FLA
FREIMAN LITTLE ACTUARIES

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City of Rockledge

General Employees Retirement Plan

Actuarial Valuation as of October 1, 2019

APPROVED BY GENERAL EMPLOYEES' RETIREMENT BOARD AT ITS QUARTERLY MEETING ON FEBRUARY 21, 2020.

CITY OF ROCKLEDGE, FLORIDA - OLDEST CITY IN BREVARD -

February 14, 2020

REPORT TO DETERMINE MINIMUM FUNDING REQUIREMENTS
FOR THE PLAN AND FISCAL YEAR
BEGINNING OCTOBER 1, 2020

FLA
FREIMAN LITTLE ACTUARIES

February 14, 2020

Board of Trustees
City of Rockledge General Employees Retirement Plan
Rockledge, Florida

RE: Actuarial Valuation as of October 1, 2019

Dear Board Members:

We are pleased to present the actuarial valuation as of October 1, 2019 for the City of Rockledge General Employees Retirement Plan (the Plan). This report provides a review of the current funded status of the Plan, establishes the minimum funding requirement for the fiscal year ending September 30, 2021, and provides an analysis of experience since the last valuation. In addition to providing the summary and derivation of actuarial findings, this report describes the data, assumptions, and methods used to create these results.

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; 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.

Statement by Enrolled Actuary:

"This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the 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 taken into account in the valuation."

We look forward to the presentation of these results to you in person and we are always available to answer any questions you may have.

Sincerely,

Chad M. Little, ASA, EA
Partner, Consulting Actuary
Enrollment Number 17-6619

Paula C. Freiman, ASA, EA
Partner, Consulting Actuary
Enrollment Number 17-5796

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Section 1 Board Summary

A summary of the key valuation findings are compared with the results of the prior valuation below.

Summary of Principal Valuation Results

Minimum Funding Requirements

Fiscal Year Ending September 30,	**2020**	**2021**
Minimum Funding Requirement		
As a Dollar Amount	$720,642	$724,655
As a Percent of Valuation Payroll	15.55%	14.85%

The $724,655 minimum funding requirement for fiscal 2021 must be deposited on December 15, 2020.

Funded Status

Valuation as of October 1,	**2018**	**2019**
Accrued Liability (AL)	$19,133,405	$19,766,820
Actuarial Value of Assets	(16,384,954)	(17,469,725)
Unfunded Accrued Liability (UAL)	$2,748,451	$2,297,095
Funded Percentage	85.64%	88.38%

Key Assumptions

Valuation as of October 1,	**2018**	**2019**
Assumed Investment Return, Net of Expenses	7.80%	7.80%
Salary Increase Assumption	6.00%	6.00%

Summary of Significant Events

Determination of the funded status of the Plan and minimum funding requirements are based on funding policy, participant data, asset information, Plan provisions, actuarial methods and assumptions. Any significant events associated with these items are discussed in the following.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the Plan Administrator and the City. This information includes, but is not limited to, statutory provisions, employee census, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

Participant Data

During the year active membership decreased from 137 to 133 members due to 25 new hires, 22 non-vested terminations, 3 vested terminations, 3 retirements, and 1 death.

The following provides a summary comparing the actual and expected pay increases for the 12 month periods ending on the date specified.

Year Ended September	Individual Actual	Individual Expected	Total Payroll Increase
2019	6.6%	6.0%	5.3%
2018	6.6%	6.0%	0.0%
2017	5.1%	6.0%	7.0%
2016	5.4%	6.0%	5.7%
2015	4.2%	6.0%	0.8%
2014	3.6%	6.0%	1.8%
2013	5.0%	6.0%	(3.9%)
2012	(4.9%)	6.0%	(1.2%)
2011	3.4%	6.0%	(5.2%)
2010	0.6%	6.0%	(2.8%)
Average:	3.5%	6.0%	0.7%

Pay increases were more than expected with the actual average pay increase amongst continuing actives at 6.6% in comparison to the 6.0% salary increase assumption. In addition, total payroll increased 0.7% on average over the last 10 years. Florida Statutes 112.64(5)(a) requires that the payroll growth assumption not exceed the average payroll growth for the prior ten years. This requirement is met in that the Unfunded Accrued Liability is amortized on a level dollar basis.

Overall, there was a demographic gain primarily due to retirement and termination experience along with the death of a retiree offset by pay increases more than expected. Should a pattern of consistent gains or losses develop, assumptions will be adjusted as needed. We recommend a review of actuarial experience be conducted.

Assets

The investment return on the Market Value of Assets was 3.62% and the return on the Actuarial Value of Assets was 7.24%, each in comparison to the 7.8% net investment return assumption. Because the return on the Actuarial Value of Assets was less than the net assumed investment return, there was an actuarial investment loss.

Note only a portion of actual investment gains or losses are recognized in the current year Actuarial Value of Assets with the remainder recognized over the next four years. Even if all assumptions are realized in the next several years, the Plan will experience changes in the required contribution rate until prior gains and losses are fully recognized.

The table below provides a comparison of the investment return on the Market Value of Assets and the Actuarial Value of Assets in comparison to the investment return assumed in the valuation of the Plan.

12-Month Period Ended September 30,	**% Market Return**	**% Actuarial Return**	**% Assumed Return**
2019	3.62 %	7.24 %	7.80 %
2018	9.84 %	8.39 %	7.90 %
2017	12.21 %	7.74 %	7.90 %
2016	9.31 %	7.34 %	8.00 %
2015	(0.03)%	5.94 %	8.00 %
2014	9.69 %	7.45 %	8.00 %
2013	8.79 %	6.11 %	8.00 %
2012	12.07 %	1.82 %	8.00 %
2011	(2.70)%	1.37 %	8.00 %
2010	8.64 %	2.86 %	8.00 %
Average	7.03 %	5.60 %	7.96 %

Investment returns less than the assumed rate of return result in increased annual minimum required contributions in the future.

Plan Provisions

The following changes in Plan provisions were adopted after the October 1, 2019 actuarial valuation date.

Ordinance No. 1775-2020 adopted January 15, 2020 provided for a revision to employee contribution crediting from 5% interest accumulation to 1.5% effective October 1, 2019. This change in Plan provisions has been reflected in this October 1, 2019 actuarial valuation of the Plan. Whereas the accrued liability decreased due to this change in Plan provisions, there was a small increase to minimum funding requirements.

There is no material impact associated with the Plan restatement adopted December 4, 2019 with Ordinance No. 1764-2019 where spousal consent is no longer required for optional form of benefit selection. Additionally, there is no material impact associated with Ordinance No. 1766-2019 adopted December 4, 2019 which provides for staggered trustee terms.

The impact of the change in Plan provisions may be found in the reconciliation of the funded status and minimum funding requirements found at the end of Section 2 of this report. See “Reconciliations” in the table of contents.

Assumptions and Methods

There were no changes in Assumptions or Methods since the prior valuation of the Plan.

This October 1, 2019 actuarial valuation has been performed using a 7.8% net assumed rate of investment return assumption as directed by the Board of Trustees. The 7.8% net assumed return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. The prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. As discussed with the Board we recommend lowering the net assumed return.

Assessment and Disclosure of Risk

As described in Actuarial Standard of Practice No. 51 (ASOP 51), this section is meant to address the assessment and disclosure of risk in a pension funding valuation. This is not meant to be a comprehensive summary but should provide information regarding risks related to this plan. Additional historical information provided in this report also contain relevant information regarding asset size, asset mix, pay increases, benefits and contributions. This information can be used to understand the changes over time to identify trends.

Note that ASOP 51 defines risk as "The potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from actuarially assumed experience…." The following provides examples of potential risk.

Investment Risk: As noted previously, investment returns less than the assumed rate of return result in increased annual minimum required contributions payable in a subsequent year.

Interest Rate Risk: Interest rates are used to discount the value of benefits. If the long-term expectation of returns is higher or lower than the assumed net investment return, the assumed net investment return should be adjusted. When the assumed net investment return is increased the estimated liability is decreased. When the assumed net investment return is decreased the estimated liability is increased. The chart below shows what the funded status of the plan is on a market value of assets basis after changing the net assumed return by 1% or 2%.

	Funded Status on Market Value of Assets Basis					
As of 10/1	**2% Decrease**	**1% Decrease**	**Valuation Net Assumed Return**	**1% Increase**	**2% Increase**	**Valuation Net Assumed Return Assumption**
2019	69.70%	78.48%	87.71%	97.34%	107.34%	7.80%
2018	69.74%	78.61%	87.95%	97.71%	107.84%	7.80%
2017	66.15%	74.61%	83.53%	92.87%	102.61%	7.90%
2016		71.16%	79.21%	87.54%		7.90%
2015		72.21%	79.88%	87.84%		8.00%
2014		75.71%	84.10%	92.86%		8.00%

Longevity and Other Demographic Risks: The estimated liability of the Plan is based on assumptions related to mortality, retirement, disability and termination. To the extent that Plan experience is different than these assumptions the gains and losses affect future required contributions and estimated liability.

Contribution Risk: The possibility that the plan sponsor does not make contributions to the plan according to the funding policy.

Intergenerational equity risk: Intergenerational equity is the concept that resources do not belong to a specific generation and they must be preserved for future generations. One way to alleviate this risk is to pay for benefits over the average future service of the group receiving benefits. Members may feel there are inequities when one is paying more than others, receiving less than others, or paying more than others in relation to what they are receiving.

Plan maturity measures may help understand the risks associated with the plan. As the Plan matures, the ratio of the Market Value of Assets to the Covered Payroll increases. As this ratio gets larger, the impact of asset volatility has a larger effect on the volatility of the Minimum Required Contribution as a percentage of pay.

Year Ending 9/30	Market Value of Assets	Payroll	Asset Volatility Ratio
2019	$17,336,944	$4,957,236	3.5
2018	16,827,700	4,766,306	3.5
2017	15,304,541	4,573,157	3.3
2016	14,412,104	4,387,506	3.3
2015	13,177,393	3,864,720	3.4
2014	12,863,211	4,094,475	3.1
2013	11,561,929	4,073,876	2.8
2012	10,534,827	4,130,994	2.6
2011	9,211,284	4,491,153	2.1
2010	9,255,489	4,387,013	2.1
2009	8,259,764	4,382,880	1.9
2008	7,794,927	4,280,250	1.8
2007	8,707,729	4,319,908	2.0
2006	7,799,445	3,812,673	2.0
2005	7,556,027	3,404,809	2.2

Another measure of a pension plan's maturity is the Ratio of Benefit Payments to Contributions. Over the life of a pension plan, it is expected that the majority of the benefits will be paid for by returns rather than contributions. For this to happen, as a plan matures, the plan will eventually pay out more in benefits than it receives in contributions. It is important to understand the magnitude of this difference so that steps can be taken, if necessary, to manage cash flows going forward. The table below provides the Ratio of Benefit Payments to Contributions. Note that there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

Year Ending 9/30	**Benefit Payments**	**Contributions**	**Ratio of Benefit Payments to Contributions**
2019	1,085,673	1,053,726	1.03
2018	961,938	1,037,831	0.93
2017	1,727,630	955,922	1.81
2016	753,910	816,496	0.92
2015	429,686	812,038	0.53
2014	438,263	687,902	0.64
2013	430,909	592,604	0.73
2012	369,733	597,398	0.62
2011	331,636	593,378	0.56
2010	285,862	598,474	0.48
2009	326,637	604,644	0.54
2008	372,445	581,872	0.64
2007	353,667	573,603	0.62
2006	889,447	497,856	1.79
2005	437,598	493,101	0.89

When looking at Net Cash Flows, it is useful to understand the relative size of the cash flows in comparison to the Market Value of Assets. The following table provides the ratio of the Net Cash Flows divided by the Market Value of Assets. As mentioned previously, there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

Year Ending 9/30	Contributions	Disbursements	Assets	Net Cash Flow Divided by Assets
2019	1,053,726	1,151,067	17,336,944	(0.01)
2018	1,037,831	1,022,033	16,827,700	0.00
2017	955,922	1,773,916	15,304,541	(0.05)
2016	816,496	809,085	14,412,104	0.00
2015	812,038	494,147	13,177,393	0.02
2014	687,902	515,662	12,863,211	0.01
2013	592,604	496,127	11,561,929	0.01
2012	597,398	398,023	10,534,827	0.02
2011	593,378	384,780	9,211,284	0.02
2010	598,474	328,340	9,255,489	0.03
2009	604,644	364,408	8,259,764	0.03
2008	581,872	413,350	7,794,927	0.02
2007	573,603	397,216	8,707,729	0.02
2006	497,856	915,190	7,799,445	(0.05)
2005	493,101	455,052	7,556,027	0.01

Section 2 Results Derivation

In this section, the assets and liabilities of the Plan are shown in detail. Assets and liabilities are then compared to determine the funded status and minimum funding requirements.

While asset information is based on the fair market value of assets, along with any techniques used to smooth out market fluctuations, liabilities are determined through a combination of the benefit provisions, participant census data which contains information for the members who will receive those benefits, and the methods and assumptions used with regard to how benefits will be paid to members. A summary of participant data, an outline of the benefit provisions, and a description of the methods and assumptions used in this valuation are described in Section 4.

Financial Information

Over the life of the Plan, the majority of assets are typically generated from investment return. In this section, we describe how the assets of the Plan are invested, show how the actuarial value of assets is derived, and review the investment results since the prior valuation.

Investment Allocation

Valuation Date	**October 1, 2018**		**October 1, 2019**	
Stocks	$12,929,750	76%	$12,159,194	70%
Fixed Income Securities	2,965,078	18%	3,188,296	18%
Cash and Cash Equivalents	118,875	1%	281,558	2%
Real Estate	799,495	5%	1,688,704	10%
Net Receivables	14,502	0%	19,192	0%
Fair Market Value of Assets	$16,827,700	100%	$17,336,944	100%

Reconciliation of Market Value of Assets

Year Ending September 30,			2018	2019
1.	**Market Value of Assets at Beginning of Year**		$15,304,541	$16,827,700
2.	Contributions			
	a.	Employer	$751,853	$756,292
	b.	Plan Members	285,978	297,434
	c.	Total Contributions	$1,037,831	$1,053,726
3.	Investment Income			
	a.	Realized Appreciation (Depreciation)	$(19,161)	$10,857
	b.	Unrealized Appreciation (Depreciation)	1,159,018	282,401
	c.	Interest plus Dividends	408,490	362,927
	d.	Investment Expense	(40,986)	(49,600)
	e.	Net Investment Income	$1,507,361	$606,585
4.	Deductions			
	a.	Benefits	$(769,600)	$(825,005)
	b.	Refund of Contributions	(109,150)	(137,946)
	c.	DROP Balance Disbursement	(83,188)	(122,722)
	d.	Administrative Expense	(60,095)	(65,394)
	e.	Total Deductions	$(1,022,033)	$(1,151,067)
5.	Net Increase		$1,523,159	$509,244
6.	**Market Value of Assets at End of Year**		$16,827,700	$17,336,944
7.	**Return on Market Value of Assets = 2I / (A + B – I)**		9.84 %	3.62 %

Development of Actuarial Value of Assets

The Market Value of Assets is adjusted to recognize investment earnings greater than (or less than) the assumed net investment return over a five-year period. The Actuarial Value of Assets is no more than 120% and no less than 80% of the Market Value of Assets.

1.	Market Value of Assets as of October 1, 2019				$17,336,944
2.	Phase-In Gains (Losses) Over Five Year Period				
		Year Ending	Original Gain (Loss)	Percent Unrecognized	Unrecognized Gain (Loss)
	a.	September 30, 2019	$(718,125)	80%	$(574,500)
	b.	September 30, 2018	280,156	60%	168,094
	c.	September 30, 2017	597,654	40%	239,062
	d.	September 30, 2016	172,813	20%	34,563
	e.	Total			$(132,781)
3.	Preliminary Actuarial Value of Assets				$17,469,725
4.	Corridor Around Market Value				
	a.	Minimum = 80% of Market Value of Assets			$13,869,555
	b.	Maximum = 120% of Market Value of Assets			$20,804,333
	c.	Corridor Adjustment to Preliminary Actuarial Value			$0
5.	Actuarial Value of Assets as of October 1, 2019				$17,469,725

Development of Historical Gain or Loss on Market Value of Assets

Fiscal Year End		2019	2018
1.	Market Value of Assets - Beginning of Year	$16,827,700	$15,304,541
2.	Expected Interest on Assets	1,312,561	1,209,059
3.	Contributions	1,053,726	1,037,831
4.	Benefit Payments + Administrative Expenses	(1,151,067)	(1,022,033)
5.	Interest on items (3) and (4)	12,149	18,146
6.	Expected Value of Assets at End of Year	$18,055,069	$16,547,544
7.	Market Value of Assets - End of Year	$17,336,944	$16,827,700
8.	Gain (Loss) for Plan Year = (7) - (6)	$(718,125)	$280,156

Fiscal Year End		2017	2016
1.	Market Value of Assets - Beginning of Year	$14,412,104	$13,177,393
2.	Expected Interest on Assets	1,138,556	1,054,191
3.	Contributions	955,922	816,496
4.	Benefit Payments + Administrative Expenses	(1,773,916)	(809,085)
5.	Interest on items (3) and (4)	(25,779)	296
6.	Expected Value of Assets at End of Year	$14,706,887	$14,239,291
7.	Market Value of Assets - End of Year	$15,304,541	$14,412,104
8.	Gain (Loss) for Plan Year = (7) - (6)	$597,654	$172,813

Historical Asset Values

Year Ending September 30,	Actuarial Value of Assets	Fair Market Value of Assets	% Market Return	% Actuarial Return	% Assumed Return
2019	$17,469,725	$17,336,944	3.62 %	7.24 %	7.80 %
2018	16,384,954	16,827,700	9.84 %	8.39 %	7.90 %
2017	15,101,483	15,304,541	12.21 %	7.74 %	7.90 %
2016	14,805,468	14,412,104	9.31 %	7.34 %	8.00 %
2015	13,786,010	13,177,393	(0.03)%	5.94 %	8.00 %
2014	12,703,666	12,863,211	9.69 %	7.45 %	8.00 %
2013	11,657,004	11,561,929	8.79 %	6.11 %	8.00 %
2012	10,892,465	10,534,827	12.07 %	1.82 %	8.00 %
2011	10,500,528	9,211,284	(2.70)%	1.37 %	8.00 %
2010	10,151,142	9,255,489	8.64 %	2.86 %	8.00 %

Historical Contribution Amounts

Year Ending September 30,	Employer	Members	Total
2019	$756,292	$297,434	$1,053,726
2018	751,853	285,978	1,037,831
2017	680,623	275,299	955,922
2016	561,465	255,031	816,496
2015	562,320	249,718	812,038
2014	443,171	244,731	687,902
2013	346,097	246,507	592,604
2012	337,661	259,737	597,398
2011	319,511	273,867	593,378
2010	322,259	276,215	598,474

Historical Deductions from Fund

Year Ending September 30,	Benefits	Refunds	Administrative Expense	Total
2019	$947,727	$137,946	$65,394	$1,151,067
2018	852,788	109,150	60,095	1,022,033
2017	1,693,784	33,846	46,286	1,773,916
2016	689,192	64,718	55,175	809,085
2015	352,136	77,550	64,461	494,147
2014	358,103	80,160	77,399	515,662
2013	370,923	59,986	65,218	496,127
2012	279,100	90,633	28,290	398,023
2011	256,780	74,856	53,144	384,780
2010	261,109	24,753	42,478	328,340

Present Value of Benefits

Valuation as of October 1,			2018	2019
1.	**Active Members**			
	a.	Retirement Benefits	$12,579,847	$12,794,220
	b.	Deferred Benefits	943,527	919,752
	c.	Survivor Benefits	539,840	541,108
	d.	Disability Retirement	548,203	548,186
	e.	Total for Active Members	$14,611,417	$14,803,266
2.	**Inactive Members**			
	a.	Retired Members	$8,400,708	$8,712,534
	b.	Terminated members	83,542	278,533
	c.	Beneficiaries	623,944	730,319
	d.	Disability Retirement	99,984	98,221
	e.	Total for Inactive Members	$9,208,178	$9,819,607
3.	**Present Value of Benefits**		$23,819,595	$24,622,873

Accrued Liability

Valuation as of October 1,			2018	2019
1.	**Active Members**			
	a.	Retirement Benefits	$9,267,368	$9,348,375
	b.	Deferred Benefits	125,259	81,035
	c.	Survivor Benefits	281,087	275,078
	d.	Disability Retirement	251,513	242,725
	e.	Total for Active Members	$9,925,227	$9,947,213
2.	**Inactive Members**			
	a.	Retired Members	$8,400,708	$8,712,534
	b.	Terminated members	83,542	278,533
	c.	Beneficiaries	623,944	730,319
	d.	Disability Retirement	99,984	98,221
	e.	Total for Inactive Members	$9,208,178	$9,819,607
3.	**Accrued Liability**		$19,133,405	$19,766,820

Normal Cost

Valuation as of October 1,			2018	2019
1.	**Preliminary Normal Cost**			
	a.	Retirement Benefits	$433,647	$467,416
	b.	Deferred Benefits	98,806	106,855
	c.	Survivor Benefits	35,164	37,512
	d.	Disability Retirement	38,315	40,812
	e.	Total	$605,932	$652,595
2.	**Total Normal Cost**			
	a.	Preliminary Normal Cost	$605,932	$652,595
	b.	Estimated Administrative Expense	60,095	65,394
	c.	Total Normal Cost	$666,027	$717,989
	d.	Total Normal Cost as a Percent of Pay	14.37%	14.72%
3.	**Employer Normal Cost**			
	a.	Preliminary Normal Cost	$605,932	
	b.	Actual Administrative Expense	65,394	
	c.	Actual Employee Contributions	(297,434)	
	d.	Employer Normal Cost	$373,892	
4.	**Valuation Payroll**		$4,633,879	$4,878,269

Unfunded Accrued Liability

Unfunded Accrued Liability

1.	Accrued Liability	$19,766,820
2.	Actuarial Value of Assets	(17,469,725)
3.	Unfunded Accrued Liability	$2,297,095

Determination of Expected Unfunded Accrued Liability

1.	Unfunded Accrued Liability as of Prior Year	$2,748,451
2.	Interest for a full year on (1)	214,379
3.	Employer Normal Cost (Including Administrative Expenses) Prior Yr.	373,892
4.	Interest for a full year on (3)	29,164
5.	City Contribution	(756,292)
6.	Interest on Contribution for Time on Deposit	(45,441)
7.	Change in Plan, Methods or Assumptions	(45,645)
8.	Expected Unfunded Accrued Liability	$2,518,508

Calculation of (Gain) or Loss

1.	Actual Unfunded Accrued Liability	$2,297,095
2.	Expected Unfunded Accrued Liability	2,518,508
3.	Total (Gain) or Loss	$(221,413)

Reconciliation of Unfunded Accrued Liability

1.	Unfunded Accrued Liability as of Prior Year	$2,748,451
2.	Total Change in Unfunded Accrued Liability	
	a. Expected Change in Unfunded Accrued Liability	$(184,298)
	b. Change in Plan, Methods or Assumptions	(45,645)
	c. Change Due to (Gain) or Loss	
	i. Portion of (Gain) / Loss Due to Investments	$108,063
	ii. Portion of (Gain) / Loss Due to Demographic Experience	(329,476)
	iii. Total (Gain) or Loss	$(221,413)
	d. Total Change in Unfunded Accrued Liability	$(451,356)
3.	Unfunded Accrued Liability	$2,297,095

Determination of Investment Gain (Loss)

1.	Actuarial Value of Assets - Beginning of Year	$16,384,954
2.	Expected Interest on Beginning Value	1,278,026
3.	Contributions (Employer)	756,292
4.	Contributions (Employee)	297,434
5.	Benefit Payments	(1,085,673)
6.	Administrative Expenses	(65,394)
7.	Interest on Contributions and Disbursements	12,149
8.	Expected Value of Assets at End of Year	$17,577,788
9.	Actuarial Value of Assets - End of Year	$17,469,725
10.	Gain (Loss) for Plan Year = (9) - (8)	$(108,063)
11.	Actuarial Investment Income	$1,182,112
12.	Return on Actuarial Value of Assets	7.24 %

Amortization of Unfunded Liability

The Unfunded Actuarial Accrued Liability is being amortized as a level dollar amount based on the net assumed return assumption. Changes in the Unfunded Actuarial Accrued Liability due to plan changes, assumption changes, method changes, or gains and losses are all amortized over a 25-year period.

Amortization Bases

	10/1	Source	Original Balance	Remaining Balance	Adjusted Remaining Balance	Years Remain	Level $ Amort
1.	2005	Method Change	$(387,558)	$(358,123)	$(339,741)	16	$(35,152)
2.	2006	Actuarial Loss	106,045	98,592	93,532	17	9,385
3.	2007	Actuarial Loss	131,907	122,986	116,674	18	11,389
4.	2008	Actuarial Loss	1,566,340	1,460,249	1,385,301	19	131,891
5.	2008	Method Change	5,097	4,751	4,507	19	429
6.	2008	Method Change	(1,333,766)	(1,243,426)	(1,179,607)	19	(112,308)
7.	2009	Actuarial Loss	317,686	295,363	280,203	20	26,082
8.	2010	Actuarial Loss	30,104	27,848	26,419	21	2,409
9.	2010	Plan Change	394,556	364,986	346,253	21	31,575
10.	2011	Actuarial Loss	548,021	503,327	477,494	22	42,738
11.	2012	Actuarial Gain	(66,804)	(60,801)	(57,680)	23	(5,076)
12.	2012	Asmp/Method Chg	810,340	737,530	699,676	23	61,569
13.	2013	Actuarial Loss	327,128	297,053	281,807	24	24,416
14.	2013	Assumption Chg	21,426	19,455	18,456	24	1,599
15.	2014	Actuarial Loss	40,289	36,681	34,798	25	2,972
16.	2014	Assumption Chg	22,355	20,353	19,308	25	1,649
17.	2015	Actuarial Loss	132,333	119,487	113,354	21	10,337
18.	2015	Assumption Chg	23,782	21,472	20,370	21	1,858
19.	2016	Actuarial Gain	(120,869)	(111,509)	(105,786)	22	(9,468)
20.	2016	Assumption Chg	840,843	775,729	735,914	22	65,868
21.	2017	Actuarial Gain	(133,464)	(126,030)	(119,561)	23	(10,521)
22.	2017	Assumption Chg	32,034	30,250	28,697	23	2,525
23.	2018	Actuarial Gain	(544,634)	(536,964)	(509,404)	24	(44,135)
24.	2018	Assumption Chg	206,529	203,620	193,169	24	16,736
25.	2019	Actuarial Gain	(221,413)	(221,413)	(221,413)	25	(18,913)
26.	2019	Plan Change	(45,645)	(45,645)	(45,645)	25	(3,899)
Scheduled Amortization Payment							$205,955
Outstanding Bases				$2,435,821	$2,297,095		

Projected Unfunded Accrued Liability and Amortization Payments

Plan Year Beginning October 1	Total Outstanding Bases	Total Amortization Payment
2019	$2,297,095	$205,955
2020	2,254,249	205,955
2021	2,208,061	205,955
2022	2,158,270	205,956
2023	2,104,595	205,958
2024	2,046,730	205,955
2025	1,984,356	205,957
2026	1,917,114	205,955
2027	1,844,629	205,957
2028	1,766,489	205,955
2029	1,682,255	205,957
2030	1,591,450	205,955
2031	1,493,563	205,958
2032	1,388,038	205,955
2033	1,274,286	205,962
2034	1,151,653	205,956
2035	1,019,461	241,109
2036	839,064	231,724
2037	654,712	220,336
2038	468,257	200,323
2039	288,833	174,241
2040	123,529	128,063
2041	(4,887)	28,925
2042	(36,449)	(19,572)
2043	(18,193)	(18,193)
2044	0	0

Actions Taken to Reduce Unfunded Actuarial Accrued Liability

The required contributions calculated each year include a payment for the amortization of the unfunded actuarial accrued liability. This payment is designed to reduce the unfunded actuarial accrued liability in an orderly fashion over the next 25 years.

Minimum Funding Requirements

Determination of Required Contribution

Valuation as of October 1, Funding for Year Ending September 30,	2018 2020	2019 2021
1. Minimum Required Contribution		
a. Total Normal Cost	$666,027	$717,989
b. Amortization of Unfunded Accrued Liability	241,145	205,955
c. Beginning of Year Contribution	$907,172	$923,944
d. Interest	91,503	93,407
e. Minimum Required Contribution	$998,675	$1,017,351
2. Contribution by Source - $ Amount		
a. City Policy Contribution	$720,642	$724,655
b. Expected Member Contributions	278,033	292,696
c. Total	$998,675	$1,017,351
3. Contribution by Source - % Pay		
a. City Policy Contribution	15.55 %	14.85 %
b. Expected Member Contributions	6.00 %	6.00 %
c. Total	21.55 %	20.85 %
4. Valuation Payroll	$4,633,879	$4,878,269
5. Key Assumptions		
a. Net Assumed Rate of Return	7.80 %	7.80 %
b. Assumed Valuation Payroll Increase	0.00 %	0.00 %

Note: The $720,642 minimum funding requirement for fiscal 2020 <u>must</u> be deposited on December 15, 2019. The $724,655 minimum funding requirement for fiscal 2021 <u>must</u> be deposited on December 15, 2020.

Reconciliations

Reconciliation of Funded Status

	Unfunded Accrued Liability	Funded Percentage	Change in Unfunded Accrued Liability	Change in Funded Percentage
As of Prior Valuation	**$2,748,451**	**85.64 %**		
Changes in due to:				
Normal Operation of Plan	2,564,153	87.27 %	$(184,298)	1.63 %
Investment Experience	2,672,216	86.73 %	108,063	(0.54)%
Demographic Experience	2,342,740	88.18 %	(329,476)	1.45 %
Plan Change	2,297,095	88.38 %	(45,645)	0.20 %
Total Changes			$(451,356)	2.74 %
As of Current Valuation	**$2,297,095**	**88.38 %**		

Reconciliation of City Minimum Funding Requirement

	Dollar Amount	% of Pay
City Required Contribution for Fiscal 2020	**$720,642**	**15.55 %**
Changes in Contribution due to:		
Normal Operation of Plan	$0	0.00 %
Change in Expenses	5,804	0.13 %
Investment Experience	10,101	0.21 %
Demographic Experience	(13,218)	(1.06)%
Plan Change	1,326	0.02 %
Total Changes	$4,013	(0.70)%
City Required Contribution for Fiscal 2021	**$724,655**	**14.85 %**

Note: The City required contributions shown above must be deposited on December 15.

Section 3 Accounting Information

Information Required by GASB 67/68

A supplemental report provides information under the Governmental Accounting Standards Board No. 67/68.

Statement of Accumulated Plan Benefits

The present value of accrued benefits is an estimate of the liability for all benefits accrued to date.

Valuation as of October 1,	2018	2019
1. Actuarial present value of accumulated benefits		
a. Participants currently receiving benefits	$9,124,636	$9,541,074
b. Other participants	6,400,461	6,661,161
c. Vested participants	$15,525,097	$16,202,235
d. Nonvested participants	1,322,488	1,371,271
e. Total	$16,847,585	$17,573,506
2. Change in actuarial present value of accumulated benefits		
a. Actuarial present value of accumulated benefits beginning of year		$16,847,585
b. Increase (decrease) during year attributable to:		
i. Plan amendment		$(7,752)
ii. Change in assumptions or methods		0
iii. Increase for interest and probability of payment due to decrease in discount period and benefits accrued		1,819,346
iv. Benefits paid		(1,085,673)
v. Other		0
vi. Net increase (decrease)		$725,921
c. Actuarial present value of accumulated benefits end of year		$17,573,506

Other Disclosures Required by the State of Florida

Valuation as of October 1,	2018	2019
Present value of active member:		
Future salaries (attained age)	$37,470,583	$38,024,984
Future contributions (attained age)	$2,248,235	$2,281,499
Balance of contributions with interest for actives	$3,146,602	$3,164,327

Required Disclosure Under F.S. 112.664(1)

As required under F.S. Section 112.664(1) we have produced the following information:

(a) Total pension liability calculated based on mortality used in one of the last two Florida Retirement System (FRS) valuations. This actuarial valuation assumes mortality as used in the July 1, 2016, 2017 and 2018 actuarial valuations for NOT special risk members of FRS.

(b) Total pension liability calculated using an assumed interest rate that is 200 basis points lower than that assumed in the valuation of the Plan.

(c) Determination of the number of months or years for which the current market value of assets is adequate to sustain the payment of expected retirement benefits.

(d) Recommended contribution to the Plan using the most recent valuation and the contributions necessary prepared pursuant to (a) and (b) stated as a dollar amount and % of payroll.

	2% Decrease (5.8%)	Current Discount Rate (7.8%)	2% Increase (9.8%)
Total pension liability	$24,873,304	$19,766,820	$16,152,181
Plan fiduciary net position	(17,336,944)	(17,336,944)	(17,336,944)
Net pension liability	$7,536,360	$2,429,876	$(1,184,763)
Plan fiduciary net position as a percentage of the total pension liability	69.70%	87.71%	107.34%
Years of benefit payments:			
Expected for current members:	100	100	100
Paid for with current assets:	15.13	18.74	27.50
City Contribution Requirement, Plus Expected Employee Contributions			
Dollar Amount	$1,704,016	$1,017,351	$595,768
Percent of Payroll	34.93%	20.85%	12.21%

Required Disclosure Under F.S. 112.664(2)(b)2.

F.S. Section 112.664(2)(b)2. - For the previous five years, beginning with 2013, a side-by-side comparison of the plan's assumed rate of return compared to the actual rate of return, as well as the percentages of cash, equity, bond and alternative investments in the plan portfolio.

Year Ending September 30,	**2019**	**2018**	**2017**	**2016**	**2015**
Assumed rate of return	7.8%	7.9%	7.9%	8.0%	8.0%
Actual rate of return	3.6%	9.8%	12.2%	9.3%	0.0%
Percentages of assets in:					
Cash	2%	1%	2%	1%	2%
Equity	70%	76%	74%	74%	68%
Bond	18%	18%	19%	19%	28%
Alternative	10%	5%	5%	6%	2%
Total	100%	100%	100%	100%	100%

Section 4 Supplementary Information

Summary of Participant Data

Valuation as of October 1,	**2018**	**2019**
Active Participants		
Number	137	133
Average Age	46.0	46.6
Average Credited Service	8.5	8.4
Percent Male	69.3	69.2
Average Valuation Salary	$36,716	$39,037
Total Valuation Salary	$5,030,149	$5,191,859
Payroll Covered in Valuation	$4,633,879	$4,878,269
Terminated with Rights to Deferred Benefits		
Number	5	7
Average Age	40.6	48.9
Percent Male	40.0	57.1
Average Monthly Benefit	$809	$927
Retirements (DROP and Service Retirees)		
Number	43	45
Average Age	67.9	68.7
Percent Male	74.4	71.1
Average Monthly Benefit	$1,531	$1,547
Total of DROP Account Balances September 30	$302,029	$249,573
Beneficiaries		
Number	7	9
Average Age	69.5	64.7
Percent Male	14.3	11.1
Average Monthly Benefit	$734	$660
Disability Retirements		
Number	3	3
Average Age	67.4	68.4
Percent Male	100.0	100.0
Average Monthly Benefit	$383	$383

Number of Active Members by Age and Service as of October 1, 2019

	Service									
Age	< 1	< 5	< 10	< 15	< 20	< 25	< 30	< 35	< 40	Total
< 20	1									1
< 25	7	1	1							9
< 30	2	5	1	1						9
< 35	5	6	1	1						13
< 40		5	6	1						12
< 45	4	6		2	3					15
< 50		3		3	2					8
< 55	2	2	2	2	3	3	2			16
< 60	4	9	2	4	3	2	1	1	2	28
< 65		2	8	4		2		1		17
65+		1	2		2					5
Total	25	40	23	18	13	7	3	2	2	133

Active Valuation Pay by Age and Service as of October 1, 2019

	Service									
Age	< 1	< 5	< 10	< 15	< 20	< 25	< 30	< 35	<40	Total
< 20	33,000									33,000
< 25	31,634	28,496	29,120							31,006
< 30	31,060	29,332	47,741	45,111						33,515
< 35	30,992	34,416	36,785	38,480						33,594
< 40		31,423	36,644	30,784						33,980
< 45	33,372	46,678		45,400	40,164					41,656
< 50		37,061		43,520	54,064					43,734
< 55	28,080	29,286	53,693	38,006	42,201	41,912	57,007			41,530
< 60	35,441	36,638	32,760	39,083	36,637	46,256	45,760	54,184	82,824	41,478
< 65		37,396	32,577	36,021		54,055		45,822		37,260
65+		47,741	54,630		71,341					59,937
Total	32,117	36,022	38,100	39,565	46,755	46,622	53,258	50,003	82,824	39,037

Reconciliation of Plan Participants

	Active	Retired	DROP	Deferred Vested	Disabled	Survivor	Total
October 1, 2018	**137**	**39**	**4**	**5**	**3**	**7**	**195**
Retired	(3)	4	(1)				0
Terminated Vested	(3)			3			0
Terminated Vested Paid Refund				(1)			(1)
Nonvested Termination	(22)						(22)
Death	(1)	(1)				2	0
Additions	25						25
October 1, 2019	**133**	**42**	**3**	**7**	**3**	**9**	**197**

Outline of Plan Provisions

Plan Type: Single-employer Defined Benefit Pension Plan

Legal Authority: The Plan was established and is amended by local ordinance.

Effective Date: November 1, 1969. Plan amendment and restatement adopted December 4, 2019 effective December 14, 2019 with Ordinance No. 1764-2019. Subsequently amended by Ordinance No. 1766-2019 and 1775-2020.

Plan Administrator: The Board of Trustees

Board Composition: Two members are elected from among the general employees of the City, who are members of the plan, two city residents appointed by the Commission and one person is chosen by a majority of the previous four members.

Funding Requirements: Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

Plan Year: The 12-month period from October 1st to the next September 30th.

Member: Full-time General or Waste Water employees (excluding the Mayor, City Council, City Attorney and assistants) participate in the Plan immediately upon hire. A one-time option is provided for a person initially hired as a City Manager to irrevocably opt out of the Plan. The option must be exercised before the commencement date of employment with the City.

Credited Service: Employee service computed in years and completed calendar months.

Vesting: Members become 100% vested after earning 10 years of Credited Service.

Basic Compensation: Total compensation actually paid in a Plan Year by the City including tax deferred compensation and excluding overtime, commissions, bonuses, expense allowances and payment for accrued annual leave, accrued sick leave, and accrued compensatory leave.

Employee Contributions: 6.0% of Basic Compensation. Members receive benefits under the Plan no less than the value of their accumulated Employee Contributions with interest.

Members who terminate non-vested are entitled to the return of Employee Contributions accumulated with interest to the first day of the month in which termination occurs. The interest rate for accumulation was 5% from October 1, 1984 until October 1, 2019 when it was revised to 1.5%. Prior to October 1, 1984 a different interest rate was credited to Employee Contributions.

Average Monthly Compensation: The sum of the highest five successive Plan Years of Basic Compensation in the last ten Plan Years of employment divided by 60.

Normal Retirement Date: The first day of the month coincident with or next following attainment of age 65 and 10 years of Credited Service.

Accrued Benefit: The amount of monthly retirement income payable at the Normal Retirement Date is determined according to the following formula:

2.75% x Average Monthly Compensation x Credited Service up to 30 years

The Accrued Benefit is payable in the form of a life only annuity. However, any member with a spouse shall receive an actuarially equivalent 50% joint and survivor annuity unless the member chooses another Optional Form of Retirement Income.

Members who terminate employment 100% vested prior the Normal Retirement Date are eligible to receive their Accrued Benefit once the age requirements for the Normal Retirement Date are met, provided Employee Contributions remain in the Plan.

Late Retirement Benefit: The amount of monthly retirement income payable to a Member who retires after the Normal Retirement Date is the greater of (i) the monthly retirement income which can be provided by the single-sum value of the Accrued Benefit payable if he had retired at the Normal Retirement Date, accumulated with interest from the Normal Retirement Date to the date the monthly retirement income payments are to commence, and (ii) the monthly retirement income computed as described for the Accrued Benefit using Credited Service and Average Monthly Compensation determined at the Member's actual retirement date.

Early Retirement Date: The first day of the month coincident with or next following the date an employee retires prior to the Normal Retirement Date after attainment of age 55 and 10 years of Credited Service.

Early Retirement Benefit: The Accrued Benefit is reduced for commencement earlier than the Normal Retirement Date at a rate of 5/9% for the first 60 months and 5/18% thereafter. However, the minimum monthly retirement income for a Member who retires before the Normal Retirement Date with 25 years Credited Service is 60% x Average Monthly Compensation.

Members who terminate employment 100% vested prior to reaching the Early Retirement Date age requirements may elect to receive an Early Retirement Benefit once the age requirements are met, provided Employee Contributions remain in the Plan.

Members who terminate employment 100% vested prior the Normal Retirement Date but on or after their Early Retirement Date but do not commence receipt of an Early Retirement Benefit at that time will receive a monthly retirement income not less than the monthly retirement income which can be provided by the single-sum value of the monthly early retirement income which would have been payable if he had retired immediately upon termination, accumulated with interest from termination to the date the monthly retirement income payments are to commence.

Members who recover from Disability Retirement and who were eligible for an Early Retirement Benefit at the date of disability may elect to receive this benefit upon recovery from disability.

Disability Retirement: This benefit is payable from the first day of the month coincident with or next following the date the Retirement Committee approves the Member's Disability Retirement. The benefit is payable in the form of a 10 year certain and continuous annuity. The last payment is that due next preceding the earlier of (1) the date of recovery prior to the Normal Retirement Date and (2) the later of the date of death or the 120th payment. The amount of monthly retirement income is determined as follows:

(a) Non-Line of Duty: Members with less than 10 years of Credited Service upon disability receive a monthly retirement income which can be provided by the greater of (i) the single-sum value of the Accrued Benefit and (ii) 2 x Basic Compensation paid in the Plan Year immediately preceding disability. The monthly retirement income which can be provided by (ii) is limited to 60% x Anticipated Monthly Retirement Income at the Normal Retirement Date.

(b) Non-Line of Duty: Members with 10 years of Credited Service or more upon disability receive a monthly retirement income which is the greater of (i) the monthly retirement income which can be provided by the single-sum value of the Accrued Benefit and (ii) 30% x Basic Compensation paid in the Plan Year immediately preceding disability where the single-sum value of this monthly amount does not exceed 100 x the Anticipated Monthly Retirement Income at the Normal Retirement Date.

(c) Line of Duty: Members receive a monthly retirement income which is 50% x Basic Compensation paid in the Plan Year immediately preceding disability where the single-sum value of this monthly amount does not exceed 100 x the Anticipated Monthly Retirement Income at the Normal Retirement Date.

Members who recover from disability and re-enter the service of the City within 30 days of recovery will be deemed to have continuous service except that the period beginning with the first month for which Disability Retirement income was received and ending with the date of service re-entry is not considered as Credited Service.

Anticipated Monthly Retirement Income at the Normal Retirement Date: Determined as described for the Accrued Benefit, but instead using Anticipated Credited Service and Anticipated Average Monthly Compensation. Anticipated Credited Service is employee service computed in years and completed calendar months as if the member remains employed to the Normal Retirement Date. Anticipated Average Monthly Compensation is computed assuming that the last complete Plan Year of Basic Compensation is paid in each Plan Year, without change, to the Normal Retirement Date.

Survivor Benefit at Death of Disabled Member Prior to Disability Retirement: The designated beneficiary of a disabled Member who dies prior to receipt of Disability Retirement benefits is eligible to receive a monthly retirement income payable in the form of a 10 year certain and continuous annuity payable commencing on the first of the month coincident with or next following the date of the disabled Member's death. The designated beneficiary will receive a monthly retirement income which can be provided by the greater of (i) the single-sum value of the Accrued Benefit and (ii) 2 x Basic Compensation paid in the Plan Year immediately preceding disability not more than 100 x Anticipated Monthly Retirement Income at the Normal Retirement Date.

Survivor Benefit at Death of Vested Terminated Members: The designated beneficiary of vested Member who dies prior to retirement is eligible to receive a monthly retirement income payable in the form of a 10 year certain and continuous annuity payable commencing on the first of the month coincident with or next following the Member's death, which can be provided by the single-sum value of the Member's Accrued Benefit or Early Retirement Benefit.

Survivor Benefit at Death of Active Employee Prior to Normal Retirement Date: The designated beneficiary of a Member who dies while in active service prior to the Normal Retirement Date is eligible to receive, commencing on the first of the month coincident with or next following the Member's death, a monthly retirement income (payable in the form of a 10 year certain and continuous annuity) which can be provided by the greater of (i) the single-sum value of the Accrued Benefit as of the date of death, not less than the single-sum value of the Early Retirement Benefit which would have been payable if the Member had retired early on the date of death, and (ii) 2 x Basic Compensation paid in the Plan Year immediately preceding death not more than 100 x Anticipated Monthly Retirement Income at the Normal Retirement Date.

Survivor Benefit at Death of Active Employee After Normal Retirement Date: The designated beneficiary of a Member who dies while in active service after the Normal Retirement Date is eligible to receive, commencing on the first of the month coincident with or next following the Member's death, a monthly retirement income (payable in the form of a 10 year certain and continuous annuity) which can be provided by the single-sum value of the Late Retirement Benefit.

Optional Forms of Retirement Income: In addition to the life only form of annuity, also available under the terms of the Plan are the 10 year certain and continuous annuity and the joint and 50%, 66 2/3%, 75%, or 100% survivor annuity. With the joint and survivor options, the member may also elect the pop-up feature. The Plan also allows for other amounts and forms of retirement income that will meet the circumstances of the Participant, in the opinion of the Retirement Committee, and will not substantially affect the actuarial soundness of the Plan. Ordinance 1641-2013 was adopted December 18, 2013. Members may no longer be paid their retirement income in a lump sum under Section 3.1, Option 3.

Deferred Retirement Option Program (DROP): Members are eligible to enter the DROP at age 55 with 25 years of service. The Accrued Benefit is frozen and no further Employee Contributions are payable at DROP entry. The Accrued Benefit accumulates with interest in the DROP account and is payable as a single-lump sum (or as an actuarially equivalent annuity) upon DROP exit. The DROP account earns interest at a rate equal to the funds net rate of investment return minus administration fees, unless the DROP participant, as a one-time irrevocable option, elects a self-directed DROP as approved by the board of trustees. The maximum DROP participation duration is 5 years and participation will end if the employee resigns, dies or is terminated with cause prior to completion of the 5 years.

Description of Assumptions and Methods

Assumed Rate of Investment Return: 7.8% per year, net of investment expenses

Inflation: 2.0% per year (revised from 2.5% per year in the prior valuation). Note this assumption is not used directly in the valuation.

Salary Increase – Individual: 6.0% per year

Salary Increase – Total Payroll: Based on individual salary increase assumptions and other decrements assumed in the valuation of Plan liabilities.

Unfunded accrued liability is amortized as a level dollar amount.

Mortality: The mortality table is that used for NOT special risk employees in the valuation of FRS as of July 1, 2016, 2017 and 2018, as required by state statute. The mortality rates are as follows:

Healthy mortality (Pre-retirement):	
	Males: 50% RP-00 Combined Healthy White Collar + 50% RP-00 Combined Healthy Blue Collar
	Females: 100% RP-00 Combined Healthy White Collar
	Both male and female rates fully generational using Scale BB
Healthy mortality (Post-retirement):	
	Males: 50% RP-00 Annuitant White Collar + 50% RP-00 Annuitant Blue Collar
	Females: 100% RP-00 Annuitant White Collar
	Both male and female rates fully generational using Scale BB
Disabled mortality:	Males: 100% RP-00 Disabled Retiree Set Back 4 Years
	Females: 100% RP-00 Disabled Retiree Set Forward 2 Years
	No mortality improvement is assumed for disabled lives.

Retirement: Members are assumed to retire at a rate of 100% at either 65 and 10 years of service or 55 and 25 years of service, whichever decrement produces the higher liability.

Termination: Sex distinct rates as used for regular employees in the Florida Retirement System actuarial valuation report as of July 1, 2005. Linear interpolation has been used between the rates shown in five year age increments, as follows:

Male Age by Service Values:

Age	0	1	2	3	4	5	6	7	8	9	>=10
20	32.8%	31.8%	25.2%	18.4%	15.8%	13.3%	12.4%	11.7%	11.0%	10.5%	10.9%
25	27.2%	23.2%	19.1%	14.6%	12.7%	11.0%	9.4%	8.8%	7.7%	6.6%	6.9%
30	25.8%	19.2%	15.5%	13.2%	11.8%	10.0%	8.6%	7.5%	6.4%	5.8%	5.2%
35	25.8%	17.9%	14.2%	12.6%	10.9%	9.7%	8.3%	7.2%	6.2%	5.6%	4.7%
40	24.4%	15.8%	12.0%	10.7%	9.0%	8.4%	7.5%	6.6%	5.8%	5.5%	3.3%
45	24.4%	15.7%	11.6%	10.3%	8.8%	7.7%	7.2%	6.3%	5.7%	5.4%	3.0%
50	23.4%	15.2%	10.7%	9.4%	7.9%	6.9%	6.1%	5.6%	5.1%	4.8%	3.3%
55	27.4%	18.4%	14.1%	12.4%	9.9%	8.9%	6.4%	5.5%	4.9%	5.0%	5.0%
60	27.4%	18.4%	14.1%	12.3%	9.7%	8.8%	6.3%	5.4%	4.8%	4.9%	5.9%
65+	27.4%	18.4%	14.1%	12.3%	9.7%	8.8%	6.3%	5.4%	4.8%	4.9%	4.1%

Female Age by Service Values:

Age	0	1	2	3	4	5	6	7	8	9	>=10
20	31.9%	28.6%	23.3%	18.3%	15.4%	15.3%	12.4%	11.9%	11.6%	11.3%	11.6%
25	28.0%	22.0%	18.0%	14.7%	12.9%	12.2%	10.5%	9.7%	8.6%	7.9%	5.3%
30	26.7%	18.8%	15.3%	13.2%	11.3%	10.7%	9.5%	8.5%	7.9%	7.2%	5.4%
35	26.7%	17.7%	14.2%	12.6%	10.9%	10.2%	9.2%	8.2%	7.5%	6.9%	4.6%
40	25.7%	15.5%	12.1%	10.6%	9.1%	8.0%	7.2%	6.6%	6.0%	5.5%	3.3%
45	25.7%	15.4%	11.9%	10.3%	8.8%	7.7%	7.0%	6.4%	5.8%	5.3%	3.0%
50	24.4%	14.8%	11.5%	9.2%	8.4%	7.0%	6.5%	5.8%	5.5%	5.1%	3.2%
55	27.8%	17.6%	13.7%	11.3%	9.7%	8.3%	7.0%	6.3%	6.0%	5.6%	5.4%
60	27.8%	17.6%	13.7%	11.2%	9.6%	8.2%	6.9%	6.2%	5.9%	5.4%	7.2%
65+	27.8%	17.6%	13.7%	11.2%	9.6%	8.2%	6.9%	6.2%	5.9%	5.4%	4.1%

Disability: Sex distinct rates as used for regular employees in the Florida Retirement System actuarial valuation report as of July 1, 2005. Linear interpolation has been used between the rates shown in five year age increments, as follows:

	Line-of-Duty			Not Line-of-Duty	
Age	Male	Female	Age	Male	Female
20	0.004%	0.001%	20	0.000%	0.000%
25	0.006%	0.002%	25	0.030%	0.010%
30	0.010%	0.007%	30	0.058%	0.026%
35	0.018%	0.010%	35	0.073%	0.049%
40	0.029%	0.016%	40	0.102%	0.075%
45	0.044%	0.022%	45	0.188%	0.165%
50	0.069%	0.035%	50	0.313%	0.285%
55	0.095%	0.049%	55	0.523%	0.478%
60	0.099%	0.044%	60	0.687%	0.599%
65+	0.004%	0.001%	65+	0.239%	0.150%

Funding Method: Entry Age Normal (level percent of salary)

A description of the funding method is found on the next page entitled “Glossary of Actuarial Terms.”

Glossary of Actuarial Terms

Present Value of Benefits (PVB): The present value, as of the valuation date, of all benefits that will become payable by the Plan for the current group of members in the census.

Normal Cost (NC): Under the Individual Entry Age Normal Cost Method, the annual normal cost for each individual active member is determined as the amount, from the date of employment to the date of retirement, sufficient to accumulate the value of the member's benefit at the time of retirement. The annual normal cost is a constant percentage of the member's projected covered pay.

Accrued Liability (AL): This is the portion of the PVB attributable to the past at the valuation date. For active members, AL is the annual NC accumulated from date of entry to the valuation date for each member. For retired and terminated members, the PVB and the AL are equal. The AL is the estimated liability owed by the pension fund at the valuation date.

Unfunded Accrued Liability (UAL): Any excess of the Accrued Liability over the fund assets. A negative UAL indicates fund assets are greater than the Accrued Liability, otherwise known as a surplus. Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Actuarial Value of Assets: The value of assets used in the actuarial valuation of the Plan which is compared to the AL to determine the UAL and minimum funding requirements. A method may be used to smooth out short term volatility in the fair market value of assets. In this valuation, the Actuarial Value of Assets has been calculated to smooth out unexpected fluctuations in the fair market value of assets over a 5-year period.