

Stanley,
Holcombe
& Associates, Inc. _____

September 24, 2010

Board of Trustees (c/o nagle@miamifipo.org)
City of Miami Fire Fighters' and
Police Officers' Retirement Trust
1895 SW 3 Avenue
Miami, FL 33129-1456

Actuarial Impact Statement
For 2010/2011 Fiscal Year
For Ordinance File No. 10-01091, As Applicable

Dear Board Members:

Section 112.63 (3) of the Florida Statutes specifies that an actuarial impact statement is to be issued before a change to retirement benefits is adopted, and that a copy of such statement is to be forwarded to the Division of Retirement.

Enclosed is our Actuarial Impact Statement, summarizing the results of cost calculations as of October 1, 2009 for the 2010/2011 Fiscal Year. This Actuarial Impact Statement reflects the provisions of City Ordinance File No. 10-01091, as applicable.

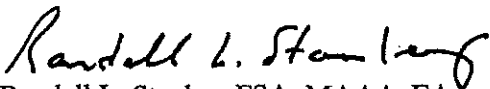
The City contribution requirement for 10/01/2010 would decrease by \$23,264,569 million annually, including a decrease of \$11,389,731 due to the impact on plan costs of compensation cuts.

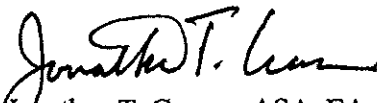
This Statement (A) does not reflect limitations on benefit reductions under Chapter 175.351(1)(b) or Chapter 185.35(1)(b), Florida Statutes or vesting of benefits for members eligible to retire on September 30, 2010. It does address the issue of applicability to members eligible to retire on September 30, 2010, as interpreted by the Board of Trustees and Counsel for the Board.


Board of Trustees (c/o nagle@miamifipo.org)
City of Miami Fire Fighters' and
Police Officers' Retirement Trust
September 24, 2010
Re: Actuarial Impact Statement
For 2010/2011 Fiscal Year
For Ordinance File No. 10-01091, As Applicable
Page Two

None of these changes are benefit improvements mandated by Chapter 99-1 of the Florida Statutes.
In my opinion these changes are in compliance with Section 14, Article X of the State Constitution
and with Section 112.64 of the Florida Statutes.

Respectfully submitted,


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Consulting Actuary and Principal


Jonathan T. Craven, ASA, EA
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**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

**Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable**

Prepared By:

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September 24, 2010

**S
H
& A**

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable

Table of Contents

| | <u>Page</u> |
|---|-------------|
| City-Imposed Changes on FIPO Trust..... | 1 |
| Average Final Compensation..... | 1 |
| Multiplier Change..... | 1 |
| Normal Form of Benefit..... | 1 |
| Normal Retirement Eligibility..... | 1 |
| Maximum Annual Benefit..... | 1 |
| Preservation of Accrued Benefits..... | 1 |
| Applicability | |
| Subsequent Event..... | 2 |
| Retirement Assumptions | 2 |
| Table 1 – Modified Retirement Assumptions..... | 2 |
| Wage Reductions | 3 |
| Tiered Reductions..... | 3 |
| Freezing Step and Longevity Pay | 3 |
| Supplemental Pay in Base..... | 3 |
| Elimination of Education Pay Supplements | 3 |
| 5% Supplements | 3 |
| Police | 3 |
| Fire..... | 3 |
| Paramedic Supplements | 3 |
| Salary Increase Assumptions..... | 3 |
| Table 2 – Modified Salary Increase Assumptions..... | 4 |

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance No. 10-01091, As Applicable

Table of Contents

| | <u>Page</u> |
|--|-------------|
| <u>Cost Calculation Results</u> | |
| Compensation Cuts..... | 5 |
| Table 3 – Estimated Amount of Compensation Cuts..... | 5 |
| Table 4 – Cost Impact of Compensation Cuts..... | 6 |
| Mass Retirements | 6 |
| Table 5 – Cost Impact of Mass Retirements | 6 |
| Assumption Changes..... | 7 |
| Table 6 – Mortality Tables..... | 7 |
| Table 7 – Cost Impact of Assumption Changes..... | 7 |
| Table 8 – Cost Impact of Plan Changes | 8 |
| Actuarial Impact | 8 |
| Table 9 – Combined Actuarial Impact | 9 |
| Appendix A – Comparison of Current and Proposed Features | 9 |
| Appendix B – Summary of Actuarial Basis – Prior Basis | 10 |
| Appendix C – Summary of Actuarial Basis – Revised Basis | 14 |
| Appendix D – Summary of Principal System Provisions | 18 |

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance No. 10-01091, As Applicable

City-Imposed Changes on FIPO Retirement Trust

Our understanding of the changes imposed by City management on the Retirement Trust, is based on Ordinance File No. 10-01091, adopted by the City on first reading on September 14, 2010. We also relied on a summary prepared by Michael J. Tierney, City actuary, on September 2, 2010.

- (A) Change Average Final Compensation from one year to highest two consecutive years as of 10/1/2010 – 11, to highest three consecutive years as of 10/1/2011-12; to highest four consecutive years as of 10/1/2012 – 13, and to highest five consecutive years as of 10/1/2013 and later; minimum Average Final Compensation is the 09/30/2010 one-year average.
- (B) Reduce multiplier from 3.5% to 3% for creditable service in excess of 15 years; past accrued percentage is preserved.
- (C) Change normal form of benefit from joint & 40% contingent annuity to 10 years certain and life for married members and change 105% life annuity to 10 years certain and life at 100% for unmarried members;
- (D) Change normal retirement eligibility from Rule of 64 (police) and Rule of 68 (fire) to Rule of 70 with a minimum age of 50 and 10 years of service;
- (E) Impose a maximum annual benefit (normal form) of \$100,000, or the current accrued benefit, if greater.

Preservation of Accrued Benefits

There are at least two rules which must be followed when benefits are reduced by amendment:

- (1) As a tax-qualified retirement system, accrued benefits may not be reduced by an amendment.
- (2) For any members eligible for normal service retirement, prospective benefits may not be reduced.

This report does not address whether benefits may be reduced below the multiplier formula in place as of March 12, 1999, the date the State Legislature enacted Chapter 99-1.

Applicability

This Statement addresses the issue of applicability to members eligible to retire on September 30, 2010, as interpreted by the Board of Trustees and Counsel to the Board.

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable

Subsequent Event

As of September 14, of the 254 members who were eligible for service retirement in the 2009-2010 year, 245 have elected to retire before September 30. This is the group whose prospective benefits are protected under rule (2) above. Note that 216 of these retired after August 1, 2010, and therefore were considered to have retired due to the City's imposed changes to the Retirement system.

To reflect the accelerated retirements, 100% of this group of 216 members has been included in the cost calculations as retired or DROPs. To the extent that any withdraw retirement applications, experience losses could emerge in the current year.

Retirement Assumptions

The current retirement assumptions are as follows (after retirement eligibility based on service):

| <u>Years of Service</u> | <u>Police %</u> | <u>Fire %</u> |
|-------------------------|-----------------|---------------|
| <20 | 0 | 0 |
| 20-24 | 20 | 5 |
| 25-29 | 25 | 25 |
| 30-31 | 50 | 25 |
| 32 | 100 | 100 |

The development of these assumptions reflected the patterns of actual retirements and the premise that the 3.5% multiplier helped to encourage later retirements. In anticipation of earlier retirements with the 3% multiplier, the retirement assumptions for police have been changed as follows:

Table 1 – Modified Retirement Assumptions

| <u>Years of Service</u> | <u>Previous Assumptions</u> | | <u>Revised Assumptions</u> | |
|-------------------------|-----------------------------|---------------|----------------------------|---------------|
| | <u>Police %</u> | <u>Fire %</u> | <u>Police %</u> | <u>Fire %</u> |
| <20 | 0 | 0 | 0 | 0 |
| 20-24 | 20 | 5 | 40 | 5 |
| 25-29 | 25 | 25 | 50 | 25 |
| 30-31 | 50 | 25 | 100 | 25 |
| 32+ | 100 | 100 | | 100 |

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable

Wage Reductions

The ordinance provides for reductions in pay, as follows:

- (1) Tiered reductions, ranging from 5% at \$40,000 to 12% at \$120,000 or more;
- (2) Freezing step and longevity pay;
- (3) No longer allowing supplemental pay to roll into base;
- (4) Elimination of education pay supplements (\$1,200 to \$4,200);
- (5) For Police: Replacement of supplements at 5% or higher with \$1,500 annually;
crime prevention pay increased from \$1,999 to \$2,700;

For Fire: Replacement of supplements for fire prevention, revenue incentive pay and most others at 5% or higher with \$1,500 annually;

- (6) For Fire: Replacement of 14% paramedic supplement with \$4,825 annually.

Salary Increase Assumptions

The current salary increase assumptions are

merit: 5% to 1% annually, based on service;
inflation: 3.5%
promotions and other increases: 1.5%
at retirement: 7%

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable

The adjustments to the current assumptions and methods to reflect the ordinance changes summarized under "Wage Reductions" are as follows:

Table 2 – Modified Salary Increase Assumption

- (1) Tiered reductions: 10/1/09 valuation data is adjusted by the tiered reductions table;
- (3) Supplemental pay: elimination of 7% assumption, at the time of retirement/DROP entry;
- (4) Education pay supplements: not covered by System
- (5) Other Supplements: for police: Crime Prevention Pay supplement from \$1,999 to \$2,700, applied to 100%; other supplements replaced 5% of pay with \$1,500, applied to 50%;
for fire: Fire prevention supplement reduced from \$2,000 to \$1,500, applied to 100%; other supplements replaced with \$1,500, applied to 50%; revenue incentive pay of 3.7% replaced with \$1,500, applied to 50%;
- (6) Paramedic supplements: 14% reduction to results of item (1), increment of \$4,825, applied to 85%.

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable

Cost Calculation Results

Compensation Cuts

Our understanding of the compensation cuts and our estimates of the amounts are as follows:

Table 3 – Estimated Amounts of Compensation Changes

| | <u>Police</u> | <u>Fire</u> |
|----------------------|------------------|-------------------|
| | -\$- | -\$- |
| Tiered Reductions | 4,717,636 | 5,732,289 |
| Education Pay | 657,300 | 404,600 |
| Paramedic Supplement | N/A | 4,619,535 |
| Other Supplements | | |
| - Police | 224,320 | N/A |
| - Fire | <u>N/A</u> | <u>1,977,189</u> |
| Totals | <u>5,599,256</u> | <u>12,733,613</u> |

The amounts shown in Table 3 were calculated in order to determine the cost impact on FIPO. Since they are payroll items, they are only an indirect part of the Actuarial Impact for this Statement.

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable

The cost calculation results after the estimated compensation cuts compare to those in the October 1, 2009 actuarial valuation report as follows:

| <u>Table 4 – Cost Impact of Compensation Cuts</u> | | |
|---|-----------------------|------------------------------------|
| | <u>10/1/09 Report</u> | <u>After Compensation Cuts</u> |
| | -\$- | -\$- |
| A. Present Value of Future Benefits | 1,931,679,342 | 1,811,933,322 |
| B. PV of Member Contributions | 101,158,464 | 87,643,933 |
| C. Actuarial Asset Value | <u>1,164,973,724</u> | <u>1,164,973,724</u> |
| D. PV of Future Normal Costs | 665,547,154 | 559,315,654 |
| E. Normal Cost – Payable 10/1/10 | 65,551,615 | 54,161,884 |
| F. Annual Cost Impact | -- | (11,389,731) |

As will be noted from Table 4, the impact of the reduced payroll on the annual FIPO cost is a reduction of \$11,389,731. (The estimated reduction to covered payroll is \$17,270,969.)

Mass Retirements

The estimated costs and impact of the mass retirements and the compensation cuts are as follows:

| <u>Table 5 – Cost Impact of Mass Retirements</u> | | |
|--|------------------------------------|-----------------------------------|
| | <u>After Compensation Cuts</u> | <u>After Mass Retirements</u> |
| | -\$- | -\$- |
| A. Present Value of Future Benefits | 1,811,933,322 | 1,857,264,431 |
| B. PV of Member Contributions | 87,643,933 | 80,798,557 |
| C. Actuarial Asset Value | <u>1,164,973,724</u> | <u>1,164,973,724</u> |
| D. PV of Future Normal Costs | 559,315,654 | 611,492,150 |
| E. Normal Cost – Payable 10/1/10 | 54,161,884 | 52,533,866 |
| F. Annual Cost Impact | | (1,628,018) |

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable

Actuarial Assumptions

In order to make contribution requirements slightly more realistic the inflation component of the FIPO economic assumptions has been reduced from 3.50% to 3.25%. This change reduces the interest discount/investment return assumption from 7.75% to 7.5%. It also reduces the inflation component of the salary increase assumption by .25%.

In addition, the mortality assumptions have been changed, as follows:

| <u>Table 6 – Current and Updated Mortality Tables</u> | | |
|---|---|--|
| Healthy | 1994 Group Annuity Table | RP 2000 Mortality Table Projected by Scale AA to 2020 |
| Disabled | Pension Benefit Guaranty Corporation – non OASDI | RP 2000 Disabled Mortality Table Projected by Scale AA 2020 |

The combined impacts on the cost components and 2010/2011 City contribution requirements are as follows:

| <u>Table 7 – Cost Impact of Assumption Changes</u> | | |
|--|-----------------------------------|-------------------------------------|
| | <u>After Mass Retirements</u> | <u>After Assumption Changes</u> |
| A. Present Value of Future Benefits | 1,857,264,431 | 1,913,127,371 |
| B. PV of Member Contributions | 80,798,557 | 77,396,456 |
| C. Actuarial Asset Value | <u>1,164,973,724</u> | <u>1,164,973,724</u> |
| D. PV of Future Normal Costs | 611,492,150 | 670,757,191 |
| E. Normal Cost – Payable 10/1/10 | 52,533,866 | 62,222,390 |
| F. Annual Cost Impact | | 9,688,524 |

**CITY OF MIAMI FIRE FIGHTERS'
AND
POLICE OFFICERS' RETIREMENT TRUST**

Actuarial Impact Statement
For Ordinance File No. 10-01091, As Applicable

Table 8 – Cost Impact of Plan Changes

| | <u>After Assumption Changes</u> | <u>After Plan Changes</u> |
|-------------------------------------|---------------------------------|---------------------------|
| | -\$- | -\$- |
| A. Present Value of Future Benefits | 1,913,127,371 | 1,737,298,951 |
| B. PV of Member Contributions | 77,396,456 | 84,233,807 |
| C. Actuarial Asset Value | <u>1,164,973,724</u> | <u>1,164,973,724</u> |
| D. PV of Future Normal Costs | 670,757,191 | 488,091,420 |
| E. Normal Cost – Payable 10/1/10 | 62,222,390 | 42,287,046 |
| F. Annual Cost Impact | | (19,935,344) |

Actuarial Impact

The elements of the actuarial impact and the combined impact are as follows:

Table 9 – Combined Actuarial Impact

| | 10/1/09 Report <u>After Compensation Cuts ⁽¹⁾</u> | <u>After Plan Changes ⁽²⁾</u> |
|-------------------------------------|---|--|
| | -\$- | -\$- |
| A. Present Value of Future Benefits | 1,811,933,322 | 1,737,298,951 |
| B. PV of Member Contributions | 87,643,944 | 84,233,807 |
| C. Actuarial Asset Value | <u>1,164,973,724</u> | <u>1,164,973,724</u> |
| D. PV of Future Normal Costs | 559,315,654 | 488,091,420 |
| E. Normal Cost – Payable 10/1/10 | 54,161,884 | 42,287,046 |
| F. Annual Cost Impact | (11,389,731) | (11,874,838) |

Note (1): Table 4 – second column

Note (2): Table 8 – second column

As will be noted in Table 9, the combined actuarial impact is (\$23,264,569), consisting of the impact of (\$11,389,731) on FIPO costs of the compensation cuts and (\$11,874,838) due to mass retirements and Plan and assumption changes.

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST
For Ordinance File No. 10-01091, As Applicable**

**Actuarial Impact Statement
Comparison of Current and Proposed Features**

| Benefit | Current FIPO | City Proposal | Limitations |
|----------------------------|---|--|--|
| Average Final Compensation | Highest year of employment | <u>Retirement Dates</u> 2010-11: 2 years 2011-12: 3 years 2012-13: 4 years 2013-14& later: 5 years | Note (1): Minimum of accrued benefit at 09/30/10 Note (2): No change if eligible for normal retirement on 9/30/10 |
| Normal Retirement Date | Age 50 + 10 years' service or "Rule of 64" (Police) or "Rule of 68" (Fire) (not 66) | "Rule of 70" with minimum age 50 and 10 years of service | Note (1): Note (2): |
| Retirement Benefit Formula | 3% x AFC x Service for first 15 years; 3.5% x AFC x service thereafter | 3% per year of future service after 9/30/10, plus accrued percentage at 9/30/10 | Note (1): Note (2): |
| Maximum Benefit | 100% of avg. final comp. | \$100,000 per year limit added; minimum of accrued benefit at 9/30/10 | Note (1): Note (2): |
| Normal Form of Benefit | Married: 40% joint & survivor Unmarried: 105% life annuity (not 10 years certain & life) | All: 10 years certain and life thereafter | Note (1): Note (2): |

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Actuarial Basis – Prior Basis

Valuation Date: October 1, 2009 for Fiscal Year beginning October 1, 2010.

Valuation Method: Aggregate Cost Method.

Asset Valuation Method: 20% Write-Up Method: Expected value is based on the Interest Discount/Investment Return rate applied to the actuarial asset value as of previous valuation date and cash flow during the year. 20% of the difference between the Expected Value and the Market Value (net of pending transfers to the COLA Fund) is added to the Expected Value.

The result cannot be greater than 120% of market value or less than 80% of market value (net of pending COLA transfers).

Actuarial Assumptions:

Interest Discount/
Investment Return: 7.75%, compounded annually.

Inflation: 3.5%, compounded annually.

Mortality: 1994 Group Annuity Mortality Table, producing following specimen rates:

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| 20 | .0507% | .0284% |
| 30 | .0801% | .0351% |
| 40 | .1072% | .0709% |
| 50 | .2579% | .1428% |
| 60 | .7976% | .4439% |
| 70 | 2.3730% | 1.3730% |

Disabled Mortality: In accordance with Pension Benefit Guaranty Corporation non-OASDI basis, producing following specimen rates:

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| 30 | 0.13% | 0.11% |
| 40 | 0.31% | 0.19% |
| 50 | 0.83% | 0.51% |
| 60 | 2.05% | 1.30% |
| 70 | 4.85% | 3.21% |

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Actuarial Basis -- Prior Basis
(Continued)

| <u>Age</u> | <u>Disability</u> | <u><5</u> | <u>Turnover</u> | <u>5+</u> |
|------------|-------------------|--------------|-----------------|-----------|
| 31 | .00200 | .0240 | | .0192 |
| 32 | .00220 | .0240 | | .0192 |
| 33 | .00245 | .0240 | | .0192 |
| 34 | .00265 | .0240 | | .0192 |
| 35 | .00285 | .0240 | | .0192 |
| 36 | .00305 | .0228 | | .0182 |
| 37 | .00325 | .0216 | | .0173 |
| 38 | .00345 | .0204 | | .0163 |
| 39 | .00370 | .0192 | | .0154 |
| 40 | .00390 | .0180 | | .0144 |
| 41 | .00470 | .0168 | | .0134 |
| 42 | .00555 | .0156 | | .0125 |
| 43 | .00635 | .0144 | | .0115 |
| 44 | .00720 | .0132 | | .0106 |
| 45 | .00800 | .0120 | | .0096 |
| 46 | .00880 | .0096 | | .0077 |
| 47 | .00965 | .0072 | | .0057 |
| 48 | .01045 | .0048 | | .0038 |
| 49 | .01130 | .0024 | | .0019 |
| 50 | .01210 | .0000 | | .0000 |
| 51 | .01295 | .0000 | | .0000 |
| 52 | .01375 | .0000 | | .0000 |
| 53 | .01455 | .0000 | | .0000 |
| 54 | .01540 | .0000 | | .0000 |
| 55 | .01620 | .0000 | | .0000 |
| 56 | .01785 | .0000 | | .0000 |
| 57 | .01870 | .0000 | | .0000 |
| 58 | .01950 | .0000 | | .0000 |
| 59 | .02030 | .0000 | | .0000 |
| 60 | .00000 | .0000 | | .0000 |

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Actuarial Basis – Prior Basis
(Continued)

Retirement: Fire Fighters who have attained 64 points by September 30, 2009 and all Police Officers are subject to the Rule of 64; the rest of the Fire Fighters are subject to the Rule of 68. If eligible for Retirement, the following decrements apply, based on service:

| <u>Years of Service</u> | <u>Police %</u> | <u>Fire %</u> |
|-------------------------|-----------------|---------------|
| <20 | 0 | 0 |
| 20-24 | 20 | 5 |
| 25-29 | 25 | 25 |
| 30-31 | 50 | 25 |
| 32 | 100 | 100 |

There is no explicit assumption on the percentage of retirements expected to enter the DROP. No distinction is necessary, since funding is calculated to expected retirement or expected DROP entry.

Salary Merit Scale

| <u>Service</u> | <u>Police</u> | <u>Fire</u> |
|----------------|---------------|-------------|
| 0 | .0500 | .0500 |
| 1 | .0500 | .0500 |
| 2 | .0500 | .0500 |
| 3 | .0500 | .0500 |
| 4 | .0500 | .0500 |
| 5 | .0500 | .0500 |
| 6 | .0500 | .0500 |
| 7 | .0250 | .0500 |
| 8 | .0500 | .0500 |
| 9 | .0500 | .0500 |
| 10 | .0100 | .0000 |
| 11 | .0100 | .0000 |
| 12 | .0100 | .0000 |
| 13 | .0100 | .0000 |
| 14 | .0100 | .0000 |
| 15 | .0125 | .0250 |
| 16 | .0125 | .0250 |
| 17 | .0100 | .0100 |
| 18 | .0100 | .0100 |
| 19 | .0100 | .0100 |
| 20 | .0100 | .0100 |
| 21 | .0100 | .0100 |
| 22 + | .0000 | .0000 |

Salary Merit Scale is combined with 3.5% inflation and 1.5% for promotions and other increases. There is also a 7.0% increase at retirement.

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Actuarial Basis – Prior Basis
(Continued)

| | |
|--|--|
| Type of Disability: | 100% of the disabilities are expected to be accidental disabilities. |
| Recovery: | No probabilities of recovery are used. |
| Type of Death: | 100% of the assumed deaths are expected to be ordinary deaths. |
| Remarriage: | No probabilities of remarriage are used. |
| Spouse's Ages: | Females are assumed to be 3 years younger than males. |
| Marital Status: | All employees are assumed to be married. |
| Investment Expenses: | None; the investment return assumption of 7.75% is net of investment expenses. |
| Withdrawal of Employee Contributions: | It is assumed that employees do not withdraw their contribution balances upon employment termination or retirement. |
| Compensated Absence Balance Transfers: | No liabilities or costs are included for the provision to transfer compensated absence balances into FIPO to purchase additional creditable service, based on our understanding that assets will be transferred immediately prior to retirement to cover 100% of the liability for the additional service. |
| Adjustments from Valuation Date: | One year's interest is added to the calculated deposit to reflect ordinance provision. |
| Sources of Data: | Asset data is from unaudited financial statements and includes an appraised value for the real estate to be used for Market Value. Membership data was furnished by Administrator. Member compensation used is final bi-weekly pay in the year, annualized. |

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Actuarial Basis – Revised Basis

Valuation Date: October 1, 2009 for Fiscal Year beginning October 1, 2010.

Valuation Method: Aggregate Cost Method.

Asset Valuation Method: 20% Write-Up Method: Expected value is based on the Interest Discount/Investment Return rate applied to the actuarial asset value as of previous valuation date and cash flow during the year. 20% of the difference between the Expected Value and the Market Value (net of pending transfers to the COLA Fund) is added to the Expected Value.

The result cannot be greater than 120% of market value or less than 80% of market value (net of pending COLA transfers).

Actuarial Assumptions:

Interest Discount/
Investment Return: 7.50%, compounded annually.

Inflation: 3.25%, compounded annually.

Mortality: RP 2000 Mortality Table, Employees and Annuitants Combined, projected by scale AA to 2020, producing following specimen rates:

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| 20 | .0235% | .0138% |
| 30 | .0402% | .0216% |
| 40 | .0919% | .0522% |
| 50 | .1487% | .1189% |
| 60 | .4887% | .4573% |
| 70 | 1.6413% | 1.5145% |
| 80 | 5.7647% | 3.9866% |

Disabled Mortality: RP 2000 Disabled Mortality Table projected by scale AA to 2020, producing following specimen rates:

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| 20 | 1.5696% | .5287% |
| 30 | 2.0418% | .6093% |
| 40 | 1.9221% | .5507% |
| 50 | 2.0149% | .8186% |
| 60 | 3.0450% | 1.9756% |
| 70 | 4.6257% | 3.4045% |
| 80 | 8.9456% | 6.2834% |

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Actuarial Basis – Revised Basis
(Continued)

| <u>Age</u> | <u>Disability</u> | <u>Turnover</u> | |
|------------|-------------------|-----------------|-----------|
| | | <u><5</u> | <u>5+</u> |
| 31 | .00200 | .0240 | .0192 |
| 32 | .00220 | .0240 | .0192 |
| 33 | .00245 | .0240 | .0192 |
| 34 | .00265 | .0240 | .0192 |
| 35 | .00285 | .0240 | .0192 |
| 36 | .00305 | .0228 | .0182 |
| 37 | .00325 | .0216 | .0173 |
| 38 | .00345 | .0204 | .0163 |
| 39 | .00370 | .0192 | .0154 |
| 40 | .00390 | .0180 | .0144 |
| 41 | .00470 | .0168 | .0134 |
| 42 | .00555 | .0156 | .0125 |
| 43 | .00635 | .0144 | .0115 |
| 44 | .00720 | .0132 | .0106 |
| 45 | .00800 | .0120 | .0096 |
| 46 | .00880 | .0096 | .0077 |
| 47 | .00965 | .0072 | .0057 |
| 48 | .01045 | .0048 | .0038 |
| 49 | .01130 | .0024 | .0019 |
| 50 | .01210 | .0000 | .0000 |
| 51 | .01295 | .0000 | .0000 |
| 52 | .01375 | .0000 | .0000 |
| 53 | .01455 | .0000 | .0000 |
| 54 | .01540 | .0000 | .0000 |
| 55 | .01620 | .0000 | .0000 |
| 56 | .01785 | .0000 | .0000 |
| 57 | .01870 | .0000 | .0000 |
| 58 | .01950 | .0000 | .0000 |
| 59 | .02030 | .0000 | .0000 |
| 60 | .00000 | .0000 | .0000 |

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Actuarial Basis – Revised Basis
(Continued)

Retirement: Fire Fighters who have attained 64 points by September 30, 2009 and all Police Officers are subject to the Rule of 64; the rest of the Fire Fighters are subject to the Rule of 68. If eligible for Retirement, the following decrements apply, based on service:

| <u>Years of Service</u> | <u>Police %</u> | <u>Fire %</u> |
|-------------------------|-----------------|---------------|
| <20 | 0 | 0 |
| 20-24 | 40 | 5 |
| 25-29 | 50 | 25 |
| 30-31 | 100 | 25 |
| 32 | | 100 |

There is no explicit assumption on the percentage of retirements expected to enter the DROP. No distinction is necessary, since funding is calculated to expected retirement or expected DROP entry.

Salary Merit Scale

| <u>Service</u> | <u>Police</u> | <u>Fire</u> |
|----------------|---------------|-------------|
| 0 | .0500 | .0500 |
| 1 | .0500 | .0500 |
| 2 | .0500 | .0500 |
| 3 | .0500 | .0500 |
| 4 | .0500 | .0500 |
| 5 | .0500 | .0500 |
| 6 | .0500 | .0500 |
| 7 | .0250 | .0500 |
| 8 | .0500 | .0500 |
| 9 | .0500 | .0500 |
| 10 | .0100 | .0000 |
| 11 | .0100 | .0000 |
| 12 | .0100 | .0000 |
| 13 | .0100 | .0000 |
| 14 | .0100 | .0000 |
| 15 | .0125 | .0250 |
| 16 | .0125 | .0250 |
| 17 | .0100 | .0100 |
| 18 | .0100 | .0100 |
| 19 | .0100 | .0100 |
| 20 | .0100 | .0100 |
| 21 | .0100 | .0100 |
| 22 + | .0000 | .0000 |

Salary Merit Scale is combined with 3.25% inflation and 1.5% for promotions and other increases. There is no additional increase at retirement.

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Actuarial Basis – Revised Basis
(Continued)

| | |
|--|--|
| Type of Disability: | 100% of the disabilities are expected to be accidental disabilities. |
| Recovery: | No probabilities of recovery are used. |
| Type of Death: | 100% of the assumed deaths are expected to be ordinary deaths. |
| Remarriage: | No probabilities of remarriage are used. |
| Spouse's Ages: | Females are assumed to be 3 years younger than males. |
| Marital Status: | All employees are assumed to be married. |
| Investment Expenses: | None; the investment return assumption of 7.75% is net of investment expenses. |
| Administration Expenses: | Equal to amount from previous fiscal year (\$2.2 million) |
| Withdrawal of Employee Contributions: | It is assumed that employees do not withdraw their contribution balances upon employment termination or retirement. |
| Compensated Absence Balance Transfers: | No liabilities or costs are included for the provision to transfer compensated absence balances into FIPO to purchase additional creditable service, based on our understanding that assets will be transferred immediately prior to retirement to cover 100% of the liability for the additional service. |
| Adjustments from Valuation Date: | One year's interest is added to the calculated deposit to reflect ordinance provision. |
| Sources of Data: | Asset data is from unaudited financial statements and includes an appraised value for the real estate to be used for Market Value. Membership data was furnished by Administrator. Member compensation used is final bi-weekly pay in the year, annualized. |
| Changes Since Prior Valuation: | Inflation assumption reduced from 3.5% to 3.25%; Salary increase assumption reduced by .25%; Investment return/interest discount reduced from 7.75% to 7.5%; Retirement decrements increased for police; Mortality tables changed to RP 2000 projected to 2020; Disabled mortality table changed to RP 2000 disabled mortality table projected to 2020; 7% compensation increase at retirement eliminated; Administration fee assumption added. |

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Principal System Provisions

(Based on Ordinance No. 10002, as Amended
through Ordinance No. 13091)

Effective Date: January 1, 1940, as restated effective May 23, 1985, and amended through September 30, 2009.

Fiscal Year: October 1 - September 30.

Membership: Police officers and fire fighters.

Covered Compensation: An employee's base salary, including pick-up contributions, for all straight time hours worked, plus assignment pay and payments received for vacation and sick leave taken, jury duty, and death-in-family leave taken. Earnable compensation shall not include overtime pay; payments for accrued sick leave, accrued vacation leave, or accrued compensatory leave; holiday pay; premium pay for holidays worked; the value of any employment benefits or non-monetary entitlements; or any other form of remuneration.

Contributions: Members: 7% of Compensation for Police Officers, 9% for Fire Fighters.
City: Balance, as actuarially determined.

Creditable Service: Service credited under Retirement System; military service (maximum of four years) during wartime for which Member makes contributions; maternity leave (maximum of 180 days for each leave) for which Member makes contributions; up to 5 years, without member contributions, if member was an employee before period of military service.

Average Final Compensation: Average Compensation during the highest year of Creditable Service.

Normal Service Age: Age 50

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Principal System Provisions
(Continued)

- Service Retirement:** 3.0% of Average Final Compensation for each of the first fifteen years of Creditable Service plus 3.5% of Average Final Compensation for each year of Creditable Service after the fifteenth year; maximum of 100% for those with less than 100% under prior rules on 9/30/98.
- Early Service Retirement:** After 20 years of Creditable Service. Benefits are based on Average Final Compensation and Creditable Service at retirement date. Actuarial equivalence for early commencement.
- Rule of 64 Retirement:** Service retirement on the basis of combined age and Creditable Service equaling 64 or more.
- Rule of 68 Retirement:** Service retirement on the basis of combined age and Creditable Service equaling 68 or more. Rule of 68 applies to all Fire Fighters who had not attained 64 points by September 30, 2009.
- Disability:** Ordinary Disability: After 10 or more years of Creditable Service, and not eligible for service retirement. Not incurred as accident in performance of duties. 90% of benefit rate times Average Final Compensation times Creditable Service, with a minimum benefit of 30% of Average Final Compensation; 10 years' certain and life normal form.
- Accidental Disability: Incurred as accident in performance of duties. $66 \frac{2}{3}\%$ of Average Final Compensation, or $66 \frac{2}{3}\%$ of Final Compensation, whichever is greater. 40% joint & survivor normal form, with a minimum of 10 years' certain and life.
- Deferred Retirement Option Plan:** Members who are eligible for Service Retirement or Rule of 64 Retirement after September 1998 may elect self-directed Deferred Retirement Option Plan, for a maximum of 4 years. An actuarially equivalent Back DROP option (maximum of 4 years) may be elected prior to DROP entry; combined years of DROP may not exceed 4.

CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST

Summary of Principal System Provisions
(Continued)

Death:

Ordinary Death: (a) Between 3 and 10 years of Creditable Service, and death not accidentally incurred in performance of duties: Lump sum benefit equal to 50% of Compensation received in year preceding death. (b) After 10 years of Creditable Service and before eligibility for Early Service or Rule of 64 Retirement, accrued benefit, deferred to earlier of member's 50th birthday or Rule of 64 eligibility, payable for 10 years. Beneficiary does not have to survive deferred period or 10 years' certain period. (c) If eligible for Service, Early Service, or Rule of 64 retirement, considered to have retired on the date of death. Surviving spouse would receive 40% of the member's monthly retirement allowance.

Accidental Death: Incurred in performance of duties. (a) Pension of 50% of Average Final compensation to spouse until death or remarriage. If there is no spouse, or if spouse dies or remarries before youngest child is 18, payable until attainment of age 18. If no spouse or no children under 18, benefit is payable to dependent parents. (b) After 10 years of Creditable Service and before eligibility for Early Service or Rule of 64 Retirement, accrued benefit, deferred to earlier of member's 50th birthday or Rule of 64 eligibility, payable for 10 years. Beneficiary does not have to survive deferral period or 10 years' certain period.

Employment Termination:

After 10 years of Creditable Service, based on Creditable Service and Average Final Compensation at termination date. If Member contributions are withdrawn, benefit is forfeited. Benefits are deferred to Normal Retirement Age.

Optional Allowances:

Normal form is joint and 40% contingent survivor, with a minimum of 10 years' certain and life. Option 1 is cash refund annuity, based on present value at retirement. Option 2 is joint and 100% survivor. Option 3 is joint and 50% contingent survivor. Option 4 is open option. Option 5 is determined by Board due to incapacity of Member. Option 6 is withdrawal of member contributions with credited interest; monthly benefit is 1/2 of normal level.

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

Summary of Principal System Provisions
(Continued)

Transfer of Compensated
Leave Balances:

Accumulated leave balances may be transferred into system immediately prior to retirement to purchase additional Creditable Service, on an actuarially equivalent basis.

Transfer of 457 Balances:

457 balances of Firefighters may be transferred into System at retirement to purchase additional Service for multiplier purposes.