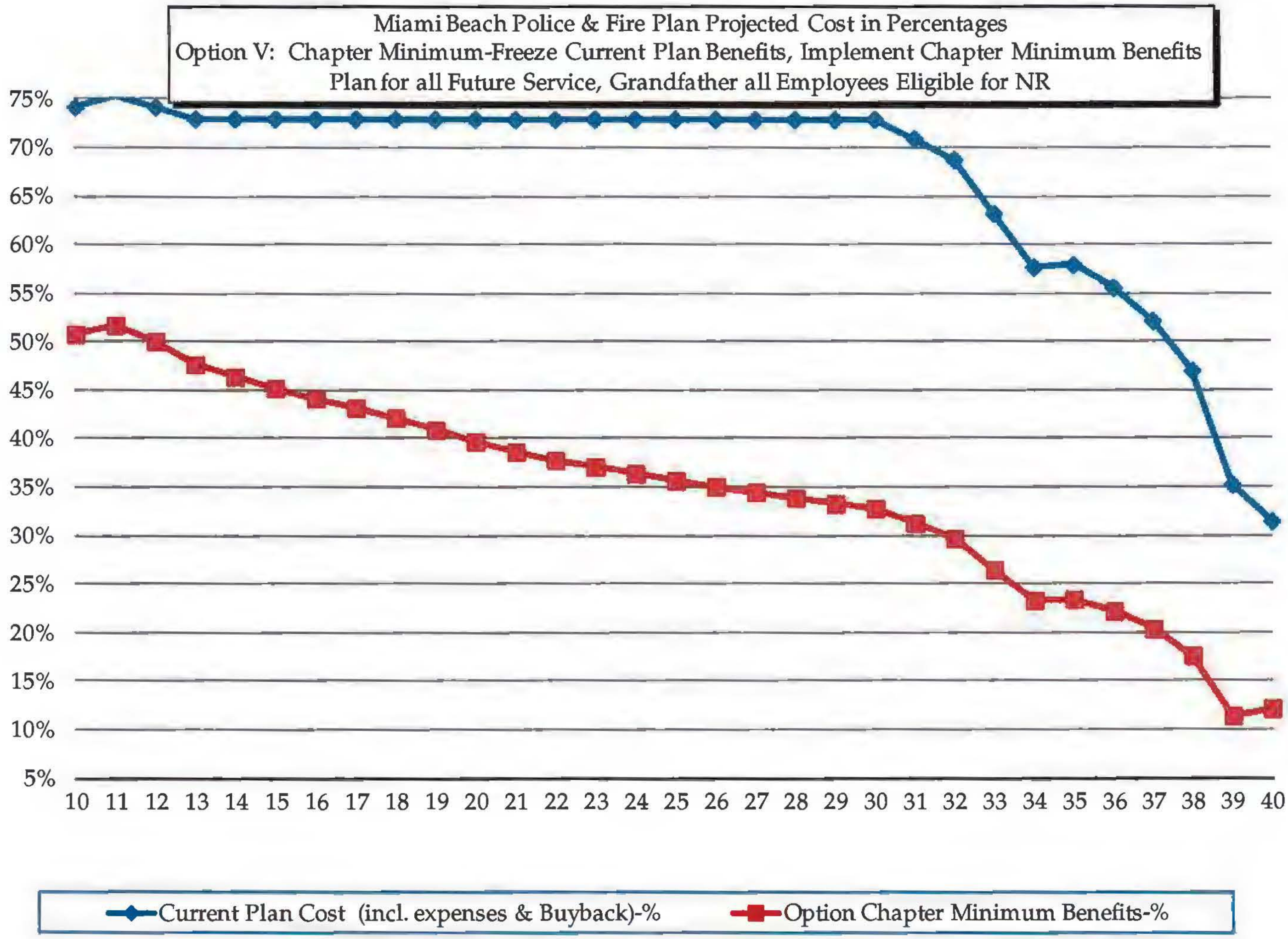
Option IVH2: Increase Existing Employee Contributions by 2%, EE's Eligible for NR Grandfathered

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option IVH2-$	Option IVH2-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	34,597,069	72.38%	841,994	841,994
2011	37,226,360	75.25%	36,343,498	73.46%	882,862	815,953
2012	37,981,309	74.18%	37,051,952	72.36%	929,357	793,831
2013	38,660,638	72.95%	37,685,072	71.11%	975,565	770,149
2014	40,013,760	72.95%	38,994,181	71.09%	1,019,579	743,895
2015	41,414,242	72.95%	40,352,707	71.08%	1,061,535	715,810
2016	42,863,740	72.95%	41,760,135	71.07%	1,103,605	687,781
2017	44,363,971	72.95%	43,217,458	71.06%	1,146,513	660,371
2018	45,916,710	72.95%	44,725,644	71.06%	1,191,066	634,042
2019	47,523,795	72.95%	46,285,257	71.05%	1,238,538	609,346
2020	49,187,128	72.95%	47,899,194	71.04%	1,287,933	585,627
2021	50,908,677	72.95%	49,569,713	71.03%	1,338,964	562,690
2022	52,690,481	72.95%	51,299,280	71.02%	1,391,201	540,334
2023	54,534,648	72.95%	53,090,042	71.02%	1,444,605	518,555
2024	56,443,360	72.95%	54,942,933	71.01%	1,500,427	497,775
2025	58,418,878	72.95%	56,860,154	71.00%	1,558,724	477,926
2026	60,463,539	72.95%	58,845,065	71.00%	1,618,474	458,637
2027	62,579,763	72.95%	60,899,324	70.99%	1,680,438	440,108
2028	64,770,054	72.95%	63,024,853	70.98%	1,745,201	422,430
2029	67,037,006	72.95%	65,223,979	70.98%	1,813,027	405,589
2030	69,383,301	72.95%	67,500,586	70.97%	1,882,716	389,260
2031	69,868,207	70.98%	67,913,670	68.99%	1,954,538	373,484
2032	70,122,087	68.82%	68,093,113	66.83%	2,028,974	358,325
2033	66,721,958	63.27%	64,617,809	61.28%	2,104,149	343,439
2034	62,987,707	57.71%	60,806,584	55.71%	2,181,123	329,023
2035	65,472,079	57.96%	63,213,476	55.96%	2,258,603	314,890
2036	65,058,318	55.65%	62,720,185	53.65%	2,338,133	301,273
2037	63,213,581	52.24%	60,793,412	50.24%	2,420,169	288,210
2038	58,980,901	47.09%	56,476,026	45.09%	2,504,875	275,691
2039	45,863,374	35.38%	43,270,829	33.38%	2,592,546	263,716
2040	42,349,557	31.57%	39,666,273	29.57%	2,683,285	252,260
					Total APV	15,672,414

Actuarial Concepts

Section 29
Option V: Chapter Minimum-Freeze Current Plan Benefits, Implement Chapter Minimum Benefits Plan for all Future Service, Grandfather all Employees Eligible for NR




Miami Beach Police & Fire Plan Projected Cost in Percentages
Option V: Chapter Minimum-Freeze Current Plan Benefits, Implement Chapter Minimum Benefits Plan for all Future Service, Grandfather all Employees Eligible for NR
75%
70%
65%
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Current Plan Cost (incl. expenses & Buyback)-%
Option Chapter Minimum Benefits-%

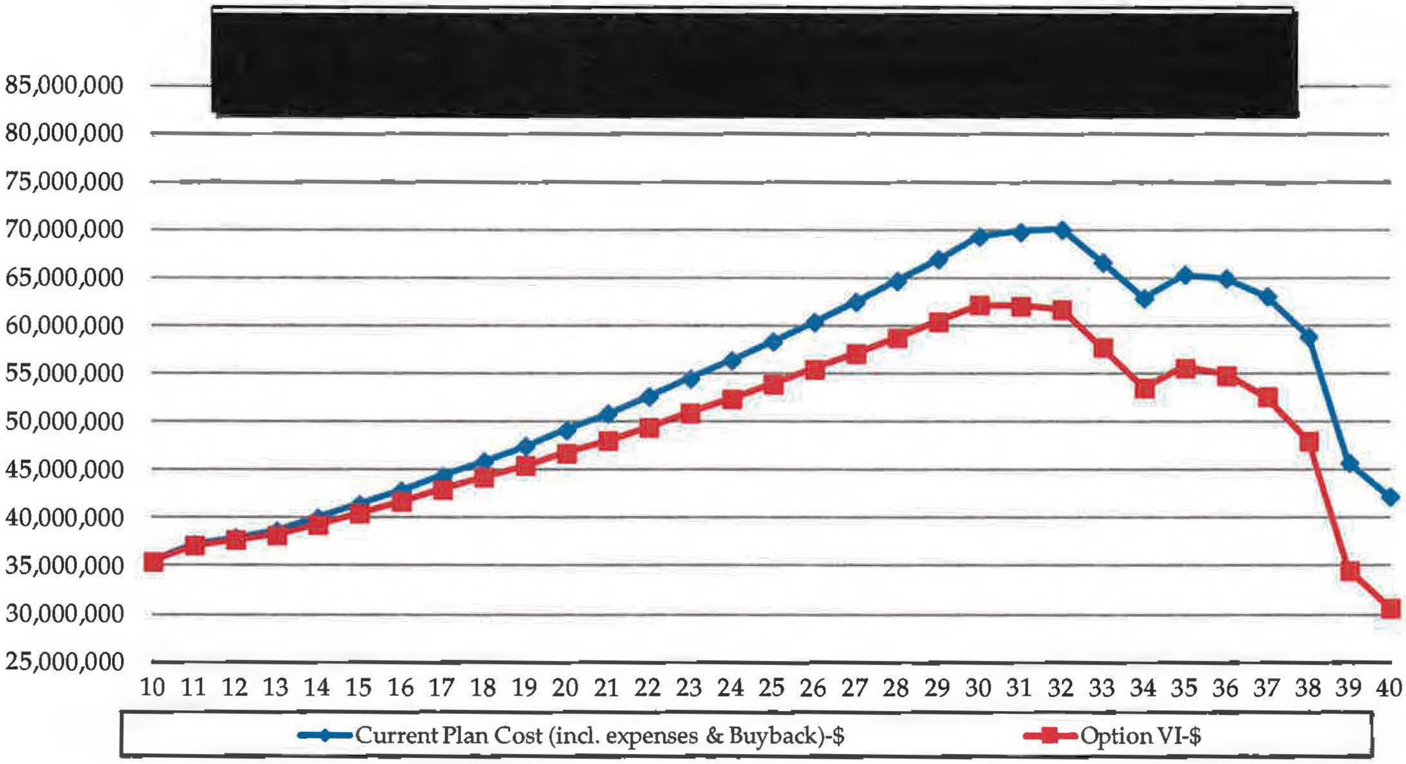
Option V: Chapter Minimum-Freeze Current Plan Benefits, Implement Chapter Minimum Benefits Plan for all Future Service, Grandfather all Employees Eligible for NR

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option Chapter Minimum Benefits-$	Option Chapter Minimum Benefits-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	24,259,101	50.75%	11,179,963	11,179,963
2011	37,226,360	75.25%	25,337,626	51.69%	11,888,734	10,987,739
2012	37,981,309	74.18%	25,346,200	50.05%	12,635,109	10,792,560
2013	38,660,638	72.95%	25,487,439	47.65%	13,173,199	10,399,428
2014	40,013,760	72.95%	26,456,302	46.36%	13,557,458	9,891,661
2015	41,414,242	72.95%	27,578,105	45.18%	13,836,137	9,329,933
2016	42,863,740	72.95%	28,769,052	44.15%	14,094,688	8,783,991
2017	44,363,971	72.95%	30,032,923	43.18%	14,331,048	8,254,431
2018	45,916,710	72.95%	31,407,521	42.15%	14,509,189	7,723,694
2019	47,523,795	72.95%	32,950,145	40.91%	14,573,650	7,170,063
2020	49,187,128	72.95%	34,587,965	39.72%	14,599,163	6,638,277
2021	50,908,677	72.95%	36,281,112	38.67%	14,627,565	6,147,127
2022	52,690,481	72.95%	37,999,766	37.81%	14,690,715	5,705,790
2023	54,534,648	72.95%	39,726,301	37.12%	14,808,347	5,315,599
2024	56,443,360	72.95%	41,567,659	36.40%	14,875,701	4,935,098
2025	58,418,878	72.95%	43,531,437	35.68%	14,887,441	4,564,688
2026	60,463,539	72.95%	45,516,209	35.08%	14,947,330	4,235,722
2027	62,579,763	72.95%	47,581,427	34.52%	14,998,335	3,928,074
2028	64,770,054	72.95%	49,774,818	33.95%	14,995,236	3,629,632
2029	67,037,006	72.95%	52,115,704	33.36%	14,921,303	3,338,019
2030	69,383,301	72.95%	54,493,144	32.85%	14,890,157	3,078,606
2031	69,868,207	70.98%	54,983,090	31.31%	14,885,117	2,844,329
2032	70,122,087	68.82%	55,251,157	29.74%	14,870,931	2,626,264
2033	66,721,958	63.27%	51,700,023	26.50%	15,021,935	2,451,878
2034	62,987,707	57.71%	47,735,519	23.39%	15,252,188	2,300,795
2035	65,472,079	57.96%	49,787,333	23.48%	15,684,746	2,186,734
2036	65,058,318	55.65%	48,867,152	22.24%	16,191,166	2,086,264
2037	63,213,581	52.24%	46,473,580	20.42%	16,740,001	1,993,515
2038	58,980,901	47.09%	41,655,001	17.68%	17,325,901	1,906,920
2039	45,863,374	35.38%	27,931,067	11.46%	17,932,307	1,824,087
2040	42,349,557	31.57%	30,858,185	12.23%	11,491,373	1,080,324
					Total APV	167,331,205

Actuarial Concepts

Section 30

Option VI: Reformed Plan for New Employees: Minimum Retirement Age 48, 4% multiplier after 20 years, 3 year FAME, 1.5% Retiree COLA



Actuarial Concepts

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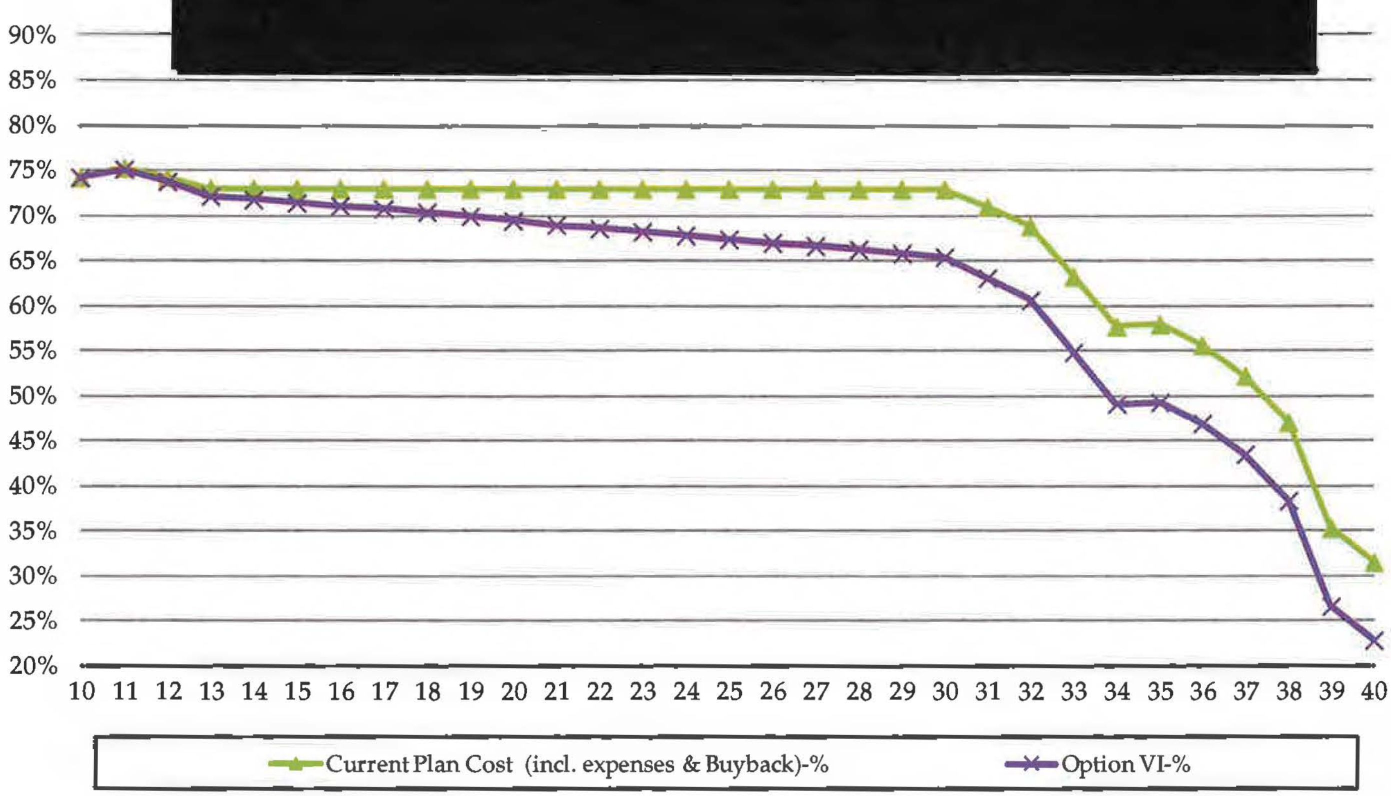

Actuarial Concepts

Option VI: Reformed Plan for New Employees: Minimum Retirement Age 48, 4% multiplier after 20 years, 3 year FAME, 1.5% Retiree COLA

Year	Current Plan Cost (incl. expenses & Buyback)-$	Current Plan Cost (incl. expenses & Buyback)-%	Option VI-$	Option VI-%	Annual Savings (Cost)	Present Value of Savings (Cost)
2010	35,439,063	74.14%	35,439,063	74.14%	-	-
2011	37,226,360	75.25%	37,148,265	75.09%	78,096	72,177
2012	37,981,309	74.18%	37,755,762	73.74%	225,547	192,656
2013	38,660,638	72.95%	38,216,584	72.11%	444,054	350,553
2014	40,013,760	72.95%	39,335,749	71.71%	678,011	494,684
2015	41,414,242	72.95%	40,509,026	71.35%	905,216	610,402
2016	42,863,740	72.95%	41,735,540	71.03%	1,128,200	703,109
2017	44,363,971	72.95%	43,003,118	70.71%	1,360,853	783,827
2018	45,916,710	72.95%	44,283,119	70.35%	1,633,591	869,611
2019	47,523,795	72.95%	45,529,738	69.89%	1,994,056	981,052
2020	49,187,128	72.95%	46,796,935	69.40%	2,390,193	1,086,827
2021	50,908,677	72.95%	48,111,117	68.94%	2,797,560	1,175,654
2022	52,690,481	72.95%	49,497,011	68.53%	3,193,470	1,240,325
2023	54,534,648	72.95%	50,966,754	68.18%	3,567,893	1,280,730
2024	56,443,360	72.95%	52,453,757	67.79%	3,989,603	1,323,573
2025	58,418,878	72.95%	53,957,533	67.38%	4,461,345	1,367,908
2026	60,463,539	72.95%	55,545,950	67.02%	4,917,588	1,393,529
2027	62,579,763	72.95%	57,182,817	66.66%	5,396,945	1,413,463
2028	64,770,054	72.95%	58,840,606	66.27%	5,929,448	1,435,237
2029	67,037,006	72.95%	60,510,394	65.85%	6,526,612	1,460,057
2030	69,383,301	72.95%	62,268,152	65.47%	7,115,149	1,471,088
2031	69,868,207	70.98%	62,161,619	63.15%	7,706,589	1,472,617
2032	70,122,087	68.82%	61,797,521	60.65%	8,324,566	1,470,151
2033	66,721,958	63.27%	57,865,604	54.87%	8,856,354	1,445,533
2034	62,987,707	57.71%	53,629,082	49.14%	9,358,626	1,411,750
2035	65,472,079	57.96%	55,720,003	49.33%	9,752,076	1,359,614
2036	65,058,318	55.65%	54,937,233	46.99%	10,121,085	1,304,122
2037	63,213,581	52.24%	52,726,639	43.57%	10,486,942	1,248,857
2038	58,980,901	47.09%	48,126,916	38.43%	10,853,985	1,194,609
2039	45,863,374	35.38%	34,629,500	26.71%	11,233,874	1,142,718
2040	42,349,557	31.57%	30,722,497	22.90%	11,627,060	1,093,080
					Total APV	32,849,516

Actuarial Concepts

Survey of Comparative Jurisdictions

City of Miami Beach
Multi-Jurisdiction Pension Plan and Benefits Survey*

	City of Miami Beach	FRS**	Boca Raton	Coral Gables	Coral Springs	Ft. Lauderdale***	Hialeah
Number of General Employees	1,503	655,367 approx. (265,602 count/municipal); 182 municipalities, 231 special districts	854	424	917	1,385	608
Number of High Risk Employees	466	N/A	403	308	Police = 188; Fire = 155	875	656 (377 Police 279 Fire)
Type of Plan	DC = 64 High Risk; DB = remainder	DB = 85.1% of members; DC = 14.9% of members	DC = 112 General; DB = 640 General; 352 High Risk	DB	DB	DC = 160; DB = 1,227 General/ 802 High Risk	DB
Social Security	No	Yes	Yes	Yes	Yes	Yes	Yes
% of Payroll - General Employees	25.54%	N/A	19.81%	49.10%	N/A	32.75%	32.59%
% of Payroll - High Risk Employees	66.66%	N/A	52.72%	49.10%	Police = 87.98%; Fire = 28.02%	49%	32.59%
UAAL - General Employees	13.85%	DB all employees = 12.1% - $16.7 billion (114% in 2008)	45.46%	N/A	N/A	18.91%	16.98%
UAAL - High Risk Employees	35.21%	N/A	299.14%	N/A	Police = 18.25%; Fire = 5.64%	N/A	16.98%
Normal Cost - General Employees	11.69%	9.84%	16.48%	N/A	N/A	19.31%	N/A
Normal Cost - High Risk Employees	31.45%	22.34%	29.78%	N/A	Police = 69.73%; Fire = 22.38%	N/A	N/A
Funded Ratio - General Employees	74.40%	N/A	91.38%	57.50%	N/A	70.70%	75.03%
Funded Ratio - High Risk Employees	66%	N/A	70.26%	57.50%	Police = 77.77%; Fire = 79.65%	77.40%	75.03%
Pension Stabilization Fund	Yes	No	No	No	No	No	No
% of Salary at Retirement General Employees	80 - 90%	N/A	60-100%	N/A	N/A	N/A	75%
% of Salary at Retirement - High Risk Employees	90%	N/A	Policde = 70-87.5% Fire = 68-100%	N/A	N/A	N/A	75%
Period Adjustments	Annually	N/A	Annually	N/A	N/A	No	No
Avg. Annual Adjustment for past 10 years	2.5% General Plan	N/A	N/A	N/A	N/A	No	No

* All data provided directly by jurisdictions through survey administered by City of Miami Beach Labor Relations in 2011
** FRS - Coconut Creek, Cooper City, Miami Gardens, Miami Lakes, Miami-Dade County, Pinecrest, Wilton Manors
*** Ft. Lauderdale - Plan closed for General Employees New Hires After 10/1/07 through 3/5/08
**** Hollywood - Plans are now frozen for Police/Fire and General Fund Employees and New plans with lower benefits became effective 10/1/11
DB = Defined Benefit; DC = Defined Contribution; YCS = years of creditable service

City of Miami Beach
Multi-Jurisdiction Pension Plan and Benefits Survey*

	Hollywood****	Miami Shores	North Miami	North Miami Beach	Pompano	Tamarac
Number of General Employees	690	71	296	427	575	181
Number of High Risk Employees	507	28	119	Police = 97; Fire = contracted	195	Police = contracted; Fire = 89
Type of Plan	DB	DB	DB	DC (for 1 managmeent employee); DB (411 employees), FRS (7 elected officials)	DB	DB
Social Security	Yes	Yes	Yes	Yes	Yes	Yes
% of Payroll - General Employees	36.14%	4.14%	32.14%	25%	21.39%	28.80%
% of Payroll - High Risk Employees	Police = 84.41%; Fire = 127.03%	40.65%	30.21%	55.30%	38.59%	55.45%
UAAL - General Employees	28.16%	N/A	16.56%	12.40%	160.20%	7.30%
UAAL - High Risk Employees	Police = 50.16%; Fire = 70.793%	N/A	12.01%	33.90%	436.40%	20.70%
Normal Cost - General Employees	7.98%	N/A	15.58%	16.80%	11.06%	21.50%
Normal Cost - High Risk Employees	Police = 31.20%; Fire = 43.22%	N/A	18.20%	33.20%	21.78%	34.30%
Funded Ratio - General Employees	63.76%	100.80%	75.60%	70.30%	74.20%	77.96%
Funded Ratio - High Risk Employees	Police = 53.5%; Fire = 37.6%	73%	68.60%	61.60%	69.80%	63.03%
Pension Stabilization Fund	No	N/A	No	No	Yes - 3 years smoothing	No
% of Salary at Retirement General Employees	81%	60%	Average = 41.4%	N/A	60%	N/A
% of Salary at Retirement - High Risk Employees	Police = 80%; Fire = 86%	60%	Average = 95.3%	N/A	80%	N/A
Period Adjustments	Annually	N/A	Annually	N/A	Yes	Annually
Avg. Annual Adjustment for past 10 years	2% under frozen plan; No COLA after 10/01/2011	N/A	1.92% - 3.00%	N/A	Fire = 2% fixed COLA w/ 1% variance; General = Tier 1 or 2	Fire = 2.13%

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City of Miami Beach
Multi-Jurisdiction Pension Plan and Benefits Survey*

	City of Miami Beach	FRS**	Boca	Coral Gables	Coral Springs	Ft. Lauderdale***	Hialeah
Name of Plan	**Miami Beach Employees Retirement Plan**	**Florida Retirement System**	**City of Boca Raton General Employees Pension Plan**	**City of Coral Gables General Retirement System**	**City of Coral Springs Police Pension Plan**	**City of Ft. Lauderdale General Employees Retirement System**	**City of Hialeah Employees' Retirement System**
Vesting	5 Years	8 Years as of 7/1/11 (previously 6 Years)	10 years	10 years	10 years	5 years	10 years
Multiplier	Employees hired prior to 10/1/10 = 3%; Employees hired after 10/1/10 = 2.5%	N/A	Plan A and Plan B = 3%; Plan C = 1.75%; Alternate Multipliers for Early Retirement	General Employees until 9/30/10 = 3%; After 9/30/10 = 2.25%	3.50%	3% for first 25 and 2.5% beyond - Max Accrual 90%	2% for Vested and 3% for Normal
Final Average Monthly Earnings (FAME)	5 Highest	N/A	5 Highest of last 15	5 Highest	Top (3) of last (10)	2 Highest	6.5 Highest (78 pay periods)
Normal Retirement Age	Hired prior to early 1990s = Age 50; Hired between early 1990's and 10/1/10 = Age 55; Hired on or after 10/1/10 = Age 62 w/5 Years of Service or Age 55 with 30 Years of Service	62 or 30 YCS	Age 65; Age 55 w/ 20 YCS; Age 53 w/30 YCS; Age 50 and 20 YCS, reduced 5% Per Year; Rule of 68 Min Age 50 w/15 YCS; Age 55 w/15 YCS Alternate	65 or Rule of 70	55 w/10 YCS; 50 w/10 YCS	65 or 30 YCS; 50 w/15 YCS	55
Retirement COLA	2.5% for employees hired prior to 10/1/10; 1.5% for employees hired on or after 10/1/10	Previsously 3%, NOW NONE	Not Required - Reviewed Every Odd Year in June	If the investments make over 10% as of 9/30 of any fiscal year then the cost of living would be 1/2 the CPI. If the investments do not make 10% as of 9/30 of any fiscal year then there is no cost of living however there is a catch-up clause that is maxed at 8% for a cost of living	2.5% (Jan 1st after retirement from plan)	Very infrequent - appoval by CC only if Actual Investment Earnings for FY>Actuarial Interest Rate Assumption	2% for 10 Years
DROP Years	5 Years	N/A	5 Years	5 Years	5 Years	3 Year Declining Balance DROP	3 Years
OT Pensionable	Only Tier A with max of 10%	N/A	Not Required - Reviewed Every Odd Year in June	None	14.50%	NO	No
Pensionable Earnings	Base and Incentive Pays	N/A	Base and Longevity	Base; Shift Differential and Special Assignment (Excludes OT and all other Payments)	Base	Base, Assignment Pay, Shift Pay, Academic Incentive Pay and Longevity	All excluding Overtime
Member Contribution	Tier A = 12%; Tier B = 10%; all those hired after 10/1/10 = 10%	3% as of 7/1/11	Plan A and B = 9.65%; Plan C = 6%	As of 9/30/2010 General employees 5%; Excluded employees 10%; appointed 5%; elected 5%	9.88%	6%	0% (7% deducted but placed in annuity that is returned with interest upon retirement)

* All data provided directly by jurisdictions through survey administered by City of Miami Beach Labor Relations in 2011

** FRS - Coconut Creek, Cooper City, Miami Gardens, Miami Lakes, Miami-Dade County, Pinecrest, Wilton Manors

*** Ft. Lauderdale - Plan closed for General Employees New Hires After 10/1/07 through 3/5/08

**** Hollywood - Plans are now frozen for Police/Fire and General Fund Employees and New plans with lower benefits became effective 10/1/11

DB = Defined Benefit; DC = Defined Contribution; YCS = years of creditable service

City of Miami Beach
Multi-Jurisdiction Pension Plan and Benefits Survey*

	Hollywood****	Miami Shores	North Miami	North Miami Beach	Pompano	Tamarac
Name of Plan	**City of Hollywood General Pension Plan**	**General Employees Retirement Plan**	**Clair T Singerman Employee Retirement System**	**General Employees Retirement Plan**	**General Employees**	**City of Tamarac General Employees' Pension Trust Fund**
Vesting	General Fund = 7 Years; Enterprise Fund = 5 Years	10 years	10 years	6 years	Tier 1 = 10 years; Tier 2 = 10 years	5 years
Multiplier	General Fund EE = 2%; Enterprise Fund = 3% hired prior to 7/15/09; and 2.5% hired on or after 7/15/09	2%	3%	3%	Tier 1 = 2.75%; Tier 2 = 2%	2.60%
Final Average Monthly Earnings (FAME)	General Fund = 5 Highest Consecutive of Last 10; Enterprise Fund hired prior to 7/15/09 = Highest 3 consecutive; hired after 7/15/09 = Highest 4 Consecutive	N/A	2 Highest of last 10	5 Highest of last 10 years	Tier 1 =3 Highest; Tier 2 = 5Highest	5 Highest
Normal Retirement Age	General Fund EE = Age 65 w/7 YCS, Age 62 w/25 YCS, Age 60 w/30 YCS; Enterprise Fund = hired before 7/15/0 9= Age 55 w/5 YCS, 25 YCS at any age; Enterprise Fund Hired after 7/15/09 = Age 57 w/25 YCS, Age 60 w/7 YCS or 30 YCS at any age.	62	55 w/20 YCS; Age 62 w/10 YCS; 14 YCS Regardless of Age	62 or 55 w/ 20 YCS;	Age 55 w/20 YCS; Age 50 w/20 YCS or Age 62 w/3 YCS	62 or Age 55 w/30 YCS; 55 w/10 YCS
Retirement COLA	Only for Enterprise Fund hired before 7/15/09	None	1.92% w/ 1year Elimination Period OR 2.5% w/3 Year Elimination Period; OR 3% w/5 Year Elimination Period	2.25% every Oct. 1st	Tier 1 = 2%; Tier 2 = 5 Year waiting period tiered 0-2% based on Age	2% funded solely by actuarial gains from corresponding year
DROP Years	Only for Enterprise Fund hired before 7/15/09	5	No	5 Years	5 Years	No
OT Pensionable	Enterprise Fund hired before 7/15/09 - Yes, No Cap	No	No	No	No	
Pensionable Earnings	General Fund and Enterprise Fund hired before 7/15/09 have cap on accrual payouts; General Fund and Enterprise Fund hired after 7/15/09 = Base Pay Only	Yes	Base, Holiday, Certificate and Longevity	Only base pay	Base	
Member Contribution	9%	6%	7%	7%	Tier 1 = 10%; Tier 2 = 7%	7%

* All data provided directly by jurisdictions through survey administered by City of Miami Beach Labor Relations in 2011

** FRS - Coconut Creek, Cooper City, Miami Gardens, Miami Lakes, Miami-Dade County, Pinecrest, Wilton Manors

*** Ft. Lauderdale - Plan closed for General Employees New Hires After 10/1/07 through 3/5/08

**** Hollywood - Plans are now frozen for Police/Fire and General Fund Employees and New plans with lower benefits became effective 10/1/11

DB = Defined Benefit; DC = Defined Contribution; YCS = years of creditable service

City of Miami Beach

Multi-Jurisdiction Pension Plan and Benefits Survey*

	City of Miami Beach	FRS**	Boca	Coral Gables	Coral Springs	Ft. Lauderdale***	Hialeah
Name of Plan	City Pension Fund for Firefighters and Police Officers in the City of Miami Beach	Florida Retirement System	City of Boca Raton Police and Firefighter Pension Plan	City of Coral Gables Police/Fire Retirement System	City of Coral Springs Firefighters' Pension Plan	Police and Firefighters Retirement System	N/A
Vesting	10 years	N/A	10 years	10 years	10 years	10 years	N/A
Multiplier	3% first 15; 4% thereafter with 90% Max if hired prior to 10/1/10; 3% first 20 and 4% thereafter with 90% max if hired on or after 10/1/10	N/A	Police = 3.5%; Fire = 3.4%	Police and Fire = Rule of 70	4%	3.38% (max accrual = 81%)	N/A
Final Average Monthly Earnings (FAME)	2 Highest hired prior to 10/1/10; 3 Highest hired on or after 10/1/10	N/A	2 Highest (consecutive)	3 Year Average for Police and Fire; General Employees - 3 Year average capped as of 9/29/10 for vested and excluded employees; 5 Year average for general and excluded not vested as of 9/29/10.	3 Highest of last 10	2 Highest	N/A
Normal Retirement Age/ Early Retirement	Age 50 or Rule of 70 with minimum age 48	55; or 52 with 25 w/25 YCS; or 30 YCS at any age	20 YCS; Age 55 and 10 YCS	Rule of 70 for Police and Fire; General Employees - Rule of 70, Rule of 80, Age 60 and 10 years or Age 65 and 6 years for general & excluded employees who were vested as of 9/29/2010; Rule of 80, Age 60 and 10 years or Age 65 and 6 years for general & excluded employees who were not vested as of 9/29/2010	55 w/10 YCS, or 52 w/20 YCS; 50 w/	20 YCS; Age 55 w/10 CS	N/A
Retirement COLA	2.5% if hired prior to 10/1/10; 1.5% deferred to 1 year after DROP if hired on or after 10/1/10	Previsously 3%, NOW NONE	Police = 2%; Fire = 3%	If the investments make over 10% as of 9/30 of any fiscal year then the cost of living would be 1/2 the CPI. If the investments do not make 10% as of 9/30 of any fiscal year then there is no cost of living however there is a catch-up clause that is maxed at 8% for a cost of living	1% (commence date = 5 years after retirement from plan)	None	N/A
DROP Years	3 years if join prior to 10/1/10; 5 years with mandatory 2 DROP COLA's for Years 3 and 4 of DROP if join on or after 10/1/10	N/A	5 years	8 Years for firefighters and 5 years for police	5 years	20<22 YCS = 6 Years; 22<23 YCS = 7 Years; 23<23.96 YCS = 8 Years	N/A
OT Pensionable	Police = capped at 70% of annualized pay rate for next highest rank; Fire = capped at % of highest annualized pay rate of next highest rank	N/A	None	Max 300 hours	None	Police Only up to 40 Hours Per Year (as additional funding becomes available, up to 300 hours will be included for Police)	N/A
Pensionable Earnings	Base, Allowances and Overtime. Leave Payments are NOT pensionable.	N/A	Police = Base, Assignment, crash-free bonus, longevity and up to 300 overtime hours in 12 month period for last 2 Years; Fire = Base, Paramedic Certification, Fire Inspetion, Hazardous Material Cert., Assignment Pay, Acting in Higher Capacity and Longevity Pay.	Base; Shift Differential and Special Assignment - Excludes OT and all other Payments	Base	Base, Assignment Pay, Longevity Pay, Academic Pay, Temp Upgrade Pay, Shift Pay, Certification Pay, 1st Responder Pay (FF)	N/A
Member Contribution	10%	N/A	10.20%	Police = 5%; Fire = 5%	9%	Hired Before 4/18/10 = 8.25%; Hired After 4/18/10 = 8.5%	N/A

* All data provided directly by jurisdictions through survey administered by City of Miami Beach Labor Relations in 2011

** FRS - Coconut Creek, Cooper City, Miami Gardens, Miami Lakes, Miami-Dade County, Pinecrest, Wilton Manors

*** Ft. Lauderdale - Plan closed for General Employees New Hires After 10/1/07 through 3/5/08

**** Hollywood - Plans are now frozen for Police/Fire and General Fund Employees and New plans with lower benefits became effective 10/1/11

DB = Defined Benefit; DC = Defined Contribution; YCS = years of creditable service

City of Miami Beach
Multi-Jurisdiction Pension Plan and Benefits Survey*

	Hollywood****	Miami Shores	North Miami	North Miami Beach	Pompano	Tamarac
Name of Plan	**City of Hollywood Police/City of Hollywood Fire**	**Police Officers Retirement Plan**	**North Miami Police Pension Plan**	**Police Officers and Firefighters Retirement Plan**	**Pompano Fire Fighters Pension Plan**	**City of Tamarac Firefighters Pension Trust Fund**
Vesting	10 years	10 years	10 years	10 years	10 years	10 years
Multiplier	2% with an additional .5% until age 62	2%	3% prior to 1999; 3.5% after 1999	3%	2.5% for first 10 years; 3% for years 11-20; and 4% for years 21-25	3% for first 15 years; 4% for next 10 years; and 3% thereafter
Final Average Monthly Earnings (FAME)	5 Highest of last 10	N/A	5 Highest of last 10 hired prior to 2006; 2 Highest of 10 hired after 2006	5 Highest of last 10	3 years	5 Highest
Normal Retirement Age/ Early Retirement	Age 55 w/10 YCS or Age 52 w/25 YCS for both Police and Fire	25 YCS	50 w/20 YCS; 55 w/10 YCS; 50 w/10 YCS	Age 52 or 20 YCS	Age 47 w/20 YCS; Age 50 with 25 YCS	55 w/ 5 YCS or 25 YCS regardless of Age; 50 w/ 10 YCS
Retirement COLA	No	1.50%	1.92% w/ 1 Yr Eliminination Period; OR 2.5% w/ 3 Yr Elimination Period; OR 3% w/5 Year Elimination Period	2.5% every Oct 1st, starting after 3rd yr of retirement	2010 Fixed 1% Variable	Employees retiring Before 3/1/07 = 2% after being retired for at least 3 years; Employees retiring After 3/1/07 = 2.25% after being retired for at least 3 years.
DROP Years	No	5 years	No	8 years	6 years	5 years
OT Pensionable	No	No	No	Yes, not capped (until next contract negotiation caps it at 300 hours)	No	N/A
Pensionable Earnings	Police = Salary, Assignment Pays, Longevity - excludes overtime and accrual payouts; Fire = Fixed Montly compensation - excludes overtime and accrual payouts	Yes	Base; Holiday; Education Incentive Pay and Longevity Pay	Base pay, all forms of overtime pay, all salary differentials and incentive pays	Base, Incentive Pays; Lump Sum Payments	N/A
Member Contribution	Police = 9.25% ; Fire = 7.5% or 8% based on hire date	9%	11.51% OR 9.51% (if plan outperforms range)	11%	11.60%	9%

* All data provided directly by jurisdictions through survey administered by City of Miami Beach Labor Relations in 2011

** FRS - Coconut Creek, Cooper City, Miami Gardens, Miami Lakes, Miami-Dade County, Pinecrest, Wilton Manors

*** Ft. Lauderdale - Plan closed for General Employees New Hires After 10/1/07 through 3/5/08

**** Hollywood - Plans are now frozen for Police/Fire and General Fund Employees and New plans with lower benefits became effective 10/1/11

DB = Defined Benefit; DC = Defined Contribution; YCS = years of creditable service

Supporting Rationale and Data for Proposed Guidelines and Policy Statements

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

AFFORDABILITY AND SUSTAINABILITY

GUIDELINE STATEMENT:

- If the City's portion of the total annual cost of retirement benefits contribution exceeds 25 percent of payroll for general employees and 60 percent of payroll for high risk employees, the City should review and evaluate potential changes to the collective bargaining agreements between the City and the Unions, applicable towards the next contract negotiations, in order to identify potential approaches to reduce the contributions to these levels over the long term.

POLICY STATEMENT:

- The City shall fund at least the normal cost of pension. If this exceeds the amount of the actuarially determined annual required contribution, the excess should be placed in a pension stabilization fund, to be made available for future pension shortfalls.

Background/Rationale:

Pension plans require annual contributions from plan sponsors (i.e., municipal governments) and participants in order to maintain their funding levels. Ideally, those contributions are only necessary to pay for future benefits that were earned by participants in the current year. That amount is referred to as the normal contribution. Normal contributions increase as plans provide more generous benefits, make benefits available to more individuals and reduce the number of years someone needs to work or lower the age when the plan will begin to pay benefits.

Underfunded pension plans require an additional contribution in order to eventually eliminate their unfunded liabilities. When pension plans are underfunded, annual contributions need to include the normal contribution and an additional contribution to pay down the unfunded portion of the liability. Therefore, if two pension plans have equal benefit policies and equal employee characteristics but one is 75 percent funded and the other is 100 percent funded, the plan that is 75 percent funded will require a larger annual contribution in order to pay down its unfunded liability. Plan sponsors do not have to make up the entire unfunded portion of the liability in a single year. In most cases, that amount would be too costly for governments to pay in full. Instead, a professional actuary establishes a payment schedule that allows the sponsor to pay off the unfunded portion of the liability over as many as 30 years. In short, plans with large unfunded liabilities will pay more in annual pension costs.

The combination of the normal cost funding requirement and the payment for amortization of the unfunded liability results in a combined annual required contribution (ARC) that the City is required to pay to each pension plan for the next fiscal year. Typically, this is expressed as a percent of the payroll applicable to the particular pension plan to allow comparability from year to year, as well as, to other pension plans.

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

Current Conditions:

The City of Miami Beach pension contributions as a percent of payroll as of the 10/1/10 valuation reports:

Fire and Police Pension Plan: 72.76%%
Miami Beach Employees Retirement Plan: 25.02%

Fire and Police Pension Plan Normal Cost: 32.59%%
Miami Beach Employees Retirement Plan Normal Cost: 10.80%

At this time, the negotiated changes to the Fire and Police Pension Plan are under litigation. However, the projections provided by the Fire and Police Pension Plan actuary regarding the impact of changes collectively bargained for new employees were minimal. In addition, assuming all actuarial projections were met from FY 2010/11 forward, the ARC as a percent of payroll is projected to increase to 81.05% by Fiscal Year 2017 contribution.

The Miami Beach Employees Retirement Plan (MBERP) Actuary projected that the 2010 changes to the plan for new employees would decrease the unfunded liability payment by approximately $6 million - 5.78% of payroll after 10 years. Even with this decrease, and assuming all actuarial projections were met from FY 2010/11 forward, the ARC as a percent of payroll is projected to increase to 37.12% by Fiscal Year 2017, declining each year thereafter.

Comparison to Florida Retirement System and Comparative Local Jurisdictions:

Total annual employer cost of retirement benefits contribution as a percent of payroll

Jurisdiction	High Risk Employees	General Employees
Boca Raton	52.72%	19.81%
Coral Gables	49.1%	
Coral Springs	Police: 87.98% Fire 28.02%	
Fort Lauderdale	49%	32.75% Plan closed for new hires 10/1/2007-3/5/2008 Now defined contribution
Hialeah	32.59%	
Hollywood	Police: 84.41% Fire 127.03% (Plans are now frozen and new plans with lower benefits became effective 10/1/11)	36.14% (Plans are now frozen for General Fund Employees and new plans with lower benefits became effective 10/1/11)

North Miami	30.21%	32.14%
North Miami Beach	55.3%	25%
Pompano	38.59%	21.39%
Tamarac	55.45%	28.8%
FRS (Includes Coconut Creek, Cooper City, Miami Gardens, Miami-Dade County, Miami Lakes, Pinecrest and Wilton Manors)	14.1% 7/1/11 19.56% 7/1/12	4.91% 7/1/11 6.58% 7/1/12

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

POLICY STATEMENT:

- The City should strive to maintain a funded ratio of at least 80 percent for each of its defined benefit pension plans.

GUIDELINE STATEMENT(S):

- If the funded ratio (actuarial value of assets minus actuarial liabilities) of either of the City of Miami Beach's pension plans falls below 70 percent, the City should strive to implement approaches to increase the funded ratio to that level over five (5) years.

Background/Rationale:

Each year, the City receives independent actuarial reports for each of the City's two pension plans. The actuarial valuation of the pension plan is a mathematical determination of the financial condition of the plan, which includes: the computation of the present monetary value of benefits payable to present members, the present monetary value of future employer and employee contributions, considering the expected mortality rates among employees and retirees, rates of disability, retirement age, withdrawal from service, salary increases, investment earnings and value of assets.

As part of the annual actuarial valuation for each plan based on plan data as of October 1, the Actuary evaluates how the actual data for the preceding year compared to the actuarial valuation for that year. Any differences are reflected as gains or losses in unfunded liability. The unfunded liability for a plan is the difference between the benefits earned (accrued) and the assets of the plan on a given date, and is typically amortized and funded over 30 years. The amortization methodology varies by plan. In the Fire and Police Pension Plan, the amortization is based on increased payments in proportion to assumed future payroll growth. In the MBERP, an assumption of level amortization payments is used.

The unfunded liability of the plan is the actuarial accrued liability less the plan actuarial assets. This amount is expected to have year-by-year fluctuations; however, if the plan's assumptions are consistent with the plans long-term experience, the changes in the unfunded liability should be offsetting over the life of the plan. In contrast to the market value of the pension plan assets, the actuarial value of the pension plan assets is equal to the market value of the assets at a specific data, adjusted to reflect a five-year phase-in (or smoothing) of any asset experience gain or loss. The five-year smoothing of pension plan asset value means that only 20 percent of the experience gain or loss that the fund experiences in any one year is recognized immediately for the purpose of determining the actuarial value of the plan and the annual required contribution.

The percent of the actuarial accrued liability funded is a measure of a pension fund's fiscal health. It compares assets to pension obligations. A percentage over 100% means that the fund has more money than it needs to meet its obligations at that point in time.

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

Current Conditions:

City of Miami Beach funding levels as of the 10/1/10 valuation reports:

Fire and Police Pension Plan: 64.3%
Miami Beach Employees Retirement Plan: 74.4%

Comparison to Florida Retirement System and Comparative Local Jurisdictions:

Funded Ratio

Jurisdiction	High Risk Employees	General Employees
Boca Raton	70.26%	91.38%
Coral Gables	57.5%	
Coral Springs	Police 77.77% Fire: 79.65%	
Fort Lauderdale	77.4%	70.7% Plan closed for new hires 10/1/2007-3/5/2008 Now defined contribution
Hialeah	75.03%	75.03%
Hollywood	Police 53.5% Fire 37.6% (Plans are now frozen and new plans with lower benefits became effective 10/1/11)	63.78% (Plans are now frozen for General Fund Employees and new plans with lower benefits became effective 10/1/11)
North Miami	68.6%	75.6%
North Miami Beach	61.6%	70.3%
Pompano	69.8%	74.2%
Tamarac	63.3%	77.96%
FRS (Includes Coconut Creek, Cooper City, Miami Gardens, Miami-Dade County, Miami Lakes, Pinecrest and Wilton Manors)	87.1% (7/1/11)	

Other Information:

The United States Postal Service Office of the Inspector General (June 18, 2010) concluded that 80 percent prefunding of pensions is reasonable based on the following:

- The Standard and Poor's companies' (S&P 500) median prefunding level for pensions in 2009 was 79 percent of liabilities. From 2001 through 2009, S&P 500's pension median prefunding ranged from 73 to 112 percent.

- The aggregate prefunding for states' pensions in 2008 was also 79 percent. From 2001 through 2009, state governments' aggregate pension prefunding ranged from 59 to 90 percent.

The Government Accountability Office (GAO) reported that many experts consider at least 80 percent prefunding to be sound for government pensions. (Source: The GAO's State and Local Government Retiree Benefits Current Funded (5); The GAO's State and Local Government Retiree Benefits Current Funded Status of Pension and Health Benefits, January 2008.)

The Pension Protection Act of 2006 considers pensions prefunded at less than 70 percent as being "at risk" and attempts to protect such plans by commencing restrictions on corporate pension funds only when prefunding is below 80 percent.

The 2011 report prepared by the Leroy Collins Institute at Florida State University for pension systems across Florida assigned the following grades to pension plans based on percent funded.

GRADE	PERCENT FUNDED
A	More than 90% funded
B	80 to 90% funded
C	70 to 80% funded
D	60 to 70% funded
F	Less than 60% funded

The following cities scored an "F" grade, according to the institute's study: Boynton Beach, Cooper City, Fort Myers, Hollywood, Homestead, Jacksonville, Miramar, Oakland Park, Ocala, Oviedo, Palm Beach Gardens, Panama City, Parkland, Plant City, Port Orange, Tamarac, Temple Terrace, Venice and Winter Haven. The highest rated was Melbourne's general employee plan with 190.1 percent funding, while Cooper City's general employee and police pension fund sat at the bottom with 35.48 percent funding. Pension funds that exceeded the 100% funded mark -- Tallahassee's general, Clearwater's firefighters, Gainesville's general, Key West's general, Palm Coast's firefighters, Plantation's firefighters and Rockledge's general and police funds -- have more than enough money in the bank to cover projected payouts to former and current employees.

The federal government has funded its combined **Civil Service Retirement System** (CSRS) and **Federal Employee Retirement System** (FERS) pension obligations at only 41 percent of liabilities and the military's prefunding for pensions is only 24 percent (Source: US Postal Service Office of The Inspector General Report of Pension Funding, 2010).

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

POLICY STATEMENT(S):

- Salary growth should not exceed the average actuarially assumed salary growth in each pension plan.

Background/Rationale:

Each year, the City receives independent actuarial reports for each of the City's two pension plans. The actuarial valuation of the pension plan is a mathematical determination of the financial condition of the plan, which includes: the computation of the present monetary value of benefits payable to present members, the present monetary value of future employer and employee contributions, considering the expected mortality rates among employees and retirees, rates of disability, retirement age, withdrawal from service, salary increases, investment earnings and value of assets.

Each year, experience "gains" in the prior year reduces the actuarial accrued liability. Experience "losses" for the prior year, conversely, increases the actuarial accrued liability. To the extent that salary growth is more than the actuarial assumption for the plan, this would result in an experience "loss" and add to the unfunded liability of the plan.

Salary growth can result from merit increases, automatic step adjustments to salaries annually, cost of living adjustments impacting all employees or subsets or employees (COLA's), adjustments to salary ranges based on compensation studies, etc.

Current Conditions:

Projected salary rate increases vary by age.

For the Fire and Police Pension Plan, the average long-term assumption across all ages is 6 percent per year.

For the Miami Beach Employees Retirement Plan, the assumed increases are as follows:

Years of Service	Merit and Seniority	Base (Economic)	Total Increase
1	4.0%	4.0%	8.0%
2	3.9%	4.0%	7.9%
3	3.8%	4.0%	7.8%
4	3.7%	4.0%	7.7%
5	3.6%	4.0%	7.6%
6	3.5%	4.0%	7.5%
7	3.0%	4.0%	7.0%
8	2.9%	4.0%	6.9%
9	2.8%	4.0%	6.8%
10	2.7%	4.0%	6.7%
11	2.6%	4.0%	6.6%
12	2.5%	4.0%	6.5%
13	2.4%	4.0%	6.4%

14	2.3%	4.0%	6.3%
15	2.2%	4.0%	6.2%
16	2.1%	4.0%	6.1%
17	2.0%	4.0%	6.0%
18	1.9%	4.0%	5.9%
19	1.8%	4.0%	5.8%
20	1.7%	4.0%	5.7%
21+	1.5%	4.0%	5.5%

The pension board for MBERP recently approved a decrease in the salary growth assumption for the 10/11/11 valuation to reflect the downturn in the economy and the lower economic increases in recent years and likely into the future.

Comparison to Florida Retirement System and Comparative Local Jurisdictions:

Not Applicable

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

POLICY STATEMENT(S):

- The City should require 5, 10 and 20 year projections of required pension contributions as part of the annual actuarial valuations for each of the City's pension plans. These projections shall be based on the current actuarial assumptions for each plan. The projections shall be updated to reflect the cost of any proposed benefit enhancement, before the City Commission agrees to the enhancement. The cost of these studies shall be funded separately from the annual contribution to the pension plan.

- There shall be an experience study of each of the City's pension plan's actuarial assumptions performed by an actuary that is independent from the pension board. The experience study should be conducted at least once every three (3) years, to compare actual experience to the assumptions. The independent actuary shall make recommendations for any changes in assumptions based on the results of the experience study, and any deviations from those assumptions by the pension board shall be justified to the City Commission.

- Once pension reform is implemented, a 5/7th vote of the City Commission should be required for further pension changes.

Background/Rationale:

Changes to plan benefits can affect the actuarial accrued liability of a plan, either positively or negatively. If plan benefits are increased, the mathematical calculations will result in more benefits anticipated to be paid to plan members in the future, which will need to be recognized all at once, although payments would be amortized over the long-term. Conversely, if plan benefits are reduced, with all else being equal, the plan will see a reduction in the actuarial accrued liability.

Current Conditions:

Not Applicable

Comparison to Florida Retirement System and Comparative Local Jurisdictions:

Not Applicable

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

POLICY STATEMENT(S):

- The City should require 5, 10 and 20 year projections of required pension contributions as part of the annual actuarial valuations for each of the City's pension plans. These projections shall be based on the current actuarial assumptions for each plan. The projections shall be updated to reflect the cost of any proposed benefit enhancement, before the City Commission agrees to the enhancement. The cost of these studies shall be funded separately from the annual contribution to the pension plan.

- There shall be an experience study of each of the City's pension plan's actuarial assumptions performed by an actuary that is independent from the pension board. The experience study should be conducted at least once every three (3) years, to compare actual experience to the assumptions. The independent actuary shall make recommendations for any changes in assumptions based on the results of the experience study, and any deviations from those assumptions by the pension board shall be justified to the City Commission.

- Once pension reform is implemented, a 5/7th vote of the City Commission should be required for further pension changes.

Background/Rationale:

Changes to plan benefits can affect the actuarial accrued liability of a plan, either positively or negatively. If plan benefits are increased, the mathematical calculations will result in more benefits anticipated to be paid to plan members in the future, which will need to be recognized all at once, although payments would be amortized over the long-term. Conversely, if plan benefits are reduced, with all else being equal, the plan will see a reduction in the actuarial accrued liability.

Current Conditions:

Not Applicable

Comparison to Florida Retirement System and Comparative Local Jurisdictions:

Not Applicable

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

APPROPRIATE BENEFITS TO PROVIDE TO EMPLOYEES

DRAFT POLICY STATEMENT(S):

- The City of Miami Beach should strive to provide a retirement benefit that provides for a replacement of salary at a level at least equivalent to Social Security plus a supplemental retirement benefit.

Background/Rationale:

In the United States, 96 percent of workers are covered by Social Security. The benefit payment is based on how much is earned during your working career. Higher lifetime earnings result in higher benefits. If there were some years when you did not work or had low earnings, your benefit amount may be lower than if you had worked steadily. Social Security replaces about 40 percent of preretirement income for the average worker. The average replacement rate for lower-paid workers equals about 55 percent of their pre-retirement earnings. The average replacement rate for highly paid workers is about 25 percent.

Windfall Elimination Provision
Before 1983, people who worked mainly in a job not covered by Social Security had their Social Security benefits calculated as if they were long-term, low-wage workers. They had the advantage of receiving a Social Security benefit representing a higher percentage of their earnings, plus a pension from a job where they did not pay Social Security taxes. Congress passed the Windfall Elimination Provision to remove that advantage.

Government Pension Offset
If you receive a pension from a federal, state or local government based on work where you did not pay Social Security taxes, your Social Security spouse's or widow's or widower's benefits may be reduced by two-thirds of your government pension.

(Source: Social Security website: http://www.ssa.gov/pubs/10035.html
http://www.ssa.gov/pubs/10045.html http://www.ssa.gov/pubs/10007.html)

Current Conditions:

The City of Miami Beach currently does not participate in Social Security. In evaluating proposed changes to the City's pension plans, the fact that the City does not participate in Social Security must be taken into account.

Comparison to Florida Retirement System and Comparative Local Jurisdictions:

Participation in Social Security

Jurisdiction	General Employees
Boca Raton	Yes
Coral Gables	Yes
Coral Springs	Yes
Fort Lauderdale	Yes
Hialeah	Yes
Hollywood	Yes
North Miami	Yes
North Miami Beach	Yes
Pompano	Yes
Tamarac	Yes
FRS (includes Miami Dade County, Miami Lakes, Pinecrest, Wilton Manors)	Yes

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

POLICY STATEMENT(S):

- City of Miami Beach retirement benefits should be adjusted periodically after retirement to reflect the impacts of inflation, with rates no more than the Consumer Price Index for All Workers (CPI-W), subject to Commission approval, and with a maximum of 3 percent annually.

Background/Rationale:

Most people are aware that there are annual increases in Social Security benefits to offset the effects of inflation on fixed incomes. These increases, now known as cost-of-living adjustments (COLAs), are such an accepted feature of the program that it is difficult to imagine a time when there were no COLAs.

Before 1975, beneficiaries had to await a special act of Congress to receive a benefit increase.

Beginning in 1975, Social Security started automatic annual COLAs. The change was enacted by legislation that ties COLAs to the annual increase in the CPI-W.

(Source: Social Security website: http://www.ssa.gov/pubs/10035.html
http://www.ssa.gov/pubs/10045.html http://www.ssa.gov/pubs/10007.html)

Current Conditions:

Fire and Police Pension Plan

Employees hired before 10/1/10 - 2.5%

Employees hired on or after 10/1/10 – 1.5% with first adjustment deferred to 1 year after the end of DROP or 2 mandatory 0 DROP COLAs*

Miami Beach Employees Pension Plan

Employees hired before 10/1/10 - 2.5%

Employees hired on or after 10/1/10 – 1.5%

*Subject to current litigation

Comparison to Florida Retirement System and Comparative Local Jurisdictions:

Cost of Living Adjustments

Jurisdiction	**High Risk Employees**	**General Employees**
Boca Raton	Not required – reviewed every odd year	Not required – reviewed every odd year
Coral Gables	If investment returns are over 10%, then equal to half of CPI – catch-up clause capped at 8%	
Coral Springs	2.5%	1% commences 5 years after retirement or DROP entry
Fort Lauderdale	COLA provision repealed 7/15/2008	Very Infrequent – only if actual investment earnings exceed assumptions Plan closed for new hires 10/1/2007-3/5/2008 Now defined contribution
Hialeah	2% for 10 years	
Hollywood	Police: None Fire None (Plans are now frozen and new plans with lower benefits became effective 10/1/11)	Only Enterprise employees hired prior to 7/15/2009 (Plans are now frozen for General Fund Employees and new plans with lower benefits became effective 10/1/11)
North Miami	1.92% with 1 year elimination period or 3% with 5 year elimination period	1.92% with 1 year elimination period or 3% with 5 year elimination period
North Miami Beach	2.5% Annually after 3 Years of Retirement	2.25% Annually
Pompano	2% fixed 1% variable	Tier 1 2% Tier 2 5 year waiting period tiered 0-2% based on age
Tamarac	Employees retiring before 3/1/07 = 2% after 3 years of retirement After 3/1/07 – 2.25%. after 3 years of retirement	Up to 2% - solely funded from actuarial gains
FRS (Includes Coconut Creek, Cooper City, Miami Gardens, Miami-Dade County, Miami Lakes, Pinecrest and Wilton Manors)	3% for benefits earned prior to 7/1/11 None for benefits earned thereafter	

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

RECRUITMENT AND RETENTION

POLICY STATEMENT(S):

- The City of Miami Beach should strive to provide retirement benefits that ensure that the City is competitive in recruitment and retention of employees.

Background/Rationale:

Salary ranges for job classifications in City of Miami Beach are periodically reviewed to ensure internal equity and external competitiveness. Internal equity refers to the relationships (duties, level of responsibilities, salary, tenure, etc.) between positions within the same organization. External equity refers to the relationships (duties, level of responsibilities, salary, tenure, etc.) between positions to the external labor market, in both, the public and private sectors. Benefits, including pension, are also periodically reviewed.

Current Conditions:

In the past, particularly during periods of low unemployment rates when competition for employees has been tight, the City has targeted to set salaries in the 75th percentile of neighboring jurisdictions, and to provide benefits similar to neighboring jurisdictions.

Comparison to Florida Retirement System (FRS) and Comparative Local Jurisdictions:

See survey of pension benefits provided by neighboring jurisdictions

In addition, the 2009 Classification and Compensation Study prepared by Condrey and Associates for the City of Miami Beach concluded that "the City's retirement benefit, while generous, appears appropriate considering the employee 8 percent contribution to the fund (based on a comparison to other jurisdictions locally and throughout Florida).

City of Miami Beach
Budget Advisory Committee
Pension Reform:
Policy and Guideline Statements

MANAGEMENT OF RISK/RISK SHARING

POLICY STATEMENT(S):

- The City of Miami Beach should strive to share some portion of retirement benefit risk with employees.

GUIDELINE STATEMENT(S):

- If the City's contribution to a defined pension benefit plan exceeds 25 percent of payroll for general employees and 60 percent of payroll for high-risk employees, the employee contribution should be reviewed.

Background/Rationale:

With the City of Miami Beach's two pension plans, the City bears 100 percent of the risk of the volatility of the equity market; whereas, with private sector pension plans, the risk is born by the employee.

Current Conditions:

Fire and Police Pension Plan:
Employee Contribution Rates – 10%

Miami Beach Employees Retirement Plan
Employee Contribution Rates for employees hired prior to early 1990's – 12%
Employee Contribution Rates for employees hired after early 1990's – 10%

Comparison to Florida Retirement System and Comparative Local Jurisdictions:

Employee Contribution Rates

Jurisdiction	High Risk Employees	General Employees
Boca Raton	10.2%	Plans A&B 9.65% Plan C 6%
Coral Gables	5%	5-10%
Coral Springs	Police 9.875% Fire 8.75%	
Fort Lauderdale	Hired before 4-18-10 8.25% Hired after 4-18-10 8.5%	6% Plan closed for new hires 10/1/2007-3/5/2008 Now defined contribution
Hialeah		0%

Hollywood	Police 9.25% Fire 7.5% - 8% (Plans are now frozen and new plans with lower benefits became effective 10/1/11)	9% (Plans are now frozen for General Fund Employees and new plans with lower benefits became effective 10/1/11)
North Miami	11.51% or 9.51%	7%
North Miami Beach	12%	7%
Pompano	11.6%	Tier 1 10% Tier 2 7%
Tamarac	9%	7%
FRS (Includes Coconut Creek, Cooper City, Miami Gardens, Miami-Dade County, Miami Lakes, Pinecrest and Wilton Manors)	3%	3%

Note: Employees in Social Security also contribute to Social Security.

See page 1 for additional comparatives related to percent of payroll.

Presentations by: City Pension Counsel/Actuary and Pension Plan Administrators

City of Miami Beach

Private Industry Pensions
Other Public Pension Plans
Conceptual Plan Changes

August 30, 2011

James W. Linn
Lewis, Longman & Walker, P.A.

Michael J. Tierney
Actuarial Concepts

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City of Miami Beach

Private Industry Pensions
Changes to other pension plans
Conceptual Potential Retirement Program Changes

August 30, 2011

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Actuarial Concepts

Private Sector Retirement Plans

- About 50% of employees in the private sector in the U.S. participate in an employer sponsored retirement plan.
- More than 80% of these employees participate in defined contribution (DC) plans.
- Less than 20% of these employees participate in defined benefit (DB) plans.
- The average employer contribution to a U.S. private sector defined contribution (401K) plan is 3% of payroll.

Sources: U.S. Government Accountability Office Report on Private Pensions, March 2011; 50th Annual Survey of Profit Sharing and 401K Plans, 401K Coucil of America, 2007.

Pension Reform: What Other Florida Cities Have Done

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<u>Stuart (2007)- All Employees</u>

- All City pension plans terminated
- City joined FRS for all employees
- City purchased past service credit under FRS for all employees

Pension Reform: What Other Florida Cities Have Done

<u>Ft. Lauderdale (2007) - General</u>

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- Closed general employee pension plan
- Set up defined contribution plan for new hires (9% City contribution; no employee contribution)

Pension Reform: What Other Florida Cities Have Done

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Coral Gables (2009) - Police

- Increased employee contributions by police officers by 5%
- Reduced pensionable earnings (exclude OT in excess of 300 hrs. and lump sum payments for comp. time)

Pension Reform: What Other Florida Cities Have Done

<u>Naples (2009) - Fire</u>

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- "Stop & Restart" implemented; premium taxes City can use to offset City pension contributions increased from $776K to $1. 67 million per year
- "Share Plan" set up with excess premium tax revenues

Pension Reform: What Other Florida Cities Have Done

Hollywood (2009) - Fire

- Reduced 13^{th} check benefit for current employees
- Reduced pensionable earnings for current employees (exclude comp. time and blood time payouts; 70% cap on vacation leave payouts; no OT in excess of 300 hrs. over 3 year average)
- Reduced benefits and employee contributions for new hires (2 tier plan)
- "Share Plan" for all employees funded with increases in premium tax revenues

Pension Reform: What Other Florida Cities Have Done

<u>Port Orange (2010) – Fire</u> [Not Yet Implemented]*

- Reduced wages by 6% (imposed in lieu of increase in employee pension contribution)
- Reduced pension benefits for current and future employees
  - ➢ Push back normal retirement date
  - ➢ Reduce pensionable earnings (exclude OT)
  - ➢ Extend final averaging period from 3 to 5 years
  - ➢ Reduce maximum benefit from 90% to 80%
  - ➢ Reduce COLA
  - ➢ Reduce DROP earnings

* litigation pending

Pension Reform: What Other Florida Cities Have Done

Miami (2010) – Pension Changes (All Employees)*

[Financial urgency declared – City Commission adopted wage and benefit reductions 8/31/10]:

- Later normal retirement age
- 5 year average final compensation
- Reduce benefit formula for future service (3%)
- Normal form of benefit: life and 10 years certain (PF); life annuity (General)
- $100,000 cap on benefits

* litigation pending

Pension Reform: What Other Florida Cities Have Done

<u>Town of Palm Beach (2011) – Fire</u> [Town Council imposed wage and benefit reductions 4/21/11]:

- Pension benefits frozen
- Pension changes for current and future employees:
  - ➢ Reduced multiplier for future service (to 1.25%)
  - ➢ Defined contribution plan on top of DB plan
  - ➢ Normal retirement under DB plan delayed to age 65 (but DC plan distributions may begin earlier)
  - ➢ Joint & Survivor Annuity abolished; replaced with life annuity (member may purchase survivor benefit)
  - ➢ No COLA
  - ➢ Town will withdraw from participation in Ch. 175

Pension Reform: What Other Florida Cities Have Done

<u>Palm Bay (2011) – Fire</u> [Settlement Approved 5/19/11]

- 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 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 – $800K one-time transfer from excess premium tax reserve to reduce city's contribution; $125K increase each year in "frozen amount"

Pension Reform: What Other Florida Cities Have Done

<u>Coral Gables (2011) – General</u> [Settlement approved by union members and City Commission in July 2011]

- Pension benefits frozen
- Pension changes for current and future employees:
  - ➢ Reduced multiplier for future service (2.25%)
  - ➢ Increase employee pension contribution by 5% (to 10%)
  - ➢ 5 year final averaging period (phased in)
  - ➢ Delay retirement age to age 65 or Rule of 85
  - ➢ Reduced disability benefits
- Future pension cost increases shared by City and employees
- City may establish DC plan in the future for new hires.

Pension Reform: Work in Progress

<u>Sarasota (2011) – Police</u> [City proposal at impasse; Special Magistrate hearing held in June 2011]

- Pension benefits to be frozen for <u>all</u> employees
- Pension changes for <u>vested</u> current employees:
  - ➢ 5 year final averaging period (now 3 years)
  - ➢ Reduce COLA from 3.2% to 2.0% beginning at age 67
  - ➢ Overtime limited to 300 hours per year
  - ➢ Standard form of benefit: 10 years certain & life (now 60% automatic spouse survivor benefit for life of spouse)
  - ➢ Reduce DROP interest to 2.0% (now 6.5%)
- DC plan for <u>non-vested</u> current and future employees (maximum combined City + employee contribution = 32%)
- City will withdraw from participation in Ch. 185

Pension Reform: Work in Progress

Hollywood (2011) – All Employees [City declared financial urgency; pension changes to be submitted to referendum if agreement with unions not reached by September 1]

- Pension benefits to be frozen for all employees
- Pension changes proposed for current 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 (now 3 years)
  - No COLA for future service
  - No DROP
- City will withdraw from participation in Ch. 175 & 185

City Pension Contributions This Year (FY2010-11)

- General Plan: $14.5M (20.65% of payroll)*
- Fire/Police Plan: $34.4M (66.66% of payroll)

<u>Total Annual City Cost: $48.9 million</u>

Increase over prior year: $8.5 million (+21%)

[General Plan decreased $2.6 million;
Fire/Police Plan increased $11.1 million]

* Following collectively bargained benefit adjustments in 2010

City Pension Contributions Next Year (FY2011-12)

- General Plan: $17.5M (25.54% of payroll)
- Fire/Police Plan: $36.2M (72.76% of payroll)

Total Annual City Cost: $53.79 million

Increase over prior year: $4.8 million (+10%)

[General Plan increased $3.0 million;
Fire/Police Plan increased $1.8 million]

Funded Status

- Actuarial Value of Assets / Actuarial Accrued Liability (value of current benefits).
- Provides a measure of how much of current benefits (earned and projected) are funded at a specific point in time.
- Funded Status of City Pension Plans as of 10/1/10 (per GASB 25):

	Fire/Police	General
– Act. Accrued Liability:	$822 million	$580 million
– Act. Value of Assets:	$526 million	$431 million
– **Percent Funded:**	**64.0%**	**74.4%**

City Pension Cost - Next 5 Years Fire/Police

Valuation Date 10/1	2009	2010	2011	2012	2013	2014	2015
Contribution for FY	2011	2012	2013	2014	2015	2016	2017
Discount Rate	8.3%	8.2%	8.1%	8.0%	8.0%	8.0%	8.0%
Salary Scale	Current Bargaining Agreement						
ARC (in millions)	34.4	36.2	39.7	43.3	43.9	44.5	45.2
% of Payroll	66.66%	72.76%	77.22%	81.94%	81.76%	81.28%	81.05%

City Pension Cost - Next 5 Years
Fire/Police

Valuation Date 10/1	2009	2010	2011	2012	2013	2014	2015
Contribution for FY	2011	2012	2013	2014	2015	2016	2017
Discount Rate	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%
Salary Scale	Current Bargaining Agreement						
ARC (in millions)	34.4	35.8	37.7	40.1	41.5	42.1	45.2
% of Payroll	66.66%	72.04%	73.33%	76.05%	76.32%	75.83%	75.54%

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City Pension Cost - Next 5 Years
Fire/Police

Valuation Date 10/1	2009	2010	2011	2012	2013	2014	2015
Contribution for FY	2011	2012	2013	2014	2015	2016	2017
Discount Rate	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%
Salary Scale	Current Bargaining Agreement, Experience Study after 2014						
ARC (in millions)	34.4	37.6	40.9	43.7	44.8	45.4	46..0
% of Payroll	66.66%	75.72%	79.51%	82.79%	83.55%	82.93%	82.43%

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City Pension Cost - Next 5 Years General

Pending From Actuary - To be Provided at Future Meeting

Pension Legacy Cost - The UAAL Issue

- Total Unfunded Actuarial Accrued Liability (UAAL) of City pension plans as of 10/1/10 was **$445 million:**
  - Fire/Police: $296 million
  - General: $149 million
- By law the **City is responsible for funding the UAAL** – even if employees are transferred to other employers, and even if the current pension plans are closed, frozen or terminated.
- **Annual UAAL payment is approximately half of the annual required contribution in each plan – these do not go away/could increase due to plan closure, etc.**

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.

Legal Guidelines

- Changes in retirement benefits and employee contributions are mandatory subjects of collective bargaining.
- Accrued pension benefits (benefits earned in the past) cannot be reduced or taken away.
- Future benefits can be reduced for current employees who have not reached retirement status.
- City is ultimately responsible for unfunded pension liabilities.

Social Security

- City currently does not participate in Social Security.

- In evaluating proposed changes to the City's pension plans, the fact that the City does not participate in Social Security must be taken into account.

Pension Reform Options

- Join FRS
- Reduce Benefits for New Hires (2 Tier)
- Reduce Benefits for All Employees
- Set up Defined Contribution (DC) plan
- Set up Hybrid DB + DC plan

Join FRS for New Hires

Issues to Consider

- No immediate savings -- may take many years to achieve cost savings; City still must pay off current plan liabilities and may shorten amortization period, thereby increasing cost in the short-term
- City must join Social Security as a condition of joining FRS
- Standardized FRS benefits
- Portability – easier for City to attract employees from other FRS agencies (but also easier for other FRS agencies to hire employees away)
- Lose police/fire premium tax revenues immediately
- State legislature sets benefits and contributions

Join FRS for All Employees

Issues to Consider

- May reduce City cost in shorter period – but City still must pay off unfunded liabilities, and may require shorter amortization period, thereby increasing cost in the short-term
- City must join Social Security as a condition of joining FRS
- Current City plan can be closed, frozen or terminated
- Standardized FRS benefits
- Portability – easier for City to attract employees from other FRS agencies (but also easier for other FRS agencies to hire employees away)
- Lose police/fire premium tax revenues immediately
- State legislature sets benefits and contributions

Reduce Benefits for New Hires (2 Tier Plan)

Issues to Consider

- No immediate savings -- may take many years to achieve cost savings – savings are achieved only as new staff are hired
- Current employees keep current benefits
- Creates lower level of benefits for new hires
- New hires can be expected to eventually press for benefits similar to longer tenured employees

Note: Miami Beach implemented 2 Tier pension plans for General employees in 2010 – Fire and Police plan implementation pending litigation

Reduce Benefits for All Employees

Issues to Consider

- Immediate cost savings
- Reduces unfunded liabilities, because future benefits are reduced for all
- Same level of benefits for all employees going forward
- Reduces future benefits for current employees (employees keep what they have already earned)
- Loss of premium tax revenues if Fire and Police Plan benefits reduced below Ch. 175/185 minimums

Note: City implemented increase in employee contributions and 5 yr. averaging period for all members of General Plan in 2010.

Defined Contribution Plan

Issues to Consider

- Predictable City costs
- Investment risk shifts from City to employees
- Appeals to younger, mobile employees
- Portability – DC account balance may be "rolled over" to an IRA or other retirement plan with another employer
- Lower administrative costs
- No actuarial liabilities - Employees bear investment risk
- Possible that DC benefits will run out while employee is still alive
- No inflation protection (COLA)
- Loss of premium tax revenues for Fire and Police Plans
- Benefit would have to exceed social security to be competitive
- No Florida City has implemented DC plan for police or fire (yet)

Hybrid Plan

- Hybrid DB / DC plans combine:
  - ➢ Base DB plan – guaranteed benefit
  - ➢ DC plan (with matching employer & employee contributions) on top of DB plan
- Hybrid plans are attractive because they provide:
  - ➢ Shared risk
  - ➢ Shared cost
  - ➢ Some level of guaranteed benefit
  - Social Security issue

Police/Fire Benefit Comparison

Benefit	MB Fire/Police	Ch. 175/185 Min.	FRS
Multiplier	3.0/4.0% (90% after 26 yrs)	2.0% (90% after 45 yrs)	3.0% (90% after 30 yrs)
Norm. Ret. Date	Age 50 w/10 yrs or Rule of 70	Age 55 w/10 yrs or age 52 w/25 yrs	Age 60 w/8 yrs or 30 yrs service
Final Avg. Comp.	Highest 2 yrs	High 5 of last 10 yrs	High 8
COLA	2.5% annual	None	None
DROP	3 yrs/invested rate	None	5 yrs/1.3%
Share Plan	Yes	None	None
Employee Cost	10%	5%	3%
City Cost	71.67%	?	14.1 (19.5% next year)
Premium Tax	0.02%	0	
Total Cost	87%	?	17.1% (22.5% next year)

Ch. 175/185 Premium Taxes

- Chapters 175 & 185, F.S. provide for a rebate of the state excise tax on property and casualty insurance premiums to cities with police and firefighter pension plans.
- The premium tax monies must be used exclusively for firefighter and police pensions, and the local pension plan must comply with the requirements of Ch. 175 & 185.
- Premium taxes received in excess of the "frozen amount" must be used for extra benefits.

Ch. 175/185 Premium Taxes

- In 2010 the City received a total of $2 million in premium tax (PT) revenues – about 3.87% of payroll. (Fire – $1.46M; Police - $603K)
- The City is able to use $120K of the premium tax money received each year to offset the City's contributions to the pension plan. This is the "frozen amount."
- The rest of the PT money -- $1.9 million last year – went to "share plans" for firefighters and police officers.

Ch. 175/185 Premium Tax Issues

- Under current law and State non-rule policy, the "City" will lose PT monies if:
  - ➢ The current plan is closed, frozen or terminated; or
  - ➢ The City joins FRS; or
  - ➢ Benefits are reduced below 1999 level
- Increase in member contributions requires collective bargaining and benefit increase.

(Reminder: only $120,000 is used to offset cost of the City's Defined Benefit Plan for Police and Fire; balance of $1.9 million annually goes to share plans).

Pension Reform:
What Miami Beach Has Done

Miami Beach (2010) – General Employees

- Wage freeze
- Pension changes for all employees:
  - ➢ Increase employee pension contribution by 2%
  - ➢ 5 year final averaging period (phased in)
- Additional reduced pension benefits for employees hired after 10/1/10:
  - ➢ Increased Normal Retirement Age
  - ➢ Reduced Multiplier from 3% to 2.5%
  - ➢ Reduced Retiree COLA from 2.5% to 1.5%

Pension Reform: What Miami Beach Has Done

Miami Beach (2010) – Fire and Police*

- Reduced wage growth -- no COLA's for 2.5 years
- Pension changes for all employees:
  - No retiree COLA for at least 2 years for DROP participants
  - Off-Duty compensation pensionable
  - Sick leave sell back
- Additional reduced pension benefits for hires after 10/1/10
  - Established Minimum Retirement Age
  - Pushed back higher multiplier (increase from 3% to 4%) to year 20 instead of year 15
  - Final Averaging period increased from 2 to 3 years
  - Retiree COLA decreased from 2.5% to 1.5%

* litigation pending

Pension Reform: Next Steps

- mployee Perspectives
  - – □ ar□ ainin□ □ roup □ eaders mployees
- Committee isionin□ Pension Reform Parameters
- Potential Pension Recommendations
- mpact of Potential Pension Recommendations □ y City s Actuary
- Final Pension Recommendations

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BUDGET ADVISORY COMMITTEE

Pension Overview

March 22, 2011

MIAMIBEACH

TYPES OF PENSION PLANS

Defined Contribution (DC) Plan

Certain amount or percentage of money is set aside each year by a company for the benefit of the employee. There are restrictions as to when and how you can withdraw these funds without penalties (e.g. 401 plans)

TYPES OF PENSION PLANS

Defined Benefit (DB) Plan

An employer-sponsored retirement plan where employee benefits are determined based on a formula using factors such as salary history and duration of employment. Investment risk and portfolio management are under the control of the plan. There are also restrictions on when and how you can withdraw these funds without penalties. (e.g. City pension plans)

DEFINED BENEFIT PLAN

Example of Benefit

Years of service X Annual Multiplier X Final Average Monthly Earning

30 years X 3% per year X Average of the last 5 years

30 X 3% X $4,000 per month

$3,600 per month = $43,200 per year

Other considerations:

Employee Contributions

Retirement Age

Cap on maximum % of salary

What type of pay is considered salary

Cost of Living Adjustments after Retirement

Deferred Retirement Option Plan (DROP)

DEFINED BENEFIT PLAN

POTENTIAL FACTORS TO CONSIDER REGARDING THE HEALTH OF A DEFINED-BENEFIT PLAN

Percent Funded

ARC* as a % of payroll

ARC* as a percent of Budget

Experience Gains and Losses

Trends

*Annual Contribution Requirement

CITY PENSION PLANS

- There are two City of Miami Beach Pension Plans:
  - Pension Fund for Firefighters and Police Officers in the City of Miami Beach (Fire and Police Pension), and
  - Miami Beach Employees' Retirement Plan (MBERP)- provides pension benefits for almost all other full-time employees

- Approximately 50 active employees participate in a defined contribution 401 Plan which is no longer offered to new employees. – these employees do not participate in the defined benefit plan

CITY PENSION PLANS

Each Pension Plan is governed by a Board of Trustees

- Fire and Police Pension Plan
  - 3 elected from Fire Department sworn employees
  - 3 elected from Police Department sworn employees
  - 3 appointed by the Mayor

- MBERP
  - 3 members elected by members of the plan
  - 2 retirees elected by retired members of the plan
  - 4 appointed by the City Manager

CITY PENSION PLANS

- Typical Functions and Responsibilities of Board Trustees

  - Establish investment policy and procedure
  - Adopt Actuarial standards
  - Approve methods for internal reporting and controls
  - Insure overall compliance with appropriate governing conditions

PLAN PARTICIPANTS

PENSION PLAN MEMBERS AS OF 10/1/09	**FIRE AND POLICE PENSION**	**MBERP**
ACTIVE	478	1,154
DROP	66	35
DISABLED	62	41
RETIRED & BENEFICIARIES	506	972
TERMINATED VESTED MEMBERS	12	79
TOTAL	1,124	2,281

SOCIAL SECURITY CONSIDERATIONS

The City does not participate in social security

IMPACTS TO CITY

- The City does not incur the expense of the 6.2% contribution

IMPACTS TO EMPLOYEE

- The employee does not incur the expense of the 6.2% contribution
- The employee does not earn social security benefits while working for the City – for long term employees, the City's pension may be the only benefits they get
- For employees that have worked elsewhere with Social Security, they lose 5% per year of social security benefits for each year they have less than 30 years of "credible" service with social security
- Some or all of their Social Security spouse's, widow's or widower's benefit also may be offset due to receipt of the City pension

SOCIAL SECURITY CONSIDERATIONS

Example to be discussed

ANNUAL ACTUARIAL VALUATION

- Each year, the City receives from each pension plan administrator independent actuarial reports for each of the plans
- These reports specify the City's annual required contribution (ARC) for the upcoming fiscal year as of the prior October 1 valuation date
- The ARC is determined by each pension plan actuary, in accordance with State Statutes, and is based on various assumptions established by each pension plan Board of Trustees in consultation with the pension plan Actuary and Investment Consultant
- Under State Statute, the City is required to fully fund the ARC

ANNUAL ACTUARIAL VALUATION

- The valuation is based on wage data as of 10/1 and important assumptions include:
  - mortality rates
  - retirement ages
  - future salary increases
  - pension plan expenses
  - investment performance assumptions

- These assumptions should mirror the actual plan experience ***over the long term.***

ANNUAL ACTUARIAL VALUATION

- **The market value of the plan is** the total value of all plan investments as of a given point in time based on current market value on that date.

- **The actuarial value of the pension plan assets** is equal to the market value of the assets at a specific date, adjusted to reflect a 5-year phased-in (or smoothing) of any asset experience gain or loss
  - only 20% of the experience gain or loss that the fund experiences in any one (1) year is recognized

- Using the actuarial value methodology allows the pension plan to spread the annual investment experience over a period of time (5 years).

ACTUARIAL ACCRUED LIABILITY

- The actuarial accrued liability reflects a snapshot at a point in time based on plan benefits and assumptions
- The actuarial accrued liability generally represents the portion of the Present Value of Fully Projected Benefits attributable to service earned (or accrued) as of the valuation date – i.e. those benefits which will be paid out over the life of the participants
- The unfunded liability for a plan is the difference between the benefits earned (accrued) and the assets of the plan on a given date, and is typically amortized and funded over 30 years

Example:

• Accrued Actuarial Liability	$600 million
• Actuarial Value of Assets	$500 million
• Unfunded Liability	$100 million
• Percent Funded	83%
• Market Value of Assets	$550 million

EXPERIENCE GAIN OR LOSS

- As part of the annual actuarial valuation, the Actuary evaluates how the actual data for the preceding year compares to the actuarial valuation for that year -- Any differences are reflected as gains or losses in unfunded liability

- **Experience "gains"** in the prior year reduces the actuarial accrued liability

  Examples of experience gains include:
    - Investment earnings for the prior year in excess of plan assumptions
    - employees retiring later than assumed
    - salary growth less than assumed, etc.

- **Experience "losses"** for the prior year, conversely, increases the actuarial accrued liability

- These gains or losses are amortized over 30 years

OTHER IMPACTS

- Changes to plan benefits can also affect the actuarial accrued liability of a plan, either positively or negatively

  - If plan benefits are increased, the mathematical calculations will result in more benefits anticipated to be paid to plan members in the future, which will need to be recognized all at once, although payments would be amortized over the long term

  - If plan benefits are reduced, all else being equal, the plan will see a reduction in the actuarial accrued liability

OTHER IMPACTS

- The investment rate of return is significant as this affects the calculation of present value of the plan benefits

  - How much the plan should have on hand today, which together with investment earnings (the investment rate of return), employer contributions, and employee contributions, should be sufficient to fund the plan in the future

INVESTMENT RATE OF RETURN

- MBERP has had an average actuarial rate of return of 8.5% since September 30, 1989 through September 30, 2010

  Prior to March 18, 2006, there were two separate pension plans for civilian employees: one for General (Classified) Employees and the other for Unclassified Employees – the Unclassified Plan had an average actuarial rate of return of 11.0% from September 30, 1989 through September 30, 2006

- The Fire and Police pension plan returns from September 1989 through September 2010 average 8.52% (Base Plan).

  •Prior to 2000, the Fire and Police Plan had a separate supplemental component. The returns for the Supplemental Plan for the nine (9) years that it was in existence averaged 11%

INVESTMENT RATE OF RETURN

	FIRE AND POLICE PENSION	MBERP
FY 2009/10 Assumed Rate of Return	8.3%	8.35%
FY 2009/10 Actual Rate of return	***10.85%***	***11.2%***

Status of Previously Recommended Pension Plan Changes

MBERP– New Employees	Status
Normal retirement: Age 55 + 30 years of service or 62 + 5 years of Service Early Retirement: "Rule of 75", Minimum Age 55	Complete
FAME Period: 5 years	Complete
Formula: 2.5% average earnings time service	Complete
Annuity form: member's lifetime	Complete
COLA: decrease from 2.5% to 1.5% annual increase, deferred to end of DROP	Complete
DROP: 5-year maximum	Complete
Pre-retirement 5 year vesting – Benefit deferred to Age 62	Complete
Death & disability benefits: unchanged	No change
Employee contribution: 10%	Complete

Status of Previously Recommended Pension Plan Changes

MBERP – Current Employees	Status
FAME Period: 5 years	Complete
Additional 2% employee contribution: From 8 to 10% for most employees	Complete

The actuarial impact of these changes for current employees were $3,297,614 or 4.7% of non-DROP payroll

Impact of changes for new MBERP employees:	
- Estimated $1 million in savings (1.25% of payroll)	
- Increasing to $6 million in 10 years	

Status of Previously Recommended Pension Plan Changes

Fire and Police – New Employees	Status
Normal retirement: "Rule of 70" with minimum age 50	Minimum Age 48
Formula: 3% average earnings times service	3% first 20 year, 4% thereafter
FAME Period: 2 years (unchanged)	3 years
Annuity form: lifetime	No change
COLA: decrease from 2.5% to 1.5% annual increase, deferred to end of DROP	1.5%, 2 years no retiree COLA if participates in DROP
DROP: 5-year maximum	As of 9/30/12
Preretirement termination 10 years vesting, benefit deferred to age 55	No change
Death & disability benefits: unchanged	No change

Status of Previously Recommended Pension Plan Changes

Fire and Police – Current Employees	Status
Normal retirement: “Rule of 70” with minimum age 50	No Minimum Age
Annuity form: lifetime	No change
COLA: decrease from 2.5% to 2.0% annual increase, deferred to end of DROP	2.5%, 2 years no retiree COLA
DROP: 5-year maximum	As of 9/30/12

In addition, the adopted pension plan ordinance provides for off-duty as pensionable pay and allows for sell back of sick leave to reach the maximum for both new and current employees

Pension Plan Changes

PENSION PLAN CHANGES FOR POLICE AND FIRE OCURRED AFTER THE ARC		
DOES NOT INCLUDE PENSION PLAN CHANGES FOR POLICE AND FIRE - ESTMATED AS OF 9/19/2010		
2 YR NO COLA IF IN DROP	$	(651,322)
CHANGE IN PENSIONABLE PAY	$	368,665
NET	$	(282,657)

FY 2010/11PLAN STATISTICS

	FIRE AND POLICE PENSION	MBERP
ANNUAL CONTRIBUTION REQUIREMENTS (ARC)	$ 34,416,519	$ 14,474,678
PENSION BOND PAYMENTS	4,495,500	499,500
TOTAL ANNUAL CITY PAYMENTS	$ 38,912,019	$ 14,974,178
GENERAL FUND COMPONENT		
ACTUAL ARC PAYMENT	$ 33,748,250	$ 9,287,147
PENSION BONDS	$ 4,366,259	$ 485,140
% OF GENERAL FUND BUDGET	16%	4%

FY 2010/11 PLAN STATISTICS

	FIRE AND POLICE PENSION	MBERP
EMPLOYER ARC AS A % OF PAYROLL		
NORMAL COST	35.21%	10.02%
AMORTIZATION OF UNFUNDED LIABILITY	31.45%	10.20%
TOTAL EMPLOYER % OF PAYROLL	66.66%	20.22%
ANTICIPATED EMPLOYEE CONTRIBUTION	$ 5,163,607	$ 7,146,837
UNFUNDED LIABILITY AS OF 10/1/09 (UAAL)	$ 266,792,988	$ 126,143,247
FUNDED RATIO (Actuarial Value of Plan Assets less Accrued Laibility - Past Service)	66.0%	76.9%

PENSION REFORM SAMPLE WORK PLAN

Agenda Item	Presenter(s)
Pension Plan Overview & Alternatives	City s Pension Attorney
Pension Plan Status	Pension Plan Administrators
Potential Pension Plan Changes	City s Actuary
Employee Perspective	Bargaining Group Leaders/Employees
Potential Recommendations	Committee
Impact of Potential Recommendations	City s Actuary
Final Recommendations	Committee

Miami Beach Employees Retirement Plan

Presented by Rick Rivera

Pension Administrator

Historical Information

- A Retirement System for General Employees of the City of Miami Beach was created by authority of Chapter 18691, Laws of Florida, Acts of 1937
- January 1, 1955 – Agreement between CMB and Federal Gov't , Social Security Administration, exempting City employees from paying Social Security Taxes
- In March 1988 the Unclassified & Elected Officials Retirement System was created

Historical Information (continued)

- In March 2006 the General Employees Retirement System and the Unclassified & Elected Officials Retirement System merged to create the Miami Beach Employees' Retirement Plan (MBERP)
- Also, at this time approximately 300 employees migrated from the City's defined contribution retirement plan into MBERP

Board of Trustees

- MBERP is a Plan and shall be construed as a Trust and Administered by the Board
- Nine (9) Trustees:
  - Three (3) Members of the Plan elected by Employee members;
  - Two (2) Retirants elected by the retired members of the Plan;
  - Four (4) persons appointed by the City Manager

Duties of the Board of Trustees

- Hold regular meetings
- Establish rules and regulations to implement provisions of the pension ordinance, and formulate policy for the proper administration of the Plan
- Consider all applications, lump sums, expenses
- Hire Actuary, Board legal counsel, Investment Consultant, Investment Managers

Duties of Board of Trustees (Continued)

- Legal Custodian of all cash & securities of the Plan
- Appoint an Administrator
- Cause an audit of the Plan annually by an independent CPA
- Issue annually an Employee Benefit Statement to each Member

Duties of the Pension Administrator

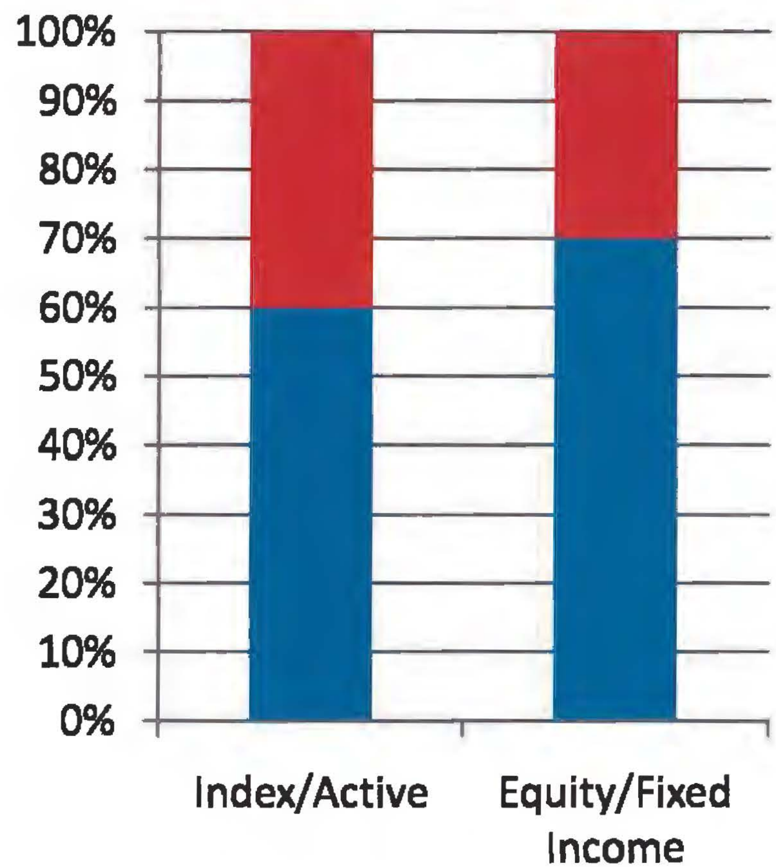
- The administration of the Plan. Responsibilities include:
  - Establish and maintain records on all members
  - Verify employee contributions
  - Receive and compute applications, credit interest
  - Notify Board of any new members, applicants
  - Maintain numerous records including City contributions, investment returns and other financial records the Board deems necessary

MBERP's Vendors

- Board's Legal Counsel – Steve Cypen, Cypen & Cypen
- Plan Actuary – Steve Palmquist, Gabriel Roeder Smith Inc.
- Plan's external Auditor – Goldstein Schechter Koch
- Fund's Investment Consultant – Bill Cottle, Milliman Inc.

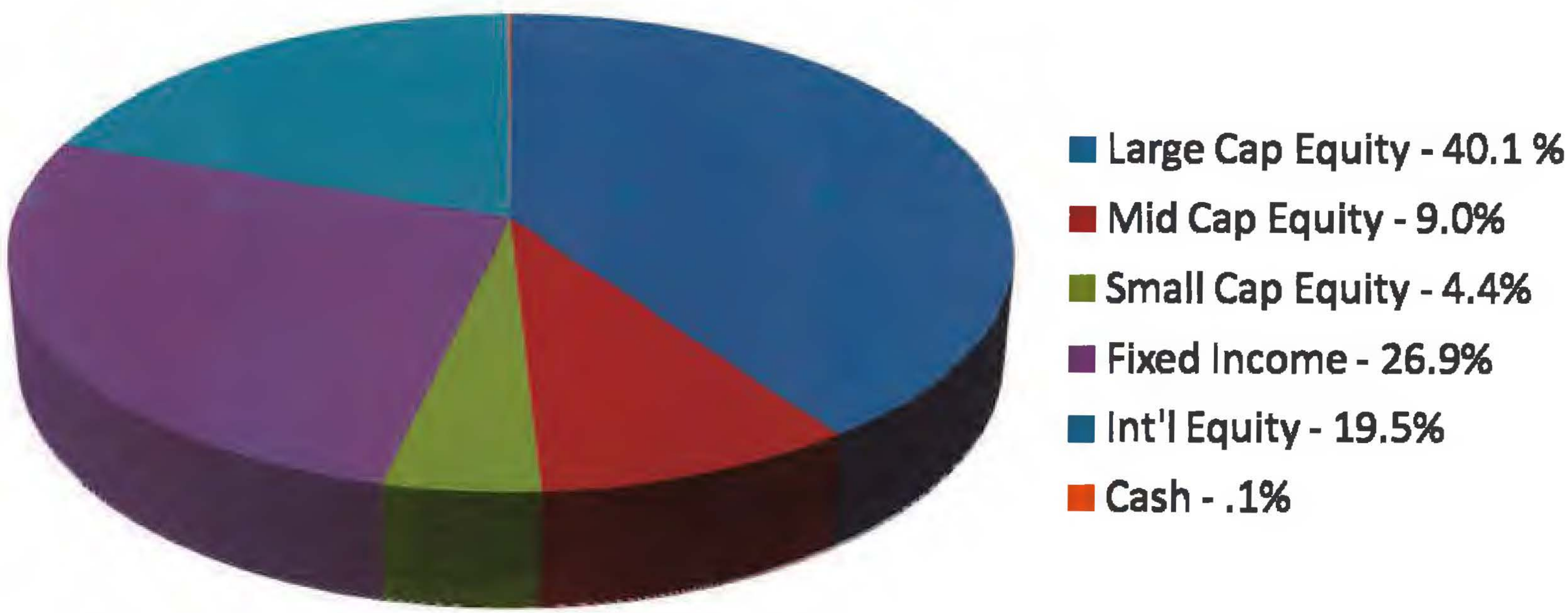
Investment details of the Plan

- <u>Index Managers</u>
- Rhumbline Advisers
- Strategies:
  - S&P 500, Large Cap Equity
  - S&P 400, Mid Cap Equity
  - S&P 600, Small Cap Equity
  - Barclays aggregate bond fund
  - ADR Int'l Index
- <u>Active Managers</u>
- ICC - Large Cap Value Manager
- Wentworth Hauser Violich – ADR International Manager
- Wellington – Core bond fund manager

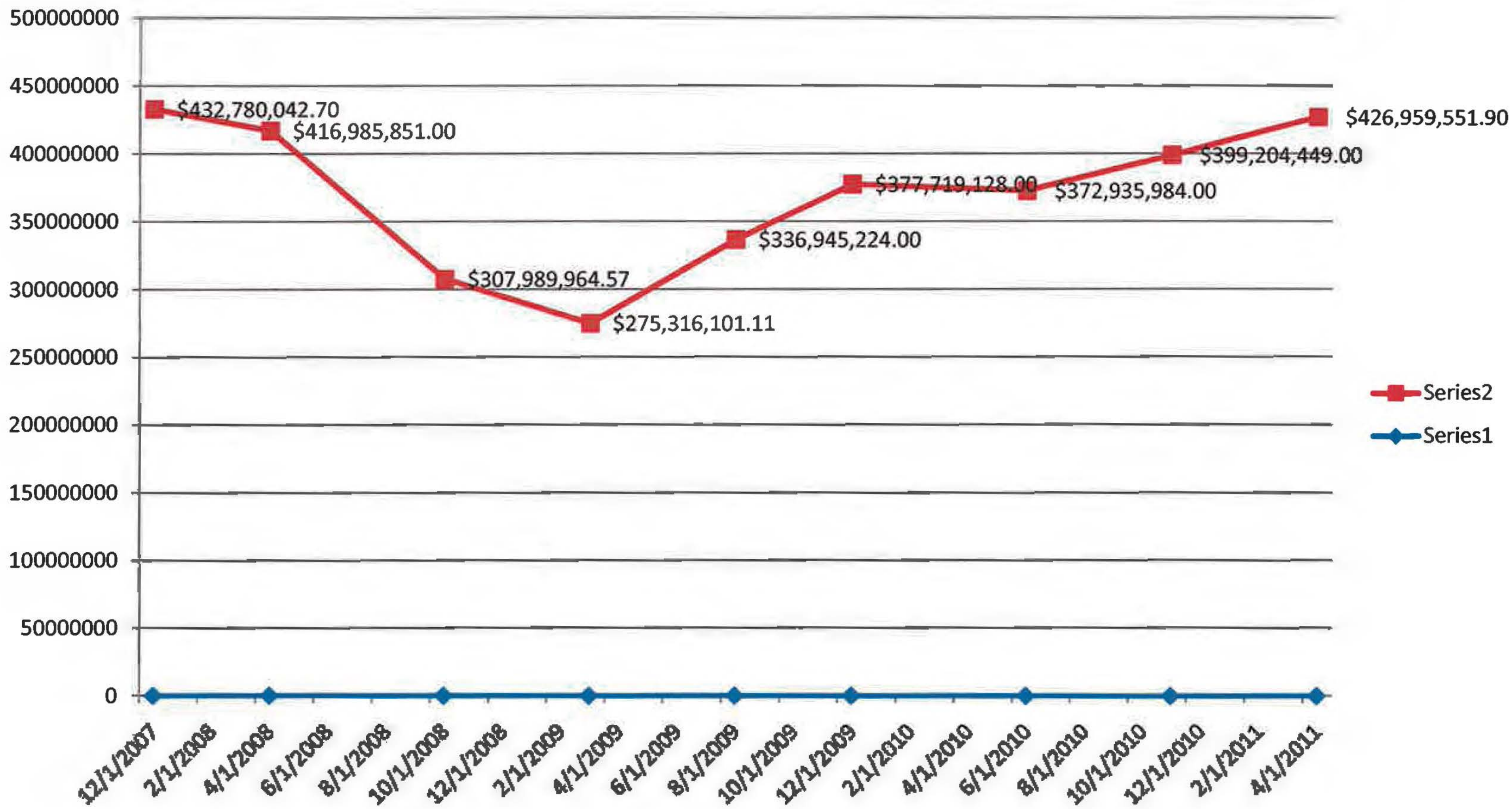


Investment details of the Plan

Actual Asset Allocation 12/31/2010



Investment details of the Plan
Market Value



Recent Historical Investment Rate of Return

Year Ended	General Plan	General Plan	Unclassified Plan	Unclassified Plan
	Market Value	Actuarial Value	Market Value	Actuarial Value
09/30/00	10.8%	10.7%	11.5%	16.5%
09/30/01	(7.4%)	7.2%	(8.1%)	9.7%
09/30/02	(5.9%)	0.3%	(9.8%)	1.7%
09/30/03	17.4%	4.3%	16.9%	4.6%
09/30/04	11.4%	4.1%	13.0%	9.7%
09/30/05	12.8%	4.4%	13.8%	10.7%
09/30/06	7.4%	7.7%	7.5%	10.2%
09/30/07	15.3%	12.0%	NA	NA
09/30/08	(13.6%)	5.2%	NA	NA
09/30/09	(0.8%)	1.1%	NA	NA
09/30/10	11.3%	5.0%	NA	NA

Fund Performance

current fiscal year 10-01-10 TO 9-30-11

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EQUITIES	3 Months ending 12-31-10	6 Months ending 03-31-11
ICC LARGE CAP VALUE	7.1%	19.7%
Rhumbline S&P 500 Index	5.9%	17.3%
Rhumbline S&P 400 Index	9.4%	24.2%
Rhumbline S&P 600 Index	7.7%	25.1%
WHV Int'l ADR portfolio	5.7%	21.2%
Rhumbline ADR Int'l Index	4.1%	11.9%
FIXED INCOME		
Rhumbline Barclay's Agg Index	.4%	(.9%)
Wellington Core bond fund	.9%	.4%
Total Fund	**4.9%**	**13.2%**
Fund Benchmark	4.1%	11.1%

Cumulative Fund Performance @ 12/31/2010

Period	Last Qtr	Last 2 Qtr	Last 3 Qtr	Last Year	Last 2 Years	Last 3 Years	Last 4 Years	Last 5 Years	Last 7 Years	Last 10 Yrs
Total Fund	8.0%	17.9%	9.1%	14.5%	19.6%	1.9%	3.5%	5.1%	6.1%	5.1%
Ranking vs. Total Funds	8	9	34	16	16	35	28	28	23	28
Fund Benchmark	6.7%	17.0%	8.8%	13.6%	17.5%	1.4%	2.6%	4.3%	5.1%	4.3%
Ranking vs. Total Funds	23	15	39	26	34	44	47	53	55	57

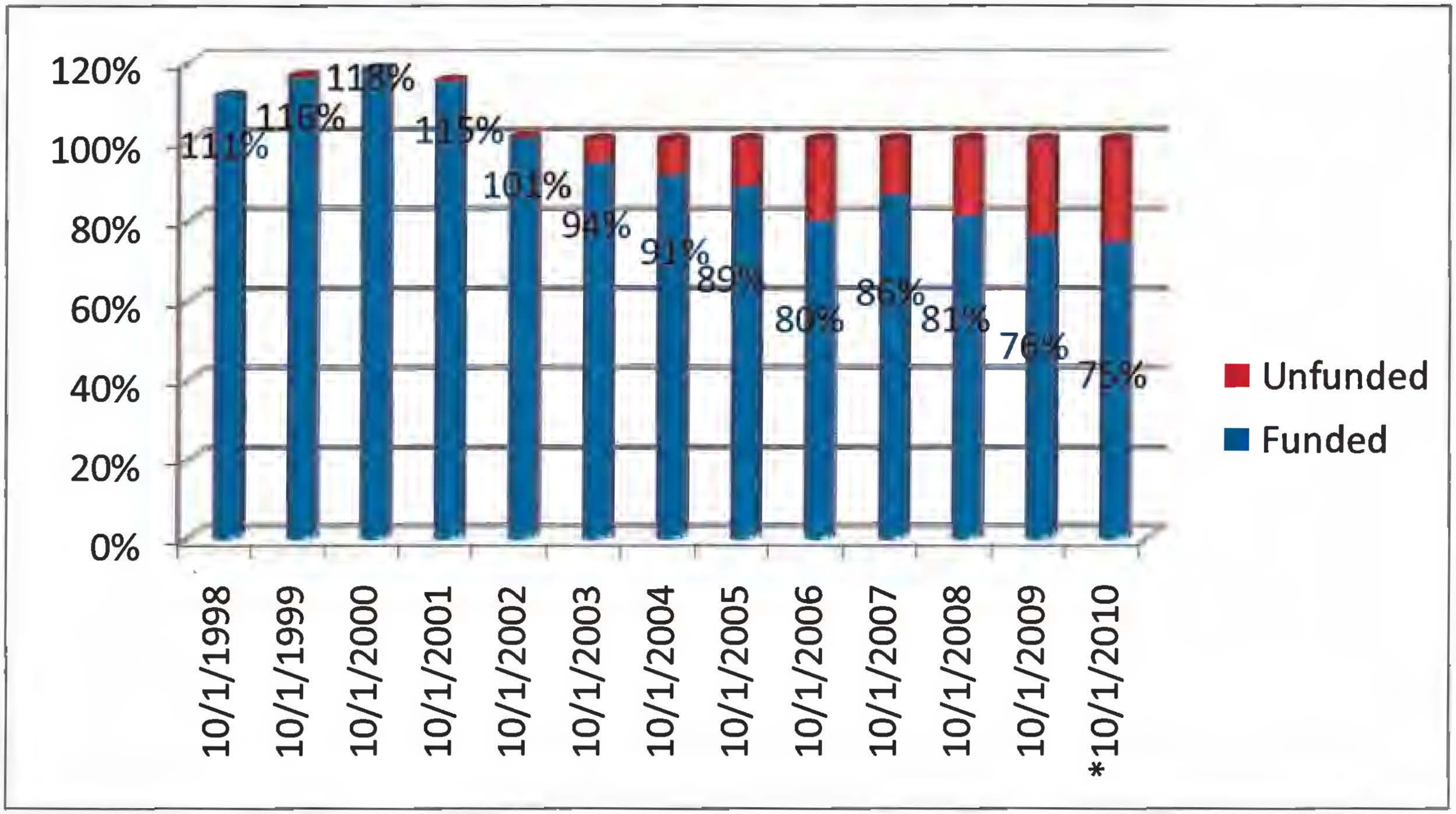
Schedule of Investment Expenses @ 09/30/2010

INVESTMENT EXPENSES	FEE DETAIL	AMOUNT
WHV	80-100 basis pts on MV	$275,645
Wellington Management	25 basis pts on MV	$170,961
ICC Capital Management	35 basis pts on MV	$166,767
Rhumbline Advisers	3 – 5 basis pts on MV	$ 69,809
Total Mngr. Expenses		$683,182
Consultant Fees-Milliman		$68,900
Custodial Fees- FTI		$39,339
Total Investment Expenses		$791,421
AVG Basis Pts. Paid by PLAN		**21 basis pts**

Key Actuarial Statistics
Recent History of Actual Contributions

Valuation Date	EOY which Val. applies	Actual ER Contrib.	% of Payroll
10-01-98	09-30-00	$666,897	2.66%
10-01-99	09-30-01	0	0
10-01-00	09-30-02	0	0
10-01-01	09-30-03	0	0
10-01-02	09-30-04	$2,476,702	8.16%
10-01-03	09-30-05	$5,082,595	14.74%
10-01-04	09-30-06	$5,500,329	15.89%
10-01-05	09-30-07	$13,053,231	23.11%
10-01-06	09-30-08	$13,911,545	24.24%
10-01-07	09-30-09	$12,863,823	21.57%
10-01-08	09-30-10	$17,137,394	25.20%
10-01-09	09-30-11	$14,474,678	20.65%
10-01-10	09-30-12	*$17,517,836*	25.54%
AVG % of PR			13.78%

Funded Ratio



Summary of Changes of Plan Net Assets

ADDITIONS	2010	2009
Contributions:		
Members	$6,414,743	$6,820,064
Members – Additional 2%	$ 431,769	
City	$17,137,394	$12,863,823
Total contributions	$23,983,906	$19,683,887
Investment Income:		
Net Appreciation in FMV	$35,791,125	($6,201,923)
Interest and Dividends	$ 3,930,461	$3,760,663
Other	$58,580	$78,299
Total investment income	$39,780,166	($3,019,825)
Less: Investment Expenses	($791,421)	($656,864)
Net Investment Income (loss)	$38,988,745	($3,019,825)
Total additions	**$62,972,651**	**$16,664,062**

Summary of Changes of Plan Net Assets (continued)

DEDUCTIONS	2010	2009
Pension benefits paid	$31,872,195	$29,346,790
Refund of Contributions	$579,709	$752,415
Transfer out, net	$408,164	$57,999
Administrative Expenses	$705,482	$675,590
Total deductions	$33,565,550	$30,832,794
Net increase (decrease)	$29,407,101	($14,168,732)
Net assets held in Trust for benefis		
Beginning of year	$349,416,064	$363,584,796
End of year	$378,823,165	$349,416,064

Key Statistics of Participant Data

ACTIVE MEMBERS	October 1, 2010
Number (Non-DROP)	1,117
Covered Annual Non-DROP Payroll	$68,586,818
Average Annual Non-DROP Pay	$61,403
Total Covered Annual Payroll	$72,159,221
Average Annual Pay	$61,886
Average Age	44.1
Average Past Service	8.8
Average Age at Hire	35.3
DROP PARTICIPANTS	**October 1, 2010**
Number	49
Annual Benefits	$2,505,713
Average Annual Benefit	$51,137
Average Age	58.6

Key Statistics of Participant Data

RETIREES & BENEFICIARIES	October 1, 2010
Number	981
Annual Benefits	$29,224,108
Average Annual Benefit	$29,790
Average Age	71.3
DISABILITY RETIREES	
Number	40
Annual Benefits	$947,329
Average Annual Benefit	$22,838
Average Age	66.7

Summary of MBERP Benefits

Benefit Information	Tier A	Tier B	Tier C
Members	121	1069	20
Normal Retirement Date	Age 50 with 5 years	Age 55 with 5 years	Age 55 with 30 yrs or 62 with 5 yrs
Early Retirement*	N/A	Min. age 50, rule of 75	Min. age 55, rule of 75
FAME	Highest 2 - 5 years	Highest 2 - 5 years	Highest 5 years
Benefit Multiplier	3%	3%	2.50%
Maximum % accrued	90%/80%	80%	80%
DROP	Min. age 50, 3yr Max	Min. age 55, 3yr Max	Min. age 55 w/ 30 ycs, 5 yr Max
COLA for retirees	2.50%	2.50%	1.50%
employee contribution %	12%	10%	10%

* subject to actuarial calculation