



April 28, 2020

Board of Trustees
City of Dania Beach Retirement Plan
for General Employees
Dania Beach, Florida

Dear Board Members:

The results of the October 1, 2019 Annual Actuarial Valuation of the City of Dania Beach Retirement Plan for General Employees are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement Plan and those designated or approved by the Board. This report may be provided to parties other than the Plan only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the Plan's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2021, and to report the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67 for fiscal year ending September 30, 2019. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report includes risk metrics in Section A but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the Plan's financial condition.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The findings in this report are based on data or other information through September 30, 2019. The valuation was based upon information furnished by the Plan Administrator and the City concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator or the City.

This report was prepared using certain assumptions approved by the Board as authorized under Florida Statutes and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Cost Method. The investment return assumption was prescribed by the Board and the assumed mortality rates detailed in the Actuarial Assumptions and Cost Method section were prescribed by the Florida Statutes in accordance with Florida Statutes Chapter 112.63. All actuarial assumptions used in this report are reasonable for purposes of this valuation.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

Dina Lerner and Travis Robinson 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. The signing actuaries are independent of the plan sponsor.

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

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By: *Dina Lerner*
Dina Lerner, ASA, MAAA, FCA
Enrolled Actuary No. 20-08236

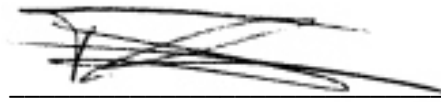

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TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
A	Discussion of Valuation Results	1
	Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution	5
B	Valuation Results	
	1. Participant Data	8
	2. Actuarially Determined Employer Contribution	9
	3. Actuarial Value of Benefits and Assets	10
	4. Calculation of Employer Normal Cost	11
	5. Liquidation of Unfunded Actuarial Accrued Liability (UAAL)	12
	5. Actuarial Gains and Losses	13
	6. History of Valuation Results	19
	7. History of UAAL and Funded Ratio under Entry Age Normal Method	20
	8. History of Required and Actual Contributions	21
9. Actuarial Assumptions and Cost Method	22	
10. Glossary of Terms	27	
C	Pension Fund Information	
	1. Statement of Plan Assets at Market Value	30
	2. Reconciliation of Plan Assets	31
	3. Development of Actuarial Value of Assets	32
	4. Reconciliation of DROP Accounts and Benefit Reserve Fund	33
5. Investment Rate of Return	34	
D	Financial Accounting Information	
	1. FASB No. 35	35
	2. GASB No. 67	36
E	Miscellaneous Information	
	1. Reconciliation of Membership Data	42
	2. Active Participant Scatter	43
	3. Inactive Participant Scatter	44
	4. Projected Payroll and Retirement Benefits	45
F	Summary of Plan Provisions	47



SECTION A

DISCUSSION OF VALUATION RESULTS

DISCUSSION OF VALUATION RESULTS

Closed Plan

In reviewing this Report, it is important for the reader to keep in mind that this Plan was closed to new members after February 28, 2006. One consequence of this closure is that the required employer contribution will generally continue to increase as a percentage of covered payroll as such payroll decreases from year to year.

Comparison of Required Employer Contributions

The minimum required employer contribution developed in this year's valuation is compared below with last year's results.

	For FYE 9/30/2021 Based on 10/1/2019 Valuation	For FYE 9/30/2020 Based on 10/1/2018 Valuation	Increase (Decrease)
Required Employer Contribution	\$ 1,209,601	\$ 1,356,798	(147,197)
As % of Covered Payroll	157.58 %	102.29 %	55.29 %
Estimated Pick-Up Contribution	\$ 123,432	\$ 213,279	\$ (89,847)
As % of Covered Payroll	16.08 %	16.08 %	0.00 %
Total Employer Contribution	\$ 1,333,033	\$ 1,570,077	\$ (237,044)
As % of Covered Payroll	173.66 %	118.37 %	55.29 %

The contribution has been adjusted for interest on the basis that the contribution is paid at the end of each quarter during the fiscal year.

The actual employer contribution for the year ending September 30, 2019 was \$1,875,779, or 147.56% of payroll based on a payroll amount of \$1,271,226. The minimum required contribution was \$1,815,438, which was based on the greater of 142.81% of payroll or \$1,792,079 dollar contribution requirement determined in the October 1, 2017 actuarial valuation report.

Going forward, the dollar amount of the contribution should be considered the minimum required contribution, without regard to the percent of payroll figure. Under the recently adopted Entry Age Normal funding method, the payment on the plan's unfunded actuarial accrued liability (UAAL) makes up the largest portion of the City's contribution requirement and is largely independent of active member payroll. Furthermore, the percent of payroll figure becomes very volatile as the active member population shrinks and therefore not a reliable measure for budgeting purposes.



Revisions in Benefits

There were no changes in benefit provisions since the previous valuation.

Revisions in Actuarial Assumptions and Methods

There were no changes in actuarial assumptions or methods affecting the results of this valuation.

Actuarial Experience

The Plan experienced a net actuarial loss of \$279,853 for the year which means that actual experience was less favorable than expected. The actuarial loss was primarily due to a lower than expected recognized return on the smoothed value of assets (4.97% actual return versus 6.50% expected). The return on the market value was 3.13%. The investment experience loss was partially offset by a net gain from demographic experience which was mainly attributable to more retiree deaths than expected during the year. The net actuarial loss increased the required employer contribution by \$38,003.

Funded Ratio

This year's funded ratio is 86.3% compared to 82.0% last year. The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability.

Cost of Living Adjustment (COLA)

The Plan allows a COLA to be provided on April 1st if there is an actuarial gain for the previous year. Additionally, according to Florida Statute Section 112.61, a COLA tied to experience gains must have an accumulated gain since the provision was adopted. As shown on the following page, there is an accumulated actuarial loss as of October 1, 2019. Therefore, no COLA is payable this year.

Future Benefit Reserve and Health Insurance Subsidy

This provision specifies that 75% of each year's actuarial gain remaining after application of the COLA provision is used for the Reserve and Subsidy. Any addition to the Reserve is to be utilized to subsidize up to one year's payment for retiree health insurance for retirees and survivors. Should the total amount available exceed such health insurance premiums, then the balance shall be held in reserve for future benefits. The reserve available for future benefits as of October 1, 2019 is \$3,326. Since there is an accumulated actuarial loss position as of October 1, 2019, there is no addition to the Reserve this year as specified in Florida Statute Section 112.61.



Cumulative Actuarial Gains (Losses)					
Year Ending 9/30	Balance at Beginning of Year	Interest	Gain (Loss) for Year	COLA	Balance at End of Year
2000	\$ -	\$ -	\$ 381,047	\$ -	\$ 381,047
2001	381,047	30,484	154,000	0	565,531
2002	565,531	45,242	(1,160,988)	0	(550,215)
2003	(550,215)	(44,017)	(964,604)	0	(1,558,836)
2004	(1,558,836)	(124,707)	(352,849)	0	(2,036,392)
2005	(2,036,392)	(162,911)	367,317	0	(1,831,986)
2006	(1,831,986)	(146,559)	(402,903)	0	(2,381,448)
2007	(2,381,448)	(190,516)	(435,322)	0	(3,007,286)
2008	(3,007,286)	(233,065)	(518,471)	0	(3,758,822)
2009	(3,758,822)	(291,309)	(982,710)	0	(5,032,841)
2010	(5,032,841)	(390,045)	(1,760,943)	0	(7,183,829)
2011	(7,183,829)	(538,787)	(1,496,495)	0	(9,219,111)
2012	(9,219,111)	(691,433)	(1,708,476)	0	(11,619,020)
2013	(11,619,020)	(871,427)	(713,717)	0	(13,204,164)
2014	(13,204,164)	(957,302)	624,007	0	(13,537,459)
2015	(13,537,459)	(947,622)	274,016	0	(14,211,065)
2016	(14,211,065)	(959,247)	333,974	0	(14,836,338)
2017	(14,836,338)	(964,362)	227,216	0	(15,573,484)
2018	(15,573,484)	(1,012,276)	(278,097)	0	(16,863,857)
2019	(16,863,857)	(1,096,151)	(279,853)	0	(18,239,861)

Analysis of Change in Employer Contribution

The components of change in the required City contribution excluding the estimated pick-up contributions are as follows:

Contribution last year	\$ 1,356,798
Change in employer normal cost	(30,530)
Change in administrative expense	892
Change in assumptions/methods	-
Experience gain/loss	38,003
Amortization Payment on UAAL*	<u>(155,562)</u>
Contribution this year	\$ 1,209,601

*Mainly attributable to a higher contribution received during the year than calculated in the prior valuation.



Variability of Future Contribution Rates

The actuarial value of assets exceeds the market value of assets by \$234,990 as of the valuation date (see Section C). This difference will be gradually recognized over the next four years causing the required contribution to increase, in the absence of offsetting gains or losses.

Relationship to Market Value

If we were not using an asset smoothing method, the required employer contribution before reflecting the estimated pick-up contribution would have been approximately \$1.24 million and the funded ratio would have been 85.5%.

Conclusion and Recommendations

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.

Please note that this report only reflects experience through the valuation date of October 1, 2019. It does not reflect the recent and still developing impact of COVID-19, which may significantly impact the economic and possibly the demographic experience seen in future valuation reports.



RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements 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 due to changing conditions; 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution shown on page 1 may be considered as a minimum contribution that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.



Plan Maturity Values

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	<u>2019</u>	<u>2018</u>
Ratio of the market value of assets to total payroll	31.96	17.64
Ratio of actuarial accrued liability to payroll	37.38	21.32
Ratio of actives to retirees and beneficiaries	0.13	0.24
Ratio of net cash flow to market value of assets	-1.0%	0.0%

Ratio of Market Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time. The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

Ratio of Actives to Retirees and Beneficiaries

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

Ratio of Net Cash Flow to Market Value of Assets

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.



Additional Risk Assessment

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

SECTION B

VALUATION RESULTS

PARTICIPANT DATA		
	October 1, 2019	October 1, 2018
ACTIVE MEMBERS		
Number	11	19
Covered Annual Payroll*	\$ 767,615	\$ 1,326,360
Average Annual Payroll*	\$ 69,783	\$ 69,808
Average Age	53.0	53.4
Average Past Service	18.5	18.5
Average Age at Hire	34.5	34.9
RETIREES, BENEFICIARIES & DROP		
Number	78	72
Annual Benefits	\$ 1,982,641	\$ 1,647,329
Average Annual Benefit	\$ 25,418	\$ 22,880
Average Age	68.6	69.2
DISABILITY RETIREES		
Number	0	0
Annual Benefits	\$ 0	\$ 0
Average Annual Benefit	\$ 0	\$ 0
Average Age	0.0	0.0
TERMINATED VESTED MEMBERS		
Number	0	0
Annual Benefits	\$ 0	\$ 0
Average Annual Benefit	\$ 0	\$ 0
Average Age	0.0	0.0
METLIFE ANNUITANTS		
Number	5	6
Annual Benefits	\$ 2,562	\$ 3,381
Average Annual Benefit	\$ 512	\$ 564
Average Age	80.1	80.4

* Excludes picked-up member contributions.



ACTUARIALY DETERMINED EMPLOYER CONTRIBUTION (ADEC)		
	October 1, 2019	October 1, 2018
A. Valuation Date	October 1, 2019	October 1, 2018
B. ADEC to Be Paid During Fiscal Year Ending	9/30/2021	9/30/2020
C. Assumed Dates of Employer Contributions	Quarterly	Quarterly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 1,036,133	\$ 1,149,208
E. Employer Normal Cost	127,325	155,832
F. ADEC if Paid on the Valuation Date: D+E	1,163,458	1,305,040
G. ADEC Adjusted for Frequency of Payments	1,209,601	1,356,798
H. ADEC as % of Covered Payroll	157.58 %	102.29 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	0.00 %	0.00 %
J. Covered Payroll for Contribution Year*	767,615	1,326,360
K. Required Employer Contribution (REC) for Contribution Year: H x J As a % of Payroll	1,209,601 157.58 %	1,356,798 102.29 %
L. Estimated Pick-Up Contribution As a % of Payroll	123,432 16.08 %	213,279 16.08 %
M. Total Employer Contribution As a % of Payroll	1,333,033 173.66 %	1,570,077 118.37 %

* Excludes picked-up member contributions.



ACTUARIAL VALUE OF BENEFITS AND ASSETS		
A. Valuation Date	October 1, 2019	October 1, 2018
B. Actuarial Present Value of All Projected Benefits for		
1. Active Members		
a. Service Retirement Benefits	\$ 5,940,042	\$ 10,102,864
b. Vesting Benefits	165,388	169,228
c. Disability Benefits	139,408	223,774
d. Preretirement Death Benefits	41,525	68,156
e. Return of Member Contributions	-	-
f. Total	<u>6,286,363</u>	<u>10,564,022</u>
2. Inactive Members		
a. Service Retirees & Beneficiaries	23,134,975	18,772,626
b. MetLife Annuitants Receiving COLA	23,350	29,606
c. Disability Retirees	-	-
d. Terminated Vested Members	-	-
e. Total	<u>23,158,325</u>	<u>18,802,232</u>
3. Total for All Members	29,444,688	29,366,254
C. Actuarial Accrued (Past Service) Liability under Entry Age Normal	28,694,766	28,279,667
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	27,847,452	27,259,216
E. Plan Assets		
1. Market Value	24,532,981	23,390,994
2. Actuarial Value	24,767,971	23,193,505
F. Actuarial Present Value of Projected Covered Payroll*	3,113,722	4,470,956
G. Actuarial Present Value of Projected Member Contributions*	614,649	882,567

* Excludes picked-up member contributions.



**CALCULATION OF EMPLOYER NORMAL COST
ENTRY AGE NORMAL METHOD**

A. Valuation Date	October 1, 2019	October 1, 2018
B. Normal Cost for		
1. Service Retirement Benefits	\$ 119,344	\$ 206,394
2. Vesting Benefits	26,788	45,832
3. Disability Benefits	13,206	22,832
4. Preretirement Death Benefits	1,460	2,681
5. Return of Member Contributions	29,021	51,741
6. Total for Future Benefits	<u>189,819</u>	<u>329,480</u>
7. Assumed Amount for Administrative Expenses	<u>89,033</u>	<u>88,175</u>
8. Total Normal Cost	278,852	417,655
9. Total as % of Covered Payroll	36.33 %	31.49 %
C. Exected Member Contribution	151,527	261,823
D. Employer Normal Cost: B8-C	127,325	155,832
E. Employer Normal Cost as a % of Covered Payroll	16.59 %	11.75 %

LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)

UAAL Amortization Period and Payments					
Original UAAL			Current UAAL		
Date Established	Source	Amount	Years Remaining	Amount	Payment
10/1/2018	Initial Unfunded Exp. (Gain)/Loss	5,086,162	4	3,646,942	999,580
10/1/2019		279,853	10	279,853	36,553
		5,366,015		3,926,795	1,036,133

Amortization Schedule

The UAAL is being liquidated as a level dollar amount over the number of years remaining in the amortization period. The expected amortization schedule is as follows:

Amortization Schedule	
Year	Expected UAAL
2019	\$ 3,926,795
2020	3,078,555
2021	2,175,180
2022	1,213,087
2023	188,456
2024	161,776
2025	133,363
2026	103,102
2027	70,875
2028	36,553
2029	-



ACTUARIAL GAINS AND LOSSES

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long-term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified. The net actuarial gain (loss) for the past year is computed as follows:

1. Last Year's UAAL	\$ 5,086,162
2. Last Year's Employer Normal Cost	155,832
3. Last Year's Employer Contributions*	1,875,779
4. Interest at the Assumed Rate on:	
a. 1 and 2 for one year	340,730
b. 3 from dates paid	60,003
c. a - b	280,727
5. This Year's Expected UAAL (Before Changes) 1 + 2 - 3 + 4c	3,646,942
6. Change in UAAL Due to Assumption Change	0
7. This Year's Expected UAAL (After Change) 5 + 6	3,646,942
8. This Year's Actual UAAL	3,926,795
9. Net Actuarial Gain (Loss): 7 - 8	(279,853)
10. Gain (Loss) due to Investments	(363,720)
11. Gain (Loss) due to Other Causes	83,867

* Excludes picked-up member contributions.

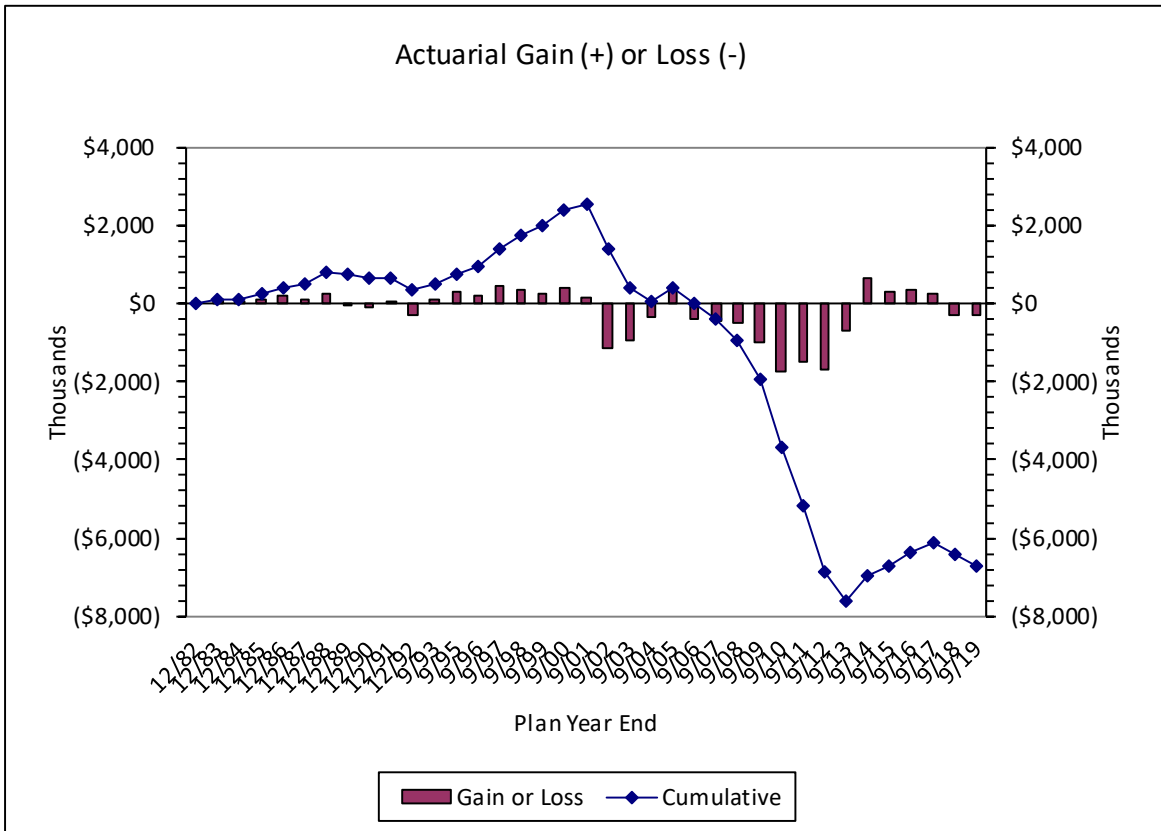


Net actuarial gains in previous years have been as follows:

Year Ended	Gain (Loss)*
12/31/1982	\$ 45,950
12/31/1983	82,583
12/31/1984	22,656
12/31/1985	105,944
12/31/1986	174,840
12/31/1987	104,647
12/31/1988	270,595
12/31/1989	(9,082)
12/31/1990	(117,293)
12/31/1991	5,995
12/31/1992	(300,891)
9/30/1993	120,509
9/30/1995	294,293
9/30/1996	178,684
9/30/1997	440,778
9/30/1998	358,844
9/30/1999	247,349
9/30/2000	381,047
9/30/2001	154,000
9/30/2002	(1,160,988)
9/30/2003	(964,604)
9/30/2004	(352,849)
9/30/2005	367,317
9/30/2006	(402,903)
9/30/2007	(435,322)
9/30/2008	(518,471)
9/30/2009	(982,710)
9/30/2010	(1,760,943)
9/30/2011	(1,496,495)
9/30/2012	(1,708,476)
9/30/2013	(713,717)
9/30/2014	624,007
9/30/2015	274,016
9/30/2016	333,974
9/30/2017	227,216
9/30/2018	(278,097)
9/30/2019	(279,853)

* Based on the Unfunded Accrued Liability under the Entry Age Normal method beginning in FYE 2019.





The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for previous years:

Year Ending	Investment Return		Salary Increases	
	Actual	Assumed	Actual	Assumed
12/31/82	10.1 %	6.0 %	10.0 %	6.0 %
12/31/83	11.7	6.0	7.1	6.0
12/31/84	11.3	6.0	7.7	6.0
12/31/85	12.8	6.0	11.9	6.0
12/31/86	11.6	8.0	13.8 *	8.0
12/31/87	11.3	8.0	2.0	8.0
12/31/88	10.6	8.0	3.5	8.0
12/31/89	9.6	8.0	9.6	8.0
12/31/90	8.6	8.0	8.1	6.0
12/31/91	8.3	8.0	1.6	8.0
12/31/92	4.1 **	8.0	2.7	8.0
12/31/93	10.3	8.0	6.7	7.0
12/31/94	(3.2)	8.0	8.4	7.0
9/30/95 (9 mos.)	19.4	6.0	1.2	5.3
9/30/96	14.5	8.0	9.1	6.5
9/30/97	12.3	8.0	1.5	6.5
9/30/98	11.4	8.0	7.6	6.5
9/30/99	11.8	8.0	5.2	6.5
9/30/00	12.2	8.0	2.9	6.5
9/30/01	8.8	8.0	6.0 ***	6.5
9/30/02	4.2	8.0	10.3	6.5
9/30/03	5.0	8.0	12.6	6.5
9/30/04	5.0	8.0	11.0	6.5
9/30/05	5.0	8.0	6.7	6.5
9/30/06	6.8	8.0	8.0	6.5
9/30/07	9.8	8.0	4.9	6.5
9/30/08	4.0	7.75	3.7	6.5
9/30/09	3.3	7.75	4.5	6.5
9/30/10	3.4	7.75	2.0	6.5
9/30/11	1.8	7.50	2.1	4.0
9/30/12	2.5	7.50	3.9	4.0
9/30/13	6.5	7.50	3.6	4.0
9/30/14	7.2	7.25	4.0	4.0
9/30/15	5.1	7.00	6.2	4.0
9/30/16	6.1	6.75	4.7	4.0
9/30/17	5.7	6.50	5.2	4.0
9/30/18	5.6	6.50	5.7	4.0
9/30/19	5.0	6.50	4.8	4.0
Averages	7.9 %	---	6.1 %	---

* Part of this increase is due to the change in the Plan which allows longevity pay to be included in the definition of compensation.

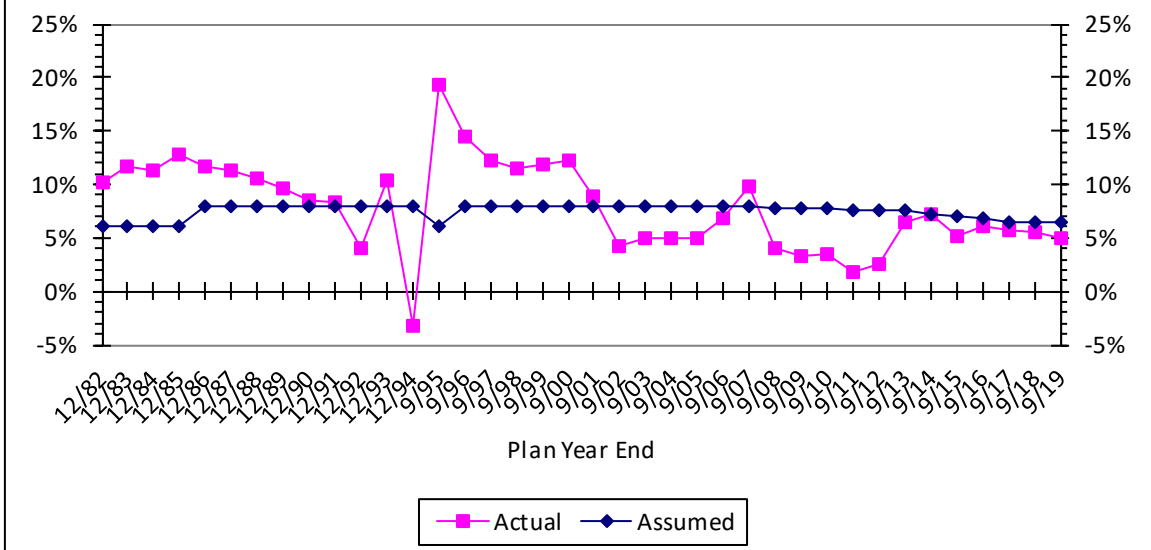
** Investment return net of contract termination charge.

*** Before 16.08% adjustment to accommodate City pick-up of Employee Contribution.

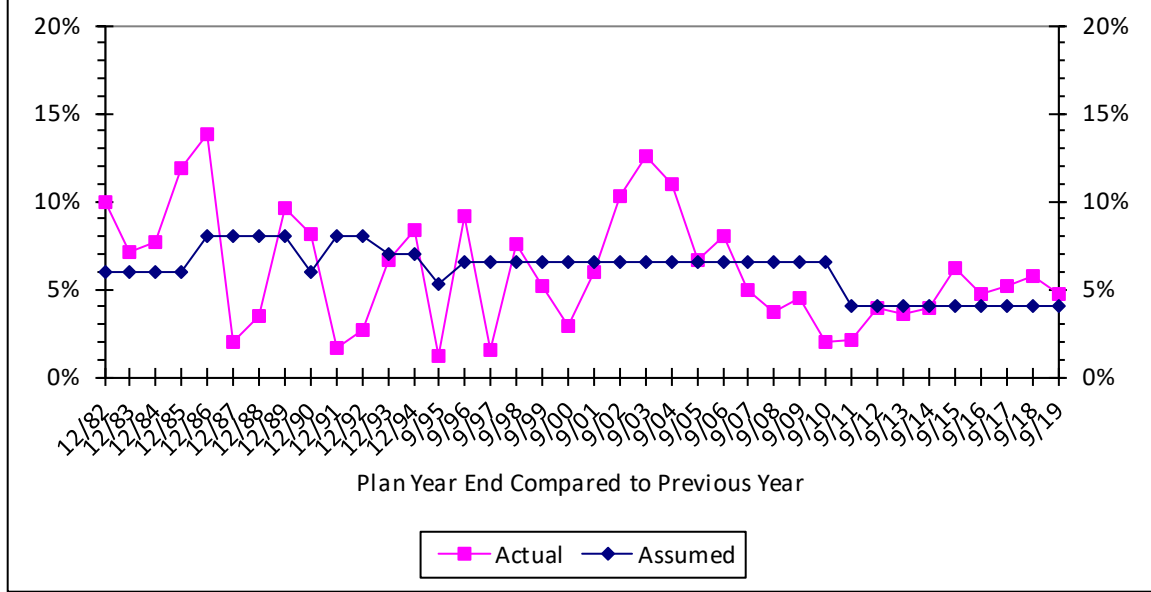
The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuation both at the beginning and the end of each period.



History of Investment Return Based on Actuarial Value of Assets



History of Salary Increases



**Actual (A) Compared to Expected (E) Decrements
Among Active Employees**

Year Ended	Number Added During Year		Service & DROP Retirement		Disability Retirement		Death		Terminations				Active Members End of Year
	A	E	A	E	A	E	A	E	Vested	Other	Totals		
									A	A	A	E	
9/30/2002	22	12	3	3	0	0	1	0	1	7	8	3	88
9/30/2003	14	11	4	5	0	0	0	0	0	7	7	4	91
9/30/2004	14	9	1	3	0	0	0	0	2	6	8	4	96
9/30/2005	14	16	3	3	0	0	0	0	1	12	13	4	94
9/30/2006	3	22	4	6	0	0	0	0	3	15	18	4	75
9/30/2007	0	0	8	5	0	0	0	0	1	9	10	3	57
9/30/2008	0	0	3	4	0	0	0	0	0	2	2	5	52
9/30/2009	1	0	3	6	0	0	0	0	2	2	4	3	46
9/30/2010	0	0	1	6	0	0	0	0	4	0	4	2	41
9/30/2011	0	0	4	6	0	0	0	0	1	1	2	2	35
9/30/2012	0	0	8	7	0	0	0	0	1	0	1	1	26
9/30/2013	0	0	6	3	0	0	0	0	0	0	0	1	20
9/30/2014	0	0	1	3	0	0	0	0	0	0	0	0	19
9/30/2015	0	0	0	4	0	0	0	0	0	0	0	0	19
9/30/2016	0	0	0	3	0	0	0	0	0	0	0	0	19
9/30/2017	0	0	0	4	0	0	0	0	0	0	0	0	19
9/30/2018	0	0	0	4	0	0	0	0	0	0	0	0	19
9/30/2019	0	0	8	6	0	0	0	0	0	0	0	0	11
9/30/2020				4		0		0				0	
18 Yr Totals *	68	70	57	81	0	0	1	0	16	61	77	36	

* Totals are through current Plan Year only.



HISTORY OF VALUATION RESULTS							
	Number of		Covered Annual Payroll	Actuarial Value of Assets	UAAL	Employer Normal Cost	
	Active Members	Inactive Members				Amount	% of Payroll
7/1/1979	44	4	559,377	\$ 475,000	\$ 45,012	\$ 65,798	11.76 %
7/1/1980	42	7	622,630	579,459	32,158	85,733	13.77
1/1/1982	69	7	1,079,029	818,346	127,204	148,422	13.76
1/1/1983	76	10	1,209,664	1,098,812	121,506	166,813	13.79
1/1/1984	78	9	1,283,325	1,425,215	118,752	167,078	13.02
1/1/1985	81	9	1,420,021	1,804,386	108,370	175,871	12.39
1/1/1986	84	11	1,653,696	2,241,856	0	176,711	10.69
1/1/1987	73	13	1,545,522	2,869,714	0	129,527	8.38
1/1/1988	61	13	1,387,389	3,317,190	0	94,714	6.83
1/1/1989	65	17	1,492,103	3,741,592	0	75,619	5.07
1/1/1990	69	17	1,606,917	4,076,506	0	90,586	5.64
1/1/1991	69	20	1,768,297	4,460,675	0	107,306	6.07
1/1/1992	74	22	1,873,207	4,889,339	0	112,683	6.02
1/1/1993	73	9	1,861,258	3,777,092	0	135,781	7.30
1/1/1994	75	11	1,995,496	4,346,149	0	136,625	6.85
10/1/1995	67	16	1,836,957	5,222,544	0	109,063	5.94
10/1/1996	66	20	1,880,843	5,698,218	0	102,126	5.43
10/1/1997	68	23	1,918,586	6,457,079	0	51,397	2.68
10/1/1998	70	21	2,099,936	7,250,071	0	12,998	0.62
10/1/1999	69	21	2,203,724	8,060,310	0	(15,595)	(0.71)
10/1/2000	77	22	2,483,454	9,009,888	0	2,144	0.09
10/1/2001	78	41	2,910,444	9,951,128	0	141,589	4.89
10/1/2002	88	44	3,442,360	10,130,969	0	338,394	9.83
10/1/2003	91	48	3,857,031	10,761,644	0	509,853	13.22
10/1/2004	96	51	4,334,825	11,737,073	0	633,671	14.62
10/1/2005	94	54	4,484,529	12,848,618	0	631,684	14.09
10/1/2006	75	60	3,969,558	14,040,888	0	641,042	16.15
10/1/2007	57	69	3,083,065	16,273,401	0	598,940	19.43
10/1/2008	52	69	2,835,359	16,992,592	0	643,017	22.68
10/1/2009	46	72	2,544,861	17,229,412	0	741,006	29.12
10/1/2010	41	73	2,041,766	17,173,624	0	1,123,013	55.00
10/1/2011	35	74	1,683,322	17,019,273	0	1,254,746	74.54
10/1/2012	26	82	1,319,723	16,876,962	0	1,305,267	98.90
10/1/2013	20	87	1,082,405	17,541,357	0	1,298,471	119.96
10/1/2014	19	84	1,072,451	18,375,975	0	1,293,991	120.66
10/1/2015	19	82	1,139,329	19,144,997	0	1,438,459	126.25
10/1/2016	19	82	1,192,932	20,354,637	0	1,694,637	142.06
10/1/2017	19	81	1,254,910	21,588,416	0	1,723,716	137.36
10/1/2018	19	78	1,326,360	23,193,505	\$5,086,162	155,832	11.75
10/1/2019	11	83	767,615	24,767,971	\$3,926,795	127,325	16.59

Note: beginning with the 10/1/2018 Actuarial Valuation, the funding method was changed from the Aggregate Method to the Entry Age Normal Method.



HISTORY OF UAAL AND FUNDED RATIO UNDER ENTRY AGE NORMAL METHOD

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL As % of Covered Payroll (b - a) / c
1/1/1991	\$ 4,460,675	\$ 3,981,712	\$ (478,963)	112.0 %	\$ 1,768,297	(27.1) %
1/1/1992	4,889,339	4,332,191	(557,148)	112.9	1,873,207	(29.7)
1/1/1993	3,766,088	3,459,808	(306,280)	108.9	1,861,258	(16.5)
1/1/1994	4,346,149	3,985,369	(360,780)	109.1	1,995,496	(18.1)
10/1/1995	5,222,544	4,560,848	(661,696)	114.5	1,836,957	(36.0)
10/1/1996	5,698,218	5,633,428	(64,790)	101.2	1,880,843	(3.4)
10/1/1997	6,457,079	5,947,154	(509,925)	108.6	1,918,586	(26.6)
10/1/1998	7,250,071	7,079,657	(170,414)	102.4	2,099,936	(8.1)
10/1/1999	8,060,310	7,559,210	(501,100)	106.6	2,203,724	(22.7)
10/1/2000	9,241,660	8,582,277	(659,383)	107.7	2,483,454	(26.6)
10/1/2001	9,921,128	10,481,568	530,440	94.9	2,910,444	18.2
10/1/2002	10,130,969	11,784,339	1,653,370	86.0	3,442,360	48.0
10/1/2003	10,761,644	13,516,327	2,754,683	79.6	3,857,031	71.4
10/1/2004	11,737,073	15,151,659	3,414,586	77.5	4,334,825	78.8
10/1/2005	12,848,618	15,859,601	3,010,983	81.0	4,484,529	67.1
10/1/2006	14,040,888	16,992,099	2,951,211	82.6	3,969,558	74.3
10/1/2007	16,273,401	19,090,013	2,816,612	85.2	3,083,065	91.4
10/1/2008	16,992,592	20,136,633	3,144,041	84.4	2,835,359	110.9
10/1/2009	17,229,412	21,042,019	3,812,607	81.9	2,544,861	149.8
10/1/2010	17,173,624	22,177,225	5,003,601	77.4	2,041,766	245.1
10/1/2011	17,019,273	22,610,265	5,590,992	75.3	1,683,322	332.1
10/1/2012	16,876,962	23,326,022	6,449,060	72.4	1,319,723	488.7
10/1/2013	17,541,357	24,293,793	6,752,436	72.2	1,082,405	623.8
10/1/2014	18,375,975	24,531,032	6,155,057	74.9	1,072,451	573.9
10/1/2015	19,144,997	25,581,603	6,436,606	74.8	1,139,329	564.9
10/1/2016	20,354,637	27,220,342	6,865,705	74.8	1,192,932	575.5
10/1/2017	21,588,416	27,814,741	6,226,325	77.6	1,254,910	496.2
10/1/2018	23,193,505	28,279,667	5,086,162	82.0	1,326,360	383.5
10/1/2019	24,767,971	28,694,766	3,926,795	86.3	767,615	511.6



HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS				
Valuation	End of Year To Which Valuation Applies	Required Contributions		Actual Contribution*
		Amount	% of Payroll	
7/7/1979	9/30/1980	\$ 74,932	13.40 %	\$ 84,263
7/1/1980	9/30/1981	95,212	15.29	94,462
1/1/1982	12/31/1982	169,075	15.67	166,983
1/1/1983	12/31/1983	188,419	15.58	182,677
1/1/1984	9/30/1985	193,010	15.04	193,010
1/1/1985	9/30/1986	201,931	14.22	201,931
1/1/1986	9/30/1987	201,144	12.16	201,144
1/1/1987	9/30/1988	141,975	9.19	141,975
1/1/1988	9/30/1989	105,796	7.63	105,796
1/1/1989	9/30/1990	82,886	5.55	82,886
1/1/1990	9/30/1991	99,291	6.18	99,291
1/1/1991	9/30/1992	117,618	6.65	117,618
1/1/1992	9/30/1993	123,512	6.59	123,512
1/1/1993	9/30/1994	148,829	8.00	148,829
1/1/1994	9/30/1995	149,755	7.50	149,755
1/1/1994	9/30/1996	149,212	7.50	149,755
10/1/1995	9/30/1997	123,506	6.72	123,506
10/1/1996	9/30/1998	115,650	6.15	115,650
10/1/1997	9/30/1999	58,204	3.03	58,204
10/1/1998	9/30/2000	14,719	0.70	14,719
10/1/1999	9/30/2001	-	-	-
10/1/2000	9/30/2002	4,959	0.20	4,959
10/1/2001	9/30/2003	161,327	5.54	161,327
10/1/2002	9/30/2004	383,205	11.13	383,205
10/1/2003	9/30/2005	577,369	14.97	577,369
10/1/2004	9/30/2006	691,110	15.33	691,110
10/1/2005	9/30/2007	688,860	14.77	688,860
10/1/2006	9/30/2008	632,162	16.93	632,162
10/1/2007	9/30/2009	547,027	20.34	547,027
10/1/2008	9/30/2010	595,676	23.75	595,676
10/1/2009	9/30/2011	683,091	30.49	683,091
10/1/2010	9/30/2012	999,715	57.51	887,200
10/1/2011	9/30/2013	1,311,950	77.94	961,045
10/1/2012	9/30/2014	1,364,774	103.41	1,123,817
10/1/2013	9/30/2015	1,355,747	125.25	1,387,882
10/1/2014	9/30/2016	1,349,154	125.80	1,538,811
10/1/2015	9/30/2017	1,497,652	131.45	1,608,734
10/1/2016	9/30/2018	1,762,416	147.74	1,894,959
10/1/2017	9/30/2019	1,792,079	142.81	1,875,779
10/1/2018	9/30/2020	1,356,798	102.29	N/A
10/1/2019	9/30/2021	1,209,601	157.58	N/A

* The City began contributing as a level percent of covered payroll in fiscal year ending September 30, 2012. The Funding method was changed from Aggregate to Entry Age Normal as of the October 1, 2018 valuation.



ACTUARIAL ASSUMPTIONS AND COST METHOD

Valuation Methods

Actuarial Cost Method - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using the **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) The annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Financing of the Unfunded Actuarial Accrued Liabilities – Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) dollar amount contributions over a reasonable period of future years.

Actuarial Value of Assets - The Actuarial Value of Assets phase in the difference between the expected return on actuarial value and actual return on market value of assets at the rate of 20% per year. The Actuarial Value of Assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

Valuation Assumptions

The covered group is too small to provide statistically significant experience on which to base certain demographic assumptions. Mortality is based on a commonly used fully generational mortality table and projection scale which are prescribed by Florida Statutes. The investment return assumption was most-recently revised in the October 1, 2016 actuarial valuation.

Economic Assumptions

The investment return rate assumed in the valuation was 6.50% per year, compounded annually (net after investment expenses) per direction from the Board of Trustees based on information from their investment consultant.

The **Inflation Rate** assumed in this valuation was 2.50% per year. The Inflation Rate is defined to be the long-term rate of annual increases in goods and services. This rate was 2.75% in the previous valuation.

The **assumed real rate of return** over inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 6.50% investment return rate translates to an assumed real rate of return over inflation of 4.50%.



The rate of salary increase used for individual members is 4% per year. The assumption reflects merit and/or seniority increases as well as inflation, productivity increases, and other macroeconomic forces. This assumption is used to project a member’s current salary to the salaries upon which benefits will be based.

Demographic Assumptions

The mortality table is the RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates used for Regular Class members of the Florida Retirement System (FRS) in the July 1, 2018 FRS Actuarial Valuation. Florida Statutes Chapter 112.63 mandates the use of the same mortality assumptions used by FRS in either of the two most recently published FRS actuarial valuation reports.

FRS Healthy Post-Retirement Mortality for Regular Class Members

Sample Attained Ages (in 2019)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.55 %	0.23 %	34.88	38.50
55	0.60	0.32	30.26	33.48
60	0.75	0.46	25.59	28.58
65	1.12	0.72	21.06	23.83
70	1.73	1.21	16.79	19.36
75	2.88	2.04	12.91	15.26
80	4.88	3.42	9.54	11.62

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

FRS Healthy Pre-Retirement Mortality for Regular Class Members

Sample Attained Ages (in 2019)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.21 %	0.15 %	35.80	38.85
55	0.35	0.24	30.68	33.70
60	0.61	0.39	25.75	28.68
65	1.06	0.69	21.10	23.86
70	1.73	1.21	16.79	19.36
75	2.88	2.04	12.91	15.26
80	4.88	3.42	9.54	11.62

This assumption is used to measure the probabilities of active members dying prior to retirement.



For disabled lives, the RP-2000 Mortality Table for Disabled Annuitants was used, with a two year set forward for females and a four year setback for males, with no provision being made for future mortality improvements. These are the same rates used for Regular Class members of the Florida Retirement System (FRS) in the July 1, 2018 FRS Actuarial Valuation. Florida Statutes Chapter 112.63 mandates the use of the same mortality assumptions used by FRS in either of the two most recently published FRS actuarial valuation reports.

FRS Disabled Mortality for Regular Class Members

Sample Attained Ages (in 2019)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	2.38 %	1.35 %	20.25	23.74
55	3.03	1.87	17.78	20.46
60	3.67	2.41	15.55	17.43
65	4.35	3.13	13.44	14.58
70	5.22	4.29	11.39	11.96
75	6.58	5.95	9.43	9.65
80	8.70	8.23	7.65	7.66

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Years of Service	% of Active Members Separating Within Next Year
0	22.0%
1	20.0%
2	18.0%
3	16.0%
4	14.0%
5	12.0%
6	10.0%
7	9.0%
8	8.0%
9	7.0%
10+	2.0%

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

Number of Years After First Eligibility for Normal Retirement	Probability of Normal Retirement
0	70 %
1	40 %
2	40 %
3	40 %
4	40 %
5+	100 %

The rate of retirement is 5% for each year of eligibility for early retirement.

Rates of disability among active members (50% of future disabilities are assumed to be service-connected):

Sample Ages	% Becoming Disabled within Next Year
20	0.07 %
25	0.09 %
30	0.11 %
35	0.14 %
40	0.19 %
45	0.30 %
50	0.51 %
55	0.96 %
60	1.66 %

Miscellaneous and Technical Assumptions

<i>Administrative & Investment Expenses</i>	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the average of the expenses over the previous two years. Assumed administrative expenses are added to the Normal Cost.
<i>Benefit Service</i>	Service based on completed months is used to determine the amount of benefit payable.
<i>Decrement Operation</i>	Disability and mortality decrements operate during retirement eligibility.
<i>Decrement Timing</i>	Decrement of all types are assumed to occur at the beginning of the year.
<i>Eligibility Testing</i>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<i>Forfeitures</i>	For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.
<i>Incidence of Contributions</i>	Employer contributions are assumed to be made in equal installments at the end of each quarter. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
<i>Marriage Assumption</i>	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
<i>Assumed Form of Benefit</i>	The 10-year certain and life annuity normal form of benefit is the assumed form of benefit.
<i>Pay Increase Timing</i>	End of fiscal year. This is equivalent to assuming that reported pay represents the rate of pay for the fiscal year beginning on the valuation date.
<i>Service Credit Accruals</i>	It is assumed that members accrue one year of service credit per year.



GLOSSARY

<i>Actuarial Accrued Liability (AAL)</i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<i>Actuarial Cost Method</i>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value (APV)</i>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<i>Actuarial Present Value of Future Benefits (APVFB)</i>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<i>Actuarial Valuation</i>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Funded Ratio and the Actuarially Determined Employer Contribution (ADEC).
<i>Actuarial Value of Assets</i>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined Employer Contribution (ADEC).

<i>Actuarially Determined Employer Contribution (ADEC)</i>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB. The ADEC consists of the Employer Normal Cost and Amortization Payment.
<i>Amortization Method</i>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
<i>Amortization Payment</i>	That portion of the plan contribution or ADEC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<i>Amortization Period</i>	The period used in calculating the Amortization Payment.
<i>Closed Amortization Period</i>	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
<i>Employer Normal Cost</i>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<i>Equivalent Single Amortization Period</i>	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
<i>Experience Gain/Loss</i>	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.



<i>Funded Ratio</i>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<i>GASB</i>	Governmental Accounting Standards Board.
<i>GASB No. 68 and GASB No. 67</i>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Open Amortization Period</i>	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Valuation Date</i>	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.

SECTION C

PENSION FUND INFORMATION

Statement of Plan Assets at Market Value

Item	September 30	
	2019	2018
A. Cash and Cash Equivalents (Operating Cash)	\$ 21,699	\$ 3,092
B. Receivables:		
1. Member Contributions	\$ 15,379	\$ 34,096
2. Employer Contributions	193,914	209,894
3. Investment Income and Other Receivables	95,657	136,330
4. Total Receivables	\$ 304,950	\$ 380,320
C. Investments		
1. Short Term Investments	\$ -	\$ -
2. Domestic and International Equities	14,174,162	14,228,219
3. Domestic and International Fixed Income	5,469,181	5,150,333
4. Mutual Funds	2,185,561	1,009,228
5. Real Estate	-	-
6. Partnership/Joint Venture	2,449,869	3,321,127
7. Total Investments	\$ 24,278,773	\$ 23,708,907
D. Liabilities		
1. Benefits Payable	\$ -	\$ -
2. Accrued Expenses and Other Payables	-	-
3. Total Liabilities	\$ -	\$ -
E. Total Market Value of Assets Available for Benefits	\$ 24,605,422	\$ 24,092,319
F. Reserves		
1. DROP Account Balances	(69,115)	(697,999)
2. Benefit Reserve Fund	(3,326) *	(3,326) *
3. Total Reserves	\$ (72,441)	\$ (701,325)
G. Market Value Net of Reserves	\$ 24,532,981	\$ 23,390,994
H. Allocation of Investments		
1. Short Term Investments	0.0%	0.0%
2. Domestic and International Equities	58.4%	60.0%
3. Domestic and International Fixed Income	22.5%	21.7%
4. Mutual Funds	9.0%	4.3%
5. Real Estate	0.0%	0.0%
6. Partnership/Joint Venture	10.1%	14.0%
7. Total Investments	100.0%	100.0%

* Before addition, if any, due to actuarial valuation results.



Reconciliation of Plan Assets

Item	September 30	
	2019	2018
A. Market Value of Assets at End of Prior Year	\$ 24,092,319	\$ 22,341,071
Post Valuation Adjustment	-	(12,219)
Market Value of Assets as of Beginning of Year	24,092,319	\$ 22,328,852
 B. Revenues and Expenditures		
1. Contributions		
a. Member Contributions	\$ 266,554	\$ 253,205
b. Employer Contributions	1,875,779	1,894,959
c. Purchased Service Credit	-	-
d. Total	\$ 2,142,333	\$ 2,148,164
2. Investment Income		
a. Interest, Dividends, and Other Income	\$ 644,756	\$ 562,598
b. Net Realized/Unrealized Gains/(Losses)*	240,937	1,341,106
c. Investment Expenses	(136,404)	(134,474)
d. Net Investment Income	\$ 749,289	\$ 1,769,230
3. Benefits and Refunds		
a. Regular Monthly Benefits & DROP Distributions	\$ (2,292,994)	\$ (2,061,387)
b. Refunds	-	-
c. Total	\$ (2,292,994)	\$ (2,061,387)
4. Administrative and Miscellaneous Expenses	\$ (85,525)	\$ (92,540)
5. Transfers	\$ -	\$ -
C. Market Value of Assets at End of Year	\$ 24,605,422	\$ 24,092,319
 D. Reserves		
1. DROP Account Balances	\$ (69,115)	\$ (697,999)
2. Benefit Reserve Fund	(3,326) **	(3,326) **
3. Total Reserves	\$ (72,441)	\$ (701,325)
 E. Market Value Net of Reserves	\$ 24,532,981	\$ 23,390,994

* The breakdown between realized and unrealized gains/(losses) was not provided.

** Before addition, if any, due to actuarial valuation results.



Development of Actuarial Value of Assets

Valuation Date – September 30	2018	2019	2020	2021	2022	2023
A. Actuarial Value of Assets Beginning of Year						
A1. Preliminary Valuation Assets Beginning of Year	\$ 22,644,979	\$ 23,894,830				
A2. Post Valuation Adjustment	(12,219)	-				
A3. Actuarial Value of Assets Beginning of Year	22,632,760	23,894,830				
B. Market Value End of Year	24,092,319	24,605,422				
C. Market Value Beginning of Year	22,341,071	24,092,319				
D. Non-Investment/Administrative Net Cash Flow	(5,763)	(236,186)				
E. Investment Income						
E1. Actual Market Total: B-C-D-A2	1,769,230	749,289				
E2. Assumed Rate of Return	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
E3. Assumed Amount of Return	1,471,736	1,545,488				
E4. Amount Subject to Phase-In: E1–E3	297,494	(796,199)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.2 x E4	59,499	(159,240)				
F2. First Prior Year	130,468	59,499	(159,240)			
F3. Second Prior Year	(37,463)	130,468	59,499	(159,240)		
F4. Third Prior Year	(356,985)	(37,463)	130,468	59,499	(159,240)	
F5. Fourth Prior Year	578	(356,984)	(37,464)	130,469	59,498	(159,239)
F6. Total Phase-Ins	(203,903)	(363,720)	(6,737)	30,728	(99,742)	(159,239)
G. Actuarial Value of Assets End of Year						
G1. Preliminary Actuarial Value of Assets End of Year: A3+D+E3+F6	\$ 23,894,830	\$ 24,840,412				
G2. Upper Corridor Limit: 120%*B	28,910,783	29,526,506				
G3. Lower Corridor Limit: 80%*B	19,273,855	19,684,338				
G4. Actuarial Value of Assets End of Year	23,894,830	24,840,412				
G5. DROP Account Balances	(697,999)	(69,115)				
G6. Benefit Reserve Fund	(3,326)	(3,326)				
G7. Final Actuarial Value of Assets End of Year	23,193,505	24,767,971				
H. Difference between Market & Actuarial Value of Assets	197,489	(234,990)				
I. Actuarial Rate of Return	5.60%	4.97%				
J. Market Value Rate of Return	7.92%	3.13%				
K. Ratio of Actuarial Value of Assets to Market Value	99.18%	100.96%				



**Reconciliation of Deferred Retirement
Option Plan (DROP) Accounts**

Value at beginning of year	\$ 697,999
Beginnig of Year Adjustment	0
Payments credited to accounts	52,461
Investment Earnings credited	303
Withdrawals from accounts	<u>(681,648)</u>
Value at end of year	69,115

**Reconciliation of Medical Insurance Subsidy/Future
Benefit Reserve Account**

Value at beginning of year	\$ 3,326
Current year subsidy	0
Value at end of year	3,326

Year Ending	Investment Rate of Return	
	Market Value*	Actuarial Value
12/31/1981	9.5 %	9.5 %
12/31/1982	10.1	10.1
12/31/1983	11.7	11.7
12/31/1984	11.3	11.3
12/31/1985	12.8	12.8
12/31/1986	11.6	11.6
12/31/1987	11.3	11.3
12/31/1988	10.6	10.6
12/31/1989	9.6	9.6
12/31/1990	8.6	8.6
12/31/1991	8.3	8.3
12/31/1992	4.1 **	4.1 **
12/31/1993	10.3	10.3
12/31/1994	(3.2)	(3.2)
9/30/1995 (9 mos.)	19.4	19.4
9/30/1996	14.5	14.5
9/30/1997	23.8	12.3
9/30/1998	6.0	11.4
9/30/1999	11.6	11.8
9/30/2000	12.1	12.2
9/30/2001	(3.0)	8.8
9/30/2002	(4.8)	4.2
9/30/2003	12.5	5.0
9/30/2004	10.4	5.0
9/30/2005	10.5	5.0
9/30/2006	8.0	6.8
9/30/2007	13.4	9.8
9/30/2008	(11.1)	4.0
9/30/2009	3.9	3.3
9/30/2010	8.9	3.4
9/30/2011	0.4	1.8
9/30/2012	14.2	2.5
9/30/2013	10.0	6.5
9/30/2014	7.1	7.2
9/30/2015	(2.2)	5.1
9/30/2016	6.2	6.1
9/30/2017	10.1	5.7
9/30/2018	7.9	5.6
9/30/2019	3.1	5.0

Average Returns:

Last 5 years	4.9 %	5.5 %
Last 10 years	6.5 %	4.9 %
All Years	8.0 %	7.9 %

* Net of investment expenses after 2005.

** Investment return net of contract termination charge.

The above rates are based on financial information reported to the actuary. They may differ from figures that the investment consultant reports, in part because of differences in the handling of administrative and investment expenses, and in part because of differences in the handling of cash flows.



SECTION D

FINANCIAL ACCOUNTING INFORMATION

FASB NO. 35 INFORMATION

A. Valuation Date	October 1, 2019	October 1, 2018
B. Actuarial Present Value of Accumulated Plan Benefits		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 23,158,325	\$ 18,802,232
b. Terminated Vested Members	0	0
c. Other Members	<u>4,689,127</u>	<u>8,456,984</u>
d. Total	27,847,452	27,259,216
2. Non-Vested Benefits	0	0
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	27,847,452	27,259,216
4. Accumulated Contributions of Active Members	2,748,700	4,548,755
C. Changes in the Actuarial Present Value of Accumulated Plan Benefits		
1. Total Value at Beginning of Year	27,259,216	26,758,625
2. Increase (Decrease) During the Period Attributable to:		
a. Plan Amendment and Change in Change in Actuarial Assumptions	0	0
b. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	2,252,043	2,175,450
c. Benefits Paid (Net Basis)	<u>(1,663,807)</u>	<u>(1,674,859)</u>
d. Net Increase	588,236	500,591
3. Total Value at End of Period	27,847,452	27,259,216
D. Market Value of Assets*	24,532,981	23,390,994
E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods		

* Less DROP accounts and Benefit Reserve.



SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

GASB Statement No. 67

Fiscal year ending September 30,	2019	2018	2017	2016	2015	2014
Total pension liability						
Service Cost	\$ 329,480	\$ 311,154	\$ 295,811	\$ 272,229	\$ 245,645	\$ 237,731
Interest on the Total Pension Liability	1,828,705	1,813,975	1,798,696	1,761,138	1,796,159	1,788,524
Benefit Changes	-	-	-	-	-	-
Difference between expected and actual experience	32,010	260,354	185,259	225,302	(648,964)	(46,534)
Assumption Changes	-	-	-	1,148,450	604,864	593,408
Benefit Payments	(2,292,994)	(2,061,387)	(2,058,718)	(1,640,067)	(1,545,461)	(1,643,035)
Refunds	-	-	-	-	-	-
Net Change in Total Pension Liability	(102,799)	324,096	221,048	1,767,052	452,243	930,094
Total Pension Liability - Beginning	28,950,936	28,626,840	28,405,792	26,638,740	26,186,497	25,256,403
Total Pension Liability - Ending (a)	\$ 28,848,137	\$ 28,950,936	\$ 28,626,840	\$ 28,405,792	\$ 26,638,740	\$ 26,186,497
Plan Fiduciary Net Position						
Contributions - Employer (From City)	\$ 1,875,779	\$ 1,894,959	\$ 1,608,734	\$ 1,538,811	\$ 1,387,882	\$ 1,123,817
Contributions - Employer (From State)	-	-	-	-	-	-
Contributions - Non-Employer Contributing Entity	-	-	-	-	-	-
Contributions - Employee (Including Picked-Up Member Contributions)	266,554	253,205	273,005	241,501	218,073	214,524
Net Investment Income	749,289	1,769,230	2,055,278	1,191,779	(425,789)	1,330,113
Benefit Payments	(2,292,994)	(2,061,387)	(2,058,718)	(1,640,067)	(1,545,461)	(1,643,035)
Refunds	-	-	-	-	-	-
Administrative Expense	(85,525)	(92,540)	(83,809)	(84,542)	(77,849)	(90,200)
Other	-	(12,219)	(29,967)	-	-	-
Net Change in Plan Fiduciary Net Position	513,103	1,751,248	1,764,523	1,247,482	(443,144)	935,219
Plan Fiduciary Net Position - Beginning	24,092,319	22,341,071	20,576,548	19,329,066	19,772,210	18,836,991
Plan Fiduciary Net Position - Ending (b)	\$ 24,605,422	\$ 24,092,319	\$ 22,341,071	\$ 20,576,548	\$ 19,329,066	\$ 19,772,210
Net Pension Liability - Ending (a) - (b)	4,242,715	4,858,617	6,285,769	7,829,244	7,309,674	6,414,287
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	85.29 %	83.22 %	78.04 %	72.44 %	72.56 %	75.51 %
Covered Payroll	\$1,271,226	\$1,282,631	\$1,223,738	\$1,223,409	\$1,108,089	\$1,086,708
Net Pension Liability as a Percentage of Covered Payroll	333.75 %	378.80 %	513.65 %	639.95 %	659.66 %	590.25 %



SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY

GASB Statement No. 67

FY Ending September 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2014	\$26,186,497	\$19,772,210	\$ 6,414,287	75.51%	\$ 1,086,708	590.25%
2015	26,638,740	19,329,066	7,309,674	72.56%	1,108,089	659.66%
2016	28,405,792	20,576,548	7,829,244	72.44%	1,223,409	639.95%
2017	28,626,840	22,341,071	6,285,769	78.04%	1,223,738	513.65%
2018	28,950,936	24,092,319	4,858,617	83.22%	1,282,631	378.80%
2019	28,848,137	24,605,422	4,242,715	85.29%	1,271,226	333.75%



NOTES TO SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY

GASB Statement No. 67

Valuation Date: October 1, 2018
Measurement Date: September 30, 2019

Methods and Assumptions Used to Determine Net Pension Liability:

Actuarial Cost Method	Entry Age Normal
Inflation	2.75%
Salary Increases	4.00%
Investment Rate of Return	6.50%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	The healthy post-retirement mortality table is the RP-2000 Mortality Table for Annuitants with future improvements in mortality projected to all future years using Scale BB. For females, the base mortality rates include a 100% white collar adjustment. For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. The preretirement mortality table is the RP-2000 Combined Healthy Participant Mortality Table with the same white and blue collar adjustments and the same mortality improvement projection scale. For disabled retirees, the mortality table is the RP-2000 Mortality Table for Disabled Annuitants, setback 4 years for males and set-forward 2 years for females, with no provision made for future mortality improvements. These are the same rates used for Regular Class members of the Florida Retirement System (FRS) in their Actuarial Valuation as of July 1, 2018, as mandated by Chapter 112.63, Florida Statutes.

Other Information:

Notes See Discussion of Valuation Results in the October 1, 2018 Actuarial Valuation Report dated June 18, 2019.



SCHEDULE OF CONTRIBUTIONS

GASB Statement No. 67

<u>FY Ending September 30,</u>	<u>Actuarially Determined Contribution</u>	<u>Actual Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll</u>	<u>Actual Contribution as a % of Covered Payroll</u>
2014	\$ 1,123,817	\$ 1,123,817	\$ -	\$ 1,086,708	103.41%
2015	1,387,882	1,387,882	-	1,108,089	125.25%
2016	1,538,811	1,538,811	-	1,223,409	125.78%
2017	1,608,604	1,608,734	(130)	1,223,738	131.46%
2018	1,894,959	1,894,959	-	1,282,631	147.74%
2019	1,815,438	1,875,779	(60,341)	1,271,226	147.56%



NOTES TO SCHEDULE OF CONTRIBUTIONS

GASB Statement No. 67

Valuation Date: October 1, 2017

Notes Actuarially determined contribution rates are calculated as of October 1, which is two year(s) prior to the end of the fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Aggregate
Amortization Method	N/A
Remaining Amortization Period	N/A
Asset Valuation Method	5-year smoothed market
Inflation	2.75%
Salary Increases	4.00%
Investment Rate of Return	6.50%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	The healthy post-retirement mortality table is the RP-2000 Mortality Table for annuitants with future improvements in mortality projected to all future years using Scale BB. For females, the base mortality rates include a 100% white collar adjustment. For males, the base mortality rates include a 50% blue collar adjustment and a 50% white collar adjustment. The preretirement mortality table is the RP-2000 Combined Healthy Participant Mortality Table with the same white and blue collar adjustments and the same mortality improvement projection scale. For disabled retirees, the mortality table is the RP-2000 Mortality Table for disabled annuitants, setback 4 years for males and set-forward 2 years for females, with no provision made for future mortality improvements. These are the same rates used for Regular Class members of the Florida Retirement System (FRS) in their Actuarial Valuation as of July 1, 2017, as mandated by Chapter 112.63, Florida Statutes

Other Information:

Notes See Discussion of Valuation Results in the October 1, 2017 Actuarial Valuation Report dated May 1, 2018.

Effective October 1, 2018 the actuarial cost method was changed from the Aggregate Method to the Individual Entry-Age Normal Cost Method.



SINGLE DISCOUNT RATE

GASB Statement No. 67

A single discount rate of 6.50% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 6.50%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments (6.50%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 6.50%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

1% Decrease	Current Single Discount	1% Increase
5.50%	Rate Assumption	7.50%
6.50%	6.50%	7.50%
\$7,247,774	\$4,242,715	\$1,707,540



SECTION E

MISCELLANEOUS INFORMATION

RECONCILIATION OF MEMBERSHIP DATA		
	From 10/1/18 To 10/1/19	From 10/1/17 To 10/1/18
A. Active Members		
1. Number Included in Last Valuation	19	19
2. New Members Included in Current Valuation	0	0
3. Non-Vested Employment Terminations	0	0
4. Vested Employment Terminations	0	0
5. DROP Participation	(4)	0
6. Service Retirements*	(4)	0
7. Disability Retirements	0	0
8. Deaths	0	0
9. Other - Rehired Members	0	0
10. Number Included in This Valuation	<u>11</u>	<u>19</u>
B. Terminated Vested Members		
1. Number Included in Last Valuation	0	0
2. Additions from Active Members	0	0
3. Lump Sum Payments/Refund of Contributions	0	0
4. Payments Commenced	0	0
5. Deaths	0	0
6. Other - Data Adjustments	0	0
7. Number Included in This Valuation	<u>0</u>	<u>0</u>
C. DROP Plan Members		
1. Number Included in Last Valuation	1	4
2. Additions from Active Members	4	0
3. Retirements	(1)	(3)
4. Deaths Resulting in No Further Payments	0	0
5. Other	0	0
6. Number Included in This Valuation	<u>4</u>	<u>1</u>
D. Service Retirees, Disability Retirees and Beneficiaries		
1. Number Included in Last Valuation	77	77
2. Additions from Active Members*	4	0
3. Additions from Terminated Vested Members	0	0
4. Additions from DROP Plan	1	3
5. Deaths Resulting in No Further Payments	(3)	(3)
6. Deaths Resulting in New Survivor Benefits	0	0
7. End of Certain Period/No Further Payments	0	0
8. Travelers Annuitants receiving COLA from Plan	0	0
9. Other - Rehired Members	0	0
10. Number Included in This Valuation	<u>79</u>	<u>77</u>

*Includes 1 member who terminated employment after meeting Normal Retirement eligibility but has not yet commenced benefit payments.



ACTIVE PARTICIPANT SCATTER

Age Group	Years of Service to Valuation Date											Totals	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30+		
25-29 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44 NO.	0	0	0	0	0	0	0	1	0	0	0	0	1
TOT PAY	0	0	0	0	0	0	0	78,925	0	0	0	0	78,925
AVG PAY	0	0	0	0	0	0	0	78,925	0	0	0	0	78,925
45-49 NO.	0	0	0	0	0	0	0	2	1	0	0	0	3
TOT PAY	0	0	0	0	0	0	0	166,374	70,479	0	0	0	236,853
AVG PAY	0	0	0	0	0	0	0	83,187	70,479	0	0	0	78,951
50-54 NO.	0	0	0	0	0	0	0	2	1	0	0	0	3
TOT PAY	0	0	0	0	0	0	0	143,077	61,918	0	0	0	204,995
AVG PAY	0	0	0	0	0	0	0	71,539	61,918	0	0	0	68,332
55-59 NO.	0	0	0	0	0	0	0	1	0	0	0	0	1
TOT PAY	0	0	0	0	0	0	0	68,267	0	0	0	0	68,267
AVG PAY	0	0	0	0	0	0	0	68,267	0	0	0	0	68,267
60-64 NO.	0	0	0	0	0	0	0	2	0	0	0	0	2
TOT PAY	0	0	0	0	0	0	0	118,392	0	0	0	0	118,392
AVG PAY	0	0	0	0	0	0	0	59,196	0	0	0	0	59,196
65 & Up NO.	0	0	0	0	0	0	0	1	0	0	0	0	1
TOT PAY	0	0	0	0	0	0	0	60,183	0	0	0	0	60,183
AVG PAY	0	0	0	0	0	0	0	60,183	0	0	0	0	60,183
TOT NO.	0	0	0	0	0	0	0	9	2	0	0	0	11
TOT AMT	0	0	0	0	0	0	0	635,218	132,397	0	0	0	767,615
AVG AMT	0	0	0	0	0	0	0	70,580	66,199	0	0	0	69,783



INACTIVE PARTICIPANT SCATTER

Age Group	Terminated Vested		Disabled		Retired		Deceased with Beneficiary	
	Number	Total Benefits	Number	Total Benefits	Number	Total Benefits	Number	Total Benefits
Under 20	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-
50-54	-	-	-	-	2	140,002	-	-
55-59	-	-	-	-	8	346,217	-	-
60-64	-	-	-	-	19	622,097	1	9,185
65-69	-	-	-	-	20	430,841	-	-
70-74	-	-	-	-	9	156,179	2	1,307
75-79	-	-	-	-	9	128,022	2	43,255
80-84	-	-	-	-	4	40,721	1	14,887
85-89	-	-	-	-	5	46,679	-	-
90-94	-	-	-	-	1	5,811	-	-
95-99	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-
Total	-	-	-	-	77	1,916,569	6	68,634
Average Age		N/A		N/A		68		75

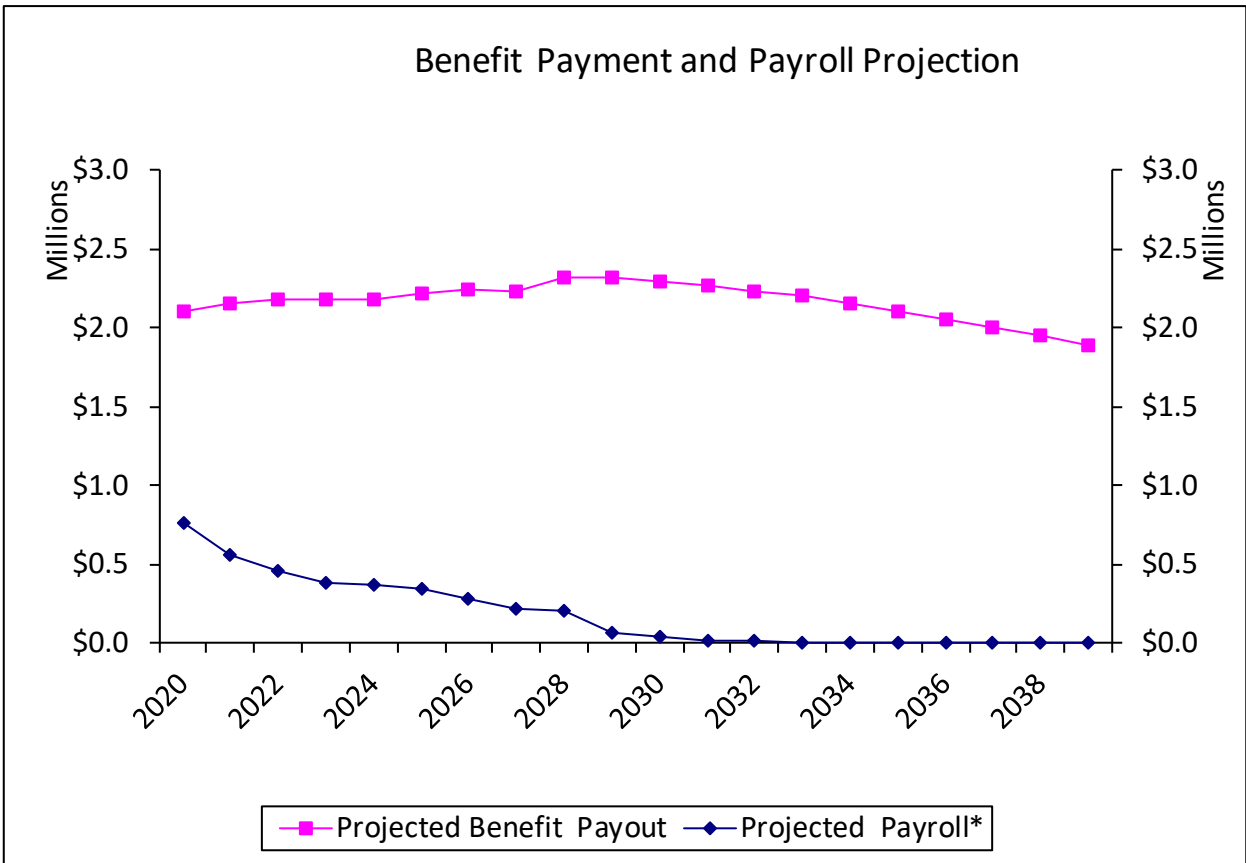
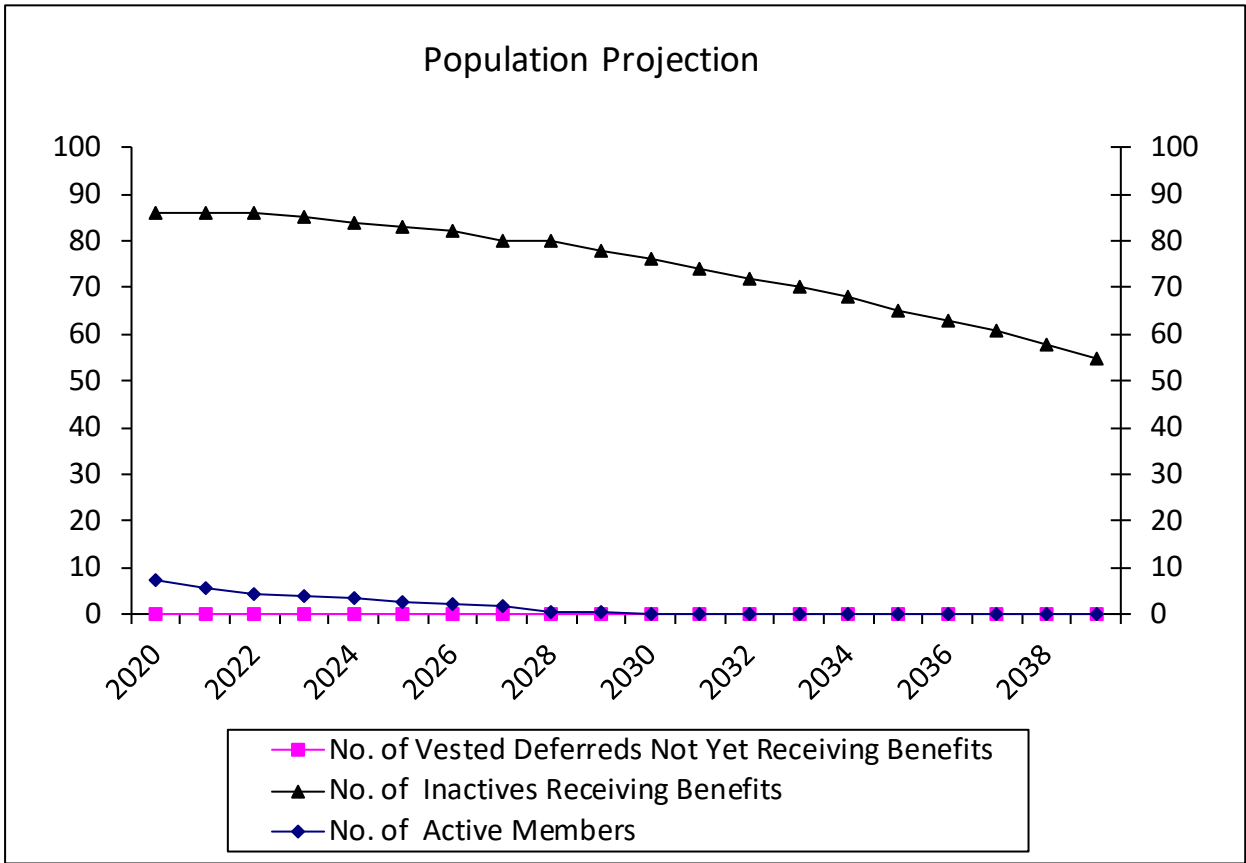


PROJECTED PAYROLL AND RETIREMENT BENEFITS					
<u>Fiscal</u> <u>Year End</u>	<u>No. of</u> <u>Active</u> <u>Members</u>	<u>Projected</u> <u>Payroll*</u>	<u>No. of Vested</u> <u>Deferreds Not</u> <u>Yet Receiving</u> <u>Benefits</u>	<u>No. of</u> <u>Inactives</u> <u>Receiving</u> <u>Benefits</u>	<u>Projected</u> <u>Benefit</u> <u>Payout</u>
2020	7	\$767,615	0	86	\$2,101,339
2021	6	562,364	0	86	2,156,059
2022	5	465,487	0	86	2,186,750
2023	4	390,295	0	85	2,185,468
2024	4	367,348	0	84	2,181,504
2025	3	345,903	0	83	2,220,777
2026	2	284,506	0	82	2,247,061
2027	2	223,809	0	80	2,236,210
2028	1	206,549	0	80	2,325,250
2029	0	68,697	0	78	2,318,363
2030	0	42,074	0	76	2,295,578
2031	0	23,720	0	74	2,266,960
2032	0	12,852	0	72	2,230,785
2033	0	7,820	0	70	2,202,756
2034	0	0	0	68	2,157,168
2035	0	0	0	65	2,109,329
2036	0	0	0	63	2,059,100
2037	0	0	0	61	2,006,446
2038	0	0	0	58	1,951,409
2039	0	0	0	55	1,893,999

*Excludes picked-up member contributions.

These projections are based on assumptions involving all decrements. Actual payroll and benefit payouts may differ from the above estimates depending upon actual experience of the plan. However, since the projections are recomputed each valuation date, there is an automatic correction to the extent actual experience varies from expected experience.





SECTION F

SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

A. Ordinances

The Plan was established under the Code of Ordinances for the City of Dania Beach, Florida, Chapter 18, Article III, and was most recently amended under Ordinance No. 2014-001 passed and adopted on January 28, 2014. The Plan is also governed by certain provisions of Part VII, Chapter 112, Florida Statutes (F.S.) and the Internal Revenue Code.

B. Effective Date

July 1, 1969; amended plan Effective Date June 23, 1981.

C. Plan Year

October 1 through September 30.

D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a single employer plan.

E. Eligibility Requirements

Full-time general employees or elected officials hired or elected before March 1, 2006, excluding those who chose to join the Florida Retirement System. Each general employee or elected official hired or elected on or after March 1, 2006 will become members of the Florida Retirement System.

F. Credited Service

Credited Service is measured as the total number of years and completed months from the date of employment to the date of termination or retirement. Vacations and other paid leaves of absence are included. Unpaid leaves of absence are not included.

G. Earnings/Compensation

Basic pay including longevity pay, but excluding bonuses, overtime or any other non-regular payments such as unused sick leave and vacation time. Member contributions which are picked up by the Employer are added to each year's pensionable compensation.

H. Average Monthly Earnings (AME)

The average of Earnings during the last year of employment and two other years as selected by the member (i.e., 3 year average) out of the last 10 years preceding termination or retirement.



I. Normal Retirement

Eligibility: A member may retire on the first day of the month coincident with or next following the earlier of:
(1) age 50 with 25 years of Credited Service, or
(2) age 55 with 6 years of Credited Service.

Benefit: 3.0% of AME multiplied by years of Credited Service.

Normal Form of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 50 with 10 years of Credited Service (8 years for elected officials).

Benefit: The Normal Retirement Benefit is reduced by 6.0% for each year by which the Early Retirement date precedes what would have been the member's Normal Retirement date.

Normal Form of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

K. Delayed Retirement

Same as Normal Retirement taking into account compensation earned and service credited until the date of actual retirement.



L. Service Connected Disability

- Eligibility:** Any member who becomes totally and permanently disabled being incapacitated from rendering regular and continuous duties as an employee for a period of 6 months or more and who qualifies for Social Security disability benefits as a result from an act occurring in the performance of service for the City is immediately eligible for a disability benefit.
- Benefit:** 66 2/3% of current salary on the date of disability less the sum of Social Security and Worker's Compensation benefits received for the same disability.
- Normal Form of Benefit:** Benefits begin on the first day of the 7th month following the date of disability and are payable until death or recovery from disability.
- COLA:** On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

M. Non-Service Connected Disability

- Eligibility:** Any member who becomes totally and permanently disabled being incapacitated from rendering regular and continuous duties as an employee for a period of 6 months or more and who qualifies for Social Security disability benefits is immediately eligible for a disability benefit.
- Benefit:** The member's accrued Normal Retirement Benefit taking into account compensation earned and service credited until the date of disability.
- Normal Form of Benefit:** Benefits begin on the first day of the 7th month following the date of disability and are payable until death, recovery from disability, or the attainment of Normal Retirement age.
- COLA:** On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.



N. Death in the Line of Duty

Eligibility: In the event of death prior to retirement, there shall be a death benefit payable for any member or former member who is eligible for an Early, Normal, or Delayed Retirement benefit.

Benefit: Benefit will be paid to the participant's beneficiary as though retirement occurred on the date of death and a Joint and Survivor annuity were chosen.

If the member had 8 years of Credited Service but was not eligible for retirement, their beneficiary can elect to leave the member's accumulated contributions in the fund and receive a survivor benefit. The benefit will be based on 100% Joint or Survivor annuity option starting at either the participant's Normal Retirement date or starting immediately with actuarial reduction.

Normal Form of Benefit: Payable for the life of the beneficiary.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

O. Other Pre-Retirement Death

Eligibility: In the event of death prior to retirement, there shall be a death benefit payable for any member or former member who is eligible for an Early, Normal, or Delayed Retirement benefit.

Benefit: Benefit will be paid to the participant's beneficiary as though retirement occurred on the date of death and a Joint and Survivor annuity were chosen.

If the member had 8 years of Credited Service but was not eligible for retirement, their beneficiary can elect to leave the member's accumulated contributions in the fund and receive a survivor benefit. The benefit will be based on 100% Joint or Survivor annuity option starting at either the participant's Normal Retirement date or starting immediately with actuarial reduction.

Normal Form of Benefit: Payable for the life of the beneficiary.

COLA: On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.



P. Post Retirement Death

Benefit determined by the form of benefit elected upon retirement.

Q. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a Single Life Annuity option or the 50%, 66 2/3, 75% or 100% Joint and Survivor options.

R. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 6 years of Credited Service (See vesting table below).

Vesting is determined in accordance with the following table.

YEARS OF CREDITED SERVICE	% OF NORMAL RETIREMENT BENEFITS
Less Than 6	0%
6 or more	100%

Benefit: The member's accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the member's Normal Retirement date. Alternatively, members may elect to receive an actuarially reduced Early Retirement Benefit any time after age 50.

Plan members with less than 6 years of Credited Service will receive a refund of the member's accumulated contributions with interest.

Normal Form of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: On April 1 of each year following commencement of benefits, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

S. Refunds

- Eligibility:** All members terminating employment with less than 6 years of Credited Service are eligible. Optionally, vested members (those with 6 or more years of credited service) may elect a refund in lieu of the vested benefits otherwise due.
- Benefit:** Refund of the member's contributions with interest. Interest is currently credited at a rate of 5.0% per annum.

T. Member Contributions

19.74% of Earnings. 16.08% of this amount is picked up by the Employer.

U. Employer Contributions

Any additional amount determined by the actuary needed to fund the plan properly according to State laws.

V. Cost of Living Increases

On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

W. Benefit Reserve and Health Insurance Subsidy

75% of each year's actuarial gain in excess of that used for the COLA would be used first to pay one-third of health insurance premiums for those whose benefits are in pay status. If any money remains after the first use, it would be used to pay the remaining two-thirds of health insurance premiums for those whose benefits are in pay status. If there is still money remaining, it will be accrued in a "future benefit reserve account" to be used to provide future benefits for retirees and survivors.

X. Deferred Retirement Option Plan

- Eligibility:** Plan members are eligible for the DROP upon meeting the eligibility requirements for Early or Normal Retirement.
- Members who meet eligibility must submit a written election to participate in the DROP.
- Benefit:** The member's Credited Service and AME are frozen upon entry into the DROP. The monthly retirement benefit as described under Early or Normal Retirement is calculated based upon the frozen Credited Service and AME.



Maximum

DROP Period: The maximum DROP period is 5 years for those who enter the DROP on or after March 1, 2006.

Interest

Credited: The member's DROP account is credited or debited quarterly at a rate equal to the actual net rate of investment return realized by the Plan for that quarter.

Normal Form

of Benefit: Options include a lump sum, annual payments, or equal monthly installments.

COLA:

On April 1 of each year, a cost of living increase is given based on the actuarial gain realized in the prior fiscal year ending September 30 and upon the percentage of such gain attributable to retirees as a percentage of the total number of participants in the fund. If there is no actuarial gain in the prior fiscal year, then there is no cost of living adjustment the following April 1. The annual increase is limited to the annual increase in the Consumer Price Index for the preceding calendar year.

Y. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Dania Beach Retirement Plan for General Employees liability if continued beyond the availability of funding by the current funding source.