



April 30, 2018

Board of Trustees
c/o Mr. T. Scott Baker
New Port Richey
Police Officers' Retirement System
6739 Adams Street
New Port Richey, Florida 34652

Re: New Port Richey Police Officers' Retirement System

Dear Board Members:

As requested, we are pleased to enclose eleven (11) copies of the October 1, 2017 Chapter 112.664 Compliance Report for the New Port Richey Police Officers' Retirement System (System).

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

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

- 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 System'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 System portfolio
- the System's funded ratio as determined in the most recent actuarial valuation – 106.7% on a market value of assets basis as of October 1, 2017

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 "L. F. Wilson".

Lawrence F. Wilson, A.S.A.
Senior Consultant and Actuary

Enclosures

New Port Richey Police Officers' Retirement System

CHAPTER 112.664, F.S. COMPLIANCE REPORT

In Connection with the October 1, 2017 Funding Actuarial Valuation Report and the System's
Financial Reporting for the Year Ended September 30, 2017





April 30, 2018

Board of Trustees
City of New Port Richey
Police Officers' Retirement System
6739 Adams Street
New Port Richey, Florida 34652

Re: October 1, 2017 Chapter 112.664 Compliance Report

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the Board of Trustees (Board) of the City of New Port Richey Police Officers' Retirement System (System) 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: system 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 system's funded status); and changes in system provisions or applicable law. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report is based upon information furnished by the City and the Board concerning System benefits, System provisions and System 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, 2017. We reviewed the information provided for internal and year-to-year consistency, but did not audit this data. The System is responsible for the accuracy of the data.

Except where specific assumptions are required by Chapter 112.664, F.S, this report is prepared using actuarial assumptions adopted by the Board as described in Section C. The Board's assumptions are based upon recent System experience last updated effective with the October 1, 2016 Actuarial Impact Statement and represent an estimate of future System 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 System experience or 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 System assets will be sufficient to pay all System benefits, future contributions are expected to remain relatively stable as a percent of payroll and the funded status is expected to improve. System minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act and for Police Officers Retirement Chapter 185 with normal cost determined as a level percent of covered payroll and a level dollar amortization payment using a maximum amortization period of 30 years.

The System's funded ratio as of October 1, 2017 is 106.7% defined as the ratio of the market value of System assets to the actuarial accrued liability.

The System's funded ratio and the GASB Net Pension Liability may not be appropriate for assessing the sufficiency of System 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 System 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 fairly presents the actuarial position of the System 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.

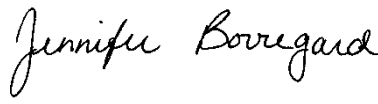
Board of Trustees
April 30, 2018
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With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, 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 
Lawrence F. Wilson, A.S.A., M.A.A.A
Enrolled Actuary No. 17-02802
Senior Consultant & Actuary

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

Date: April 30, 2018

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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

Measurement Date	September 30, 2017
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 770,072
Interest	1,970,862
Benefit Changes	0
Difference Between Actual and Expected Experience	(610,687)
Assumption Changes	686,077
Benefit Payments	(1,701,775)
Contribution Refunds	(25,471)
Other	0
Net Change in Total Pension Liability	\$ 1,089,078
Total Pension Liability (TPL) - (beginning of year)	25,549,613
Total Pension Liability (TPL) - (end of year)	\$ 26,638,691
 B. <u>System Fiduciary Net Position</u>	
Contributions - City	\$ 1,038,318
Contributions - State	224,641
Contributions - Member	111,261
Net Investment Income	3,011,138
Benefit Payments	(1,701,775)
Contribution Refunds	(25,471)
Administrative Expenses	(65,265)
Other	0
Net Change in System Fiduciary Net Position	\$ 2,592,847
System Fiduciary Net Position - (beginning of year)	24,064,494
System Fiduciary Net Position - (end of year)	\$ 26,657,341
 C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	 \$ (18,650)
Valuation Date	October 1, 2016

Certain Key Assumptions

Investment Return Assumption 7.75%

Mortality Table:

For healthy Police Officer 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 Police Officer 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.

Measurement Date	<u>September 30, 2017</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 770,072
Interest	1,970,862
Benefit Changes	0
Difference Between Actual and Expected Experience	(640,965)
Assumption Changes	410,721
Benefit Payments	(1,701,775)
Contribution Refunds	(25,471)
Other	0
Net Change in Total Pension Liability	\$ 783,444
Total Pension Liability (TPL) - (beginning of year)	25,855,247
Total Pension Liability (TPL) - (end of year)	<u>\$ 26,638,691</u>
 B. <u>System Fiduciary Net Position</u>	
Contributions - City	\$ 1,038,318
Contributions - State	224,641
Contributions - Member	111,261
Net Investment Income	3,011,138
Benefit Payments	(1,701,775)
Contribution Refunds	(25,471)
Administrative Expenses	(65,265)
Other	0
Net Change in System Fiduciary Net Position	\$ 2,592,847
System Fiduciary Net Position - (beginning of year)	24,064,494
System Fiduciary Net Position - (end of year)	<u>\$ 26,657,341</u>
 C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	 \$ (18,650)
 Valuation Date	 October 1, 2016

Certain Key Assumptions

Investment Return Assumption 7.75%

Mortality Table:

For healthy Police Officer 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 Police Officer 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	September 30, 2017
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 1,162,207
Interest	1,869,359
Benefit Changes	0
Difference Between Actual and Expected Experience	(790,447)
Assumption Changes	672,784
Benefit Payments	(1,701,775)
Contribution Refunds	(25,471)
Other	0
Net Change in Total Pension Liability	\$ 1,186,657
Total Pension Liability (TPL) - (beginning of year)	32,434,103
Total Pension Liability (TPL) - (end of year)	\$ 33,620,760
 B. <u>System Fiduciary Net Position</u>	
Contributions - City	\$ 1,038,318
Contributions - State	224,641
Contributions - Member	111,261
Net Investment Income	3,011,138
Benefit Payments	(1,701,775)
Contribution Refunds	(25,471)
Administrative Expenses	(65,265)
Other	0
Net Change in System Fiduciary Net Position	\$ 2,592,847
System Fiduciary Net Position - (beginning of year)	24,064,494
System Fiduciary Net Position - (end of year)	\$ 26,657,341
 C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	 \$ 6,963,419
Valuation Date	October 1, 2016

Certain Key Assumptions

Investment Return Assumption 5.75%

Mortality Table:

For healthy Police Officer 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 Police Officer 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, 2017</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 529,689
Interest	2,006,621
Benefit Changes	0
Difference Between Actual and Expected Experience	(534,082)
Assumption Changes	263,379
Benefit Payments	(1,701,775)
Contribution Refunds	(25,471)
Other	0
Net Change in Total Pension Liability	\$ 538,361
Total Pension Liability (TPL) - (beginning of year)	21,282,896
Total Pension Liability (TPL) - (end of year)	<u>\$ 21,821,257</u>
 B. <u>System Fiduciary Net Position</u>	
Contributions - City	\$ 1,038,318
Contributions - State	224,641
Contributions - Member	111,261
Net Investment Income	3,011,138
Benefit Payments	(1,701,775)
Contribution Refunds	(25,471)
Administrative Expenses	(65,265)
Other	0
Net Change in System Fiduciary Net Position	\$ 2,592,847
System Fiduciary Net Position - (beginning of year)	24,064,494
System Fiduciary Net Position - (end of year)	<u>\$ 26,657,341</u>
 C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	 \$ (4,836,084)
 Valuation Date	 October 1, 2016

Certain Key Assumptions

Investment Return Assumption 9.75%

Mortality Table:

For healthy Police Officer 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 Police Officer 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)
2018	\$ 26,388,376	\$ 1,980,539	\$ 1,555,637	\$ 26,813,278
2019	26,813,278	2,013,293	1,559,883	27,266,688
2020	27,266,688	2,047,145	1,590,915	27,722,918
2021	27,722,918	2,079,981	1,651,676	28,151,223
2022	28,151,223	2,107,847	1,780,050	28,479,020
2023	28,479,020	2,132,754	1,792,024	28,819,750
2024	28,819,750	2,158,712	1,802,848	29,175,614
2025	29,175,614	2,179,667	1,962,471	29,392,810
2026	29,392,810	2,192,711	2,053,743	29,531,778
2027	29,531,778	2,203,092	2,063,130	29,671,740
2028	29,671,740	2,211,847	2,113,530	29,770,057
2029	29,770,057	2,216,076	2,195,238	29,790,895
2030	29,790,895	2,216,812	2,216,416	29,791,291
2031	29,791,291	2,217,270	2,206,127	29,802,434
2032	29,802,434	2,216,962	2,234,341	29,785,055
2033	29,785,055	2,214,544	2,260,168	29,739,431
2034	29,739,431	2,211,617	2,245,493	29,705,555
2035	29,705,555	2,209,904	2,223,504	29,691,955
2036	29,691,955	2,210,113	2,193,069	29,708,999
2037	29,708,999	2,212,158	2,175,629	29,745,528
2038	29,745,528	2,215,296	2,168,227	29,792,597
2039	29,792,597	2,219,890	2,145,424	29,867,063
2040	29,867,063	2,226,933	2,114,790	29,979,206
2041	29,979,206	2,236,426	2,095,457	30,120,175
2042	30,120,175	2,249,162	2,051,821	30,317,516
2043	30,317,516	2,266,087	2,012,515	30,571,088
2044	30,571,088	2,287,372	1,973,161	30,885,299
2045	30,885,299	2,313,617	1,927,529	31,271,387
2046	31,271,387	2,345,466	1,881,099	31,735,754
2047	31,735,754	2,383,473	1,832,469	32,286,758

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, Members or State: N/A

Certain Key Assumptions

Investment return assumption 7.75%

Mortality Table:

For healthy Police Officer 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 Police Officer 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 System assets does not include contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the System 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)
2018	\$ 26,388,376	\$ 1,469,294	\$ 1,555,637	\$ 26,302,033
2019	26,302,033	1,464,198	1,559,883	26,206,348
2020	26,206,348	1,457,738	1,590,915	26,073,171
2021	26,073,171	1,448,204	1,651,676	25,869,699
2022	25,869,699	1,432,540	1,780,050	25,522,189
2023	25,522,189	1,412,188	1,792,024	25,142,353
2024	25,142,353	1,390,014	1,802,848	24,729,519
2025	24,729,519	1,361,347	1,962,471	24,128,395
2026	24,128,395	1,323,964	2,053,743	23,398,616
2027	23,398,616	1,281,711	2,063,130	22,617,197
2028	22,617,197	1,235,223	2,113,530	21,738,890
2029	21,738,890	1,182,198	2,195,238	20,725,850
2030	20,725,850	1,123,294	2,216,416	19,632,728
2031	19,632,728	1,060,757	2,206,127	18,487,358
2032	18,487,358	994,027	2,234,341	17,247,044
2033	17,247,044	921,911	2,260,168	15,908,787
2034	15,908,787	845,415	2,245,493	14,508,709
2035	14,508,709	765,589	2,223,504	13,050,794
2036	13,050,794	682,699	2,193,069	11,540,424
2037	11,540,424	596,391	2,175,629	9,961,186
2038	9,961,186	505,814	2,168,227	8,298,773
2039	8,298,773	410,929	2,145,424	6,564,278
2040	6,564,278	312,142	2,114,790	4,761,630
2041	4,761,630	209,086	2,095,457	2,875,259
2042	2,875,259	101,968	2,051,821	925,406
2043	925,406	9,989	2,012,515	-
2044	-	-	1,973,161	-
2045	-	-	1,927,529	-
2046	-	-	1,881,099	-
2047	-	-	1,832,469	-

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, Members or State: 25.42

Certain Key Assumptions

Investment return assumption 5.75%

Mortality Table:

For healthy Police Officer 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 Police Officer 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 System assets does not include contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the System 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)
2018	\$ 26,388,376	\$ 2,491,877	\$ 1,555,637	\$ 27,324,616
2019	27,324,616	2,582,940	1,559,883	28,347,673
2020	28,347,673	2,681,072	1,590,915	29,437,830
2021	29,437,830	2,784,199	1,651,676	30,570,353
2022	30,570,353	2,887,937	1,780,050	31,678,240
2023	31,678,240	2,995,332	1,792,024	32,881,548
2024	32,881,548	3,112,091	1,802,848	34,190,791
2025	34,190,791	3,231,432	1,962,471	35,459,752
2026	35,459,752	3,350,404	2,053,743	36,756,413
2027	36,756,413	3,476,340	2,063,130	38,169,623
2028	38,169,623	3,611,504	2,113,530	39,667,597
2029	39,667,597	3,753,302	2,195,238	41,225,661
2030	41,225,661	3,904,111	2,216,416	42,913,356
2031	42,913,356	4,069,197	2,206,127	44,776,426
2032	44,776,426	4,249,377	2,234,341	46,791,462
2033	46,791,462	4,444,499	2,260,168	48,975,793
2034	48,975,793	4,658,235	2,245,493	51,388,535
2035	51,388,535	4,894,622	2,223,504	54,059,653
2036	54,059,653	5,156,641	2,193,069	57,023,225
2037	57,023,225	5,446,497	2,175,629	60,294,093
2038	60,294,093	5,765,792	2,168,227	63,891,658
2039	63,891,658	6,117,742	2,145,424	67,863,976
2040	67,863,976	6,506,638	2,114,790	72,255,824
2041	72,255,824	6,935,849	2,095,457	77,096,216
2042	77,096,216	7,410,059	2,051,821	82,454,454
2043	82,454,454	7,934,534	2,012,515	88,376,473
2044	88,376,473	8,513,980	1,973,161	94,917,292
2045	94,917,292	9,154,085	1,927,529	102,143,848
2046	102,143,848	9,861,091	1,881,099	110,123,840
2047	110,123,840	10,641,672	1,832,469	118,933,043

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, Members or State: N/A

Certain Key Assumptions

Investment return assumption 9.75%

Mortality Table:

For healthy Police Officer 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 Police Officer 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 System assets does not include contributions from the City, Member or State. For this reason, this projection should not be viewed as representative of the amount of time the System can sustain benefit payments. Under the Government Accounting Standards Board standards which include City, Member and State contributions, the System 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, 2017	October 1, 2017	October 1, 2017
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2019	September 30, 2019	September 30, 2019
C. Annual Payroll of Active Employees	\$ 2,478,660	\$ 2,478,660	\$ 2,478,660
D. Total Minimum Funding Requirement			
1. Total Normal Cost	\$ 735,564	\$ 1,093,305	\$ 519,023
2. Annual Payment to Amortize Unfunded Actuarial Liability	(96,475)	349,731	(536,087)
3. Interest Adjustment	<u>28,031</u>	<u>43,467</u>	<u>4,428</u>
4. Total Minimum Funding Requirement (1. + 2. + 3., not less than 1.)	\$ 735,564	\$ 1,486,503	\$ 519,023
E. Expected Payroll of Active Employees for Following Plan Year (\$ / % of pay) (C x 1.000)	\$ 2,478,660 100.00%	\$ 2,478,660 100.00%	\$ 2,478,660 100.00%
F. Expected Contribution Sources (\$ / % of pay)			
1. City	\$ 349,810 14.11%	\$ 1,100,749 44.41%	\$ 133,269 5.38%
2. Member	161,113 6.50%	161,113 6.50%	161,113 6.50%
3. State	<u>224,641 9.06%</u>	<u>224,641 9.06%</u>	<u>224,641 9.06%</u>
4. Total	\$ 735,564 29.68%	\$ 1,486,503 59.97%	\$ 519,023 20.94%

Unfunded Actuarial Accrued Liability Bases and Amortization Payments

<u>Amortization Base</u>		Current Unfunded Liabilities	<u>Amortization Payment</u>			Remaining Funding Period
			Valuation and 112.664(1)(a), F.S. <u>Assumptions</u>	112.664(1)(b), F.S. <u>Assumptions</u>	112.664(1)(a), F.S. <u>Assumptions Plus</u> <u>2%</u>	
10/01/2017	Combined Bases *	\$ (1,198,426)	\$ (96,475)	\$ (80,140)	\$ (113,426)	30 years
10/01/2017	Assumption Change - 112.664(1)(b), F.S. Assumptions	6,428,348	N/A	429,871	N/A	30 years
10/01/2017	Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2%	(4,465,731)	N/A	N/A	(422,661)	30 years

* Combined per Internal Revenue Code Regulation 1.412(b)-1 - 30-year for resulting combined credit base

SECTION B

SUMMARY OF SYSTEM PROVISIONS

**Summary of Provisions Considered for Actuarial Valuation
as of October 1, 2017**

A. Effective Date:

May 1, 1977 (last amended February 6, 2018 - Ordinance No. 2018-2132).

B. Eligibility Requirements:

An actively employed Police Officer who fulfills the prescribed participation requirements. A new employee who is hired as the Police Chief may elect not to participate in the Plan.

C. Frozen Benefit:

The benefit structure in effect on November 7, 2017 is frozen at midnight on that date. All members will be vested in benefits accrued as of November 7, 2017 and payable under the terms and conditions of the benefit structure then in effect.

Additional benefits will accrue in accordance with the new benefit structure as described below.

D. Contributions:

State of Florida: Any monies received or receivable by reason of laws of the State of Florida, for funding and paying for retirement benefits for Police Officers of the City.

Members: 6.5% of Earnings, reduced to equal the City Contribution in any year in which the most recent Actuarial Valuation states that the required City Contribution is less than 6.5% of covered payroll.

City: Remaining amount necessary for payment of the total cost for the year as determined in the most recent Actuarial Valuation. However, in any year in which the results of the most recent Actuarial Valuation requires City Contributions of less than 6.5% of covered payroll, then the City Contribution and Member contribution shall be shared equally.

E. Credited Service:

Total number of years and fractional parts of years of service as a Police Officer with Member contributions to the System, omitting intervening years or fractional parts of years when such Member was not employed by the City as a Police Officer. A Member who terminates employment and leaves his contributions in the Fund and is reemployed within five years will receive credit for service prior to his date of termination. A Member may receive credit for military service and prior police service under certain circumstances.

**Summary of Provisions Considered for Actuarial Valuation
as of October 1, 2017**

F. Average Final Compensation (AFC):

For years of Credited Service earned prior to November 8, 2017:

One-twelfth of W-2 compensation plus any tax deferral elective deductions or salary reductions paid during the highest year of the final three (3) years of Credited Service (not less than the average over the five (5) best years of the last ten (10) years) immediately preceding November 8, 2017. In the final year of service prior to November 8, 2017 a Member may be paid 100% of accrued vacation and 50% of accrued sick leave up to 96 hours.

For years of Credited Service earned on or after November 8, 2017:

One-twelfth of total cash remuneration paid by the City for services rendered paid during the highest three (3) years of the last (5) years of Credited Service immediately preceding the retirement, termination or death of a Member. Salary excludes overtime in excess of 300 hours per year and accrued unused sick or annual leave.

G. Regular Base Salary (RBS):

The Member's hourly rate times two thousand-eighty (2,080) hours.

H. Normal Retirement:

1. Eligibility:

For participants with ten (10) or more years of credited service as of November 7, 2017:

Earlier of attainment of age fifty (50) and completion of ten (10) years of Credited Service or twenty-three (23) years of Credited Service.

For participants with less than ten (10) years of credited service as of November 7, 2017:

Earlier of attainment of age fifty-two (52) and completion of ten (10) years of Credited Service or twenty-three (23) years of Credited Service.

Frozen benefit as of November 7, 2017 may be paid upon attainment of age fifty (50) and completion of ten (10) years of Credited Service.

2. Benefit:

3.5% of AFC times years of Credited Service through November 7, 2017; 3.25% of AFC times years of Credited Service on or after November 8, 2017 (maximum benefit - 75% of AFC; minimum benefit - 2% of AFC times years of Credited Service) payable for ten (10) years certain and life thereafter. An optional form of benefit may be elected by a Member.

In addition to the benefit above, Members will receive an additional supplemental benefit.

**Summary of Provisions Considered for Actuarial Valuation
as of October 1, 2017**

I. Early Retirement:

1. Eligibility:

Attainment of age fifty (50) and completion of ten (10) years of Credited Service.

Frozen benefit as of November 7, 2017 may be paid upon completion of twenty (20) years of Credited Service.

2. Benefit:

The accrued benefit based upon AFC and Credited Service determined as of the Early Retirement Date payable immediately. The portion of the accrued benefit for years of Credited Service on or after November 8, 2017 is actuarially reduced, but not more than 3% reduction for each year early retirement date precedes normal retirement date.

J. Service Connected Disability Benefit:

1. Eligibility:

Service connected injury, disease or disability which permanently incapacitates a Member from performing Police Officers' duties. Eligible for benefits from date of employment.

2. Benefit:

60% of RBS payable monthly for life or prior recovery. In addition, Members will receive an additional supplemental benefit. Minimum disability benefit is the greatest of 42% of AFC, 2% of AFC times years of Credited Service and 3.5% of RBS times years of Credited Service through November 7, 2017 plus 3.25% of RBS times years of Credited Service on or after November 8, 2017, not to exceed 75% of RBS. Upon death, the benefit will be continued in the same manner provided for under Service Incurred Preretirement Death Benefit, but provided further that the benefit, except for the additional supplemental benefit, shall be payable for a minimum of 120 monthly payments.

Benefits may be reduced for Workers' Compensation benefits, Social Security disability benefits and disability benefits from another employer for the same disability. In no event shall the benefit be reduced below the greater of 42% of AFC and 2% of AFC times years of Credited Service.

K. Non-Service Connected Disability Benefit:

1. Eligibility:

Non-service connected injury, disease or disability which permanently incapacitates a Member from performing Police Officers' duties after completing one year of Credited Service.

Summary of Provisions Considered for Actuarial Valuation
as of October 1, 2017

K. Non-Service Connected Disability Benefit (cont'd):

2. Benefit:

Members prior to October 20, 1994 (including those who received Credited Service for periods prior to October 20, 1994), 30% of RBS payable monthly for life or prior recovery plus an additional monthly supplemental benefit. Minimum disability benefit after ten (10) years of Credited Service is the greatest of 25% of AFC, 2% AFC times years of Credited Service, and 3.5% of RBS times years of Credited Service through November 7, 2017 plus 3.25% of RBS times years of Credited Service on or after November 8, 2017, not to exceed 75% of RBS.

Members eligible on or after October 20, 1994 receive a benefit equal to 5% of RBS times years of Credited Service not to exceed 30% of RBS payable monthly for life or prior recovery plus an additional monthly supplemental benefit. Minimum disability benefit for a Member after ten (10) years of Credited Service is the greatest of 25% of AFC, 2% of AFC times years of Credited Service and 3.5% of RBS times years of Credited Service through November 7, 2017 plus 3.25% of RBS times years of Credited Service on or after November 8, 2017, not to exceed 75% of RBS. The benefit, except for the supplemental benefit, shall be payable for a minimum of 120 payments or prior recovery.

Benefits may be reduced for Workers' Compensation benefits, Social Security disability benefits and disability benefits from another employer for the same disability. In no event shall the benefit after ten (10) years of Credited Service be reduced below 25% of AFC or 2% of AFC times years of Credited Service.

L. Service Incurred Preretirement Death Benefit:

1. Eligibility:

Eligible for benefits from date of employment.

2. Benefit:

60% of RBS in effect on date of death plus an additional monthly supplemental benefit payable to the spouse until death. If no spouse, or upon death of the spouse, 15% of RBS payable to each unmarried child until age 18 (or to age 22, if enrolled in school); total maximum for all such children is 60% of RBS. Eligible children shall also share equally in the applicable additional monthly supplemental benefit. If no surviving spouse or eligible children, the designated beneficiary will receive 100% of the Member's accumulated contributions.

M. Non-Service Incurred Preretirement Death Benefit:

1. Eligibility:

Five (5) years of Credited Service.

Summary of Provisions Considered for Actuarial Valuation
as of October 1, 2017

M. Non-Service Incurred Preretirement Death Benefit (cont'd):

2. Benefit:

30% of RBS in effect on date of death plus an additional monthly supplemental benefit payable to the spouse until remarriage or death. If no spouse, or upon remarriage or death, 7.5% of RBS payable to each unmarried child until age 18 (or to age 22, if enrolled in school); total maximum for all such children of 30% of RBS. Eligible children shall also share equally in the applicable additional monthly supplemental benefit. If no surviving spouse or eligible children, the designated beneficiary will receive 100% of the Member's accumulated contributions.

With less than five (5) years of Credited Service, refund of 100% of the Member's accumulated contributions.

N. Minimum Preretirement Death Benefit:

If the Member was vested, but not eligible for Early or Normal Retirement, the beneficiary is entitled to the benefits otherwise payable at Early or Normal Retirement, and shall receive the benefit payable monthly for ten (10) years certain.

O. Termination Benefits:

A Member who has completed less than ten (10) years of Credited Service will receive a refund of his accumulated contributions. A Member who has completed ten (10) years of Credited Service who does not withdraw his accumulated contributions will receive his accrued benefit based upon his AFC and years of Credited Service as of his date of termination payable at his Normal Retirement Date. Upon death prior to Normal Retirement Date, his beneficiary will be entitled to benefits as provided under Non-service Incurred Preretirement Death Benefits.

A Member of the plan with a frozen accrued benefit as of November 7, 2017 who does not withdraw his accumulated contributions is 100% vested in the frozen accrued benefit payable under the provisions of the prior Plan.

P. Deferred Retirement Option Plan (DROP):

1. Eligibility: Eligible for normal retirement.
2. The maximum period of participation in the DROP is sixty (60) months.
3. For members entering the DROP prior to November 8, 2017, the member's account in the DROP program shall be credited with interest based upon a fixed return of 6.5%. For members entering the DROP on or after November 8, 2017, the member's account in the DROP program shall be credited with interest based upon a fixed return of 1.5%. In lieu of the fixed return, a member may elect for their account in the DROP program to be credited with interest based upon the actual net return of the Fund, but not less than 0%.

**Summary of Provisions Considered for Actuarial Valuation
as of October 1, 2017**

P. Deferred Retirement Option Plan (DROP) (cont'd):

4. For members entering the DROP prior to November 8, 2017, the member may elect to change the interest crediting option twice during his DROP participation. For members entering the DROP on or after November 8, 2017, the member's interest crediting election upon DROP entry is irrevocable.
5. No payment may be made from DROP until the employee actually separates from service with the City.

Q. Supplemental Benefit

Members prior to October 20, 1994 (including those who received Credited Service for periods prior to October 20, 1994) - an additional monthly supplemental benefit of \$400 is payable.

Members eligible on or after October 20, 1994 - the additional monthly supplemental benefit is \$200.

For members who retire on or after October 1, 2004 - the additional monthly supplemental benefit is increased to \$500. This increase in the supplemental benefit shall be funded from the annual state monies received by the Plan in excess of \$248,077. The maximum additional state monies that can be used in each year for this benefit enhancement is \$37,082. To the extent that actual state monies received in any year are less than \$285,159, the prospective supplemental benefit on the following January 1st shall be reduced to a level that the annual state monies can fully fund. This adjusted supplemental benefit cannot be reduced below the current monthly supplemental benefit of \$400 for members hired prior to October 20, 1994 and \$200 for members hired on or after October 20, 1994. Any reductions in supplemental benefits will not affect the supplemental benefits prior to that date.

The additional supplemental benefit is payable for the life of the Member, except that if the Member elects a joint and survivor option and the surviving spouse of the Member or the Member's child is the joint pensioner, the entire additional supplemental benefit shall be paid for the life of the surviving spouse or until the child reaches the age of 18 (or 22, if enrolled in school).

R. Changes From Previous Valuation (Included in Actuarial Impact Statement)

1. Member contributions were:

4.5% of Earnings, reduced to equal the City Contribution in any year in which the most recent Actuarial Valuation states that the required City Contribution is less than 4.5% of covered payroll, subject to minimum contribution of 1.0% of Earnings.

2. City contributions were:

Remaining amount necessary for payment of the total cost for the year as determined in the most recent Actuarial Valuation. However, in any year in which the results of the most recent Actuarial Valuation requires City Contributions of less than 4.5% of covered payroll, then the City Contribution and Member contribution shall be shared equally.

Summary of Provisions Considered for Actuarial Valuation
as of October 1, 2017

R. Changes From Previous Valuation (Included in Actuarial Impact Statement) (cont'd)

3. Average Final Compensation (AFC) was:

One-twelfth of W-2 compensation plus any tax deferral elective deductions or salary reductions paid during the highest year of the final three (3) years of Credited Service immediately preceding the retirement, termination or death of a Member (not less than the average over the five (5) best years of the last ten (10) years). In the final year of service a Member is paid 100% of accrued vacation and 50% of accrued sick leave up to 96 hours.

4. Normal Retirement was:

1. Eligibility:

Attainment of age fifty (50) and completion of ten (10) years of Credited Service.

2. Benefit:

3.5% of AFC times years of Credited Service (maximum benefit - 75% of AFC; minimum benefit - 2% of AFC times years of Credited Service) payable for ten (10) years certain and life thereafter. An optional form of benefit may be elected by a Member.

In addition to the benefit above, Members will receive an additional supplemental benefit.

5. Early Retirement was:

1. Eligibility:

Completion of twenty (20) years of Credited Service.

2. Benefit:

The unreduced accrued benefit based upon AFC and Credited Service determined as of the Early Retirement Date payable immediately.

6. Service Connected Disability Benefit was:

60% of RBS payable monthly for life or prior recovery. In addition, Members will receive an additional supplemental benefit. Minimum disability benefit is the greatest of 42% of AFC, 2% of AFC times years of Credited Service and 3.5% of RBS times years of Credited Service not to exceed 75% of RBS. Upon death, the benefit will be continued in the same manner provided for under Service Incurred Preretirement Death Benefit, but provided further that the benefit, except for the additional supplemental benefit, shall be payable for a minimum of 120 monthly payments.

Benefits may be reduced for Workers' Compensation benefits, Social Security disability benefits and disability benefits from another employer for the same disability. In no event shall the benefit be reduced below the greater of 42% of AFC and 2% of AFC times years of Credited Service.

**Summary of Provisions Considered for Actuarial Valuation
as of October 1, 2017**

R. Changes From Previous Valuation (Included in Actuarial Impact Statement) (cont'd)

7. Non-Service Connected Disability Benefit was:

Members prior to October 20, 1994 (including those who received Credited Service for periods prior to October 20, 1994), 30% of RBS payable monthly for life or prior recovery plus an additional monthly supplemental benefit. Minimum disability benefit after ten (10) years of Credited Service is the greatest of 25% of AFC, 2% AFC times years of Credited Service, and 3.5% of RBS times years of Credited Service not to exceed 75% of RBS.

Members eligible on or after October 20, 1994 receive a benefit equal to 5% of RBS times years of Credited Service not to exceed 30% of RBS payable monthly for life or prior recovery plus an additional monthly supplemental benefit. Minimum disability benefit for a Member after ten (10) years of Credited Service is the greatest of 25% of AFC, 2% of AFC times years of Credited Service and 3.5% of RBS times years of Credited Service not to exceed 75% of RBS. The benefit, except for the supplemental benefit, shall be payable for a minimum of 120 payments or prior recovery.

Benefits may be reduced for Workers' Compensation benefits, Social Security disability benefits and disability benefits from another employer for the same disability. In no event shall the benefit after ten (10) years of Credited Service be reduced below 25% of AFC or 2% of AFC times years of Credited Service.

8. Termination Benefits:

A Member who has completed less than ten (10) years of Credited Service will receive a refund of his accumulated contributions. A Member who has completed ten (10) years of Credited Service who does not withdraw his accumulated contributions will receive his accrued benefit based upon his AFC and years of Credited Service as of his date of termination payable at his Normal Retirement Date. Upon death prior to Normal Retirement Date, his beneficiary will be entitled to benefits as provided under Non-service Incurred Preretirement Death Benefits.

9. Deferred Retirement Option Plan (DROP):

1. Eligibility: Eligible for early or normal retirement.
2. The maximum period of participation in the DROP is sixty (60) months.
3. A member's account in the DROP program shall be credited with interest based upon the actual return of the Fund or a fixed return of 6.5% as elected by the member.
4. No payment may be made from DROP until the employee actually separates from service with the City.

SECTION C

ACTUARIAL ASSUMPTIONS AND COST METHODS USED FOR FUNDING

**Actuarial Assumptions and Actuarial Cost Methods Used for Actuarial Valuation
as of October 1, 2017**

A. Mortality

For healthy Police Officer 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 Police Officer 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 (2017)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	29.73	32.50	29.21
60	24.84	27.46	24.64	27.31
62	22.97	25.50	22.85	25.39

Sample Ages (2037)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	31.96	34.44	31.46
60	27.11	29.40	26.92	29.27
62	25.23	27.41	25.12	27.33

B. Interest to be Earned by Fund

7.75%, compounded annually, net of investment expense - includes inflation at 2.75%.

C. Allowances for Expenses or Contingencies

Average of two previous years' actual administrative expense.

**Actuarial Assumptions and Actuarial Cost Methods Used for Actuarial Valuation
as of October 1, 2017**

D. Employee Withdrawal Rates

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

<u>Service</u>	<u>Withdrawal Rates</u>
0 - 3	6.5%
3 - 10	4.5%
10 & Over	0.5%

E. Disability Rates

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

<u>Age</u>	<u>Disability Rates Per 100 Members</u>	<u>Age</u>	<u>Disability Rates Per 100 Members</u>
20	0.14	45	0.51
25	0.15	50	1.00
30	0.18	55	1.55
35	0.23	60 & Over	0.00
40	0.30		

F. Salary Increase Factors

Current salary was assumed to increase at a rate based on the table below per year until retirement - includes wage inflation of 3.75%.

<u>Years of Service / Age</u>	<u>Salary Increase</u>
<u>Under 5 Yrs:</u>	
Under Age 30	8.0%
Age 30 & Up	6.0%
<u>5 or more Yrs:</u>	
All Ages	5.5%

Extra-ordinary pay, such as for overtime, in the final averaging period is assumed to add 5% to the average final compensation.

Actuarial Assumptions and Actuarial Cost Methods Used for Actuarial Valuation
as of October 1, 2017

G. Assumed Retirement Age

Rates of retirement were used in accordance with the following table:

<u>Years of Service</u>	<u>Retirement Rates</u>
	<u>Ages \geq 50</u>
10 - 14	20%
15 - 22	50%

100% of members are assumed to retire upon attainment of 23 years of service.

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

H. Disability Benefits

No offset was assumed for potential Workers' Compensation benefits, Social Security disability benefits or other disability benefits attributable to employment with another employer for the same disability.

I. Form of Payment

For purposes of the supplemental benefit, the joint and survivor form is assumed to be elected.

J. Valuation of Assets

The actuarial value of assets is determined by smoothing earnings in excess of or less than the assumed return over five years.

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 System had always been in effect. The normal cost for the System 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 System 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 actuarial value of assets of the System.

**Actuarial Assumptions and Actuarial Cost Methods Used for Actuarial Valuation
as of October 1, 2017**

L. Marital Assumption

Females are assumed to be three (3) years younger than their male spouses. Eighty percent (80%) of active members are assumed to be married at benefit commencement.

M. Changes From Previous Valuation (Included in Actuarial Impact Statement)

1. Salary Increase Factors were:

Current salary was assumed to increase at a rate based on the table below per year until retirement - includes wage inflation of 3.75%.

<u>Years of Service / Age</u>	<u>Salary Increase</u>
<u>Under 5 Yrs:</u>	
Under Age 30	8.0%
Age 30 & Up	6.0%
<u>5 or more Yrs:</u>	
All Ages	5.5%

Extra-ordinary pay, whether for overtime or for payment of all or portion of accrued vacation or sick leave, in the final averaging period is assumed to add 10% to the final year's pay.

2. Assumed Retirement Age was:

Rates of retirement were used in accordance with the following table:

<u>Years of Service</u>	<u>Retirement Rates</u>
10 - 14	20%
15 - 19	50%
20 & Over	100%

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

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.