



July 9, 2020

Mr. Dan Stauffer
Finance Director
City of DeLand
120 South Florida Avenue
DeLand, Florida 32720-5422

Re: Retirement Plan for General Employees of the City of DeLand

Dear Dan:

As requested, we are pleased to enclose eight (8) copies of the October 1, 2019 Chapter 112.664 Compliance Report for the Retirement Plan for General Employees of the City of DeLand (Plan).

As required, we will timely upload the required data to the State's online portal.

Please note we understand the following items must be posted on the Plan's website and must be posted on any website containing budget information relating to the City or actuarial or performance information relating to the Plan:

- this compliance report
- most recent financial statement
- most recent actuarial valuation report
- link to the Division of Retirement Actuarial Summary Fact Sheet
http://www.dms.myflorida.com/workforce_operations/retirement/local_retirement_plans/local_retirement_section/actuarial_summary_fact_sheets
- for the previous five years - 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
- Plan's funded ratio as determined in the most recent actuarial valuation – 86.2% on a market value of assets basis as of October 1, 2019.

We appreciate the opportunity to work with the Board on this important assignment.

If you should have any questions concerning the above, please do not hesitate to contact us.

Sincerest regards,

A handwritten signature in black ink that reads "Jennifer Borregard". The signature is written in a cursive, flowing style.

Jennifer M. Borregard, E.A.
Consultant and Actuary

Enclosures

Retirement Plan For General Employees of the City of Deland

CHAPTER 112.664, F.S. COMPLIANCE REPORT

In Connection with the October 1, 2019 Funding Actuarial Valuation Report and the Plan's Financial Reporting for the Year Ended September 30, 2019





July 9, 2020

Retirement Committee
c/o Mr. Dan Stauffer, Finance Director
Retirement Plan for General Employees
of the City of DeLand
120 South Florida Avenue
DeLand, Florida 32720-5422

Re: October 1, 2019 Chapter 112.664 Compliance Report

Dear Committee Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the Retirement Committee (Committee) of the Retirement Plan for General Employees of the City of DeLand (Plan) to prepare a disclosure report to satisfy the requirements set forth in Chapter 112.664, F.S. and as further required pursuant to Chapter 60T-1.0035, F.A.C.

This report was prepared at the request of the Committee and is intended for use by the Committee and those designated or approved by the Committee. This report may be provided to parties other than the Committee only in its entirety and only with the permission of the Committee.

The purpose of the report is to provide the required information specified in Chapter 112.664, F.S. and to supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

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. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the City and the Committee concerning Plan benefits, Plan provisions and Plan members as used in the corresponding Actuarial Valuation Reports for the Valuation Dates indicated. Financial information was provided by the City and Committee as of September 30, 2019. We reviewed the information provided for internal and year-to-year consistency, but did not audit the data. The Plan is responsible for the accuracy of the data.

Except where specific assumptions are required by Chapter 112.664, F.S, this report was prepared using actuarial assumptions adopted by the Committee as described in Section C. The Committee's economic and demographic actuarial assumptions are based on the results of an actuarial Experience Investigation for the period October 1, 2010 - September 30, 2015. The assumptions represent an estimate of future Plan experience. The mortality assumptions are prescribed by statute.

The investment return assumption of 2% higher than the investment return assumption utilized in the Actuarial Valuation Report does not represent an estimate of future Plan experience nor observation of the estimates inherent in market data. This assumption is provided as a counterpart to the Chapter 112.664, F.S. requirement to utilize an investment return assumption of 2% lower than the investment return assumption utilized in the Actuarial Valuation Report. The inclusion of the additional 2% higher assumption shows a more complete assessment of the range of potential results as opposed to the *one-sided* range required by statute.

If all actuarial assumptions are met and if all current and future minimum required contributions are paid Plan assets will be sufficient to pay all Plan benefits, future contributions are expected to remain relatively stable as a percentage of payroll and the funded status is expected to improve. Plan minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act with normal cost determined as a level percent of covered payroll and a level dollar amortization payment using an initial amortization period of 15 years.

The Plan's funded ratio as of October 1, 2019 is 86.2% defined as the ratio of the market value of Plan assets to the actuarial accrued liability.

The Plan's funded ratio and the GASB Net Pension Liability may not be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the Plan sponsor.

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 presents the actuarial position of the Plan as of the valuation date as required by statute. 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.



With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were 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, and in our opinion, meet the requirements of Section 112.664(1), F.S., and Section 60T-1.0035, F.A.C.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

By Michelle Jones

Shelly L. Jones, M.A.A.A
Enrolled Actuary No. 20-08646
Consultant & Actuary

By Jennifer Borregard

Jennifer M. Borregard, M.A.A.A
Enrolled Actuary No. 20-07624
Consultant & Actuary

Date: July 9, 2020



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SECTION A

CHAPTER 112.664, F.S. RESULTS

Net Pension Liability
Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68
and Using Assumptions Required Under 112.664(1)(a), F.S.

Measurement Date	<u>September 30, 2019</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 194,796
Interest	2,363,666
Benefit Changes	0
Difference Between Actual and Expected Experience	37,301
Assumption Changes	150,358
Benefit Payments	(2,679,768)
Contribution Refunds	0
Other	<u>0</u>
Net Change in Total Pension Liability	\$ 66,353
Total Pension Liability (TPL) - (beginning of year)	<u>33,338,066</u>
Total Pension Liability (TPL) - (end of year)	<u>\$ 33,404,419</u>
B. <u>Plan Fiduciary Net Position</u>	
Contributions - City	\$ 619,990
Contributions - Member	108,158
Net Investment Income	678,552
Benefit Payments	(2,679,768)
Contribution Refunds	0
Administrative Expenses	(50,301)
Other	<u>0</u>
Net Change in Plan Fiduciary Net Position	\$ (1,323,369)
Plan Fiduciary Net Position - (beginning of year)	<u>30,098,047</u>
Plan Fiduciary Net Position - (end of year)	<u>\$ 28,774,678</u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ 4,629,741
Valuation Date	October 1, 2018

Certain Key Assumptions

Investment Return Assumption 7.30%

Mortality Table:

For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, RP 2000 Annuitant Female Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, RP 2000 Disabled Male Mortality Table, set back four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements.



Net Pension Liability
Using Assumptions Required Under 112.664(1)(b), F.S.

Measurement Date	<u>September 30, 2019</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 315,248
Interest	2,103,785
Benefit Changes	0
Difference Between Actual and Expected Experience	188,344
Assumption Changes	212,530
Benefit Payments	(2,679,768)
Contribution Refunds	0
Other	0
Net Change in Total Pension Liability	<u>\$ 140,139</u>
Total Pension Liability (TPL) - (beginning of year)	<u>40,332,210</u>
Total Pension Liability (TPL) - (end of year)	<u><u>\$ 40,472,349</u></u>
B. <u>Plan Fiduciary Net Position</u>	
Contributions - City	\$ 619,990
Contributions - Member	108,158
Net Investment Income	678,552
Benefit Payments	(2,679,768)
Contribution Refunds	0
Administrative Expenses	(50,301)
Other	0
Net Change in Plan Fiduciary Net Position	<u>\$ (1,323,369)</u>
Plan Fiduciary Net Position - (beginning of year)	<u>30,098,047</u>
Plan Fiduciary Net Position - (end of year)	<u><u>\$ 28,774,678</u></u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	<u>\$ 11,697,671</u>
Valuation Date	October 1, 2018

Certain Key Assumptions

Investment Return Assumption 5.30%

Mortality Table:

For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, RP 2000 Annuitant Female Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, RP 2000 Disabled Male Mortality Table, set back four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements.



Net Pension Liability

Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2% on Investment Return Assumption

Measurement Date	September 30, 2019
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 125,468
Interest	2,522,923
Benefit Changes	0
Difference Between Actual and Expected Experience	(58,324)
Assumption Changes	110,484
Benefit Payments	(2,679,768)
Contribution Refunds	0
Other	0
Net Change in Total Pension Liability	\$ 20,783
Total Pension Liability (TPL) - (beginning of year)	28,279,393
Total Pension Liability (TPL) - (end of year)	\$ 28,300,176
B. <u>Plan Fiduciary Net Position</u>	
Contributions - City	\$ 619,990
Contributions - Member	108,158
Net Investment Income	678,552
Benefit Payments	(2,679,768)
Contribution Refunds	0
Administrative Expenses	(50,301)
Other	0
Net Change in Plan Fiduciary Net Position	\$ (1,323,369)
Plan Fiduciary Net Position - (beginning of year)	30,098,047
Plan Fiduciary Net Position - (end of year)	\$ 28,774,678
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ (474,502)

Valuation Date October 1, 2018

Certain Key Assumptions

Investment Return Assumption 9.30%

Mortality Table:

For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, RP 2000 Annuitant Female Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, RP 2000 Disabled Male Mortality Table, set back four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements.



Asset and Benefit Payment Projection
Not Reflecting Any Future Contributions
Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68
and Using Assumptions Required Under 112.664(1)(a), F.S.

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2020	\$ 28,250,020	\$ 1,949,362	\$ 2,542,128	\$ 27,657,254
2021	27,657,254	1,901,724	2,662,137	26,896,841
2022	26,896,841	1,843,408	2,744,150	25,996,099
2023	25,996,099	1,775,501	2,811,165	24,960,435
2024	24,960,435	1,699,625	2,831,508	23,828,552
2025	23,828,552	1,617,242	2,839,784	22,606,010
2026	22,606,010	1,528,386	2,845,473	21,288,923
2027	21,288,923	1,432,476	2,856,322	19,865,077
2028	19,865,077	1,330,057	2,835,485	18,359,649
2029	18,359,649	1,221,333	2,824,693	16,756,289
2030	16,756,289	1,105,692	2,809,162	15,052,819
2031	15,052,819	983,585	2,773,278	13,263,126
2032	13,263,126	855,400	2,732,929	11,385,597
2033	11,385,597	721,126	2,685,376	9,421,347
2034	9,421,347	580,548	2,638,282	7,363,613
2035	7,363,613	433,395	2,585,969	5,211,039
2036	5,211,039	279,523	2,529,596	2,960,966
2037	2,960,966	118,813	2,467,300	612,479
2038	612,479	3,760	2,401,643	-
2039	-	-	2,331,073	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the City or Members: 18.25

Certain Key Assumptions

Investment return assumption 7.25%

Mortality Table:

For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements.

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City and Member contributions, the Plan is expected to be able to pay all future benefit payments.



Asset and Benefit Payment Projection
Not Reflecting Any Future Contributions
Using Assumptions Required Under 112.664(1)(b), F.S.

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2020	\$ 28,250,020	\$ 1,411,399	\$ 2,542,128	\$ 27,119,291
2021	27,119,291	1,348,650	2,662,137	25,805,804
2022	25,805,804	1,277,378	2,744,150	24,339,032
2023	24,339,032	1,198,482	2,811,165	22,726,349
2024	22,726,349	1,113,242	2,831,508	21,008,083
2025	21,008,083	1,022,799	2,839,784	19,191,098
2026	19,191,098	927,247	2,845,473	17,272,872
2027	17,272,872	826,234	2,856,322	15,242,784
2028	15,242,784	720,242	2,835,485	13,127,541
2029	13,127,541	609,497	2,824,693	10,912,345
2030	10,912,345	493,637	2,809,162	8,596,820
2031	8,596,820	373,084	2,773,278	6,196,626
2032	6,196,626	248,213	2,732,929	3,711,910
2033	3,711,910	119,107	2,685,376	1,145,641
2034	1,145,641	10,515	2,638,282	-
2035	-	-	2,585,969	-
2036	-	-	2,529,596	-
2037	-	-	2,467,300	-
2038	-	-	2,401,643	-
2039	-	-	2,331,073	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the City or Members: 14.42

Certain Key Assumptions

Investment return assumption 5.25%

Mortality Table:

For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements.

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City and Member contributions, the Plan is expected to be able to pay all future benefit payments.



Asset and Benefit Payment Projection
Not Reflecting Any Future Contributions
Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2% on Investment Return Assumption

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2020	\$ 28,250,020	\$ 2,487,477	\$ 2,542,128	\$ 28,195,369
2021	28,195,369	2,476,490	2,662,137	28,009,722
2022	28,009,722	2,455,264	2,744,150	27,720,836
2023	27,720,836	2,425,230	2,811,165	27,334,901
2024	27,334,901	2,388,525	2,831,508	26,891,918
2025	26,891,918	2,347,140	2,839,784	26,399,274
2026	26,399,274	2,301,290	2,845,473	25,855,091
2027	25,855,091	2,250,416	2,856,322	25,249,185
2028	25,249,185	2,195,400	2,835,485	24,609,100
2029	24,609,100	2,136,726	2,824,693	23,921,133
2030	23,921,133	2,073,856	2,809,162	23,185,827
2031	23,185,827	2,007,614	2,773,278	22,420,163
2032	22,420,163	1,938,784	2,732,929	21,626,018
2033	21,626,018	1,865,676	2,685,376	20,808,318
2034	20,808,318	1,794,367	2,638,282	19,964,403
2035	19,964,403	1,718,890	2,585,969	19,097,324
2036	19,097,324	1,641,472	2,529,596	18,209,200
2037	18,209,200	1,562,400	2,467,300	17,304,300
2038	17,304,300	1,481,942	2,401,643	16,384,599
2039	16,384,599	1,400,357	2,331,073	15,453,883
2040	15,453,883	1,318,044	2,254,647	14,517,280
2041	14,517,280	1,235,381	2,174,269	13,578,392
2042	13,578,392	1,152,727	2,089,430	12,641,689
2043	12,641,689	1,070,482	2,000,417	11,711,754
2044	11,711,754	989,061	1,907,388	10,793,427
2045	10,793,427	908,885	1,810,890	9,891,422
2046	9,891,422	830,368	1,711,391	9,010,399
2047	9,010,399	753,911	1,609,469	8,154,841
2048	8,154,841	679,894	1,505,822	7,328,913
2049	7,328,913	608,664	1,401,268	6,536,309
2050	6,536,309	540,513	1,296,775	5,780,047
2051	5,780,047	475,671	1,193,350	5,062,368
2052	5,062,368	414,296	1,091,972	4,384,692
2053	4,384,692	356,473	993,596	3,747,569
2054	3,747,569	302,212	899,056	3,150,725
2055	3,150,725	251,453	809,060	2,593,118
2056	2,593,118	204,067	724,223	2,072,962
2057	2,072,962	159,870	644,968	1,587,864
2058	1,587,864	118,627	571,549	1,134,942
2059	1,134,942	80,068	504,068	710,942
2060	710,942	43,890	442,508	312,324
2061	312,324	10,481	386,814	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no contributions from the City or Members: 41.83

Certain Key Assumptions

Investment return assumption 9.25%

Mortality Table:

For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements.

Note: As required in Section 112.664(1)(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include City and Member contributions, the Plan is expected to be able to pay all future benefit payments.



ACTUARIALLY DETERMINED CONTRIBUTION

	Valuation Assumptions and 112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions	112.664(1)(a), F.S. Assumptions Plus 2% on Investment Return Assumption
A. Valuation Date	October 1, 2019	October 1, 2019	October 1, 2019
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2021	September 30, 2021	September 30, 2021
C. Annual Payroll of Active Employees	\$ 1,443,390	\$ 1,443,390	\$ 1,443,390
D. Total Minimum Funding Requirement			
1. Total Normal Cost	\$ 216,431	\$ 325,417	\$ 153,852
2. Annual Payment to Amortize Unfunded Actuarial Liability	474,344	1,081,124	(65,476)
3. Interest Adjustment	57,108	88,326	3,209
4. Total Minimum Funding Requirement (1. + 2. + 3., not less than 1.)	\$ 747,883	\$ 1,494,867	\$ 153,852
E. Expected Contribution Sources (\$ / % of pay)			
1. City	\$ 646,846 44.81%	\$ 1,393,830 96.57%	\$ 52,815 3.66%
2. Member	101,037 7.00%	101,037 7.00%	101,037 7.00%
3. Total	\$ 747,883 51.81%	\$ 1,494,867 103.57%	\$ 153,852 10.66%

Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

Amortization Base	Current Unfunded Liabilities	Amortization Payment			Remaining Funding Period
		Valuation and 112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions	112.664(1)(a), F.S. Assumptions Plus 2%	
01/01/1990 Plan Amendment	\$ 529	\$ 529	\$ 529	\$ 529	0.25 years
01/01/1990 Actuarial Loss / (Gain)	(4,057)	(4,057)	(4,057)	(4,057)	0.25 years
01/01/1991 Plan Amendment	59,675	48,154	48,043	48,262	1.25 years
01/01/1991 Assumption & Cost Method Change	(6,782)	(5,473)	(5,460)	(5,485)	1.25 years
01/01/1991 Actuarial Loss / (Gain)	6,485	5,233	5,221	5,245	1.25 years
01/01/1992 Actuarial Loss / (Gain)	(72,147)	(33,471)	(33,093)	(33,843)	2.25 years
01/01/1993 Plan Amendment	22,380	7,436	7,287	7,583	3.25 years
01/01/1993 Actuarial Loss / (Gain)	(22,529)	(7,485)	(7,335)	(7,634)	3.25 years
01/01/1993 Assumption Change	(18,657)	(6,199)	(6,074)	(6,322)	3.25 years
01/01/1994 Actuarial Loss / (Gain)	(3,766)	(989)	(961)	(1,017)	4.25 years
01/01/1994 Plan Amendment	118,606	31,160	30,271	32,043	4.25 years
01/01/1995 Actuarial Loss / (Gain)	105,982	23,298	22,441	24,153	5.25 years
01/01/1996 Actuarial Loss / (Gain)	(325,316)	(62,065)	(59,287)	(64,849)	6.25 years
01/01/1996 Assumption Change	85,957	16,399	15,665	17,135	6.25 years
01/01/1997 Actuarial Loss / (Gain)	(60,187)	(10,223)	(9,687)	(10,764)	7.25 years
01/01/1997 Plan Amendment	71,649	12,170	11,531	12,813	7.25 years
01/01/1998 Actuarial Loss / (Gain)	(406,327)	(62,616)	(58,858)	(66,412)	8.25 years
01/01/1999 Actuarial Loss / (Gain)	(190,544)	(27,025)	(25,207)	(28,869)	9.25 years
01/01/1999 Plan Amendment	74,627	10,585	9,872	11,307	9.25 years
01/01/2000 Actuarial Loss / (Gain)	304,320	40,180	37,193	43,218	10.25 years
01/01/2000 Plan Amendment	91,219	12,044	11,149	12,955	10.25 years
01/01/2001 Actuarial Loss / (Gain)	885,659	109,857	100,942	118,956	11.25 years
01/01/2001 Assumption & Method Change	(414,382)	(51,400)	(47,229)	(55,657)	11.25 years
01/01/2002 Actuarial Loss / (Gain)	344,269	40,422	36,874	44,053	12.25 years
10/01/2002 Actuarial Loss / (Gain)	1,685,385	190,699	173,045	208,809	13 years
10/01/2003 Actuarial Loss / (Gain)	61,413	6,646	5,989	7,322	14 years
10/01/2003 Plan Amendment (elected officials)	29,779	3,223	2,904	3,550	14 years
10/01/2003 Plan Amendment (dispatchers)	(138,584)	(14,997)	(13,515)	(16,522)	14 years
10/01/2004 Actuarial Loss / (Gain)	903,298	93,938	84,088	104,093	15 years
10/01/2005 Actuarial Loss / (Gain)	672,242	67,455	59,987	75,169	16 years
10/01/2005 Plan Amendment (DC plan)	(307,212)	(30,827)	(27,414)	(34,352)	16 years



Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

Amortization Base	Current Unfunded Liabilities	Amortization Payment			Remaining Funding Period
		Valuation and 112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions	112.664(1)(a), F.S. Assumptions Plus 2%	
10/01/2006 Actuarial Loss / (Gain)	\$ (131,887)	\$ (15,689)	\$ (14,338)	\$ (17,072)	12 years
10/01/2006 Assumption Change	454,902	54,115	49,454	58,883	12 years
10/01/2007 Actuarial Loss / (Gain)	(278,743)	(31,539)	(28,620)	(34,535)	13 years
10/01/2007 Plan Amendment (COLA)	643,876	72,854	66,109	79,772	13 years
10/01/2008 Actuarial Loss / (Gain)	199,839	21,626	19,489	23,824	14 years
10/01/2009 Actuarial Loss / (Gain)	(43)	(4)	(4)	(5)	15 years
10/01/2010 Actuarial Loss / (Gain)	(9,908)	(994)	(884)	(1,108)	16 years
10/01/2011 Actuarial Loss / (Gain)	169,721	20,190	18,451	21,969	12 years
10/01/2011 Assumption Change	(448,992)	(53,412)	(48,812)	(58,118)	12 years
10/01/2012 Actuarial Loss / (Gain)	124,786	14,119	12,812	15,460	13 years
10/01/2013 Actuarial Loss / (Gain)	(524,821)	(56,796)	(51,183)	(62,568)	14 years
10/01/2014 Actuarial Loss / (Gain)	(422,839)	(43,973)	(39,362)	(48,726)	15 years
10/01/2015 Actuarial Loss / (Gain)	136,736	17,214	15,846	18,610	11 years
10/01/2015 Assumption Change	115,529	14,545	13,389	15,723	11 years
10/01/2016 Actuarial Loss / (Gain)	(5,296)	(630)	(576)	(686)	12 years
10/01/2016 Assumption Change	324,565	38,610	35,285	42,012	12 years
10/01/2017 Actuarial Loss / (Gain)	(236,216)	(26,728)	(24,253)	(29,266)	13 years
10/01/2017 Assumption Change	135,432	15,324	13,905	16,779	13 years
10/01/2018 Actuarial Loss / (Gain)	(37,816)	(4,092)	(3,688)	(4,508)	14 years
10/01/2018 Assumption Change	144,003	15,584	14,044	17,168	14 years
10/01/2019 Actuarial Loss / (Gain)	542,309	56,397	50,484	62,494	15 years
10/01/2019 Assumption Change	(336,346)	(34,978)	(31,310)	(38,759)	15 years
10/01/2019 Assumption Change - 112.664(1)(b), F.S. Assumptions	6,982,835	N/A	650,032	N/A	15 years
10/01/2019 Assumption Change - 112.664(1)(a), F.S. Assumptions Plu:	(5,069,852)	N/A	N/A	(584,231)	15 years



SECTION B

SUMMARY OF PLAN PROVISIONS

**Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2019)**

A. Effective Date:

January 1, 1960; amended and restated January 1, 1972; subsequently restated and amended through Ordinance 99-27 (effective September 20, 1999). Most recently amended by Ordinance 2017-07, adopted February 20, 2017.

B. Eligibility Requirements:

Regular full-time employees hired prior to August 5, 2006 who elected not to opt out of the Plan. Department heads and certain other positions are generally excluded.

C. Employee Contributions:

7% of basic annual compensation. Effective September 29, 1990, employee contributions are *picked-up* by the City. No contributions are required of elected officials.

D. Credited Service:

Service computed in completed months from date of employment to retirement date (or date of termination, if earlier).

E. Final Monthly Compensation (FMC):

Average monthly rate of basic compensation during the best 60 successive months out of the last 120 months preceding date of retirement (or termination). Basic compensation means compensation actually paid to a participant and includes overtime pay up to 300 hours and employee contributions *picked-up* by the City. Accrued leave is frozen as of July 1, 2011.

F. Normal Retirement:

1. Eligibility:

Earliest of:

- (a) Attainment of age 65 with completion of 10 years of credited service.
- (b) Attainment of age 60 with completion of 20 years of credited service.
- (c) Completion of 25 years of credited service.

2. Benefit:

2.4% times FMC times credited service.



**Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2019)**

G. Early Retirement:

1. Eligibility:

Attainment of age 55 with completion of 10 years of credited service.

2. Benefit:

Benefit accrued to date of retirement, reduced by 1/15th for each of the first five years and 1/30th for each year thereafter that early retirement date precedes normal retirement date.

H. Deferred Retirement:

Calculated the same as for normal retirement based upon credited service and FMC as of deferred retirement date.

I. Disability Retirement:

1. Eligibility:

Total and permanent disability prior to normal retirement date.

2. Benefit:

Service Connected Disability:

Benefit that can be supported by the greater of (a) or (b), where:

(a) is the single-sum value of the normal retirement benefit accrued to date of disability; and

(b) is 24 times FMC (limited to the amount which can support 60% of the participant's anticipated normal retirement benefit, where anticipated normal retirement benefit is based on FMC at date of disability and on credited service projected to normal retirement date).

Non-Service Connected Disability:

Benefit which can be supported by the greater of (a) or (b), where:

(a) is the single-sum value of the normal retirement benefit accrued to date of disability; and

(b) is 12 times FMC if the participant has completed less than five (5) years of credited service, or 24 times FMC if the participant has completed five (5) or more years of credited service (limited to the amount which can support 60% of the participant's anticipated normal retirement benefit, where the anticipated benefit is based on FMC at date of disability and on credited service projected to normal retirement date).

**Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2019)**

3. Form of Payment:

Benefit payable for 10 years certain and life thereafter, or until recovery from disability prior to normal retirement age.

J. Death Benefit:

Monthly income to beneficiary (payable for ten (10) years certain and life thereafter) which can be provided by the greater of A or B, where A is the single-sum value of the normal retirement benefit accrued to date of death and B is the smaller of (i) and (ii), where (i) is 24 times FMC at date of death and (ii) is 100 times the anticipated normal retirement benefit based upon projected FMC and anticipated credited service at normal retirement date.

K. Vested Benefit Upon Termination:

1. Eligibility:

100% vesting upon the completion of 10 years of credited service. Employees who have not completed 10 years of credited service at date of termination of employment shall only be entitled to the return of their employee contributions without interest.

2. Benefit:

Employee's option of benefit accrued to date of termination (payable at normal retirement date or actuarially reduced at early retirement date) or return of employee contributions, with interest at an annual rate of 6%.

L. Normal Form of Retirement Income:

Monthly benefit payable for ten (10) years certain and life thereafter.

M. Deferred Retirement Option Program (DROP):

The DROP is available only if the participant makes an irrevocable election to participate within 60 days after having met normal retirement eligibility. The maximum participation period in the DROP is five (5) years, after which the participant is deemed separated from the City.

The monthly retirement benefits, including any future cost of living increases, that would have been payable had the member elected to cease employment and receive a normal retirement benefit shall be deposited into the participant's DROP account.

**Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2019)**

After each fiscal year quarter, the average daily balance in a participant's deferred retirement option account shall be credited at a rate of six and one-half percent (6.5%) annual interest compounded monthly. The Retirement Committee along with the City shall review the stated rate of return on an annual basis in order to determine the necessity of any adjustment.

If a DROP participant dies before his account balance is paid out in full, the participant's designated beneficiary shall have the same rights as the participant to elect and receive the payout options allowed. DROP payments to a beneficiary shall be in addition to any retirement benefits payable to the participant. Participants who are or have been DROP participants are not eligible for pre-retirement death or disability benefits.

N. Elected Official Benefit:

1. Eligibility:

Completion of twenty (20) consecutive years of elected service prior to August 5, 2006.

2. Benefit:

50% of pay prior to retirement.

3. Form of Payment:

Monthly life annuity.

O. Cost of Living Adjustment (COLA)

All current and future retirees who retire on or after Normal Retirement Date (including DROPs), and the beneficiaries of such retired participants, who have been receiving benefits for a minimum of twelve (12) months, will be eligible for an automatic annual cost of living adjustment (COLA) in the amount of 0.5% per annum commencing January 1, 2008.

P. Changes Since Previous Valuation

None.

SECTION C

ACTUARIAL ASSUMPTIONS AND COST METHODS USED FOR FUNDING

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2019)**

A. Mortality

For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements.

Sample Ages (2019)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.50	34.95	28.53
60	27.66	29.93	24.46	27.77
62	25.78	27.96	22.85	25.95

Sample Ages (2039)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	34.14	36.43	30.54
60	29.22	31.36	26.31	29.42
62	27.29	29.36	24.63	27.55

B. Investment Return

7.25%, compounded annually, net of investment expense - includes inflation of 2.50%.

C. Allowances for Expenses or Contingencies

Estimated expenses are based on the average of actual expenses paid in the previous three years.



**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2019)**

D. Employee Withdrawal Rates

Withdrawal rates for males and for females were used in accordance with the following illustrative example:

<u>Age</u>	<u>Withdrawal Rates Per 100 Employees</u>
25 & Under	6.8
30	6.5
35	6.4
40	5.4
45	4.1
50	3.6
55	3.4
60 & Over	0.0

Elected officials are assumed to withdraw prior to completion of twenty (20) years of elected service.

E. Disability Rates

The 1985 Disability Study - Class 1 separate male and female rates were used.

50% of all disablements are assumed to be service related.

F. Marriage Assumptions

All active participants are assumed to be married.

Females are assumed to be 3 years younger than their male spouses.

G. Salary Increase Factors

Current salary is assumed to increase at a rate based on the table below per year until retirement - includes wage inflation of 3.00%.

<u>Service</u>	<u>Salary Increase</u>
0 - 20 years	4.25%
21 + years	3.25%

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2019)**

H. Assumed Retirement Age

Participants eligible for normal retirement are assumed to retire at the following rates:

<u>Age</u>	<u>Retirement Rate</u>
40 - 44	5%
45 - 49	25%
50 - 59	50%
60 - 64	70%
65+	100%

In addition, participants eligible for early retirement are assumed to retire at the rate of 10% per year prior to age 60 and 12% per year thereafter.

I. Loading

Service retirement liabilities are increased by 1.25% to account for unused vacation and compensatory leave.

J. Asset Valuation Method

The method used for determining the smoothed value of assets phases in the deviation between the expected and actual return on assets at the rate of 20% per year. The smoothed value of assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the fair market value of plan assets and whose upper limit is 120% of the fair market value of plan assets.

K. Cost Method

Normal Retirement, Termination, Disability, and Death Benefits: Entry-Age-Normal Cost Method

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his entry age to his assumed retirement age to fund his estimated benefits, assuming the Plan had always been in effect. The normal cost for the Plan is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the Plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the assets of the Plan.

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2019)**

L. Change From Previous Valuation

1. Mortality was:

For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, RP 2000 Annuitant Female Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For disabled male participants, RP 2000 Disabled Male Mortality Table, set back four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements.

Sample Ages (2019)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	30.64	33.66	30.21
60	25.71	28.64	25.55	28.54
62	23.81	26.68	23.71	26.62

Sample Ages (2039)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.78	35.50	32.37
60	27.88	30.47	27.74	30.38
62	25.97	28.49	25.89	28.44

2. Investment Return was:

7.3%, compounded annually, net of investment expense.



SECTION D

GLOSSARY

Glossary

<i>Actuarial Accrued Liability</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</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</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, non-retired 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 No. 67.
<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 required contribution.

<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 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>Annual Required Contribution</i>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The annual required contribution consists of the Employer Normal Cost and Amortization Payment plus interest adjustment.
<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. 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. 67 and GASB No. 68</i>	These are the governmental accounting standards that set the accounting rules for public retirement plans and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the plans themselves, while Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement plans.
<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.