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GASB STATEMENT NO. 67 REPORT

FOR THE

CITY OF MIAMI GENERAL EMPLOYEES' AND SANITATION EMPLOYEES' RETIREMENT TRUST

CITY OF MIAMI GENERAL EMPLOYEES' AND SANITATION EMPLOYEES' RETIREMENT TRUST STAFF PENSION PLAN

CITY OF MIAMI GENERAL EMPLOYEES' AND SANITATION EMPLOYEES' EXCESS BENEFIT PLAN

PREPARED AS OF OCTOBER 1, 2015

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March 2, 2016

Board of Trustees
City of Miami General Employees' and
Sanitation Employees' Retirement Trust
2901 Bridgeport Avenue
Coconut Grove, Florida 33133

Dear Members of the Board:

Presented in this report is information to assist the City of Miami General Employees' and Sanitation Employees' Retirement Trust in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 67. The information is presented for the period ending October 1, 2015.

The annual actuarial valuations used as a basis for much of the information presented in this report were performed as of October 1, 2014. The valuation was based upon data, furnished by the Retirement Trust office, concerning active, inactive and retired members along with pertinent financial information.

To the best of our knowledge, this report is complete and accurate. The necessary calculations were performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems.

The calculations were prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, and, in our opinion, meet the requirements of GASB 67.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the plans and on actuarial assumptions that are, individually and in the aggregate, internally consistent and reasonably based on the actual experience of the plans. In addition, the calculations were completed in compliance with the laws governing the plans. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

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Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Respectfully submitted,

Jose I Fernandez

Micki R. Taylor

Jose I. Fernandez, ASA, EA, FCA, MAAA
Principal and Consulting Actuary
Enrolled Actuary No. 14-4461

Micki R. Taylor, ASA, EA, FCA, MAAA
Senior Actuary
Enrolled Actuary No. 14-5975

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CITY OF MIAMI GENERAL EMPLOYEES' AND SANITATION EMPLOYEES'
RETIREMENT TRUST
PREPARED AS OF OCTOBER 1, 2015

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), "*Financial Reporting For Pension Plans,*" in June 2012. GASB 67's effective date is for plan years beginning after June 15, 2013. This report, prepared as of October 1, 2015 (the Measurement Date), presents information to assist the City of Miami General Employees' and Sanitation Employees' Retirement Trust (GESE) in meeting the requirements of GASB 67. Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuations of the City of Miami General Employees' and Sanitation Employees' Retirement Trust as of October 1, 2014. The results of the valuations of the plans listed below are provided in our reports dated January 22, 2015.

- General Employees' and Sanitation Employees' Retirement Trust
- Staff Pension Plan
- Excess Benefit Plan

GASB 67 replaces GASB 25 and represents a significant departure from the requirements of that older statement. GASB 25 was issued as a funding friendly statement that required pension plans to report items consistent with the results of the plans' actuarial valuations, as long as those valuations met certain parameters. GASB 67 basically divorces accounting and funding, creating disclosure and reporting requirements that may or may not be consistent with the basis used for funding the plans.

A major change in GASB 67 is the requirement to determine the Total Pension Liability (TPL) utilizing the Entry Age Normal actuarial funding method. The Net Pension Liability (NPL) is then set equal to the TPL minus the plans' Fiduciary Net Position (FNP) (basically the market values of assets). The benefit provisions recognized in the calculation of the TPL are summarized in Schedule B.

Among the assumptions needed for the liability calculation is a Single Equivalent Interest Rate (SEIR). To determine the SEIR, the FNP must be projected into the future for as long as there are anticipated benefits payable under the plan's provision applicable to the membership and beneficiaries of the plans on the Measurement Date. If the FNP is projected to not be depleted at any point in the future, the long term expected rate of return on plan investments expected to be used to finance the benefit payments may be used as the SEIR.

If, however, the FNP is projected to be depleted, the SEIR is determined as the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by discounting all projected benefit payments through the date of depletion by the long term expected rate of return, and the present value determined by discounting those benefits after the date of depletion by a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate. The rate used, if necessary, for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System.

The sections that follow provide the results of all the necessary calculations, presented in the order laid out in GASB 67 for note disclosure and Required Supplementary Information (RSI).

SECTION II – FINANCIAL STATEMENT NOTES

The material presented herein will follow the order presented in GASB 67. Paragraph numbers are provided for ease of reference.

Paragraphs 30(a) (1)-(3): The information required is to be supplied by the Retirement Trust.

Paragraph 30(a) (4): The data required regarding the membership of the GESE, Staff and Excess plan members were furnished by the Retirement Trust office. The following table summarizes the membership of the plans as of October 1, 2014, the valuation date.

Membership

Membership as of October 1, 2014	GESE	STAFF Plan	Excess Benefit Plan
Active Members	1,376	3	0
Inactive Members (due contribs. refund)	142	1	0
Deferred Vested Members	28	0	0
Retired Members:			
Non-disabled	1,595	7	44
Disabled	55	0	0
Beneficiaries	381	0	0
Subtotal	2,031	7	44
Total Members	3,577	11	44

Paragraphs 30(a) (5)-(6) and Paragraphs 30(b)-(f): The information required is to be supplied by the Retirement Trust.

Paragraphs 31(a) (1)-(4): The information is provided in the following table. As stated above, the NPL is equal to the TPL minus the FNP. That result as of October 1, 2015 is presented in the table below.

Fiscal Year End September 30, 2015

	GESE	Staff Benefit Plan	Excess Benefit Plan
Total pension liability	$873,799,058	$4,972,592	$12,750,481
Plan net position	589,051,025	3,145,336	0
Net pension liability	$284,748,033	$1,827,256	$12,750,481
Ratio of plan net position to total pension liability	67.41%	63.25%	0.00%
Covered employee payroll	$71,924,747	$164,547	$71,924,747
Net pension liability as a percentage of covered employee payroll	395.90%	1110.48%	17.73%

Paragraph 31(b) (1)(a)-(f): This paragraph requires information regarding the actuarial assumptions used to measure the TPL. The actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The total pension liability was determined based on an actuarial valuation as of October 1, 2014, using the following actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of October 1, 2015.

Inflation	3.5 percent
Salary increases, including inflation	GESE plan - 4 percent to 8.75 percent Staff plan – 6 percent Excess plan – 4 percent – 8.75 percent
Investment rate of return	GESE and Staff plans - net of pension plan investment expenses and including inflation 7.8 percent for year ending October 1, 2014 7.7 percent for year ending October 1, 2015 7.6 percent for periods from October 1, 2015 on Excess plan – Not applicable. The plan has no assets for investment

The rates of mortality are according to the following mortality tables.

GESE and Excess plans

- **Pre-Retirement Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 1 year.

- **Post-Retirement Healthy Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 2 years.

- **Post-Retirement Disabled Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 8 years.

Staff plan

- **Pre-Retirement Mortality**
  1983 Group Annuity Mortality Table for male and female, set back 2 years.

- **Post-Retirement Healthy Mortality**
  1983 Group Annuity Mortality Table for male and female.

- **Post-Retirement Disabled Mortality**
  1983 Group Annuity Mortality Table for male and female, set forward 9 years.

Paragraph 31(b) (1)

(a) **Discount rate**. The discount rate used to measure the total pension liability was 7.6 percent for the GESE and Staff plans. For the Excess plan the discount rate used to measure the total pension liability was 3.78 percent. Since the Excess plan has no assets, there are no assets available to make projected future benefit payments of current plan members. Therefore, the applicable municipal bond index rate of 3.78%, based on the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System as of September 30, 2015, was applied to all periods of projected benefit payments. As a result, the Single Equivalent Interest Rate (SEIR) is also 3.78%. The SEIR at the beginning of the measurement period was 4.13% based on the applicable municipal bond index rate of 4.13% as of September 30, 2014 applied to all periods of projected benefit payments.

(b) **Projected cash flows:** The projection of cash flows used to determine the discount rate assumed that member contributions will be made and the employer contributions will be made in accordance with the City of Miami Ordinance and Florida Statutes.

(c) **Long term rate of return:** The long-term expected rate of return on GESE and the Staff plans investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of Retirement Trust investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The Excess plan has no assets therefore the long term rate of return is not applicable.

(d) **Municipal bond rate:** The discount rate for the Excess plan uses municipal bond rates of 3.78% as of the measurement date and 4.13% at the beginning of the measurement period.

(e) **Periods of projected benefit payments:** Projected future benefit payments for all current plan members were projected through 2122 and 2120, respectively, for the GESE and Staff plans. We did not prepare a projection of benefit payments for the Excess plan since the plan has no assets to make projected benefit payments and the municipal bond rate is the applicable discount rate for all periods.

(f) **Assumed asset allocation**: The target asset allocation and best estimates of arithmetic rates of return, including inflation, for each major asset class as provided by the Retirement Trust's investment consultant – Southeastern Advisory Services - are summarized in the following table. The Excess plan has no assets.

(g)

	Asset Class	Target Allocation	Long-Term Expected Rate of Return, Including Inflation
GESE	Large Domestic Equity	42.00%	8.40%
	Small Domestic Equity	10.00%	9.25%
	International Equity	13.00%	8.75%
	Real Estate	5.00%	8.75%
	US Fixed Income	29.00%	5.00%
	Cash	1.00%	2.10%
	Total	100.00%	
Staff Pension Plan	Large Domestic Equity	42.00%	8.40%
	Small Domestic Equity	10.00%	9.25%
	International Equity	13.00%	8.75%
	US Fixed Income	35.00%	5.00%
	Total	100.00%	

Paragraph 31(b) (1) (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the GESE and Staff plans, calculated using the discount rate of 7.6 percent, as well as what the plans' net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.6 percent) or 1-percentage-point higher (8.6 percent) than the current rate. For the Excess plan the NPL is presented at the discount rate of 3.78 percent, as well as at 2.78 percent and 4.78 percent.

Net Pension Liability	1% Decrease	Current Assumption	1% Increase
GESE	$372,935,078	$284,748,033	$209,766,857
STAFF	2,471,267	1,827,256	1,306,569
EXCESS	14,482,923	12,750,481	11,354,882

Paragraph 31(c): October 1, 2014 is the actuarial valuation date upon which the TPL is based. That result was rolled forward using standard actuarial techniques to the Measurement Date of October 1, 2015.

SECTION III – REQUIRED SUPPLEMENTARY INFORMATION

There are several tables of Required Supplementary Information (RSI) that need to be included in the plans' financial statements:

Paragraphs 32(a)-(c): The required tables are provided in Schedule A.
Paragraph 32(d): The money-weighted rates of return for the year ending September 30, 2015 were 0.23% for the GESE plan and -0.40% for the Staff plan. The rates of return were provided by Southeastern Advisory Services, the investment consultant to the Retirement Trust.

Paragraph 34: In addition the following should be noted regarding the RSI:

Changes of benefit terms: There have been no significant changes to the Retirement Trust benefit provisions since the prior actuarial valuation.

Changes of assumption: There have been no significant changes to the Retirement Trust actuarial assumptions since the prior actuarial valuation, except that the investment return rate to calculate the actuarially determined contributions was lowered from 7.8% to 7.7%.

Method and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates are determined every year. The last determination of the actuarial contribution rates was as of October 1, 2014 payable for the fiscal year 2016 for the GESE and Staff plans and 2015 for the Excess plan. The following actuarial methods and assumptions were used to determine contribution rates as of the October 1, 2014 actuarial valuations of the GESE pension plans:

GESE	
Actuarial cost method:	Entry Age Normal
Amortization method:	Level percent, closed
Remaining amortization period:	8 to 20 years
Equivalent single amortization period:	13 years
Asset valuation method:	5-Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.70%
Projected salary increases*	4% to 8.75%
Payroll Growth	3.00%
*Includes inflation at	3.50%
Cost of living adjustments	4% per year, with $54 per year minimum and $400 per year maximum.

Staff Pension Plan	
Actuarial cost method:	Entry Age Normal
Amortization method:	Level dollar amounts, closed
Remaining amortization period:	2 to 20 years
Equivalent single amortization period:	11 years
Asset valuation method:	3 year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.70%
Projected salary increases*	6.00%
*Includes inflation at	3.50%
Cost of living adjustments	None

Excess Benefit Plan	
Actuarial cost method:	Entry Age Normal
Amortization method:	Level Dollar, closed
Remaining amortization period:	16 years
Asset valuation method:	Not applicable.
Actuarial assumptions:	
Investment rate of return*	7.70%
Projected salary increases*	4% to 8.75%
*Includes inflation at	3.50%

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)

GESE

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total pension liability										
Service Cost	$9,234,478	$8,678,294								
Interest	64,212,607	64,248,602								
Benefit changes	0	0								
Difference between expected and actual experience	(8,035,778)	0								
Changes of assumptions	0	0								
Benefit payments	(71,940,377)	(71,903,481)								
Refunds of contributions	(1,089,556)	(1,867,614)								
Net change in total pension liability	(7,618,626)	(844,199)								
Total pension liability - beginning	$881,417,684	$882,261,883								
Total pension liability - ending (a)	$873,799,058	$881,417,684								
Plan net position										
Contributions - employer	$33,036,318	$30,710,096								
Contributions - member	8,163,643	7,231,235								
Net investment income	1,496,395	65,272,884								
Benefit payments	(71,940,377)	(71,903,481)								
Administrative expense	(176,693)	(265,995)								
Refunds of contributions	(1,089,556)	(1,867,614)								
Other	0	0								
Net change in plan net position	(30,510,270)	29,177,125								
Plan net position - beginning	$619,561,295	$590,384,170								
Plan net position - ending (b)	$589,051,025	$619,561,295								
Net pension liability - ending (a) - (b)	$284,748,033	$261,856,389								

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)

Staff Pension Plan

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total pension liability										
Service Cost	$43,416	$77,022								
Interest	353,121	345,755								
Benefit changes	0	0								
Difference between expected and actual experience	99,869	0								
Changes of assumptions	0	0								
Benefit payments	(340,299)	(311,388)								
Refunds of contributions	0	0								
Net change in total pension liability	156,107	111,389								
Total pension liability - beginning	$4,816,485	$4,705,096								
Total pension liability - ending (a)	$4,972,592	$4,816,485								
Plan net position										
Contributions - employer	$291,087	$291,968								
Contributions - member	19,838	23,377								
Net investment income	(15,614)	338,281								
Benefit payments	(340,299)	(311,388)								
Administrative expense	0	0								
Refunds of contributions	0	0								
Other	0	0								
Net change in plan net position	(44,988)	342,238								
Plan net position - beginning	$3,190,324	$2,848,086								
Plan net position - ending (b)	$3,145,336	$3,190,324								
Net pension liability - ending (a) - (b)	$1,827,256	$1,626,161								

SCHEDULE A

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
GASB 67 Paragraph 32(a)

Excess Benefit Plan

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total pension liability										
Service Cost	$0	$0								
Interest	392,659	427,362								
Benefit changes	0	0								
Difference between expected and actual experience	3,177,002	763,199								
Changes of assumptions	0	0								
Benefit payments	(653,302)	(556,805)								
Refunds of contributions	0	0								
Net change in total pension liability	2,916,359	633,756								
Total pension liability - beginning	$9,834,122	$9,200,366								
Total pension liability - ending (a)	$12,750,481	$9,834,122								
Plan net position										
Contributions - employer	$648,302	$561,805								
Contributions - member	0	0								
Net investment income	0	0								
Benefit payments	(653,302)	(556,805)								
Administrative expense	5,000	(5,000)								
Refunds of contributions	0	0								
Other	0	0								
Net change in plan net position	0	0								
Plan net position - beginning	$0	$0								
Plan net position - ending (b)	$0	$0								
Net pension liability - ending (a) - (b)	$12,750,481	$9,834,122								

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)

GESE

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total pension liability	$873,799,058	$881,417,684								
Plan net position	589,051,025	619,561,295								
Net pension liability	$284,748,033	$261,856,389								
Ratio of plan net position to total pension liability	67.41%	70.29%								
Covered employee payroll	$71,924,747	$66,370,246								
Net pension liability as a percentage of covered-employee payroll	395.90%	394.54%								

Staff Pension Plan

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total pension liability	$4,972,592	$4,816,485								
Plan net position	3,145,336	3,190,324								
Net pension liability	$1,827,256	$1,626,161								
Ratio of plan net position to total pension liability	63.25%	66.24%								
Covered employee payroll	$164,547	$298,958								
Net pension liability as a percentage of covered-employee payroll	1110.48%	543.94%								

SCHEDULE OF THE NET PENSION LIABILITY
GASB 67 Paragraph 32(b)

Excess Benefit Plan

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total pension liability	$12,750,481	9,834,122								
Plan net position	0	0								
Net pension liability	$12,750,481	9,834,122								
Ratio of plan net position to total pension liability	0.00%	0.00%								
Covered employee payroll	$71,924,747	66,370,246								
Net pension liability as a percentage of covered-employee payroll	17.73%	14.82%								

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)

GESE

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially determined employer contribution	$33,036,318	$30,710,096	$25,568,193	$25,784,849	$20,420,995	$24,037,093	$23,191,828	$22,762,902	$24,229,028	$22,018,443
Actual employer contributions	33,036,318	30,710,096	25,568,193	25,784,849	20,420,995	24,037,093	23,191,828	22,762,902	24,229,028	22,018,443
Annual contribution deficiency (excess)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Covered employee payroll	$71,924,747	$66,370,246	$64,391,195	$65,509,421	$70,825,712	$92,746,558	$93,703,886	$82,052,702	$75,609,062	$71,485,284
Actual contributions as a percentage of covered employee payroll	45.93%	46.27%	39.71%	39.36%	28.83%	25.92%	24.75%	27.74%	32.05%	30.80%

Staff Pension Plan

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially determined employer contribution	$291,087	$291,968	$219,774	$226,793	$164,490	$132,542	$159,837	$109,163	$57,995	$72,380
Actual employer contributions	291,087	291,968	219,774	226,793	164,490	133,487	159,837	109,163	57,995	72,380
Annual contribution deficiency (excess)	$0	$0	$0	$0	$0	($945)	$0	$0	$0	$0
Covered employee payroll	$164,547	$298,958	$354,937	$735,056	$842,955	$738,898	$632,259	$734,116	$643,770	$455,220
Actual contributions as a percentage of covered employee payroll	176.90%	97.66%	61.92%	30.85%	19.51%	18.07%	25.28%	14.87%	9.01%	15.90%

SCHEDULE OF EMPLOYER CONTRIBUTIONS
GASB 67 Paragraph 32(c)

Excess Benefit Plan

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially determined employer contribution	$947,666	$722,999	$665,659	$606,589	$585,357	$625,539	$566,046	$898,149	$823,371	$824,766
Actual employer contributions	648,302	561,805	523,398	514,908	406,243	339,602	464,325	446,916	476,252	463,126
Annual contribution deficiency (excess)	$299,364	$161,194	$142,261	$91,681	$179,114	$285,937	$101,721	$451,233	$347,119	$361,640
Covered employee payroll	$71,924,747	$66,370,246	$64,391,195	$65,509,421	$70,825,712	$92,746,558	$93,703,886	$82,052,702	$75,609,062	$71,485,284
Actual contributions as a percentage of covered employee payroll	0.90%	0.85%	0.81%	0.79%	0.57%	0.37%	0.50%	0.54%	0.63%	0.65%

SCHEDULE B

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

City of Miami General Employees and Sanitation Employees
Plan Specific Benefit Provisions

1. Plan Effective Date

The original plan effective date is July1, 1956, including all amendments through September 30, 2010.

2. Membership

An employee becomes a member upon employment unless he is a member of any other pension or retirement system supported wholly or in part by the City. An employee ceases to be a member if (i) he is absent from service for more than three years of any five consecutive year period, (ii) he withdraws his contributions, (iii). he becomes a member of any other City sponsored retirement plan, or (iv) he becomes a beneficiary or dies.

3. Membership Service

Service as an employee for which contributions were made.

4. Creditable Service

Sum of Membership Service, Prior Service, and Military Service.

5. Compensation

Employee's base salary, including pick-up contributions. Compensation for pension purposes does not include the cash payment at retirement for accumulated unused leaves, such as, vacation and sick leave.

6. Member Contributions

10% of compensation.

7. Average Final Compensation

<u>Members Eligible for Retirement (meet Rule of 70 or age 55 and 10 years of service) as of September 30, 2010</u>

Average annual compensation during highest two years of membership service. For members employed before May 24, 1984, Average Final Compensation is average annual compensation during highest one year of membership service.

<u>All Other Members</u>

Average annual compensation during the highest five years of the last 10 years of service. Members retiring between October 1, 2010 and on or before September 30, 2011 will be based on the average of the highest three years of membership service; for members who retire on or after October 1, 2011 and or before September 20, 2012, it will be based on the average highest four years of membership service; and for members who retire on or after October 1, 2012, the average of the highest five years of the last 10 years of service. In no event shall the average final compensation of any member who is employed on September 20, 2010 and retires on or after October 1, 2010 be less than the members final average compensation as of September 30, 2010.

8. Service Retirement Benefit

Members Eligible for Retirement as of September 30, 2010
3% of Average Final Compensation multiplied by Creditable Service.

All Other Members
3% of Average Final Compensation multiplied by Creditable Service as of September 30, 2010. For service after September 30, 2010, 2.25% of Average Final Compensation multiplied by Creditable Service up to 15 years; for Creditable Service in excess of 15 years but less than 20 years, 2.5% of Average Final Compensation multiplied by Creditable Service; for Creditable Service in excess of 20, 2.75% of Average Final Compensation multiplied by Creditable Service. The service retirement benefit shall be based on a member's total Creditable Service and the benefit multiplier in effect at the time the service is earned, multiplied by average final compensation in effect at the time of retirement or separation from employment.

9. Normal Retirement

Members Eligible for Retirement as of September 30, 2010

- **Age and Service**
  Age 55 and 10 years of continuous Creditable Service.
- **Rule of 70**
  Age plus Service equaling 70 points
- **Benefit Amount**
  The basic retirement benefit.
- **Forms of Payment**
  Normal Forms of Payment
  Option 6a: Lump sum payment of member's accumulated contributions plus a monthly service retirement benefit equal to 50% of the amount to which he would have been otherwise entitled;
  Option 6b: Monthly service retirement benefit for member's lifetime equal to 105% of the amount to which he would have been otherwise entitled;
  Option 6c: Monthly service retirement benefit for member's lifetime equal to the amount to which he was entitled, provided that, upon his death, 40% of that amount would continue to be paid to his surviving spouse for the lifetime of such spouse.
  Actuarially Reduced Forms of Payment
  Option 2 – Equal Payment Survivor Annuity: Reduced joint and 100% survivor annuity;
  Option 3 – One-Half Payment Survivor Annuity: Reduced joint and 50% survivor annuity

All Other Members

- **Age and Service**
  Age 55 and 30 years of continuous Creditable Service, or
  Age 60 and 10 years of continuous Creditable Service
- **Rule of 80**
  Age plus Service equaling 80 points
- **Benefit Amount**
  The basic retirement benefit payable as a life annuity.
- **Forms of Payment**
  Actuarially Reduced Forms of Payment
  Option 2 – Equal Payment Survivor Annuity: Reduced joint and 100% survivor annuity;
  Option 3 – One-Half Payment Survivor Annuity: Reduced joint and 50% survivor annuity
  Option 6a: Lump sum payment of member's accumulated contributions plus a monthly service retirement benefit equal to 50% of the amount to which he would have been otherwise entitled;
  Option 6c: Monthly service retirement benefit for member's lifetime equal to the amount to which he was entitled, provided that, upon his death, 40% of that amount would continue to be paid to his surviving spouse for the lifetime of such spouse.

10. Early Retirement

- **Age**
  Any age with at least 20 years of Creditable Service.
- **Amount**
  Actuarial equivalent of the basic service retirement benefit that otherwise would have commenced at age 55. For members not eligible for retirement on October 1, 2010 the amount is the actuarial equivalent of the basic service retirement benefit payable at the earliest of the retirement eligibility dates under 9. above.
- **Form of Payment**
  Same as for Normal Retirement.

11. Deferred Vested Retirement

- **Eligibility**
  Completion of 10 years of Creditable Service and provided the member does not withdraw his accumulated contributions.
- **Amount**
  The basic retirement benefit.
- **Form of Payment**
  Same as for Normal Retirement.

12. Ordinary Disability Retirement

- **Eligibility**
  Completion of 10 years of Creditable Service.
- **Condition**
  The member must have become totally incapacitated from the further performance of duty not as a result of an accident in the performance of duty.
- **Amount**
  The greater of 90 percent of the product of the benefit multiplier in effect at the time the service is earned multiplied by the number of years of credited service; or 30 percent of the member's final average compensation.
- **Form of Payment**
  Life annuity.

13. Accidental Service Incurred Disability Retirement

- **Eligibility**
  Any member.
- **Condition**
  The Member must have become totally and permanently incapacitated for duty as a result of an accident occurring while in the performance of his duty.
- **Amount**
  66 2/3% of the greater of Average Final Compensation or final compensation.
- **Form of Payment**
  Life annuity provided that, upon the member's death, 40% of the benefit would continue to be paid to surviving spouse for the lifetime of such spouse.

14. Service Incurred Disability Retirement

- **Eligibility**
  Any member.
- **Condition**
  The member must have become totally and permanently incapacitated for duty as a result of tuberculosis, hypertension, or heart disease (which was not an existing condition at the time of employment).
- **Amount**
- The greater of 90 percent of the product of the benefit multiplier in effect at the time the service is earned multiplied by the number of years of credited service; or 40 percent of the member's final average compensation.
- **Form of Payment**
  Life annuity.

15. Ordinary Death Benefit

- **Eligibility**
  Completion of 3 years of Creditable Service.
- **Condition**
  The member must have died for a reason other than while in the actual performance of duty.
- **Amount**
  Lump sum payment of accumulated contributions plus 50% of compensation during the year immediately preceding death.

16. Surviving Spouse Benefit

- **Eligibility**
  Any member who is eligible for Normal, Early, or Rule of 70 Retirement who dies prior to actual retirement and whose spouse elects not to receive a payment of the member's accumulated contributions.
- **Amount**
  <u>If the member is eligible for retirement on September 30, 2010</u>, 40% of the sum of the member's basic retirement benefit calculated as if the member had attained age 55 and retired on date of death. In addition, the surviving spouse will receive 50% of the member's compensation during the year immediately preceding death. <u>If the member is not eligible for retirement on September 30, 2010</u>, the spousal benefit will be based on the optional form of payment elected by the member. If the member has not elected an optional allowance, the spouse will receive the 40% survivor benefit actuarially reduced.
- **Form of Payment**
  Life annuity.

17. Accidental Death Benefit

- **Eligibility**
  Membership in the Plan.
- **Condition**
  The member must have died accidentally while in the actual performance of duty.
- **Amount**
  50% of Average Final Compensation plus a lump sum payment equal to accumulated contributions.
- **Form of Payment**
  Life annuity.

18. Minimum Retired Death Benefit

A retired member who dies prior to having received 12 monthly retirement payments and prior to having an optional allowance becoming effective will have a lump sum equal to the excess, if any, of 12 times the monthly payments over the actual payments received paid to his designated beneficiary.

19. Return of Contributions

A member who terminates employment and is not eligible for any other benefit shall receive a refund of his accumulated contributions. If a member dies in active service, his beneficiary shall receive a refund of his accumulated contributions except as otherwise noted in this section.

20. Cost-of-Living Adjustment

Effective October 1, 1998, the annual cost-of-living benefit will be 4% of the total benefit with minimum increases of $54 per year and maximum increases of $400 per year.

21. Limitation on Benefits

Effective September 30, 2012, for members not eligible to retire on that date, member retirement allowances shall not exceed the lesser of 100 percent of the member's average final compensation or an annual retirement allowance of $80,000 as of the retirement or DROP entry based on the normal form of benefit in effect on the date of retirement. In no event shall the benefit limitation be less than the member's accrued benefit on September 30, 2012 based on the normal form of benefit in effect on that date.

22. Deferred retirement option program ("DROP"):

Any employee who is eligible for a service or Rule of 70 retirement is eligible to participate in the DROP. Upon election of participation, a member's creditable service, accrued benefits, and compensation calculation are frozen and the DROP payment is based on the member's average final compensation. The member's contribution and the City contribution to the retirement plan for that member ceases as no further service credit is earned. The member does not acquire additional pension credit for the purposes of the pension plan but may continue City employment for up to a maximum of 48 months. Once the maximum participation has been achieved, the participant must terminate employment.

There are two DROP programs, the Forward Drop and the BACDROP. A member can participate in both programs simultaneously. The Forward DROP is a DROP benefit equal to the regular retirement benefit the member would have received had the member separated from service and commenced the receipt of benefits from the plan. The BACDROP is a DROP benefit actuarially calculated. A member may elect to BACDROP to a date, no further back than the date of the member's retirement eligibility date. The BACDROP period must be in 12 month increments, beginning at the start of a pay period, not to exceed 48 months. The benefits for the BACDROP will then be actuarially calculated to be the equivalent to the benefit earned at the date of retirement.

An individual account is created for each participant. The Board of Trustees of the retirement plan has established, by administrative rule, a series of investment vehicles which may be chosen by the participant. Any losses incurred on account of the option selected by the participant will not be made up by the City or the GESE Trust, and will be borne by the participant only. All interest will be credited to the member's account

22. Deferred retirement option program ("DROP") continued:

Upon termination of employment, a participant may receive payment from the DROP account in a lump sum distribution; or periodic payments. A participant may elect to rollover the balance to another qualified retirement plan, individual retirement account, an Internal Revenue Code Section 457 Plan, or an annuity. A participant may defer payment until the latest date authorized by Section 401(a)(9) of the Internal Revenue Code. DROP participation will not affect any other death or disability benefit provided under law or applicable collective bargaining agreement. If a participant dies before the account balances are paid out in full, the beneficiary will receive the remaining balance.

23. Backdrop option

A Backdrop benefit option shall be implemented on January 1, 2013. The Backdrop option shall replace the existing DROP program. Employees who have not attained normal retirement eligibility as of January 1, 2013 or were not vested by October 1, 2010, and all employees hired on or after January 1, 2013, will be eligible for the Backdrop option but will not be eligible for the DROP. Anyone eligible for the forward DROP as of January 1, 2013 remains eligible for the forward DROP as it presently exists and anyone eligible for the forward DROP as of January 1, 2013 or vested prior to October 1, 2010, who chooses not to enter the forward DROP, remains eligible for the Backdrop.

Under the Backdrop option a member can receive a lump sum payment in addition to a monthly pension annuity. The employee chooses to take a Backdrop at the end of his employment with the City as long as he or she Backdrops to any date after he/she reaches the Normal Retirement date. If the member elects the Backdrop option, the monthly benefit payable on the member's actual retirement date (when the member leaves City employment) is based on the benefit the member would have received had he or she left employment and retired on an earlier Normal Retirement (NR) date, referred to as the Backdrop date. In addition, the member will receive a lump sum payment equal to the accumulation of annuity payments he or she would have received during the Backdrop period had he or she elected to receive immediate pension annuity payments starting as of the Backdrop date. Annuity payments would be accumulated at the rate of 3% per year, compounded annually. The member's Backdrop date can be any date after his or her Normal Retirement Date and the Backdrop period can be as little as one year and as long as 7 years (see below for the eligibility rules). If the member does not elect a Backdrop benefit option, his or her monthly retirement benefit will be calculated using his or her final average final compensation and creditable service as of the member's actual employment termination date.

Eligibility

All members are eligible to elect Backdrop after completing one year of service after eligibility for Normal Retirement. A Backdrop election must be made within 10 years after becoming eligible for Normal Retirement. The maximum Backdrop period is 7 years. Members who wish to elect the Backdrop option must provide at least 8 months' notice to separate, or a lesser period could apply if approved by the City Manager (due to special circumstances).

Distribution Options

The lump sum portion of this Backdrop benefit option is payable as follows:

- Cash Option
- Rollover to another tax deferred account (e.g. IRA) Option
- Combination Cash and Rollover Option

The annuity portion (as well as the Backdrop annuity accumulation) of this Backdrop benefit option is payable according to the annuity form elected (e.g. Joint and 100% Survivor annuity).

Staff Pension Plan
Plan Specific Benefit Provisions

1. Plan Effective Date

The original plan effective date is July1, 2001.

2. Membership

An administrative staff employee of the City of Miami GESE Retirement Trust becomes a member upon employment unless he/she is a member of any other pension or retirement system supported wholly or in part by the City. An employee ceases to be a member if (i) he/she is absent from service for more than three years of any five consecutive year period, (ii) he/she withdraws his/her contributions, (iii) he/she becomes a member of any other City-sponsored retirement Plan or (iv) he/she becomes a beneficiary or dies.

3. Membership Service

Service as an employee for which contributions were made.

4. Creditable Service

Sum of Membership Service, Prior Service, and Military Service.

5. Compensation

Employee's base salary, including pick-up contributions. Compensation for pension purposes does not include the cash payment at retirement for accumulated unused leaves, such as, vacation and sick leave.

6. Member Contributions

10% of compensation.

7. Average Final Compensation

Average annual compensation during highest two years of membership service.

8. Basic Retirement Benefit

3% of Average Final Compensation multiplied by Creditable Service. In addition the benefit is increased by 5% at retirement.

9. Normal Retirement

- **Eligibility**
  10 years of continuous Creditable Service.
- **Benefit Amount**
  The basic retirement benefit.
- **Forms of Payment**
  Normal Forms of Payment
  Option 6(a): Lump sum payment of member's accumulated contributions plus a monthly service retirement benefit equal to 50% of the amount to which he would have been otherwise entitled;
  Option 6(b): Monthly service retirement benefit for member's lifetime equal to 105% of the amount to which he would have been otherwise entitled;
  Option 6(c): Monthly service retirement benefit for member's lifetime equal to the amount to which he was entitled, provided that, upon his death, 40% of that amount would continue to be paid to his surviving spouse for the lifetime of such spouse.
  Actuarially Reduced Forms of Payment
  Option 2 – Equal Payment Survivor Annuity: Reduced joint and 100% survivor annuity;
  Option 3 – One-Half Payment Survivor Annuity: Reduced joint and 50% survivor annuity

10. Minimum Retired Death Benefit

A retired member who dies prior to having received 12 monthly retirement payments and prior to having an optional allowance becoming effective will have a lump sum equal to the excess, if any, of 12 times the monthly payments over the actual payments received paid to his designated beneficiary.

11. Return of Contributions

A member who terminates employment and is not eligible for any other benefit shall receive a refund of his accumulated contributions. If a member dies in active service, his beneficiary shall receive a refund of his accumulated contributions except as otherwise noted in this section.

12. Deferred retirement option program ("DROP"):

Any employee who has 10 or more years of service is eligible to participate in the DROP. Upon election of participation, a member's creditable service, accrued benefits, and compensation calculation are frozen and the DROP payment is based on the member's average final compensation. The member's contribution and the City contribution to the retirement plan for that member ceases as no further service credit is earned. The member does not acquire additional pension credit for the purposes of the pension plan but may continue City employment for up to a maximum of 48 months. Once the maximum participation has been achieved, the participant must terminate employment.

Upon termination of employment, a participant may receive payment from the DROP account in a lump sum distribution; or periodic payments. A participant may elect to rollover the balance to another qualified retirement plan, individual retirement account, an Internal Revenue Code Section 457 Plan, or an annuity. A participant may defer payment until the latest date authorized by Section 401(a)(9) of the Internal Revenue Code. DROP participation will not affect any other death or disability benefit provided under law or applicable collective bargaining agreement. If a participant dies before the account balances are paid out in full, the beneficiary will receive the remaining balance.

Excess Benefit Plan
Plan Specific Benefit Provisions

1. Plan Effective Date

The original plan effective date is October 1, 2000.

2. Membership

All members of the City of Miami General Employees' and Sanitation Employees' (GESE) Retirement Trust.

3. Member Contributions

There are no member contributions.

4. Excess Plan Benefit

The excess, if any, of the benefit earned under the GESE Retirement Plan without taking into account the Internal Revenue Code (IRC) Section 415 limits over the maximum benefit as limited under IRC Section 415.

Summary of Plan Changes

The following plan amendments have been adopted within the past few years:

GESE Retirement Trust

1. Effective October 1, 1991:

    a) Basic retirement benefit increased from 2.00% to 2.25%.
    b) Rule of 75 retirement was changed to Rule of 70.
    c) Cost of COLA was added.

2. Effective October 1, 1995: Early Retirement Incentive Program was implemented.

3. Effective October 1, 1997: No Changes

4. Effective October 1, 1998:

    a) Basic retirement benefit multiplier is increased from 2.25% to 3.00%.
    b) The Longevity Supplement ceases to be available.
    c) The COLA percentage increased from 2% to 4% and the maximum COLA benefit increase of \$200 per year is increased to \$400 per year. In addition, the maximum cumulative COLA benefit on a quarterly basis is eliminated.

5. Effective October 1, 2007: Benefit reduction factors used for optional forms of benefit payment were updated.

6. Effective October 1, 2008:

    a) The AFSCME bargaining unit members contribute 13% of payroll for fiscal year 2009/2010.

7. Effective September 30, 2010. <u>The benefit changes do not apply to members eligible to retire (that is, meet Rule of 70 or age 55 and 10 years of creditable service) on that date</u>:
    a) Normal Retirement Date: Earlier of age 60 with 10 years of service, age 55 with 30 years of service or Rule of 80.
    b) Benefit Formula: 2.25% per year – first 15 years; 2.5% per year -- 16 to 20 years; and 2.75% per year – over 20 years. The new benefit formula applies to all <u>future service</u>. Members as of September 30, 2010 retain the 3% benefit percentage earned up to that date, and earn the new percentage (based on years of service) for each year of service after that date.
    Example: current member with 20 years of service (but not eligible for normal retirement) would retain 60% multiplier earned prior to plan change, and earn 2.75% for each year of

service after the plan change.

c) Maximum Benefit: Maximum annual benefit at retirement is lesser of 100% of average final compensation benefit and $100,000 per year. Any member who has accrued a benefit in excess of the maximum benefit as of September 30, 2010 will retain that benefit but will not accrue any additional benefit.
d) Normal Benefit Form: Life annuity. Members may elect actuarially reduced survivor options.
e) Average final compensation: average of <u>highest five consecutive years of the last 10 years of service</u>, to be phased in over three years as follows: average final compensation for members who retire between October 1, 2010 and September 30, 2011 will be based on highest 3 consecutive year average; average final compensation for members who retire between October 1, 2011 and September 30, 2012 will be based on highest 4 consecutive year average; and average final compensation for members who retire after September 30, 2014will be based on the highest 5 consecutive year average of the last 10 years of service. Provided, in no event will the average final compensation of any member be less than the member's average final compensation as of the date of the plan change.
f) Contribution rate of 13% of pay for all members effective October 1, 2010. The 13% contribution rate applies to all members whether or not eligible to retire on September 30, 2010.

8. Effective October 1, 2011:

a) Maximum Benefit: Effective September 30, 2012, the maximum annual benefit at retirement is $80,000 per year. Any member who has accrued a benefit in excess of the maximum benefit as of September 30, 2012 will retain that benefit but will not accrue any additional benefit.
b) Contribution rate of 10% of pay for all members effective October 1, 2012. The 10% contribution rate applies to all members whether or not eligible to retire on September 30, 2010.
c) BACKDROP option. A Backdrop benefit option shall be implemented on January 1, 2013. The Backdrop option shall replace the existing DROP program. Employees who have not attained normal retirement eligibility as of January 1, 2013 or were not vested by October 1, 2010, and all employees hired on or after January 1, 2013, will be eligible for the Backdrop option but will not be eligible for the DROP. Anyone eligible for the forward DROP as of January 1, 2013 remains eligible for the forward DROP as it presently exists and anyone eligible for the forward DROP as of January 1, 2013 or vested prior to October 1, 2010, who chooses not to enter the forward DROP, remains eligible for the Backdrop.

Schedule B – Summary of Plan Changes

Staff Plan

Miami GESE Retirement Trust Staff Pension Plan implemented a Deferred Retirement Option Plan (DROP) for any employees having 10 or more years of service, which was approved by the Board of Trustees at its meeting on March 26, 2010.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

City of Miami General Employees' and Sanitation Employees' Retirement Trust

1. Actuarial Cost Method

The modified individual entry age normal cost method. Under this method, normal costs are determined on the individual entry age normal method. However, if the actuarial value of assets exceeds the entry age accrued liability, the individual entry age normal cost rate for the Plan shall be adjusted by the excess actuarial value of assets divided by the present value of future payroll, in order for the unfunded accrued liability to not be less than zero.

As of October 1, 1997, the unfunded actuarial accrued liability is zero. Currently, changes in actuarial assumptions and methods, plan amendments for actives and actuarial gains and losses are amortized as a level percent of pay over 20 years. Plan amendments for retirees are amortized over 15 years.

2. Decrements

- **Pre-Retirement Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 1 year.

- **Post-Retirement Healthy Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 2 years.

- **Post-Retirement Disabled Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 8 years.

- **Disability**
  Representative values of the assumed annual rates of disability among members in active service are set forth in the following table. 90% of disabilities are assumed to be ordinary (non-occupational), and 10% are service incurred. Of the service incurred disabilities, 50% are assumed to be accidental.

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	0.02%	30	0.05%	40	0.09%	50	0.18%
25	0.02%	35	0.07%	45	0.12%	55	0.26%

- **Permanent Withdrawal from Active Status**

  Representative values of the assumed annual rates of withdrawal among members in active service are set forth in the following table.

Age	Completed Years of Service					
	0	1	2	3	4	5 or more
20	13.0%	12.0%	10.0%	8.0%	7.0%	5.8%
25	13.0%	12.0%	10.0%	8.0%	7.0%	5.1%
30	13.0%	12.0%	10.0%	8.0%	7.0%	4.5%
35	12.5%	11.5%	9.5%	7.7%	7.0%	3.9%
40	11.9%	10.9%	8.9%	7.1%	6.5%	3.1%
45	11.3%	10.3%	8.3%	6.5%	5.7%	2.5%
50	10.7%	9.7%	7.7%	5.9%	4.7%	2.0%
55	10.4%	9.4%	7.4%	5.6%	4.4%	1.5%

- **Retirement (non-Backdrop)**

  Representative values of the assumed annual rates of retirement among members in active service are set forth in the following table. The rates for ages 45 through 54 are the assumed rates before the age of 55 under the rule of 70.

Age	Rate	Age	Rate	Age	Rate	Age	Rate	Age	Rate
45	10%	50	15%	55	18%	60	18%	65	16%
46	10%	51	15%	56	18%	61	18%	66	16%
47	10%	52	15%	57	18%	62	18%	67	16%
48	10%	53	15%	58	18%	63	18%	68	16%
49	10%	54	15%	59	18%	64	18%	69	16%
								70	100%

- **Rates of Backdrop Elections**
  The valuation assumes members will elect a five-year Backdrop.

	Years of Service								
Age	**10-14**	**15-20**	**21**	**23**	**25**	**27**	**29**	**30**	**35**
50								15%	
51							15%	15%	
52							15%	10%	
53						15%	10%	10%	
54						15%	10%	10%	
55					18%	10%	10%	10%	25%
56					18%	10%	10%	10%	25%
57				18%	10%	10%	10%	10%	25%
58				18%	10%	10%	10%	10%	25%
59			18%	10%	10%	10%	10%	10%	25%
60	18%	18%	18%	10%	10%	10%	10%	25%	25%
61	10%	10%	10%	10%	10%	10%	25%	25%	25%
62	10%	10%	10%	10%	10%	10%	25%	25%	25%
63	10%	10%	10%	10%	10%	25%	25%	25%	25%
64	10%	10%	10%	10%	10%	25%	25%	25%	25%
65	10%	25%	25%	25%	25%	25%	25%	25%	25%
66	10%	25%	25%	25%	25%	25%	25%	25%	25%
67	10%	25%	25%	25%	25%	25%	25%	25%	16%
68	10%	25%	25%	25%	25%	25%	25%	25%	16%
69	10%	25%	25%	25%	25%	25%	25%	25%	16%
70	100%	100%	100%	100%	100%	100%	100%	100%	100%

3. Investment Rate of Return and Discount Rate

The assumed investment rates of return are 7.8% and 7.7% for the years ending October 1, 2014 and 2015, respectively. For years on and after October 1, 2015 the assumed investment rate of return is 7.6%. The assumed investment rate of return includes inflation.

The assumed discount rate is 7.6% per year.

4. Salary Increases

Salaries are assumed to increase at a rate that varies based on years of credited service.

Years of Credited Service	Rate of Increase
Less Than 1	8.75%
1	8.00%
2	6.50%
3	5.50%
4	5.00%
5	5.00%
6	4.50%
7	4.50%
8	4.50%
9	4.50%
10 or more	4.00%

5. Inflation

3.5% per annum.

6. Spouses

80% of active members are assumed to be married with the husband 3 years older than his wife.

7. Expenses

The City shall provide for the non-investment expenses of the Retirement Trust. However, there may be some non-investment expenses during the Plan year which will be reimbursed by the City after the end of the year. An allowance for other expenses is made in that the interest rate assumption is net of investment expenses. The City's normal cost includes an allowance of $250,000 per year for the payment of custodial/trustee expenses.

8. Assets

For purposes of GASB 67 the value of assets is equal to the market value of assets.

To calculate the actuarially determined contribution the actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial value of assets cannot be less than 80% or more than 120% of market value.

9. Funding Period (Pursuant to Chapter 112, Florida Statutes)

Prior to October 1, 1997, the Gates Agreement amortization payments were paid in accordance with Schedule B of Attachment E of the Gates Agreement. As of October 1, 1997, the payment schedule was replaced. The unfunded actuarial accrued liability as of October 1, 1997 was zero. Beginning October 1, 2011, the following amortization periods apply all as level percent of pay amounts:

Benefit changes for actives	20 years
Benefit changes for retirees	15 years
Actuarial gain/loss	20 years
Change in assumptions and methods	20 years

10. Maximum Benefit

The valuation reflects the maximum benefit limits under Internal Revenue Code Section 415, indexed in future years at the 3.5% per year assumed rate of inflation.

City of Miami General Employees' and Sanitation Employees' Staff Pension Plan

1. Actuarial Cost Method

The modified individual entry age normal cost method. Under this method, normal costs are determined on the individual entry age normal method. However, if the actuarial value of assets exceeds the entry age accrued liability, the individual entry age normal cost rate for the Plan shall be adjusted by the excess actuarial value of assets divided by the present value of future payroll, in order for the unfunded accrued liability to not be less than zero.

2. Decrements

- **Pre-Retirement Mortality**
  1983 Group Annuity Mortality Table (male and female), set back 2 years.

- **Post-Retirement Healthy Mortality**
  1983 Group Annuity Mortality Table (male and female).

- **Post-Retirement Disabled Mortality**
  1983 Group Annuity Mortality Table (male and female), set forward 9 years.

- **Disability**
  Representative values of the assumed annual rates of disability among members in active service are set forth in the following table. Disability decrements do not compete with retirement.

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	0.03%	30	0.04%	40	0.07%	50	0.17%
25	0.03%	35	0.05%	45	0.10%	55	0.25%

- **Permanent Withdrawal from Active Status**
  Representative values of the assumed annual rates of withdrawal among members in active service are set forth in the following table.

Age	Completed Years of Service					
	0	1	2	3	4	5 or more
20	12.0%	10.5%	9.0%	7.2%	6.0%	5.3%
25	12.0%	10.5%	9.0%	7.2%	6.0%	4.6%
30	12.0%	10.5%	9.0%	7.2%	6.0%	4.0%
35	12.0%	10.5%	9.0%	7.2%	6.0%	3.4%
40	11.4%	9.9%	8.4%	6.6%	5.4%	2.6%
45	10.8%	9.3%	7.8%	6.0%	4.8%	2.0%
50	10.2%	8.7%	7.2%	5.4%	4.2%	1.3%
55	9.9%	8.4%	6.9%	5.1%	3.9%	1.0%

- **Retirement**

  Representative values of the assumed annual rates of retirement among members in active service are set forth in the following table.

Age	Rate	Age	Rate	Age	Rate	Age	Rate	Age	Rate
45	15%	50	20%	55	30%	60	20%	65	20%
46	15%	51	20%	56	20%	61	20%	66	20%
47	15%	52	20%	57	20%	62	20%	67	20%
48	15%	53	20%	58	20%	63	20%	68	20%
49	15%	54	20%	59	20%	64	20%	69	20%
								70	100%

In addition, the valuation assumes a 65% probability the Pension Administrator will retire upon reaching the Rule of 70 eligibility. For non-administrators, 20% is added to the rates in the table when the member first reaches Rule of 70 eligibility.

3. Investment Rate of Return and Discount Rate

The assumed investment rates of return are 7.8% and 7.7% for the years ending October 1, 2014 and 2015, respectively. For years on and after October 1, 2015 the assumed investment rate of return is 7.6%. The assumed investment rate of return includes inflation.

The assumed discount rate is 7.6% per year.

4. Salary Increases

Salaries are assumed to increase at the rate of 6.00% per annum, including inflation. There is no assumed total active member payroll increase.

5. Inflation

3.5% per annum.

6. Spouses

The Pension Administrator is assumed to not be married; 40% of active members are assumed to be married with the husband 3 years older than his wife

7. Expenses

The City shall provide for the non-investment expenses of the Plan. However, there may be some non-investment expenses during the Plan year which will be reimbursed by the City after the end of the year. An allowance for other expenses is made in that the interest rate assumption is net of investment expenses.

8. Assets

For purposes of GASB 67 the value of assets is equal to the market value of assets.

To calculate the actuarially determined contribution the actuarial value of assets is based on a moving market value averaged over three years. Each year, the actuarial asset value is projected forward at the valuation date based on actual contributions and benefit payments at the assumed interest assumption. One third of the difference between the projected actuarial value and the market value plus prior deferrals is added to the projected actuarial value. The remaining two thirds is deferred to each of the next two years as future adjustments to the actuarial value. The result cannot be greater than 120% of market value or less than 80% of market value.

City of Miami General Employees' and Sanitation Employees' Excess Benefit Plan

1. Actuarial Cost Method

The entry age normal cost method. Under this method, normal costs are determined on the individual entry age normal method.

For determination of the Annual Required Contribution the City contribution requirement the unfunded actuarial accrued liability is amortized over 30 years from October 1, 2000.

2. Decrements

- **Pre-Retirement Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 1 year.

- **Post-Retirement Healthy Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 2 years.

- **Post-Retirement Disabled Mortality**
  UP-1994, Projected to 2018 (using scale AA) for male and female, set forward 8 years.

- **Disability**
  Representative values of the assumed annual rates of disability among members in active service are set forth in the following table. 90% of disabilities are assumed to be ordinary (non-occupational), and 10% are service incurred. Of the service incurred disabilities, 50% are assumed to be accidental. Disability and retirement decrements do not compete.

Age	Rate	Age	Rate	Age	Rate	Age	Rate
20	0.02%	30	0.05%	40	0.09%	50	0.18%
25	0.02%	35	0.07%	45	0.12%	55	0.26%

- **Permanent Withdrawal from Active Status**

  Representative values of the assumed annual rates of withdrawal among members in active service are set forth in the following table.

Age	Completed Years of Service					
	0	1	2	3	4	5 or more
20	13.0%	12.0%	10.0%	8.0%	7.0%	5.8%
25	13.0%	12.0%	10.0%	8.0%	7.0%	5.1%
30	13.0%	12.0%	10.0%	8.0%	7.0%	4.5%
35	12.5%	11.5%	9.5%	7.7%	7.0%	3.9%
40	11.9%	10.9%	8.9%	7.1%	6.5%	3.1%
45	11.3%	10.3%	8.3%	6.5%	5.7%	2.5%
50	10.7%	9.7%	7.7%	5.9%	4.7%	2.0%
55	10.4%	9.4%	7.4%	5.6%	4.4%	1.5%

- **Retirement (non-Backdrop)**

  Representative values of the assumed annual rates of retirement among members in active service are set forth in the following table. The rates for ages 45 through 54 are the assumed rates before the age of 55 under the rule of 70.

Age	Rate	Age	Rate	Age	Rate	Age	Rate	Age	Rate
45	10%	50	15%	55	18%	60	18%	65	16%
46	10%	51	15%	56	18%	61	18%	66	16%
47	10%	52	15%	57	18%	62	18%	67	16%
48	10%	53	15%	58	18%	63	18%	68	16%
49	10%	54	15%	59	18%	64	18%	69	16%
								70	100%

- **Rates of Backdrop Elections**
  The valuation assumes members will elect a five-year Backdrop.

	Years of Service								
Age	**10-14**	**15-20**	**21**	**23**	**25**	**27**	**29**	**30**	**35**
50								15%	
51							15%	15%	
52							15%	10%	
53						15%	10%	10%	
54						15%	10%	10%	
55					18%	10%	10%	10%	25%
56					18%	10%	10%	10%	25%
57				18%	10%	10%	10%	10%	25%
58				18%	10%	10%	10%	10%	25%
59			18%	10%	10%	10%	10%	10%	25%
60	18%	18%	18%	10%	10%	10%	10%	25%	25%
61	10%	10%	10%	10%	10%	10%	25%	25%	25%
62	10%	10%	10%	10%	10%	10%	25%	25%	25%
63	10%	10%	10%	10%	10%	25%	25%	25%	25%
64	10%	10%	10%	10%	10%	25%	25%	25%	25%
65	10%	25%	25%	25%	25%	25%	25%	25%	25%
66	10%	25%	25%	25%	25%	25%	25%	25%	25%
67	10%	25%	25%	25%	25%	25%	25%	25%	16%
68	10%	25%	25%	25%	25%	25%	25%	25%	16%
69	10%	25%	25%	25%	25%	25%	25%	25%	16%
70	100%	100%	100%	100%	100%	100%	100%	100%	100%

3. Discount Rate

The discount rate is 4.13% as of September 30, 2014 and 3.78% as of September 30, 2015 based on the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System.

4. Salary Increases

Salaries are assumed to increase at a rate that varies based on years of credited service:

Years of Credited Service	Rate of Increase
Less Than 1	8.75%
1	8.00%
2	6.50%
3	5.50%
4	5.00%
5	5.00%
6	4.50%
7	4.50%
8	4.50%
9	4.50%
10 or more	4.00%

5. Inflation

3.5% per annum.

6. Spouses

80% of active members assumed to be married with the husband 3 years older than his wife.

7. Expenses and Payment of Benefits

The City shall provide for all the expenses of the Plan and for all the benefit payments.

8. Assets

There are no plan assets.

9. Funding Period (Illustrative City Contribution Requirement)

The initial unfunded actuarial accrued liability as of October 1, 2000 is amortized over 30 years from that date.

10. Maximum Benefit

The valuation of the excess benefits does not reflect the maximum benefit limits under Internal Revenue Code Section 415.

We have assumed future cost-of-living increases of 3.5% in the IRC Section 415 limits for the benefits payable from the City of Miami GESE Retirement Trust.