



July 17, 2019

Mr. Chris Jaques
Chairman, Board of Trustees
DeLand Municipal Police Officers'
Retirement Plan
219 West Howry Avenue
DeLand, Florida 32720-5483

Re: DeLand Municipal Police Officers' Retirement Plan

Dear Chris:

As requested, we are pleased to enclose eight (8) copies of the October 1, 2018 Chapter 112.664 Compliance Report for the DeLand Municipal Police Officers' Retirement Plan (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
- a 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
- the Plan's funded ratio as determined in the most recent actuarial valuation – 80.3% on a market value of assets basis as of October 1, 2018.

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

cc: Mr. Dan Stauffer

DeLand Municipal Police Officers' Retirement Plan

CHAPTER 112.664, F.S. COMPLIANCE REPORT

In Connection with the October 1, 2018 Funding Actuarial Valuation Report and the Plan's Financial Reporting for the Year Ended September 30, 2018





July 17, 2019

Mr. Chris Jaques
Chairman, Board of Trustees
City of DeLand Municipal Police Officers'
Retirement Plan
219 West Howry
DeLand, Florida 32720-5483

Re: October 1, 2018 Chapter 112.664 Compliance Report

Dear Mr. Jaques:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the Board of Trustees (Board) of the DeLand Municipal Police Officers' Retirement Plan (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 Board and is intended for use by the Board and those designated or approved by the Board. This report may be provided to parties other than the Board only in its entirety and only with the permission of the Board.

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 Board 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 Board as of September 30, 2018. 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 Board as described in Section C. The Board's assumptions are based on the results of an actuarial Experience Study for the period October 1, 2005 – September 30, 2013. The assumptions represent an estimate of future Plan experience. The mortality assumptions are prescribed by statute and were updated in 2016.

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 of the Plan 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 and Police Officers Retirement Chapter 185 with normal cost determined as a level percent of covered payroll and a level dollar amortization payment using an initial amortization period of 30 years.

The Plan's funded ratio as of October 1, 2018 is 80.3% 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 plans. 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.

Board of Trustees
July 17, 2019
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With respect to the reporting standards for defined benefit retirement plans 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 *Jennifer Borregard*

Jennifer M. Borregard, M.A.A.A.
Enrolled Actuary No. 17-07624
Consultant & Actuary

By *Michelle Jones*

Shelly L. Jones, M.A.A.A.
Enrolled Actuary No. 17-08646
Consultant & Actuary

Date: July 17, 2019

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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, 2018</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 781,239
Interest	2,458,448
Benefit Changes	0
Difference Between Actual and Expected Experience	142,773
Assumption Changes	0
Benefit Payments	(2,698,884)
Contribution Refunds	(40,311)
Other	0
Net Change in Total Pension Liability	<u>\$ 643,265</u>
Total Pension Liability (TPL) - (beginning of year)	<u>33,229,223</u>
Total Pension Liability (TPL) - (end of year)	<u><u>\$ 33,872,488</u></u>
B. <u>Plan Fiduciary Net Position</u>	
Contributions - City	\$ 1,064,184
Contributions - State	252,492
Contributions - Member	278,334
Net Investment Income	2,560,887
Benefit Payments	(2,698,884)
Contribution Refunds	(40,311)
Administrative Expenses	(87,416)
Other	326
Net Change in Plan Fiduciary Net Position	<u>\$ 1,329,612</u>
Plan Fiduciary Net Position - (beginning of year)	<u>25,450,627</u>
Plan Fiduciary Net Position - (end of year)	<u><u>\$ 26,780,239</u></u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	<u>\$ 7,092,249</u>
Valuation Date	October 1, 2017

Certain Key Assumptions

Investment Return Assumption 7.5%

Mortality Table:

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 60% RP 2000 Disabled Male Mortality Table setback four years / 40% RP 2000 Annuitant Male Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements. For disabled female participants, 60% RP 2000 Disabled Female Mortality Table set forward two years / 40% RP 2000 Annuitant Female Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements.

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

Measurement Date	<u>September 30, 2018</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 1,247,415
Interest	2,337,998
Benefit Changes	0
Difference Between Actual and Expected Experience	198,549
Assumption Changes	0
Benefit Payments	(2,698,884)
Contribution Refunds	(40,311)
Other	<u>0</u>
Net Change in Total Pension Liability	\$ 1,044,767
Total Pension Liability (TPL) - (beginning of year)	<u>42,423,897</u>
Total Pension Liability (TPL) - (end of year)	<u><u>\$ 43,468,664</u></u>
B. <u>Plan Fiduciary Net Position</u>	
Contributions - City	\$ 1,064,184
Contributions - State	252,492
Contributions - Member	278,334
Net Investment Income	2,560,887
Benefit Payments	(2,698,884)
Contribution Refunds	(40,311)
Administrative Expenses	(87,416)
Other	<u>326</u>
Net Change in Plan Fiduciary Net Position	\$ 1,329,612
Plan Fiduciary Net Position - (beginning of year)	<u>25,450,627</u>
Plan Fiduciary Net Position - (end of year)	<u><u>\$ 26,780,239</u></u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ 16,688,425
Valuation Date	October 1, 2017

Certain Key Assumptions

Investment Return Assumption 5.5%

Mortality Table:

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 60% RP 2000 Disabled Male Mortality Table setback four years / 40% RP 2000 Annuitant Male Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements. For disabled female participants, 60% RP 2000 Disabled Female Mortality Table set forward two years / 40% RP 2000 Annuitant Female Mortality Table with White Collar Adjustment with no setback, 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	<u>September 30, 2018</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 514,877
Interest	2,500,276
Benefit Changes	0
Difference Between Actual and Expected Experience	98,327
Assumption Changes	0
Benefit Payments	(2,698,884)
Contribution Refunds	(40,311)
Other	0
Net Change in Total Pension Liability	\$ 374,285
Total Pension Liability (TPL) - (beginning of year)	27,081,786
Total Pension Liability (TPL) - (end of year)	<u>\$ 27,456,071</u>
B. <u>Plan Fiduciary Net Position</u>	
Contributions - City	\$ 1,064,184
Contributions - State	252,492
Contributions - Member	278,334
Net Investment Income	2,560,887
Benefit Payments	(2,698,884)
Contribution Refunds	(40,311)
Administrative Expenses	(87,416)
Other	326
Net Change in Plan Fiduciary Net Position	\$ 1,329,612
Plan Fiduciary Net Position - (beginning of year)	25,450,627
Plan Fiduciary Net Position - (end of year)	<u>\$ 26,780,239</u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ 675,832
Valuation Date	October 1, 2017

Certain Key Assumptions

Investment Return Assumption 9.5%

Mortality Table:

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 60% RP 2000 Disabled Male Mortality Table setback four years / 40% RP 2000 Annuitant Male Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements. For disabled female participants, 60% RP 2000 Disabled Female Mortality Table set forward two years / 40% RP 2000 Annuitant Female Mortality Table with White Collar Adjustment with no setback, 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)
2019	26,523,783	1,911,874	1,926,751	26,508,906
2020	26,508,906	1,906,709	2,027,539	26,388,076
2021	26,388,076	1,893,474	2,131,394	26,150,156
2022	26,150,156	1,874,119	2,169,014	25,855,261
2023	25,855,261	1,848,409	2,258,433	25,445,237
2024	25,445,237	1,815,781	2,305,133	24,955,885
2025	24,955,885	1,778,620	2,316,576	24,417,929
2026	24,417,929	1,737,067	2,346,598	23,808,398
2027	23,808,398	1,689,266	2,398,520	23,099,144
2028	23,099,144	1,634,417	2,439,719	22,293,842
2029	22,293,842	1,572,619	2,474,591	21,391,870
2030	21,391,870	1,504,360	2,489,787	20,406,443
2031	20,406,443	1,430,518	2,488,175	19,348,786
2032	19,348,786	1,351,058	2,491,555	18,208,289
2033	18,208,289	1,265,319	2,496,575	16,977,033
2034	16,977,033	1,172,837	2,500,006	15,649,864
2035	15,649,864	1,073,021	2,506,928	14,215,957
2036	14,215,957	965,290	2,511,609	12,669,638
2037	12,669,638	849,511	2,506,760	11,012,389
2038	11,012,389	725,234	2,506,352	9,231,271
2039	9,231,271	592,069	2,495,925	7,327,415
2040	7,327,415	449,916	2,480,080	5,297,251
2041	5,297,251	298,472	2,459,721	3,136,002
2042	3,136,002	137,344	2,435,680	837,666
2043	837,666	8,234	2,408,277	-
2044	-	-	2,378,129	-
2045	-	-	2,345,012	-
2046	-	-	2,308,936	-
2047	-	-	2,270,278	-
2048	-	-	2,228,290	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no future contributions from the City, Members or State: 24.33

Certain Key Assumptions

Investment return assumption 7.5%

Mortality Table:

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 60% RP 2000 Disabled Male Mortality Table setback four years / 40% RP 2000 Annuitant Male Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements. For disabled female participants, 60% RP 2000 Disabled Female Mortality Table set forward two years / 40% RP 2000 Annuitant Female Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Members or State. 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, Member and State 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)
2019	26,523,783	1,401,876	1,926,751	25,998,908
2020	25,998,908	1,370,030	2,027,539	25,341,399
2021	25,341,399	1,330,799	2,131,394	24,540,804
2022	24,540,804	1,285,654	2,169,014	23,657,444
2023	23,657,444	1,234,427	2,258,433	22,633,438
2024	22,633,438	1,176,727	2,305,133	21,505,032
2025	21,505,032	1,114,327	2,316,576	20,302,783
2026	20,302,783	1,047,316	2,346,598	19,003,501
2027	19,003,501	974,321	2,398,520	17,579,302
2028	17,579,302	894,773	2,439,719	16,034,356
2029	16,034,356	808,770	2,474,591	14,368,535
2030	14,368,535	716,701	2,489,787	12,595,449
2031	12,595,449	619,229	2,488,175	10,726,503
2032	10,726,503	516,337	2,491,555	8,751,285
2033	8,751,285	407,552	2,496,575	6,662,262
2034	6,662,262	292,554	2,500,006	4,454,810
2035	4,454,810	170,940	2,506,928	2,118,822
2036	2,118,822	44,504	2,511,609	-
2037	-	-	2,506,760	-
2038	-	-	2,506,352	-
2039	-	-	2,495,925	-
2040	-	-	2,480,080	-
2041	-	-	2,459,721	-
2042	-	-	2,435,680	-
2043	-	-	2,408,277	-
2044	-	-	2,378,129	-
2045	-	-	2,345,012	-
2046	-	-	2,308,936	-
2047	-	-	2,270,278	-
2048	-	-	2,228,290	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no future contributions from the City, Members or State: 17.83

Certain Key Assumptions

Investment return assumption 5.5%

Mortality Table:

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 60% RP 2000 Disabled Male Mortality Table setback four years / 40% RP 2000 Annuitant Male Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements. For disabled female participants, 60% RP 2000 Disabled Female Mortality Table set forward two years / 40% RP 2000 Annuitant Female Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Members or State. 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, Member and State 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)
2019	26,523,783	2,421,987	1,926,751	27,019,019
2020	27,019,019	2,463,919	2,027,539	27,455,399
2021	27,455,399	2,500,105	2,131,394	27,824,110
2022	27,824,110	2,533,224	2,169,014	28,188,320
2023	28,188,320	2,563,286	2,258,433	28,493,173
2024	28,493,173	2,589,878	2,305,133	28,777,918
2025	28,777,918	2,616,348	2,316,576	29,077,690
2026	29,077,690	2,643,303	2,346,598	29,374,395
2027	29,374,395	2,668,855	2,398,520	29,644,730
2028	29,644,730	2,692,446	2,439,719	29,897,457
2029	29,897,457	2,714,685	2,474,591	30,137,551
2030	30,137,551	2,736,723	2,489,787	30,384,487
2031	30,384,487	2,760,264	2,488,175	30,656,576
2032	30,656,576	2,785,941	2,491,555	30,950,962
2033	30,950,962	2,813,653	2,496,575	31,268,040
2034	31,268,040	2,843,601	2,500,006	31,611,635
2035	31,611,635	2,875,891	2,506,928	31,980,598
2036	31,980,598	2,910,705	2,511,609	32,379,694
2037	32,379,694	2,948,866	2,506,760	32,821,800
2038	32,821,800	2,990,886	2,506,352	33,306,334
2039	33,306,334	3,037,446	2,495,925	33,847,855
2040	33,847,855	3,089,695	2,480,080	34,457,470
2041	34,457,470	3,148,641	2,459,721	35,146,390
2042	35,146,390	3,215,309	2,435,680	35,926,019
2043	35,926,019	3,290,764	2,408,277	36,808,506
2044	36,808,506	3,376,130	2,378,129	37,806,507
2045	37,806,507	3,472,621	2,345,012	38,934,116
2046	38,934,116	3,581,574	2,308,936	40,206,754
2047	40,206,754	3,704,436	2,270,278	41,640,912
2048	41,640,912	3,842,812	2,228,290	43,255,434

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no future contributions from the City, Members or State: 99.99

Certain Key Assumptions

Investment return assumption 9.5%

Mortality Table:

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 60% RP 2000 Disabled Male Mortality Table setback four years / 40% RP 2000 Annuitant Male Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements. For disabled female participants, 60% RP 2000 Disabled Female Mortality Table set forward two years / 40% RP 2000 Annuitant Female Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the City, Members or State. 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, Member and State 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, 2018	October 1, 2018	October 1, 2018
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2020	September 30, 2020	September 30, 2020
C. Annual Payroll of Active Employees	\$ 3,514,829	\$ 3,514,829	\$ 3,514,829
D. Total Minimum Funding Requirement			
1. Total Normal Cost	\$ 882,047	\$ 1,362,436	\$ 606,849
2. Annual Payment to Amortize Unfunded Actuarial Liability	673,407	1,200,639	177,882
3. Interest Adjustment	40,137	43,164	33,042
4. Total Minimum Funding Requirement	\$ 1,595,591	\$ 2,606,239	\$ 817,773
E. Expected Payroll of Active Employees for Following Plan Year (\$ / % of pay) (C x 1.000)	\$ 3,514,829 100.00%	\$ 3,514,829 100.00%	\$ 3,514,829 100.00%
F. Expected Contribution Sources (\$ / % of pay)			
1. City	\$ 1,106,569 31.48%	\$ 2,117,217 60.24%	\$ 328,751 9.35%
2. Member	272,399 7.75%	272,399 7.75%	272,399 7.75%
3. State	216,623 6.16%	216,623 6.16%	216,623 6.16%
4. Total	\$ 1,595,591 45.40%	\$ 2,606,239 74.15%	\$ 817,773 23.27%

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%	
10/01/2017 Combined Credit Bases *	\$ (4,883,629)	\$ (621,004)	\$ (572,013)	\$ (670,939)	11 years
10/01/2017 Combined Charge Bases *	13,342,045	1,357,676	1,208,783	1,511,303	16 years
10/01/2018 Actuarial Loss / (Gain)	(803,220)	(63,265)	(52,385)	(74,586)	30 years
10/01/2018 Assumption Change - 112.664(1)(b), F.S. Assumptions	9,449,089	N/A	616,254	N/A	30 years
10/01/2018 Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2%	(6,331,062)	N/A	N/A	(587,896)	30 years

* Combined per Internal Revenue Code Regulation 1.412(b)-1

SECTION B

SUMMARY OF PLAN PROVISIONS

Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2018)

A. Effective Date:

January 1, 1973, amended through Ordinance 2017-06, adopted February 6, 2017.

B. Eligibility Requirements:

Certified full time law enforcement officer in the service of the City of DeLand.

C. Employee Contributions:

7.75% of basic compensation. Effective September 29, 1990, employee contributions are *picked-up* by the City.

D. Credited Service:

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

E. Final Monthly Compensation (FMC):

Average monthly rate of basic compensation during the best 5 years out of the last 10 years preceding date of retirement (or termination). Basic compensation includes overtime pay and employee contributions picked-up by the City but excludes commissions, bonuses and expense allowances. Accrued leave will be frozen as of September 30, 2013.

F. Normal Retirement:

1. Eligibility:

Earlier of:

- (a) Attainment of age 55 with completion of 10 years of credited service.
- (b) Completion of 20 years of credited service.

2. Benefit:

3% times FMC times credited service.

Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2018)

G. Early Retirement:

1. Eligibility:

Attainment of age 50 with completion of 10 years of credited service.

2. Benefit:

Benefit accrued to date of retirement, actuarially reduced, but not more than 3% reduction for each year early retirement date precedes normal retirement date.

H. Deferred Retirement:

Computed the same as set forth under Normal Retirement, based upon FMC and credited service as of deferred retirement date.

I. Disability Retirement:

1. Eligibility:

Total and permanent disability.

2. Benefit:

Service Connected Disability:

Monthly Retirement Income:

A monthly retirement income determined as the greater of 60% of FMC as of date of disability or benefit accrued based upon FMC and credited service to date of disability.

Form of Payment:

Monthly retirement income payable until the earliest of recovery from disability, death or normal retirement date. If the participant remains disabled until normal retirement date, the same benefit will be payable for 10 years certain (measured from normal retirement date) and life thereafter.

Non-Service Connected Disability:

Monthly Retirement Income:

A monthly retirement income of 50% of FMC as of date of disability.

Form of Payment:

Monthly retirement income payable for 10 years certain and life thereafter, or until recovery from disability prior to normal retirement date.

Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2018)

I. Disability Retirement (cont'd):

Death of Disabled Participant Prior to Normal Retirement Date:

Benefit to beneficiary (payable for ten (10) years certain and life thereafter) which can be supported by the greater of A or B, where A is the single-sum value of the accrued deferred benefit at date of death assuming continued credited service and assuming continued pay at last monthly rate to date of death and B is the smaller of (1) and (2), where (1) is 24 times FMC at date of death and (2) is 100 times the anticipated monthly normal retirement benefit.

J. Death Benefit:

Benefit to beneficiary (payable for ten (10) years certain and life thereafter) which can be supported by the greater of A or B, where A is the single-sum value of the accrued deferred benefit at date of death and B is the smaller of (1) and (2), where (1) is 24 times FMC at date of death and (2) is 100 times the anticipated monthly normal retirement benefit.

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 be entitled to the return of their employee contributions without interest.

2. Benefit at Normal Retirement Date:

Accrued benefit based upon credited service and FMC as of date of termination.

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 must terminate employment from the City.

After each fiscal year quarter, the average daily balance in a participant's deferred retirement option account shall be credited at a rate of 6% per annum, compounded monthly.

Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2018)

N. Cost of Living Adjustment (COLA)

All current retirees, disableds, beneficiaries, DROPs and terminated vested members, who retired before January 1, 2008 and 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, 2006.

All participants, or the beneficiaries of said participants, who retire on or after January 1, 2008, shall be required to have attained Normal Retirement Date to be eligible to receive the above stated annual COLA.

Effective October 1, 2012, all participants who were employed on or after March 21, 2011 and who retire pursuant to normal retirement eligibility conditions, including entry into the DROP, and active DROP participants employed as of March 21, 2011 with the City shall receive an automatic annual cost of living adjustment (COLA) of 1.5% in addition to the above stated annual COLA of 0.5% in the January following the earlier of (1) attainment of age 55 but not before a period of one (1) year has elapsed from date of retirement or DROP entry or (2) three (3) years following the date of retirement or DROP entry.

O. 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, 2018)

A. Mortality

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For disabled male participants, 60% RP 2000 Disabled Male Mortality Table setback four years / 40% RP 2000 Annuitant Male Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements. For disabled female participants, 60% RP 2000 Disabled Female Mortality Table set forward two years / 40% RP 2000 Annuitant Female Mortality Table with White Collar Adjustment with no setback, without projected mortality improvements.

Sample Ages (2018)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	29.84	32.60	29.33
60	24.96	27.56	24.76	27.41
62	23.09	25.59	22.97	25.49

Sample Ages (2038)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	32.06	34.54	31.57
60	27.21	29.49	27.03	29.36
62	25.34	27.51	25.23	27.42

B. Interest to be Earned by Fund

7.5%, compounded annually, net of investment expenses - includes inflation at 2.5%.

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2018)

C. Allowances for Expenses or Contingencies

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

D. Employee Withdrawal Rates

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

<u>Years of Service</u>	<u>Withdrawal Rates Per 100 Employees</u>
1	20.0
2	16.0
3	14.0
4	12.0
5	10.0
6	10.0
7	4.0
8	3.0
9	2.0
10	2.0
11 & Over	1.0

E. Disability Rates

The 1985 Disability Study - Class 2 separate male and female rates were used.

F. 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 3.0%.

<u>Service</u>	<u>Salary Increase</u>
1 - 2	6.25%
3	6.00%
4	5.75%
5 - 6	5.50%
7 + years	4.75%

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2018)

G. Assumed Retirement Age

Age	Retirement Rates
Early - Age 50 and 10 Years of Service Rule	
All Ages	5%
Normal - 20 Years and Out Rule (Prior to 55)	
40 - 44	60%
45 - 54	75%
Normal - Age 55 and 10 Years of Service Rule	
55 - 59	75%
60 and above	100%

However, all active members on the valuation date are assumed to have a minimum of one year of future service.

H. Loading

Service retirement liabilities are increased by 2.5% to account for unused vacation and compensatory leave for members hired prior to October 1, 2013.

I. Asset Valuation Method

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

J. 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.

K. Change From Previous Valuation

None.

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.