

CITY OF ST. PETE BEACH
FIREFIGHTERS' RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT
AS OF OCTOBER 1, 2017
(Revised February 20, 2018)

CONTRIBUTIONS APPLICABLE TO THE PLAN/
FISCAL YEAR ENDED SEPTEMBER 30, 2019

February 20, 2018

Board of Trustees
City of St. Pete Beach
Firefighters' Pension Board
7301 Gulf Boulevard
St. Pete Beach, FL 33706

Re: City of St. Pete Beach
Firefighters' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of St. Pete Beach Firefighters' Retirement System. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Please note that these valuations may not be applicable for any other purposes.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112 and 175, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Board of Trustees, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the

information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2016. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2017 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

The undersigned is familiar with the immediate and long-term aspects of pension valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of St. Pete Beach, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of St. Pete Beach Firefighters' Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact me at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.



By: _____

Patrick T. Donlan, ASA, EA, MAAA
Enrolled Actuary #17-6595

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Enclosures

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SUMMARY OF REPORT

The annual actuarial valuation of the City of St. Pete Beach Firefighters’ Retirement System, performed as of October 1, 2017, has been completed and the results are presented in this Report. The contribution amounts developed in this valuation apply to the plan/fiscal year ending September 30, 2019.

The funding requirements for the applicable year, compared with amounts developed in the November 1, 2017 Actuarial Impact Statement (determined as of October 1, 2016), are as follows:

Valuation Date	10/1/2017	10/1/2016
Applicable Plan/Fiscal Year End	<u>9/30/2019</u>	<u>9/30/2018</u>
Total Required Contribution		
% of Total Annual Payroll	55.4%	54.0%
Less Member Cont’s (Est.)		
% of Total Annual Payroll	12.1%	11.9%
Equals Required City and State		
% of Total Annual Payroll	43.3%	42.1%
State Contribution ¹	176,996	176,996
% of Total Annual Payroll	7.8%	7.8%
Balance from City		
% of Total Annual Payroll	35.5%	34.3%

¹ Reflects Mutual Consent Agreement that allows the City to use all future State Monies to offset their requirements.

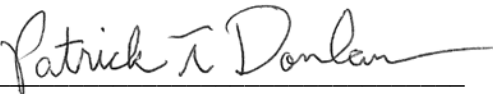
The required contribution from the combination of City and State sources for the year ending September 30, 2018, is 42.1% of the actual non-DROP payroll realized in that year. As a budgeting tool, the City may contribute 34.3% of each non-DROP Member’s Salary and then make a one-time adjustment to account for the actual State Monies received. The City and State requirement for fiscal 2019 will be 43.3% of actual non-DROP payroll in that year.

During the past year, there was net unfavorable actuarial experience on the basis of the Plan’s actuarial assumptions. The primary components of unfavorable experience included no employee turnover, no retiree mortality and an investment return of 6.86% (Actuarial Asset Basis), which was less than the 7.75% assumption. The requirements, determined as of October 1, 2017 also reflect the annual analysis to determine the required Member Contributions to fund certain benefit changes. The Member Contribution Rate, effective October 1, 2018 will need to increase from 11.9% of Salary to 12.1% of Salary.

Lastly, the above requirements reflect the Board approved reduction in the investment return assumption from 7.70% to 7.65% in conjunction with this valuation report.

The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and answer any pending questions concerning its contents.

Respectfully submitted,
FOSTER & FOSTER, INC.

By: 
Patrick T. Donlan, EA, ASA, MAAA

By: 
Sara Carlson, EA

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2016	33.7%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	0.6%
Change in Normal Cost Rate	0.1%
Change in Administrative Expense Percentage	1.2%
Payroll Change Effect on UAAL Amortization	-2.0%
Investment Return (Actuarial Asset Basis)	0.4%
Salary Increases	0.0%
Active Decrements	0.1%
Inactive Mortality	0.4%
Assumption Change	0.7%
Other	<u>0.3%</u>
Total Change in Contribution	1.8%
(3) Contribution Determined as of October 1, 2017	35.5%

CHANGES SINCE PRIOR VALUATION

Plan Changes

There have been no plan changes since the prior valuation report.

Actuarial Assumption/Method Changes

As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the rates used by the Florida Retirement System actuary in the July 1, 2015 actuarial valuation to the rates used in the July 1, 2016 actuarial valuation for special risk lives.

Additionally, the Board approved a reduction in the investment return assumption from 7.70% to 7.65% in conjunction with this valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assum Member Funded <u>10/1/2017</u>	New Assum City Funded <u>10/1/2017</u>	Old Assum City Funded <u>10/1/2017</u>	Old Assum City Funded <u>10/1/2016</u>
A. Participant Data				
Actives	34	34	34	33
Service Retirees	20	20	20	19
DROP Retirees	0	0	0	0
Beneficiaries	1	1	1	1
Disability Retirees	3	3	3	3
Terminated Vested	<u>4</u>	<u>4</u>	<u>4</u>	<u>6</u>
Total	62	62	62	62
Total Annual Payroll	\$2,274,459	\$2,037,373	\$2,037,373	\$1,894,373
Payroll Under Assumed Ret. Age	2,274,459	2,037,373	2,037,373	1,894,373
 Annual Rate of Payments to:				
Service Retirees	908,660	908,660	908,660	857,870
DROP Retirees	0	0	0	0
Beneficiaries	17,037	17,037	17,037	17,037
Disability Retirees	46,449	46,449	46,449	46,449
Terminated Vested	26,036	26,036	26,036	67,105
 B. Assets				
Actuarial Value (AVA) ¹	12,617,219	12,617,219	12,617,219	11,921,804
Market Value (MVA) ¹	12,516,123	12,516,123	12,516,123	11,554,030
 C. Liabilities				
Present Value of Benefits				
Actives				
Retirement Benefits	9,877,783	6,856,778	6,680,707	6,032,647
Disability Benefits	110,230	84,629	82,800	77,564
Death Benefits	66,922	48,283	96,763	92,700
Vested Benefits	363,146	256,840	250,948	241,144
Refund of Contributions	84,136	65,771	64,299	59,061
Service Retirees	12,786,468	12,786,468	12,718,222	12,259,992
DROP Retirees ¹	0	0	0	0
Beneficiaries	203,841	203,841	202,859	204,294
Disability Retirees	464,651	464,651	462,691	467,969
Terminated Vested	176,375	176,375	174,923	584,113
Share Plan Balances ¹	0	0	0	0
Excess State Monies Reserve	<u>0</u>	<u>251,482</u>	<u>251,482</u>	<u>251,482</u>
Total	24,133,552	21,195,118	20,985,694	20,270,966

C. Liabilities - (Continued)	New Assum Member Funded <u>10/1/2017</u>	New Assum City Funded <u>10/1/2017</u>	Old Assum City Funded <u>10/1/2017</u>	Old Assum City Funded <u>10/1/2016</u>
Present Value of Future Salaries	16,963,310	15,152,418	14,948,552	14,104,124
Present Value of Future Member Contributions	2,052,561	606,097	597,942	564,165
Normal Cost (Retirement)	394,265	245,102	234,504	224,308
Normal Cost (Disability)	9,054	7,607	7,477	6,924
Normal Cost (Death)	4,375	3,223	6,618	6,098
Normal Cost (Vesting)	27,482	23,167	22,673	20,976
Normal Cost (Refunds)	<u>12,155</u>	<u>6,827</u>	<u>6,739</u>	<u>6,363</u>
Total Normal Cost	447,331	285,926	278,011	264,669
Present Value of Future Normal Costs	3,374,520	1,945,142	1,865,394	2,040,095
Accrued Liability (Retirement)	6,862,817	5,188,176	5,105,562	4,272,808
Accrued Liability (Disability)	47,211	35,351	34,975	31,502
Accrued Liability (Death)	37,069	28,729	55,955	53,362
Accrued Liability (Vesting)	162,111	109,503	108,272	102,375
Accrued Liability (Refunds)	18,489	5,400	5,359	2,974
Accrued Liability (Inactives) ¹	13,631,335	13,631,335	13,558,695	13,516,368
Share Plan Balances ¹	0	0	0	0
Excess State Monies Reserve	<u>0</u>	<u>251,482</u>	<u>251,482</u>	<u>251,482</u>
Total Actuarial Accrued Liability (EAN AL)	20,759,032	19,249,976	19,120,300	18,230,871
Unfunded Actuarial Accrued Liability (UAAL)	8,141,813	6,632,757	6,503,081	6,309,067
Funded Ratio (AVA / EAN AL)	60.8%	65.5%	66.0%	65.4%

D. Actuarial Present Value of Accrued Benefits	New Assum Member Funded <u>10/1/2017</u>	New Assum City Funded <u>10/1/2017</u>	Old Assum City Funded <u>10/1/2017</u>	Old Assum City Funded <u>10/1/2016</u>
Vested Accrued Benefits				
Inactives + Share Plan Balances ¹	13,631,335	13,631,335	13,558,695	13,516,368
Actives	3,718,603	3,226,322	3,185,294	2,802,651
Member Contributions	<u>1,193,253</u>	<u>1,193,253</u>	<u>1,193,253</u>	<u>1,130,800</u>
Total	18,543,191	18,050,910	17,937,242	17,449,819
Non-vested Accrued Benefits	<u>514,023</u>	<u>331,491</u>	<u>321,517</u>	<u>322,559</u>
Total Present Value Accrued Benefits (PVAB)	19,057,214	18,382,401	18,258,759	17,772,378
Funded Ratio (MVA / PVAB)	65.7%	68.1%	68.5%	65.0%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:				
Plan Amendments	674,813	0	0	
Assumption Changes	0	123,642	0	
New Accrued Benefits	0	0	138,409	
Benefits Paid	0	0	(982,668)	
Interest	0	0	1,330,640	
Other	<u>0</u>	<u>0</u>	<u>0</u>	
Total	674,813	123,642	486,381	

	New Assum Member Funded	New Assum City Funded	Old Assum City Funded	Old Assum City Funded
Valuation Date	10/1/2017	10/1/2017	10/1/2017	10/1/2016
Applicable to Fiscal Year Ending	<u>9/30/2019</u>	<u>9/30/2019</u>	<u>9/30/2019</u>	<u>9/30/2018</u>

E. Pension Cost

Normal Cost (with interest) % of Total Annual Payroll ²	20.4	14.6	14.2	14.5
Administrative Expenses (with interest) % of Total Annual Payroll ²	2.3	2.6	2.6	1.2
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2017, with interest) % of Total Annual Payroll ²	32.7	31.0	30.7	31.3
Total Required Contribution % of Total Annual Payroll ²	55.4	48.2	47.5	47.0
Expected Member Contributions % of Total Annual Payroll ²	12.1	4.0	4.0	4.0
Expected City and State Contribution % of Total Annual Payroll ²	43.3	44.2	43.5	43.0

F. Past Contributions

Plan Years Ending:	<u>9/30/2017</u>
City and State Requirement	769,400
Actual Contributions Made:	
Members (excluding buyback)	62,468
City	675,894
State	<u>176,996</u>
Total	915,358

G. Net Actuarial (Gain)/Loss 296,084

¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2017 and 9/30/2016.

² Contributions developed as of 10/1/2017 are expressed as a percentage of total annual payroll at 10/1/2017 of \$2,274,459.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2017	8,141,813
2018	7,994,310
2019	7,824,891
2026	6,107,001
2033	3,582,139
2040	1,095,958
2047	0

I. (i) 3 Year Comparison of Actual and Assumed Salary Increases

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	5.02%	4.57%
Year Ended	9/30/2016	2.61%	4.50%
Year Ended	9/30/2015	3.74%	4.50%

(ii) 3 Year Comparison of Investment Return on Actuarial Value

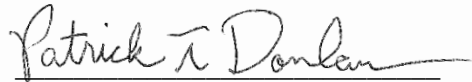
		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	6.86%	7.70%
Year Ended	9/30/2016	7.31%	7.75%
Year Ended	9/30/2015	9.18%	7.75%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2017	\$2,274,459
	10/1/2007	1,359,065
(b) Total Increase		67.35%
(c) Number of Years		10.00
(d) Average Annual Rate		5.28%

STATEMENT BY ENROLLED ACTUARY

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



Patrick T. Donlan, EA, ASA, MAAA
Enrolled Actuary #17-6595

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112, Florida Statutes:

Mr. Keith Brinkman
Bureau of Local
Retirement Systems
Post Office Box 9000
Tallahassee, FL 32315-9000

Ms. Sarah Carr
Municipal Police and Fire
Pension Trust Funds
Division of Retirement
Post Office Box 3010
Tallahassee, FL 32315-3010

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1) Unfunded Actuarial Accrued Liability as of October 1, 2016	\$7,706,348
(2) Sponsor Normal Cost developed as of October 1, 2016	157,039
(3) Expected administrative expenses for the year ended September 30, 2017	21,656
(4) Expected interest on (1), (2) and (3)	606,315
(5) Sponsor contributions to the System during the year ended September 30, 2017	852,890
(6) Expected interest on (5)	26,022
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2017 (1)+(2)+(3)+(4)-(5)-(6)	7,612,446
(8) Change to UAAL due to Member Funded Benefit Changes ¹	103,607
(9) Change to UAAL due to Actuarial (Gain)/Loss	296,084
(10) Change to UAAL due to Assumption Changes	129,676
(10) Unfunded Actuarial Accrued Liability as of October 1, 2017	8,141,813

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2017 <u>Amount</u>	Amortization <u>Amount</u>
A	10/1/1991	4	90,178	24,613
B	10/1/1994	7	206,293	35,031
C	10/1/1998	11	331,934	40,011
D	10/1/1999	12	60,639	6,881
E	10/1/1999	12	505,877	57,402
F	10/1/2003	16	93,756	8,848
G	10/1/2004	17	1,167,501	106,340
H	10/1/2005	18	465,640	41,064
I	10/1/2006	19	138,653	11,872
J	10/1/2007	20	91,706	7,643
Actuarial Loss	10/1/2008	21	835,185	67,902
Method Change	10/1/2008	21	(224,179)	(18,226)
Assumption Change	10/1/2008	21	(79,950)	(6,500)
Actuarial Loss	10/1/2009	22	861,491	68,462
Actuarial Loss	10/1/2010	23	757,258	58,928
Assumption Change	10/1/2010	23	231,951	18,050
Actuarial Loss	10/1/2011	24	1,443,728	110,190

Type of Base	Date Established	Years Remaining	10/1/2017 Amount	Amortization Amount
Assumption Change	10/1/2011	24	1,312,950	100,209
Actuarial Loss	10/1/2012	25	367,745	27,569
Benefit Change	10/1/2012	25	(2,574,470)	(193,003)
Actuarial Gain	10/1/2013	26	(476,166)	(35,110)
Actuarial Gain	10/1/2014	27	(145,929)	(10,596)
Actuarial Gain	10/1/2015	28	(880,917)	(63,058)
Assumption Change	10/1/2016	29	918,897	64,911
Actuarial Gain	10/1/2016	29	(55,329)	(3,908)
Benefit Change	10/1/2016	29	2,168,004	153,147
Actuarial Loss	10/1/2017	30	296,084	20,659
Assumption Change	10/1/2017	30	129,676	9,048
Benefit Change ¹	10/1/2017	30	<u>103,607</u>	<u>7,229</u>
			8,141,813	715,608

¹ This is in addition to the originally calculated amount of \$1,397,281 as of October 1, 2016.

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2016	\$7,706,348
(2) Expected UAAL as of October 1, 2017	7,612,446
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	99,633
Salary Increases	4,113
Active Decrements	31,057
Inactive Mortality	101,112
Other	<u>60,169</u>
Increase in UAAL due to (Gain)/Loss	296,084
Assumption Changes	129,676
Member Funded Benefit Changes	<u>103,607</u>
(4) Actual UAAL as of October 1, 2017	\$8,141,813

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rates

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy (previously Annuitant) White Collar, Scale BB

Male: RP2000 Generational, 10% Combined Healthy (previously Annuitant) White Collar / 90% Combined Healthy (previously Annuitant) Blue Collar, Scale BB

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale

The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2016 FRS actuarial valuation report for special risk lives. We feel these assumptions sufficiently accommodate future mortality improvements.

Prior assumption: July 1, 2015 FRS assumption for special risk lives.

Interest Rate

7.65% (previously 7.70%) per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.

Termination Rates

<u>Service</u>	<u>Termination Rate</u>
<1	15.0%
1-4	9.0%
5-9	4.0%
10-14	3.0%
15+	2.0%

This is based on the results of an actuarial experience study issued January 18, 2017.

Disability Rates

See Table on following page (1201). This is based on the results of an actuarial experience study issued January 18, 2017.

Retirement Age

For Members eligible for Normal Retirement on January 1, 2013 or hired before January 1, 2003: Earlier of age 56 or the completion of 26 years of service. Also, any member who has reached Normal Retirement Age is assumed to continue employment for one additional year. This is based on the results of an actuarial experience study issued October 20, 2008.

For all other Members: Earlier of age 60 with 10 years of service or the completion of 30 years of service for Old Benefits column and Earlier of age 52 with 25 years of service or the age 55 with 10 years of service for the New Benefits columns. Also, any member who has reached Normal Retirement Age is assumed to continue employment for one additional year. This is based on the results of an actuarial experience study issued October 20, 2008.

Early Retirement

Commencing at the member's eligibility for Early Retirement, members are assumed to retire with an immediate, subsidized benefit at the rate of 5.00% per year. In the Old Benefits column this was only for Members eligible for Normal Retirement on January 1, 2013. This is based on the results of an actuarial experience study issued October 20, 2008.

Salary Increases

<u>Service</u>	<u>Termination Rate</u>
<1	5.5%
1-5	5.0%
6-10	4.5%
11+	4.0%

This is based on the results of an actuarial experience study issued January 18, 2017.

Cost-of-Living Adjustment

3.00% per year commencing 7 years after retirement.

Payroll Growth

1.38% per year.

Administrative Expenses

\$50,943 annually.

Funding Method

Entry Age Normal Actuarial Cost Method.

Actuarial Asset Method

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return (net of fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value of Assets.

<u>Age</u>	<u>% Becoming Disabled During the Year</u>
20	0.03%
30	0.04
40	0.07
50	0.18

GLOSSARY

Total Annual Payroll is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Total Required Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

(a) The normal cost accrual rate equals

(i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by

(ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	59,933.31	_____%
1999	53,710.16	-10.4%
2000	74,061.60	37.9%
2001	69,720.23	-5.9%
2002	74,850.49	7.4%
2003	87,857.75	17.4%
2004	93,071.41	5.9%
2005	99,084.63	6.5%
2006	110,397.41	11.4%
2007	140,387.79	27.2%
2008	242,785.19	72.9%
2009	222,199.40	-8.5%
2010	156,356.49	-29.6%
2011	171,509.23	9.7%
2012	170,298.49	-0.7%
2013	210,858.83	23.8%
2014	39,564.56	-81.2%
2015	392,128.21	891.1%
2016	178,044.06	-54.6%
2017	176,996.30	-0.6%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	485,879.34	485,879.34
Total Cash and Equivalents	485,879.34	485,879.34
Receivables:		
Member Contributions in Transit	9.80	9.80
State Contributions	176,996.30	176,996.30
Investment Income	29,620.67	29,620.67
Total Receivable	206,626.77	206,626.77
Investments:		
U. S. Bonds and Bills	790,882.45	791,315.48
Federal Agency Guaranteed Securities	558,996.41	554,325.74
Corporate Bonds	1,393,140.41	1,397,538.37
Municipal Obligations	14,304.90	15,336.00
Stocks	2,203,734.97	3,038,480.41
Mutual Funds:		
Fixed Income	586,047.35	537,390.83
Equity	3,858,245.88	4,421,798.98
Pooled/Common/Commingled Funds:		
Real Estate	1,050,000.00	1,068,284.16
Total Investments	10,455,352.37	11,824,469.97
Total Assets	11,147,858.48	12,516,976.08
<u>LIABILITIES</u>		
Payables:		
Prepaid Member Contribution	853.38	853.38
Total Liabilities	853.38	853.38
NET POSITION RESTRICTED FOR PENSIONS	11,147,005.10	12,516,122.70

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2017
Market Value Basis

ADDITIONS

Contributions:		
Member		62,468.29
City		675,893.80
State		176,996.30
Total Contributions		915,358.39
Investment Income:		
Net Realized Gain (Loss)	1,023,935.91	
Unrealized Gain (Loss)	(146,445.68)	
Net Increase in Fair Value of Investments		877,490.23
Interest & Dividends		279,096.19
Less Investment Expense ¹		(76,240.44)
Net Investment Income		1,080,345.98
Total Additions		1,995,704.37

DEDUCTIONS

Distributions to Members:		
Benefit Payments		949,337.01
Lump Sum DROP Distributions		0.00
Refunds of Member Contributions		33,331.31
Total Distributions		982,668.32
Administrative Expense		50,942.97
Total Deductions		1,033,611.29
Net Increase in Net Position		962,093.08
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		11,554,029.62
End of the Year		12,516,122.70

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2017

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return ¹	
09/30/2014	9.74%	
09/30/2015	-0.66%	
09/30/2016	9.25%	
09/30/2017	9.48%	
Annualized Rate of Return for prior four (4) years:		6.86%
(A) 10/01/2016 Actuarial Assets:		\$11,921,804.16
(I) Net Investment Income:		
1. Interest and Dividends	279,096.19	
2. Realized Gains (Losses)	1,023,935.91	
3. Change in Actuarial Value	(413,123.86)	
4. Investment Related Expenses	(76,240.44)	
Total		813,667.80
(B) 10/01/2017 Actuarial Assets:		\$12,617,219.06
Actuarial Asset Rate of Return = 2I/(A+B-I):		6.86%
10/01/2017 Limited Actuarial Assets:		\$12,617,219.06
10/01/2017 Market Value of Assets:		\$12,516,122.70
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		(\$99,632.79)

¹Market Value Basis, net of investment related expenses.

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 SEPTEMBER 30, 2017
 Actuarial Asset Basis

REVENUES

Contributions:		
Member	62,468.29	
City	675,893.80	
State	176,996.30	
 Total Contributions		 915,358.39
Earnings from Investments:		
Interest & Dividends	279,096.19	
Net Realized Gain (Loss)	1,023,935.91	
Change in Actuarial Value	(413,123.86)	
 Total Earnings and Investment Gains		 889,908.24

EXPENDITURES

Distributions to Members:		
Benefit Payments	949,337.01	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	33,331.31	
 Total Distributions		 982,668.32
Expenses:		
Investment related ¹	76,240.44	
Administrative	50,942.97	
 Total Expenses		 127,183.41
 Change in Net Assets for the Year		 695,414.90
 Net Assets Beginning of the Year		 11,921,804.16
 Net Assets End of the Year ²		 12,617,219.06

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

²Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

	<u>10/1/2014</u>	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>
<u>Actives</u>				
Number	26	30	33	34
Average Current Age	41.7	39.8	40.2	40.8
Average Age at Employment	32.8	30.8	31.7	31.6
Average Past Service	8.9	9.0	8.5	9.2
Average Annual Salary	\$58,019	\$56,679	\$64,084	\$66,896
<u>Service Retirees</u>				
Number	18	19	19	20
Average Current Age	N/A	62.8	63.8	64.2
Average Annual Benefit	\$44,892	\$44,143	\$45,151	\$45,433
<u>DROP Retirees</u>				
Number	2	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	\$40,430	N/A	N/A	N/A
<u>Beneficiaries</u>				
Number	1	2	1	1
Average Current Age	N/A	58.4	53.2	54.2
Average Annual Benefit	\$17,037	\$43,627	\$17,037	\$17,037
<u>Disability Retirees</u>				
Number	3	3	3	3
Average Current Age	N/A	60.2	61.2	62.2
Average Annual Benefit	\$15,483	\$15,483	\$15,483	\$15,483
<u>Terminated Vested</u>				
Number	3	4	6	4
Average Current Age	N/A	40.9	40.7	40.1
Average Annual Benefit ¹	\$16,258	\$16,258	\$22,368	\$26,036

¹ The Average Annual Benefit excludes participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	1	0	0	0	0	0	0	0	0	1
25 - 29	1	0	1	0	0	0	0	0	0	0	0	2
30 - 34	0	2	3	1	2	1	0	0	0	0	0	9
35 - 39	0	2	0	0	0	1	0	0	0	0	0	3
40 - 44	0	2	0	0	0	3	0	0	0	0	0	5
45 - 49	0	0	0	0	0	0	4	2	0	0	0	6
50 - 54	0	0	0	0	0	0	0	2	2	0	0	4
55 - 59	0	0	0	0	0	0	0	2	1	0	0	3
60 - 64	0	0	0	0	0	0	0	1	0	0	0	1
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	6	5	1	2	5	4	7	3	0	0	34

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2016	33
b. Terminations	
i. Vested (partial or full) with deferred benefits	0
ii. Non-vested or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>0</u>
g. Continuing participants	33
h. New entrants	<u>1</u>
i. Total active life participants in valuation	34

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	19	0	1	3	6	29
Retired	0	0	0	0	0	0
DROP	0	0	0	0	0	0
Vested Deferred	1	0	0	0	(1)	0
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	(1)	(1)
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	20	0	1	3	4	28

SUMMARY OF PLAN PROVISIONS

(Through Ord. No. 2017-16)

ORIGINAL EFFECTIVE DATE October 1, 1960.

LATEST AMMENDMENT October 10, 2017.

Please note that Members who had attained Age 55 or 25 years of Credited Service on December 31, 2012 continue to make contributions and receive benefits based upon the provisions that were in effect on December 26, 2012.

ELIGIBILITY Full-time employees who are classified as full-time Firefighters shall participate in the System as a condition of employment.

CREDITED SERVICE Total years and fractional parts of years of employment with the City as a Firefighter.

SALARY For Salary earned prior to January 1, 2013: W-2 earnings, including all tax-deferred, tax sheltered and tax exempt income and up to 300 hours of overtime per year, but excluding accrued sick leave and vacation pay.

For Salary earned after January 1, 2013: Base Compensation.

AVERAGE FINAL COMPENSATION (AFC) Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination (Frozen at December 31, 2012 for "frozen benefit").

MEMBER CONTRIBUTIONS 11.90% (12.10% for fiscal 2019) of Salary. This will be re-determined in conjunction with the annual actuarial valuation report.

CITY AND STATE CONTRIBUTIONS Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112. In no event will the City's contribution be less than 2.00% of the total Salary of the Members.

NORMAL RETIREMENT

 "Frozen" Piece
 Date

Earlier of 1) Age 55, or 2) the completion of 25 years of Credited Service, regardless of Age.

 Benefit

3.40% of Average Final Compensation times Credited Service.

“Future Service” Piece
Date

At least 10 Years of Credited Service on December 31, 2012: Earlier of 1) Age 55, or 2) the completion of 25 years of Credited Service, regardless of Age.

Less than 10 years of Credited Service on December 31, 2012: Earlier of 1) Age 55 with 10 years of Credited Service, 2) Age 52 with 25 years of Credited Service, or 3) the completion of 30 years of Credited Service, regardless of Age.

Benefit

3.40% of Average Final Compensation times Credited Service.

Form of Benefit

Ten Year Certain and Life Annuity (options available).

Maximum Benefit

The maximum combined benefit is 100% of Average Final Compensation. If a Member’s accrued benefit as of January 1, 2013 is greater than or equal to 75% of Average Final Compensation, the benefit percentage may not be reduced.

EARLY RETIREMENT

“Frozen” Piece
Date

Earlier of age 50 and 10 years of Credited Service or the completion of 20 years of Credited Service, regardless of age.

Benefit Amount

Accrued benefit, reduced 3.00% for each year commencement of benefits precedes Normal Retirement Date.

“Future Service” Piece
Date

Age 50 and 10 years of Credited Service.

Benefit Amount

Accrued benefit, reduced 3.00% for each year commencement of benefits precedes age 55.

COST OF LIVING INCREASES

Retirees receive a 3.00% per year cost-of-living adjustment commencing 7 years after retirement.

VESTING

Schedule

100% after 10 years of Credited Service (“frozen” piece uses old vesting schedule).

Benefit Amount Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

DISABILITY

Eligibility Total and permanent after 10 years of Credited Service (non-service incurred) or from date of hire (service incurred).

Waiting Period Board approval.

Exclusions Disability resulting from use of drugs, illegal participation in riots, service in the military, etc.

Benefit Benefit accrued to date of disability but not less than 42% of AFC if service incurred.

Duration Payable for life with 10 years certain, or until recovery (as determined by the Board). Optional forms of payment available.

DEATH BENEFITS

Pre-Retirement If vested, the value of the accrued benefit is payable on a monthly basis to the beneficiary for 10 years. If not vested, member contributions are refunded.

Post-Retirement Benefits payable to beneficiary in accordance with option selected at retirement.

DEFERRED RETIREMENT OPTION PLAN

Eligibility Only those Members who were Age 55 or had completed 25 years of Credited Service on December 31, 2012. There is no DROP for other Members.

Participation Not to exceed 60 months.

Rate of Return At the Member's election: (1) 7.50% annual rate, or (2) actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs), credited each fiscal quarter.

Form of Distribution Cash lump sum (options available) at termination of employment.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	485,879
Total Cash and Equivalents	485,879
Receivables:	
Member Contributions in Transit	10
State Contributions	176,996
Investment Income	29,621
Total Receivable	206,627
Investments:	
U. S. Bonds and Bills	791,316
Federal Agency Guaranteed Securities	554,326
Corporate Bonds	1,397,538
Municipal Obligations	15,336
Stocks	3,038,480
Mutual Funds:	
Fixed Income	537,391
Equity	4,421,799
Real Estate	1,068,284
Total Investments	11,824,470
Total Assets	12,516,976
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	12,516,976

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2017
Market Value Basis

ADDITIONS

Contributions:

Member	61,764	
City	675,894	
State	176,996	
 Total Contributions		 914,654
 Investment Income:		
Net Increase in Fair Value of Investments	877,490	
Interest & Dividends	279,096	
Less Investment Expense ¹	(76,240)	
 Net Investment Income		 1,080,346
 Total Additions		 1,995,000

DEDUCTIONS

Distributions to Members:

Benefit Payments	949,337	
Lump Sum DROP Distributions	0	
Refunds of Member Contributions	33,332	
 Total Distributions		 982,669
 Administrative Expense		 50,943
 Total Deductions		 1,033,612
 Net Increase in Net Position		 961,388
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		11,555,588
 End of the Year		 12,516,976

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2017)

Plan Description

Plan Administration

The City of St. Pete Beach Firefighters' Retirement System is a single-employer defined benefit pension Plan administered by a Board of Trustees which acts as the administrator of the Plan. The Board consists of 5 Trustees, 2 of whom are appointed by the City Commission, 2 of whom are full-time Firefighters who are elected by a majority of the Members of the Plan and a fifth Trustee who is chosen by a majority of the first 4 Trustees.

Plan Membership as of October 1, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	23
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	6
Active Plan Members	33
	62
	62

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

Please note that Members who had attained Age 55 or 25 years of Credited Service on December 31, 2012 continue to make contributions and receive benefits based upon the provisions that were in effect on December 26, 2012.

Normal Retirement:

"Frozen" Piece:

Date: Earlier of 1) Age 55, or 2) the completion of 25 years of Credited Service, regardless of Age.

Benefit: 3.40% of Average Final Compensation times Credited Service.

"Future Service" Piece:

Date At least 10 Years of Credited Service on December 31, 2012: Earlier of 1) Age 55, or 2) the completion of 25 years of Credited Service, regardless of Age.

Less than 10 years of Credited Service on December 31, 2012: Earlier of 1) Age 60, or 2) the completion of 30 years of Credited Service, regardless of Age.

Benefit: 1.25% of Average Final Compensation times Credited Service.

Maximum Benefit: The maximum combined benefit is 75% of Average Final Compensation. If a Member's accrued benefit as of January 1, 2013 is greater than or equal to 75% of Average Final Compensation, the benefit percentage may not be reduced.

Early Retirement:

"Frozen" Piece:

Date: Earlier of age 50 and 10 years of Credited Service or the completion of 20 years of Credited Service, regardless of age.

Benefit Amount: Accrued benefit, reduced 3.00% for each year commencement of benefits precedes Normal Retirement Date.

"Future Service: Piece:

Date: Age 50 and 10 years of Credited Service.

Benefit Amount: Accrued benefit, reduced 3.00% for each year commencement of benefits precedes age 55.

Cost-of-Living Increases:

Retirees receive a 3.00% per year cost-of-living adjustment commencing 7 years after retirement.

Vesting:

Schedule: 100% after 10 years of Credited Service ("frozen" piece uses old vesting schedule).

Benefit Amount: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability:

Eligibility: Total and permanent after 10 years of Credited Service (non-service incurred) or from date of hire (service incurred).

Benefit: Benefit accrued to date of disability but not less than 42% of AFC if service incurred.

Pre-Retirement Death Benefits:

If vested, the value of the accrued benefit is payable on a monthly basis to the beneficiary for 10 years. If not vested, member contributions are refunded.

Contributions

Member Contributions: 11.90% of Salary. This will be re-determined in conjunction with the annual actuarial valuation report.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112. In no event will the City’s contribution be less than 2.00% of the total Salary of the Members.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2017:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	50%
International Equity	10%
Broad Market Fixed Income	25%
Global Fixed income	5%
Real Estate	10%
Total	100%

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

Rate of Return:

For the year ended September 30, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 9.48 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Deferred Retirement Option Program

Eligibility: Only those Members who were Age 55 or had completed 25 years of Credited Service on December 31, 2012. There is no DROP for other Members.

Participation: Not to exceed 60 months.

Rate of Return: At the Member’s election: (1) 7.50% annual rate, or (2) actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs), credited each fiscal quarter.

The DROP balance as September 30, 2017 is \$0.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2017 were as follows:

Total Pension Liability	\$ 20,629,293
Plan Fiduciary Net Position	\$ (12,516,976)
Sponsor's Net Pension Liability	\$ 8,112,317
Plan Fiduciary Net Position as a percentage of Total Pension Liability	60.68%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2016 updated to September 30, 2017 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.65%
Investment Rate of Return	7.65%

Mortality Rate Healthy Inactive Lives:

Female: RP 2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP 2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The most recent actuarial experience study used to review the other significant assumptions was dated January 18, 2017.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2017 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2017 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	7.5%
International Equity	8.5%
Broad Market Fixed Income	2.5%
Global Fixed income	3.5%
Real Estate	4.5%

GASB 67

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.65 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	1% Decrease	Current Discount Rate	1% Increase
	6.65%	7.65%	8.65%
Sponsor's Net Pension Liability	\$ 10,841,318	\$ 8,112,317	\$ 5,875,611

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	<u>09/30/2017</u>	<u>09/30/2016</u>
Total Pension Liability		
Service Cost	421,007	245,298
Interest	1,516,026	1,245,496
Change in Excess State Money	(251,482)	-
Changes of benefit terms	2,483,070	-
Differences between Expected and Actual Experience	(251,797)	(786,356)
Changes of assumptions	167,748	1,212,697
Benefit Payments, including Refunds of Employee Contributions	(982,669)	(933,688)
Net Change in Total Pension Liability	<u>3,101,903</u>	<u>983,447</u>
Total Pension Liability - Beginning	<u>17,527,390</u>	<u>16,543,943</u>
Total Pension Liability - Ending (a)	<u>\$ 20,629,293</u>	<u>\$ 17,527,390</u>
Plan Fiduciary Net Position		
Contributions - Employer	675,894	690,612
Contributions - State	176,996	178,044
Contributions - Employee	61,764	59,223
Net Investment Income	1,080,346	962,019
Benefit Payments, including Refunds of Employee Contributions	(982,669)	(933,688)
Administrative Expense	(50,943)	(21,656)
Net Change in Plan Fiduciary Net Position	<u>961,388</u>	<u>934,554</u>
Plan Fiduciary Net Position - Beginning	<u>11,555,588</u>	<u>10,621,034</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 12,516,976</u>	<u>\$ 11,555,588</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 8,112,317</u>	<u>\$ 5,971,802</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.68%	65.93%
Covered Employee Payroll ¹	\$ 1,938,036	\$ 1,787,358
Net Pension Liability as a percentage of Covered Employee Payroll	418.58%	334.11%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period.

Changes of benefit terms:

For measurement date 09/30/2017, the following changes were made based on the 2017-16 Ordinance:

- 1.) The Normal Retirement Date for Members not eligible for Normal Retirement and who had less than 10 years of Credited Service on December 31, 2012 is changed to the earliest of A) Age 55 with 10 years of Credited Service, B) Age 52 with 25 years of Credited Service, or C) 30 years of Credited Service regardless of age.
- 2.) The benefit multiplier is increased to 3.4% per year of Credited Service, retroactive to January 1, 2013.
- 3.) The definition of Compensation is changed for Salary earned after January 1, 2013 to include total W-2 earnings, including up to 300 hours of overtime, but not including any lump sum payments of accrued sick or annual leave.
- 4.) The maximum benefit is increased from 75% of Average Final Compensation to 100%.
- 5.) Early retirement provisions are established for service on and after January 1, 2013, with eligibility at age 50 with 10 years of Credited Service and with an early retirement reduction of 3% per year prior to age 55.
- 6.) A 3.0% annual cost-of-living adjustment is added for service on and after January 1, 2013. It is commencing on the first October 1st following 7 complete years of receiving benefits.
- 7.) The member contribution rate has been increased to fund some of these benefit improvements listed.

Continued Changes of benefit terms:

8.) The Excess State Monies Reserve was used to help offset the increase in the plan's unfunded liability associated with the benefit changes the Members were funding. This effectively reduced the required Member Contribution Rate. In conjunction with a member contribution rate increase to 4%, the City has agreed to pay for benefit changes 1, 2, 4, and 5, except for any increase in benefit multiplier above 2.25%. Any other benefit changes shown are funded through a further adjustment in member contribution rate such that the City's contribution requirement as a percentage of payroll is approximately the same as before any benefit changes funded by members.

Changes of Assumptions:

For measurement date 09/30/2017, as required by Chapter 2015-157, Laws of Florida, the assumed rates of mortality have been changed from those in the July 1, 2015 FRS valuation report to those used in the July 1, 2016 FRS valuation report. Additionally, the investment return assumption was lowered from 7.70% to 7.65% per year, net of investment related expenses.

For measurement date 09/30/2016, the following assumption changes were made based on the January 18, 2017 experience study:

1. Salary increases changed from a flat 4.5% to one based on Credited Service.
2. Changing the turnover table from an age based table to a service based table.
3. Changing the mortality table to the same rates as used by the Florida Retirement System (FRS) in their July 1, 2015 valuation as required by State Law
4. Reduction in the investment return assumption from 7.75% to 7.70% per year, net of investment related expenses.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	<u>09/30/2015</u>	<u>09/30/2014</u>
Total Pension Liability		
Service Cost	230,254	238,163
Interest	1,212,870	1,189,290
Change in Excess State Money	-	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	103,860	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(1,348,403)</u>	<u>(882,183)</u>
Net Change in Total Pension Liability	198,581	545,270
Total Pension Liability - Beginning	<u>16,345,362</u>	<u>15,800,092</u>
Total Pension Liability - Ending (a)	<u>\$ 16,543,943</u>	<u>\$ 16,345,362</u>
Plan Fiduciary Net Position		
Contributions - Employer	413,656	632,678
Contributions - State	392,128	39,565
Contributions - Employee	50,369	45,249
Net Investment Income	(72,360)	999,549
Benefit Payments, including Refunds of Employee Contributions	(1,348,403)	(882,183)
Administrative Expense	<u>(19,804)</u>	<u>(16,250)</u>
Net Change in Plan Fiduciary Net Position	(584,414)	818,608
Plan Fiduciary Net Position - Beginning	<u>11,205,448</u>	<u>10,386,840</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 10,621,034</u>	<u>\$ 11,205,448</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 5,922,909</u>	<u>\$ 5,139,915</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	64.20%	68.55%
Covered Employee Payroll ¹	\$ 1,572,198	\$ 1,371,924
Net Pension Liability as a percentage of Covered Employee Payroll	376.73%	374.65%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period.

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014
Actuarially Determined Contribution	769,400	868,656	740,688	672,243
Contributions in relation to the Actuarially Determined Contributions	852,890	868,656	805,784	672,243
Contribution Deficiency (Excess)	\$ (83,490)	\$ -	\$ (65,096)	\$ -
Covered Employee Payroll ¹	\$ 1,938,036	\$ 1,787,358	\$ 1,572,198	\$ 1,371,924
Contributions as a percentage of Covered Employee Payroll	44.01%	48.60%	51.25%	49.00%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period.

Notes to Schedule

Valuation Date: 10/01/2015
Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Funding Method: Entry Age Normal Actuarial Cost Method.
 Amortization Method: Level % of Pay, Closed.
 Remaining Amortization Period: 30 Years (as of 10/01/2015).
 Mortality Rate: RP 2000 Combined Healthy (Sex Distinct). Disabled lives are set forward 5 years. We feel this assumption sufficiently accommodates mortality improvements.
 Interest Rate: 7.75% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.
 Termination Rates: See Tables below (1305). This is based on the results of an actuarial experience study issued October 20, 2008.
 Disability Rates: See Tables below (1201). This is based on the results of an actuarial experience study issued October 20, 2008
 Retirement Age: For Members eligible for Normal Retirement on January 1, 2013 or hired before January 1, 2003: Earlier of age 56 or the completion of 26 years of service. Also, any Member who has reached Normal Retirement Age is assumed to continue employment for one additional year. This is based on the results of an actuarial experience study issued October 20, 2008.
For all other Members: Earlier of age 60 with 10 years of service or the completion of 30 years of service. Also, any Member who has reached Normal Retirement Age is assumed to continue employment for one additional year. This is based on the results of an actuarial experience study issued October 20, 2008.
 Early Retirement: For Members eligible for Normal Retirement on January 1, 2013: Commencing at the Member's eligibility for Early Retirement, Members are assumed to retire with an immediate, subsidized benefit at the rate of 5% per year. This is based on the results of an actuarial experience study issued October 20, 2008.
For all other Members: None
 Salary Increases: 4.50% per year up to the assumed retirement age. This is reasonable compared with other Fire plans.

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Cost-of-Living Adjustment: 3% per year commencing 7 years after retirement. No COLA for benefits accrued on and after January 1, 2013, based on the plan provisions.

Payroll Growth: Up to 1.38% per year.

Actuarial Asset Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return (net of fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value of Assets.

Termination and Disability Rate Table:

Age	% Terminating During the Year	% Becoming Disabled During the
20	17.2%	0.03%
30	15.0%	0.04%
40	8.2%	0.07%
50	1.7%	0.18%

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

	<u>09/30/2017</u>	<u>09/30/2016</u>	<u>09/30/2015</u>	<u>09/30/2014</u>
Annual Money-Weighted Rate of Return				
Net of Investment Expense	9.48%	9.25%	-0.66%	9.74%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2017)

General Information about the Pension Plan

Plan Description

The City of St. Pete Beach Firefighters' Retirement System is a single-employer defined benefit pension Plan administered by a Board of Trustees which acts as the administrator of the Plan. The Board consists of 5 Trustees, 2 of whom are appointed by the City Commission, 2 of whom are full-time Firefighters who are elected by a majority of the Members of the Plan and a fifth Trustee who is chosen by a majority of the first 4 Trustees.

Full-time employees who are classified as full-time Firefighters shall participate in the System as a condition of employment.

Plan Membership as of October 1, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	23
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	6
Active Plan Members	33
	62
	62

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

Please note that Members who had attained Age 55 or 25 years of Credited Service on December 31, 2012 continue to make contributions and receive benefits based upon the provisions that were in effect on December 26, 2012.

Normal Retirement:

"Frozen" Piece:

Date: Earlier of 1) Age 55, or 2) the completion of 25 years of Credited Service, regardless of Age.

Benefit: 3.40% of Average Final Compensation times Credited Service.

"Future Service" Piece:

Date At least 10 Years of Credited Service on December 31, 2012: Earlier of 1) Age 55, or 2) the completion of 25 years of Credited Service, regardless of Age.

Less than 10 years of Credited Service on December 31, 2012: Earlier of 1) Age 60, or 2) the completion of 30 years of Credited Service, regardless of Age.

Benefit: 1.25% of Average Final Compensation times Credited Service.

Maximum Benefit: The maximum combined benefit is 75% of Average Final Compensation. If a Member's accrued benefit as of January 1, 2013 is greater than or equal to 75% of Average Final Compensation, the benefit percentage may not be reduced.

Early Retirement:

"Frozen" Piece:

Date: Earlier of age 50 and 10 years of Credited Service or the completion of 20 years of Credited Service, regardless of age.

Benefit Amount: Accrued benefit, reduced 3.00% for each year commencement of benefits precedes Normal Retirement Date.

"Future Service: Piece:

Date: Age 50 and 10 years of Credited Service.

Benefit Amount: Accrued benefit, reduced 3.00% for each year commencement of benefits precedes age 55.

Cost-of-Living Increases:

Retirees receive a 3.00% per year cost-of-living adjustment commencing 7 years after retirement.

Vesting:

Schedule: 100% after 10 years of Credited Service ("frozen" piece uses old vesting schedule).

Benefit Amount: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability:

Eligibility: Total and permanent after 10 years of Credited Service (non-service incurred) or from date of hire (service incurred).

Benefit: Benefit accrued to date of disability but not less than 42% of AFC if service incurred.

Pre-Retirement Death Benefits:

If vested, the value of the accrued benefit is payable on a monthly basis to the beneficiary for 10 years. If not vested, member contributions are refunded.

Contributions

Member Contributions: 11.90% of Salary. This will be re-determined in conjunction with the annual actuarial valuation report.
 City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112. In no event will the City’s contribution be less than 2.00% of the total Salary of the Members.

Net Pension Liability

The measurement date is September 30, 2017.
 The measurement period for the pension expense was October 1, 2016 to September 30, 2017.
 The reporting period is September 30, 2016 through September 30, 2017.

The Sponsor's Net Pension Liability was measured as of September 30, 2017.
 The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2016 updated to September 30, 2017 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.65%
Investment Rate of Return	7.65%

Mortality Rate Healthy Inactive Lives:

Female: RP 2000 Generational, 100% Annuitant White Collar, Scale BB.
 Male: RP 2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.
 Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.
 Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The most recent actuarial experience study used to review the other significant assumptions was dated January 18, 2017.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2017 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2017 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	50%	7.50%
International Equity	10%	8.50%
Broad Market Fixed Income	25%	2.50%
Global Fixed income	5%	3.50%
Real Estate	10%	4.50%
Total	100%	

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Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.65 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at September 30, 2016	\$ 17,527,390	\$ 11,555,588	\$ 5,971,802
Changes for a Year:			
Service Cost	421,007	-	421,007
Interest	1,516,026	-	1,516,026
Change in Excess State Money	(251,482)	-	(251,482)
Differences between Expected and Actual Experience	(251,797)	-	(251,797)
Changes of assumptions	167,748	-	167,748
Changes of benefit terms	2,483,070	-	2,483,070
Contributions - Employer	-	675,894	(675,894)
Contributions - State	-	176,996	(176,996)
Contributions - Employee	-	61,764	(61,764)
Net Investment Income	-	1,080,346	(1,080,346)
Benefit Payments, including Refunds of Employee Contributions	(982,669)	(982,669)	-
Administrative Expense	-	(50,943)	50,943
Net Changes	3,101,903	961,388	2,140,515
Balances at September 30, 2017	\$ 20,629,293	\$ 12,516,976	\$ 8,112,317

Sensitivity of the Net Pension Liability to changes in the Discount Rate.

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.65%	7.65%	8.65%
Sponsor's Net Pension Liability	\$ 10,841,318	\$ 8,112,317	\$ 5,875,611

Pension Plan Fiduciary Net Position.

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

**PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS**

For the year ended September 30, 2017, the Sponsor will recognize a Pension Expense of \$3,432,464.

On September 30, 2017, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	25,965	734,066
Changes of assumptions	948,254	-
Net difference between Projected and Actual Earnings on Pension Plan investments	87,971	-
Total	\$ 1,062,190	\$ 734,066

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:			
2018		\$	159,866
2019		\$	174,217
2020		\$	(9,971)
2021		\$	18,020
2022		\$	(14,008)
Thereafter		\$	-

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2017	09/30/2016
Total Pension Liability		
Service Cost	421,007	245,298
Interest	1,516,026	1,245,496
Change in Excess State Money	(251,482)	-
Changes of benefit terms	2,483,070	-
Differences between Expected and Actual Experience	(251,797)	(786,356)
Changes of assumptions	167,748	1,212,697
Benefit Payments, including Refunds of Employee Contributions	(982,669)	(933,688)
Net Change in Total Pension Liability	3,101,903	983,447
Total Pension Liability - Beginning	17,527,390	16,543,943
Total Pension Liability - Ending (a)	\$ 20,629,293	\$ 17,527,390
Plan Fiduciary Net Position		
Contributions - Employer	675,894	690,612
Contributions - State	176,996	178,044
Contributions - Employee	61,764	59,223
Net Investment Income	1,080,346	962,019
Benefit Payments, including Refunds of Employee Contributions	(982,669)	(933,688)
Administrative Expense	(50,943)	(21,656)
Net Change in Plan Fiduciary Net Position	961,388	934,554
Plan Fiduciary Net Position - Beginning	11,555,588	10,621,034
Plan Fiduciary Net Position - Ending (b)	\$ 12,516,976	\$ 11,555,588
Net Pension Liability - Ending (a) - (b)	\$ 8,112,317	\$ 5,971,802
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.68%	65.93%
Covered Employee Payroll ¹	\$ 1,938,036	\$ 1,787,358
Net Pension Liability as a percentage of Covered Employee Payroll	418.58%	334.11%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period.

Effective for the City's fiscal year ending 09/30/2016, the GASB 68 measurement date of the Pension Expense has been approved and changed from 09/30/2015 to 09/30/2016.

Changes of benefit terms:

For measurement date 09/30/2017, the following changes were made based on the 2017-16 Ordinance:

- 1.) The Normal Retirement Date for Members not eligible for Normal Retirement and who had less than 10 years of Credited Service on December 31, 2012 is changed to the earliest of A) Age 55 with 10 years of Credited Service, B) Age 52 with 25 years of Credited Service, or C) 30 years of Credited Service regardless of age.
- 2.) The benefit multiplier is increased to 3.4% per year of Credited Service, retroactive to January 1, 2013.
- 3.) The definition of Compensation is changed for Salary earned after January 1, 2013 to include total W-2 earnings, including up to 300 hours of overtime, but not including any lump sum payments of accrued sick or annual leave.
- 4.) The maximum benefit is increased from 75% of Average Final Compensation to 100%.
- 5.) Early retirement provisions are established for service on and after January 1, 2013, with eligibility at age 50 with 10 years of Credited Service and with an early retirement reduction of 3% per year prior to age 55.

Continued Changes of benefit terms:

6.) A 3.0% annual cost-of-living adjustment is added for service on and after January 1, 2013. It is commencing on the first October 1st following 7 complete years of receiving benefits.

7.) The member contribution rate has been increased to fund some of these benefit improvements listed.

8.) The Excess State Monies Reserve was used to help offset the increase in the plan's unfunded liability associated with the benefit changes the Members were funding. This effectively reduced the required Member Contribution Rate.

In conjunction with a member contribution rate increase to 4%, the City has agreed to pay for benefit changes 1, 2, 4, and 5, except for any increase in benefit multiplier above 2.25%. Any other benefit changes shown are funded through a further adjustment in member contribution rate such that the City's contribution requirement as a percentage of payroll is approximately the same as before any benefit changes funded by members.

Changes of Assumptions:

For measurement date 09/30/2017, as required by Chapter 2015-157, Laws of Florida, the assumed rates of mortality have been changed from those in the July 1, 2015 FRS valuation report to those used in the July 1, 2016 FRS valuation report. Additionally, the investment return assumption was lowered from 7.70% to 7.65% per year, net of investment related expenses.

For measurement date 09/30/2016, the following assumption changes were made based on the January 18, 2017 experience study:

1. Salary increases changed from a flat 4.5% to one based on Credited Service.
2. Changing the turnover table from an age based table to a service based table.
3. Changing the mortality table to the same rates as used by the Florida Retirement System (FRS) in their July 1, 2015 valuation as required by State Law
4. Reduction in the investment return assumption from 7.75% to 7.70% per year, net of investment related expenses.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	<u>09/30/2015</u>	<u>09/30/2014</u>
Total Pension Liability		
Service Cost	230,254	238,163
Interest	1,212,870	1,189,290
Change in Excess State Money	-	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	103,860	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(1,348,403)</u>	<u>(882,183)</u>
Net Change in Total Pension Liability	198,581	545,270
Total Pension Liability - Beginning	<u>16,345,362</u>	<u>15,800,092</u>
Total Pension Liability - Ending (a)	<u><u>\$ 16,543,943</u></u>	<u><u>\$ 16,345,362</u></u>
Plan Fiduciary Net Position		
Contributions - Employer	413,656	632,678
Contributions - State	392,128	39,565
Contributions - Employee	50,369	45,249
Net Investment Income	(72,360)	999,549
Benefit Payments, including Refunds of Employee Contributions	(1,348,403)	(882,183)
Administrative Expense	<u>(19,804)</u>	<u>(16,250)</u>
Net Change in Plan Fiduciary Net Position	(584,414)	818,608
Plan Fiduciary Net Position - Beginning	<u>11,205,448</u>	<u>10,386,840</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 10,621,034</u></u>	<u><u>\$ 11,205,448</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 5,922,909</u></u>	<u><u>\$ 5,139,915</u></u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	64.20%	68.55%
Covered Employee Payroll ¹	\$ 1,572,198	\$ 1,371,924
Net Pension Liability as a percentage of Covered Employee Payroll	376.73%	374.65%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period.

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014
Actuarially Determined Contribution	769,400	868,656	740,688	672,243
Contributions in relation to the Actuarially Determined Contributions	852,890	868,656	805,784	672,243
Contribution Deficiency (Excess)	\$ (83,490)	\$ -	\$ (65,096)	\$ -
Covered Employee Payroll ¹	\$ 1,938,036	\$ 1,787,358	\$ 1,572,198	\$ 1,371,924
Contributions as a percentage of Covered Employee Payroll	44.01%	48.60%	51.25%	49.00%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period.

Notes to Schedule

Valuation Date: 10/01/2015

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Funding Method:	Entry Age Normal Actuarial Cost Method.
Amortization Method:	Level % of Pay, Closed.
Remaining Amortization Period:	30 Years (as of 10/01/2015).
Mortality Rate:	RP 2000 Combined Healthy (Sex Distinct). Disabled lives are set forward 5 years. We feel this assumption sufficiently accommodates mortality improvements.
Interest Rate:	7.75% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.
Termination Rates:	See Tables below (1305). This is based on the results of an actuarial experience study issued October 20, 2008.
Disability Rates:	See Tables below (1201). This is based on the results of an actuarial experience study issued October 20, 2008
Retirement Age:	For Members eligible for Normal Retirement on January 1, 2013 or hired before January 1, 2003: Earlier of age 56 or the completion of 26 years of service. Also, any Member who has reached Normal Retirement Age is assumed to continue employment for one additional year. This is based on the results of an actuarial experience study issued October 20, 2008. For all other Members: Earlier of age 60 with 10 years of service or the completion of 30 years of service. Also, any Member who has reached Normal Retirement Age is assumed to continue employment for one additional year. This is based on the results of an actuarial experience study issued October 20, 2008.
Early Retirement:	For Members eligible for Normal Retirement on January 1, 2013: Commencing at the Member's eligibility for Early Retirement, Members are assumed to retire with an immediate, subsidized benefit at the rate of 5% per year. This is based on the results of an actuarial experience study issued October 20, 2008. For all other Members: None
Salary Increases:	4.50% per year up to the assumed retirement age. This is reasonable compared with other Fire plans.

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Cost-of-Living Adjustment: 3% per year commencing 7 years after retirement. No COLA for benefits accrued on and after January 1, 2013, based on the plan provisions.

Payroll Growth: Up to 1.38% per year.

Actuarial Asset Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return (net of fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value of Assets.

Termination and Disability Rate Table:

Age	% Terminating During the Year	% Becoming Disabled During the Year
20	17.20%	0.03%
30	15.00%	0.04%
40	8.20%	0.07%
50	1.70%	0.18%

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2017

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 5,971,802	\$ 847,891	\$ 1,615,074	\$ -
Total Pension Liability Factors:				
Service Cost	421,007	-	-	421,007
Interest	1,516,026	-	-	1,516,026
Change in Excess State Money	(251,482)	-	-	(251,482)
Changes in benefit terms	2,483,070	-	-	2,483,070
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(251,797)	251,797	-	-
Current year amortization of experience difference	-	(173,027)	(25,965)	(147,062)
Change in assumptions about future economic or demographic factors or other inputs	167,748	-	167,748	-
Current year amortization of change in assumptions	-	-	(230,074)	230,074
Benefit Payments	(982,669)	-	-	-
Net change	<u>3,101,903</u>	<u>78,770</u>	<u>(88,291)</u>	<u>4,251,633</u>
Plan Fiduciary Net Position:				
Contributions - Employer	675,894	-	-	-
Contributions - State	176,996	-	-	-
Contributions - Employee	61,764	-	-	(61,764)
Projected Net Investment Income	885,200	-	-	(885,200)
Difference between projected and actual earnings on Pension Plan investments	195,146	195,146	-	-
Current year amortization	-	(107,336)	(184,188)	76,852
Benefit Payments	(982,669)	-	-	-
Administrative Expenses	(50,943)	-	-	50,943
Net change	<u>961,388</u>	<u>87,810</u>	<u>(184,188)</u>	<u>(819,169)</u>
Ending Balance	<u>\$ 8,112,317</u>	<u>\$ 1,014,471</u>	<u>\$ 1,342,595</u>	<u>\$ 3,432,464</u>

AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2014	\$ (201,581)	5	\$ (40,316)	\$ (40,316)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 920,940	5	\$ 184,188	\$ 184,188	\$ 184,188	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (139,953)	5	\$ (27,990)	\$ (27,991)	\$ (27,991)	\$ (27,991)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (195,146)	5	\$ (39,030)	\$ (39,029)	\$ (39,029)	\$ (39,029)	\$ (39,029)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 76,852	\$ 76,852	\$ 117,168	\$ (67,020)	\$ (39,029)	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2016	\$ 1,212,697	6	\$ 202,116	\$ 202,116	\$ 202,116	\$ 202,116	\$ 202,116	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 167,748	6	\$ 27,958	\$ 27,958	\$ 27,958	\$ 27,958	\$ 27,958	\$ 27,958	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 230,074	\$ 230,074	\$ 230,074	\$ 230,074	\$ 230,074	\$ 27,958	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year Ending	Differences Between		Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	Expected and Actual Experience												
2015	\$	103,860	4	\$ 25,965	\$ 25,965	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$	(786,356)	6	\$ (131,060)	\$ (131,059)	\$ (131,059)	\$ (131,059)	\$ (131,059)	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$	(251,797)	6	\$ (41,967)	\$ (41,966)	\$ (41,966)	\$ (41,966)	\$ (41,966)	\$ (41,966)	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense				\$ (147,062)	\$ (147,060)	\$ (173,025)	\$ (173,025)	\$ (173,025)	\$ (41,966)	\$ -	\$ -	\$ -	\$ -